CHAPTER 2

LITERATURE REVIEW

This chapter presents the review of selected literature, which is relevant to the current study, and the conceptual framework of the study. The literature review is divided into five sections as follows:

1. Depression in the elderly
2. Impacts of depression on elderly
3. Treatment of elderly depression
4. Cognitive therapy
5. Mindfulness
6. Cognitive-Mindfulness Practice Program

DEPRESSION IN THE ELDERLY

Definition of Depression

The definition of the term 'depression' is complicated because of the intrinsic ambiguity involved. From the psychological view point, the term depression tends to be used to describe three distinct levels of organization. At the simplest level, that of a state of mood, depression refers to an unpleasant affective state, usually synonymous with sadness. At a more complex level, depression refers to symptoms which involve affective, behavioral, motivational, and physical signs and symptoms. Finally, at the most complex level, that of a disease, the term implies not

only just a common manifest of symptomatology, but also some consistency in course, prognosis, treatment response, and, presumably etiology (Meurman & Syvalahti, 2003).

Depression as a State of Mood

As a way of feeling, depression is characterized by feelings of sadness, discouragement, unhappiness, disappointment, and social withdrawal (Buschmann, Dixon, & Tichy, 1995). Persons feel this way at one time or another for short periods (Zimney, 2008). These feelings are transient moods, which happen when a specific psychosocial stressor develops.

Depression as Symptoms

In relation to cognitive theory, Beck (1967) defined depression in terms of the following attributes: 1) a specific alteration in mood: sadness, loneliness, apathy, 2) a negative self-concept associated with self-reproaches and self-blame, 3) aggressive and self-punitive wishes: desires to escape, hide, die, 4) vegetative changes: anorexia, insomnia, loss of libido, 5) change in activity level: retardation or agitation. Beck (1967) concluded the definition of depression as a complex pattern of deviation of cognitive feelings and behavior that presents with a loss of interest or pleasure, depressed mood, feeling of guilt or low self-esteem, sleep or appetite disturbance, low energy and poor concentration. The symptoms of depression depend on the severity of the depression. Beck (1995) described three distinct levels of depression (mild, moderate and severe) which composed of emotional manifestations,

cognitive manifestations, motivational manifestations, and physical manifestations as follows:

Emotional Manifestations

Dejected mood. A mildly depressed person feels blue or sad. The unpleasant feeling tends to fluctuate considerably during the day. The feeling can be relieved partially or completely by outside stimuli, such as a compliment, a joke, or a favorable event. In the moderate level, the depressed mood tends to be more pronounced and more persistent. It is often worse in the morning and tends to be alleviated as the day progresses. The duration is frequently present. In severe cases, a depressed person feels sad and very anguished all the time, hopeless or miserable, agitated and worried. The person can not snap out of it and can not stand it.

Negative feeling toward self. Mildly depressed people feel disappointed in themselves. In moderate cases, the feeling of self-dislike is stronger and may progress to a feeling of disgust, whereas in severe cases the feeling of self-dislike is stronger and may lead to suicide.

Reduction in gratification. A mildly depressed person no longer gets pleasure from family, friends, or job. Characteristically, activities involving responsibility or effort become less satisfying; some of the joy has gone out of life. In moderate cases, a depressed person feels bored much of the time, he/she may try to enjoy some former favorite activities but they seem flat and uninteresting now. A severely depressed person experiences no enjoyment from activities that were formerly pleasurable.

Loss of emotional attachments. In mild cases, there is some decline in the degree of enthusiasm for, or absorption in, an activity. The loss of interest or of positive feelings may progress to indifference in moderate cases. A woman may no longer care about her appearance. In severe cases, loss of attachment to external objects may progress to apathy.

Crying spells. In mild cases, there is an increased tendency to weep or cry. Stimuli or situations that would ordinarily not affect the person may now elicit tears. Moderately depressed persons may cry during an interview as references to the problems may elicit tears. Severe cases can no longer cry even when they want to.

Loss of mirth response. A mildly depressed person who previously frequently enjoy listening to jokes and telling jokes find that this is no longer such a ready source of gratification. Moderately depressed persons may see the point of a joke and can even force a smile, but are usually not amused. The person cannot see the good points of events and tend to take everything seriously. A severely depressed person does not respond at all to humorous sallies by other people.

Cognitive Manifestations

Low self-evaluation. Mildly depressed persons show an excessive reaction to any of their errors or difficulties and are prone to regard them as a reflection of their inadequacies or as a defect in themselves. Most moderately depressed persons' thought content revolves around their sense of deficiency, and is prone to interpret neutral situations as indicative of this deficiency. They exaggerate the degree and significance of any errors. Severely depressed persons' self-evaluations are at the

lowest point and preoccupied with ideas that they are the world's worst sinners, completely impoverished, or totally inadequate.

Negative expectations. Mildly depressed persons tend to expect negative outcomes in ambiguous or equivocal situations. Moderate cases regard the future as unpromising and have nothing to which they can look forward to. Severe cases view the future as black and hopeless.

Self-blame and self-criticism. Mildly depressed persons are prone to blame and criticize themselves when they are inflexible and can not meet their perfectionist standards. In moderate cases, self-criticism becomes more extreme. They are likely to criticize themselves harshly for any aspect of their personality or behavior and blame themselves for mishaps that are obviously not their fault. In the severe states, depressed persons are even more extreme in their use of self-blame or self-criticism. They view themselves as a criminal, and interpret various extraneous stimuli as signs of public disapproval.

Indecisiveness. Mildly depressed persons' fear making the wrong decision is reflected in a general sense of uncertainty and they frequently seek confirmation from others. In moderate cases, difficulty in making decisions spreads to almost every activity and involves such minor problems. Severely depressed persons generally believe they are incapable of making a decision and, consequently, do not even try. They frequently have doubts about everything they do and say.

Distortion of body image. Mildly depressed persons begin to be excessively concerned with their physical appearance. In moderate cases, the concern about physical appearance is greater. They believe that there has been a change in their look since the onset of the depression even though there is no objective evidence to support

this idea. In severe cases, the idea of personal unattractiveness becomes more fixed, they believe that they are ugly and repulsive looking.

Motivational Manifestations

Paralysis of the will. Mildly depressed persons no longer spontaneously desire to do certain specific things, especially those that do not bring any immediate gratification. In moderate cases, the loss of spontaneous desire spreads to almost all of one's usual activities. In severe cases, there often is complete paralysis of the will, there is no desire to do anything, even those things that are essential to life.

Withdrawal wishes. The mildly depressed cases experience a strong inclination to avoid or to postpone doing certain things that they regard as uninteresting. In moderate cases, avoidance wishes are stronger and spread to a much wider range of usual activities. In severe cases, the wish to avoid or escape is manifested in marked exclusiveness.

Suicidal wishes. The mildly depressed persons may wish to die. Although they state that they would not do anything to hasten their death, they may find the idea of dying attractive. In moderate cases, suicidal wishes are more direct, frequent, and compelling; there is a definite risk of either impulsive or premeditated suicidal attempts. In severe cases, suicidal wishes tend to be intense although they may be too retarded to complete a suicide attempt.

Increased dependency. The mildly depressed person who is ordinarily very self-sufficient and independent begins to express a desire to be helped, guided, or supported. As the dependency wishes become stronger, they now find that they prefer to have somebody to do things with rather than do them alone. The moderately

depressed persons' desire to have things done for them, to receive instruction and reassurance is stronger. The intensity of the desire to be helped is increased and the content of the wish has a predominantly passive cast in severe cases.

Physical Manifestations

Loss of appetite. The mildly depressed person no longer eats meals with enjoyment. There is also some dulling of the desire for food. In moderate cases, the desire for food may be gone and a meal may be missed without realizing it. In severe cases, a depressed person may have to force himself, or be forced, to eat. There may even be an aversion for food. After several weeks, the amount of weight loss may be considerable.

Sleep disturbance. The mildly depressed person wakes up a few minutes to half an hour earlier than usual. In some cases, the sleep disturbance is in the reverse direction: sleeps more than usual. In moderate cases, they awake one or two hours earlier than usual and require a hypnotic to return to sleep. In some cases, an excessive sleeping tendency can manifests and may sleep up to twelve hours a day. In severe cases, depressed persons frequently awaken after only four or five hours of sleep and find it impossible to return to sleep. In some cases, they claim that they have not slept at all during the night and remember their thought continuously during the night.

Loss of libido. There is generally a slight loss of spontaneous sexual desire and of responsiveness to sexual stimuli. In some cases, however, sexual desire seems to be heightened for a mildly depressed person. In moderate cases, sexual desire is

markedly reduced and the person is aroused only with considerable stimulation. In severe cases any responsiveness to sexual stimuli is lost.

Fatigability. The mildly depressed persons find that they are tired more easily than usual, they now feel fatigued after a relatively short period of work. Not infrequently a diversion or a short nap may restore a feeling of vitality, but the improvement is transient. The moderately depressed person is generally tired when he/she awakens in the morning. Almost any activity seems to accentuate the tiredness. Rest, relaxation, and recreation cannot alleviate this feeling and may aggravate it. In severe cases, a depressed person is too tired to do anything.

Depression as a Disease

World Health Organization (2003) defines depression as a common mental disorder that presents with symptoms of loss of interest or pleasure, depressed mood, feelings of guilt or low self-esteem, sleep or appetite disturbance, low energy and poor concentration. As a disease, the fourth edition of the Diagnostic and Statistical Manual of Mental Disorder (DSM-IV-TR) (American Psychiatric Association [APA], 2000) revised in 2000 and ICD-10 (the International Classification of Diseases (10th revision) are widely used international classifications of diseases, which include the diagnostic criteria of depressive disorders defined by the presence of certain symptoms (Frisch & Frisch, 2002; Meurman & Syvalahti, 2003). The term depression referred to the group of symptoms resulting in mood episode. DSM-IV-TR makes a fundamental distinction between a mood episode and a mood disorder. A mood episode is the experience of a strong emotion of depression, mania, or a mixture of both for a period of at least 2 weeks. The symptoms must be new or have clearly

worsened over the pre-episode state and must be present nearly every day for most of the day for two consecutive weeks. A mood disorder is diagnosed based on the pattern of mood episodes. It requires the presence of at least one Major Depressive Episode. The client must have a depressed mood daily. The client must also have five (or more) of the following during a two week period; depressed mood, fatigue or loss of energy, feelings of worthlessness, excessive or inappropriate guilt, diminished interest or pleasure in all activities, indecisiveness, insomnia or hypersomnia, psychomotor agitation or retardation, recurrent thoughts of death, recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide and a change from previous functioning; at least one of the symptoms is either a depressed mood or loss of interest or pleasure (APA, 2000). The elderly often suffer a single major depressive episode (Blazer, 1998).

There are several sub-classifications of depression and depressive episodes. They can be presented in various other mental disorders such as the bipolar disorder formerly known as manic-depressive illness (Meurman & Syvalahti, 2003). Once a diagnosis of a particular mood disorder is made, specific symptoms are used to provide more detailed information about the diagnosis. For example, in mild depression there are few symptoms and a person can function normally although with extra effort. In moderate depression the severity of the symptoms are between mild and severe. In severe depression without psychotic features a majority of symptoms are present and a person clearly has little or no ability to function. In severe depression with psychotic features the person has little or no ability to function and experiences hallucinations and/or delusions. A first episode of depression is considered a single incident and any subsequent episodes are classified as recurrent

depression. Dysthymic disorder, chronic depression, is more common among the elderly than major depression (Blazer, 1998). To receive a diagnosis of dysthymic disorder, the elderly must suffer from the symptoms of a major depressive episode as present for at least a two-year period. In the ICD-10, the depressive episode is used instead of major depression and are classified as mild, moderate, or severe, depending upon the number and severity of symptoms (Meurman & Syvalahti, 2003). The depressive episode is diagnosed based on the presence of four instead of five symptoms of the following: depressed mood, fatigue or loss of energy, feelings of worthlessness, excessive or inappropriate guilt, diminished interest or pleasure in all activities, indecisiveness, insomnia or hypersomnia, psychomotor agitation or retardation, recurrent thoughts of death, recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide and a change from previous functioning; at least one of the symptoms is either a depressed mood or loss of interest or pleasure (APA, 2000).

In this study, the definition and concept of depression from Beck (1967) was used. Depression is a complex pattern of deviation of cognitive feelings and behavior that presents with a loss of interest or pleasure, depressed mood, feelings of guilt or low self-esteem, sleep or appetite disturbance, low energy and poor concentration. The intensity of depression is measured by Beck Depression Inventory (BDI-IA) (Beck & Steer, 1993), which was translated into the Thai language by Sriyoung (1979).

Etiology of Depression

A number of theories attempt to explain the causes of depression. These theories include biological theories and psychological theories that attempt to identify the etiology of depression. There is evidence that there is an inter-actional factor contributing to the etiology of depression (Varcarolis, 2002).

Biological Theories

Biological theories of depression explain that genetically vulnerable nervous systems, hormonal imbalance, norepinephrine, acetylcholine and serotonin deficiencies in the brain, neural pathway malfunction, as well as estrogen and progesterone deficiencies can be causative agents for depression (Varcarolis, 2002; Kelner & Warren, 2003).

Neurochemistry

Many CNS neurotransmitter abnormalities can lead to clinical depression (Kelner & Warren, 2003; Varcarolis, 2002). There is evidence that serotonin activity within the depressed brain is severely diminished, when compared to that within a healthy brain, and increasing these levels causes a resolution of the symptoms (Brage, 1995). Brain studies of serotonin activity in a depressed brain show minimal activity in contrast to the activity seen in the brain of non-depressed clients. The decrease of serotonin could result in poor impulse control, low sex drive, decrease appetite and irritability (Sadek & Nemeroff, 2000). Dopamine, norepinephrine, acetylcholine, and grammar-amunobutyric acid may also contribute to depression (Kelner & Warren,

2003; Varcarolis, 2002). There is evidence that shows the concentration of both norepinephrine and serotonin decreased with age (Blazer, 1998). Other investigators proposed that among the elderly with depression, the number of receptors for neurotransmitter might be lower in the elderly than in adult (Blazer, 1998).

Endocrine Function

Disruptions of endocrine system are commonly associated with more severe depression (Blazer, 1998). Chronic stress of the elderly leads to an increase in cortisol secretion which may contribute to the symptoms of depression (Blazer, 1998).

Limbic System

Depression has been associated with limbic seizure activity, as shown by electroencephalogram (EEG) changes (Frisch & Frisch, 2002). Sleep electroencephalogram abnormalities were found in 40% to 60% of out clients with a major depressive episode and in more than 90% of in clients with a major depressive episode (APA, 2000). In the elderly with depression, the total time of sleep decreased, the number of awakenings increased whereas the amount of deep sleep decreased (Blazer, 1998).

Genetics and Family History

There is agreement that environment and heredity play an important role in severe mood disturbances. Both major depressive disorders and bipolar run in families, but evidence of heredity is higher for bipolar disorder (Stauart, 2001).

Findings from twin and family studies have supported the possible influence of genetics among the causes of depression (Sadek & Nemeroff, 2000). They found an overall monozygotic twin concordance rate of 76% for affective disorders as compared with an overall rate of 19% for dizygotic twins. For one parent with bipolar disorder there is a 25% chance for the child. For two parents with bipolar disorder, there is a 50% to 70% chance for the child. For one parent with a depressive disorder, there is a 10% to 13% chance for the child (Stauart , 2001).

Psychological Theories

There are a number of theories that attempt to explain the cause of depression. Some of the more common ones are the psychoanalytic theory, psychosocial theory, object loss theory and cognitive theory, which provide some insight into understanding the cause of depression.

Psychoanalytic Theory

Freud viewed depression as the aggressive instinct inappropriately directed at self and accompanied by feelings of guilt (Frisch & Frisch, 2002). The process is initiated by the loss of an ambivalently loved object. The person feels angry and loving at the same time and is unable to express anger because it is considered inappropriate or irrational. The person has developed a pattern throughout life of containing feelings, especially those that are view negatively (Stauart, 2001). The superego punishes the ego for having forbidden wishes or for not living up to the superego's expectations. The result of that conflict leads to depression (Frisch & Frisch, 2002).

Psychosocial Theory

Integration and despair: Erikson proposed that depression would result when the elderly believed they never accomplished anything of value during their lives. The elderly often look back on their lives to find meaning and themes in the past events. Because they can not change the past, when they experienced difficulty accepting mistakes, and lack of accomplishment, the realization that the die is cast can be most threatening. If the elderly can not find meaning in their lives, despair, dread, and hopelessness emerged (Blazer, 1998).

Object Loss Theory

The object loss theory of depression refers to traumatic separation of the person from significant object of attachment. This theory explained that loss during childhood is a predisposing factor for adult depressions and separation in adult life as precipitating stress (Stauart, 2001).

Cognitive Theory

Beck proposed that depression occurs when a person acquires a psychological predisposition through early life experience and perceives all stressful situations as being negative (Beck & Rush, 1995). The cognitive model explains that one's thoughts influence one's emotions and behavior (Beck, 1995). Depression caused by the activation of three cognitive patterns that lead people to view themselves, their experiences, and their future in negative biased ways, Beck termed this the cognitive triad. The first component consists of people's negative concept of

themselves as deficient, helpless, or unlovable. They tend to attribute their unpleasant experiences to their presumed physical, mental, or moral defects. The second component is the person's predominantly negative interpretations of day to day and past experiences. The last component is a negative view of the future. They see a future life of unremitting hardship, deprivation, and frustration (Beck, & Rush, 1995; Beck, Rush, Shaw, & Emery, 1979). An individual has a sense of no control in their life, which is acquired through unpleasant experiences and traumas. This brings on depression (Frisch & Frisch, 2002), this person believes that undesired events are their fault and they cannot control or change them. This can lead to depression (Varcarolis, 2002).

Depression can also be viewed as a reaction to life stresses (APA, 2000; Kelner & Warren, 2003; Varcarolis, 2002). Loss, interpersonal difficulty, coping with individual stressors, life events and life changes can cause depression (Kelner & Warren, 2003). These stressors and life events can cause depression in persons who are biologically vulnerable to depression (Varcarolis, 2002).

Stressful life events can cause depression particularly in the elderly. Events such as chronic medical problems, a low level of education, financial distress, loss of close friends and family, interpersonal difficulty and loneliness can contribute to the development of depression (Kelner & Warren, 2003; Sidik et al., 2003). The elderly usually spend more time thinking, reviewing past experiences and reflecting on current ones than younger people (Zerhuzen, Boyle & Wilson, 1991). These reasons may cause depression in elderly.

IMPACTS OF DEPRESSION ON ELDERLY

Depression in the elderly not only causes distress, suffering and recurrent episodes but also leads to impairments in physical, emotional, thought process and behaviors (Anderson, 2001, Serby & Yu, 2003). Depression in elderly can lead to disability, cognitive impairments, family disruption, increased symptoms from medical illness, increased utilization of health care services and increased rates of suicide and non-suicide mortality (Alexopoulos, 2005, Gareri et al., 2002). Depression causes more functional impairment including poorer physical, psychosocial and family functions, and health care costs than many other common medical conditions and carries an increased risk of suicide and natural mortality in older adults (Anderson, 2001; Callahan, 2001).

Impact on Physical, Psychosocial and Family Functions

Elderly suffering from depression often have severe feelings of sadness, but these feelings are frequently not acknowledged or openly shown (Jeste, 2003). It is estimated that approximately 5 million of the 31 million Americans aged 65 and older suffer from clinically significant depressive symptoms, yet many cases are either treated insufficiently or not treated at all (Jeffrey & Charles, 2000).

Elderly with depression often fail to get the medical care they need because of isolation, passivity, and pessimism. They complain more of pain and spend more time in bed than people with heart disease or arthritis. Blazer (2003) reviewed that depression in the elderly was an independent risk factor for heart failure among elderly women but not among elderly men. Depression raises the risk of death by five

times, after a heart attack or stroke (Harvard Mental Health Letter, 2003), possibly because it triggers the release of stress hormones, causes heart rhythm disturbances, increases blood clotting, or weakens the immune system. Studies of nursing home patients with physical illnesses have shown that depression in the elderly increased the risk of death from cardiac diseases. Depression also has been associated with increased risk of death following a heart attack (Fram, 2006).

Despite being associated with excess morbidity and mortality, depression often goes undiagnosed and untreated. It is often accepted as a normal part of the aging process. A substantial proportion of older people receive no treatment or inadequate treatment for their depression in primary care settings. The most serious consequence of depression in later life, especially untreated or inadequately treated depression, is increased mortality from either suicide or somatic illness (Anderson, 2001; Callahan, 2001; Jeste, 2003). From a psychological report of 80 people who committed suicide at an average age of 68 found that 50% of them had a known history of major depression (Harvard Mental Health Letter, 2003).

Elderly women who suffer from depression tend to be isolated, passive, and pessimistic and exhibit impaired parenting, and experience increased difficulties in their ability to solve problems and family disruptions (Alexopoulos, 2005).

Impact on Health Care Costs

The costs of care for depressed elderly are high. The study by Katon et al. (2003) reported that the in client costs of the depressed elderly are 47% to 51% higher when compared to other elderly persons after adjustments for chronic medical illness are made. In mean cost of care, depressed elderly clients average an increase of

$1,045-1,700 in ambulatory and in client costs (Katon, Lin, Russo & Unutzer, 2003). Depression in women contributed to the escalating costs of health care in terms of diminished ability in marital and parenting relationships and other social relationships, increased higher rates of chemical dependency and high admission rates to psychiatric hospitals (Maynard, 1993).

TREATMENT OF ELDERLY DEPRESSION

Elderly depression can be effectively treated by medication, psychotherapy, electroconvulsive therapy (ECT) or any combination of the three (Arean & Cook, 2002; Jeste, 2003; Walker & Clarke, 2001). Treatment choices will depend on the outcome of the psychiatric evaluation. Both antidepressant medication and psychotherapy are considered first line treatment for mild to moderately depressed outclients (Casacalenda et al., 2002). There are a number of research studies supporting the use of a combination of medication and psychotherapy as superior to using one treatment without the other. This finding is especially true for the treatment of late life depression (Arean & Cook, 2002, Moutier et al., 2003, Thompson et al., 2001).

Jeste (2003) found that 80% of depressed persons including the elderly may be effectively treated by medication, psychotherapy and electroconvulsive therapy or any combination of the three. Similarly, the WHO (2003) reported that antidepressant medications and brief, structured forms of psychotherapy are effective for 60-80% of depressive clients. However, fewer than 25% of those affected (in some countries fewer than 10%) receive such treatments. Barriers to effective care include the lack of

resources, lack of trained providers, and the social stigma associated with mental disorders including depression (WHO, 2003).

Medication

Antidepressant medications are relatively safe and work for many clients, but there is no evidence that they reduce the risk of recurrence of depression once their use is terminated (Hollon, Thase, & Markowitz, 2002). Medication compliance is necessary but often can be a problem among the elderly. Jeste (2003) found that 70% of elderly clients fail to take their antidepressant drugs 25% to 50% of the time. Antidepressants may take longer to start working in older people than they do in younger people. Since elderly people are more sensitive to medicines, doctors may prescribe lower doses at first. Many elderly patients are taking lots of drugs, which can lead to increased complications and side effects.

There are four groups of antidepressant drugs that have been used effectively to help people with depression (Kelner & Warren, 2003; Varcarolis, 2002):

1) Tricyclics Antidepressants (TCAs) such as amitriptyline, imipramine, and nortriptyline. These types of medications inhibit the reuptake of epinephrine and serotonin. Side effects can include dry mouth, constipation, blurred vision, tachycardia, arrhythmias, and orthostasis.

2) Monoamine Oxidase Inhibitors (MAOIs) such as nardil and parnate. These inhibit monoamine oxidase. Side effects can include hypotension, sedation, insomnia, fatigue, changes in cardiac rhythm, muscle cramps, and sexual impotence.

3) Selective Serotonin Re-uptake Inhibitors (SSRIs) such as citalopram, fluoxetine, sertraline, paroxetine, and fluvoxamine. These block the serotonin reuptake process. Side effects can include agitation, anxiety, sleep disturbance, and sexual dysfunction.

4) Novel antidepressants such as bupropion, venlafaxine, nefazodone. These select dopamine reuptake inhibitors, selective serotonin norepinephrine reuptake inhibitors, and serotonin reuptake inhibitors. Side effects include seizure risk, nausea, headaches, anxiety, agitation similar to SSRI, hypertension, sexual dysfunction, nausea, dizziness, confusion, and sedation (Kelner & Warren, 2003; Varcarolis, 2002).

The National Institute of Mental Health (NIMH) indicate that Selective Serotonin Re-uptake Inhibitors (SSRIs) such as citalopram, fluoxetine, sertraline, paroxetine, and fluvoxamine, which affected neurotransmitter serotonin are most effective to treat depression, especially for the elderly, in addition SSRIs have fewer side effects than Tricyclics Antidepressants and Monoamine Oxidase Inhibitors (National Institute of Mental Health, 2007). Similar to Moutier et al. (2003) reported that most of the SSRIs have demonstrated efficacy in elderly people, including citalopram (Celexa), sertraline (Zoloft), paroxetine (Paxil) and fluoxetine (Prozac). Mirtazapine and the extended-release form of venlafaxine and sustained-release form of bupropion have also been found to be effective in late-life depression. The consensus recommendation is to continue an antidepressant three to six weeks before switching or augmenting (Moutier et al., 2003).

Although antidepressant medications can ease depression in the elderly, older adults are more sensitive to drug side effects and vulnerable to interactions with

other medicines that they may already be taking. Depressed seniors may also forget to take the medication. Furthermore, recent studies have found that SSRIs such as Prozac can cause rapid bone loss and a higher risk for fractures and falls (National Institute of Mental Health, 2007). Whereas Tricyclics Antidepressants can precipitate acute confusion owing to the centrally acting anticholinergic side-effects of this class of drug (Evan & Motram, 2000). There are reports that amitriptyline and imipramine can be sedating and cause a sudden drop in blood pressure when a person stands up, which can lead to falls and fractures. Because of these safety concerns, elderly adults on antidepressants should be carefully monitored (National Institute of Mental Health, 2007).

Psychotherapy

There are many types of psychotherapy that can be effective for the elderly with depression including supportive counseling, problem-solving, reminiscence therapy, cognitive therapy, and mindfulness cognitive behavioral therapy (Franklin, 2002).

Supportive counseling. Supportive counseling based on empathy and understanding, helps the elderly express and address the feelings of hopelessness that accompany depression and relieves the pain of depression while finding the root of the problem such as low self-esteem and relationship problems. Finally, the clients can choose good solutions for themselves (Buschmann et al., 1995).

Problem-solving therapy. Problem-solving therapy addresses the areas of a person's life that are creating significant stresses and thought to be contributing to the person's depression. This approach may require the use of behavioral therapy to assist

the elderly in developing better coping skills, or interpersonal therapy to assist in solving relationship problems (Franklin, 2002).

Reminiscence therapy (RT). RT is a commonly recommended psychotherapy for the elderly, in based on the premise that life review constitutes a normal developmental process to promote a sense of commonality with one's peers, combats depression, and increase self-esteem (Buschmann et al., 1995). RT helps the elderly develop a feeling of accomplishment, a sense of a job well done, an opportunity to decide what to do with the time that is left.

In summary, depressed persons including the elderly may be effectively treated by medication, psychotherapy and electroconvulsive therapy (Jeste, 2003). Older adults are more sensitive to drug side effects and vulnerable to interactions with other medicines. Depressed seniors may also forget to take the medication (National Institute of Mental Health, 2007). Electroconvulsive therapy is a useful treatment for patients with treatment-resistant or psychotic depression. Psychotherapy in the elderly is believed to be effective if patients are properly selected for therapy and appropriate modifications are made (Casey, 1994). Meta-analyses of many studies show that cognitive therapy is one of the most effective interventions for elderly with mild and moderate depression (Arean & Cook, 2002; Butler, & Beck, 2000; Casacalenda et al., 2002; Thomson et al., 2001; Walker & Clarke, 2001; Wilson et al., 1995).

COGNITIVE THERAPY

Definition of Cognitive Therapy

Beck and his colleagues at the University of Pennsylvania developed cognitive therapy in the early 1960s as a structured, short-term, present-oriented psychotherapy for depression (Beck, 1995). Cognitive therapy is a system of psychotherapy based on a theory of personality and psychopathology that gives primary to cognitive processing in the development of psychological distress. How a person structures his or her experiences strongly influences how that person feels and behaves (Hillert, Hedman, Dolling & Arnetz, 1998). Cognitive therapy is an action-oriented form of psychosocial therapy, which assumes that maladaptive, or faulty, thinking patterns cause maladaptive behavior and negative emotions. The treatment focuses on changing an individual's thoughts (cognitive patterns) in order to change his or her behavior and emotional state (Beck, 1995). Kraus, Kunik, and Stanley, (2007) concluded that cognitive therapy is a collaborative, structured, time-limited, and problem-focused form of therapy. Cognitive therapy is a treatment process that enables clients to collect false self-beliefs that can lead to negative moods and behaviors (Rupke, Blecke, & Renfrow, 2006). The fundamental principle behind cognitive therapy is that a thought precedes a mood, and that both are interrelated with a person's environment, physical reaction, and subsequent behavior (Greenberger & Pedesky, 1995). Therefore, learning to substitute healthy thoughts for negative thoughts will improve a person's mood, self-concept, behavior, and physical state (Rupke et al., 2006). The basic principles of cognitive therapy are no different

for older clients than for younger ones. The treatment strategies should be adapted for use with the elderly by minimally modifying clinical technique (Kraus et al., 2007).

A major goal of the cognitive therapist is to alleviate depressive symptoms and bring about changes in the client's thinking and client's misinterpretations and dysfunctional attitudes in order to introduce enduring emotional and behavioral change (Beck, 1995, Varcarolis, 2002). Cognitive therapy also helps persons to develop positive life goals and have a more positive self-assessment.

Brief History of Cognitive Therapy

The first wave of behavior therapy began in the 1950's. Behavior therapy arose as a reaction against Freudian psychoanalysis which was questioned by psychology due to the lack of empirical evidence to support both its theory and its effectiveness (Westbrook, Kennerley, & Kirk, 2007). The behavioral research which psychologists had been building for a few decades regarded how a person learns to behave and react emotionally (learning theory). Behavior therapy is still a very important part of all therapies, it is now called cognitive-behavior therapy or cognitive therapy, and this was the second wave or the cognitive revolution. Psychologists and psychiatrists began the empirical study of how beliefs, thoughts (cognitions) affected emotions and behavior. Beck and others developed cognitive therapy which became increasing influential with much empirical support. The third wave CBT puts much more emphasis on reacting to our thoughts in new ways, placing them in context, rather than getting caught in arguing with the content of our negative thoughts. Philosophically third wave therapies have a decreased emphasis on controlling our internal experience; they offer a more eastern philosophical approach. Many of these

therapies are incorporating the role of acceptance and mindfulness into traditional CBT some of the major third wave CBT therapies.

The Principles of Cognitive Therapy

The underlying principles of cognitive therapy are as follows (Beck, 1995).

1. Cognitive therapy is based on an ever-evolving formulation of the clients and their problems in cognitive terms. From the beginning, the therapist identifies client's current thinking that helps maintain their feelings of sadness and their problematic behaviors. Second, the therapist identifies precipitating factors that influenced client's perceptions at the onset of their depression. Third, the therapist hypothesizes about key developmental events and their enduring patterns of interpreting these events that may dispose them to depression.

2. Cognitive therapy requires a sound therapeutic alliance. For trusting and collaborating, the therapist demonstrates all basic ingredients which consist of warmth, empathy, caring, genuine regard and competence, listening closely and carefully, accurately summarizing clients' thoughts and feelings.

3. Cognitive therapy emphasizes collaboration and active participation. The therapist is more active in suggesting a direction for therapy sessions and in summarizing what they have discussed during a sessions.

4. Cognitive therapy is good oriented and problem focus. The therapist needs to conceptualize the clients' specific problems and assess the appropriate level of intervention.

5. Cognitive therapy initially emphasizes the present. The treatment involves a strong focus on here and now problems and on specific situations that are distressing to clients.

6. Cognitive therapy is educative; it aims to teach the clients to be their own therapist, and emphasizes relapse prevention. In the first session, the therapist educates clients about depression, the process of CT, and CT model.

7. Cognitive therapy aims to be time limited. The number of sessions is guided by treatment trials involving the target problems and the clients. Beck, (1995) indicates that the clients with depression should be treated for 4 to 14 sessions, weekly therapy sessions, biweekly sessions after 2 months and booster sessions every 3 months for a year. Westbrook et al., (2007) suggested that guidelines on length of treatment for mild to moderate depression should be 6 to 12 sessions. For the elderly suffered from depression, the CT protocol should be 16 to 20 sessions over a 3-month period (Thompson, 1996).

8. Cognitive therapy sessions are structured. The therapist tends to adhere to a set structure in every session which consists of set an agenda for the session, elicit feedback about the previous session, review homework, discusses the agenda items, set new homework, frequently summarizes, and seeks feedback at the end of the session.

9. Cognitive therapy teaches clients to identify, evaluate, and respond to their dysfunctional thoughts and beliefs. The therapist helps clients focus on a specific problem, identify dysfunctional thinking, evaluate the validity of their thought via a careful review of data.

10. Cognitive therapy uses a variety of techniques to change thinking, mood, and behavior. The therapist carefully selects techniques based on case formulation and objectives in specific sessions.

The Cognitive Model of Depression

Cognitive therapy is based on the cognitive model, which explains that people emotions and behaviors are influenced by their perception of events (Beck, 1995). The situation itself does not directly determine how they feel. The way people feel is associated with the way in which they interpret and think about a situation. They may be having some quick and evaluative thoughts, which are called automatic thoughts. These thoughts are often quite rapid and are not the result of consideration or reasoning. People are almost barely aware of these thoughts; they are then also unaware of the emotion that follows. As a result, they most likely uncritically accept that their automatic thoughts are true (Beck, 1995).

Beck's cognitive model proposed that people developed certain beliefs about themselves, other people, and their worlds since they were young. Their most central or core beliefs are the most fundamental level of belief which are global, rigid and overgeneralized (Beck, 1995). Core beliefs influence the development of an intermediate class of beliefs which consist of attitudes, rules and assumption. Where as automatic thoughts the actual words or images that go through a person mind, are situation specific and may be considered the most superficial level of cognition. Automatic thoughts influence one's emotions, behavior and often lead to a physiological response, as shown in Figure 1 (Beck, 1995).

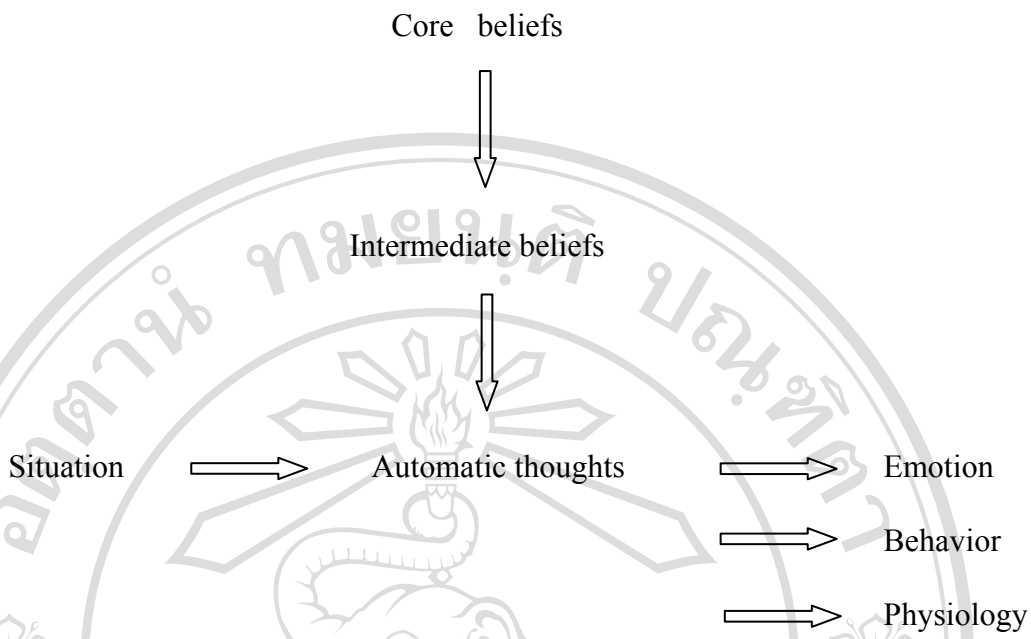

Figure 1. Beck's cognitive model

Note. From *Cognitive therapy: Basics and beyond* (p. 18), by J. S. Beck, 1995, New York: The Guilford Press.

Beck's cognitive model postulates three specific concepts to explain the psychological substrate of depression as follows (Beck et al., 1979):

Concept of Cognitive Triad

The cognitive triad consists of three major cognitive patterns that lead the clients to viewing themselves, their experiences, and their future in negatively biased ways. The first component consists of clients' negative concept of themselves as defective, helpless, inadequate, unlovable, or diseased. They tend to attribute their unpleasant experiences to their presumed physical, mental, or moral defects. The second component is the clients' predominantly negative interpretations of day to day

and past experiences. The last component is a negative view of the future. They see a future life of unremitting hardship, deprivation, and frustration (Rush, & Beck, 1995; Beck et al., 1979).

Structural Organization of Depressive Thinking

A second major component in Beck's cognitive model consists of the concept of schemas (Beck et al., 1979). Any situation is composed of an overabundance of stimuli. Persons selectively focus on specific stimuli, combine them in a pattern, conceptualize the situation, and tend to be consistent in responses to similar types of events. Relatively stable cognitive patterns form the basis for the regularity of interpretations of a particular set of situations. Beck (1979) used the term "schemas" to allocate these stable cognitive patterns. In mild cases, clients may be able to view their negative thoughts with some objectivity. As the depression worsens, their thinking becomes increasingly dominated by negative thoughts, although there may be a logical connection between actual situations and their negative interpretations (Beck et al., 1979).

Faulty Information Processing

These systematic errors in the thinking of the depressed person maintain the clients' belief in the validity of his negative concepts despite the presence of contradictory evidence. Typical mistakes in thinking include (Beck, 1995):

1. All or nothing thinking (black and white thinking): Clients view a situation in only two categories instead of on a variety.

2. Catastrophizing (fortune telling): Clients predict the fortune negatively without considering other or more likely outcomes.

3. Disqualifying or discounting the positive: Clients unreasonably tell themselves that positive experiences or qualify do not count.

4. Emotional reasoning: Clients think something must be true because they actually believe it so strongly, discounting evidence to the contrary.

5. Labeling: Clients put the fixed label on themselves or others without considering.

6. Magnification or minimization: When clients evaluate themselves, another person, or a situation, they unreasonably increase the negative and decrease the positive.

7. Mental filter: Clients pay excessive attention to one negative detail instead of the whole picture.

8. Mind reading: Clients believe they know what others are thinking, failing to consider other, more likely possibilities.

9. Overgeneralization: Clients make a extensive negative conclusion that goes far beyond the current situation.

10. Personalization: Clients believe others behaving negatively because of themselves, without considering more reasonable explanations for their behavior.

11. Should and must statements: Clients have a fixed idea of how they or others should behave and they overestimate how bad it is if these expectations are not met.

12. Tunnel vision: Clients only see the negative aspects of a situation.

The Process of Cognitive Therapy

A. The Process of Cognitive Restructuring

1. Collaborative Empiricism

Beck (1979) used the term "collaborative empiricism" to characterize the nature of the therapist-client relationship in cognitive therapy. The therapist is active and directive, and facilitates a rational approach to thinking with regards to the client's current life circumstances, using the principles of logic and the scientific method. All of the client's thoughts and assumptions are treated as hypotheses, which can be tested to verify their accuracy (Sanderson, & Mcginn, 2001).

With the aim of fostering the spirit of collaborative empiricism, therapists typically begin treatment by educating clients about depression. Educating clients about the CT model of depression is particularly important in strengthening the treatment rationale and subsequent compliance. The therapist always begins by presenting the rationale for that particular technique when a new technique is introduced. These ways will build the therapeutic alliance. One of the most important functions of the therapist is to provide structure. First, the therapist and client together discuss the goals of therapy. The goals should be specific and concrete. The therapist frequently evaluates with the client on how well therapy is helping the client progress towards these goals, and modifies treatment strategies and goals when appropriate.

The client should be encouraged to express their feelings about the therapy so that such factors, which may interfere with treatment, can be dealt with up front. In CT process, identifying and responding to negative thoughts about therapy are very important.

2. Homework

To increase the rapid treatment response, the therapist puts emphasis on the use of homework outside of therapy sessions. By the end of each session the therapist and client should agree upon at least one assignment the client can do. It is the therapist's responsibility to facilitate compliance with homework assignments. Although it is not always the case, clients are often noncompliant with homework because their therapist does not pay enough attention to it, and as a result, the client concludes it is not important. Providing a rationale that motivates clients, developing homework assignments in collaboration with the client, following up with assignments, praising clients when they complete assignments, brainstorming solutions when problems occur rather than labeling the client as resistant, and pointing out the positive consequences of carrying out homework assignments are ways the therapist can facilitate compliance (Sanderson, & Mcginn, 2001).

B. Steps in Cognitive Restructuring

In cognitive therapy, the focus is on understanding how clients interpret events in their lives. The therapy is based upon the premise that if distorted thoughts and images can be changed, then the accompanying negative emotional states and behaviors will change as well. If cognition is distorted, then maladaptive affect and dysfunctional behavior will follow.

In order to facilitate cognitive change, clients are encouraged to consider their thoughts and beliefs as hypotheses, to pay attention to all available information, and to revise thoughts according to incoming information. The following three steps

are used to accomplish this goal (Beck et al., 1979; Beck, 1995; Greenberger, & Padesky, 1995; Sanderson, & Mcginn, 2001; Thase & Beck, 1993).

Step 1: Recognize and Record Automatic Thoughts

According to CT model, one's thoughts influence one's emotions and behavior. Before clients can change the way they think, they must first recognize what they are thinking. The actual thoughts or images on a person's mind are called automatic thoughts which are repetitive, unintended, and not readily controllable. The therapist focuses on identifying automatic thoughts that are dysfunctional, distort reality and increase emotional distress. Dysfunctional automatic thoughts are almost always negative, usually quite brief, and may occur in verbal form, visual form, or both. Clients are often more aware of the emotion they feel as a result of the thought than of the thought itself. Automatic thoughts can be evaluated according to their validity and their utility. There are 3 types of most common automatic thoughts (Beck, 1995). The most common type of automatic thought is distorted in some way and occurs despite objective evidence to the contrary. A second type of automatic thought is accurate, but the conclusion the client draws may be distorted. A third type of automatic thought is also accurate but decidedly dysfunctional. A reasonable response to this thought would address its utility. Evaluating the validity and the utility of automatic thoughts and adaptively responding to them generally produces a positive shift in affect.

The first essential step of cognitive restructuring is to teach clients to begin monitoring their own automatic thoughts. Several techniques are useful in helping clients to identify negative automatic thoughts. The therapist may make direct

inquires about a specific problem, identify automatic thought by attending to their shifts in affect and when they notice that they are feeling, asking what was going through their mind during a strong emotional response. Past events associated with dysphoric mood can be examined by asking clients to recall specific thoughts and feelings while imagining a troubling event taking place. The use of imagery may happen easily in some case, whereas others may need coaching in order to evoke intense images. Role playing also may be useful to facilitate recall of past events, thoughts and feelings.

Step 2: Logical Analysis of Automatic Thoughts

Once a client has elucidated his thoughts and examined how they influence and affect behavior, the next step is for the therapist and client to subject each thought to logical analysis by: a) examining the evidence for the client's thoughts, b) determining if any cognitive distortions are present, c) attempting to generate alternative hypothesis.

a) *Examine the evidence.* Examining evidence lies at the heart of a rational approach to life. When the clients have negative automatic thoughts, they usually dwell on data that confirm their conclusions. It is helpful to consider their thoughts as hypotheses or guesses. Then the clients and therapist can test the accuracy of these thoughts by examining the evidence that supports the automatic thoughts and the evidence that does not support the automatic thoughts. Facilitating this approach will allow clients to break free of the habitual acceptance of implicit negative thoughts generated by depressogenic schema. At this point, cognitions are treated as hypotheses and subjected to logical analysis. The therapist typically uses

Socratic questioning to examine the logic on which conclusions are based and to uncover of cognitive distortion such as “What is the evidence to support this thought?” “Are there any alternative interpretations?” “What if my interpretation is true? How will I manage then?”

b) *Identify cognitive distortions.* Depressed persons tend to make consistent errors in their thinking that is a systematic bias in the cognitive process (Beck, 1979). The use of cognitive distortions consequence in the client's viewing life events in a way that tend to maintain depression, when clients express an automatic thought, the therapist should note and reflect the type of errors in thinking. Identifying cognitive distortions will facilitate cognitive restructuring, as it will enable clients to clearly see the errors of logic in their thinking, and facilitate the development of more accurate statements and rational responses.

c) *Generate alternatives hypotheses.* Clients’ automatic thoughts represent their interpretation of events. Distorted information processing largely influences depressed clients’ interpretations of events. Thus, before assuming any one interpretation is correct, clients are asked to consider all the possibilities by generating alternative hypotheses to their automatic thoughts. This strategy is intended to move clients away from the exclusive use of negatively biased information processing.

The goal is to generate as many plausible alternative explanations as possible. Depressive thinking is rigid in its negativity. When clients step back and generate alternative interpretations of an upsetting event, this process counters and loosen their rigidity. In many instances, none of the alternative hypotheses can be proven, yet each is as plausible as the one that the client has generated and accepted as true. Therefore, increasing clients' awareness of other possibilities gives them a

sense of the full picture, demonstrates the frequent subjectivity involved in interpreting events, and highlights their repeated focus on the negative aspects of the situation.

Step 3: Generate a Rational Response

Once evidence has been reviewed, distortions examined, and alternatives explored, the next step is to generate a rational response. Work done during Step 2 will facilitate their generating a rational (realistic) response. Thus, the goal would be to have the individual modify or change the negative automatic thoughts to something realistic. There are 2 ways to change the thought. First, reattribution: change the thought about the cause of problems. Second, decatastrophizing: change the thought about the negative result of problems.

C. Cognitive Techniques

1. Hypothesis Testing

Hypothesis testing involves setting up an experiment to test an interpretation or anticipation of an event to provide more definitive information. Rather than telling clients how to test the hypothesis, the therapist should ask a series of questions to help the client uncover the answer themselves. Hypothesis testing teaches the client a process for testing their thinking pattern, rather than relying on it as fact or as purely subjective.

2. Problem Solving

When the clients find out their automatic thoughts are correct, the client is identifying a real problem that requires a solution. Therefore, the therapist should help the client see their task as problem solving. It is important to note that the pessimistic thinking style that accompanies depression interferes with clients' ability to problem-solve. Depressed clients tend to view situations as overwhelming and hopeless. The following steps are crucial in the problem solving process:

a) *Brainstorm solutions.* The therapist leads the clients' brainstorming for generating as many solutions as possible, without stopping to evaluate them. The therapist should encourage the clients to be creative and thorough.

b) *Consider the pros and cons of the solutions.* The therapist teaches the client to list the advantages and disadvantages of each proposed solution.

c) *Choose the best solution and carry it out.* The therapist helps the client to carefully consider the importance of the various pros and cons and based upon that analysis, choose the solution that seems best, and take concrete steps to carry it out.

Effect of Cognitive Therapy on Depression

According to Beck's Cognitive Theory of Depression, negative cognitive interpretations of experience leads to these negative views of self, experiences and the future. The automatic negative thoughts (repetitive, unintended, and not readily controllable) affect feelings and behavior. These misinterpretations lead to depression. Cognitive therapy (CT) helps people alleviate depressive symptoms by identifying automatic negative thoughts and change the patient's thinking to bring about enduring

emotional and behavioral change (Beck & Rush, 1995; Beck, 1995; Varcarolis, 2002). There are many studies that have shown the effect of cognitive therapy on depression.

Zerhusen et al. (1991) studied the effectiveness of cognitive therapy in the elderly age group and their program was as described by Beck et al. (1979). During the first week of therapy, group leaders established rapport with residents and shared general information about depression. They then explained the principles of cognitive therapy, discussed strategies that would be used in the groups and explained role expectations of group leaders and members. The second phase focused on a significant problem of the depressed elderly. Cognitive rehearsal was used to help focus attention on a task. The third phase focused on changing cognition. Once the activity level of the residents increased they were ready to focus on using their minds to apply cognitive approaches for solutions to their problems. Leaders then worked with the residents to help change their negative thoughts into more realistic ones and to adopt an alternative view of a distressful situation or modify the underlying assumptions responsible for their depression. The final phase of treatment focused on the reinforcement and practice of skills and on a smooth termination of treatment. Group leaders reminded residents that the initial goal of treatment was to teach them strategies to manage their own problems throughout a lifetime. The results showed that cognitive therapy was found to be effective in the elderly. Residents attended sessions regularly, and the change in the depression levels for group participants was highly significant statistically and clinically noticeable.

Wilson et al. (1995) examined the effects of Cognitive Behavioral Therapy and lithium maintenance therapy in reducing depression severity over a follow-up year in depressed elderly clients. This study was composed of three phases. During

the acute treatment and continuation phase, 17 of the 31 clients received CBT as adjuvant to treatment as usual. Subjects were entered into a double-blind, placebo-controlled study of low dose lithium therapy during the maintenance phase of 1 year. The results indicated that clients who received CBT had significantly reduced their scores on the Hamilton Rating Scale for Depression during the follow up year (repeated measures analyses of variance; $p = .007$). No significant differences were found between lithium and placebo maintenance therapy.

Thomson et al. (2001) compared the efficacy of desipramine alone, Cognitive Behavioral Therapy alone and a combination of the two for the treatment of elderly out clients with mild to moderate depression.

Six psychiatrists who received specialized training in geriatrics and geriatric psychiatry applied medication treatment. Desipramine was chosen because of its low side-effect profile. The psychiatrists followed the drug condition protocol developed for the Treatment of Depression Collaborative Research Program, sponsored by the National Institute of Mental Health (NIMH-TDCRP), which was suitable for the elderly. Each session began with a brief inquiry about client's current levels of distress. The psychiatrists maintained a supportive attitude in talking with clients about their feelings and problems and continued to emphasize the importance of improving clients' depression. Cognitive Behavioral Therapy, which was developed by Beck and colleagues and specific for elderly clients, was used. Each session took 50 to 60 minutes. Clients were taught to identify, monitor and ultimately challenge negative cognitions about themselves and their situations and then develop more adaptive and flexible cognitions in their stead. The therapist focused on teaching clients to monitor and increase pleasant events in their daily lives by using behavioral

treatment procedures. In combined treatment, clients met both psychiatrist and the therapist in two separate contacts for each of the 16 to 20 sessions. The results of investigating three treatments effects showed significant per session improvement in depressive symptoms as measured by HAM-D and BDI. The slopes reflected in negative per-session rates of change in CBT alone and combined group were statistically significant at the 0.05 level. Post-hoc comparison of treatment pairs indicated that combined group showed greater improvement than the desipramine alone group and CBT alone group, where as CBT alone group showed marginally better improvement.

Walker & Clarke (2001) conducted a study about the efficacy of Cognitive Behavioral Therapy, comparing older adults with younger adults in two inner city mental health teams, in terms of range of referrals, outcomes, attendance rates and length of time in therapy. The sample population was clients who were referred to the community mental health teams and who were suitable for CBT without organic impairment or excessive alcohol/benzodiazepine use. The range of disorders referred included a wide mix of anxiety disorders and depression. Sixteen older adults and sixteen younger adults entered CBT, which was conducted by two Cognitive Behavioral Psychotherapists. The therapists had the same qualifications in CBT. All subjects were assessed by using behavioral interviews, measures were taken at assessment and discharge. The Problem-Goal Statement of Marks (1986) was used to identified problem and end of treatment goals. The Work and Social Adjustment Scale of Marks (1986) was client rated and consisted of five areas namely work, home management, social leisure, private leisure, family and relationships. With the impact of the problem rated 0-8, the researcher omitted the work section because it was

inapplicable to the older group and the younger people had high levels of unemployment common in inner cities. The results were measured by changes in score where a reduction of two points is considered a slight improvement, four moderate, and six marked. On completion of assessment a diagnosis was made using ICD-10 Classification of Mental and Behavioral Disorders. The results explained that there were no differences in therapy outcomes apart from home adjustment measures where older adults showed greater improvement whereas younger adults showed significantly higher rates of non-attendance and had higher dropout rates ($p=0.014$). This is an interesting point in that it indicates older adults paying more attention to, and cooperating in, treatment and that they saw the treatment as being very helpful to them. The study showed that CBT is effective to not only younger adults but also older adults.

In Thailand, Chatkaew (2003) examined the effect of cognitive therapy on depression of female youths in a welfare institution. The cognitive therapy program on depression of female youths in a welfare institution was developed by the researcher based on the concept of cognitive therapy of depression proposed by Beck et al. (1979). The program consisted of 4 steps: First, recognize and record automatic thoughts, which started with monitoring their automatic thoughts and identifying the event arousing depression. Second, logical analysis of automatic thoughts by examining the evidence of the client's thoughts, determining if any cognitive distortions are present and then attempting to generate alternative hypotheses. Third, change thoughts about the cause of problems and the negative results of the problems. Finally, find alternative ways to solve the problems. In all, participant attending the program were monitored with the children's depression inventory developed by

Kovas (1985). The result indicated that the cognitive therapy program significantly reduced depression in female youths in a welfare institution, immediately and at 2-weeks follow up after participating in cognitive therapy.

From the literature review, cognitive therapy is reported to be effective in treating depression in older adults in both in client and out client settings. CT is an effective treatment for older adults with moderate levels of depression (Thomson et al., 2001). Older adults treated by CT recover more quickly than younger individuals. This recovery is thought to be due in part to a higher attendance rate at the therapy sessions (Walker & Clarke, 2001). The older individuals' severity of depression during follow up was less than younger individuals (Wilson et al., 1995). CT is effective when used in either individual or group sessions. Thus, it can potentially be more cost effective than other treatments (O'Donohue, Fisher, & Hayes, 2003).

In comparison with other psychotherapies, CT is both cost-effective and the treatment is shorter in duration than psychoanalysis (Spinelli, 1994, as cited in Landreville & Gervais, 1997). In comparison to the use of antidepressant medication in the elderly, the results of CT showed greater improvement than medicine and reduced depression severity during follow up (Thomson et al., 2001; Wilson et al., 1995).

In Thailand, there are rare studies of the effect of cognitive therapy on depression especially in the elderly. Two quasi-experimental studies indicated that cognitive therapy decreased depression of persons with HIV/AIDS (Namsui, 2005) and female youths in a welfare institution (Chatkaew, 2003).

With relation to cognitive therapy, all existing programs focus on identifying and changing autonomic thoughts and dysfunctional attitudes in order to change depressive symptoms. Autonomic thoughts play a mediating role between dysfunctional attitudes and depression; CT strategies develop more adaptive and flexible cognitions to solve the problems.

There are some limitations of cognitive therapy such as it is inappropriate for clients with severe cognitive dysfunction, significant interpersonal disturbances and personality disorders and fails to convincingly explain the substantial physical symptoms that accompany depression (Landreville & Gervais, 1997). Although there are a number of studies supporting the effectiveness of CT on depression for the elderly, the generalizability of these results are questioned. Some assignments or homework may be not appropriate for elderly especially elderly Thai women. Thus, the results may not apply to more socially, ethnically, and clinically diverse groups of depressed elderly (Thomson et al., 2001).

In conclusion, the ability to generalize the results indicating the effectiveness of CT treatment for depression in the elderly is still questioned and its use with elderly Thai women has not been demonstrated. From the review of CT for depression in the elderly, the elderly with depression failed to acknowledge their depressive symptoms and automatic negative thoughts (Koder et al., 1996, Landreville & Gervais, 1997). Therefore, the treatment for elderly depression has been adapted to associate with aging and culture. Given that the population of Thailand is predominately Buddhist, the practice of mindfulness is well known among the population. Mindfulness aims to increase awareness of what happen to the body, feelings, mind and mind-objects. Therefore, increased mindfulness may be helpful for

elderly with depression to allow easy detection of negative thinking, feelings, and bodily sensations.

MINDFULNESS

Definition of Mindfulness

The term mindfulness is used in a variety of ways but the definition is the same. For example, in psychiatric nursing self awareness is used instead of mindfulness. Mindfulness is synonymous with awareness as it is the effort to intentionally pay attention non-judgmentally, to present experiences and to cultivate and sustain this attention over time (Miller, Flectcher, Ken, & Kobat-Zinn, 1995). Kabat-Zinn defined mindfulness as the art of knowing one's self and acceptance without judgment at the present moment (Kabat-Zinn, 1994).

From a Buddhist viewpoint, Mindfulness, the English translation of the Pali word Sati, is an activity reflecting only what is presently happening with non-judgmental observation (Buddhadasa Bhikkhu, 1991, Gunaratana Mahathera, 2001). Mindfulness is the direct experience of touching only the present moment of our lives (Namto, 1989). Mindfulness is presence of mind, attentiveness or awareness what brings the field of experience into focus and makes it accessible to insight in a mental faculty (Bhikkhu Bodhi, 1999). Phra Bhasakorn Bhavilai (2008) explained that mindfulness is a carefulness, and a kind of instant wisdom that makes one aware in each situation what one should do and should not do to avoid any bad conduct. Mindfulness is the practice whereby a person is intentionally aware of his or her thoughts and actions in the present moment, non-judgmentally. Mindfulness is applied

to both bodily actions and the mind's own thoughts and feelings. Phra Ajahn Plien Panyapatipo (2006) stated that people must have both Sati (mindfulness) and Sampajanna (clear knowing). Where there is knowing there is no need to think, awareness will arise at that place and this become wisdom (panna). Mindfulness composes of reminding people of what they are supposed to be doing, seeing things as they really are; and seeing the deep nature of all phenomena (Gunaratana Mahathera, 2007). Mindfulness does not react to what it sees, it just sees, understands, accepts, and acknowledges. The goal of Mindfulness is to simply learn to observe, with no intention of changing or improving anything and also accept life just as it is. It is simply a practical way to be more in touch with the fullness of your being through a systematic process of self-observation, self-inquiry, and mindful action.

The Characteristics of Mindfulness

Gunaratana Mahathera (2007) indicated that mindfulness is characterized by:

1. Mindfulness is mirror-thought. It reflects only what is presently happening and in exactly the way it is happening. There are no biases.

2. Mindfulness is non-judgmental observation. It is that ability of the mind to observe without criticism.

3. Mindfulness is an impartial watchfulness. It does not take sides. It does not get hung up in what is perceived. It just perceives.

4. Mindfulness is no conceptual awareness. Another English term for Sati is bare attention. It is not thinking. It does not get involved with thought or concepts.

5. Mindfulness is present time awareness. It takes place in the here and now. It is the observance of what is happening right now, in the present moment.

6. Mindfulness is goalless awareness. In mindfulness, one does not strain for results. One does not try to accomplish anything. When one is mindful, one experiences reality in the present moment in whatever form it takes. There is nothing to be achieved. There is only observation.

7. Mindfulness is awareness of change. It is observing the passing flow of experiences.

Concept of Mindfulness

From the Buddhist perspective, in Pali, there are three related concepts: Sati (mindfulness), Samadhi (absorption) and Bhavana (meditation including Sati, Samadhi and Panna or wisdom) (Dwivedi, 2000). Mindfulness is considered a prerequisite for developing insight and wisdom. Right mindfulness is the seventh path from the Noble Eightfold Path, which is in its turn the fourth of the Four Noble Truths (Venerable Ajahn Sumadho, 1992).

The Four Noble Truths are the central teachings of the Buddha and the Four Noble Truths compose of (Nyanatiloka Thera, 2000; Venerable Ajahn Sumadho, 1992):

1. *The truth about suffering (Dukkha).* The Pali word, dukkha, means incapable of satisfying or not able to bear or withstand anything. The first truth teaches that the whole of existence, which is comprised without remainder in five groups of existence (coporeality, feeling, perception, mental formations and consciousness) is somethig miserable and subject to suffering, impermanent,

impersonal, and void. All life is suffering. Birth, aging, sickness, death are suffering. Union with what is displeasing, separation from what is pleasing is suffering. One cannot get what one wants or gets what one does not want is suffering. This first Noble Truth reflects on the nature of suffering.

2. *The truth about the origin of suffering (Samudaya).* All suffering is caused by human attachments, cravings, and desires. Such a desire or thirst for things can be understood by the concept of tanha, which produces rebirth and suffering and manifests as volitional activities, or karma of body, speech, or mind.

3. *The truth about the cessation of suffering (Nirodha).* To eliminate suffering, eliminate selfish cravings, desire and all forms of delusion connected with it. It is the remainderless fading away and cessation of that same craving, the giving up and relinquishing of it, freedom from it, and non-reliance on it. The third Noble Truth reflects on the belief that suffering can be eliminated. It asserts that it can be done, and that it has been done to deliverance from rebirth and suffering.

4. *The truth about the path leading to the cessation of suffering (Magga).* To eliminate desire follow the Noble Eightfold Path. The Noble Eightfold Path describes the way to the end of suffering. It is a practical guideline to ethical and mental development with the goal of freeing the person from attachments and delusions; and it finally leads to understanding the truth about all things. Great emphasis is put on the practical aspect, because it is only through practice that one can attain a higher level of existence and finally reach Nirvana. The eight aspects of the path are composed of (Bhikkhu Bodhi, 1999; Nyanatiloka Thera, 2000):

1. *Right understanding*

Right understanding means to see and to understand things as they really are and to realize the Four Noble Truths. It means to see things through, to grasp the impermanent and imperfect nature of worldly objects and ideas, and to understand the law of karma and karmic conditioning. It begins with the intuitive insight that all beings are subject to suffering and it ends with complete understanding of the true nature of all things.

2. *Right thought*

Right thought refers to the kind of mental energy that controls our actions. Right intention can be described best as commitment to ethical and mental self-improvement. Buddha distinguishes three types of right thought which composed of the thought of renunciation, good will, and harmlessness.

3. *Right Speech*

Right speech means to abstain from false speech, slanderous speech and not to use words maliciously against others, to abstain from harsh words that offend or hurt others, and to abstain from idle chatter that lacks purpose or depth.

4. *Right Action*

Right action means to avoid the destruction of life, abstain from killing living beings, to abstain from taking what is not given which includes stealing, robbery, fraud, deceitfulness, and dishonesty, and to abstain from unlawful sexual intercourse.

5. *Right Livelihood*

Right livelihood means that one should earn one's living in a righteous way and that wealth should be gained legally and peacefully. The Buddha mentions

four specific activities that harm other beings and that one should avoid for this reason such as dealing in weapons, dealing in living beings, working in meat production and butchery, and selling intoxicants and poisons.

6. *Right Effort*

Right effort is detailed in four types of endeavors that rank in ascending order of perfection: First, the effort to avoid the arising of unarisen evil and unwholesome states, greed and sorrow. Second, the efforts to overcome unwholesome states that have already arisen by abandoning, destroying, cause them to disappear. Third, the efforts to develop the factors of enlightenment that ends in deliverance such as mindfulness and concentration. Fourth, the effort to maintain and perfect wholesome states already arisen.

7. *Right Mindfulness*

Right mindfulness is the controlled and perfected faculty of cognition. It is the mental ability to see things as they really are, with clear consciousness. The mind is deliberately kept at the level of bare attention, a detached observation of what is happening within us and around us in the present moment. In the practice of right mindfulness the mind is trained to remain in the present, open, quiet, and alert, contemplating the present event. All judgments and interpretations have to be suspended, or if they occur, just registered and dropped. The whole process of mindfulness is a way of coming back into the present, of standing in the here and now without slipping away, without getting swept away by the tides of distracting thoughts. Mindfulness exercises a powerful grounding function. It anchors the mind securely in the present, so it does not float away into the past and future with ones' memories, depression, fears, and hopes. Mindfulness facilitates the achievement of

both serenity and insight. It can lead to either deep concentration or wisdom. Right mindfulness is cultivated through a practice called “the Four Foundations of Mindfulness” (Satipatthana) which leads the person to be aware of the here and now in each moment, continuously and consciously aware of what is happening to the body, feelings, mind and mind-objects (Pra Rajaprommajarn, 2004). This is the only way that leads to purifying of the mind, to free the mind of sorrows and lamentation, to get rid of physical and mental sufferings, to understand the truth of life and to extinguish suffering and gain Nirvana (Nyanatiloka Thera, 2000; Phra Rajaprommajarn, 2004). The Four Foundations of Mindfulness are as follows: (Disayavanish, 2005; Nyanatiloka Thera, 2000; Phra Rajaprommajarn, 2004)

1) Foundation of the contemplation of the body aims to consider the body as being merely a body, it may be practiced by mindful walking and mindful observation of rising and falling of abdomen. All movements and positions of the body (stretching, lowering, raising, bending, turning, sitting, etc.) should be contemplated and acknowledged as it occurs in the present moment. And further, one should be clearly conscious in looking forward and backward and clearly conscious in eating, drinking, chewing and tasting. One contemplates the body with regard to the elements which consists of the solid, fluid, heating and wind elements.

2) Foundation of the contemplation of the feelings includes clear awareness of the various conditions that arise through the feelings such as an agreeable feeling, a disagreeable feeling, an indifferent feeling. One dwells in contemplation with regard to their own feelings, or the feelings of others, or the feelings of both.

3) Foundation of the contemplation of the mind is mindful contemplation of the various conditions (greed, distraction, unfocused thinking, etc.) that arise through the mind. All mind states should be mindfully aware as soon as they arise and pass away.

4) Foundation of the contemplation of mental objects gained by various methods such as the five hindrances (sensual lust, anger, inactivity and sleepiness, restlessness and worry), five groups (corporeality, feeling, perception, mental formations and consciousness), seven factors of enlightenment (mindfulness, investigation of the Dhamma, energy, rapture, tranquility, concentration and equanimity), Four Noble Truths (The truth about suffering, the origin of suffering, the cessation of suffering, and the path leading to the cessation of suffering). A popular method is the contemplation of six sense-bases (eye and visible objects, ear and sounds, nose and odors, tongue and tastes, body and body impressions, mind and mind-objects.

The practice of mindfulness is no more than applying it to contemplate each and every present moment whatever condition arise through the body and mind. The progress of mindfulness depends on the state of mind. If a person is experiencing a decreased state of sadness, depression and anxiety and increased state of happiness and peace, then the person is making progress (Ven Punyananda Bhikkhu, n.d.).

8. *Right Concentration*

Concentration is described as one-pointedness of mind, meaning a state where all mental faculties are unified and directed onto one particular object. Right concentration for the purpose of the eightfold path means wholesome thoughts and actions. The Buddhist method of choice to develop right concentration is through the

practice of meditation. The meditating mind focuses on a selected object. It first directs itself onto it, then sustains concentration, and finally intensifies concentration step by step. Through this practice it becomes natural to apply elevated levels concentration also in everyday situations.

Mindfulness Practice

Achieving mindfulness is not easy and one has to put effort and practice into it as a kind of meditation (Bhavana). In Buddhist meditation there are two types of bhāvanā or kammaṭṭhāna. They are Tranquility Meditation (Samatha bhāvanā) and Insight Meditation (Vipassanā bhāvanā)The purpose of practicing Tranquility Meditation is to make the mind peaceful, while that of Insight Meditation is to acquire wisdom so as to get rid of ignorance (avijjā), which is the root-cause of all mental defilements (Phra Dhammavisuddhikavi, 2002; Yupho, 1988).

1. *Tranquility Meditation (Samatha bhāvanā)*

Samatha bhāvanā (Tranquility Meditation) is the method used to make the mind peaceful using the Dhamma (doctrine) that makes the mind free from mental hindrances. So the practicing of Tranquility Meditation is just the training of the mind itself (citta-sikkhā), and this is for the purpose of being rid of the middle grade of defilements. The way of training in Buddhism it is called the training of the mind and is (citta in Pāli) to concentrate the mind because the concentration of the mind is called “Samādhi”.

When samādhi is translated it means literally ‘firm establishment’, that is to say, the firm establishing of the mind, so that it is firm and not distracted. Just as a post deeply sunk into the ground will take and load without moving, so the mind

established in samādhi is like that. It is neither ruffled nor distracted. Even if an external stimulus arises, samādhi can preserve its nature. Such a kind of mind is of an inestimable value.

2. *Insight meditation (Vipassana bhāvanā)* means inward seeing reality as it is, not one we would like it to be. It is the vehicle leading to full liberation. It is ultimate knowledge of reality and eliminates ignorance, or the causative factor creating suffering from mental pollutants. It brings a radical change in one's personal world, a change in how one sees others and ourselves. Insight is the tool that reveals the awakened mind of purity and clarity (Namto, 1989).

The great principles of insight meditation are the Four Foundations of Mindfulness. Lord Buddha claims that mindfulness is the only path to purification, freedom from suffering, and thus to Nirvana (Pra Rajaprommajarn, 2004). Lord Buddha gave five purposes for insight meditation that are to purify the mind, to free the mind of sorrows, to get rid of physical and mental sufferings, to understand the truth of life and to extinguish suffering and gain Nirvana.

Main principles for the practice of insight meditation through the four foundations of mindfulness (Pra Rajaprommajarn, 2004):

1. *Keep the mind in the present*. The mind focusing on the abdomen must acknowledge the rising or falling or the mind focusing on the right or left foot must acknowledge the right/left foot stepping exactly at the same time as the movement. The mind's acknowledgement of the rising and the falling movement of the abdomen must be simultaneous. Acknowledgement of the rising must not happen before or after the rising movement. While the mind is acknowledging "right" the right foot must be lifted simultaneously. While the mind is acknowledging "go" the foot must be

stepping forward. While the mind is acknowledging “thus” the foot must be touching the floor or the ground. Apply the same principles and process to the left foot.

2. *Practice continually.* Endeavor to be mindful of each and every movement. The cycle of mindful prostration and mindful walking and sitting for the prescribed period of time must be repeated continually. In daily life, try to be mindful and acknowledge movements of daily activities such as washing the face, taking a shower, eating, using the toilet, and stretching or bending the arm. Even when you lie down to sleep, acknowledge “lying” and acknowledge the rising/falling of the abdomen until falling asleep. In prostrating the focus of mindfulness is on the hands. In walking the focus of mindfulness is on the feet. In sitting the focus of mindfulness is on the abdomen and various points on the body.

3. *Practice with the three valuable factors.* Firstly, effort; be determined and try hard. Secondly, attentiveness; the mind should know while the body or the mind rises. Thirdly, clear consciousness; the mind consciously follows and acknowledges the body/mind at every movement, as the person rocking a cradle keeps his/her eyes on the cradle line all the time.

4. *The five powers or controlling faculties must be balanced.* Faith and wisdom should be equal. Effort and concentration should be equal. The more mindfulness one has, the better is the practice as mindfulness controls the other faculties.

5. *The heart of insight meditation is acknowledging.* It is the continual work of mindfulness to be aware and acknowledge. Acknowledging stops the natural state. There are many advantages to perpetually acknowledging: concentration is

strengthened tremendously, sin is prevented from entering the mind and the arising and cessation of the body/mind are perceived continuously.

Mindfulness Practice

Preparation before practice.

1) *Recollection of the Triple Gem.* Participants join palms in front of oneself in a chanting manner, then recollects on the noble virtues of the Lord Buddha, his teaching (Dhamma), and his noble disciples (Sangha). This makes one feel secure, cheerful, and brilliant.

2) *Observing Precepts (sīla).* Participants must request at least the five precepts (sīla-moral conduct) to refrain from doing five evil things, that is, killing, stealing, committing adultery, telling lies and taking intoxicants.

3) *Extending of Mettā or Loving-kindness.* Extend one's loving-kindness to all possible kinds of beings and wishing them happiness, freedom from suffering, freedom from hostility, and freedom from unkindness.

4) *Freeing oneself from all worries.* Participants have to pay attention in practice. For instance, the various disturbing factors must be absent to some extent. The participants should at least temporarily cut down all worries about family, work, study, relatives, etc.

Mindful walking practice.

Mindful walking is essentially about the awareness of movement as one notes the component parts of the steps. When mindful walking alternates with mindful

sitting it helps to keep the mindful practice in balance. This is a brief description of how to practice mindfulness walking.

In preliminary practice of mindful of walking practice, one has to follow these steps (Disayavanish, 2005; Phra Rajaprommajarn, 2004). Establish attentiveness by first noting the standing posture with feet parallel and toes in line and the touch sensations of the feet at the start of the walking track. The arms should hang naturally with the right hand on the left hand. The head is straight and the eyes look ahead and down focusing on the ground about one or two meters away to avoid visual distractions. The mind acknowledges "standing, standing, standing" while being conscious of the standing posture. Walk while keeping the attention on the sole of the foot, not on the leg or any other part of the body. One is walking along with mindfulness or having mindfulness accompanying every step, being aware of the walking experience, and being on guard against distractions. It means walking up and down within a prescribed distance and for a predetermined time. Keep the mind on one foot at present. There are six steps to practice mindfulness of walking.

1) *First step: Right goes thus, Left goes thus.* Lift the right foot about 3 inches above the floor. The mind acknowledges "right." Then move the right foot solely forward, acknowledging "go," and press it on the floor while saying in mind "thus." Make sure to acknowledge the present action.

2) *Second step: Lifting and Treading.* When one wants to lift their feet, a mental note should be made of "lifting," and when they want to place them down they make a note of "treading." So the second stage should be noted as "lifting and treading"

3) *Third step: Lifting, Moving, and Treading.* In the third step, the movement of the feet in divided into three parts. As the left or right feet are lifted, one make a mental note "lifting." As the feet are moving forward, they say in their minds, "moving," and as the feet touch the floor, they say in their minds, "treading."

4) *The fourth step: Heel up, Lifting, Moving, and Treading.* As the right or left feet are lifted, one must be aware of the heels going up and make a mental note, "heel up." They next focus attention on the lifting movement of the whole feet and say in their minds, "lifting." As the feet move forward they make the acknowledgement "moving," and as the feet touch the ground, they acknowledge "treading."

5) *The fifth step: Heel up, Lifting, Moving, Lowering, and Touching.* In this stage the downward movement of the feet in divided into two steps. They must be aware of the downward movement before the feet make contact with the floor by making a mental note, "lowering," and be aware of the feet making contact with floor by making a mental note, "touching."

6) *The sixth step: Heel up, Lifting, Moving, Lowering, Touching, and Pressing.* One lifts their heels up, acknowledging, "heel up," lift the feet entirely acknowledging, "lifting," move them forward, acknowledging, "moving." Then they lower their feet and acknowledge, "lowering." The next new movement is the touching of the feet on the floor with the toes and the ball of the feet, and this they acknowledge mentally, saying, "touching." As the last movement, they press the feet entirely on the floor and make a mental note, "pressing."

Try to do a minimum walking period of half an hour and build it up to a full hour. Strategically it is better to do a walking period before a sitting session as it

brings balance into the practice. If you can alternate the walking and sitting sessions without any major breaks it will develop a continuity of awareness that naturally carries through into the awareness of your daily activities.

Mindful observation of rising and falling of abdomen.

This is a brief description of how to practice mindfulness of observation of rising and falling of abdomen (Phra Dhammavisuddhikavi, 2002; Pra Rajaprommajarn, 2004):

1) Sitting. One can either sit on the floor or on a chair according to one's comfort and ease. If one sits on a chair, do not lean backwards because one will feel sleepy too easily. To sit on the floor, the correct sitting posture is to sit like Buddha's image in samādhi posture. That is, with the right foot on top of the left foot, hands on the lap with the right on top of the left with palms up, and holding the body erect with one's back stretched as straight as possible. When the back is straight it makes the observation of rising and falling of abdomen, the blood-circulation, and the like processes smoother than usual. The eyes should by closed so that one's thoughts do not wander as a result of seeing any objects.

2) Predetermine the period of time that one will practice, such as 10, 15, or 30 minutes, then make a vow to let go off any other thoughts or worries, concentrating only on the abdomen. Inhalation is associated with the rising of abdomen. One acknowledge "rising" simultaneously. It is not before or after the rising of the abdomen. Exhalation is associated with the falling of abdomen. One acknowledges "falling" simultaneously. It is not before or after the falling of abdomen.

Effect of mindfulness on depression.

Teasdale et al. (2000) evaluated the effectiveness of Mindfulness-Based Cognitive Therapy (MBCT) on a group intervention designed to train recovered relapsed depressed patients to disengage from dysphoria-activated depressogenic thinking that may mediate recurrent major depression. In that multicenter trial, recovered recurrently depressed patients (n = 145) were randomized to continue with treatment as usual (TAU) or, in addition, to receive MBCT. The inclusion criteria were: a) 18 to 65 years of age; b) meeting enhanced DSM-III-R criteria for a history of recurrent major depression; c) a history of treatment by a recognized antidepressant medication, but off antidepressant medication, and in recovery, at the time of baseline of assessment and for at least the preceding 12 weeks; d) a baseline assessment, a 17-item Hamilton Rating Scale for Depression (HRSD) score of less than 10. Beck Depression Inventory (BDI) developed by Beck, Ward, Mendelson, Mock, & Erbaugh (1961) was used to measure of severity of depressive symptoms at baseline assessment and each follow-up assessment. The primary outcome variable was the occurrence meeting DSM-III-R criteria for major depressive episode was assessed by Structured Clinical Interview for DSM-III-R developed by Spizer, Williams, Gibbon, and First (1992).

MBCT, a manualzed group skills-training program, developed by Segal, Williams, and Teasdale (2002) is based on an integration of aspects of CBT for depression of Beck et al. (1979) with components of the mindfulness-based stress reduction (MBSR) program developed by Kabat-Zinn et al. (1990). The aim of MBCT is to teach patients in remission from recurrent major depression to become more aware of, and to relate differently to, their thoughts, feelings, and bodily

sensations. The program teaches skills that allow individuals to disengage from habitual (automatic) dysfunctional cognitive routines. A core feature of the program, characterized by freedom and choice, involves facilitation of an aware mode of being. Mindfulness leads a person to be fully present in each moment, consciously aware of sights, sounds, thoughts, and body sensations as they arise. The ability to deploy and maintain attention on a particular focus is central to all other aspects of MBCT. This involves sustained, quality attention that is gathered and focused rather than dispersed and fragmented. MBCT composed of 8 sessions including Sessions 1-4: the development of mindfulness skills (meditation, yoga, and breathing spaces), Sessions 5-8: the change in attitude towards acceptance and flexibility, and developing awareness of personal indicators of worsening mental state. Increased mindfulness can prevent relapse of depression as it allows early detection of relapse-related patterns of negative thinking, feelings, and bodily sensations (Teasdale et al., 2000). Results were analyzed separately for an intent-to-treat sample (n = 145) comprising all of the patients included in random portion, and a per-protocol sample (n = 132) which composed of all of the patients allocated to the TAU condition (n = 69) and the patients (n = 63) allocated to MBCT program in 8 weeks, 2 hr group training sessions. Homework exercises and guide or unguided awareness exercise video or audiotapes were used by an instructor.

Relapse to major depression was assessed over a 60-week study period. For patients with three or more previous episodes of depression (77% of the sample), MBCT reduced relapse rates from 66% for TAU to 37% for MBCT group, a 44% reduction in risk of recurrence in the MBCT condition. In contrast with these positive results, patients experienced only two previous episodes which occurred within the

preceding 5 years. The relapse rates for the MBCT group were 56% and 31% for TAU controls.

In summary, the Four Foundations of Mindfulness are the main principles of mindfulness practice, which leads the person to be fully present in each moment, continuously and consciously aware of what happens to the body, feelings, mind and mind-objects. Increased mindfulness can help the elderly with depression to allow easier detection of autonomic negative thoughts, feelings, and bodily sensations.

There are few studies that examine the effectiveness of the cognitive therapy and mindfulness practice in depressed patients. Recent evidence shows that Mindfulness-Based Cognitive Therapy, a promising cost-efficient psychological approach, could be used to prevent relapse/recurrence in recovered recurrently depressed patients with three or more previous episodes. Unlike CT, there is little emphasis in MBCT on changing the content of thoughts. The focus of MBCT is to teach people to become more aware of thoughts and change relationship of thought. The cultivation of detached, decentered relationship to depression-related thoughts and feelings is central in providing skills to prevent the escalation of negative thinking patterns at time of potential recurrence but it did not work for patients who were depressed (Teasdale et al., 2000). The researchers, however, still recommend that they needed cognitive therapy to help them change the automatic negative thoughts (Ma &Teasdale, 2004; Teasdale et al., 2000).

COGNITIVE-MINDFULNESS PRACTICE PROGRAM

From the review of CT for depression in the elderly, the elderly with depression failed to acknowledge their depressive symptoms and automatic negative thoughts (Koder et al., 1996, Landreville & Gervais, 1997). Therefore, mindfulness practice based on the Four Foundations of Mindfulness may increase awareness in the elderly to easily identify their depressive symptoms and also automatic negative thoughts. It is hypothesized that mindfulness practice not only increases awareness in the elderly but also decreases duration of time in the CT process, as it takes many sessions to identify automatic negative thoughts. The evidence indicates that appropriate CT protocol in the elderly suffered from depression should be 16 to 20 sessions over a 3 to 4 month period (Thompson, 1996; Thomson et al., 2001). The researcher developed the new program for the elderly that consisted of 11 sessions, everyday for the first week and 2 days a week for 3 weeks. Beck Depression Inventory (BDI-IA) (Beck & Steer, 1993) was used to measure the intensity of depression after completion of the program and at four months follow up.

Since the elderly experience increased difficulties with complex abstracting ability, memory, ear or eye problems, minor therapeutic adaptations were essential to maximize the effectiveness of treatment. The researcher presented information in several different modes to increase the elderly's comprehension and retention. The researcher emphasized an important point by stating it, writing it on the whiteboard, taking the time to model the concepts, and also presenting new material slowly. The researcher developed the flipchart or caricature illustrations to demonstrate the important topics such as depression, CT model, the Four Foundations of Mindfulness. Each session began with placing an agenda of what is to be covered on a well-

prepared flipcharts for good collaboration and agreement on topics and tasks. The researcher usually began the sessions with reviewing the last session and homework assignments. At the end of the sessions, a final overall summary and a relevant homework assignment was done, followed by a discussion of the session, and confirmed next appointment.

Cognitive-Mindfulness Practice Program was developed by the researcher to reduce depression in Thai elderly women. The program is based on mindfulness practice centered on the Four Foundations of Mindfulness and Cognitive Theory designed to improve individuals' ability to be aware of body, feelings, mind and mind-objects, to consciously identify automatic negative thoughts and their problems and to develop alternative thinking patterns and problem solving. The program consisted of 2 phases: Phase 1: mindfulness practice (the Four Foundations of Mindfulness), Phase 2: Cognitive therapy which consists of recognition of automatic thoughts, logical analysis of automatic thoughts, generating a rational response and problem solving.

Phase 1: Mindfulness Practice

First of all, the researcher explained the goals of therapy, mindfulness practice and Buddhist principles such as the Four Noble Truths, the Noble Eightfold Path and mindfulness practice based on the Four Foundations of Mindfulness. Then the participants followed the basic general practice (Phra Dhammavisuddhikavi, 2002).

1) *Recollection of the Triple Gem:* Participants join palms in front of oneself in a chanting manner, then recollects the noble virtues of the Lord Buddha, his

teaching (Dhamma), and his noble disciples (Sangha). This make one feels secure, cheerful, and brilliant.

2) *Observing Precepts (sīla):* Participants must request at least the five precepts (sīla - moral conduct) to refrain from doing the five evil things, that is, killing, stealing, committing adultery, telling lies and taking intoxicants.

3) *Extending of Mettā or Loving-kindness*. Extend one's loving-kindness to all possible kinds of beings and wishing them happiness, freedom from suffering, freedom from hostility, and freedom from unkindness.

4) *Freeing Oneself from all Worries*. Participants have to pay attention in practice. For instance, the various disturbing factors must be absent to some extent. The participants should at least temporarily cut down all worries about family, work, study, relatives, etc.

The Four Foundations of Mindfulness are as follows (Disayavanish, 2005; Nyanatiloka Thera, 2000; Phra Rajaprommajarn, 2004):

1. Foundation of the contemplation of the body aims to consider the body as being merely a body, it may be practiced by mindful walking and mindful observation of rising and falling of abdomen.

1.1 Mindful walking practice

Although there were six steps in mindful walking practice, the first step (right goes thus, left goes thus) was used in this program as it was appropriate and safe for the elderly. In preliminary practice of mindful walking practice, one has to follow these steps (Disayavanish, 2005; Phra Rajaprommajarn, 2004). Establish attentiveness by first noting the standing posture with feet parallel and toes in line and the touch sensations of the feet at the start of the walking track. The arms should hang

naturally with the right hand on the left hand. The head is straight and the eyes look ahead and down focusing on the ground about one or two meters away to avoid visual distractions. The mind acknowledges “standing, standing, standing” while being conscious of the standing posture. Walk while keeping the attention on the sole of the foot, not on the leg or any other part of the body. One is walking along with mindfulness or having mindfulness accompanying every step, being aware of the walking experience, and being on guard against distractions. It means walking up and down within a prescribed distance and for a predetermined time. Keep the mind on ones foot at present. Make sure to acknowledge the present action. Acknowledge “right” not before or after lifting the right foot but exactly while lifting it. While the mind is acknowledging “go” the foot must be stepping forward. While the mind is acknowledging “thus” the foot must be touching the floor or the ground. Apply the same principles and process to the left foot. Walk straight from one end, stop with feet parallel and acknowledge “stopping, stopping, stopping”. Aware of their standing posture, one acknowledges “standing, standing, standing”. Then one turns right by lifting the right foot, turning it to the right and putting it form a right angle while acknowledging “turning” after that the left foot is lifted, turned and put on the floor parallel to the right foot, the mind acknowledging “turning.” After repeating the process of turning one more time, walk back to the other end.

1.2 Mindful observation of rising and falling of abdomen. To begin practice, take the sitting posture with legs crossed and then try to keep the mind (but not the eyes) on the abdomen. After a short time the upward movement of the abdomen on inhalation and the downward movement on exhalation will become clear. Then make a mental note, “rising” for the upward movement, and “falling” for the

downward movement. The mediators are not concerned with the shape or form of the abdomen, but they have to pay attention to the bodily sensation of pressure caused by the heaving movement of the abdomen.

2. Foundation of the contemplation of the feelings includes clear awareness of the various conditions that arise through the feelings such as pleasant, unpleasant and neutral feelings. The acknowledgement of the happiness or suffering appears while ones are concentrating on the rising/falling. When happiness or suffering happens one stops acknowledging the rising/falling to acknowledge the feeling. For example, when one feels pain in any part of the body, one acknowledges "pain, pain, pain." For a while, before one resumes acknowledging rising/falling

3. Foundation of the contemplation of the mind is mindful contemplation of the various conditions (distraction, unfocused thinking, etc.) that arise through the mind. All mind states should be mindfully aware as soon as they arise, acknowledge our thoughts. While acknowledging rising/falling, our minds may think of work or home. One has to stop acknowledging rising/falling and acknowledge "thinking, thinking, thinking" for a while before one resumes acknowledging rising/falling.

4. Foundation of the contemplation of mental objects gained by various methods. A popular method is the contemplation of six sense-bases. There are six sense-bases whereby contact between the external stimulus and the sense organ can take place. One practice gives just bare attention or acknowledgement to seeing, thinking, hearing, smelling, tasting and touching. The acknowledgement of the five hindrances: like, dislike, drowsiness, anxiety, and doubt. These exist in the minds of people of all nations. While people are concentrating on rising/falling, one of the hindrances such as pleasure may occur in the mind. People have to stop

acknowledging rising/falling and acknowledge “pleased, pleased, pleased,” instead. If it is displeasures which occurs, one must acknowledge “displeased, displeased, displeased.” If it is drowsiness that occurs, one must acknowledge “drowsy, drowsy, drowsy.” If it is anxiety that occurs, one acknowledges “anxiety, anxiety, anxiety.” If it is doubt that occurs, one must acknowledge “doubt, doubt, doubt.” After one acknowledges the hindrances for a while, one resumes acknowledgement of the rising/falling.

Phase 2: Cognitive Therapy

Cognitive therapy is based on the cognitive model, which explains that people, emotions and behaviors are influenced by their perception of events (Beck, 1995). The situation itself does not directly determine how they feel. The way people feel is associated with the way in which they interpret and think about a situation. With the purpose of fostering the spirit of collaborative empiricism, the researcher displays all basic ingredients which consist of warmth, empathy, caring, genuine regard and competence, listening closely and carefully, accurately summarizing clients’ thoughts and feelings. The researcher is more active in suggesting a direction for therapy sessions and summarizing what they have discussed during a sessions. The researcher tends to adhere to a set structure in every session which consists of a set agenda for the session, elicits feedback about the previous session, reviews homework, discusses the agenda items, sets new homework, frequently summarizes and seek feedback at the end of the session. In the first session, the researcher educates clients about depression, the process of CT, and CT model, automatic

negative thought and how thoughts, moods, and behaviors are all connected to each other.

There are 3 steps as follows:

Step 1: Recognize and Record Automatic Thoughts

The researcher explains about the characteristics of automatic thoughts and help the elderly begin monitoring their automatic thoughts by using a change in emotion as a cue to initiate self-monitoring of what was going through their mind. According to cognitive theory, the onset or intensification of emotion is an indication that an automatic thought has occurred. In addition to labeling their thoughts, clients will also label the intensity of their negative affect, and note the situation in which the thought occurred. The elderly should be encouraged to be aware of whatever goes through their mind. The researcher must strongly encourage clients to express any thoughts that pass through their minds. After the elderly identifies their automatic thoughts, they already do to some extent, evaluate the validity of their thoughts.

Step 2: Logical Analysis of Automatic Thoughts

Once the elderly recognized their negative automatic thoughts, it is helpful to consider their thoughts as hypotheses or guesses. Then the researcher and elderly can test the accuracy of these thoughts by examining the evidence client to subject each thought to logical analysis by : a) examining the evidence for the client's thoughts via a careful review of data and examine the evidence that seems to support its accuracy and the evidence that seems to contradict it and devise a plan of action by using socratic questioning such as “What is the evidence to support this thought?” “Are there any alternative interpretations?” “What if my interpretation is true? How will I manage then?”, b) determining if any cognitive distortions are present, when the

elderly express an automatic thought, the researcher should reflect the type of errors in thinking, c) attempting to generate alternative hypothesis by considering all the possibilities by generating alternative hypotheses to their automatic thoughts..

Step 3: Generate a Rational Response

The researcher can help the elderly modify or change the negative automatic thoughts to something realistic. There are 2 ways to change the thought. First, reattribution: change the thought about the cause of problems. Second, decatastrophizing: change the thought about the negative result of problems. When the elderly finds out their automatic thoughts are correct the elderly is identifying a real problem that requires a solution. Thus, the researcher should educate the elderly about problem solving technique. First, the researcher leads the elderly brainstorming for generating as many solutions as possible, without stopping to evaluate them. Second, the researcher teaches the elderly to list the advantages and disadvantages of each proposed solution. Finally, the researcher helps the elderly to carefully consider the importance of the various pros and cons and based upon that analysis, choose the solution that seems best, and take concrete steps to carry it out.

CONCEPTUAL FRAMEWORK

Depression is a common condition amongst elderly women. According to Beck's Cognitive Theory of Depression, negative cognitive interpretation of experiences leads to negative views of self, experiences and the future. The automatic negative thoughts (repetitive, unintended, and not readily controllable) affect feelings and behavior which can lead to depression (Sacco & Beck, 1995). Therefore, cognitive therapy helps people alleviate depressive symptoms by identifying

automatic negative thoughts and changing the patient's thinking to bring about enduring emotional and behavioral change (Beck, 1995; Varcarolis, 2002). From the review of CT for depression in the elderly, the elderly with depression failed to acknowledge their depressive symptoms and automatic negative thoughts (Koder et al., 1996, Landreville & Gervais, 1997). Therefore, the Cognitive-Mindfulness Practice Program is developed by the researcher to reduce depression in Thai elderly women.

Cognitive-Mindfulness Practice Program, combining mindfulness practice based on the Four Foundations of Mindfulness and Cognitive Theory, enables the elderly to increase their awareness of what happens to the body, feelings, mind and mind-objects when they are about to undergo dangerous mood swings, decrease misinterpretation and unrealistic thinking, and easier to identify the automatic negative thoughts. At that point, techniques from CT help the elderly deal with the automatic negative thoughts that any sad mood might reactivate, to change in the patient's thinking and alleviate depressive symptoms.

Cognitive-Mindfulness Practice Program consisted of 2 phases: Phase 1: mindfulness practice (the Four Foundations of Mindfulness), Phase 2: Cognitive therapy which consists of recognition of automatic thoughts, logical analysis of automatic thoughts, generating a rational response and problem solving.

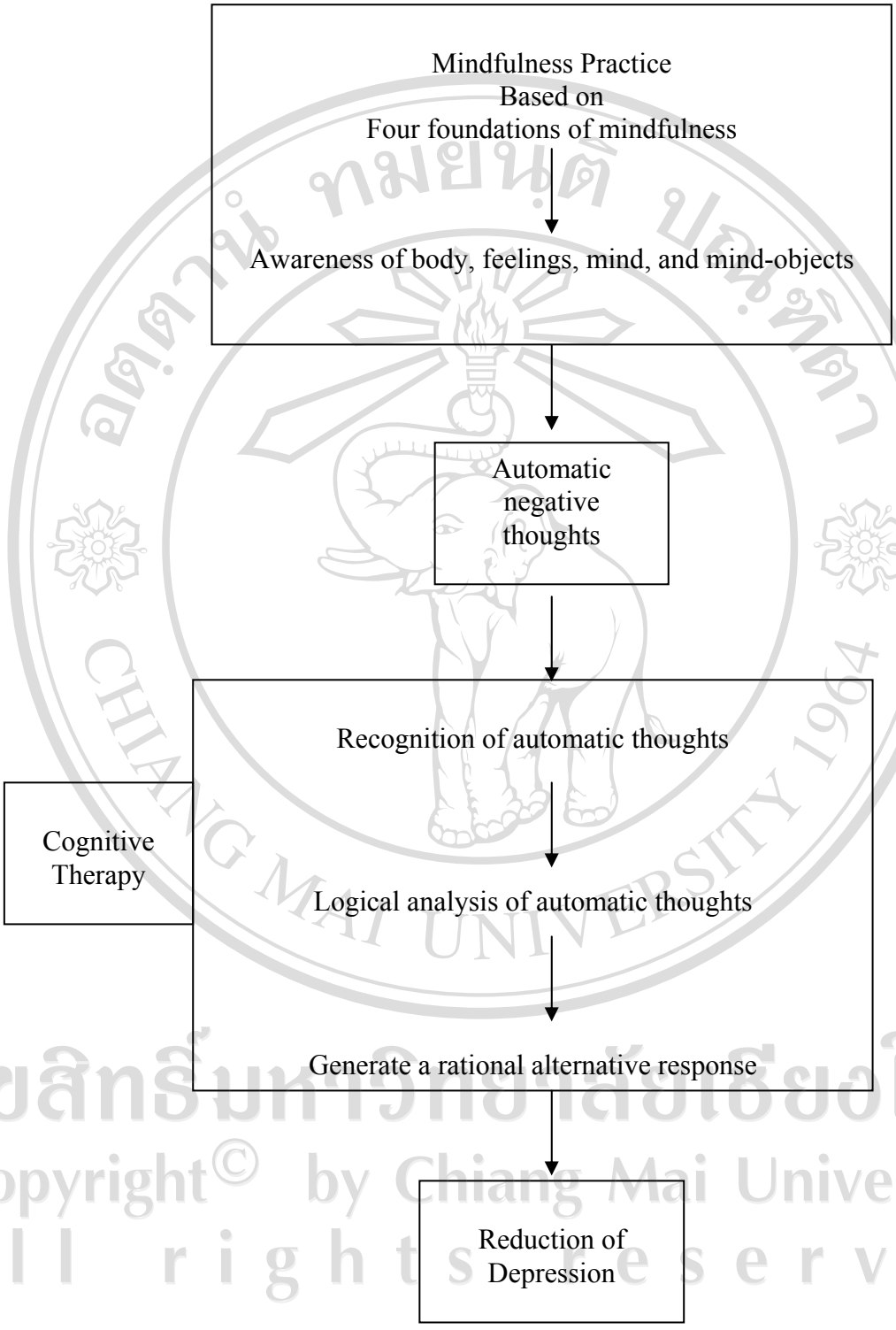

Figure 2. Conceptual Framework of Cognitive-Mindfulness Practice Program