CHAPTER 2

Literature Review

This chapter presents the review of selected literatures which are relevant to the current study, and the conceptual framework of the study. The literature review is divided into six sections as listed below:

1. Situation of older population
2. Definition of depression
3. Depression among older persons
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Situation of Older Population

Situation of Older Persons

Situation of older persons worldwide. Globally, the population is aging rapidly. Between 2015 and 2050, the proportion of the world's population over 60 years will nearly double, from 12% to 22% (WHO, 2016). Interest in the older population has increased immensely in recent years, largely in response to the unavoidable growth faced by industrialized countries, where a phenomenon termed the 'demographic transition' has been underway. Concurrent with increasing life expectancy has been a fall in the birth rate; in other words, people are living longer. As a result, the affected countries are undergoing shifts in their population structure, such that older people comprise of an increasing proportion of the population (Ezeh, Bongaarts, & Mberu, 2012). Over the past 50 years, the percentage of the older population has increased fourfold from 5.7% in 1960, to 23.1% in 2010. This change has occurred at the fastest rate in the world (Ari et al., 2012). Congruent with National Institute of Aging, National Institute of Health: NIH, U.S. studied global health and aging found that in 2010, an estimated 524 million people were aged 65 or older as 8 % of the world's population. By 2050, this number is expected to nearly triple to about 1.5 billion, representing 16 % of the world's population. In China, the equivalent estimates are 8% and 23%; in Europe, they are 16% and 27%; in North America, they are 13% and 22%. New Zealand is undergoing a similar process, whereby the 14% of the population currently aged 65 or more is expected to rise to 25% by 2050; within that group, people aged 80 or more currently comprise of about 25%, but that proportion will be 40% by 2050 (NIMH, 2011). Situation of aging in France, in the mid-2000s, France was near the European Union (EU) average, with about 16% of the population aged 65 and older. Over the next few decades, the share of the French population aged 65 and older will increase steadily, to reach about 25% in 2030 and nearly 30% in 2050 (Beland & Viriot Durandal, 2013). Japanese society is aging at an unprecedented rate. In addition, the percentage of very old (aged 75 years and over), comprising more of frail aged people, exceeded 10% of the nation's population in 2008 (Ari et al., 2012). Japan has led the way in this phenomenon: people aged 65 or more currently comprise 23% of the Japanese population, and are expected to make up 38% by 2050 (Ezeh et al., 2012).

Although, more developed countries have the oldest population profiles, the vast majority of older people, and the most rapidly aging populations are in less developed countries. Between 2010 and 2050, the number of older people in less developed countries is projected to increase by more than 250 %, compared with a 71 % increase in developed countries. Most developed nations have had decades to adjust to their changing age structures. In contrast, many less developed countries are experiencing a rapid increase in the number and percentage of older people (NIMH, 2011). Data reported by the Ministry of the Interior in Taiwan indicate that 10.6% in 2012, and 20% in 2025 of people were over 65 years old. Moreover, the author presented population trends in regions of Asia divided by region as, South-East Asia have a percentage of the population aged 60 years and over was 7.1 %, 12.7%, and 22.0% by the year 2000, 2025, and 2050, respectively (Weiss, Mohler, & Fain, 2011). Another two studies in Taiwan, the first study found that by 2011 the estimate of Taiwan's disabled population will reach 450,000, two-thirds of who are older people. The number will continue to rise, reaching 1 million by 2036, with senior citizens accounting for 75% of the disabled population. In other words, the number of disabled older people in Taiwan will grow 2.5 times by 2036 (Chen et al., 2011). The second study in Taiwan showed data reports indicating that in 2010, 2.45 million (10.6%) of the country's 23 million people were over 65 years old. Estimates are that by 2025, 20% of Taiwan' population will be over 65 (Weiss et al., 2011). From the epidemiological studies presented, fastest growth of older population were consistant with other studies, this then implies that this phenomenon may not be as marked in other developed countries, but the same trends are evident, and population aging was a global phenomenon.

Situation of older persons in Thailand. Now a day, like many other countries all over the world, Thailand's population has continually been growing and aging (The Government Public Relations Department, Thailand, 2014). Among the most prominent features of Thailand's population in recent decades is the rapid growth in the numbers of older persons, and their increasing share of the population. The rapid growth is a legacy of the high levels of fertility that prevailed at the time when the cohorts now entering older were born, and the subsequent improvements in mortality over their lifetime. The increasing share that they represent of the total population is attributable mainly to the rapid decline in fertility during the three decades following the mid-1960s, and the below

replacement level of fertility since the early 1990s (UNFPA, Thailand, 2011). Similar to the Institution of Population and Social Research, Mahidol University reporting about estimated Thai aging population in 2005, Thailand has 6 million people who are 60, or more than 60 years old, or 10% of total of Thai population. In 2010 we had Thai older adults at 12.8%, and by the years 2035 Thailand will have as many as 16 million older adults, or 25%; hence, Thailand will meet the criteria given by the United Nation as an aged society (National Statistical Office, Ministry of Information and Communication Technology of Thailand, 2012).

Changes in the population age structure is demonstrated by the ratio of population, in 3 major groups: youth (aged under 15), working-age (aged 15-59), and elderly (aged 60 and over). The percentage of Thai youth and working-age population will continue to decline from the year 2010 to 2040, while that of the elderly will increase continuously, from 13.2% in 2010, to 32.1% in 2040 (FOPDEV, 2015). Consistency with the statistics of the government public relations department report (2014) show that the proportion of persons aged over 60 years in Thailand now accounts for 13% of the total population. In the next 20 years, the aging population is expected to be 25% of the population.

From rapid change of demographic groups, and the percentage of Thailands older population, it means that Thailand will be faceed with an aging society, the world's aged society, and part of the worldwide global problem. Thailand has continued to face major global and internal changes which may pose threats to, or provide opportunities for the country's development in this significant change, as many countries are moving toward an ageing society (Office of the National Economic and Social Development Broad, Thailand, 2011). Thailand's aging population also represents an enormous challenge, thus we must now recognize the importance of gerontology, geriatrics, preparation of mental health and psychiatric nursing care services, to ensure that services are put in place in order to effectively cope with their rapidly growing population, and growing aged society.

Classification of the Older Person

Classification of the older person worldwide. Most developed world countries have accepted the chronological age of 65 years as a definition of "elderly" or "older" person, but like many westernized concepts, this does not adapt well to the situation in Africa. While this definition is somewhat arbitrary, it is many times associated with the age at which one can begin to receive pension benefits. At the moment, there is no United Nations standard numerical criterion, but the UN agreed that the cutoff is 60+ years, to refer to the older population, mostly used is age 60 or 65 years for eligibility (WHO, 2016).

In Europe and the USA, older people are most commonly defined by chronological age. For legal and occupational purposes an older person is generally defined as someone aged 65 years and older. It has become popular to characterize people as young-old (65-75 years), old-old (75-85 years), and oldest-old (85 years plus). In working with older adults, it is important to understand the individuality of each person. The age of an individual is more complex than chronological age (years since birth). In a sense, chronological age confuses the picture more than it clarifies it. To understand the individual capabilities of an older adult it may be more important to take into account biological, psychological and social factors rather than age (Laidlaw, Thomson, Dick-Siskin, & Gallagher-Thomson, 2004). On the other hand, we can divide by age of the over 65 population as follows traditionally, 65 years of age has been seen as entry point for "old age". The demarcations, then are young-old, which incorporate ages 65 to 74, old-old, which include ages 75 to 84, and oldest-old, or ages 85 and older (Whitbourne, 2001).

Classification of the older persons in Thailand. Classification of older person in Thailand is commonly done by starting at the age of 60 as aging index for Thai people, and then dividing into 3 levels as early stage, which includes age 60-69, middle stage, which includes age 70-79, and late stage which includes age 80 and older (Department of Mental Health, Ministry of Public Health, Thailand 2010; Bureau of Empowerment for older person of Thailand, 2010; Institute of Geriatric Medicine, Department of Public Health, Thailand, 2006). This study provided for older Thai's in the community dwelling, thus the researcher used the classification of the older person from the Department of mental health, Ministry of public health, Thailand.

Definition of Depression

Depressive symptoms represent the most common mental problem and play a major contributor to disease burden worldwide (WHO, 2016; Xu, Wang, Wimo, & Qui, 2016). Depressive symptoms are frequent in old age, and their prevalence is increasing with an aging population (Valiengo et al., 2016).

Consistent with the definition proposed by Beck and Alford, depression refers to 1) normal mood, a person experiencing a transient sadness or loneliness may state that he or she is depressed, or a lowering of their mood below their baseline level. In any event, when a person complains of feeling extremely depressed, desperate, or unhappy, the term depressed is often used to label this subjective state, 2) the term has been often used to label an intricate pattern of deviation of feeling, cognition and behavior that is not represented as a distinct psychiatric disorder. In such cases it is regarded as a syndrome, or symptom complex. The group of signs and symptoms is sometimes intellectualized as a psychopathological dimension, fluctuating in intensity (or degree of abnormality) from mild to severe (Beck & Alford, 2009), and 3) the syndrome of depression may at times appear associated with a definite psychiatric disorder or depressive disorder. When theorized as a specific clinical entity, depression is assumed to have certain reliable attributes in addition to the distinguishing signs and symptoms; these attributes include a specifiable type of onset, course, duration, and outcome (Beck & Alford, 2009). A diagnosis of depression is related to a major depression disorder, and is diagnosed based on the standard criteria of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) and International Classification of Disease 10 version (ICD-10), American Psychiatric Association [APA], 2013). Depending on the number and severity of symptoms, a depressive episode can be classified as mild, moderate, or severe. A key distinction is also made between depression in people who have or do not have a history of manic episodes. Both types of depression can be chronic (i.e. over an extended period of time) with relapses, especially if they go undertreated (WHO, 2016).

Most literature present the definition of a depression diagnosis as a syndrome or disorder, with the aim for treatment in a medical model or research study such as; Pilgrim and Bentall (1999) who defined depression as a "syndrome not a symptom, and this syndrome requires the presence of several symptoms". And describe depression as "The

word depression is used in many ways to describe a mood, a symptom, a syndrome as well as a specific group of illnesses". On the other hand, Kurlowicz (2003) describe in the broadest sense depression as defined as a syndrome comprised of a collection of affective, cognitive and somatic or physiological manifestations. Some problems can occurr after classifying depression as followed by DSM-5, and ICD-10, because depression as a disorder is better explained as a range rather than as a collection of distinct categories. Minor and subthreshold depressions are common conditions, and patients falling under the diagnostic threshold experience substantial difficulties in functioning, and generally have a negative impact on their quality of life. Current diagnostic systems need to review the thresholds for depressive disorders, and differentiate them from normal feelings of sadness (Rodriguez, Nuevo, Chatterji, & Ayuso-Mateos, 2012).

This study defined depression as the depressive symptoms complex pattern of deviation of feeling, cognition, and behavior that follow Beck and Alford (2009) that was used to term a complex pattern of deviation of feeling, cognition and behavior, that is not characterized as a discrete psychiatric disorder, have mild depression but not met DSM-5 or ICD-10 criteria of major depressive disorder (MDD) or the second group of Beck and Alford (2009).

Depression Among Older Persons

Depression encompasses a variety of symptoms; the individual usually suffers from a depressed mood, loss of interest and pleasure, and reduced energy leading to increased fatigability and reduced activity. Marked fatigue after only slight effort is common. Other common symptoms are: (a) reduced concentration and attention; (b) reduced self-esteem and self-confidence; (c) ideas of guilt and unworthiness (even in a mild type of episode); (d) depressing and negative views of the future; (e) ideas or acts of self-harm or suicide; (f) troubled sleep; (g) lessened appetite. The lowered mood differs little from day to day, and is often unresponsive to situations, yet may show a characteristic diurnal disparity as the day goes on. For depressive episodes of all three grades of severity, a duration of at least 2 weeks is usually required for diagnosis, but shorter periods may be reasonable if symptoms are unusually severe and of rapid onset (WHO, 2012).

The severity of depression is largely dictated by the amount of symptoms the person experiences and the effect these have on the person's ability to function. Normally, determining factors of the three categories of depression are; mild, moderate and severe depression. In typical depressive episodes of all three varieties as (mild (F32.0), moderate (F32.1), and severe (F32.2 and F32.3). Differentiation between mild, moderate, and severe depressive episodes, rests upon a complex clinical judgment that involves the number, type, and severity of symptoms present. Mild depressive symptoms present guidelines as depressed mood, loss of interest and enjoyment, and increased fatigability are usually regarded as the most typical symptoms of depression, and at least two of these, plus at least two of the other symptoms should typically be present for a definite diagnosis. None of the symptoms should be present to an extreme degree. Minimum duration of the whole episode is about 2 weeks. An individual with a mild depressive episode is usually distressed by the symptoms, and has several difficulties in continuing with ordinary work and social activities, but will probably not cease to function entirely (WHO, 2012).

Although some of the signs and symptoms of depression are the same for both men and women, women tend to experience certain symptoms more often than men. Differences between female and male depression are such that women tend to blame themselves, feel sad, apathetic, and worthless, feel anxious and scared, avoid conflicts at all costs, feel slowed down and nervous, have trouble setting boundaries, find it easy to talk about self-doubt and despair, use food, friends, and love to self-medicate. While, men tend to blame others, feel anger, irritable, and ego inflated, feel suspicious and guarded, create conflicts, feel restless and agitated, need to feel in control at all costs, find it weak to admit self-doubt or despair, and use alcohol, sport, and sex to self-medicate (Smith & Jaffe, 2016; NIH, 2016). From gender specified symptomatology of older women, and incidence rate, were twice as likely to report suffering from symptoms of depression more than men, thus this study endeavours to evaluate the effect of group CBT on depressive symptoms for this population.

Almost all of the literature reviewed, divided the studies of depression among older persons in two groups. The first one, major depressive disorders (MDD) that follow DSM-5, and ICD-10 (WHO, 2012), explain depression in the older person referring to

depressive syndromes defined in that they arise in adults older than age 65 years, matching APA (2013) which explained depression in the elderly referring to depressive syndromes similarity with that of Muliyala and Varghese (2010) who defined depression in older person as a depressive episode or disorder that is diagnosed according to ICD-10 as a syndrome in the presence of any two of the following: depressed mood, loss of interest and enjoyment, and reduced energy for at least a period of 2 weeks. The last group, depressed mood is a symptom of many psychiatric disorders and physical illnesses, but does not meet the criteria of MDD. In psychiatric terms, "depression" refer to a syndrome. A syndrome is a group of signs and symptoms that occur together, in a form that is specific to a particular disease or abnormal condition. In the syndrome, it is recognized as a "depressive disorder", the clinical features are low mood, lack of enjoyment and interest, reduced energy, sleep disturbance, appetite disturbance, reduced confidence and self-esteem, and pessimistic thinking.

Prevalence of Depression in Older Persons

Recently, it has been widely recognized that depression is the most common mental health problem in the older person (Marcus, Yasamy, van Ommeren, Chisholm, & Saxena, 2012; WHO, 2012, 2016) and a high incidence of depression among older people who are living in the community (Pence, O'Donnell, & Gaynes, 2012) as below.

Western countries. Depression is known to be common among older people, though in developing countries precise data are scarce (Department of Economic and Social Affairs US., 2011). By 2020, depression will be second only to heart disease as a cause of worldwide disability, and a chief public health problem in older people (Cooper et al., 2011; Richards et al., 2007; WHO, 2016). These studies empirically supported psychological interventions in the US and found that more than one-quarter (27%) of older persons assessed by aging service providers met criteria for having current MDD, and nearly one-third (31%) had clinically substantial depressive symptoms. Depression is often under recognized and under treated in older persons (Palazzolo, 2015). Similar with the study of mood disorders in the elderly: incidence found that 10% to 38% of the older population present with depressive symptoms, and an overall, 35.3% of the cases occur as late life depression, and are regarded as mild depressive symptoms (Valiengo et al., 2016). Additionally, the study of those who had been diagnosed over twelve

months, as well as prevalence of mental health disorders by long term care (LTC) and non-long term care (Non-LTC) settings in US for older people, established that a total of MDD was 1.3%, MDD in community LTC was 1.2%, and MDD in Non LTC was 0.7% (Lum et al., 2012). Additionally, van der Wurff et al. (2004) studied the prevalence and risk factors for depression in 330 older Turkish and 299 Moroccan migrants in Netherlands, and found that the incidence of self-reported depressive symptoms (CES-D ≥ 16) was very high in elderly migrants, at 33.6% for Moroccan, and 61.5% for Turkish elderly. In multivariate analysis, ethnic origin was distinctively related with the occurrence of clinically significant depressive symptoms in migrant elders. While, Patten et al. (2006) use descriptive epidemiology of major depression in Canada, found that groups aged 65 years and over was at 6.4% of prevalence for depression, and the lifetime occurrence of a major depressive occurrence was at 12.2%. Consistent with Snowdon (2002) whose study revealed the prevalence of depressive condition (not just major depression) in the elderly, found that people aged over 65 years reported rates in the range of 10.3 to 13.5%, this being similar to 9 centers in Europe reporting a prevalence rate of 12.3%, and Magnil, Gunnarsson, Bjorkstedt, and Bjorkelund (2008) found a 15% frequency of depressive symptoms in Swedish elders. Several studies present the estimated prevalence of sub-syndromal depression amongst the elderly, as being between 8% to 16%, (Blazer, 2003).

Public studies conducted in the Western countries indicated that up to 5% of older persons in the community meet diagnostic criteria for MDD, and up to 15% had clinically significant depressive symptoms that impact their functioning, otherwise known as sub-syndromal depression, or minor depression (Palazzolo, 2015). Consistent with the frequency of depression among U.S. older people living in the community, and having not received any diagnosis could range from 15 to 25% (Hooyman & Kiyak, 2009). Additionally, up to 15% of older people living in the community have clinically significant depressive symptoms. Incidence rates for depression are higher in specialty settings, include primary care (5%-10%), and residential care (10%-50%) (Francis & Kumar, 2013). Moreover, MDD was reported in 8-16% of community living older adults in U.S., 5-10% of older medical outpatients seeing a primary care provider, 10-12% of medical-surgical hospitalized older adults, with 23% more experiencing significant depressive symptoms (Blazer, 2009). While prevalence of studies by different diagnostic

criteria for depression in the Spanish elderly community, found that 7% of the sample had depressive symptoms, but only 5.7% had a diagnosis of depression, 4.8% fulfilled DSM-IV criteria, and only half of MDD cases were on antidepressants (de la Cámare, Saz, López-Antón, Ventura, Día, & Lobo, 2008). Similarity with the studied twelve month diagnosed and prevalence of mental health disorders by long term care (LTC), and non-long term care (Non-LTC), settings in US older people found that the total of mild depression was 8.2%, mild depression in community LTC was 7.8%, and mild depression in Non LTC was 4.3% (Lum et al., 2012). Moreover, the researchers reference that depression is one of the most common psychiatric disorders among older persons, 1-3 with evaluations of at least 15-20% of community older persons suffering from a type, and degree of depression that need clinical, and public health care (Thompson, Coon, Gallagher-Thompson, Sommer, & Koin, 2016). From previous studies, this meant the older people living in the community are nearly 10%, who have depressive symptoms, are under diagnosed and still suffering from depressive symptoms, while older people who met MDD criteria and are under treated, or inadequate treatment, was frequent, and only half of the MDD cases were on antidepressants.

Eastern countries. The prevalence of depressive symptoms in Chinese older adults: a population based study found that the prevalence of depressive symptoms in the total study population was 39.86%, it can be concluded that there is a higher prevalence of depression in Chinese older population, compared with those reported two decades ago (Yu, Li, Cuijpers, Wu, & Wu, 2012). In this same situation, Cho and Lee (2005) studied epidemiology of depressive disorders in Korea, and found that prevalence rate of major depression was between 3.5-4%, and those with depressive symptoms were between 7.4-38.9%. The prevalence rate of major depression in the Korean elderly was high. In Australia, the study found that 8.2% of elder's living in the community are suffering clinically significant depressive symptoms of depression (Pirkis et al., 2009). In Sri Lanka, a national survey studied the incidence of clinically significant depressive symptoms among 1,181 elderly people (≥ 60 years) and found that the incidence of depressive symptoms was estimated to be 27.8% (Malhotra, Chan, & Ostbye, 2010). The study of depression among older Singaporeans found that overall depression in both male and female was at 7.7%, mild depression (Mustaffa & Alkaff, 2011).

In Thailand, the study into the situation of Thai elderly from the year 2010 to 2040 found that the elderly will increase continuously from 13.3% in 2010 to 32.1% in 2040 (FOPDEV, 2015). Supporting this study of Thailand as it prepares for becoming an aging society, was that Thailand's population has continually been aging. Statistics show that the section of persons aged over 60 years in Thailand now accounts for 13% of the total population. In the next 20 years, the aging population is expected to account for 25% of the population (The Government Public Relations Department, 2014). While, previous studies were determining the prevalence in hospitalization, and recognition of geriatric syndromes in 120 outpatient clinics, at a tertiary care hospitals of Thailand, their research found that the occurrence was 14% for depression (Limpawattana, Sawanyawisuth, Soonpornrai, & Huangthaisong, 2011). In a different setting that studied prevalence of depression among Thai older people who are living in the community of Wongpoom, Sukyimg, and Udomsubpayakul's their survey studied depression among the elderly living in Chiang Mai province, and found that 87% of the older people have depression (Wongpoom et al., 2011) consistent with the studies of older people living in rural areas of Thailand which found that the identified group was at 28.5% who had depression (Hassen & Prasartkul, 2011). From previous studies, this means that the number of Thai older people living in the community, have depression more than those attending outpatient clinics. Thai older persons who have depressive symptoms, are underdiagnosed and have MDD, are under treated, and still suffering from depressive symptoms.

In terms of prevalence of depression in older person between the genders, WHO mentioned that more women are affected by depression than men (Jang, Kim, & Chiriboga, 2011; Li et al, 2014; WHO, 2012, 2016). At least six previous studies support that older women have higher percentage of depression than men. The investigated depressive symptoms among Mexican older people, who live in the community found the percentage of subjects with depressive symptoms was at 35% of men, and 50% in women, indicating that a large proportion of older persons experience depressive mood states, and are still suffering whilst living in the community (Bojorquez-Chapela, Villalobos-Daniel, Manrique-Espinoza, Tellez-Rojo, & Salinas-Rodríguez, 2009). The prevalence of depressive symptoms in community living for older Korean immigrants, and older Koreans, found that women have depressive indicators (65.1%) higher than men (34.9%)

and present the variance indicated as a significant main effect of gender, on depressive symptoms ($F=4.07$, $p< .04$) (Sin et al., 2010). A national survey of Sri Lanka, found that the prevalence of depressive symptoms was observed to be 24.0% for men, and 30.8% for women (Malhotra et al., 2010). The study conducted among older aged people 65 years and over, living in urban areas of Canada, found that 13.3% developed depressive symptoms, versus 8.9% of those living in rural regions, and factors predicting depressive symptoms, were that of the female (St. John, Blandford, & Strain, 2009). In Thailand, studies found that the prevalence of depression in Thai older people living in the community overall was 12.78%, of which 8.23% had only depressive symptomatology in males at 5.43%, and for females was 9.63% (Thongtang et al., 2002). The research project survey, and study of health status among the elderly in 4 regions of Thailand found that 87% of older person have depression, and divided into 3 groups of age as 1) 60-69 years old male have depression as 9.7% and female have depression as 12.5%, 2) 70-79 years old male have depression as 10.9% and female have depression as 15.0%, and 3) more than 80 years male have depression as 15.4%, and females have depression recorded at 20.1%. (Institute of Geriatric Medicine, Department of Public Health, Thailand, 2006). The study determining the prevalence of depression among members of elderly clubs in Bangkok, Thailand, found that females had twice the prevalence of depression than males (Charernboon, Phanasathit, Tangwongchai, Hemrungrojn, & Worakul, 2010). From literature reviews, it suggested that older women might suffer from depressive symptoms more than men.

Overall of the research project in the different countries, and different settings found a similar tendency of high prevalence of depression in older person, so this statistic can ensure the significant of the problem in this population group, that effects world mental health of the aging society now and in the near future. Moreover, WHO (2012) mentioned depression as a significant contributor to the global burden of disease, and affects people in all communities across the world, which is in support with their report of WHO (2008), that indicated that depression ranked first on the leading cause of burden of disease in 2030. The results from several studies presented that Thailand is meeting this trend of high prevalence of mental health problem of depression, thus depression in older people has been identified as a new public health problem, in low and middle income countries, including Thailand (WHO, 2010).

Factor Related to Depression

Risk factors leading to the development of depressive symptoms in older persons likely comprise complex interactions among biological, psychological, and social risk factors (Fiske et al., 2009). The first, biological risk factor and physical illness, and possible one of the most important related, and specific with depressive symptoms in older persons, is physical illness, poor health status, and functional disability, and associated depression in older persons (NIMH, 2015; Sin et al., 2010; Suttajit et al., 2010; UNFPA, 2011; WHO, 2016). Biological risk factors include endocrine, inflammatory or immune, cardiovascular and neurological changes that occur with normal aging, or with age linked diseases, appear to increase vulnerability to depression (Fiske et al, 2009). Moreover, any serious, or chronic condition of medical illness can produce a depressive reaction, the most strongly associated with depression include cardiac and cerebrovascular diseases (Baune et al., 2012; Peltzer & Phaswana-Mafuya, 2013; Rodda et al., 2011) and neurological conditions (Fiske et al., 2009; Peltzer & Phaswana-Mafuya, 2013). About 80% of older persons have at least one chronic illness, and 50% have two or more. Depression is more common in people who also have other illness, or whose role become incomplete, or an adverse disability (Centers for Disease Control and Prevention, 2015). The study of frequency and links to depressive symptoms in Chinese older adults in a population based study found that health status was the strongest predictor for depressive symptoms (Yu et al., 2012). It may be true then that depression increases the risk of developing a disability, and that disability may increase the risk of depression. Moreover, the connotation between depression and disability is more complex (Graham, Campion, Kaiser, & Edwards, 2011). The second, psychological risk factors consistant with cognitive diathesis, such as cognition causally influencing emotions, and behaviors and, in the case of negative unconscious thoughts, and cognitive alterations, contribute to the maintenance of depression (Beck, 2011; Hofmann et al., 2013), ruminative coping style, avoidance coping styles have been associated with depressive symptoms in the older person (Fiske et al., 2009). The third, social risk factor, stressful life events and inadequate social support when individuals are faced with greater losses that are associated with depressive symptoms in older persons. Long standing susceptibilities appear to change the effects of stressful events on depression, and

negative events, such as loss of a loved one, were more strongly associated with depression in older persons (Fiske et al., 2009).

Gender was a crucial factor that presented as a risk factor for depression, with women, more than twice that of men (Nierenberg, 2014). From literature reviews found, two studies of depressive symptoms in community dwelling elderly Koreans found that women had higher depressive symptoms than men (NIMH, 2015; Sin et al., 2010). Another study on gender differences in depressive symptoms among older Korean American immigrants found that women who more likely to present with chronic conditions, and greater functional disability, and lower sense of control, and were found to have more depressive symptoms (Jang et al., 2011). They studied rural residences and predicted the development of depressive symptoms in older adults in Canada, which found that females and poor self-rate health, as factors predicting depressive symptoms by female gender, in rural areas likely to have depressive symptoms 3 times greater than females in urban areas, and elders who have poor self-rated health are likely to have depressive symptoms 3.52 times greater than elders who have high self-rated health (St.John et al., 2009). A meta-analysis of the prevalence of depressive symptoms in Chinese older adults found that depressive symptoms significantly differed with gender, and the prevalence in women was significantly higher than that in men (Li et al., 2014). The study of gender differences in depression found that clinically important risk factors for prevalence of females in depression, are role limitation associated with lack of choice, role overload, and competing social roles; psychological attributes related to vulnerability to life events, and coping skills (Piccinelli & Wilkinson, 2000). Even in Thailand the study of gender difference in term of sociodemographic risk factors of depression, found that women who were unemployed, and had an occupation with inconsistent income, had a higher risk than those who had a consistent income (OR= 0.6). Women who came from an unsupported family had a higher risk than those from a supported family (OR= 1.75) and intervention needed to be designed with appropriate strategies that take into account gender differences (Rungreangkulkij et al., 2010).

Factors related with depressive symptoms in older women, many factors may contribute to women's experience of depression, such as biological, loss of loved one, stressful situations, and hormone factors that are unique to women are linked to women's

higher depression rates. While women with depression do not all experience the same symptoms (NIH, 2016), they classically have symptoms of sadness, worthlessness, and extreme guilt (NIH, 2016; NIMH, 2013). From literature reviews to study gender differences in the pertinence of cognitive diathesis stress factors to depression, they found that depressed women were more likely to have experienced a undesirable severe event before the onset of depression, and had a higher frequency of negative interpersonal events than men, that supports the hypothesis of gender differences in pathways to depression (Spangler et al., 1996). The study of Thailand of gender differences leading to a high risk of depressive disorder in women found that internalization has a high risk for depressive disorders in Thai women. The five identified themes related to the causes of depression were drinking and having affair, continuous family responsibly, mother-child attachment, unable to let it go, and the norm that women should stay home. The researcher suggested that therapist's should be gender sensitive in providing care for women who are under stress from gender role, and psychosocial interventions need to address the psychosocial origin, or gender norms of depression (Rungreangkulkij et al., 2012).

Consequences of Depression in Older Person

Depression frequently accompanies and complicates chronic medical conditions such as, complications of cardiac disease, ischemic heart disease, diabetes, and stroke (Mykletun et al., 2009), and it is associated with functional impairment and disability (Joo et al., 2010; Mykletun et al., 2009; Unutzer, 2007). Depression in older persons has also been linked to increased healthcare costs (Rodda et al., 2011; Unutzer, 2007). Finally, depression may increase mortality rates through suicide, with up to 83% of older persons who suicide, had suffered from depression (Mustaffa & Alkaff, 2011). Additionally, depression will be second only to heart disease as a cause of global disability (Chen et al., 2011) and a major public health problem among older people by the year 2020 (Cooper et al., 2011; Richards et al., 2007).

The entire studies present a trend of prevalence of depression in older people that also seems to be high, even in Thailand. With the aged population growing, there will be even more people in this group suffering from unrecognized depression. Early recognition and treatment can reduce the impact of this debilitating condition (Hardy, 2011). From

the statistics of depression, Thailand has encountered a magnitude of this problem, thus we should be prepared with the best way for managing this problem. Moreover, WHO set depression as a global crisis on world mental health day on October 10, 2012 that encouraged governments, and civil societies, around the world to address depression as a widespread illness, often co-existing with other serious illnesses that affects individuals, their families, and their peers, and to recognize that it is a treatable condition. Among the developed countries, the current economic downturn has resulted in increased unemployment, increased debts, and increased insecurity resulting also in an increasing incidence of depression among the population. For middle- to low-income countries, public education on mental health is often inadequate due to limited resources; it will be useful for mental health promotion to be implemented in these countries (WHO, 2012).

Literature reviews further found depression in older people as a public health problem, and provided the evidence of high prevalence of this situation in both developed countries, and developing countries, thus reflecting the importance of this situation, as to how all countries should be aware of and prepare appropriate interventions or strategies to manage, provide intervention and alleviate this global problem. Moreover, devastating consequences of depression in older persons affect public health problems, leading to a global health burden (WHO, 2016), and influencing the national economic burden (Xu, et al., 2016).

Measurement of Depression

Depression is a significant contributor to the global burden of disease, and affects people in all communities across the world (WHO, 2012) and because of its disturbing magnitudes; depression in the elderly is a significant public health problem (Fiske et al., 2009). Mechanisms used in psychiatric research can be classified into three types: screening tools, predictive mechanisms, and rating or evaluative instruments. Particularly depression questionnaires that are increasing in popularity among researchers, because of their suitability and requirement for few personnel. Moreover, the validity and reliability of self- administered questionnaires are satisfied (Lotrakul and Sukanich, 1999). Several self-report depression scales have been shown to be reliable, and valid in distinguishing depressed from non-depressed older people, such as The Geriatric Depression Scales (GDS) that was developed specifically for use with the

elderly. The Beck Depression Inventory (BDI) and Center for Epidemiologic Studies-Depression Scale (CES-D), were not developed specifically for use with elderly, but have reliability and validity data supporting their use with elderly (Karel & Hinrichsen, 2000). Thus instrument that we use to measure depression in older people must have satisfactory reliability, and validity as outlined below.

1. The Geriatric Depression Scale (GDS) is currently one most used depression self-reports, and was created for the elderly. The scale was first developed in 1982 by Yesavage and others, its items were based on characteristics of depression in the elderly in 30 items. Range of possible score 0 to 30, so score of 0 to 10 should be normal and 11 or more, as possible indicators of depression (Montorio & Izal, 1996). Four years later, The GDS: SF (Short Form) was developed by Sheikhits and Yesavage (1986), consisting of 15 questions requiring "yes" or "no" answers and could be completed quickly. Although the tool itself states that a score above 5 is suggestive of depression, and a score equal to or greater than 10 is almost always indicative of depression, a 0 to 4 isn't typically cause for concern, 5 to 8 suggests mild depression, 9 to 11 suggests moderate depression, and 12 to 15 suggests severe depression (Greenberg, 2007).

The GDS was developed to give a simple, easy to use approach to screening for depression in the elderly. The advantage of the GDS-15 for medically ill populations is that the instrument deliberately does not assess the somatic symptoms of depression, so as to not inflate the total score by inadvertently attributing symptoms of medical illness to depression (Vaccarino, Kasl, Abramson, & Krumholz, 2001). The GDS-SF had been well studied in various geriatric populations, and offered in several languages, such as the studies of Chinese older in Chinese version, which found that the internal consistency reliability of the scale was .89 and test–retest reliability was .85 (Wang, 2004). In a Korean study that used the Korean version of the short form of the Geriatric Depression Scale (SGDS-K), reliability demonstrated high internal consistency as Cronbach's alpha was .83 (Kim, Choe, & Chae, 2009). Overall, previous studies found that the GDS-15 has a good quality of the instrument. In Turkey, the study of GDS-30 presented a good quality instrument, where Cronbach's alpha coefficient was .89 in internal consistency analysis for detecting minor depression, it has a high discriminant validity (Sivrioglu et al., 2009). In Nepal, the study aimed to evaluate the use of the Geriatric Short Form (GDS-15) in

community-dwelling of Nepalese elders, found that the GDS-15 had a good Cronbach's alpha .86 (Gautam & Houde, 2011). In New York, the study about screening performance of the Geriatric Depression Scale (GDS-15) in a 492 elder's home care in Westchester, New York found that an internal consistency-reliability equal to .80 (Marc, Raue, & Bruce, 2008). The results from previous studies found that the GDS-15 presented range of the Cronbach's alpha coefficient in .80-.89, which means that the GDS-15 was a good quality instrument for measuring depression in older person.

On the other hand, accuracy of the GDS-15 is not influenced by severity of any medical burden, age or other sociodemographic characteristics, such as those who are medically ill, and disabled population (Marc et al., 2008). The GDS-30 for assessing depressive symptoms that present both test-retest reliability, the average kappa statistic across the 30 items was .61 indicating fair to good reliability (McAvay, Bruce, Raue, & Brown, 2004). During the development of the GDS, it was noted that vegetative symptoms failed to differentiate depressed and non-depressed elders, thus these symptoms are largely not assessed by the GDS (Holroyd & Clayton, 2000).

2. BDI (Beck Depression Inventory) as the gold standard of self-rating scales, was created by Aaron T. Beck. The original BDI, first published in 1961 which was initially developed to assess the efficacy of psychoanalytically oriented psychotherapy in depressed subjects. This scale was designed to measure the severity of depressive symptoms that the test taker is experiencing at the moment. The original of BDI (BDI-I) included 21 items concerning different symptom domains with a score from 0 to 3 (total score as 63). The standard cut-off scores are as 0-9 indicates minimal depression, 10-18 indicates mild depression, 19-29 indicates moderate depression, and 30-63 indicates severe depression. And after the publication of the DSM-IV, to the BDI- second edition (BDI-II) in 1996. Four new items (agitation, worthlessness, concentration difficulty, and loss of energy) were added to make the BDI-II more reflective of DSM-IV criteria of MDD, and some BDI-IA items such as weight loss, body image change, work difficulty, and somatic preoccupation, were eliminated because they were considered less indicative of the overall severity of depression (Cusin, Yang, Yeung, & Fava, 2009).

The BDI was developed to give a simple, easy to use approach to screening for depression. The advantage of the BDI such as presented meta-analysis of all the

psychometric studies on BDI from 1961 to 1986, found a mean coefficient alpha of .86 for psychiatric subjects, and after the publication of the BDI-II, Beck compared the BDI-II and BDI-IA scales in sample of 140 psychiatric outpatients, and found coefficient alpha for BDI-II and the BDI-IA of .91 and .89, respectively. Reliability with the studies used for screening depressive symptoms severity in African American women by applying the Beck Depression Inventory-II (BDI-II) found the estimate of internal consistency reliability for the BDI-II at .94 (Lamis & Kaslow, 2014). The result of the studies to review the psychometric properties of the Beck Depression Inventory-II (BDI-II) as a self-report measure of depression in a variety of settings, and populations, found that the internal consistency was described as around 0.9, and the retest reliability ranged from .73 to .96. The correlation between BDI-II and the Beck Depression Inventory (BDI-I) was high, and substantially overlay with measures of depression and anxiety was reported (Wang & Gorenstein, 2013). Similar to the result of the studies comparing depressive symptom severity in low income women, which found that both BDI and PHQ-9 convergent validity was high (r_s= .80, $p < .05$) (Kneipp, Kairalla, Stacciarini, Pereira, and Miller, 2010). While the BDI and the BDI-II were also tested on a larger sample (n=500), where the BDI-II showed improved clinical sensitivity, with reliability (α = .92) higher than the BDI (α = .86). Test-retest reliability in a Spanish study found reliability for BDI between .65 and .72. (Cusin et al., 2009). Overall of the previous studies suggested that the quality of the BDI-II instrument was a good range from .65 to .96.

Besides comparing the cross-cultural equivalence, and conducting item-level analysis to uncover the factors affecting the explanation of this scale for measurement of depressive symptoms, disadvantages of the BDI-II should be aware of theory based strategies of validation (Wang & Gorenstein, 2013). Despite the differences in symptoms between geriatric and adult patients with MDD, the primary outcome measures are still the scales developed in the adult population (Cusin et al., 2009). Another study mentions the disadvantages of BDI-II is that the ability for non-motivated patients to manipulate the process and state what they feel will lead to them receiving a diagnosis of depression, and having some type of personal gain (Farinde, 2013). Similar to the study of useful scales for depression mentioned that BDI is not recommended for use in older people owing to focus on somatic symptoms (Rodda et al., 2011)

3. The Center for Epidemiologic Studies Depression scale (CES-D), Radloff was developed for use in studies of epidemiology of depressive symptomatology in the general population. The CES-D measures symptoms defined by the American Psychiatric Association' Diagnostic and Statistical Manual (DSM-V) for a major depressive episode. Total score range from 0-60, with higher scores indicating more depressive symptoms. Participants scoring ≥ 20 were considered as having "clinical significant depressive symptoms" or "depression." (Radloff, 1977). Although the cut-off for a depressive syndrome which is probable clinically relevant is generally 16 (Beekman, Copeland, & Prince, 1999).

The advantages of CES-D from previous studies using CES-D for measuring depression in the elderly are as follows: the study of Fernandez, Mutran, Reitzes, and Sudha (1998) used the Center for Epidemiological Studies Depression Scale (CES-D) to measure depressive symptomatology, its scale is extensively used to measure depressive symptoms in nonclinical populace. The scale had inter-item reliabilities, measured by Cronbach's alpha, of .85 at time 1 and .86 at time 2 (Fernandez et al., 1998). The CES-D was translated into a Chinese version by using the 20-items to measure depressive symptoms, and based on these thresholds, sensitivity, specificity, was a positive predictive value, and negative predictive value were .75, .51, .55 and .72, respectively (Cheng and Chan, 2005). While the result of the study about the CES-D in Chinese elderly found that this study present reliability of the CES-D present, Cronbach's $\alpha = .88$ (Chou, Jun, & Chi, 2005).

In Thailand studies of Worapongsathorn et al. (1990) developed and tested the applicability of a Thai version of the Center for Epidemiological Studies Depression Scale (CES-D) and found that it had good internal consistency, and the inter-rater reliability was satisfactory (as cited in Lotrakul & Sukanich, 1999). Another two studies of CES-D presented the same value of Cronbach's $\alpha = .91$ in Thai people in Siriraj Hospital (Nilmanut, Kuptniratsaikul, Pekuman, and Tosayanonda, 1997) and the second study of CES-D in Thai people (Kuptniratsaikul & Pekumal, 1997).

Disadvantages of the CES-D instrument found small numbers of false negative when the cut off score was at 16 (Luijendijk et al., 2008). Other constraints of the CES-D are that is does not measure all the important dimensions of depressive symptoms.

Negative cognitions, hopelessness, irritability and melancholic features, which are not assessed by the CES-D, that may be strongly linked to suicidal ideation (Sugawara et al., 2012). Moreover, the studies used the CES-D to measured depressive symptomatology that showed that depressive symptoms not meeting the CES-D threshold are very prevalent in older adults. The researcher suggests that clinician, and researchers should recognize that not only older individuals who do not meet DSM criteria for depression, but also those who fall below the threshold on instruments such as the CES-D, may experience symptoms of depression that deserve attention because of their potential to be associated with adverse health consequences (Blazer, Hybels, & Pieper, 2001). Consistency with the study is a factor analysis of the CES-D that found that all items, rather than simply the somatically-oriented ones, were significantly associated with greater disability in the elderly patients. This finding suggests that association between depression and physical disability is not simply due to shared alteration of some of the measure items (Lenze et al., 2001).

Thailand studies found the construct validity of the scale was unsatisfactory to consist with the same results of the finding's Tragkasombat who, instead of using a translated version, found Thai adolescents had a higher cut-point score than Western subjects (Lotrakul & Sukanich, 1999) and cutting point was more than 16, as westerners might not be appropriate with Thai people (Nilmanut, Kuptniratsaikul, Pekuman, & Tosayanonda, 1997). From the previous studies this means the CES-D is not appropriated with the older who do not meet DSM criteria for depression, but also those who fall below the threshold on instruments, or who have a physical disability, and also found a small number of false negative.

4. Hamilton Rating Scale for Depression (HAM-D or HRSD) was developed by Hamilton in 1960. It was proposed to be a measurement of treatment outcome rather than as a screening device (Yesavage, Brink, Rose, & Lum, 1983). The original HAM-D included 21 items, but Hamilton pointed out that the last four items should not be counted toward the total score because these symptoms (diurnal variation, depersonalization/ derealization, paranoid symptoms, and obsessive compulsive symptoms) are either infrequent or do not mirror depression severity. Therefore, the 17-item version of the HAM-D has become the standard for clinical trial. The total score is obtained by summing

the score of each item, 0-4 (symptom is absent, mild, moderate, or severe) or 0-2 (absent, slight or trivial, clearly present). For the 17-item version, scores can range from 0-54. The cutoff scores between 0-6 do not indicate the presence of depression, 7-17 indicate mild depression, scores between 18 and 24 indicate moderate depression, and scores over 24 indicate severe depression (Cusin et al., 2009).

The advantage of the HAM-D from previous studies present a number of studies have shown the internal consistency of different version of HAM-D to range widely from 0.48 to 0.92 when studied by 21 psychiatric novices who had insignificant previous experience with the HAM-D. A recent report of studies has shown the internal consistency coefficients of 0.83 for HAM-D-17 and 0.88 for HAM-D-24. (Cusin et al., 2009).

While disadvantages of this instrument from previous studies that used HAM-D to measure depression in the elderly, are an expression of the severity of the depression, but the scale used in this studied does not really disclose the full range of symptoms that the elderly patients experience, e.g., the HDS emphasizes sleep disturbances more than problems in memory, a symptom which may be more prominent in the elderly depressed patient. This study presents both DSM-IV and ICD-10 and can be used without modification for age (Stage, Bech, Kragh-Sorensen, Nair, & Katona, 2001). From previous studies that mean that this tool might not be appropriated with older person.

5. The Patient Health Questionnaire-9 (PHQ-9) was developed by Spitzer, Williams, Kroenke, and colleagues in 1999, it contains 9 items assessing all DSM-IV inclusion criteria for major depressive disorder, as well as an additional item assessing psychosocial impairment. The 9-item set-up makes it easier to apply the DSM-IV diagnostic algorithm for major depression (Zimmerman, 2011). Major depression is diagnosed if five or more of the nine depressive symptom criteria have been present at least “more than half the days” in the past 2 weeks, and one of the symptoms is a depressed mood or anhedonia (Kroenke & Spitzer, 2002; Kroenke, Spitzer, & Williams, 2001). As a severity measure, the PHQ-9 score ranges from 0 to 27, because each of the 9 items can be scored from “0” (not at all) to “3” (nearly every day). Easy to remember cutpoints of 5, 10, 15, and 20 that represent the threshold for mild, moderate, moderately severe, and severe depression, respectively (Kroenke & Spitzer, 2002).

Previous studies present the advantage of used the PHQ-9 in two Chinese studies for reliability and validity of the PHQ-9, the first studied for assess depressive syndrome for 600 outpatients in general hospital, that found that cronbach's α coefficient of PHQ-9 was .86, and the test-retest reliability was .95. Uniformity with the second study was to examine reliability of the Chinese version of PHQ-9 and found that cronbach's α coefficient of PHQ-9 was .86 (Wang et al., 2014). Thus the Chinese version PHQ-9 was shown to have good reliability and validity for screening of depression syndrome in general hospital outpatients, and general populace (Bian, Li, Duan, & Wu, 2011; Wang et al., 2014). While two studies in UK, the first studied for the diagnostic accuracy of the PHQ-9 in primary care elderly, found that the PHQ-9 had an area under the curve (AUC) of .87 more than 15-item of GDS was .71. Base on AUC values, the PHQ-9 performs comparably to 15-item of GDS in identifying depression among primary care elderly (Phelan et al., 2010). The second study in UK was for screening and case finding for MDD, by use of the PHQ-9 which meta-analysis found that PHQ-9 was a better screener in primary care and for MDD, the PHQ-9 has acceptable diagnostic properties at cutoff point 10, in different settings (Moriarty, Gilbody, McMillan, & Manea, 2015). In term of the good quality of the instrument for screening depression in older persons, the study in UK presented the tools for assessing depression in the elderly using the PHQ-9 to measure depression in people of all ages including older people (Hardy, 2011). The researchers suggested that the PHQ-9 was very useful, easily manageable tool available to screen for depression in older adults, and it is quick and easy to complete the diagnostic tool for mental health disorder. The PHQ-9 is composed of 9 items that relate to depressive symptoms, and are based directly on the DSM-IV (Flood & Buckwalter, 2009). In addition the studies of PHQ-9 to measure depression in the elderly for validity of a brief depression severity measure, and was completed by 6,000 patients in 8 primary care clinics. The PHQ-9 is also a reliable and valid measure of depression severity. The researchers mention that PHQ-9 making criteria-based diagnoses of depressive disorders, these characteristics plus its brevity make the PHQ-9 a useful clinical and research tool (Kroenke, Spitzer, and Williams, 2001). The validated of PHQ-9 was also measured in adults over 60, in primary care in US and Netherlands. With a cut off score of > 9 has sensitivity 88&, specificity 80% (Rodda et al., 2011). Moreover, the study used PHQ-9

in Holland, and found that PHQ-9 was a useful instrument to detect for MDD in primary care (Zuithoff et al., 2010).

In Thailand, researchers found the previous studies about reliability and validity of the Thai version of the PHQ-9 used this as it had been translated from English language into Thai. The process involved back translation, cross cultural adaption, field testing of the pre-final version, as well as final adjustments. The PHQ-9 was then administered among 1,000 patients in family practice clinics. The result of this study presented that this instrument had satisfactory internal consistency (Cronbach's alpha= .79) and showed moderate convergent validity with the HAM-D ($r= .56$; $p < .001$). The categorical algorithm of the PHQ-9 very high specificity (.98), a positive predictive value (PPV) of .67, a negative predictive value (NPV) of .97, and positive probability ratio (27.37). The area under the curve (AUC) in this study was .89 (SD= .05, 95% CI .85 to .92) (Lotrakul et al., 2008).

The instruments which are used in psychiatric research can be classified into three types: screening instruments, predictive instruments, and rating or evaluative instruments. Some self-report rating scales such as Beck Depression Inventory, and Zung self-rating Depression scale are widely used and considered as standard instruments for evaluating depression. However, these instruments were derived from Western population, and Western concepts of depression, thus it does not effectively measure that of Thai people.

This study used the PHQ-9 to measure the depression score in older women because this instrument was tested reliability in many studies in Thai population, and presented good quality. Moreover the PHQ-9 was tested and an acceptable instrument to detect MDD in primary care, and diagnostic accuracy for identifying depression in primary care for older people.

Interventions for Mild Depression in Older People

Now a day, contingent on the number and severity of symptoms, a depressive episode can be classified as mild, moderate, or severe. An individual with a mild depressive episode will have some difficulty in continuing with ordinary work and social activities (WHO, 2016). Despite the high frequency and severity of depression, and its damaging effects, treatments for depression have only been moderately effective. Furthermore, the majority of individuals suffering from depression do not receive appropriate care. Nevertheless, several psychotherapies have received good empirical support (Mor & Haran, 2009). Consistent with the studies of Burnett-Ziegler et al whom found that more elder depressed are diagnosed in primary care than specialty mental health (57% versus 28%). Because primary care look as if to be the optimal location to target efforts to improve access to depression treatment for the elderly by the year 2007, consequently the researcher suggests that many interventions should have been designed to treat depression in elder people in the general community that are based in primary care (Burnett-Ziegler et al., 2012).

Depression results from a multipart interaction of social, psychological and biological factors. There are effective treatments for moderate and severe depression. Health care workers may offer psychological management (such as cognitive behavior therapy [CBT], behavioral activation [BA], and interpersonal psychotherapy [IPT]), or antidepressant medication (such as selective serotonin reuptake inhibitors [SSRIs]) and tricyclic antidepressants [TCAs]. Health care providers should keep in mind the possible antagonistic effects associated with antidepressant medication, along with the ability to deliver either intervention (in terms of experts, and/ or treatment availability), and individual preferences (WHO, 2016).

Even though the National institute of mental health, US recommend safety treatment for depressed elders in term of biological treatment, such as antidepressant medications and electroconvulsive therapy (ECT) are important and effective treatments for depression in the elderly. The pharmacotherapies recommend use for older persons such as tricyclic antidepressants (TCAs, e.g. nortriptyline, imipramine), serotonin selective reuptake inhibitors (SSRIs, e.g. fluoxetine, sertraline, paroxetine; or another combinations of pharmacotherapy and psychotherapy, or psychotherapy alone, such as

cognitive behavioral therapy (CBT), and interpersonal psychotherapy (IPT). However, some studies present side effects, or adverse effect of treatment from biological treatment such as antidepressant and ECT in this population, should be contemplated (NIMH, 2011).

Department of mental health, Ministry of public health, Thailand, developed aguidebook of depressive disorders observation and care: provincial level of Department of Mental Health, Ministry of Public Health, Thailand (2014), providing care for mild depressive symptoms where psychoeducation about depression, and advice to exercise 30-45 minute at least 2-3 time per week if do not have complication were the first line of treatment. While, WHO recommend psychosocial treatments such as CBT and IPT, which are also effective for mild depression, and antidepressants can be an effective form of treatment for moderate to severe depression, but are not the first line of treatment for cases of mild depression. Different psychological treatment formats for consideration include individual and/ or group, face to face psychological treatment being delivered by professional, and supervised lay therapists (WHO, 2016).

There is a good evidence base for the management of depression in older people regarding the prescribing of: antidepressants which are effective for people with moderate to severe depression. The principles of prescribing antidepressants are the same as those for prescribing for younger people (Graham et al., 2011; WHO, 2016). However, older people are particularly susceptible to antidepressant side effects, especially cardiovascular and anticholinergic side effects, and this can compromise compliance and effectiveness of treatment (Andreescu and Reynolds III, 2011). From limitations of pharmacotherapy for older person which have evidence of adverse drug effects, and has no guideline for mild depression, thus treatment should start with psychosocial intervention first, following the NICE Guideline (National Institute for Clinical Excellence [NICE], 2009), and WHO (2016) hence the psychotherapy interventions for mild depressive symptoms for older person as below.

Psychotherapy refers to any of over 250 types of largely verbal techniques designed to help individuals overcome psychological stresses, including depression. Psychotherapy based on psychoanalytic interventions accentuate helping clients gain insight into the causes of their depression (Frisch & Frisch, 2002), but its time consuming

and expensive nature have limited the number of patients. In order to overcome these difficulties, the short term psychotherapies such as CBT and IPT came to be widely practiced for achieving therapeutic effects in a short period of time (Frisch & Frisch, 2002; Nukariya, 2001). Overall treatment for mild depressive symptoms have many types of psychotherapy that present the effectiveness, and present the data based on interventions in the community, and many studies of psychotherapy have shown reliable benefits for depression as below.

1. Interpersonal Therapy (IPT) was developed initially as a time restricted weekly psychotherapy for the ambulatory, nonbipolar, nonpsychotic depressed patients. The goals of IPT are to lessen the symptoms of depression, and to increase the quality of the patient's current interpersonal functioning. These goals are accomplished in the initial formulation of IPT by weekly face-to-face sessions between the patients and the therapist in which the following occur: 1) the depression is explicitly diagnosed, 2) the patient is educated about depression and its causes, and various treatment options available, 3) the interpersonal context of depression, and its development are identified, and 4) strategies for dealing with the context, involve and are tried by the patient (Klerman & Weissman, 1993)

IPT derives from a number of sources. The ideas of Adolf Meyer, whose psychobiological approach to understanding psychiatric disorders placed great emphasis on the patient's relation to his or her environment, constitute the most noticeable theoretical sources for IPT. IPT progresses directly from an interpersonal conceptualization of depression. It does not, however, accept that interpersonal problems cause depression, but rather that, whatsoever the cause, the current depression transpires in an interpersonal context. The therapeutic strategies of IPT are planned to support the patient master that context1 (Klerman & Weissman, 1993). This therapy is characterized in that the treatment period is as short as 12 to 16 weeks, and that the difficulties are defined by centering on the current interpersonal relationship, not on cognition or behavior (Nukariya, 2001).

2. Problem Solving Therapy (PST) is a positive approach to clinical intervention that focuses on training in practical problem-solving attitudes and skills. PST was originally presented by D'Zurilla and Goldfried (1971) and presently, the goals are both

to reduce psychopathology and to boost positive well-being by helping individuals cope more successfully with stressful problems in living. The theory on which PST is based involves two interconnected conceptual models: 1) the social problem-solving model and 2) the relational/ problem solving model of stress and well-being. Contingent on the nature of the problematic situation, effective coping may comprise of improving the situation (e.g. attaining a performance goal, resolving a conflict, eliminating an aversive condition) and/or reducing the emotional distress generated by the situation (e.g. acceptance, reducing physical tension) (Dobson, 2010).

The original social problem solving model of D'Zurilla and Nezu (1990) postulated that the problem solving ability comprises of two major, somewhat independent processes: 1) problem orientation (problem solving proper) and 2) problem solving skills (problem solving style). In 2002, D'Zurilla et al. developed a revised, five dimensional social problem solving model that involves two different, albeit related, problem orientation dimensions, and three different problem solving styles. The two problem orientation dimensions are positive problem orientation, and negative problem orientation, whereas the three problem solving styles are rational problem solving, impulsivity/ careless style, and evasion style. Positive problem orientation and rational problem solving are beneficial dimensions that increase the likelihood of positive problem solving outcomes, whereas negative problem orientation, impulsivity/careless style, and evasion style are dysfunctional dimensions that disturb or hinder effective problem solving, resulting in negative personal and social outcomes (D'Zurilla & Nezu, 2007). "Problem orientation" is a metacognitive method that primarily serves a motivational purpose in social problem solving. It involves the operation of a set of relatively stable cognitive-emotional outlines that reflect a person's general awareness and appraisals of problems in living, as well as his or her own problem solving ability (e.g. threat vs. challenge appraisals, self-efficacy beliefs, and outcome prospects). "Problem solving skills" are the actions by which a person endeavors to understand problems in everyday living, and to discover effective solutions, or ways of coping with them. In this model, four major problem solving skills are identified: 1) problem definition and formulation, 2) generation of alternative solutions, 3) decision making, and 4) solution implementation and verification (Dobson, 2010; D'Zurilla & Nezu, 2007).

3. CBT refer to a class of interventions that mention on maladaptive cognitions that contribute to the maintenance of emotional distress and behavior problems (Hofmann et al., 2012). According to Beck's model, these maladaptive cognitions include general belief or plans, negative cognitions about the self, world and future or cognitive triads are concomitants of depression, but serve to reinforce the core underlying dysfunctional beliefs. The negative unthinking thoughts (NATs) that dominate the thinking of many depressed patients are constant through organized disorders of information processing (e.g. focusing only on negative aspects of an interpersonal interaction) and contribute to further depression of affect (A. T. Beck, 1967; J. S. Beck, 2011). Thus CBT is a structured, short term, present oriented psychotherapy for depression, focused toward solving current problems and changing dysfunctional (imprecise and/or unhelpful) thinking and behavior (A. T. Beck, 1967, J. S. Beck, 2011).

From literature reviews, the studies that compared psychotherapy and medication for depressive disorders found that psychotherapy such as CBT showed a noteworthy advantage over medication at longer follow up periods, the greater the advantage for psychotherapy. (Imel, Malterer, McKay, & Wampold, 2008; Pinquart & Sorensen, 2016).

4. Psychoeducation is a general term for an educational approach of assistance to offer accurate knowledge and information about the nature and methods of treatment and addressing the disease needed for cure added with consideration for psychotherapy (Nukariya, 2001). Additionally, psychoeducational interventions are interventions in which education is offered to individuals with psychological disorders or physical illnesses. These interventions can vary from the delivery of passive materials such as single leaflets, email or information websites to active multisession group intervention with exercises and therapist guidance. Psychoeducational interventions are less expensive, more easily administered and potentially more accessible than conventional pharmacological and psychological interventions (Donker, Griffiths, Cuijpers, & Christensen, 2009).

Psychoeducation for clear symptoms of depression are mild, providing health education about the symptoms and their likely cause and the available types of self-management and treatment may be helpful (termed psychoeducation). The benefits of

information, advice and education about depression should not be underestimated. Simple explainations about depression can help people to make sense of their distressing symptoms and give hope about discovery (Buszewicz & Murphy, 2016).

From literature review found that passive psychoeducational interventions for depressive, anxiety and psychological distress symptoms show a small, but significant, effect (d=.20) on depression and psychological distress in only one session of psychoeducational intervention compare with no intervention condition. Thus the researchers' suggest that active psychoeducational intervention were all based on CBT techniques, all were guided by a therapist and the duration of the intervention ranged from 4 to 11 weeks (Donker et al., 2009).

5. Exercise therapy: in general, many people with depression experience a loss of energy and constant feelings of tiredness. Taking some form of exercise, for example swimming, walking, running or kickboxing two to three times per week, can help relieve several of the symptoms associated with depression. Where possible, encourage outdoor exercise as that a greater benefit than indoor exercise. Physical activity is an effectiveness antidepressant as when we exercise our bodies release 'feel good' chemical called endorphins. Exercise can also give people more energy and improve their sleep and appetite but need to tailor advice about physical activity to the physical health of the person and recognize that a person who is depressed will nearly always lack motivation and energy and so will need to build up their activity level slowly (Buszewicz & Murphy, 2016).

Many older people express a preference for a talking treatment and there is good evidence for the effectiveness of a number of psychosocial interventions such as CBT, PST, and IPT (Graham et al., 2011; NICE, 2009; WHO, 2016). Treatment for depression in the elderly in other perspective includes engagement in value activities, and religious or spiritual involvement. Treatment including psychosocial therapies or psychological intervention such as CBT and IPT (WHO, 2016), and PST are effective used with the elderly (Fiske et al., 2009; WHO, 2012). Consistency with meta-analysis of randomized, controlled trials indicated that several forms of psychotherapy have been shown the effective treatment for depression in elders, including, IPT, and PST (Wang, 2004; Unutzer, 2007). Such structured psychotherapies, which can be delivered by trained

therapists in 6 to 12 sessions in mental health or primary care settings, should be strongly considered if antidepressant treatment is not preferred or not effective in a patient. The efficacy of such evidence-based psychotherapies is roughly similar to that of antidepressant medications, with 45 to 70% of patients treated with psychotherapy having substantial improvement in depression (at least a 50% reduction in symptoms of depression) as compared with 25 to 35% of controls (Unutzer, 2007).

The study about reducing the global burden of depression in population-level analysis of intervention cost-effectiveness in 14 world regions and this study include Thailand. The result of this study found that psychotherapy was modeled to have a slightly lower rate of remission than pharmacotherapy and indicate larger treatment effect sizes for both single and combine interventions in developing countries, no intervention effect was attributed to incidence of first episode. Moreover, the result of this study indicate that implementation of efficient depression interventions in primary care setting would be very cost-effective and interventions (psychotherapy: CBT or PST) for depression are in the same range as treatment strategies for reducing hypertension and cholesterol levels (Chisholm et al., 2004). The studied about evidence-based psychotherapeutic interventions for geriatric depression found that seventeen randomized clinical trials meeting guideline recommendations for evidence-based interventions have evaluated the efficacy of psychotherapy as a treatment for depression in the elderly. In addition, CBT and BT have received the most research attention of any psychotherapeutic interventions for depression in the elderly. While, IPT is considered generally to be commensurate with CBT as a psychotherapeutic intervention for depression in younger adults, there are fewer studies investigating efficacy of IPT as a stand-alone therapy for elder with depression (Mackin & Arean, 2005). Additionally, the result from meta-analyses and specialized textbooks found that CBT for depression is currently the best-researched therapeutic strategy for any psychological disorder. Many studies and meta-analyses have confirmed its efficacy for the treatment of mild, moderate or severe depression. Furthermore, CBT is just as effective as or even more so than pharmacological therapy or any other form of psychological intervention such as IPT or supportive treatment (Powell, Abreu, de Oliveira, & Sudak, 2008). Some limitation of CBT was cognitive impairment, severe depression, non-compliant, complex condition of psychiatric disorder, or psychosis might

be not appropriated with CBT for management option (Beck, 2011; Holmes, 2002; Rodda et al., 2011).

When we consideration of Thai guideline for manage depression start from pharmacological interventions first (Department of Mental Health, Ministry of Public Health, Thailand, 2010) and the previous studied the outcome of care and comparison the treatments for older depressed showed high cost of care for depressed elder even in those who do complete treatment and recover 11 to 83% will experience a new episode of depression and many clients terminate treatment prematurely, which leads to lower effects of antidepressant (Jarrett et al., 2000). In addition to the studied an evidence-based treatment for Late-life depression presented that although response and remission rates to pharmacotherapy and electroconvulsive therapy (ECT) are comparable with those in midlife depression, relapse rates are higher (Andreescu & Reynolds, 2011).

Furthermore, meta-analyses study, the researchers have reported adherence rates of 70% for TCAs, 73% for SSRIs, and highest rates still for CBT (Chisholm et al., 2004). Additionally, up to 20% of patients with depression do not respond to two or more pharmacologically different agents and respond to treatment only 10-25% of patients (Arandjelovic, Eyre, Forbes, & Lavretsky, 2016). From some limitations of pharmacological intervention in elder people who are vulnerable to antidepressant side effects, especially cardiovascular and anticholinergic side effects, and this can compromise compliance and effectiveness of treatment (Andreescu & Reynolds, 2011).

While, CBT is a clinically effective and recommended treatment for depressed elder in a primary care setting (Holman, Serfaty, Leurent, & King, 2011). Additionally, the result from literatures review present effectiveness of CBT might be useful more than the other treatments in the elderly (Prasrimahaphodi Psychiatric Hospital, 2012). Related with research study of Lee et al. (2012) suggest that psychotherapy (CBT) is a safe and cost effective method to reduce the public health burden of depression among elderly. Moreover, Karel and Hinrichsen (2000) suggestion treatment for elderly who are unable to tolerate or comply with antidepressant treatment, psychotherapy is a very viable option.

In term of the comparison studied, the treatment of MDD in a primary care setting and patients generally received drugs as the standard treatment in US. The second

generation antidepressants and CBT have evidence bases of benefits and harms in MDD thus the researcher used the systematic review and meta-analysis to comparative benefits and harms of second generation antidepressants and CBT in initial treatment for MDD found that no difference in treatment effects of second generation antidepressants and CBT, either alone or in combination, in MDD (Amick et al., 2015). Another studied in US to comparison of desipramine and CBT in the treatment of older outpatients with mild to moderate depression found that the CBT alone and combine between drug and CBT had similar levels of improvement, the combined group showed greater than drug alone. The combined therapies were most effective in patients who were more severely depressed. The result indicate that psychotherapy can be an effective treatment for older outpatients with mild to moderate levels of depression (Thompson et al., 2016). That consisted with WHO (2016) that recommended psychotherapy as the first choice for mild depression in older person.

Among the developed countries, the current economic downturn has resulted in increased unemployment, increased debts and increased insecurity resulting also in an increasing incidence of depression among the population. For middle-to low—income countries, public education on mental health is often inadequate due to limited resources, it will be useful for mental health promotion in these countries (WHO, 2012). Although there are known, effective treatments for depression, fewer than half of those affected in the world (in many countries, fewer than 10%) receive such treatment. Barriers to effective care include a lack of resources, lack of trained health care providers, and social stigma associated with mental disorders. Another barrier to effective care is inaccurate assessment. In countries of all income levels, people who are depressed are often not correctly diagnosed, and other who do not have the disorder are too often misdiagnosed and prescribed antidepressants. Prevention programs have been shown to reduce depression. Effective community approaches to prevent depression as psychological treatment for mild depressive symptoms as CBT (WHO, 2016). According to these, this study was interested to use group CBT to decrease suffering from depressive symptoms among older women.

Cognitive Behavior Therapy

The CBT is one of effective treatment psychotherapy for depression. This therapy integrated of cognitive and behavior techniques. It is based on an underlying theoretical rational that an individual's affect and behavior are largely determined by the way in which he/she perceived the world or idiosyncratic view of particular situation (Beck, 1976 as cited in Beck, Rush, Shaw, and Emery, 1979). CBT is a solution-focused approach to treatment, oriented toward solving problems and learning skills. The goal of CBT is to help people get better and stay better, and its effectiveness has been demonstrated in thousands of clinical trials (Beck, 2011).

Characteristics of CBT was an active, directive, structured approach, short-term made up of 12-20 sessions, present-oriented, time-limited as 45-60 minutes in each session, evidence based intervention, a collaborative effort between the therapist and the client, based on cognitive model, and homework is a central feature of CBT, with a focus on here and now. The therapist and the client work together as a team to identify and solve problems. Therapists help clients to overcome their difficulties by changing their thinking, behavior, and emotional responses (Beck, 2011).

The effective use of cognitive behavior therapy for reducing client's sufferings needs understanding about development of CBT, theory based CBT, basic principles of CBT, three steps of CBT, homework assignment, and evaluation and feedback have detail as below.

Development of CBT

Cognitive behavior therapy (CBT) has its modern origins in the mid 1950's with the work of Albert Ellis, a clinical psychologist. He observed that they tended to get better when they changed their ways of thinking about themselves, their problems, and the world. Ellis reasoned that therapy would progress faster if the focus was directly on the client's beliefs, and developed a method now known as Rational Emotive Behavior Therapy (REBT). Ellis' method and a few others, for example Glasser's 'Reality Therapy' and Berne's 'Transactional Analysis', were initially categorized under the heading of 'Cognitive Psychotherapies' (Froggatt, 2006). In the year 1960s the cognitive

therapy approach beginning developed a form of psychotherapy by A.T. Beck (Beck, 1967), but becoming far more influential with the 'cognitive revolution' in the year 1970s (Westbrook, 2010). In the year 1980s-1990s termed "cognitive therapy" then used synonymously with "cognitive behavior therapy" (Beck, 2011). Beck devised a structured, short-term, present-oriented psychotherapy for depression, directed toward solving current problems and modifying dysfunctional (inaccurate and/or unhelpful) thinking and behave (Beck, 2011). These adaptations have changed the focus, techniques, and length of treatment, but the theoretical assumptions themselves have remained constant.

Theory and Concept Based CBT

Cognitive theory of depression. Beck suggests that the underlying beliefs that render an individual vulnerable to depression may be broadly categorized into beliefs about being helpless or unlovable. Thus events that are deemed uncontrollable or involve relationship difficulties may re-activate these beliefs and be important in the genesis of depressive symptoms. Negative cognitions about the self, world and future or cognitive triads are concomitants of depression but serve to reinforce the core underlying dysfunctional beliefs. The negative automatic thoughts (NATs) that dominate the thinking of many depressed patients are sustained through systematic disorders of information processing (e.g. focusing only on negative aspects of an interpersonal interaction) and contribute to further depression of affect. Beck clearly states that whist the vicious cycle of low mood enhancing negative thinking leading to further lowering in mood may represent a causal theory in some cases; it represents a maintenance model for other depressions (Beck, 1967).

The concept based CBT. Cognitive model of depression evolved from systematic clinical observations and experimental testing. These models appear to make sense, and it allows for development of specific therapy techniques. Beck proposed that CBT can treat depression as it helps the client to evaluate and modify distorted thought processes and dysfunctional behaviors. The source of depression is a hypervalent set of negative concepts; therefore the correction and damping down of these schemas may be expected to alleviate the depressive symptomatology. The cognitive model postulates tree specific

concepts to explain the psychological substrate of depression. (Beck, Rush, Shaw, & Emery, 1979) as follows:

1. Concept of "Cognitive triad" consists of three major cognitive patterns that induce the patient to regard himself, his future, and his experiences in an idiosyncratic manner. The first component of the third revolves around the patient's negative view of himself (negative view of self). The second component of the cognitive triad consists of the depressed person's tendency to interpret his ongoing experiences in a negative way (negative view of world). The third component of the cognitive triad consists of a negative view of the future. The cognitive model views the other signs and symptoms of the depressive syndrome as consequences of the activation of the negative cognitive pattern.

2. Concept of "schemas" or structural organization of depressive thinking. This concept is used to explain why a depressed patient maintains his pain-inducing and self-defeating attitudes despite objective evidence of positive factors in his life. Any situation is composed of a plethora of stimuli. An individual selectively attends to specific stimuli, combines them in a pattern, and conceptualize the situation. Relatively stable cognition patterns from the basis for the regularity of interpretations of a particular set of situations. The term "schema" designates these stable cognitive patterns. The schema is the basis for molding data into cognitions. The schemas activated in a specific situation directly determine how the person responds. The patient loss much of his voluntary control over his thinking processes and is unable to invoke other more appropriate schemas.

3. Concept of negative faulty information processing or "dysfunctional thoughts" or "cognitive errors" or "cognitive distortion". These systematic errors in the thinking of the depressed person maintain the patient's belief in the validity of his negative concepts despite the presence of contradictory evidence such as 1) arbitrary inference refer to the process of drawing a specific conclusion in the absence of evidence to support the conclusion or when the evidence is contrary to the conclusion, 2) selective abstraction consists of focusing on a detail taken out of context or conceptualizing the whole experience on the basis of this fragment, 3) overgeneralization refers to the pattern of drawing a general rule or conclusion on the basis of one or more isolated incidents and applying the concept across the board to related and unrelated situation, 4) magnification and minimization are reflected in errors in evaluating the significance or magnitude of an

event that are so gross as to constitute a distortion, 5) personalization refers to the patient's proclivity to relate external events to himself when there is no basis for making such a connection, 6) absolutistic or dichotomous thinking is manifested in the tendency to place all experiences in one of two opposite categories (Beck et al., 1979), 7) mind reading that sometimes individual pick out an idea or fact from an event to support their depressed or negative thinking, 8) catastrophizing is cognition distortion by individuals take one event they are concerned about and exaggerate it so that they become fearful, and 9) labeling and mislabeling is a negative view of oneself is created by self-labeling based on some errors or mistakes (DeRubeis, Webb, Tang, & Beck, 2010).

Cognitive model is an important feature to helping patients understand how their thinking affects their reactions, preferably using their own examples. Typically, a patient is able to recognize that by changing the content of his/her thought he/she is able to alter his/her feeling state.

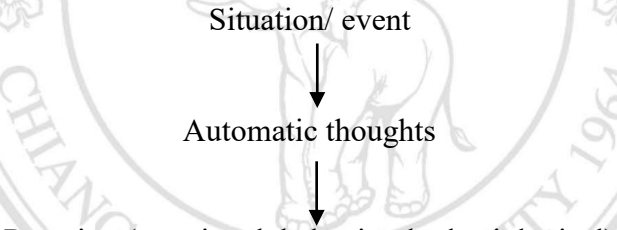

Figure 2-1. The cognitive model

Note. From *Cognitive behavior therapy basic and beyond* (2nd ed.), by J. S. Beck, 2011, New York: The Guilford Press.

The hierarchical of cognition and relationship of behavior to automatic thoughts. The relationship of ATs, intermediate beliefs and core belief as core beliefs (deepest level of cognition) influence the development of an intermediate class of beliefs, which consist of (often unarticulated) attitudes, rules, and assumptions. Then intermediate beliefs influence his/her view of a situation, which in turn influences how he/she thinks, feels, and behaves (Beck, 2011). The relationship of these intermediated beliefs to core beliefs and automatic thoughts is depicted below:

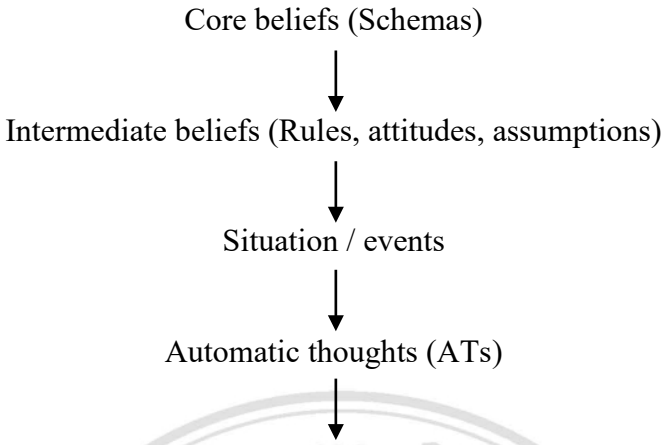

Figure 2-2. Hierarchy of cognition

Note. From *Cognitive behavior therapy basic and beyond* (2nd ed.), by J. S. Beck, 2011, New York: The Guilford Press.

Core beliefs or schemas: at the other end of the scale from ATs, core beliefs represent their fundamental beliefs about themselves, other people, or the world in general (Beck, 2011). Characteristics of core beliefs are: most of the time they are not immediately accessible to consciousness. They are usually learned early on in life as a result of childhood experiences, but they may sometimes develop or change later in life, e.g. as a result of severe trauma. They manifest as general and absolute statements, e.g. 'I am bad', or 'Others are not to be trusted' (Beck et al., 1979). Additionally, Neenan and Dryden (2010) explained about core belief that they are usually formed through early learning experiences and become instrumental in shaping our outlook. In emotional disturbance, absolute and global negative core beliefs are activated and then process information in a biased way that maintains the core belief and discredits or disconfirms any contradictory evidence in depressed person. Negative core beliefs about the self can be slotted into three broad categories of helplessness (e.g. 'I'm no good on my own'), unlovability (e.g. 'I'm undesirable') and worthlessness (e.g. 'I'm rubbish') (Beck, 2011).

Intermediate belief or assumption/rule can be considered as bridging the gap between core beliefs and NATs. Intermediate beliefs can be thought of as 'rules for living', more specific in their applicability than core beliefs, but more general than ATs. They often take the form of conditional 'If…..then …' propositions, or are framed as

‘should’ or ‘must’ statements. Depressed person often represent attempts to live with negative core beliefs (Beck, 2011).

Automatic thoughts (ATs), as first described by Beck, are fundamental to CBT. This term is used to describe a stream of thoughts that almost all of us can notice if we try to pay attention to them (Beck et al., 1979). In CBT perspective mention negative automatic thoughts (NATs) more than positive automatic thoughts (PATs) because NATs are thought to exert a direct influence over mood from moment to moment. Because of their immediate effect on emotional states, and their accessibility, NATs are usually tackled early on in therapy (Neenan & Dryden, 2010).

Additionally, Beck, Rush, Shaw, and Evans coined the term negative cognitive triad to describe the content of NATs. Typically, NATs may be grouped by themes pertaining to (1) self, (2) world (i.e., significant others or people in general), and (3) future. As described subsequently, the themes revealed in one’s characteristic NATs can be used to infer deeper levels of cognition: beliefs, rules, and schemas. Once they are comfortable recognizing their automatic negative thoughts, patients can be taught to examine their beliefs and the operational rules that underlie beliefs. Although patients are not fully aware of their schemas (relatively stable cognitive patterns that are the product of one’s beliefs, attitudes, and behavioral responses), these cognitions are usually accessible through the questioning techniques used in CBT (Beck, Rush, Shaw, and Evans, 1979).

Basic Principles of CBT

Basic principles of CBT that Beck (2011) provided as follow:

1. CBT is based on an ever-evolving formulation of patients’ problems and an individual conceptualization of each patient in cognitive terms. From the beginning, identify current thinking that contributes to people feelings of sadness and his/her problematic behaviors. Second, identify precipitating factors that influenced person’s perceptions at the onset of his/her depression Third, hypothesize about key developmental events and her enduring patterns of interpreting these events that may have predisposed his/her to depression.

2. CBT requires a sound therapeutic alliance by making empathic statements, listening closely and carefully, and accurately summarizing his/her thoughts and feelings. Moreover, therapist should built therapeutic relationship during of each session of cognitive behavior therapy.

3. CBT emphasizes collaboration and active participation such as encourage patients to become increasingly active in the therapy session: deciding which problems to talk about, identifying the distortions in his/her thinking, summarizing important points, and devising homework assignments.

4. CBT is goal oriented and problem focused such as ask patients in our first session to enumerate his/her problems and set specific goals so both he/she and therapist shared understanding of what he/she is working toward.

5. CBT initially emphasizes the present. The treatment of most patients involves a strong focus on current problems and on specific situations that are distressing to them. Therapy starts with an examination of here-and-now problems, regardless of diagnosis.

6. CBT is educative, aims to teach the patient to be his/her own therapist, and emphasizes relapse prevention. In the first session should be educating patients about the nature and course of his/her disorder, about the process of cognitive behavior therapy, and about the cognitive model. At each session therapist ensures that he/she takes home therapy notes—important ideas he/she has learned—so he/she can benefit from his/her new understanding in the ensuing weeks and after treatment ends.

7. CBT aims to be time limited. Many straightforward patients with depression disorders are treated for 6 to 14 sessions. Therapists' goals are to provide symptom relief, facilitate a remission of the disorder, help patients to resolve their most pressing problems, and teach them skills to avoid relapse.

8. CBT sessions are structured. No matter what the diagnosis or stage of treatment, following a certain structure in each session maximizes efficiency and effectiveness. This structure includes an introductory part (doing a mood check, briefly reviewing the week, collaboratively setting an agenda for the session), a middle part (reviewing homework, discussing problems on the agenda, setting new homework, summarizing), and a final

part (eliciting feedback). Following this format makes the process of therapy more understandable to patients and increases the likelihood that they will be able to do self-therapy after termination.

9. CBT teaches patients to identify, evaluate, and respond to their dysfunctional thoughts and beliefs. Patients can have many dozens or even hundreds of automatic thoughts a day that affect their mood, behavior, and/or physiology. Therapists help patients identify key cognitions and adopt more realistic, adaptive perspectives, which leads patients to feel better emotionally, behave more functionally, and/or decrease their physiological arousal.

10. CBT uses a variety of techniques to change thinking, mood, and behavior. Although cognitive strategies such as Socratic questioning and guided discovery are central to cognitive behavior therapy, behavioral and problem-solving techniques are essential, as are techniques from other orientations that are implemented within a cognitive framework.

Core Components of CBT

Core components of CBT consisted with 1) psychoeducation about cognitive model, depression, and CBT, 2) case formulation, 3) three steps of CBT, 4) homework assignment, and 5) evaluation and feedback (Beck, 2011) detail as below.

1. Psychoeducation is usually applied in group and researcher implement psychoeducation in order to maximize its beneficial effects in the participants by using strategies that closely follow the principles of CBT. Psychoeducation and CBT share in common a focus on medication adherence and compliance, detecting early signs and seeking help. Almost of CBT program involve one or two sessions that provide information about the illness and its treatment, while most psychoeducation approaches include information about life style change (Gonzalez-Pinto et al., 2004). Psychoeducation in CBT program use to teach the participants about prodromal symptoms. The strengthen of psychoeducation more informative about illness and treatment, and content mainly aimed at improving adherence to treatment that consist with the basic principle of CBT requires a sound therapeutic alliance and collaboration

because the participants have information and knowledge about their symptoms and treatment that can decreasing depressive symptoms (Beck, 2011). Psychoeducation is the most effective of the evidence-based practice because of the flexible of the model, which incorporates both illness-specific information and tool for managing related circumstances, psychoeducation has broad potential for many from of illness and varied life challenges (Lukens & McFarlane, 2004).

Researcher provide information about depressive symptoms, cognitive model, and CBT thus the participants understanding their symptoms and they have information to manage suffering situation. In the first and second session, researcher educated the participants about cognitive model, depression, CBT, case formulation, dysfunctional thoughts, and NATs simply found in depressed people such as all or none thinking, mind reading, and overgeneralization. Researcher provided the situation and explained interaction of dysfunctional thoughts to feeling, behavior, and physical. The participant understand their symptoms, cause of depression, CBT and they have information to deal with their problems then depressive symptoms will decrease.

Group psychoeducation, participants are able to benefit from others' experience, as well as share about their own. The sense of not being alone and having group support are key elements in making the group a positive experience, which reduces stress and anxiety, increases motivation to manage depressive symptoms, and enhances self-efficacy (Colom et al., 2009). Moreover, psychoeducation has evolved into the program focusing on effective, teaching-oriented communication of key information within CBT. The theme of empowerment and coping through understanding was manifest early on as attendance at basic psychoeducational sessions came to be regarded as relaxation exercise, assertiveness training or problem-solving sessions, it can help the participant decreasing their symptoms by themselves. In addition, psychoeducation involves the provision and explanation of information to participants about what is widely known about characteristics of their symptoms. The participants often require specific information about their symptoms and what is known about the cause, effects, and implications of the problem. Information also provided about prognosis and alleviating and aggravating factors. Information is also provided about early sign and how can be actively monitored and effectively managed. Researcher help participants to understand

their symptoms, to enhance therapy and assist them to live more productive and fulfilled lives (Australian Psychological Society, 2010).

The researcher provide psychoeducation about cognitive model, cognitive model of depression, and cognitive model for CBT as below.

1.1 Cognitive model is an important feature of the initial session is helping patients understand how their thinking affects their reactions, preferably using their own examples. Therapist provides psychoeducation about the relationship among triggering situations, automatic thoughts or images, and reactions (emotional, behavior and physiological). Demonstrate the relationship between cognition and affect or behavior using specific examples such as "induced imagery" technique. The therapist first asks the patient to imagine an unpleasant scene. If the patient indicates a negative emotional response, the therapist can inquire about the content of the patient's thoughts. The therapist then asks the patient to imagine a pleasant scene and to describe his/her feeling.

The hierarchical of cognition and relationship of behavior to automatic thoughts. The relationship of ATs, intermediate beliefs and core belief as core beliefs (deepest level of cognition) influence the development of an intermediate class of beliefs, which consist of (often unarticulated) attitudes, rules, and assumptions. Then intermediate beliefs influence his/her view of a situation, which in turn influences how he/she thinks, feels, and behaves (Beck, 2011).

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1.2 Cognitive model of depression evolved from systematic clinical observations and experimental testing. These models appear to make sense, and it allows for development of specific therapy techniques. Beck proposed that CBT can treat depression as it helps the client to evaluate and modify distorted thought processes and

dysfunctional behaviors. The cognitive model postulates tree specific concepts to explain the psychological substrate of depression consisted with cognitive triad, schemas, and dysfunctional thoughts (Beck et al., 1979).

1.3 Cognitive model for CBT is based on the cognitive model, which hypothesized that people's emotions, behaviors, and physiology are influenced by their perception of events. It is not a situation in and of itself that determines what people feel, but rather how they construe a situation. In daily life, they have quite different emotional and behavioral responses to the same situation, based on what is going through their minds. The way people feel emotionally and the way they behave are associated with how they interpret and think about the situation. The situation itself does not directly determine how they feel or what they do; their emotional response is mediated by their perception of the situation. Cognitive behavior therapists are particularly interested in the cognitive structure in two layers; 1) deeper cognitive structure: core beliefs (schemas) are the most fundamental level of belief; they are global, rigid, and overgeneralization ; intermediated beliefs as rules, attitudes, or assumptions of daily living, 2) automatic thoughts (ATs) are the actual words or images that go through a person's mind, are situation specific and may be considered the most superficial level of cognition (Beck, 2011).

Of particular significance to the CBT is that dysfunctional beliefs can be unlearned and more reality-based and functional new beliefs can be developed and strengthened through treatment. The quickest way to help patients feel better and behave more adaptive is to facilitate the direct modification of their core beliefs as soon as possible. But when patients' beliefs are entrenched and endanger the therapeutic alliance if validity of core beliefs too early. The usual course of treatment in CBT, therefore, involves an initial emphasis on identifying evaluating and modifying automatic thoughts that derive from the core beliefs (and on interventions that directly modify core beliefs). Therapist teaches patients to identify these cognitions that are closet to conscious awareness, and to gain distance from them by learning as 1) they believe something doesn't necessary mean it is true and 2) changing their thinking so it is more reality based and useful helps them feel better and progress toward their goal (Beck, 2011).

Almost of CBT program involve one or two sessions that provide information about the illness and its treatment, while most psychoeducation approaches

include information about life style change (Gonzalez-Pinto et al., 2004). Psychoeducation in CBT program use to teach the participants about prodromal symptoms. The strengthen of psychoeducation more informative about illness and treatment, and content mainly aimed at improving adherence to treatment that consist with the basic principle of CBT requires a sound therapeutic alliance and collaboration because the participants have information and knowledge about their symptoms and treatment that can decreasing depressive symptoms (Beck, 2011). Psychoeducation is the most effective of the evidence-based practice because of the flexible of the model, which incorporates both illness-specific information and tool for managing related circumstances, psychoeducation has broad potential for many from of illness and varied life challenges (Lukens & McFarlane, 2004).

The meta-analysis study of psychoeducation for depression revealed that brief passive psychoeducation session for depression can reduce symptoms by first step intervention provide information about depressive symptoms and serve as an initial intervention (Donker et al., 2009). Group psychoeducation, participants are able to benefit from others' experience, as well as share about their own. The sense of not being alone and having group support are key elements in making the group a positive experience, which reduces stress and anxiety, increases motivation to manage depressive symptoms, and enhances self-efficacy (Colom et al., 2009). Moreover, psychoeducation has evolved into the program focusing on effective, teaching-oriented communication of key information within CBT. The theme of empowerment and coping through understanding was manifest early on as attendance at basic psychoeducational sessions came to be regarded as relaxation exercise, assertiveness training or problem-solving sessions, it can help the participant decreasing their symptoms by themselves. In addition, psychoeducation involves the provision and explanation of information to participants about what is widely known about characteristics of their symptoms. The participants often require specific information about their symptoms and what is known about the cause, effects, and implications of the problem. Information also provided about prognosis and alleviating and aggravating factors. Information is also provided about early sign and how can be actively monitored and effectively managed. Researcher help participants to understand their symptoms, to enhance therapy and assist them to live more productive and fulfilled lives (Australian Psychological Society, 2010).

2. Case formulation is an element of an empirical hypothesis-testing approach to clinical work that has three key elements, assessment, formulation, and intervention. Information obtained during assessment is used to develop a formulation, which is a hypothesis about the causes of the patient's disorders and problems, and which is used as the basis for intervention. As the treatment proceeds, the therapist doubles back repeatedly to the assessment phase, collecting data to monitor the process and progress of the therapy and using those data to revise the formulation and intervention as needed (Persons & Tompkins, 2007).

Beck's cognitive conceptualization provides the framework of case formulation for understanding a patient. To initiate the process of formulating a case by ask yourself the following question as "What are his/her current problems?" "How did these problems develop and how are they maintained?", "What dysfunctional thoughts and NATs associated with depressive symptoms?", "What reactions (emotional, physiological, and behavior) are associated with his/her thinking or NAT?". After that hypothesize how the patient developed depressive symptoms as "How does the patient view herself, others, her personal world, and her future?", "What are the patient's underlying belief (including attitudes, expectations, and rules) and thoughts or NATs", "How is the patient coping with her dysfunctional cognitions or NATs?". Therapist begin to construct a cognitive conceptualization during first contact with the patient and continue to refine their conceptualization throughout the program. This organic, evolving formulation helps therapist plan for efficient and effective therapy (Beck, 1995, 2011).

Formulation occurs at several levels: the level of symptom, disorder or problem, and case. For example, major depressive disorder has been conceptualized as made up of automatic thoughts, negative emotions, and problem behaviors that result from the activation of negative schemas by stressful life events (Beck et al., 1979). The problem of treatment was conceptualized such as consisting of avoidance behaviors, negative cognitions, and negative emotions arising from schemas of themself as unlovable, of others as critical, and of the future as hopeless. The formulation at the level of the case is a hypothesis about the causes of all of the patient's symptoms and problems, and how they are related. The term "problem" is used in two ways: to refer to difficulties that are

not symptoms or disorders (e.g., depression), and in a generic way that includes all symptoms, disorders, and problems (Persons & Tompkins, 2007).

Case formulation is a foundation of CBT because it describes and explains participants' presentations in ways that inform intervention (Beck, 2011). Case formulation is an element of a hypothesis-testing empirical mode of clinical work. Researcher begins the process by carrying out an assessment to collect information that is used to develop an initial formulation of the case the case formulation is a hypothesis about the psychological mechanism and other factors that cause and maintain a particular participants' depressive symptoms and problems (Dobson, 2010).

A case formulation is key element and important because intervention flow from it. The formulation also provides a way to tie all of the participants' symptoms and problems into a coherent whole (Dobson, 2010). Congruent with literature reviews provide rationale and evidence based for case conceptualization that used of a case formulation crucible in which participants' particular history, experience and strengths are synthesized with theory and research to produce an original and unique account of participants' presenting issues (Kuyken, Padesky, & Dudley, 2008; Thew & Krohnert, 2015). The crucible metaphor illustrates three key defining principles of case formulation. First, in the model, collaborative empiricism between researcher and participants. Second, conceptualization develop over time. By, it begins at more descriptive level, later a conceptualization incorporates explanatory elements and, if necessary, it develops further to include a longitudinal explanation of how predisposing and protective factors influence participants' issues. Finally, new substances formed in a crucible are dependent on problems and strengthen of participants at every stage of the conceptualization process to more effectively alleviate participants' emotional distress and promote treatment adherence (Beck, 2011; Kuyken et al., 2008).

Case formulation that helps answer the questions above and address many of the challenges posed by inter researcher reliability regarding case formulation (Kuyken et al., 2008). Case formulation is a process whereby researcher and participants work collaboratively to first describe and then explain the issues participants present in the session using cognitive and behavior terms. Its primary function is to guide therapy in order to relieve participants' emotional distress, strengthening therapeutic alliance (Beck,

2011; Thew & Krohnert, 2015), and enhancing treatment adherence (Mumma & Fluck, 2016). In short, case formulation is a tool for improving CBT practice by helping describe and explain participants' presentations in ways that are theoretical informed, coherent, meaningful and lead to effective intervention (Kuyken et al., 2008; Thew & Krohnert, 2015). There are two primary approaches to CBT case formulation: disorder specific models and generic model. The development of CBT has included carefully observed accounts of depression. Researcher used case formulation to adapt these disorder specific model to incorporate participants' specific information. Generic approach to case formulation based on higher level cognitive theory of emotional disorder and used for complex or comorbid presentation (Kahlon, Neal, & Patterson, 2014). Typically, these approach provide a framework for identifying core belief, intermediate belief and NATs that contribute to participants' depressive symptoms (Beck, 2011). Additionally, evidence base for case formulation, both as a process in its own right, and with respect to its potential role as an intervention. Case formulation is evidence for underlying models and theories on which formulations are based, and evidence for the reliability and validity of process of producing, and the end product, formulations themselves. Within CBT, bodies of top-down evidence for relevant models and theories are more established, for example evidence of theoretically important constructs and processes such as cognitive appraisals or empirical support for specific theoretically driven cognitive model (Thew & Krohnert, 2015).

Moreover, case formulation is considered to be the basis for achieving an understanding of the participants' difficulties in CBT. The importance of collaborative development of formulation has been emphasized in the CBT (Beck, 2011; Thew & Krohnert, 2015). The current evidence based appears to focus on the benefit of CBT formulation from participants' perspectives, for example case formulation can aid researcher's understanding of the participants and help them to comprehensive and adapt to the cognitive model (Kahlon et al., 2014). Furthermore, CBT formulation allows for a focus on the "here and now" which considered to be particularly helpful to researcher as well as informing appropriate intervention (Beck, 2011; Sturmey & McMurran, 2011). The recent study empirically testing cognitive behavior case formulation for tailored treatment found that the validity of cognitive behavior case formulation was increasing the effectiveness of a treatment plan tailored for a particular clients with depression

(Mumma & Fluck, 2016). This component can help both researcher and the participants to understand causes of the problems, strengthen of participants and learn together.

3. Three steps of CBT consist of identifying, evaluating, and responding NATs: Beck mention that depressive disorder was reflected in a systematic bias in the way the patients' interpreted particular experiences. By pointing out these biased interpretations and proposing alternatives-that is, more probable explanations by train the patients in cognitive skill helped to sustain the improvement. The cognitive model state that the interpretation of a situation (rather than the situation itself), often expressed in NATs, influences one's subsequent emotion, behavior, and physiological response. People with psychological disorders, however, often misconstrue neutral or even positive situations, and thus their NATs are biased. By critically examining their thoughts and correcting thinking errors, they often feel better throughout three steps of CBT (Beck, 2011).

Characteristics of NATs are a stream of thinking that coexists with a more manifest steam of thought (A. T. Beck, 1967, J. S. Beck, 2011). These thoughts are not peculiar to people with psychological distress. NATs are usually quite brief, and patients are often more aware of the emotion they feel as a result of their thoughts than of the thoughts themselves and NATs are almost always negative such as "I'm too bad" or "Nobody loves me" or "I'm a burden". NATs are often in shorthand form, but can be easily spelled out when therapist ask for the meaning of the thought. NATs may be in verbal form, visual form (images), or both. In addition to his/her verbal automatic thought, the patient above had an image of himself. NATs can be evaluated according to their "validity" and "utility". The most common type of NATs is distorted, a second type of NATs is accurate, but the conclusion the patient draws any be distorted. A third type of NATs is also valid, but decidedly dysfunctional (Beck, 1995; 2011).

3.1 Identifying NATs

Therapists are barely aware of these thoughts, train them can easily bring these thoughts into consciousness. When they become aware of their thoughts, they may automatically do a reality check if they are not suffering from psychological dysfunction. Therapist teaches patients to identify their NATs in a conscious, structured way, especially when they are upset. Although NATs seem to pop up spontaneously, they become fairly predictable once the patient's underlying beliefs are identified. Therapist

concerned with identifying those thoughts that are dysfunctional, those that distort reality, are emotionally distressing, and/or interfere with patients' ability to reach their goals. The emotions patients feel are logically connected to the content of their NATs. After the patients learning tools of CBT, however, she is able to use her negative emotion as a cue to look for, identify, and evaluate her thoughts, and develop an adaptive response. This thought was undoubtedly accurate, but it increased her anxiety and decrease her concentration and motivation

To summarize, NATs coexist with a more manifest stream of thoughts, arise spontaneously, and are not based on reflection or deliberation. People are usually more aware of the associated emotion but, with a little training, they can become aware of their thinking. The thoughts relevant to personal problems are associated with specific emotions, depending on their content and meaning. They are often brief and fleeting, in shorthand form, and may occur in verbal and/or imaginal form. People usually accept their NATs as true, without reflection or evaluation. Identifying, evaluating, and responding to NATs (in a more adaptive way) usually produces a positive shift in affect. The researcher explain NATs by using the patients' own examples.in the context of discussing a specific problem with a patient, researcher will elicit the NATs associated with the problem by use Socratic questioning to examine the NATs with the patient so they can develop their own adaptive response. The researcher writes down the NATs, emphasizing the cognitive model.

The skill of learning to identify NATs is analogous to learning any other skill. The question that therapist use to elicit NATs is "What was going through your mind?" might be able to elicit their "hot cognitions" that is, important NATs and image that arise in the session itself, and associated with a change or increase in emotion. These hot cognitions may be about the patient herself, the therapist, or the subject under discussion and may undermine the patient's motivation or sense of adequacy or worth. In addition therapist can ask them to elicit a detailed description of the problematic situation, ask the meaning of the situation that can elicit NATs.

Identifying NATs on the spot gives the patient the opportunity to test and respond the thoughts immediately, so as to facilitate the work in the rest of the session. When ask for the patients' NATs, researcher seeking the actual words or images that have

gone through their mind. Until they have learned to recognize these thoughts, many patients report interpretations, which may or may not reflect their actual thoughts. Thus the researcher teach them to differentiating between NATs and interpretation by specifying NATs in actual words from embedded expressions to actual NATs such as I couldn't get myself to start reading to I can't do it. The researcher gently led patients to identify the actual words that went through their mind and begin teaching patients the skill of identifying NATs even during the first session.

NATs play an important role in the phenomenology and ontology of depression. A defining feature of the CBT is the assumption that changes in thinking mediate the effects of therapeutic interventions on depressive symptoms thus investigation the effects of CBT interested cognitive procedures on cognitive change and symptom change in depression (Lorenzo-Luaces, German, & DeRubeis, 2015). In CBT, participants are taught how to identify the connections between their thoughts, feelings, and actions, and they learn skills to more effectively manage their emotions. Participants learn to identify dysfunctional thoughts such as all-or-none thinking, mind reading, which encourages them to adopt a more realistic viewpoint. In addition, researcher helps participants to identify and engage in activities that are enjoyable and valuable to them. Participants are strongly encouraged to try out these new skills and behaviors outside of the therapy sessions and to use the researcher as a coach and advisor in implementing changes (Wang & Blazer, 2015).

The result of a meta-analysis study behavior activities for depression found that behavior activity is an effective treatment for depression (Ekers, Richards, & Gilbody, 2008; Ekers et al., 2014). Importantly, the participants also learned from homework assignment that thoughts do not always fit the fact and may be changed (Beck, 1955, 2011). In addition, individual thinking about a situation or problem may affect how they feel emotionally and physically and also alter what they do. Identifying and modifying dysfunctional thoughts and NATs can therefore be an effective intervention such as increase in activity (altered behavior domain) or altered physical symptom as relaxation and physical activity (Williams & Garland, 2002).

3.2 Evaluating NATs

The therapist and patients have identified a NAT by patient may have made a spontaneous utterance during session; related NAT, often from the previous session, past week; or reported NAT they predict will arise in the future. Next therapist need to conceptualize whether this is an important thought on which to focus; currently distressing or dysfunctional. After elicit the first NAT, determined that is important and distressing, and identified its accompanying reactions (emotional, physiological, and behavioral), therapist may collaboratively decide with the patient to evaluate it. Therapist use three reasons ask for challenge the NAT as 1) you usually do not know in advance the degree to which any given NAT is distorted, 2) direct challenge can lead patients feel invalidated, and 3) challenging the patient together examine NAT, test its validity, variety and/or utility, and develop a more adaptively responding to them generally produces a positive shift in affect.

The guideline for evaluating NAT such as examine the validity of NAT, explore the possibility of other interpretations or viewpoints, recognize the impact of believing the NAT, take steps to solve the problem. The set of Socratic questions to help patients evaluate their thinking such as the evidence questioning as “What is the evidence that support or against this idea?.”, the alternative explanation question as “Is there an alternative explanation or viewpoint?.”, the decatastrophizing question as “What is the worst that could happen?.”, or the distancing question as “What would I tell (family member, key person) if he/she were in the same situation?.”

Patients tend to make consistent error in their thinking. Often there is a systematic negative bias in the cognitive processing of patients who suffer from depressive disorder (Beck, 1976). Therapist using the alternate methods to help patients examine their thinking such as identifying cognitive distortions or cognitive error or dysfunctional thoughts that always used interchangeable thus this study use dysfunctional thoughts. Although some NATs are true, many are either untrue or have just a grain of truth (Beck, 1995, 2011).

When NATs are true because sometimes NATs turn out to be true, therapist do one or more as focus on 1) problem solving: not all problems can be solved, but if a patient’s perception of a situation appears to be valid, therapist investigate whether the

problem can be solved, at least some degree, 2) investigate whether the patient has drawn an invalid or dysfunctional conclusion: while NAT might be true, the meaning may be invalid or at least not completely valid, and therapist can examine the underlying belief or conclusion, or 3) work toward acceptance: some problem cannot be solved and may never be solved, and patients need help in accepting that outcome. They may continue to feel miserable if they have unrealistic expectations. Meanwhile, they need assistance in learning to focus on their core values, emphasize the more rewarding parts of their lives, and enrich their experience in new ways (Beck, 1995, 2011).

3.3 Responding NATs

Patients experience two kinds of NATs outside of session: ones they have already identified and evaluated in session, and novel cognitions. For the format group, therapist will ensure that patients have recorded robust responses in writing on paper or therapy notebook. To respond to novel NATs between sessions, researcher will teach patients to use the list Socratic question as above or use worksheet such as the Thought Record or other ways to respond to NATs. Patients can engage in problem solving, use distraction or relaxation techniques, or label and accept their thoughts and emotions without evaluation. Therapist can use review therapy note having evaluated NATs though with patients (usually through Socratic questioning to ask themselves to evaluate their thinking such as “If the situation comes up again, what you wish to tell yourself or how to evaluate and respond your NATs?”). It is desirable to have patients read their therapy notes each morning and pull them out, as needed, during the day. Patients tend to integrate responses into their thinking when they have rehearsed them repeatedly. Reading notes only when encountering difficult situations is usually less effective than reading them regularly in preparation for difficult situations. Therapist can help them by assign homework to responses to dysfunctional thinking, behavior assignments, or a combination of responses and behavior assignments (Beck, 1995, 2011).

Evaluating and responding to novel NATs between sessions. Before suggest patients use Socratic question will make sure they understand that evaluating their thinking can help them feel better, they believe they will be able to use the questions effectively at home, they understand that not all questions apply to all NATs, and therapist have shortened the list for patients who find the entire list daunting or overwhelming. The

thought Records is a worksheet that prompts patients to evaluate their NATs when they feel distressed. It elicits more information than just responding to the questions but many patients find the worksheet organizes their thinking and responses better. For some patients, it is better to introduce the Thought Record in two stages. In one session, therapist might teach patients try out to fill in the worksheet (Beck, 1995, 2011).

Responding to NATs in other ways by teaching them the "AWARE" techniques in which patients practice: A: accepting their thoughts and depressed mood, W: watching their thoughts without judgment, A: acting with their thoughts, as if they aren't depressed, R: repeating the first three steps, and E: expecting the best (Beck, 2011).

4. Homework assignment is an integral part of CBT. The content of CBT is focused on here and now problems. The major trust is toward investigating the patient's thinking and feeling during the therapy session and between therapy sessions. The cognitive behavior therapist actively collaborates with the patient in exploring their psychological experiences, setting up schedules of activities all of stages of CBT as identifying, evaluating, and responding NATs by using homework assignments. The assignment of homework critically influences the therapeutic collaboration. Patients often regard the homework as a test of personal worth, personal skill, or motivation, or they may believe they must do the homework perfectly. The therapist tries to sense or directly inquire about such attitudes since they are distortion and antitherapeutic. Moreover, therapist actively encourages the patients to share their thoughts and feelings about the homework task, both before and after attempting. Example of homework assignment for activity daily record, the therapist review this homework assignment of following schedule and ask them about her previous predictions: that she would be too tired to do activities. Discovering that her NAT was inaccurate can motivate the patient to get up earlier and engage in a greater number of productive or pleasurable activities (Beck, 2011).

Homework assignment has been recognized as one of the factors associated with positive outcome (Beck, 2011; Dobson & Dobson, 2013). Homework is vital component of treatment that improves level of functioning, change attitudes, and gives a feeling of gratification. In general, homework completion has significant positive correlations with positive effects on therapy outcome. In addition, within CBT, CBT with homework leads

to better outcomes compared to CBT without homework (Kazantzis, Whittington, & Dattilio, 2010). In essence, researcher seeks to extend the opportunities for cognitive and behavior change throughout the participants' week. Good homework assignments provide opportunities for the participants to educate themselves further, to collect data from monitoring their thoughts, feelings, and behavior, to test their thoughts, to modify their thinking, to practice cognitive and behavioral tools, and to experiment with new behaviors. Homework can maximize what was learned in the session and lead to an increase in the participants' sense of self efficacy. Typical ongoing homework assignment consisted with behavior activation helpful to enrich their live through experimenting with new activities. Activity scheduling can accomplished in the session content, consist with practice new skills and/or implementing solution emanating from practical problem solving. Following discussion and role play in the session. Direct problem solving with successful behavior follow through often provides an important boost in mood. Monitoring NATs is an important homework assignment form the first session forward, researcher teach them to write NATs on a dysfunctional thought record. Researcher advises the participants that monitoring NATs can actually lead to an increase in distress unless the participants also tries to respond adaptively to their thoughts. Reviewing the past session helps consolidate learning. Researcher can write the main points of or conclusions drawn in the session. Additional assignment during the next few sessions, homework emphasize evaluating and responding to NATs (Beck, 2011).

Increasing of successful homework and experience an elevation in mood, successful completion of homework can speed up therapy and lead to an increased sense of mastery and improve mood. Researcher provides a brief rational initially useful of homework assignment, later sessions encourages the participants to think about the purpose of an assignment. Researcher point out to participants that they feel better faster if they make the effort to do homework. Changing one's thinking and behavior requires ongoing attention and effort (Beck, 2011).

Moreover, type of homework assignments for older adults such as relaxation training, it helpful in reducing anxiety and related symptoms. Relaxation method, researcher provide the activity in session practice have more benefit than younger adults. Behavior task assignment designed to increase activation such as walking, breathing

exercise also have additional health benefits (Kazantzis, Pachana, & Secker, 2003). In addition, the result from systematic review found that physical activity as a management strategy for mild depression in the elderly such as breathing exercise, meditation, walking, or muscle relaxation. Exercise has been supposed acting on depression with a variety of neurobiological effects, such as increase endorphin and monoamine levels or reduction in the level of cortisol in the brain. Exercise has been shown to improve subjective quality of life and promote other cognitive mechanism related to subjective well-being, beneficial effect on depressive symptoms by providing the possibility of diversion from NATs, a sense of purpose (Mura & Carta, 2013; Mura, Mora, Patten, & Carta, 2014), and enhancement of social contact (Mura et al., 2014).

5. Evaluation and feedback about the therapist and the CBT program and elicit feedback further strengthens rapport, providing the message that researcher care about what they think. Also give clients a chance to express and researcher to resolve any misunderstandings and then test their conclusions. The goal of the final summary and feedback is to focus the client's attention on the most important points of the session in a positive way (Beck, 2011).

Evaluation and feedback the final element of every sessions is feedback. Asking for feedback further strengthens rapport, providing the message that the researcher cares about what the participants thinks. It also gives the participants a chance to express, and the researcher to resolve, any misunderstandings. Asking the participants to state and then to test them conclusions. Evaluate and feedback have necessity for strengthening the therapeutic alliance and aims to make clear to the participants the major points covered during the session in an upbeat way. In the end of the session, researcher making a final summary and eliciting the participants' feedback (Beck, 2011).

This component is very important to elicit feedback regarding the session and to provide an opportunity for discussion of the participants' experiences and responses to the session and the therapeutic process. This request for feedback indicates the researcher's desire to serve the participants' needs and to modify what is happening in the session if the feedback is negative. Obtaining feedback indicates that the participants' thoughts and feelings matter, as well as provides part of the empirical data needed for future planning. While evaluate and feedback are often perfunctory and positive, it may

reveal concerns about how therapy is proceeding, and may even suggest major concerns about the direction being taken. It is therefore critical that researcher approach this component in an open-minded and nondefense manner, and thus demonstrate to the participants that their experiences and the collaborative relationship are an important component of therapy (Dobson & Dobson, 2013).

CBT Techniques

Beck's cognitive behavior therapy is a structure problem solving approach aimed at modifying the faulty information processing that characterizes depression. Both behavior and cognitive techniques are used to realize treatment goals. Cognitive technique is addressed at a product, processing, and intermediate belief. Therapy begins with the provision of a treatment rationale and instruction in the specifics of the cognitive model. Beck's CBT recognizes that experience is the most effective way to change existing thoughts and beliefs (Clark, Beck, & Stewart, 1990). While, behavior tasks are frequently used at the beginning of therapy to mobilize to activity. Behavior activation strategies include weekly activity scheduling, grade task assignments, and pleasure/mastery rating assignments. Cognitive techniques are present to train the patient to identify, evaluated, and correct the faulty thinking or NATs that distorts reality. Patients are taught to identify and reevaluate NATs through the use of homework assignments. Therapy shifts toward modification of faulty assumptions during the middle and later steps. Behavior tasks are assigned to test specific assumptions against experience. Such behavior experiments are presented in a collaborative, hypothesis testing manner, usually as part of a homework assignment. By emphasizing an empirical hypothesis testing approach, maladaptive beliefs are disconfirmed, and more adaptive thinking is verified (Beck, 2011; Dobson & Craig, 1990).

A variety of cognitive and behavior techniques are utilized in CBT to help depressed patients address their NATs including three major CBT techniques as 1) cognitive techniques such as Socratic questioning to guide patients in mindful questioning which gives them insight over their negative cognition, this procedure is called guided discovery, and downward arrow technique, 2) behavior techniques such as behavioral activation, behavior experiment; scheduling daily activities, pleasant and mastery

activity, and 3) additional techniques such as Pie techniques, role play, and problem solving skill (A. T. Beck et al., 1979; J. S. Beck, 2011) detail as below.

Cognitive techniques. Cognitive techniques are aim at delineating and testing the patient's specific misconceptions and maladaptive assumptions. This approach consists of highly specific learning experiences designed to teach the patient the following operations: (1) to monitor their negative automatic thoughts (cognitions); (2) to recognize the connections between cognition, affect, behavior, and physical; (3) to examine the evidence for and against their distorted automatic thoughts; (4) to substitute more reality-oriented interpretations for these biased cognitions; and (5) to learn to identify and alter the dysfunctional beliefs which predispose them to distort their experiences. (Beck et al., 1979).

The two terms most often used to describe this form of inquiry are "Socratic questioning" (asking questions that guide the patient to become actively involved in finding answers) and "Guided discovery" (a series of questions that help the patient explore and change maladaptive cognitive processes) all of identifying NATs, evaluating NATs and responding to NATs sessions (Beck et al., 1979).

1. Socratic questioning and Guided Discovery: the most important and frequently used cognitive technique is the use of questions that encourage the patient to break through rigid patterns of dysfunctional thinking and to see new perspectives. The two terms most often used to describe this form of inquiry are "Socratic questioning" (asking questions that guide the patient to become actively involved in finding answers).

Example of Socratic question in the clinical focus at this level is twofold: what we think (specific NATs in specific situations) and how we think, such as ways of processing information which results in some of the cognitive distortions. Three general questions can be used in evaluating and responding to NATs: What is the evidence for and against this thought?, What are the alternative ways to think in this situation?, and What are the implications of thinking this way?. (Neenan & Dryden, 2010).

2. The term "guided discovery" also refers to the process, through the use of leading yet open questions, of helping participants to arrive at new perspectives that

challenge their faulty beliefs. The art of Socratic questioning is to walk the line between leading participants where researcher would like them to go and allowing them to free associate. Therefore, good Socratic questions of CBT sort are much more open ended and theory-free than those of the originator. Socratic questioning is especially productive in therapy, because participants are maximally engaged to think about the problem under discussion, as well as its solution. Moreover, good Socratic questioning prevents a common problem in nonoptimal CBT: researcher can become quite convinced that participants' thoughts are in error, but participants are left with idiosyncratic doubts and concerns that were not addressed in the discussion between participants and researcher (Dobson, 2010).

Examples of some of the specific techniques that might be included in guided discovery are examining the evidence exercises and two-column analyses of the advantages and disadvantages of holding a core belief. One of the most useful cognitive interventions is the thought change record. In the beginning phase of therapy, patients may be introduced to thought recording by asking them to make a note of automatic thoughts that occur in stressful situations and to identify emotions associated with these thoughts. As the patient gains knowledge and experience with CBT, thought record can be used in which the patient identifies cognitive errors in automatic thoughts, generates rational alternatives, and charts the outcome of making these changes (Beck, 2011) Other frequently used cognitive techniques include imagery, role play, rehearsal exercises, and homework assignments to put modified cognitions into action (Wright, 2006).

3. Downward arrow technique refers to a series of questions that can be asked of almost any inference, where each answer begs another question. Each question probes for the personal meaning of the inference to participants, until an interference is brought out that will profit from the work of CBT. It is important for researcher to realize that the meanings are idiosyncratic and can therefore be difficult to predict, even after they have come to know participants well. Furthermore, although researcher may ask the first two of the three questions immediately, there are times when it is more productive to employ the downward arrow technique first (Dobson, 2010).

Example of three questions of downward arrow if analyzed for its validity when participants may think, in response to a perceived sadness are "What would it mean

(regarding you or your future) if it were true that…" or "What if it is true that…" or "What about that bothers you?"

In many instances it is worthwhile both to proceed downward to discover the meanings of the inference, and to use the first two of the three questions at more than one level of thinking such as both NATs and belief during the inquiry (Dobson, 2010).

All three steps of CBT involves training the patient to observe and record his cognition. The training in the observation and recording of cognitions makes the patients aware of the occurrence of images and self-verbalizations (stream of thought). Therapist trains the patient to identified distorted and dysfunctional thoughts or cognition errors. Training the patient to observe and record his cognitions is best accomplished in the several steps (A. T. Beck et al., 1979; J. S. Beck, 2011) as 1) define "automatic thought", 2) educating the patient about cognitive model, 3) demonstrate the relationship between cognition and affect or behavior using specific examples, 4) demonstrate the presence of cognitions from the patient's recent experience. The therapist labels these thoughts and images for the patients as "NATs" (cognitions), and 5) assign the patient homework to collect cognitions or detection of NATs.

Cognitive techniques in the session, focus on researcher and the participants used specifically to address questions about the effects of CBT, which researcher adhere to CBT techniques, participants change in ways that are predicted by CBT and/or changes specific to CBT or do similar change occur in the sessions. The questions guide participants to identifying, evaluating, and responding to NATs. The assumption in CBT is that the meaning systems are idiosyncratic. For this reason, the participants must take an action role in her sessions. They were taught to be prepared to question their thoughts during a distressing event or shortly thereafter.in CBT sessions concern of the participants that become apparent in relation to the therapy or researcher was actively discussed. The researcher seeks feedback and responds to it in ways that are consistent with the CBT. Thus, researcher helps participants attend to their thoughts about the therapy itself, and together they examine them (Dobson, 2010).

Behavior techniques. Behavior techniques are aim to mobilize activity that the immediate therapeutic attention is solely on the patient's overt behavior; that is, the therapist prescribes some kind of goal-directed activity. In actuality, the reporting of the patient's thoughts, feelings, and wishes remains critical for the successful application of the behavior techniques. The ultimate aim of these techniques in CBT is to produce change in the negative attitudes so that the patient's performance will continue to improve. Actually, the behavior techniques can be regarded as a series of small experiments designed to test the validity of the patient's hypotheses or ideas about himself/herself (A. T. Beck et al., 1979; A. T. Beck & Alford, 2009; J. S. Beck, 2011). The behavior techniques used in the CBT are as follows:

1. Scheduling daily activities: the use of activity schedules serves to counteract the patient's loss of motivation, inactivity, and his/her preoccupation with depressive ideas. The specific technique of scheduling the patient's time on an hour-by-hour basis is likely to maintain a certain momentum and prevent slipping back into immobility. Furthermore, focusing on specific goal-oriented tasks provides the patient and therapist with concrete data on which to base realistic evaluations of the patient's functional capacity. The therapist may choose to provide the patient with a schedule to plan his/her activities in advance and/or record the actual activities during the day. A grade task hierarchy should be incorporated into the daily plan.

2. Pleasure and Mastery techniques: the therapist may assign the task of undertaking a particular pleasurable activity for a specified number of minutes each day and request that the patient note change in mood or reduction of depressive ruminations associated with the activity. When patient engages in various activities, it is useful to have him record the degree of mastery and pleasure associated with a prescribed activity. The term mastery refers to a sense of accomplishment when performing a specific task. Pleasure refers to pleasant feelings association with the activity. Mastery and pleasure can be rated on a 5 point scale with 0 representing to no mastery (pleasure) and 5 representing maximum mastery (pleasure). By using a rating scale, the patient is induced to recognize partial successes and small degree of pleasure. This technique tends to counteract his/her all-or-nothing thinking. Thus, scheduling activities and rating each for

mastery and pleasure provides data with which to identify and correct cognitive distortions (Beck, 2011; Dobson & Craig, 1990).

3. Graded task assignments: after successful completion of a series of tasks, depressed patients generally experience some improvement in their mood. They then feel motivated to tackle more difficult tasks, provided the therapist is vigilant to detect and rebut the patient's inclination to disparage his achievement. The therapist should assignment of tasks (or activities) from simpler to more complex, encouragement of realistic evaluation by the patient's actual performance (Beck, 1995, 2011).

Behavior experimental, in CBT are used to promote cognitive change. The prominent behavior techniques are used to increase activity or to provide experiments of pleasure or mastery, the focus is on change in beliefs. Researcher explains the assignment of behavior tasks for the participants' attempts to engage in the assigned task will serve either to test a hypothesis that the participants holds or to provide a setting that provokes the formation of new hypotheses that can be tested subsequently such as 1) self-monitoring to maintain a careful, hour-to-hour record of their activities and associated moods, or other pertinent phenomena, 2) scheduling activities have twofold purpose as to increase the probability that the participants will engage in activities that they has been avoiding unwisely and to remove decision making as an obstacle in the initiation of an activity (Dobson, 2010; Beck, 2011).

Additional cognitive and behavior techniques.

1. Problem solving and skill training, this technique simply involves the active investigation of other interpretations or solutions of the patient's problems. This approach forms the cornerstone of effective problem solving. Searching for alternative explanations provides another approach to in solution problems. In general, the training focuses as problem solving skill present four skills consisting of problem definition and formulation, generation of alternative solution, decision making, and solution implementation and verification. This skill used after evaluating NATs was partly true so researcher provide alternative way of thinking and alternative way to solve the problem including advantage and disadvantage of each choice, b) other techniques such as modeling, coaching, and behavior rehearsal (Beck, 2011; D'Zurilla & Nezu, 2007).

2. Role-playing is a technique that can be used for a wide variety of proposes, simply involves the adoption of a role by the therapist, patient, or both, and the subsequent social interaction based on the assigned role that useful in learning and practicing social skills. Role-playing may also be employed to demonstrate an alternative viewpoint to the patient or to further elucidate the factors which interfere with appropriate emotional expression. Additionally, role playing to uncover NATs, to develop an adaptive response, and to modify intermediate and core beliefs (Beck, 2011).

3. Pie technique, it is often helpful to clients to see their ideas in graphic form. A pie chart can be used in many ways, for instance, helping clients to set a goal or determining relative responsibility for given outcome (Beck, 2011).

4. The relaxation exercise aim of relaxation is to take the participants gradually through a series of exercises designed to enable her to actively reduce any anxiety by relaxing. Since the participants are learning a new skill, it is recommended that they practice relaxation (Beck, 2011). Depression is frequency association with tension, stress and anxiety. Relaxation is the natural answer to stress. There are many ways to relax such as yoga, listening to a relaxation song, and reading the teaching of Buddha or religious quotes or words of freedom of their belief encourage the participants' try to find out what works for them and to regularly give themselves time to wind down (Buszewicz and Murphy, 2016).

Format of the Session in CBT

According of previous study, it was found that 12-20 sessions were effective to decreasing depression (Beck, 2011) as follow the format of CBT session as below.

Format of the first sessions.

1. Initial part of session consist with set the agenda and provide rationale to do, do a mood check, obtaining an update since evaluation, and discuss the clients' diagnosis.

2. Middle part of session consist with identify problems and goal setting, psychoeducation by educating about the cognitive model, and discuss a problem.

3. End of session consist with provide or elicit a summary, review homework assignment, and elicit feedback.

Format of session two and beyond.

1. Initial part of session consist with do a mood check, setting an initial agenda, obtain an update, review homework, and priority the agenda.

2. Middle part of session consist with work on a specific problem, conceptualize the participants' difficulties according to the cognitive model, and collaboratively decide on which part of the cognitive model and work (solving the problem situations, evaluating NATs, suggesting behavior changes, teach behavior skill and setting new homework. Researcher CBT skills in that context, NATs and belief are identified and tested, follow up discussing with relevant, collaboratively set homework assignment(s), and work on second problem.

3. End of session consist with provide or elicit a summary, review new homework assignments, and elicit feedback.

4. The terminate session, researcher prepare participants for termination as treatment as time limited as possible, with the aim helping them to become their own therapist. The goal in CBT is to facilitate them to practice cognitive and behavior techniques in their lifetime. Researcher give the participants the opportunity to test and strengthen their skill to solve every their problems. Researcher encourages participants to read through and organize their notes so they can easily refer to them in the future. Provide self-therapy session and booster sessions, it also affords researcher opportunity to check on the reemergence of dysfunctional strategies. Participants can express any new or previously unaccomplished goals and develop a plan to work toward them.

The Structure in CBT Sessions

1. The structure in the session includes discuss the clients' diagnosis or emotional problems, do a mood check, set goals, start working on a problem, set homework, and elicit feedback. Before the first session, the therapist review the clients' intake evaluation and keep initial conceptualization and treatment plan in mind as conduct the session, being prepared to change course if need be. Most standard CBT sessions last for about

45-60 minutes, but the first one often takes an hour. Goals and structure of the initial session to establish rapport and trust with clients, normalize their difficulties, and instill hope. Socialize clients into treatment by educating them about their disorder, the cognitive model, and the process of therapy. Therapist collects additional data to help conceptualize the clients and develop a goal list. Then start solving a problem important to the clients (and/ or get the clients behaviorally activated).

2. The structure of second and beyond session includes reestablish rapport, elicit the names of the problems clients want help in solving, collect data that may indicate other important problem areas to discuss, review homework, and prioritize the problems on the agenda. The goals during second session are to help clients identify important problems on which to work and, in the context of problem solving, by teaching the clients relevant skills, especially identifying and responding to NATs and, for most depressed clients, scheduling activities. Provided continue to socialize clients into CBT following the session format, work collaboratively, providing feedback, and starting to view their past and ongoing experience in light of the cognitive model and above all, concerned with building the therapeutic alliance and providing symptom relief.

In each structure session have detail of variety activities as below.

1) Setting the agenda, the researcher should reduce clients' anxieties and provide a rational make the process of therapy more understandable to clients and elicit their active participation in a structured, productive way and make sure the clients agree with the topics proposed. Setting an initial agenda by socialize the participants into bringing up the names of problems they want help in solving. The researcher questions in a problem solving way.

The priority the agenda and add more topic as collect the data about the participants' week and homework. The researcher summarized the topics. If there are too many agenda items, therapist and clients will collaboratively priority items and agree to move discussion of less important problems to a future session.

2) Doing a mood check, having set the agenda, the researcher brief check on mood and symptoms by summed scores of the objective tests as every session, comparing

them to the scores from the evaluation and between the objective scores of the previous session and the present objective scores. Do a mood check help researcher and the participants to keep track of how they are progressing. The researcher also confirms that the participants are not reporting how they feel just that day, but instead are providing an overview of their mood for the past week. The brief mood check creates several opportunities such as researcher also reinforce the cognitive model; namely, how the participants have been viewing situations and how they have been behaving have influenced their mood.

3) Education the client about the cognitive model. An important feature to help clients to understand how their think can affect their reactions, preferably using their own examples. The easier providing psychoeducation about the relationship among triggering situations, automatic thoughts or images, and reactions (emotional, behavioral, and physiological).

4) Obtaining an update, since evaluation by used question clients to discover whether there are any important problems or issues that they have not mentioned before that might take priority in the session. Then researcher will probe for positive experiences the clients had during the week.

5) Discuss the diagnosis most clients want to know their general diagnosis, and to establish that the clients don't think they are abnormal. Usually it is preferable to avoid the label of diagnosis and give some initial information of their condition by start attributing some their problems to their disorder instead of to their character.

6) Problem identification and goal setting, the researcher focus on identifying specific problems. As a logical extension, researcher helps clients to turn these problems into goals to work on the treatment.

7) Specific problem, conceptualize the participants' difficulties according to the cognitive model, and collaboratively decide on which part of the cognitive model and work (solving the problem situations, evaluating NATs, suggesting behavior changes, teaching behavior skill and setting new homework). Researcher CBT skills in that

context, NATs and belief are identified and tested. Follow up discussing with relevant, collaboratively set homework assignment(s), and work on second problem.

8) Discussion of problem or behavior activation is done by start discussing a specific problem of significant concern to the clients. Developing alternate ways of viewing the problem, or concrete steps clients can take to solve the problem, tends to increase their hopefulness that treatment will be effective. Overcoming depressive passivity and creating opportunities to experience pleasure and a sense of mastery is essential for most depressed clients.

9) Homework review helps the researcher to bridge between the previous session and the current one. It includes a brief update of the participants' week; during which researcher remains alter for potential problems that could be important for the agenda. Homework review is critical. If researcher does not, participants invariably stop doing it. Part of the art of therapy is determining how much time to spend in reviewing homework versus discussing other problems the participants want to help in solving.

10) End of session summary and setting of homework together the threads of the session and reinforces important points. The summary includes a review of what the clients has agreed to do for homework.

11) Periodic summaries are important throughout sessions by content summary used cognitive model to ensure the correctly identified most troublesome to clients, and present more concise and clear brief summary when a section of a session had been completed. Both therapist and client convey accurate understanding.

12) Evaluate and feedback therapist, participants, and the program, elicit feedback further strengthens rapport, providing the message that researcher care about what they think. Also give clients a chance to express and researcher to resolve any misunderstandings and then test their conclusions. The goal of the final summary and feedback is to focus the client's attention on the most important points of the session in a positive way.

Effectiveness of CBT for Depressed Older Person

The CBT provides evidence of effectiveness of this intervention for reduce depression and preventing relapse or recurrence for elderly people in difference countries and difference settings as nursing home, community or hospitalization. Additionally, many research finding from many researches support statistically significant both individual and group design. Moreover, singular study provides rigor methodology as RCTs or meta-analysis, systematic review present effectiveness of cognitive behavior therapy for depression in elderly. Thus this intervention appropriated for reducing depression in the elderly people.

The CBT on depression among older persons but almost of previous studies mention on major depressive disorder by conducted a systematic review or meta-analysis for evaluated the effectiveness of CBT as the treatment for depressed older or comparison the effective of CBT with medication more than examine the effect of CBT for mildly depressed older and not met criteria of depressive disorders. All of the studied support that CBT as an empirical treatment follow the NICE guidance the appropriated use of antidepressant medicines and psychological therapies in the management for treatment depressive disorder for older person (National Institute for Clinical Excellence, 2004). While found only one studied used RCT design to evaluate the effect of CBT compare with TAU for mild to moderate depressed older persons as below.

Almost of previous studies mention on major depressive disorder by conducted a systematic review or meta-analysis for evaluated the effectiveness of CBT as the treatment for depressed older found that several randomized clinical trials met guideline recommendations for evidence based interventions have evaluated the efficacy of psychotherapy as a treatment for older depressed. The researcher concluded that the CBT as an empirically support treatment of older depressed (Cuijper, van Straten, & Smit, 2006; Frazer, Christensen, & Griffiths, 2005; Imel et al., 2008; Mackin & Arean, 2005) and mention that CBT was best evidence of effectiveness and quality of evidence in level I for depressed older people (Frazer et al., 2005).

The CBT studies used systematic review and meta-analysis and focused on evaluation the effective of CBT and other interventions such as comparison CBT and

medication management for depressed older found that no significant different between CBT and antidepressant (Mackin & Arean, 2005) While the other studies compared of psychotherapy and medication for depressive disorders found that psychotherapy as CBT showed a significant advantage over medication at longer the follow up, the greater the advantage for psychotherapy. (Imel et al., 2008; Pinquart & Sorensen, 2016). The CBT for depression in older people more effective than waiting list or treatment as usual (TAU) (Hofmann et al., 2012) and CBT shown more efficacy with other treatment approaches (Gould, Coulson, & Howard, 2012). Moreover the researchers mention that CBT can reducing depression in older with mental disorder and CBT was especially recommended with older persons (Pinquart & Sorensen, 2016).

Two CBT studied mild to moderate depressed older community dwelling and primary care setting by used systematic review and meta-analysis to evaluated the efficacy of CBT, the result of the first studied shown CBT was effective in assisting primary care physician in treating patients with depression and could be considered for treating patients with mild to moderate depression, the health care be recommended (McNaughton, 2009). Another studied of the efficacy of group based psychological therapies for mild depression in primary care and the community found that CBT benefit for individual who are clinically depressed over that of usual care alone. Individually delivered CBT is more effective than group CBT immediately following treatment but after 3 months there is no evidence of difference (Huntley, Araya, & Sallisbury, 2012).

Only one studied provided an empirical evaluation of CBT versus TAU for mild to moderate late life depression in a UK primary care setting by used RCT design. The researcher conclusion that CBT shown to be effective treatment for mild to moderate late life depression and has utility as a treatment alternative for older persons who cannot or will not tolerate physical treatment approaches for depression (Laidlaw et al., 2008).

Nevertheless literatures review result not found the previous studied to examine the effective of CBT for mildly depressed older community dwelling. From the result of previous studies and previous evidence support that CBT as the treatment of depressed older. While the result of this study confirmed that CBT can decrease severity of depression and might be preventing depressive disorder in older persons in the future.

For improved life expectancy is also contributing to the aging of Thailand's population but to a lesser extent (UNFPA, Thailand, 2011). Combined with depression has become a major mental health problem for elderly people. In addition, public health expenditures will increase at the expense of other investments (Office of the National Economic and Social Development Broad, Thailand, 2011). The evidence so far clearly points to greater needs on a variety of fronts that are associated with more advanced age, rural residence and poverty status. Continuing to monitor the situation of older Thais is essential to keep such programs targeted appropriately and help ensure their effectiveness and affordability (UNFPA, Thailand, 2011).

Depression frequently accompanies and complicates chronic medical conditions such as ischemic heart disease, diabetes, and stroke, and it is associated with functional impairment and disability (Unutzer, 2007). Depression in the elderly has also been linked to increased healthcare costs (Unutzer, 2007). Primary care is on the front-line in dealing with older people's mental health. Most people with mental health problems are managed in primary care, only 6% of older people with depression receiving specialist mental health care. Depression is under detected in older people, with only one in six older people with depression discussing their symptoms with their General Practitioners (GPs), and less than half of these receiving adequate treatment (Graham et al., 2011). Finally, depression may increase mortality rates through suicide and complications of cardiac disease (Blazer, 2003; Joynt, Whellan, & O'Connor, 2003). With the aged population growing, there will be even more people in this group suffering from unrecognized depression. Early recognition and treatment can reduce the impact of this debilitating condition (Hardy, 2011).

Over the past 3 decades, there has been a substantial increase in the number of clinical trials that have looked at the effects of psychosocial interventions on depression among older person. Many studied provide the evidence based support that CBT, PST, and IPT have the strongest evidence base for treating patient with MDD (Arean, 2012; Graham et al., 2011; NICE, 2009; Tilyard, 2011; WHO, 2016). The literature has been broadly supportive of psychotherapy as a first line treatment for depression (MDD) in older persons but not mention on mild depressive symptoms or subclinical depression. Research on the effectiveness of psychotherapy in depressed older is relatively sparse,

although there has been considerable growth in the database in the past 15 years. Most studies that are large enough to determine a stable effect of treatment have focus on ambulatory, middle-high income older adults (Arean, 2012).

Cognitive Behavior Therapy on Mild Depressive Symptoms in Older Women

Modification CBT for Older Person

Overall of this study use CBT (Beck, 2011) as the framework of the program. Conceptualization treatment plans (formulation) for older person with depressive symptoms can be challenging because of the presence of many complicating factors such as medical comorbidity, alterations in role status and the potential for stress in various intergenerational relationships. In working with older people, there may be important aspects of cohort beliefs and attitude towards aging that may influence behavior. Working therapeutically with older people can be different from working with younger people in a number of important respects, such as the higher likelihood of physical condition, changes in cognitive capacity, different cohort experiences and in certain circumstances, getting the patient to reinitiate good practices rather than learn new practices (Laidlaw et al., 2004). Thus, the researcher pay attention on 1) procedure modification such as cognitive change, sensory impairment, physical health problems and 2) content modification should be appropriated with nature of the elderly (Evans, 2007). Moreover, there are modifications to the procedures and content of therapy that are more likely to be required when working with older people.

1. Procedure modifications are as follows:

1.1 Addressing cognitive change, certain changes to cognitive functioning occur with advancing age but they are not the universal phenomena that they are widely held to be. Ability on sustained attention tasks is well preserved in old age but tests of selective attention show a decline given this information it is essential during the initial assessment for CBT to be aware of these potential problems and possibly to use cognitive screening tests (e.g. the Mini Mental State Examination, MMSE). Where problems exist it may be necessary to repeat and summarize information to enhance encoding and, for the same reason, to present information in multiple modalities (e.g. on dry-wipe boards,

using audio-visual equipment) and provide folders and notebooks to record information from the sessions. It may also be useful to incorporate specific memory-training techniques. On the one hand, Kazantzis et al. (2003) provide alternative way when we assign homework for older adult should be modification of both the process of homework and nature of the homework task, it can be helpful to make key bullet-point note about the homework as a guide for later reference or written format appropriated with this group or homework not too difficult involves asking the client for a confidence rating of his or her perceived ability to complete the assignment. Therapist should renegotiate the assignment by exploring further barriers to homework in term of its length, location, duration, and obstacles to the completion of homework in CBT.

1.2 Addressing sensory impairment: the most common form is the loss of perception of high-frequency sounds. It will obviously be desirable to help address any sensory problems that are affecting the progress of therapy, so that the best use of time can be made. Hearing problems attributed to old age could in fact have other, easily remediable causes such as conductive deafness owing to earwax. Where impaired vision cannot be corrected, written materials can be provided in large, bold print. Tape recorders can be used where visual impairment is severe (Evans, 2007).

1.3 Addressing physical health problems: many elder people enjoy good physical health, and where health problems are present they may not have a significant limiting functional effect. Health problems can limit a client's understanding, recall or application of therapeutic principles. Physical disability may limit a client's ability to engage in behavioral experiments. It is essential to find a balance between remaining attentive to any physical limitations a person may have and awareness that individuals may have excessively negative appraisals of their limitations. Problems with attention and recall can be addressed as described above. Realistic goals need to be agreed for behavioral experiments and, where patients are severely limited by physical problems; it may be useful to spend more time examining dysfunctional thoughts and assumptions that may be preventing them from making the most of ongoing activities. An interdisciplinary approach with input from 'medicine for the elderly' teams can be very helpful in trying to assess and optimize physical functioning and thus maximize gains from therapy (Evans, 2007).

1.4 Setting and format for therapy: more recent study of the effectiveness of CBT for elder people frequently offer flexibility with regard to the setting of therapy – seeing people in their own homes or in primary care clinics (Stanley et al., 2003). This improves access to CBT for elder people with physical health problems and disabilities (Evans, 2007).

2. Modifications to therapy content, when working with older people, there are certain age-related themes and factors that may emerge more frequently and thus require a modified focus in terms of the content of therapy. In this context, 'content' refers to issues such as case conceptualization, key cognitions and themes, as well as client–therapist 'interpersonal process issues'. These can all have an important bearing on the progress and outcome of therapy.

2.1 Modified case conceptualization: a case conceptualization, shared between client and therapist, is one of the cornerstones of CBT. A case conceptualization is an idiosyncratic representation of the patient's current problems, including predisposing and maintaining factors (cognitive, behavioral, emotional and interpersonal). This builds on Beck's (1979) model, to include information thought to be important and necessary when working with older people: cohort beliefs, role investments, 'intergenerational linkages', socio-cultural context and physical health (Evans, 2007).

1) Cohort beliefs. These are beliefs held by groups of people born in similar time periods, reflecting shared experiences. These experiences can have a significant impact on the therapeutic process, and combining cohort beliefs with core beliefs provides an age and generational context to therapy work.

2) Role investments. Role investment describes the extent to which an individual remains involved in personally meaningful, purposeful and relevant activities and interests. It has been proposed that vulnerability to depression may be related to the degree of investment in these roles. Old age may represent a time of transition in these areas of investment and self-validation, which may function as a trigger for emotional problems.

3) Intergenerational linkages. This issue draws attention to the apparently increasing dynamic role that grandparents and great-grandparents play in society and, in particular, families. With this comes the potential for tensions and disagreements in the context of intergenerational relationships. There may be interaction here with cohort beliefs, for example relating to notions of family structure, roles, etc.

4) Socio-cultural context. The socio-cultural context refers in particular to people's attitudes to their own ageing and may include internalized negative stereotypes about growing old. It is important that therapists take their own values into account.

5) Physical health. It is advocated that the therapist asks about the presence of physical illness in the patient and explores the patient's understanding of diseases and resulting outcomes.

2.2 Modified focus on key cognitions. Laidlaw et al.'s (2004) model is consistent with the idea that certain themes are more likely to emerge in the dysfunctional belief systems of older individuals in therapy.

1) Loss and transition points commonly bringing older people into therapy can be distilled down to the twin themes of loss and transition points. The theme of loss includes bereavement (spouse, other family members, and friends) and loss of social networks (through bereavement or changes in social situation, e.g. relocation to a new community). Furthermore, physical illness can be viewed as a loss of health. The key to helping the client work through these issues is to identify the personal meaning of the loss or transition point and to look for any cognitive distortions or dysfunctional thinking on which that meaning may be based. The eventual aim is to identify alternative, more adaptive ways of thinking about the situation, thus enabling the individual to adjust.

2) Aging and ageism. An older person's attitude to and beliefs about ageing commonly require attention in therapy. Ageism is not uncommon in our societies and there is a risk that older people may internalize negative judgments and ageist stereotypes that may lead them to adopt restrictive patterns of behavior consistent with these beliefs. In therapy, the aim should be to highlight the arbitrary nature of age-related

beliefs. It may be useful to challenge myths regarding ageing by providing accurate information in the form of books and documents that draw on research findings.

3) Health anxiety. Another issue that may feature frequently in the depressive cognitions of older people relates to physical symptoms and physical illness. CBT can potentially help in two main ways. First, older women may be less likely to acknowledge that symptoms such as loss of energy and appetite may be a manifestation of a depressive disorder. Thus, Socratic questioning and education about these issues may facilitate understanding and treatment (Beck, 2011). Second, older women with depression and co-morbid physical illness may ruminate about disability and develop overdeveloped expectations of eventual incapacity. The role of CBT is to identify and tackle NATs that may be feeding this process, and to help patients differentiate between the hopelessness and helplessness of depression and a realistic, yet hopeful, recognition of limitations.

3. Beliefs that may interfere with therapy

3.1 The patient's beliefs. It is often suggested that older people may believe that they are 'too old to change'. This belief may be derived from a combination of internalized negative stereotypes of old age as well as cohort beliefs. As a result, older people may not seek help for their difficulties and, if help is sought, they may have reduced expectations of treatment outcomes (Laidlaw et al., 2004). Another potential influence of ageism (in the form of stereotypical prejudice against 'the young') is that age discrepancy can lead older people to question their therapist's empathy and skill (Thompson et al., 2016). Older people may believe that being a patient involves 'passive receptiveness of the expert's help'. They suggest that older patients need to be encouraged to actively generate and enact new behaviors and strategies for themselves and not just ask for recommendations. In essence, the collaborative nature of CBT needs to be reinforced consistently. A related issue is that of dependency. Older people who have suffered bereavements may be more lonely and isolated and therefore there may be greater potential for dependence in the therapeutic relationship. Dependency issues may inhibit therapy if a client attributes therapeutic benefit directly to the therapist, and ending therapy may be problematic. Another potential source of impedance in therapy is older patients' beliefs regarding the stigma of mental health problems. Many myths and

assumptions regarding therapy will be dismissed during the process of educating the client about the CBT model and the progression of therapy itself.

3.2 The therapist's beliefs. Thus, when working with older people, therapists must be aware of their own ageist assumptions such as common dysfunctional beliefs: 'old people can't learn new behaviors'; 'the elderly are inadequate and need to be cared for'; 'there is something inherently inferior about old age'; 'they are going to die soon so why bother?' In addition, a therapist's stereotypical views of elderly people may result in blaming the client for being 'unable to engage in therapy', 'unpsychologically minded' or 'cognitively impaired'. Laidlaw et al. (2004) suggested that therapists ask themselves whether they would accept this belief as fact in a younger patient and also whether they would accept in someone younger the limitations this person places on the expected outcome of therapy.

Group CBT Program for the Older Women

Group CBT program for depressed older women was formulated based on Beck' Cognitive Behavior Therapy, encouraged 3 time a week session, 45-60 minutes all 12 sessions within 4 weeks. All of sessions in group CBT program have basic stages as identifying, evaluating and responding NATs by researcher teaching and helping older women to learn the strategies to deal with NATs into a more reality based and it can reduce their depression to achieve the objective of this study, throughout components of CBT as the psychoeducation, case formulation, three steps of CBT, homework assignment, and evaluation and feedback follow as structure and format of CBT session, using CBT techniques to identifying, evaluating, and responding NATs (Beck, 2011), and modified content of group CBT that normally occurred in older women (Laidlaw et al., 2004) as below.

Structure of the first CBT session (Beck, 2011) includes discussion on the clients' diagnosis or emotional problems, doing a mood check, setting goals, starting working on a problem, setting homework, and eliciting feedback. Before the first session, the researcher review the participants' intake evaluation and keep initial conceptualization and treatment plan in mind as conducting the session, being prepared to change course if needed. Each session takes about 45-60 minutes, but the first one often takes an hour.

Goals and structure of the initial session are to establish rapport and trust with clients, normalize their difficulties, and instill hope. Socialize clients into treatment by educating them about their depressive symptoms in mild levels of depression, the cognitive model, and the process of group CBT program consist with 12 sessions, three times per week. The researcher collects additional data to help conceptualize the participants and develops a goal list and then starts solving a problem important to the participants, giving feedback and homework assignment.

1. The CBT session

The researcher follows the typical series of the overview of CBT session (Beck, 2011) as initial part of CBT session, researcher often takes the lead in suggesting homework assignments. In the middle part of CBT session, researcher continue working toward these objectives but also emphasize identifying (second, fifth, and eighth session), evaluating (third, sixth, and ninth session), and responding (forth, seventh, and tenth session) participants' NATs. In the last phase of therapy, the researcher train the participants all of the techniques and skills of CBT to deal with the NATs in the future and summarizing overall of the CBT program (Beck, 2011). At each session, the therapist provides a mood check which is compared to the previous session and take a quick look at the patient's symptoms for evaluating the effectiveness of the CBT program. It also point out problems of the CBT program during the session. The researcher sets an agenda with the participants, discuss each problem in detail, teach the participants necessary techniques and skills of CBT, discuss the context of solving problems following the problem solving process, and discuss homework assignment includes implementing solutions to problems and practicing skills. At the end of sessions the researcher summarizes or has the participants summarize the learning attained from the session and asks for feedback to find out how the participants feels or thinks about the session.

2. The CBT techniques employed are utilized within the CBT program for older women by the researcher teaching clients how to identify distorted cognitions through a process of evaluation and responding to negative automatic thoughts (NATs). The participants learn to discriminate between their own thoughts and reality. They learn the influence that cognition has on their feelings, and they are taught to recognize, observe and monitor their own thoughts. The behavior part of therapy involves setting homework

for the participants to do (e.g. keeping a diary of thoughts record). The researcher gives the participants tasks that help them to challenge their own irrational beliefs. The therapeutic techniques are designed to identify, reality-test, and correct distorted conceptualizations and the dysfunctional beliefs (schemas) underlying these cognitions. The patients learn to master problems and situations which they previously considered insuperable by reevaluating and correcting their thinking. The cognitive behavior therapist helps the patient to think and act more realistically and adaptively about their psychological problems and thus reduces symptoms (Beck et al., 1979).

In this study, the researcher applies the CBT program for older women by referring to Beck (2011) and Laidlaw et al. (2004). In particular, researcher integrates homework into group CBT program and it is important for older women to be encouraged to view completion of homework as an integral part of program. Researcher keep in mind characteristics that define the geriatric population that focuses on significant events and related with physical health (Chand & Grossberg, 2013; Cox & D'Oley, 2011), change in role investments, interactions with younger generations (Chand & Grossberg, 2013), and spiritual and religious beliefs (Cox & D'Oley, 2011). Researcher has a guideline to enhance homework compliance among older women with three steps of identifying, evaluating and responding NATs. Homework assignments specificity for older persons, researcher consideration about obstacles to do homework such as sensory deficits so homework assignments to hard completely and accurately that effect actual ability to comply with homework assignments. In this physical problem, researcher can help them to complete homework before start each session and design homework more simply and easy to complete it such as check list or older women be encouraged to view completion of homework as an integral part of the session. While a more directive style is recommended when using homework with older persons, the therapist involve the participants in the choice and design of the specifics of completing the homework and successful outcome. Many type of homework assignments such as relaxation training, assertive training, cognitive and behavior rating scales are appropriated with older population. The researcher enhance the perception of homework's importance, it is suggested that homework be routinely written down and researcher help them to summarizing both written and verbal homework assignments for predicting subsequent compliance with older persons. Moreover, researcher curiosity about the experience of

homework task. Part of the skill involved in reviewing homework assignments lies in therapist's ability to sincerely provide praise and encourage so that every step involved in homework task is perceived as a success (Kazantzis et al., 2003). Homework assignment facilitates cognitive and behavior changes during sessions with consideration in gender sensitivity such as stressful life events, functional disability, women's role, and typically have symptoms of sadness, worthlessness, and excessive guilt or self- blame. Researcher helps the participants to identify, evaluate, and respond to NATs that they were likely to experience during sessions; helping them to devise solutions to their problems to implement during the week, and teach them anew skills to practice during the week (Beck, 2011). In term of religious belief used for CBT techniques, Thai older women have strong belief and strictly follow the teaching of Buddha or religious quotes or words of freedom or religious activities. Researcher encourage the participants' try to find out what works for them and to regularly give themselves time to practice in daily live by used homework assignment them to practice. In this study have 2 session that compound religious belief and activities for cognitive reconstructuring. While, add more additional techniques such as behavior experiment, behavior activation, relaxation activity, and rehearsal situation for older women have learn various techniques to deal with NATs.

Group CBT program was designed an approach that is intended to help the participants to take stock of the way they behave and the way they think about themselves and others and to see whether there are alternative perspectives and actions that could be more useful to them. It is not about correcting "faulty" thoughts or thinking positively.

3. The three steps of CBT for older women

3.1 Identify NATs, the researcher provides the step of identifying NATs in second, fifth, and eighth session consisted with cognitive techniques such as Socratic question, Downward arrow techniques, guided discovery, and problem solving. Moreover, researcher used their previous homework to explain the situations which one was NATs and it affect to feeling, behaviors, and physical by the participants pleasure to sharing and discussion for deeply understanding how to identifying the various NATs. Additionally, behavior techniques that the researcher assigns homework by used scheduling daily activity to identify NATs because recording activity on activity daily

record can also are used as a convenient way to introduce the concept of thought monitoring. The activity daily record can help the participants to make the thought-feelings-behavior-physical connection more easily from previous homework assignment and in the session the researcher asked how the participants would have thought about this situation before depressed, it can developed an awareness of the connection between behaviors and mood and how her thoughts can have an influence on subsequent behavior. Importantly, the participants also learned from homework assignment that thoughts do not always fit the fact and can change (Laidlaw et al., 2004). The mood checks activity that represents an individual's mood over the course of a day, it serves as a useful way of helping older women to get used to the idea of recording their thoughts and helps to bridge the conceptual gap between recording behaviors and recording thoughts. Older persons have a tendency to confuse thoughts and feelings, the researcher teach them learn to do a dysfunctional thoughts record together in the session before assign homework. In this study, researcher educated older women about normally of dysfunctional thoughts, distinction between thoughts and feeling, and use gently probing questions to elicit them, while providing feedback. The example of the way to dealing with age-related NATs, some older persons believe that depression is a normal part of ageing. The researcher hold age-related NATs, older persons may see their age as reason in itself for the development of depression thus the researcher mention that not the situation itself that is causing depression but, rather, it is how the person interprets and responds to the situation that makes all the difference.

3.2 Evaluating NATs, the researcher provides the stage of evaluating NATs in third, sixth, and ninth session by used various behavior techniques such as behavior experiment, behavior activation, relaxation, teaching of Buddha, words of freedom, making merit, listen to sermon or Dhamma that according to Thai Buddhist culture for evaluating NATs. Consisted the strategies to modifying CBT for older women need to explore belief and sociocultural lens of the older women or considerate religion of the older belief (Chand & Grossberg, 2013; Cox & D'Oyley, 2011). In CBT, the researcher assigns homework the participants record the pleasant and mastery because increasing pleasant events serves a number of important therapeutic functions for working with older persons with depression. The participants increasing the pleasant events shows a person that activity (behavior) and mood are linked and that changing behavior, the mood levels

can be influenced. With this approach, older women learn an important lesson in how to control and limit negative mood cycles in depression. As an enabling technique, scheduling daily activity or increasing pleasant events is one of the most important tools to combat the effects of depression (Laidlaw et al., 2004).

3.3 Responding NATs, the researcher provides the stage of responding NATs in fourth, seventh, and tenth session. The eleventh session, the researcher give the examples situation for rehearsal the older women to practice identifying, evaluating, and responding NATs and all of the participants sharing how to deal with NATs in her perspective. The last session the researcher and the participants evaluated the program together. At this point, researcher shares something of what has learned from working with the participants. It is gratifying to the participants to know that they something to offer to highly trained professional who themselves are "not too old to learn".

A robust literature suggests that traditional passive training practice are ineffective at changing provider behavior so active learning may be most effective way to change behavior, particular for new or complex skills. Behavior rehearsal was used to assess analogue fidelity for CBT competencies of depression (Beidas, Cross, & Dorsey, 2014). This study, two last sessions, the researcher used the scenario and examples situation in their daily live such as the participant has appointment with medical doctor to follow up blood sugar and blood pressure while your son work hard and busy every day. You ask him about your appointment then your son said that "you didn't say it again because I listen this sentence more than three times and I remember" and he walk away quietly. After the conversation, you think about yourselves as "I am burden" "annoying mother" "Nobody loves me". The researcher used behavior rehearsal for evaluating the participants can deal with NATs or stressful live events throughout all of three basic step of CBT.

In the summary, from literatures review, we already had known, the first worldwide face with aging society as the eastern countries or developing countries and aged society for western countries or developed countries. The second, depression was the global burden and public health burden. The third, depression among older community dwelling have high prevalence and older women suffering from depressive symptoms more than older men. The fourth, almost of psychotherapy present effectiveness for reducing

depression in the elderly with MDD in different countries and various setting but few studied mention with mild depression with not met criteria of MDD. The fifth, department of mental health of Thailand known about the effectiveness of psychotherapy and adopt guideline form NICE (2004) to implementation for population aged 18-59 year old and provide the handbook for manage depression in primary, secondary, and tertiary care that consisted with CBT and PST but did not cover older person. The sixth, literatures review not found the studied in Thailand indicated that we can use it follow the guideline as standard treatment for older person. The last, in Thailand most patients with psychiatric disorders are treated by GPs because of the limited number of psychiatrists in the country. Moreover, people are reluctant to seek help from a psychiatrist because it may imply that they have a mental illness (Lotrakul & Saipanish, 2009).

Form this point was the gaps of knowledge and research gaps of this study. Moreover, we can fulfill the gap that the reducing depression in the elderly should address on psychotherapy because of biological factors affect to depression in the elderly. Some limitation of pharmacological and electroconvulsive therapy that present adverse effect treatment, high recurrence rate relapse rate, and non-compliant in elders people. Sociological factor that associated with depression in the elderly we can use some risk factor as high risk characteristic of subject that can affect to higher score of depression thus we should be aware when recruited the subject into the study. Psychological factor lead us to created intervention to reducing depression especially for the elderly because of evidence of effectiveness of psychotherapy and benefit of psychotherapy in this population. Moreover, psychotherapy as CBT present cost effectiveness for manages depression in several studies. From previous reasons, the researcher as a psychiatric nurse and received well train with CBT from Beck depression institute, Department of mental health, Thailand, and under supervision from expertise in CBT at least 150 experience hours can help them from suffering of depressive symptoms and preventing severity of depression in older persons. The CBT program with elevated levels of depressive symptoms or mildly depression in older persons but no depressive disorders have shown significant effects in reducing high levels of depressive symptoms and preventing depressive episodes. This issue led the researcher to conduct and examine the effect of the Thai group CBT intervention program to reducing depression in older women community dwelling.

Group CBT program will target older women who have mild level of depression belong to the PHQ-9 (Lortakul et al., 2008) has been used as a reliable depression screening tool in primary care, with a demonstrated good sensitivity and specificity for depressive disorder (Department of Mental Health, Ministry of Public Health of Thailand, 2010). In this study used The PQH-9 was the instrument for data collection.

Conceptual Framework

In this study, the researcher used Beck's cognitive theory (Beck, 2011) as the theoretical framework to develop group CBT program on depression among older women. Beck's Cognitive Theory of Depression indicated that negative cognitive interpretation of experiences leads to negative views of self, experiences and the future. The negative automatic thoughts affect to feelings and behavior which can lead to depression (A. T. Beck et al., 1979; J. S. Beck, 2011). CBT helps people alleviate depressive symptoms by identifying NATs, evaluating NATs and responding to the patient's thinking to bring about enduring emotional and behavioral change (A. T. Beck et al., 1979; J. S. Beck, 2011).

Group CBT program used cognitive techniques and behavior techniques are aimed at delineating and testing the patient's specific misconceptions and maladaptive assumptions. This approach consists of highly specific learning experiences designed to teach the patient the following with the components of CBT as 1) psychoeducation, 2) case formulation, 3) three steps of CBT; identifying NATs consist with to identify and monitor his/her negative automatic thoughts (cognitions); to recognize the connections between cognition, affect, behavior, and physiological; evaluating NATS which examine the evidence for and against his/her distorted automatic thought; to substitute more reality-oriented interpretations for these biased cognitions; responding to NATs by learn to identify and alter the dysfunctional belief which predispose him/her to distort his/her experiences, 4) homework assignment, and 5) evaluation and feedback. According to these three steps in the program when finished the cognitive behavior therapy program, mildly depressive symptoms older women known how they can manage their thinking (cause of inducing depression) and it can prevent severity of depression by reducing depressive symptoms.

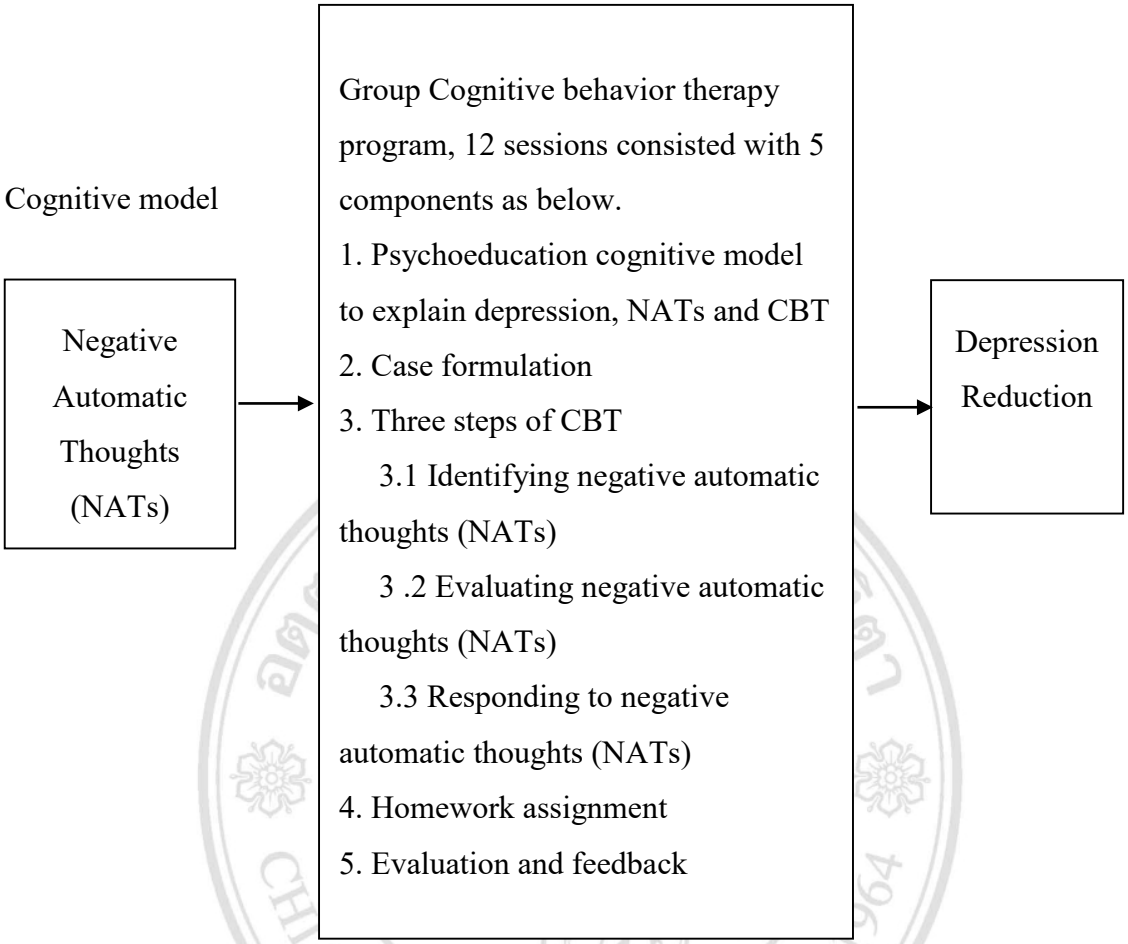

Figure 2-3. Conceptual framework of group cognitive behavior therapy program