CHAPTER 1

Introduction

This chapter presents the background and significance of the research problem, objectives of the study, hypotheses, scope of the study, and definition of terms.

Background and Significance of the Research Problem

The situation of rapid growth of aging population is increasing around the world. In the UK, the Office for National Statistics (2009, as cited in Hardy, 2011) revealed that there were nearly 12 million people of state pension age (currently 60 years for women and 65 for men), representing almost one fifth of the UK's total population (Hardy, 2011). Canada shared many similarities with other industrialized or developed countries around the world, including a rapidly growing aging population (Sheet & Gallagher, 2012). The estimates are that by 2025, 20% of Taiwan's population will be over 65. For China, the estimates are that by 2050, 30% of its population will be aged 60 or older, and 7% (1 out of every 15 people) will be aged 80 or older.

Similar to other countries, the demographic characteristics of the Thai population are changing and transforming to an aging population. The number and percentage of older population derived from the Population Projections for Thailand during 2010-2040 will increase sharply, and indicates that the percentage of the late-elderly (aged 80 and over) population will be almost one-fifth of the total elderly population, approximately 12.7%. The elderly population is predicted to increase in the municipal and urban areas. In 2010, a total of 3.3 million elderly resided in the municipal areas, accounting for 39.7%. The number is expected to have increased to 11.6 million or 59.8% by 2040, due to the urbanization trend in Thailand. According to the Population Projections for Thailand, 2010-2040, the total population increase rate all of life span is continuing downward into a negative rate, but older population continuing upward. This phenomenon will be experienced from the years 2025-2030 onward. Meanwhile, the

growth of the older population, although on the declining trend, remains at a much higher level comparatively with other ages (Office of the National Economic and Social Development Board, 2010). Similarly, the Institution of Population and Social research, Mahidol University, reported that the estimated Thai aging population in 2005 had 6 million people who were 60 years of age or above, or 10% of the total Thai population. In 2010 the Thai older adult increased to12.8%, and by the year 2035, Thailand will have as many as 16 million or 25% of older adults as its total population. Thailand has one of the fastest growing aging populations in this region (Hassen & Parsartkul, 2011). Furthermore, the proportion of Thai older adults in the total population is expected to reach 19.8% in 2025 and nearly 30% by 2050 (Bull World Health Organization, Thailand, 2012). While the latest study of the, Foundation for older persons' development, Thailand, found that the present situation of Thai older adults will increase continuously, from 13.2 % in 2010 to 32.1% in 2040 (Foundation for Older Persons' Development [FOPDEV], 2015).

Even though the results from various studies of the Thai older adult growth found that there was a difference in years predicting growth rates, these differences in the percentage of older population numbers, or differences expected in the number of the older adult population, all of the studies present a similar trend of the aging population increase. This highlights that Thailand will become an aging society according to the criteria provided by the United Nation (National Statistical Office, , Ministry of Information and Communication Technology of Thailand, 2012), and can be concluded that Thailand has to continue to face major global change, which may either pose threats to, or provide opportunities for the country's development for significant change, while many countries are also moving toward an aging society.

When considering the distribution of the elderly population by gender, it is found that female elderly accounted for 55.1 percent in 2010, and will increase to 56.8 percent by 2040. The late-elderly female group in particular, will increase from 13.9 in 2010, to 21.3 percent by 2040, as they tend to be living longer than their male counterpart (Office of the National Economic and Social Development Board, 2010).

The rise is attributable to improved life expectancy in older persons, which also results in an increasing number of population who are economically, socially, physically

and psychologically dependent, health areas such as depression, anxiety, and stress have an impact on this group of society, (Office of the National Economic and Social Development Board, 2010). From a literature review of the prevalence and gender differences in late-life depression: a population-based study found that overall prevalence of depression was 25.1% (95% CI: 20.6-29.6), while prevalence of mild, moderate, and severe depression was 16.4% (95% CI: 12.6-20.2), 7.5% (95% CI: 4.8-10.2), and 1.1 (95% CI: -0.4-2.6), respectively. A rate of 5.6% of the population complained of subclinical depressive symptoms (Forlani et al., 2014). From this prevalence of depression in older persons worldwide, present efforts to address the health care system need to be prepared specifically by way of supporting this population group, now and in the future. The worldwide phenomenon of an aging population, combined with the increasing prevalence of depression in older persons are issues that need to be further studied, and addressed, to meet this growing trend, failure to do so early could have greater health care costs for this population group. Prevention and intervention are essential.

Risk factors leading to the development of depressive symptoms in older persons likely comprise of complex interactions among biological, psychological, and social risk factors (Fiske, Wetherell, & Gatz, 2009). The first, biological risk factor, and physical illness, related and specific with depressive symptoms in older persons is physical illness, poor health status, and functional disability associated with depression in older persons (National Institute of Mental Health [NIMH], 2015; Sin, Choe, Kim, Chae, & Jeon, 2010; United Nations Population Fund [UNFPA], 2011; World Health Organization [WHO], 2016). Any serious or chronic condition of medical illness can produce a depressive reaction, the most strongly associated with depression include cardiac and cerebrovascular disease (Baune et al., 2012; Peltzer & Phaswana-Mafuya, 2013; Rodda, Walker, & Carter, 2011) and neurological conditions (Fiske et al., 2009; Peltzer & Phaswana-Mafuya, 2013). The second, psychological risk factors consist of cognitive diathesis, such as cognitions that causally influence emotions and behaviors and, in the case of negative automatic thoughts and cognitive distortions, contribute to the maintenance of depression (Beck, 2011; Hofmann, Asmundson, & Beck, 2013), ruminative coping style, avoidance coping style are also associated with depressive symptom in older persons (Fiske et al., 2009). The third, social risk factors such as

stressful life events, and inadequate social support when individuals are faced with greater losses, are associated with depressive symptoms in older persons. Long standing vulnerabilities appear to modify 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 factor that presented as risk for depression, highlighting that women were likely to have depression, more than twice that of men (Nierenberg, 2014). From a literature review, the researcher found two studies on depressive symptoms in community dwellings for elderly Koreans, found that women had higher depressive symptoms than men (Sin et al., 2010; NIMH, 2015). Another study researched gender differences in depressive symptoms among older Korean American immigrants, and found that women who have more chronic conditions like, greater functional disability, and a lower sense of control, were found to have more depressive symptoms (Jang, Gum, & Chiriboga, 2011). 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, Zhang, Shao, Qi, & Tian, 2014). Even in Thailand study about gender difference in terms 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 design appropriate strategies that take into account gender differences (Rungreangkulkij, Juntachum, Chirawatkul, & Charatsingha, 2010).

Factor related with depressive symptoms in older women, several combination of factors may contribute to women experiencing 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 (National Institute of Health [NIH], 2016), they typically have symptoms of sadness, worthlessness, and excessive guilt (NIH, 2016; NIMH, 2013). From a literature review to study gender differences in the pertinence of cognitive diathesis stress factors to depression, found that depressed women were more likely to

have experienced a negative severe event before the onset of depression, and had a greater frequency of negative interpersonal events than men, that support the hypothesis of gender differences in pathways to depression (Spangler, Simon, Monroc, & Thase, 1996). The study of Thailand about sex and gender leading to a high risk of depressive disorders in women found that role 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 an affair, continuous family responsibly, mother-child attachment, unable to let it go, and the model 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).

Depression is known to be common among older persons, though in developing countries precise data are scarce (Department of Economic and Social Affairs, US, 2011). According to the World Health Organization, depression was widely recognized and were ranked as the third leading cause of the global burden of disease in 2004, and will move into the first place by 2030 (WHO, 2012). Major depressive disorder occurs in 10-38% of the elderly population while over 20% of the older population suffering from depressive symptoms (WHO, 2016). Furthermore, depressed older persons is highly under recognized, up to 40-60% of cases (Valiengo, Stella, & Forlenza, 2016). Meanwhile, depression was the most common mental health problem in Thai older persons, and the prevalence of depression among older people living in the community was 28% who were depressed (Haseen & Prasartkul, 2011). Community studies conducted in the West indicated that the prevalence of depression in German elderly aged 65 years and over was about 9.2% (Kessler & Bromet, 2013). While, WHO mention that in older persons they found that the number of women experiencing depression continued to increase, and the incidence was higher than men (Steel et al., 2014; WHO, 2016). Moreover, a substantial number of epidemiological studies of depression across cultures, the study of age differences in the prevalence of depression of World Mental Health Survey, and even the systematic review and meta-analysis study of the global prevalence of common mental disorders, have consistently found the female to male prevalence ratio of depression to be around 2:1 (Kessler & Bromet, 2013; Seedat et al., 2009; Steel et al., 2014).

It is also true according to the results from the research project survey and study of health status among the elderly in 4 regions of Thailand, which found that the majority of health problems in Thai older included chronic illness. Moreover, this survey discovered that 87% of older adults had depression but did not met the criteria of depressive disorder. Wongpoom, Sukyimg, and Udomsubpayakul presented the percentage of depression in older adults by dividing into 3 groups of age: 1) 60-69 years old males were found to have depression for 9.7%, and 12.5% for females; 2) 70-79 years old males were found to have depression for 10.9%, and15.0% for females; and 3) more than 80 year old males were found to have depression for 15.4%, and 20.1% for females. Another study in Thailand found that point prevalence of depression was 5.2% in the female population were suffering from depression (Wongpoom, Sukyimg, & Udomsubpayakul, 2011).

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, such as 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). Another experience that is different between men and women, is that men are more likely to be very tired, irritable, lose interest in pleasurable activities, difficultly sleeping, and turn to alcohol or drugs when they are depressed (NIH, 2016).

In summary, depression is not one size fits all, particularly when it comes to the genders. Not only are women nearly twice prone to depression than men, but the causes of female depression, and even the pattern of symptoms are often different. Many factors contribute to the unique picture of depression in women from reproductive hormones to social pressures, to female response to stress. Specific aspects of treatment must often be modified for women. Because of female biological differences, women should generally be started on lower doses of antidepressants than men. Women are also more likely to experience side effects, so any medication use should be closely monitored. Finally,

women are more likely than men to require simultaneous treatment for other conditions, such as suffering from grief and loss experience, because they live longer than men, tend to be more turned into their emotion, and more likely to ruminate when feeling depressed. Dwelling on and rehashing negative feelings, known as ruminating, occurs more commonly in women who have depression in comparison to men, who have the illness thus their behavior may involve negative thoughts, negative self-talk, crying for no obvious reason, and blaming themselves. Thus from sex differences when it comes to depression many studies show women can experience depression in different ways, so we should modify in details of the intervention that are suitable for depressive symptoms for older women to deal with their negative thoughts that influence increasing depressive symptoms.

The entire studies present the trend of prevalence of depression in older persons that seems to be high, even in Thailand. With a growing aged population, there will be even more people in this group suffering from unrecognized and undertreated depressive symptoms among community based depressed older persons (Snowden, Steinman, & Frederick, 2008; Trangle et al., 2016). Early recognition and treatment can reduce the impact of this debilitating condition (Hardy, 2011). WHO mentioned that depression has become a major mental health problem for older people. In addition, public health expenditures will increase at the expense of other investments (Office of the National Economic and Social Development Broad, 2011). Projections are that by 2020, depression will be second only to heart disease in its contribution to the global burden of disease as measured by disability adjusted life years (DALYs), and depression as a major component of public health for older persons (Chapman & Perry, 2008). From the statistics of depression, our country has encountered with magnitude this problem, thus we ought to be prepared, and strive for the best way for coping with this problem in our older population.

Depression in older persons is an important public health problem, and a global burdening disease (Ferrari et al., 2013; Rodda et al., 2011; Tilyard, 2011; WHO, 2012, 2016). 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, Morales, de Vries, & Gallo, 2010; Mykletun et al., 2009). Depression in older persons has also been linked to increased healthcare costs (Rodda et al., 2011). Finally, depression may increase mortality rates through suicide, with up to 83% of older persons who complete 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). Furthermore, WHO set depression as a global crisis on World Mental Health Day, on October 10, 2012, that encouraged governments and civil society around the world to address depression as a widespread illness, often co-existing with other serious illness 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 beneficial for mental health promotion in these countries (WHO, 2012).

According to the definition of depression by Beck and Alford (2009) providing the guideline for each group of depression, the first group, for instance, is defined as normal mood where 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. This can occur in daily life and can recover itself. The proper response is therefore to observe, while no treatment is required for this group. The second group as a psychopathological group has been often used to designate a complex pattern of deviation of feeling, cognition, and behavior that is not represented as a discrete psychiatric disorder. The cluster of the signs and symptoms is sometimes conceptualized as a psychopathological dimension ranging in intensity (or a degree of abnormality) from mild to severe, thus should use psychotherapies that are proved to be effective in reducing depressive symptoms, and one of which is recommended by the National Institute of Mental Health (NIMH, 2011), as safe for depressed elders, in this group also is included cognitive behavior therapy (CBT), interpersonal psychotherapy (IPT), reminiscence therapy (RT). Furthermore, the US National Institutes of Health (NIH) recommended guidelines for depression among older persons including psychosocial therapies, or psychological interventions such as CBT, or

reminiscence for older persons in the community (Fiske et al.,2009). The last group as depressive disorders assumed to have certain consistent attributes in addition to the characteristic signs and symptoms; these attributes include a specifiable type of onset, course, duration, and outcome. National Institute of Mental Health (NIMH, 2011) recommended safe treatment for depressed older in terms of biological treatment, such as antidepressant medications, and electroconvulsive therapy (ECT), which are important and effective treatments for depression in older persons, or another combination of pharmacotherapy and psychotherapy. Furthermore, Chisholm, Sanderson, Ayuso-Mateos, and Saxena (2004) studied about reducing the global burden of depression in a population-level analysis of intervention cost-effectiveness in 14 world regions, and this study included Thailand. The results of this study found that psychotherapy was modeled to have a slightly lower rate of remission than pharmacotherapy, and indicated larger treatment effect sizes for both single and combined interventions in developing countries. Additionally, meta-analyses have reported adherence rates of 70% for TCAs, 73% for SSRIs, and higher rates still for CBT. Moreover, the results of this study indicated that implementation of efficient depression interventions in primary care setting would be very cost-effective, such as CBT. While, WHO mention that psychosocial treatment are also effective for mild depression, antidepressants can be an effective form of treatment for moderate to severe depression (WHO,2016).

Thus CBT used as a standard goal of psychotherapy for depression that presents empirical support for its effectiveness in older persons (Alexopoulos & Bruce, 2009; Cox & D'Oyley, 2011; Hofmann et al., 2012; Serfaty et al., 2009; WHO, 2016). Moreover, NIMH (2011) and WHO (2016) recommended that CBT was the best choice for treating depressive disorders in the elderly. Almost all the literature found that the CBT present effectiveness for treating and preventing relapse and recurrence in depressed elders in different countries and various settings, not only individual CBT but also group CBT, have evidence that support the effectiveness to decrease the depression as a clinical outcome of care. For example, the first study of a randomize controlled trial for ,group CBT for depression in older persons, found that group CBT was efficacious in reducing in the geriatric population, and was maintained for at least three months post group CBT, when compared to waitlist (Wuthrich & Rapee, 2013). Another RCT study found that group CBT produced faster and sustained improvement in depression on diagnostic

severity and recovery rates, compared to the control group (Wuthrich, Rapee, Kangas, & Perini, 2016). Moreover, the result of the study of CBT for depression among older persons found that CBT produced significant improvement in depressive symptoms among older persons, and adapting group CBT for older persons can demonstrate effectiveness, more than the control group (Palazzolo, 2015). Hence, almost all studies can conclude that the knowledge in treatment of major depressive disorder is quite clear, and can confirm the effective intervention from many studies, and as few studies mentioned mild depressive symptoms in older persons, this area deserve future study.

From the review of literature in Thailand, there was only one study concerning Cognitive Mindfulness Practice Program (CMPP) on depression among elderly Thai women by using Beck's cognitive theory of depression for 60-80 year old women who had score of 10 to 29 as mild to moderate depression on Beck Depression Inventory. This study provided group CMPP, and consisted of 2 phases of 11 sessions over 4 weeks. Phase 1, mindfulness practice took six hours daily from Monday to Friday, at 9 am.-3 pm. Phase 2, cognitive therapy (CT), required the participants to attend mindfulness practice for 3 hours every Tuesday, and Thursday for the following 3 weeks. Additionally, each session on Tuesday and Friday, the participants were required to undertake mindfulness practice for 30 minutes before starting CT. The result of this study showed that CMPP could decrease depression scores. The researcher presented the limitation of mindfulness practice, as not knowing any effect the attention that they received from being a participant in the program, and the effect of their regular interaction together, on a regular basis, at their respective community center, (Kitsumban, Thapinta, Sirindharo, & Anders, 2008). From the details of the intervention they found that the participants used the time for mindfulness practice, around 50 hours, and 6 hours for CT during 4 weeks, thus this study although limited in correlations, provided appropriate scoring for depression with the older, from the mindfulness experiences, opening their awareness to the hidden thoughts, and social constraints related to women, they showed a willingness of commitment to the program and awareness of its advantages, and outcomes as a treatment process.

In summary, according to the significance of problems resulting from the tendency to an aging society, and high prevalence rate of depression in women elders, Thailand has

encountered certain health care problems leading to the countries burden, such as high cost of care, exacerbation of physical illness, worsen outcome of care, morbidity and mortality rate increase in older people in community dwelling. The Department of Mental Health, Ministry of Public Health of Thailand (2010) paid attention and interest in managing depression problems by providing clinical practice guideline of major depressive disorder for the general practitioner: CPG-MDD-GP (The Department of Mental Health, Ministry of Public Health of Thailand, 2010), clinical practice guideline of psychosocial intervention for depressive disorder in secondary care (The Department of Mental Health, Ministry of Public Health of Thailand, 2012), and a handbook manual of CBT for patients with Major Depressive Disorders under the responsibility of Prasrimahaphodi Psychiatric Hospital, as a representative of Department of Mental Health, Thailand, and the excellence center of depression of Thailand (Prasrimahaphodi Psychiatric Hospital, Department of Mental Health, Ministry of Public Health of Thailand, 2015). Only one study used this handbook manual in the community to implement and examine the effectiveness of group CBT to reduce negative automatic thought and depressive symptoms for Thai people aged between 21 years old, and above, who met the criteria of major depressive disorder that present CBT, this study was effective (Khonkaen Psychiatric Hospital, Department of Mental Health, Ministry of Public Health of Thailand, 2011). While the Department of Mental Health, Thailand (2010) only provided guideline treatment for MDD in older persons in which antidepressant is first line, and basic counseling, problem solving, CBT, or exercise therapy for mild and moderate depressed older, it did not study the effectiveness of CBT cover for depressed older, or design specific CBT programs for this population, thus no study in Thailand to examine the effect of CBT for decreasing depressive symptoms among older person has been undertaken to date. Nevertheless, a great number of mild depressive symptoms of Thai older' in the community dwelling, after screening for levels of depression by using the questionnaires, did not receive clinical assessment by a psychiatrist before starting standard treatment, (Lortakul & Saipanish, 2009) as the clinical practice guidelines for general practitioner, used the guidebook of depressive disorders surveillance and care: provincial level of Department of Mental Health, Ministry of Public Health, Thailand (2014) provided the standard care, where

psychoeducation about depression, and advise to exercise 30-45 minutes at least 2-3 time per week, was the only implementation of treatment depth for elders.

From this problem, mild depressive symptoms among older women, but not meeting criteria of DSM-IV or ICD-10 are faced with under treatment, or inappropriate care (Hardy, 2011; Snowden et al., 2008: Steinman et al., 2007) for Thai older persons suffering from depression in the community (Kongsuk, 2012; Wongpoom et al., 2011). The researcher, as a psychiatric nurse has an independent role, and used psychotherapy to prevent severity of depression before developing to major depressive disorders, as a treatment program. At the same time, it has already known that CBT was investigated for its effectiveness as an intervention that can reduce suffering in depressed older from the several studies in different countries. Moreover, these interventions reduce cost of care, and provide high benefit of it as compared with other psychotherapies; it presents the best choice of non-pharmacotherapy treatment in this population. From the previous study in Thailand, only two utilized CBT for MDD. The first studied used CPG-MDD-GP of Department of Mental Health, Thailand (2010) implemented in the community for examining the effectiveness of group CBT for MDD, but does not cover older persons (Khonkaen Psychiatric Hospital, Department of Mental Health, Ministry of Public Health of Thailand, 2011). Another study used group CMPP for mild to moderate depression of MDD in Thai older women. The result of this study show that group CMPP with 6 hours CT and 50 hours mindfulness practice requirement can decrease depression scores, thus the participants should have previous mindfulness experiences before participating in this program. Hence, it was not found that the previous study was appropriate in Thailand to use group CBT, to examine the effectiveness to decrease the depressive symptoms, and did not meet the criteria of MDD among older women. These gaps of knowledge are needed to develop and test the effectiveness of group cognitive behavior therapy program, with specific activities and thus, suitable for older women. Additionally, it can improve quality of nursing care, quality outcomes of care, and reduce depression severity, and prevent the negative consequence of depression among older persons.

This study utilized Beck cognitive theory to understand the cognitive model of depressed older, and Beck's cognitive behavior therapy (2011) as a framework of the

study for developing group CBT program for reducing depressive symptoms among older women.

Research Objectives

The purposes of this study were to examine the effects of group cognitive behavior therapy programs on depressive symptoms among older women. The research objectives were as follows:

1. To compare mean depression scores of group CBT program at immediately after completing the program, one month, and three months follow up, with baseline.

2. To compare mean depression scores between group CBT program and usual care at immediately after completing each intervention, one month, and three months follow up.

Hypothesis

1. Among older women who attended group CBT program, mean depression score immediately after completing group CBT program, one and three months follow up will have mean depression scores lower than that of a baseline.

2. Mean depression scores immediately after completing the program, at one month, and three months follow up in older women attending group CBT program will have mean depression scores lower than that of those older women receiving usual care.

Scope of the Study

This study was conducted among Thai older women, aged 60 years old, and above with mild level of depressive symptoms, residing in Phitsanulok province, Thailand over six months from December, 2014 to May, 2015.

Definition of Terms

Older women with depressive symptoms refers to Thai women who age 60 year old and over, who present complex patterns of deviation of feeling, cognition and behavior conceptualized as a psychopathological dimension (Beck & Alford, 2009) and measured by the Thai version of the Patient Health Questionnaires (PHQ-9) translated by Lortakul, Sumrithe, and Saipanish (2008) scores 5-8.

Group cognitive behavior therapy program refers to group nursing intervention based on Beck's cognitive behavior therapy for reducing depression among older persons. This intervention was developed by the researcher, which includes 45-60 minutes for each session, three times per week, totaling 12 sessions. Structure of this program consists of 1) psychoeducation, 2) case formulation, 3) three steps of CBT as identifying negative automatic thoughts (NATs), evaluating NATs, and responding to NATs, 4) Homework assignment, and 5) Evaluation and Feedback.

Usual care refers to the routine care activities conducted by a nursing team in Sub District Hospitals (SDHs), and follow the guidebook of depressive disorders surveillance and care: provincial level of Department of Mental Health, Ministry of Public Health, Thailand (2014) providing care for mild depressive disorders where psychoeducation about depression and advice to exercise 30-45 minute at least 2-3 times per week if they do not have any complications.