Supportive Psychotherapy with Family Participation for Older Patients with Major Depressive Disorder

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Abstract

In Thailand, the number of older patients with major depressive disorder was increased. In 2009, 2010, and 2011, the prevalence was 8.75%, 13.95%, and 14.95% respectively. Major depressive disorder is caused by bio-psychosocial factors and lacks of social and family support during times of poor health. Supportive psychotherapy with family participation is suitable for relieving emotional suffering including depression. This quasi-experimental research aimed to compare the depressive symptoms of older patients with major depressive disorder before and after receiving supportive psychotherapy with family participation. Thirty potential participants diagnosed with major depressive disorder, aged 60 years or older were recruited from the Out-Patient Department of the Institution. After matching characteristics of gender, age, and level of depressive symptoms and treatment, 15 participants were randomly assigned to each group, one experimental and one control group. The experimental group received supportive psychotherapy with family participation, while the control group received only routine care. Data were collected through a personal questionnaire, the Hamilton Rating Scale for Depression, and the positive relationship level scale. All of the instruments were tested for validity and reliability. Reliability testing showed Cronbach's alpha coefficient at .83. The data were analyzed using descriptive statistics and t-test.

The results showed that the depressive symptoms of the participants after receiving supportive psychotherapy with family participation were lower than before receiving supportive psychotherapy (t=8.79, p< 0.05). The depressive symptoms of the patients that received supportive psychotherapy with family participation were lower than those that only received routine care (t= -2.25, p< 0.05).

Keywords: depressive symptoms; family participation; older patient; supportive psychotherapy
Introduction

According to the Diagnostic and Statistical Manual of Mental Disorders Fourth Edition, Text Revision (DSM-IV-TR), major depressive disorder is defined as an individual that is experiencing depressed mood and/or loss of pleasure or interest in daily life of at least two weeks and other symptoms that influence social, work, and other functions in life. The World Health Organization (WHO) has predicted that major depressive disorder is on the rise and that the impact of major depressive disorder will affect the quality of life of people worldwide by 2020. Additionally, major depressive disorder is expected to be at the second significant rank in causing poor quality of life and health, whereas cardiovascular is expected to be the first rank. Major depressive disorder will shift from the fourth most burdensome disease in 1990 to the second in 2020 as it doubles in prevalence and as damage becomes more severe. The Global Burden of Disease 2000 in patients with major depressive disorder was 3.7% Disability Adjusted Life Years (DALYs). The number of patients with major depressive disorder in Thailand in 2009 was 165,785 persons, a rate of 260.78 per every hundred thousand of population. According to the statistical data of the Psychiatry Department, Institute of Aviation Medicine, Royal Thai Air Force in 2009, 2010, and 2011, people over sixty years of age that received services had major depressive disorder at rates of 8.75%, 13.95%, and 14.95% respectively, thereby indicating that the number of patients with major depressive disorder is increasing annually, which is in line with the projection of the World Health Organization.

Major depressive disorder is a chronic disease which constitutes a significant public health issue. The disorder involves the physical impairment of the individual’s function and mental disability, resulting in cognitive, emotional, and behavioral abnormalities, including diminishment in the interest in one’s surroundings and activities, an individual will lose interest in routine activities that he or she previously enjoyed. These symptoms lead to suffering, putting them at risk of disability, suicidal tendencies, or possibly death. Major depressive disorders cause suffering as the secondary rank when compared to heart disease in older people. Moreover, the prognosis for older people with this major depressive disorder is poor.

Major depressive disorder in elderly patients is caused by bio-psychosocial and other factors, including spiritual and religious beliefs. In addition, deficient social support and family support during times of poor health are risk factors for depression. Furthermore, there are correlations between familial relationships, loss of intimate acquaintances, loss of familial relationships, and major depressive disorders among the elderly. Studies also showed that the factors influencing relapses in patients with major depressive disorders have stemmed from a lack of social support. According to the literature review, various forms of psychosocial therapy among patients with major depressive disorder, including cognitive and behavioral modification, interpersonal psychotherapy, reminiscing about the past, problem-solving practice, and supportive group therapy, can relieve major depressive disorder among the elderly. Supportive psychotherapy is suitable for use in effectively helping major depressive disorder patients and is widely accepted in the treatment of psychiatric patients, as it can help relieve emotional suffering with increased ability to make adjustments, practice self-control, and make decisions about problems. This method also solves sub-conscious problems, builds treatment relationships and gives greater importance to external events than the internal conflicts in the minds of patients. Although group psychotherapy can be quite effective, it can be less effective when an individual’s ability to function is limited by...
the aging process. For example, older patients may have cognitive and physical impairments in addition to being in a dependent state. Psychotherapy should be used with the individually persons in order to yield better outcomes.\textsuperscript{25} Hence, this research investigates supportive psychotherapy with family participation in order to relieve the symptoms of major depressive disorder among the older persons.

**Objectives**

1) To compare the depressive symptoms among older patients before and after receiving supportive psychotherapy with family participation, and 2) to compare the depressive symptoms among older patients that have received supportive psychotherapy with family participation and those that received only routine care.

**Research questions**

1) Did older patients with major depressive disorder have lower scores for depressive symptoms after receiving supportive psychotherapy with family participation?

2) Did older patients with major depressive disorder who receiving supportive psychotherapy with family participation have lower scores for depressive symptoms than those who receive the routine nursing care?

**Research Hypotheses**

1) After receiving supportive psychotherapy with family participation, older patients with major depressive disorder shall have lower scores for depressive symptoms.

2) Older patients with major depressive disorder that receive supportive psychotherapy with family participation shall have lower scores for depressive symptoms than those that receive only routine care.

**Conceptual Framework**

Major depressive disorder is 1.5–3 times more common among first-degree biological relatives of person with this disorder than among the general population. Major Depressive Episode is a period of at least 2 weeks during which there is either depressed mood or the loss of interest or pleasure in nearly all activity. The symptoms include changes in appetite or weight, sleep, and psychomotor activity, decrease energy, feeling worthlessness or guilt, difficulty thinking, concentrating, or making decisions or recurrent thoughts of death or suicidal ideation, plans, or attempts. The symptoms must persist for most of the day, nearly every day, for at least 2 weeks. Having distress or impairment in social, occupational, or other important areas of functioning.\textsuperscript{1} Depressive symptoms in older patients are considered a significant problem. When patients are discharged from the hospital to return to their families and communities, they usually face problems such as reduced familial relationships and loss of the ability to perform various normal activities. When patients are unable to perform certain activities such as self-care, feelings of self-worth diminish and factors occur that contribute to a relapse of depressive symptoms. These factors include inappropriate confrontations with relatives\textsuperscript{26}, a lack of skills to build interpersonal relationships, and because of the disease, they are often unaware of their own inability to take care of themselves. These factors lead to a lack of interest in the daily self-care routines of older patients with the disease.\textsuperscript{27,28} Based on the supportive psychotherapy conceptual framework\textsuperscript{23}, this study focuses on reducing emotional suffering, improving feelings of self-worth, mental conditions and functions, and the mental stability of patients, resulting in their desire and ability to do things.

In addition, families are an important source of support for the older persons, especially during
illness, when older patients require care and assistance in addition to physical, psychological, social, and spiritual support. If familial relationships are unstable, confused, and emotionally distant for a long time, older patients will be unable to endure the stress. Additionally, high emotional expression in families influences depression. Families expressing violent emotions may cause greatly heightened symptoms in patients, even when the patients have received proper medication. In this connection, Blazer, et al. conducted a study showing that a lack of social support leads to increased depression. As such, an increased interaction and interpersonal relationship improved positive relationship between older patients and family members. Then, this positive relationship reduced depression of older patients.

Methods
This quasi-experimental research employed a pretest-posttest control group design, aimed at studying the effects of supportive psychotherapy with family participation on the depressive symptoms of older patients with major depressive disorder.

Population and Sample Group
The study population consisted of 45 older patients with major depressive disorder aged sixty years and up that had been diagnosed with major depressive disorder according to the DSM-IV-TR criteria and that sought services at the Out-Patient Department, Institute of Aviation Medicine, Royal Thai Air Force in Bangkok. However, only thirty participants met the inclusion criteria and later were assigned to the experimental and control group. The sample size was added to each sample group. The final sample included 15 participants in each group.

The samples were willing to participate in the research project and were selected due to common characteristics as follows. The qualifications for the inclusion criteria were specified as follows: 1) being age sixty years and up; 2) being previously diagnosed with major depressive disorder according to the DSM-IV-TR criteria; 3) having at least moderate level of depression and up according to HRS-D assessments, and 4) providing written consent to participate in the project. Exclusion criteria included: 1) having severe or critical physical or mental symptoms; 2) having history of sight or hearing impairments. The potential subjects included 45 older patients who met the inclusion criteria. The researcher managed potential subjects by matching pairs with gender, age, and depressive symptom levels. After that, the researcher randomly assigned one of a pair into an experimental and a control group, with fifteen members each.

Ethical Considerations
This study passed the ethical consideration of the human research ethics committee of Bhumibol Adulyadej Hospital and the Institute of Aviation Medicine, Royal Thai Air Force, with five committee members participating in the consideration of approval. The researcher explained the data concerning the research procedures to the sample group and explained that all data would be kept confidential, with the presentation restricted to an aggregate perspective only. The samples had the right to end participation in the study at any time, and the samples signed consent forms once they had agreed to participate.

Instrumentation
The instrumentation for the study comprised the following three types of instruments:

1. The instruments for conducting the experiment were composed of the supportive
psychotherapy with family participation handbook, implementing the supportive psychotherapy concept of Winston, et al. The first author provided supportive psychotherapy to an older patient and a family member who participated in all sessions. The supportive psychotherapy in the present study consisted of six sessions, lasting 45–60 minutes per session, comprising the following: 1) building relationships and homes together; 2) living with one another and helping each other; 3) the “Our Gifts” activity; 4) building strong mental conditions; 5) adjustment practice activities; and 6) ending supportive therapy. Each session was conducted in three stages. The beginning stage – One of the researchers as a therapist used therapeutic relationships to establish new relationships among the participant, a family member, and the researcher. A family member was a relative who had a close relationship and stayed with an older patient in this study. The therapist built rapport with the patients and their families in order to build trust and to improve communication. The middle stage – Patients begin to accept the therapist as a supportive person and realize that they should take responsibility for their feelings to build mental strength, adjust and promote self-worth, and learn how to confront and manage problems in their lives without blaming others or putting ideas in their own heads. Therapists need to unconditionally accept the thoughts, feelings, and expressions of patients and their families while promoting, encouraging, and building mental strength, and adjusting and modifying new views while making periodical assessments, promoting self-confidence, and setting therapy goals together. The final stage – This stage is when patients are able to manage their feelings in the therapy process with greater self-understanding and acceptance, psycho-emotional development, self-understanding, and with closer relationships with others, and the ability to solve problems using various methods.

The instruments passed instrument quality testing by a panel of five qualified experts and were submitted to trial implementation with major depressive disorder patients similar to the sample group with modifications before implementation in the study.

2. The data collection instruments consisted of: 1) a personal data questionnaire covering gender, age, religion, educational attainment, marital status, occupation, income sufficiency, family characteristics, and a background check for physical diseases; and 2) the Hamilton Rating Scale for Depression, which had a content validity index of .88 and a Cronbach’s alpha coefficient of .83.

3. The experimental monitoring instruments comprised the following: 1) a form for recording progress in supportive psychotherapy with family participation; and 2) a self-record of positive relationship levels while living with families. The researcher created the instruments in order to assess the positive relationship level after the activities of the sample group, which were presented to five qualified mental health and psychiatry experts. All participants in this study reported that the positive relationship level increased.

Conducting the Experiment
In conducting the research, the experiment was divided into the following three steps.

1. Preparation
The researcher made preparations in the area of knowledge, concepts and theories on depression, therapy, treatments and care by studying relevant textbooks, documents, and research, and practiced supportive psychotherapy with depressive patients under supervision of an advanced practice psychiatric nurse at Srithanya Hospital from November 2011 to December 2011. In addition, all research instruments were developed and validated by experts. Then the researcher submitted the proposal to the ethic committee of Bhumibol Adulyadej Hospital and
the Institute of Aviation Medicine, Royal Thai Air Force. The researcher collaborated with nurse administrators at the study setting.

2. Conducting the Research

2.1 The research was conducted with the control group as follows. The researcher had the control group answer demographic data questionnaires and assessed pretest depression with the control group that received routine care activities provided by professional out-patient department nurses for the care of patients with major depressive disorder. The researcher also scheduled appointments with the control group after a four-week period to assess posttest depression.

2.2 The research was conducted with the experimental group as follows. Supportive psychotherapy was conducted individually with fifteen samples in the experimental group at the Psychiatry Department and at the homes of the patients. The activities were carried out six sessions, 45-60 minutes per session from 7 December 2011 to 9 March 2012. The researcher had the experimental group complete the demographic data evaluation forms, which assessed pretest depression with supportive psychotherapy every week for a total of six activities, 45-60 minutes per activity.

3. Assessment of the Findings

The researcher assessed the depressive symptoms and assessed the level of positive relationship records among the experimental group after the end of the supportive psychotherapy with family participation. At the fourth week, the data obtained were checked for completeness before analysis by statistical means.

Data Analysis

1. The patients’ demographic data were analyzed using percentage, mean values, and standard deviation.

2. The differences in the mean depressive symptom scores were compared by using paired t-test statistics with a statistical significance set at .05.

3. The differences in the mean depressive symptoms scores were compared between the experimental group and the control group, before and after the experiment, by using independent t-test statistics with a statistical significance set at .05.

Results

In terms of the demographic data, the sample group comprised more females than males, with most of the samples being seniors aged 60-74 years, with a mean age of 69.6 years. Most of the samples reported that their education levels were lower than high school (an elementary school). Most of the samples were unemployed. In addition, the samples reported that they had at least one of the diseases like hypertension as a frequently-encountered co-morbidity (Table 1).
Table 1 Characteristics of Patients with Major Depressive Disorders

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Control Groups (n=15)</th>
<th>Experimental Group (n=15)</th>
<th>$\chi^2$</th>
<th>p</th>
</tr>
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<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Male</td>
<td>7</td>
<td>46.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>8</td>
<td>53.3</td>
<td></td>
<td></td>
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<tr>
<td>Age (yr.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60-74</td>
<td>12</td>
<td>80</td>
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</tr>
<tr>
<td>75-90</td>
<td>3</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\chi^2$</td>
<td>1.36</td>
<td>.136</td>
<td>.71</td>
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<tr>
<td>Education</td>
<td></td>
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<tr>
<td>$&lt; $ High school</td>
<td>9</td>
<td>60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\geq $ High school</td>
<td>6</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\chi^2$</td>
<td>.14</td>
<td>.14</td>
<td>.71</td>
<td></td>
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<td>Employment</td>
<td></td>
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<td>Unemployment</td>
<td>11</td>
<td>73.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employ</td>
<td>4</td>
<td>26.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\chi^2$</td>
<td>1.29</td>
<td>.12</td>
<td>.45</td>
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<tr>
<td>Comorbidities</td>
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<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 disease</td>
<td>8</td>
<td>53.4</td>
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<td></td>
</tr>
<tr>
<td>$&gt; 1$ disease</td>
<td>7</td>
<td>46.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\chi^2$</td>
<td>2.29</td>
<td>.22</td>
<td>.32</td>
<td></td>
</tr>
</tbody>
</table>

*Chi-square test,  Fisher's exact test

According to Table 1 the demographic characteristics between the experimental and control groups indicated that no significant differences in gender, age, educations, employment and comorbidity (p-values $>0.05$). There were also no significant differences between study groups at baseline, indicating homogeneity in both groups and setting baseline.

Table 2 Comparison of Mean Depressive Symptom Pretest and Posttest Scores of the Older Patients with Major Depressive Disorder in the Experimental and Control Groups

<table>
<thead>
<tr>
<th>Depressive Symptom Score</th>
<th>Pretest</th>
<th>Posttest</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Experimental Group:</td>
<td>23.60</td>
<td>4.74</td>
<td>18.26</td>
</tr>
<tr>
<td>Control Group:</td>
<td>23.20</td>
<td>4.81</td>
<td>22.40</td>
</tr>
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</table>

*p< 0.05

According to Table 2, the mean depressive symptom scores of the older patients with major depressive disorder in the experimental group were found to be different, with a statistical significance at 0.05 (t= 8.798) and with mean depressive symptom scores after the experiment being lower than before the experiment (M= 18.26/23.6, SD= 5.06/4.74). The control group exhibited no differences in the pre-test and posttest scores.
Table 3 Comparison of Mean Depressive Symptom Pretest and Posttest Scores of the Older Patients with Major Depressive Disorder between the Experimental and Control Groups

<table>
<thead>
<tr>
<th>Depressive Symptom Score</th>
<th>M</th>
<th>SD</th>
<th>t</th>
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<tbody>
<tr>
<td><strong>Pretest:</strong></td>
<td></td>
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<td>23.60</td>
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<tr>
<td>Control Group</td>
<td>23.20</td>
<td>4.81</td>
<td></td>
</tr>
<tr>
<td><strong>Posttest:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental Group</td>
<td>18.26</td>
<td>5.06</td>
<td>-2.25*</td>
</tr>
<tr>
<td>Control Group</td>
<td>22.40</td>
<td>4.99</td>
<td></td>
</tr>
</tbody>
</table>

*p< 0.05

According to Table 3, the mean depressive symptom pretest scores of the older patients with major depressive disorder between the experimental and control groups were found to be not different. However, the mean depressive symptom posttest scores of the older patients with major depressive disorder were found to be different, with a statistical significance at 0.05 (t = \(-2.25\)) and with mean depressive symptom posttest score in the experimental group being lower than that in the control group (M = 18.26/23.6, SD = 5.06/4.74).

Discussion

This section discusses the findings from investigating the effects of supportive psychotherapy with family participation on the depression symptoms of elderly patients with major depressive disorder.

Hypothesis 1 - The older patients with major depressive disorder had lower mean score of depressive symptoms after receiving supportive psychotherapy with family participation with a statistical significance of 0.05. This type of psychotherapy was conducted according to the concept of Winston, et al.\(^2^3\) According this supportive psychotherapy with family participation, the activities allowed older patients and their family members to collaborate in thinking, caring, and sharing their health information and relationships. The activities reduced emotional suffering, improved feelings of self-worth, mental state functions, increased an instill of hope,\(^3^5\) psychological mechanism security, and adaptation skills. In addition, they promoted and supported family participation in the care of patients with good family relationships, proper communication, care and mutual acceptance, all of which had effects on the positive emotional responses of the patients. This built motivation to perform daily activities, the feeling of being a part of the family, mutual understanding, solutions, and communication among the family members to help the seniors feel self-worthy. When family members support patients, the family becomes important to the overall social support of the patients. As such, proper mental health is realized and depressive symptoms and mental health problems are diminished.\(^3^6\) Some of the studies found that social support correlated negatively with depression\(^3^7\), which indicated that the family participated in the program as social support, which would allow patients and their families to interact and express their emotional support.

According to studies of the characteristics of older patients with major depressive disorder, the patients that received care in terms of supportive psychotherapy at the hospital and homes showed significant reductions in depressive symptoms, as this care also promoted coexistence with families. These patients lived with their family members so that they had good chances to support each other both emotional and instrumental support.

Hypothesis 2 - When comparing the experimental and control group, the depressive symptoms in the
experimental group were found to have a greater reduction than the control group, with a statistical significance of 0.05, while the patients and family members also had improved relationships with one another after participation in the activities. In the control group, which did not receive supportive psychotherapy with family participation, five patients were found to have more depressive symptoms, and one patient had the same symptoms. In contrast, almost the entire experimental group had reduced depressive symptom scores after receiving supportive psychotherapy with family participation. In this study, the researcher controlled extraneous variables by pairing the extraneous variables with the control and experimental groups for the greatest similarity possible in order to reduce the differences between the groups. According to the posttest comparison after receiving supportive psychotherapy with family participation, the control group that did not receive supportive psychotherapy was found to have higher depressive symptom scores and stable scores, while the experimental group had reduced depressive symptom posttest scores after the experiment at a statistical significance, thereby indicating that supportive psychotherapy with family participation was effective in reducing the depressive symptoms among the samples.

Conclusion

The findings of this study revealed supportive psychotherapy with family participation to be an effective psychiatric nursing practice for the care of older patients with major depressive disorder. The method is capable of reducing depressive symptoms and promoting good relationships in families from activities that promote self-worth, modify mental states, and build the strength of mental conditions and adaptation to various situations. The family members played important roles that support the elderly patients and they were able to care for each other both physical and emotional health. This was a kind of psychotherapy that decreased depressive symptoms for older adults with depression. Furthermore, the understanding of family structures and the assessment of the family-related problems of patients were seen to be necessary in planning for the care of each patient.

Recommendations and Implications

Regarding mental health and psychiatric nursing practices, the training workshop of the supportive psychotherapy for psychiatric nurses needed to consider family participation in order to improve the effectiveness of the quality of care for older patients with major depressive disorder. Home-based psychiatric service provision should promote activities jointly performed by patients and families by having activities continually hosted for families that provide care for chronic patients as regular nursing practice in order to determine risk groups and to monitor the results among the patients that enter out-patient department service systems.

For further study, the use of supportive psychotherapy should be conducted with long-term follow-ups at one month, three months, six months, and twelve months in order to follow up on the suitability of this psychotherapy and to ensure care continuity and relapsed prevention, along with promoting family participation in the sustainable care of patients. In addition, studies of supportive psychotherapy should be conducted with individual families.

Acknowledgements

The researcher would like to thank the administrators of Bhumibol Adulyadej Hospital and the Institute of Aviation Medicine, Royal Thai Air Force, Psychiatry Department, who provided facilities for conducting the research. I would like to thank all of the participants for participating for the duration.
of the study. I would also like to thank the Office of the National Research Council of Thailand and Chulalongkorn University for granting the 90th Year Chulalongkorn University Scholarship, Ratchadaphiseksomphot Endowment Fund, which supported this study.

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