

Effect of attachment-based family therapy to reduce depression among persons diagnosed with schizophrenia

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ABSTRACT

Background: Schizophrenia is a chronic mental disorder that affects a person's way of thinking, his behaviors, and his or her feelings. One of the common symptoms of schizophrenia is depression, and depression can be associated with suicidal thoughts. Attachment-based family therapy is an intervention that was used to treat depression in young adults but has never been used in persons diagnosed with schizophrenia.

Objective: This study was done to find out the effect of Attachment-based family therapy on reducing depression among persons diagnosed with schizophrenia.

Materials and methods: Thirty male participants aged between 25 and 60 years who were already diagnosed with schizophrenia were selected and participated in this study. The participants were divided into 2 groups, with 15 participants in each as experimental and control groups. Beck's Depression Inventory was used to find out the level of depression in both groups. The experimental group underwent Attachment-Based Family Therapy, whereas the control group attended conventional occupational therapy for 3 months. The SPSS software version was used for data analysis. The descriptive statistics examined the distribution of records to summarize the data. If the $p < 0.05$, it is statistically significant.

Results: The results of this study showed that Attachment-Based Family Therapy was effective in reducing depression among persons diagnosed with Schizophrenia.

Conclusion: The results suggested that Attachment-Based Family Therapy was effective for the experimental group, and the level of depression decreased after the intervention.

Introduction

Mental health is an essential part of society and people's lives. Poor mental health affects people's ability to work, well-being, family, and maintain relationships with friends and the community. Mental health conditions are expected. It's estimated about 1 in 5 men and 1 in 3 women will experience major depression. Other conditions, such as bipolar disorder and schizophrenia, have a significant impact on people's lives, but they are less common. The effects of mental illnesses can be reduced and treatable. Occupational therapy has a considerable influence on the treatment of mental illnesses.¹

Schizophrenia is a chronic, complex mental health disorder characterized by many symptoms, including impaired cognitive ability, disorganized speech or behavior, hallucinations, and delusions. For many patients and their families, it is a disabling disorder due to its early

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onset of the disease, along with its chronic course. There are negative and cognitive symptoms of schizophrenia. Negative symptoms may be characterized by deficits or loss. Cognitive symptoms include impairments in executive functions, attention, and working memory. In addition, relapse may occur because of positive symptoms, such as hallucinations, delusions, and suspiciousness.²

Previous evidence suggests that people with schizophrenia not only have psychosocial risks but also biological illnesses that accompany relapse. Early identification and early intervention will reduce the risk of relapse, reduce disease burden, and improve schizophrenic patient outcomes in the long term.³

Depression is one of the leading causes of disability worldwide, and feelings of loneliness contribute significantly to depression.⁴ Depression is associated with reduced quality of life and significant functional impairment. Specific functional areas such as work, cognitive function, and interpersonal relationships can be disrupted due to depression.⁵

The World Health Organization (WHO) and Global Burden of Disease Study ranked depression as the single most burdensome disease in the world in terms of total disability-adjusted life years among people in midlife due to the rates of depression being so high. It is also a highly recurrent disorder.⁶

An elevated risk for developing depressive symptoms has been found in schizophrenia patients compared to the lifetime prevalence of depression in the general population. An increased risk of suicide is associated with the course of schizophrenia, and depressive symptoms have been reported during all stages of schizophrenia. Certain depressive symptoms and negative symptoms of schizophrenia showed an overlap. For example, abulia, motivation, social withdrawal, alogia, anhedonia, and avolition status. The pathophysiology and etiology of both depression and schizophrenia remain poorly understood. There is some relationship between the two disorders, which affects the severity of both disorders.⁷

Attachment-based family therapy (ABFT) is a problem-solving approach to the treatment of adolescent depression, trauma, and suicidality, and ABFT is based on attachment theory. ABFT provides a clear and structured roadmap to help therapists quickly address the underlying problems at the heart of family conflict, even if they are structural. Therapists try to uncover experiences and relational processes that prevent adolescents from reaching out to their parents for help when they are suicidal—learning skills in reflection and emotion regulation under the influence of attachment security. For example, children turn to their caregivers for care and comfort when they are afraid or insecure. Over time, self-regulation skills come into play because of the caregiver's many experiences helping the child to reduce his or her fears. In addition to the psychological stress of self-care, the caregiver's responsibility allows children to live independently. Maintaining relationships while choosing independence is the first step of adolescence, not isolation and individuality. Youth who maintain this

balance have fewer peer relationships, do better in school, and show better health outcomes. Adolescents are less skilled at interpersonal problem-solving and emotional regulation if they do not have a supportive parenting environment. A lack of these skills increases the risk of many mental illnesses, including suicide and depression.⁸ Attachment-based family therapy has proven to be an effective treatment intervention for depression. There are many intervention strategies used to reduce depression in schizophrenia. Still, there have been fewer studies done to find the effect of attachment-based family therapy on reducing depression among persons diagnosed with schizophrenia.

Hence, this study has been done to find out the effect of attachment-based family therapy on reducing depression among persons diagnosed with schizophrenia.

Materials and methods

Study design

A Quasi-experimental study design was used in the study to find out the effect of Attachment-Based Family Therapy on reducing depression among persons diagnosed with schizophrenia. A convenient sampling technique was used. A total of 30 subjects were selected and divided into two groups 15 in the control group 15 in the experimental group. Samples were collected in Rehabilitation setups that are Confident Health Centre - Maduravoyal, Chennai, and Helping Hearts – Oragadam, Chennai.

Participants

Participants were selected according to the inclusion and exclusion criteria. Persons diagnosed with schizophrenia with depression, People aged between 25 and 60, only male patients, and patients with all levels of depression were included. Persons diagnosed with other conditions, people aged below 25 and above 60, and patients with other co-morbid conditions other than depression were excluded. Participants were asked to give their written consent and submitted their consent to participate in this study.

Instrument

The Beck's Depression Inventory (BDI) was used in this study. The BDI is a self-reporting questionnaire that has 21 items that help to evaluate the severity of depression in psychiatric and normal populations. The Beck's Depression Inventory is a 4- 4-point scale from 0 (symptom absent) to 3 (severe symptoms). 0 is the minimum score, and 63 is the maximum score. Scores of 0-13 indicate minimal depression, 14-19 indicate mild depression, 20-28 indicate moderate depression, 29-63 indicate severe depression. The reliability and validity of the scale are as follows. The internal consistency of Beck's depression inventory is 0.9. Range from 0.73 to 0.96 was the test-retest reliability of Beck Depression Inventory. 0.72 and 0.60 have been found as Mean correlation coefficients between clinical ratings of depression and the BDI for the population. Between Beck's Depression Inventory and other measures of depression, such as the Minnesota Multiphasic Personality

Inventory-D, $r=0.77$ has demonstrated high concurrent validity.

Procedure

In this study, a total of 30 participants diagnosed with schizophrenia who are also suffering from depression were selected and divided into two groups. Fifteen participants in the experimental groups and 15 participants in the control group were placed. In Attachment-based family therapy, five treatment tasks were used in the experimental group. Task one focuses on getting family members to engage in a treatment focused on relationship building rather than behavioral management. It focuses on promoting caregivers to help the patient cope with and recover from depression. Task two consists of individual sessions with patients. Task three consists of individual sessions with the caregivers. It helps caregivers consider how their life stressors and intergenerational legacies of attachment affect their ability to connect better with their family. In task four, the patient and the caregiver come back together to discuss how rational disappointments have damaged trust in the relationship. Then, task five focuses on using caregivers to support the patient's exploration of competency and autonomy. The control group received conventional occupational therapy. The study duration was 3 months, 3 days a week, and 45 minutes per session.

Data analysis

A Quasi-experimental study was carried out by analyzing the inferential studies in this study. Mean and standard deviation (Minimum-Maximums) were repeatedly measurement criteria for the results. The SPSS software version was used for data analysis. The descriptive statistics examined the distribution of records

to summarize the data. If the $p < 0.05$, it is statistically significant. Since the samples belonged to the sample size (30), a non-parametric method was used to test the statistical differences between pre-test and post-test scores of the control and experimental groups. The Wilcoxon signed-rank test and Mann-Whitney U test were analyzed to find the hypothesis being tested and identify whether a statistically significant difference exists in consideration of the treatment given. An alpha level of $p=0.05$ was measured to be statistically significant. The statistical analysis was done with the help of IBMSPSS version 23.0

Results

Table 1 shows the statistical difference between the pre-test and post-test in the control group, which was measured with the BDI. The mean value of the post-test is 30.06, which is less than the mean value of the pre-test of the control group. The p -value is 0.001, which is lower than 0.05. Hence, there is a statistically significant difference between the pre-test and post-test scores in the Control Group. This suggests that the conventional occupational therapy intervention the control group received significantly improved.

Table 2 shows the statistical difference between the pre-test and post-test in the experimental group, which was measured with the BDI. The mean value of the post-test is 22.66, which is less than the mean value of the pre-test of the experimental group. The p is 0.001, which is lower than 0.05. Hence, there is a statistically significant difference between the pre-test and post-test scores in the experimental group. This suggests that the Attachment-Based Family Therapy intervention received by the experimental group had significant improvement.

Table 1. Mean differences between the control group.

Group	Mean	SD	N	Z value	p value
Control group (pre-test)	32.93	8.85	15	-3.458	0.001*
Control group (post-test)	30.06	8.37	15		

Note: *Significant at 5% alpha level.

Table 2. Mean differences between the experimental group.

Group	Mean	SD	N	Z value	p value
Experimental group (pre-test)	33.86	5.70	15	-3.417	0.001*
Experimental group (post-test)	22.66	5.70	15		

Note: *Significant at 5% alpha level.

Table 3 shows the statistical difference between the post-tests of the control and experimental groups, measured with the BDI. The mean value of the experimental group's post-test is less than the mean value of the post-test of the control group. The p is 0.015, which is lower than

0.05. Hence, there is a statistically significant difference between post-test scores in the control and experimental group. This suggests that the attachment-based family therapy intervention received by the experimental group had significant improvement.

Table 3. Mean differences between the post-test scores of the control and the experimental groups.

Group	Mean	SD	N	Z value	p value
Control group (post-test)	30.06	8.37	15	2.405	0.015*
Experimental group (post-test)	22.66	5.70	15		

Note: *Significant at 5% alpha level.

Discussion

The purpose of this study was to examine the effect of attachment-based family therapy on reducing depression among persons diagnosed with schizophrenia. This study was conducted for 3 months with 36 sessions.

In Table 1, the control group exhibited a statistically significant difference ($p=0.001$), with their mean score decreasing from 32.93 at the pre-test to 30.06 at the post-test. These findings suggest that the intervention received by the control group positively impacted depression reduction, as measured by the BDI. These findings were supported by a Quasi-experimental study conducted by Emel Bahadır Yilmaz. In this study, they did a non-randomized control group pre-test, post-test, and follow-up design. The group mindfulness-based cognitive therapy program was an intervention for 82 second-year undergraduate nursing students. With the test results, the study concluded that mindfulness-based cognitive therapy programs conducted with nursing students influenced students' mindful attention awareness and stress levels and reduced the levels of depression, which stated that the conventional occupational therapy received by the control group was effective in reducing depression.⁹

In Table 2, the experimental group demonstrated a highly statistically significant difference ($p=0.001$), in their mean score, from 33.86 in the pre-test to 22.66 in the post-test. This improvement indicates that the attachment-based family therapy that the experimental group received was effective in reducing depression, as measured by BDI. These findings were supported by an exploratory study done by Roger Kobak, and the results revealed that attachment-based family therapy that the LGBQ adolescents receive showed a greater rate of reduction in depressive symptoms ($p<0.001$), which stated that the Attachment-Based Family Therapy intervention helps reduce depression.¹⁰

In Table 3, when comparing the post-test scores between the groups, the experimental group exhibited a significantly lower mean score of 22.66 compared to the control group's mean of 30.06 ($p=0.015$). These findings suggest that the ABFT intervention received by the experimental group was more effective than the control group's conventional occupational therapy intervention in reducing depression among individuals with schizophrenia. A randomized controlled trial supported these findings, and the results demonstrated significantly greater rates

of change in depression in patients receiving Attachment-Based Family Therapy.¹¹

Conclusion

Attachment-based family therapy aims to help individuals with behavioral and mental health problems, especially depression and suicide. This also helps improve individuals' emotional regulation, problem-solving, interpersonal skills, and the quality of interaction between people. Thirty individuals with Schizophrenia ($N=30$) were selected 15 participants were assigned to the control group, and 15 participants were assigned to the experimental group. The experimental group received Attachment-Based Family Therapy, and the control group received conventional occupational therapy. Post-test scores were measured using BDI. Further analysis revealed that attachment-based family therapy was more effective on depression among persons diagnosed with schizophrenia than traditional occupational therapy.

Limitations and recommendations

The study was done with a small sample size, for a shorter duration of time, in a confined age group, and only with male patients.

A study can be done with a larger sample size, for a longer duration of time, or by including both genders.

Conflict of interest

No conflict of interest.

Ethical approval

This study has been approved by the Institution Scientific Review Board (ISRB) of Saveetha College of Occupational Therapy with REF.NO of SCOT/ISRB/046/2023.

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