Mentalization-Based Family Therapy Combined with Cognitive Behavioral Therapy for Adolescent Depressive Disorder: An Application Study

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Abstract

Objective: To investigate the therapeutic efficacy of integrating mentalization-based family therapy and cognitive behavioral therapy for adolescent patients with depression. Methods: Eighty adolescent depression patients treated between May 2023 and May 2024 were selected as the study sample and equally allocated to an intervention group and a control group (n=40 each) using computer-generated randomization. The intervention group received combined mentalization-based family therapy and cognitive behavioral therapy, while the control group received standard treatment. Comparative analysis was conducted on Hamilton Depression Rating Scale (HAMD) scores, depression factor scores in the Symptom Checklist-90 (SCL-90), and overall therapeutic efficacy before and after treatment. Results: Pre-treatment HAMD scores showed no significant difference between the intervention and control groups ($P>0.05$). Post-treatment scores were lower in the intervention group than in the control group ($P<0.05$), with significant differences also observed in within-group pre- and post-treatment comparisons ($P<0.05$). Similarly, pre-treatment SCL-90 depression factor scores showed no significant difference between groups ($P>0.05$), while post-treatment scores were lower in the intervention group ($P<0.05$), and within-group comparisons showed significant differences ($P<0.05$). The overall clinical response rate was 95.00% in the intervention group, significantly higher than the 80.00% rate in the control group ($P<0.05$). Conclusion: For adolescent patients with depressive disorders, combined mentalization-based family therapy and cognitive behavioral therapy demonstrates significant therapeutic efficacy, alleviates depressive symptoms, improves depressive condition, and plays an important role in promoting recovery.

Full Text

Application of Mentalizing Family Therapy Combined with Cognitive Behavioral Therapy in Adolescent Patients with Depressive Disorder

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Abstract

Objective: To investigate the therapeutic efficacy of combining mentalizing family therapy with cognitive behavioral therapy in adolescent patients with depressive disorder.

Methods: Eighty adolescent patients with depressive disorder admitted between May 2023 and May 2024 were selected as study subjects and randomly divided into an observation group and a control group, with 40 cases in each group. The observation group received integrated intervention combining mentalizing family therapy with cognitive behavioral therapy, while the control group received standard treatment protocols. The Hamilton Depression Scale (HAMD) scores, depression factor scores from the Symptom Checklist-90 (SCL-90), and overall treatment efficacy were compared between the two groups before and after treatment.

Results: Prior to treatment, no significant differences were observed between the observation and control groups in HAMD scores ($P>0.05$). Following treatment, the observation group exhibited significantly lower HAMD scores than the control group ($P<0.05$), with significant within-group differences before and after treatment ($P<0.05$). Similarly, no pre-treatment differences existed between groups in SCL-90 depression factor scores ($P>0.05$), but post-treatment scores were significantly lower in the observation group ($P<0.05$), accompanied by significant within-group improvements ($P<0.05$). The overall clinical response rate reached 95.00% in the observation group, substantially higher than the 80.00% rate observed in the control group ($P<0.05$).

Conclusion: The combination of mentalizing family therapy and cognitive behavioral therapy demonstrates significant therapeutic effects in adolescent patients with depressive disorder, effectively alleviating depressive symptoms, improving clinical status, and substantially promoting patient recovery.

Keywords: Mentalizing family therapy; Cognitive behavioral therapy; Adolescents; Depressive disorder; Therapeutic application

Introduction

Adolescent mental health constitutes a critical component of public health, directly impacting family wellbeing, social stability, and future developmental trajectories [1]. Adolescent depression represents a prevalent psychological disorder with complex and diverse etiological factors that severely compromise both individual physical and mental health while posing certain societal risks. Current epidemiological data indicate that the incidence of adolescent depression ranges between 3%–8%, with rates increasing annually. Notably, major depressive disorder affects approximately 5.6% of the adolescent population [2]. The urgency of enhancing treatment interventions for adolescent depression cannot be overstated. Standard clinical approaches primarily encompass psychotherapy, pharmacotherapy, and cognitive-behavioral interventions [3]. This study investigates the therapeutic efficacy of combining mentalizing family therapy with cognitive behavioral therapy in 80 adolescent patients with depressive disorder hospitalized at our institution from May 2023 to May 2024.

Methods

1.1 General Information

This study enrolled 80 adolescent patients with depressive disorder hospitalized at our hospital from May 2023 to May 2024, who were randomly assigned to either an observation group or a control group, with 40 patients in each group. The observation group received combined mentalizing family therapy and cognitive behavioral therapy, while the control group received conventional treatment. The observation group comprised 23 males and 17 females, with a mean age of 15.15$\pm$1.15$years.Thecontrolgroupincluded21malesand19females,withameanageof15.16\pm$1.45 years.

Inclusion Criteria:
1) All selected patients were inpatients or outpatients at our hospital;
2) Patients and their families provided informed consent;
3) All selected patients were diagnosed with adolescent depressive disorder;
4) Patient age range was 12–16 years.

Exclusion Criteria:
1) Individuals unwilling to participate;
2) Patients with psychiatric disorders or communication impairments;
3) Those who withdrew mid-study or had incomplete data;
4) Patients with poor treatment compliance.

Comparison of general demographic data between the two groups revealed no statistically significant differences (P>0.05), establishing comparability.

1.2 Intervention Methods

The control group received conventional antidepressant treatment comprising psychological and pharmacological interventions to improve psychological status. The observation group implemented combined mentalizing family therapy and cognitive behavioral therapy as follows:

Mentalizing Family Therapy:
1) During the initial consultation, the therapeutic framework was explained to family members to establish understanding of the approach's importance and active role in addressing family issues, while fostering recognition of its utility in enhancing self-mentalizing skills.
2) Throughout treatment, each participant's contributions received precise praise and affirmation through motivational guidance, encouraging patients to express themselves openly. This approach, supported by praise, motivation, and communication, elevated participants' awareness and enhanced cognitive capabilities. Based on patients' autonomous learning interests, personalized mentalizing development pathways were established to strengthen psychological self-regulation and control. For example, family members were encouraged to label their own feelings and subsequently inquire about unlabeled or unrecognized emotions, utilizing facts and hypotheses for iterative exploration to develop reverse learning 思维模式. Therapists also modeled self-utilization techniques, encouraging patients and families to communicate internal psychological states while facilitating psychological regulation and intervention.
3) During the final session, family members summarized recent emotional changes and psychological improvements while establishing future therapeutic directions to ameliorate depressive symptoms.

Cognitive Behavioral Therapy:
1) The principles of cognitive behavioral therapy were explained to patients and families to establish therapeutic goals.
2) Emotion management education guided patients in connecting emotional regulation with specific events.
3) Patients were instructed to continuously monitor and record their emotional fluctuations, establishing connections between emotions and events through self-monitoring.
4) Positive reinforcement of individual behaviors was implemented to secure parental recognition, support, and encouragement.
5) Patients were guided to identify and address social functioning challenges, motivating active participation in communication and sharing to enhance social skills and self-confidence.
6) Interpersonal difficulties were thoroughly explored and analyzed through role-playing methods to overcome these challenges.
7) Patients were encouraged to observe and challenge their automatic thoughts, assisting in identifying causal relationships between events and consequences.
8) The final session reviewed the entire treatment process, discussed existing problems, and formulated subsequent treatment plans. Cognitive behavioral

therapy was typically administered once weekly for 60–90 minutes per session over eight sessions, following a structured family therapy model with documentation of each session's outcomes to support symptom improvement.

1.3 Outcome Measures

1) The 17-item Hamilton Depression Scale (HAMD), a clinician-rated instrument, was administered before and after treatment, with higher scores indicating more severe depressive symptoms.

2) The depression factor subscale of the Symptom Checklist-90 (SCL-90), comprising 10 items, was used for pre- and post-treatment assessment, with lower scores indicating milder depressive symptoms.

3) Treatment efficacy was determined based on HAMD score reduction rates: markedly effective ($ 75 $50% reduction), and ineffective (<50% reduction). Overall response rate was calculated as (number of markedly effective + effective cases) / total number of cases × 100.00%.

1.4 Statistical Analysis

SPSS 19.0 statistical software was utilized for data analysis. Count data were expressed as n (%) and validated using the ^{2} test. Measurement data were expressed as ($\bar{x}\pm s$) and validated using the t-test. Dferences with $P<0.05$ were considered statistically significant.

Results

2.1 Comparison of HAMD Scores Between Groups

No significant differences existed between the observation and control groups in pre-treatment HAMD scores ($P>0.05$). Post-treatment HAMD scores were significantly lower in the observation group compared to the control group ($P<0.05$), with significant within-group differences before and after treatment ($P<0.05$) .

Table 1 Comparison of HAMD Scores Between Groups Before and After Treatment ($\bar{x}\pm s$, points)

Group	Pre-treatment	Post-treatment
Observation	23.63$±1.25|8.85±1.16||*Control*|23.12±1.22|10.36±$1.65	

2.2 Comparison of SCL-90 Depression Factor Scores

Pre-treatment SCL-90 depression factor scores showed no significant differences between groups ($P>0.05$). Post-treatment scores were significantly lower in

the observation group (P<0.05), with significant within-group improvements (P<0.05) .

Table 2 Comparison of SCL-90 Depression Factor Scores Between Groups Before and After Treatment ($\bar{x}\pm s$, points)

Group	Pre-treatment	Post-treatment
Observation	3.52$±1.02|2.21±1.25||*Control*|3.63±1.15|3.05±$1.35	

2.3 Comparison of Treatment Efficacy

The overall clinical response rate in the observation group reached 95.00%, significantly higher than the 80.00% rate in the control group (P<0.05) .

Table 3 Comparison of Treatment Efficacy Between Groups [n(%)]

Group	Overall Response Rate
Observation	95.00%
Control	80.00%

Discussion

3.1 Epidemiological Characteristics of Adolescent Depression

Adolescent depression represents a relatively common psychological disorder with increasing incidence in contemporary clinical research. Affected individuals typically present with depressed mood, anhedonia, emotional lability, irritability, and temperamental volatility [4]. Post-onset manifestations include diminished interest in daily activities, low self-esteem, feelings of inadequacy, and consequent self-abandonment and inferiority complexes, with some patients exhibiting extreme behaviors such as suicide or self-harm. Additionally, somatic symptoms including insomnia, dizziness, chest tightness, shortness of breath, and in severe cases, urinary incontinence significantly compromise patient health [5]. Adolescent depression most commonly occurs between ages 14–16, coinciding with puberty when hormonal influences and other factors frequently produce rebellious psychology alongside severe anxiety and depressive states. Epidemiological data indicate that female adolescents exhibit depression rates more than double those of males, primarily because females are more prone to tension when encountering problems, thereby increasing vulnerability to depression. Seasonal pattern research reveals that autumn and winter represent high-incidence periods for depressive episodes [6].

3.2.1 Mentalizing Family Therapy

Mentalizing refers to the capacity to understand the inner worlds of self and others, encompassing the psychological processes of perceiving mental activities

in oneself and others to gain insight into thoughts and emotions. Mentalizing family therapy, an intervention emphasizing mentalizing skill development also known as brief mentalizing and relational therapy, specifically targets adolescent depression. This approach demonstrates innovation, timeliness, and efficiency in clinical application and has gained widespread promotion in domestic adolescent depression treatment. While extensive international clinical research supports mentalizing family therapy, domestic studies remain relatively scarce, leaving certain gaps in the evidence base [7]. This study addresses this deficit by investigating the therapeutic effects of mentalizing family therapy in adolescent depression patients, focusing on capacity-building and systematic application.

3.2.2 Cognitive Behavioral Therapy

Cognitive behavioral therapy represents a structured, time-limited, cognition-oriented psychological intervention widely employed for anxiety, depression, and other psychological disorders. This approach uniquely focuses on correcting patients' irrational thinking patterns by transforming self and other perceptions, thereby adjusting psychological status to achieve significant rehabilitation. As a commonly utilized psychotherapeutic method, cognitive behavioral therapy emphasizes cognitive intervention and perspective modification, employing specific techniques to help patients alter cognitive habits, correct psychological 障碍, and gradually restore psychological health [8]. Since depression fundamentally alters patients' psychological states, cognitive behavioral intervention helps stabilize psychological conditions, improve 障碍, and enhance psychological intervention capacity, thereby producing favorable therapeutic outcomes.

3.4 Analysis of Study Results

This controlled trial divided 80 adolescent depression patients into two groups receiving different interventions, yielding the following findings: First, HAMD score analysis revealed no pre-treatment differences between groups ($P>0.05$), but post-treatment scores were significantly lower in the observation group ($P<0.05$), with significant within-group improvements ($P<0.05$). These results demonstrate that combined mentalizing family therapy and cognitive behavioral therapy enhances treatment efficacy, facilitates symptom alleviation, and improves intervention approaches, thereby supporting patient recovery. Second, SCL-90 depression factor analysis similarly showed no pre-treatment differences ($P>0.05$), but post-treatment scores were significantly lower in the observation group ($P<0.05$), with significant within-group reductions ($P<0.05$), indicating that combined intervention significantly decreases depression factor levels and importantly promotes rehabilitation. Finally, clinical efficacy comparison demonstrated a 95.00% overall response rate in the observation group, substantially higher than the 80.00% rate in the control group ($P<0.05$), confirming that combined mentalizing family therapy and cognitive behavioral therapy produces superior overall efficacy compared to conventional treatment, with higher response rates that better satisfy patient treatment needs.

3.5 Summary

In summary, the incidence of adolescent depression continues to increase in contemporary society, severely impacting health and quality of life, necessitating scientifically analyzed intervention measures. This study implemented combined mentalizing family therapy and cognitive behavioral therapy for adolescent depression patients, with comparative results demonstrating significant improvements in depressive symptoms, enhanced social and interpersonal capacities, and important implications for rehabilitation. The therapeutic advantages of this combined approach manifest in several aspects: First, the family-centered nature of mentalizing family therapy reduces intervention burden and enhances treatment capacity, supporting recovery [10]. Second, the combination significantly decreases rejection reactions, enabling most patients to develop better psychological coping skills that satisfy correction and intervention needs [11]. Finally, this therapeutic approach helps adolescent depression patients rebuild social relationships, enhances psychological intervention capacity, and supports rehabilitation [12]. Therefore, future clinical research should continue integrating mentalizing family therapy with cognitive behavioral therapy to improve practical treatment capabilities and elevate overall standards of adolescent depression care.

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Note: Figure translations are in progress. See original paper for figures.