Journal of Clinical and Nursing Research, 2025, Volume 9, Issue 5
http://ojs.bbwpublisher.com/index.php/JCNR
Online ISSN: 2208-3693
Print ISSN: 2208-3685

Study on the Effect of Drug Therapy Combined with Psychological Intervention on Adolescent Patients with Depression

Yue Wang*

Qilu Institute of Technology, Jinan 250200, Shandong Province, China

**Author to whom correspondence should be addressed.*

Abstract: Research on the effects of drug therapy combined with psychological intervention in adolescent patients with depression represents a critical focus in contemporary psychiatric medicine. This study aims to explore the synergistic therapeutic approach of integrating pharmacological treatment with psychological interventions, focusing on its positive impacts on symptom alleviation, quality-of-life enhancement, and clinical recovery in adolescent depression. A cohort of 62 adolescents was selected as research participants, with randomized allocation into either monotherapy (drug-only) or combination therapy (drugs + psychological intervention) groups. Key evaluation metrics included anxiety levels, clinical efficacy, and incidence of adverse reactions

Keywords: Drug combination; Psychological intervention; Adolescents with depression

Online publication: June 3, 2025

1. Introduction

The "Notice on Exploring Specialized Services for Depression and Alzheimer's Disease Prevention and Treatment" issued by the General Office of the National Health Commission explicitly mandates that healthcare institutions at all levels should standardize and consistently conduct training on depression prevention and treatment. Emphasis is placed on enhancing training for non-psychiatric physicians to improve their ability to identify depression and facilitate timely referrals. The notice advocates for collaborative practices, such as establishing joint clinics or telemedicine consultations between general hospitals and psychiatric institutions. Maternal and child health centers and traditional Chinese medicine hospitals are required to set up psychiatric (psychological) departments. Primary healthcare institutions are urged to build robust collaborative mechanisms with psychiatric hospitals through models like medical consortia. Additionally, depression prevention and treatment knowledge must be integrated into mandatory continuing education programs for community

physicians, ensuring that general practitioners at community health stations (township hospitals) acquire screening and diagnostic competencies. Psychiatric institutions are tasked with extending expert services to grassroots levels via medical consortia, providing scientific diagnoses and tailored treatment plans for community-based depression patients. Special "green channels" for diagnosing and treating complex depression cases should be established to ensure prompt admission of severe cases [1]. This policy underscores the national prioritization of adolescent depression management. Universities and colleges should align with such national directives to foster talent development in ways that support societal progress.

2. Materials and methods

2.1. Clinical data

A total of 62 adolescent depression patients treated at our hospital from July 2023 to July 2024 were enrolled and randomly assigned to two groups with 31 patients in each group. In the monotherapy group, there were 16 females and 15 males, and the average age was (16.78 ± 1.08) years old. There were 4 severe patients, 12 moderate patients, and 15 mild patients with major problems. In the combination therapy group, there were 13 females and 18 males with an average age of (16.78 ± 1.08) years old, and there were 5 severe patients, 13 moderate patients, and 13 mild patients with major problems. The mean years of disease were (2.08 ± 1.48). It can be seen that the comparison of clinical patient data between the two groups was not statistically significant and had a certain comparability. This study has been approved by the hospital committee [2].

Inclusion criteria: Participants were in the age range of 12 to 17 years with depression at their first visit and had to exhibit core symptoms (e.g., low mood, loss of interest, etc.) according to the International Classification of Diseases 10th Edition (ICD-10) diagnostic criteria for depression; Parents of all participants should be fully aware of the content of this study, and voluntarily sign informed consent to ensure the rationality and legality of the study; Participants should be able to receive drug treatment and psychological intervention in accordance with the research protocol to ensure the accuracy and reliability of the research data [3].

Exclusion criteria: Participants had serious physical diseases such as heart, liver and kidney, or suffered from mental diseases such as schizophrenia and bipolar disorder; Participants may have serious language disorders, intellectual disabilities; The participants had not received antidepressant medication or psychotherapy; They had a severe allergic reaction to the antidepressants used in the study [4].

2.2. Methods

The monotherapy group could take drug therapy, fluoxetine preparation (fluoxetine hydrochloride tablets or capsules), Paxil preparation (Paxetine hydrochloride tablets), sertraline preparation (sertraline hydrochloride tablets or capsules), etc. for mild depression patients to increase the concentration of serotonin in the brain to improve depressive symptoms. Patients with moderate depression can use paroxetine hydrochloride tablets, fluvoxamine maleate tablets, Citalopram hydrobromide tablets, Wenlafaxine hydrochloride capsules, duloxetine hydrochloride capsules, and other drugs. To alleviate the situation of adolescent depression, SSRI drugs can be used for patients with severe depression, which can not only regulate emotions but also regulate the level of neurotransmitters in the brain and improve the emotional state and sleep quality of patients. In the combination therapy group, the following interventions were required along with the medication [5]:

(1) Family therapy

By introducing the whole family system as the treatment object, family therapy aims to improve the communication mode among family members and solve the potential problems in the process, to enhance the family support function. In this process, the doctor will pay attention to the individual symptoms of the patient by adjusting the family structure. If the patient's symptoms have improved to a certain extent, the doctor will continue to use this method. If the patient's symptoms have certain problems, the doctor will adjust the model of getting along with the family until the family finally becomes a whole balanced state. In addition, family therapy also emphasizes mutual understanding and support among family members, and ultimately makes the family form a more harmonious and supportive family environment [6].

(2) Physical therapy

On the one hand, electroconvulsive therapy (ECT) can be used, in which is that the patient will receive a certain amount of electrical stimulation for a short period of time to induce a brief systemic convulsion, so that the brain can "reset" and improve depressive symptoms [7]. Although ECT may be accompanied by some short-term and long-term side effects, such as short-term memory impairment, headache, etc., but under the operation of an experienced medical team, its safety and effectiveness have been widely recognized. Especially in emergency situations, ECT may become a key means of saving lives. On the other hand, repetitive transcranial magnetic stimulation (rTMS) can be used to generate a weak current in the brain to stimulate the neuronal activity in a specific area, to better regulate the activity pattern of the brain, but there may still be certain side effects such as headache and scalp discomfort [8].

(3) Cognitive behavioral therapy (CBT)

Cognitive behavioral therapy (CBT) refers to a series of carefully designed cognitive and behavioral skills training to help patients identify and change those negative, distorted thinking patterns and the resulting bad behavior habits, to better enable patients to establish a more positive and rational cognitive framework, and better manage their emotions. Through a series of structured sessions, CBT helps patients learn to identify these automated negative thoughts, known as "cognitive distortions", such as all-or-nothing thinking, overgeneralization, personalization, etc. Once the patient is able to identify these distorted thoughts, treatment moves to the next stage -- challenging and reframing them [9].

(4) Supportive psychotherapy

The doctor's patient listening and unconditional support and companionship can not only improve patients' treatment compliance, but also promote their active participation in the treatment program, to better help patients through difficulties. Supportive psychotherapy not only helps patients overcome psychological difficulties, but also paves the way for them to gradually return to normal social and academic life. Therapists help patients rebuild their social skills and enhance their self-confidence in interpersonal communication through role-playing, scenario simulation, and other techniques. In addition, doctors will guide family members to recognize the pressure and challenges the patient is under through family interviews and family therapy, and encourage family members to treat the patient with a more open, understanding, and supportive attitude. This kind of family support not only provides a more harmonious and inclusive rehabilitation environment for the patient, but also provides an opportunity for the emotional connection between the family members to repair, jointly creating a good

family atmosphere for the patient's comprehensive recovery [10].

(5) Psychoanalytic therapy

Psychoanalytic therapy holds that people's behavior and emotions are often driven by impulses, desires, and fears that lie beneath our consciousness. These deep psychological contents, although not directly perceptible, affect our thinking and emotional responses all the time [11]. Through the method of free association, doctors will encourage patients to freely express their thoughts, feelings, dreams and any thoughts that come into their minds during the treatment, no matter how insignificant or illogical these thoughts may seem, they can unconsciously express those repressed emotions and wishes in the bottom of their hearts, to enhance patients' subconscious cognition [12]. To better transform the negative emotions into an acceptable perspective for adolescents with depression.

2.3. Observational indicators and evaluation criteria

(1) Doctors compared the anxiety degree and depression degree of the monotherapy group and the combination therapy group, using the self-rating depression scale (SDS) greater than 73 for severe depression patients, 63 to 72 for moderate depression patients, 53 to 62 for mild depression patients; The self-rating Anxiety Scale (SAS) was used, in which more than 70 points were classified as severe anxiety, between 60 and 69 points were moderate anxiety, and between 50 and 59 points were mild anxiety [13].

(2) The clinical efficacy of the two groups of patients was compared, and the results showed that the SAS and SDS scores of the patients were reduced by > 75% after intervention; Effective: the SAS and SDS scores were reduced by 50%–75% after intervention; Ineffective: patients' SAS and SDS scores decreased by < 50% after intervention. Total response rate = (obvious + effective)/total cases × 100%.

(3) Adverse conditions caused by headache, scalp discomfort, nausea, etc.

3. Results

(1) Anxiety and depression in the two groups

The scores of anxiety and depression in the two groups were 57.23 ± 4.02 after intervention in the monotherapy group (n = 31), 62.32 ± 4.23 before intervention, and 46.93 ± 5.33 after intervention in the SDS group. In the combination therapy group (n = 31), SAS score was 57.17 ± 5.11 before intervention and 37.66 ± 4.34 after intervention, SDS score was 62.25 ± 4.34 before intervention and 37.82 ± 5.12 after intervention.

(2) Comparison of clinical efficacy between the two groups

The reciprocal number of patients in the monotherapy group was 31, the obvious effect was 8, the effective effect was 13, the ineffective was 10, and the total effective rate was 21 (67.74). The reciprocal number of patients in the combination therapy group was 31, the obvious effect was 10, the effective rate was 19, the ineffective rate was 2, and the total effective rate was 29 (93.55). The value was 6.613, and the P value was 0.010.

4. Discussion

With the rapid development of information technology, there are increasing cases of depression among teenagers. The specific reasons are as follows:

(1) Psychological vulnerability

Teenagers are in the critical period of transition from children to adults, but some parents may think that they are busy with work and neglect to care for their teenagers. As a result, some teenagers are affected by internal and external factors in psychological and physiological aspects, and it is difficult to adjust their emotions and cognition, thus falling into a state of depression [14].

(2) Emotional problems

Teenagers are people in adolescence and they will have a desire for intimate relationships at this stage, but due to a lack of social skills, peer competition pressure, family tension, or romantic relationship twists and turns, it may lead to emotional problems. When it is accumulated to a certain degree, it may lead to depression phenomenon [15].

(3) Virtual network

With the rapid development of information technology, many parents may have no way to control teenagers' addiction to online games, which leads to a disconnect between teenagers and the real world, reduces face-to-face social interaction, and exacerbates loneliness and social anxiety. In addition, the negative information and comparative culture on the Internet may also deal a blow to the sense of self-worth of teenagers. Teenagers have been immersed in the Internet space, looking for pleasure in the Internet space, so that they rarely speak in real life, forming a distorted psychology.

(4) Study pressure

Because some parents only focus on their children's grades, they will not communicate and exchange with their children. As a result, the child can not communicate for a long time under the high-pressure environment consumes too much energy and physical strength, resulting in a sense of remorse and helplessness, which leads to depression. There are also some students and teenagers who do not want to live up to their parents' hopes, give themselves a lot of pressure, just immersed in learning every day, will not communicate and exchange with others, resulting in a tendency of depression.

(5) Economic pressure

Although adolescents themselves may not directly bear the financial burden, the economic status of their families directly affects their quality of life, their access to educational resources, as well as their access to mental health services. Family economic difficulties may lead to adolescents' limited educational resources, interest cultivation, social activities, etc., and increase their sense of inferiority and social isolation. In addition, financial stress may increase tensions among family members and further affect adolescents' mental health.

Psychological intervention for depression should pay attention to the following issues:

(1) Medical staff should meet with adolescents constantly, to observe their unique psychological development characteristics, such as self-identity exploration, lack of emotional regulation, and strong need for social relationships.

(2) The approach the health care provider takes after identifying each patient's situation (root causes of depression, family background, social support status)

(3) The health care provider should also communicate with the youth, to clearly know the method that

adolescents do not want to take

(4) The medical staff can verify the implementation after determining the treatment goals of adolescents

(5) The medical staff can regularly observe the emotional state and quality of life of adolescents after treatment to ensure that they have been treated well.

Depressed adolescents are in an autistic environment for a long time, so the medical staff should carry out their own therapy, so that they can be treated in the case of ensuring their own safety. The medical staff may have a flexible recovery period for the treatment of adolescent depression and the adolescent can not be cured immediately, so the adolescent should be treated with drugs and through regular checks to determine the final recovery of the adolescent, to ensure the healthy growth of the adolescent.

5. Conclusion

Health care workers use antidepressants Escitalopram, fluoxetine, sertraline, etc. to regulate the function of neurotransmitters in the brain to achieve antidepressant effects. These drugs are able to block the reabsorption of serotonin and norepinephrine or activate their receptors, thereby alleviating depressive symptoms in patients. However, drug treatment can only control the symptoms and cannot fundamentally solve the psychological problems of patients. Therefore, cognitive behavioral therapy, psychoeducation, and family therapy can also be used to help patients identify and change negative thinking patterns and behavior habits, improve their self-cognition and self-regulation ability, better cope with the pressure and challenges in life, and reduce the recurrence of depressive emotions. This comprehensive treatment approach can not only effectively control symptoms but also improve patients' quality of life and promote their full recovery. In the future, the research in this field should be deepened and more optimized treatment plans should be explored to further improve the treatment effect of adolescent depression.

Disclosure statement

The author declares no conflict of interest.

References

[1] Yu Y, Yi T, Liu P, et al., 2025, Analysis of Influencing Factors of Combined Treatment of Traditional Chinese and Western Medicine in Inpatients With Depression. Anhui Medical and Pharmaceutical Journal, 29(03): 512–518.

[2] Wang X, Chen M, Teng Y, et al., 2025, Analysis of Self-Harm and Suicidal Behavior and Non-Enzymatic Antioxidants and Thyroid Hormone Levels in Adolescents With Depression. China Modern Doctor, 63(05): 15–18.

[3] Wei Y, 2025, Scientific Understanding of Senile Depression. Family Medicine (Second Half of the Month), 2025(02): 36–37.

[4] Zhang A, An J, 2025, Research Progress of Mental Complications After Traumatic Brain Injury. Physician Online, 15(02): 87–91.

[5] Di J, Cheng G, 2025, Study on the Mechanism of Xiaoyao Tablets in the Treatment of Depression Based on Network Pharmacology and Molecular Docking. Chinese Journal of Pharmaceutics (Online Edition), 23(01): 22–35.

[6] Xu H, Song L, 2025, Effects of Amisulpride Combined With Escitalopram on Depressive Symptoms and Cognitive Function in Patients With Depression. Chinese and Foreign Medical Research, 23(05): 35–38.

[7] Shi Y, Yin J, 2025, Differences in Clinical Effects of Fluvoxamine and Other SSRIs Antidepressants in the Treatment of Patients With Depression With Anxiety and Distress Characteristics. Journal of Shandong Second Medical University, 47(01): 6–11, 82.

[8] Ailifeire A, Ailaiti T, 2025, Research Progress of Esketamine in Perioperative Depressive Symptoms in Cancer Patients. Anesthesia Safety and Quality Control, 7(01): 82–86.

[9] Su J, Shi C, Li B, et al., 2025, Exploring the Differential Correlation Between Gray Matter Volume and Body Mass Index in Depression Based on MRI. Chinese Journal of CT and MRI, 23(02): 16–18, 49.

[10] Yang X, Rui C, Zhou C, 2025, The Influence of SFBT Combined With Escitalopram Oxalate in the Treatment of Patients With Unipolar Depression on Depressive Symptoms and Serum Neurotransmitter Levels. Heilongjiang Medicine and Science, 48(02): 189–190, 193.

[11] Qi B, Zheng Q, Yang S, 2025, Analysis of the Effect of Mindfulness-Based Cognitive Therapy Combined With Drug Treatment on the Psychological Status and Cognitive Function of Adolescent Patients With Depression. Psychological Monthly, 20(03): 158–160.

[12] Wan G, Shan J, Liu J, 2025, The Effect of Repetitive Transcranial Magnetic Stimulation Combined With Dynamic Group Psychotherapy in Patients With Depression and Suicidal Tendencies. Psychological Monthly, 20(03): 164–166.

[13] Wang L, Yin Y, Liu S, 2025, The Influence of Group Sandplay on the Coping Styles and Depression Degree of Patients With Depression. Psychological Monthly, 20(03): 167–169.

[14] Ren M, Mao J, Wu S, 2025, The Application Research of Cognitive Behavioral Therapy in the Rehabilitation Stage of Patients With Depression. Psychological Monthly, 20(03): 146–148, 154.

[15] Dong H, Ji X, Qin B, 2025, The Influence of Family Member Participation-Based Individualized Nursing Model on the Mental Health Level of Patients With Depression. Psychological Monthly, 20(03): 152–154.