

Research status of depression in children and adolescents

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Abstract. This paper conducts a systematic review of existing literature in the field of childhood depression, aiming to comprehensively sort out and analyze the epidemiological characteristics, pathogenic risk factors, difficulties in clinical identification, and comprehensive intervention strategies of this group. As a core issue at the intersection of psychiatry, psychology and pedagogy, the negative impacts of depression in children and adolescents have widely penetrated into multiple levels such as society, families and schools. This review covers key dimensions including early warning signals, psychosocial risk factors, disease comorbidity characteristics, and pharmacological and non-pharmacological interventions. First, this paper reviews the epidemiological status of this field, highlighting the rising incidence rate and the trend of younger age of onset in recent years; in particular, the increase in incidence among young children has aroused great attention from all walks of life. Second, this paper analyzes the current difficulties faced in clinical identification and diagnosis, including the diagnostic complexity caused by atypical symptom presentation, cognitive biases of guardians and comorbidity. Meanwhile, it focuses on core risk factors such as family environment, academic pressure and childhood trauma. Finally, this paper prospects the future development direction of treatment and intervention, emphasizing the necessity of constructing a comprehensive intervention model combining psychotherapy, pharmacotherapy and environmental support, so as to provide scientific references for clinical diagnosis and treatment practice and family prevention work.

Keywords: children, depression, risk factors, psychotherapy

1. Introduction

With the intensification of competition in modern society and the acceleration of life rhythm, mental health problems among children and adolescents have become increasingly prominent. As a mental disorder with high incidence and high disability rate, depression shows a significant upward trend among children and adolescents aged 12-18, and the age of onset is gradually getting younger, with the incidence rate among children increasing year by year. Epidemiological data show that the overall risk of depression among children and adolescents in China is relatively high, and the incidence rate among some young children groups is also on the rise. However, because childhood depression is mainly manifested by atypical symptoms such as irritability and somatic discomfort, and parents and the public often misinterpret it as "rebellious period"

behavior, the identification rate of this group is low and the misdiagnosis rate is high. Against this realistic background, how to realize early identification of depression signals, clarify multi-dimensional pathogenic risk factors and formulate scientific intervention strategies has become an important issue to be solved urgently. Therefore, in-depth exploration of the pathogenesis, risk factors and comprehensive treatment schemes of depression in children and adolescents has both important theoretical value and practical significance.

2. Research significance

2.1. Theoretical significance

This study helps to deepen the theoretical understanding of the pathological mechanism and development trajectory of depression in children and adolescents. By systematically sorting out relevant literature at home and abroad, it can further clarify the interaction mechanism of biological, psychological, social and other multi-dimensional factors in the occurrence and development of depression, especially the correlation between childhood trauma, family rearing styles and depressive symptoms, thereby providing strong academic support for improving the theoretical system of child psychopathology.

2.2. Practical significance

Based on the realistic background of the high incidence of depression in children and adolescents, this study aims to provide scientific basis for identification and intervention for parents, schools and clinicians. By summarizing effective treatment plans and prevention strategies, it helps to improve the early identification ability of parents and teachers, reduce stigma, promote early diagnosis and treatment and standardized intervention of children, and then improve their social function and quality of life. In addition, the research results can also provide decision-making references for relevant managers, educators and clinical researchers, with significant application value.

3. Research status

3.1. Epidemiology and disease burden

In recent years, the disease burden of depression in children and adolescents has continued to increase. Although the overall incidence rate of depression among children and adolescents in China was lower than the global average in 2019, and showed a downward trend from 1990 to 2019, it is worth noting that the incidence rate and Disability-Adjusted Life Years (DALYs) among children under 10 years old are on the rise. In addition, the gender difference of the disease is significant, with the incidence rate in females much higher than that in males, and the incidence rate peaks in the 15-19 age group [1]. What is more severe is that depression in children and adolescents is characterized by high recurrence rate and high suicide risk, especially among patients with psychotic symptoms or somatic diseases, whose suicide risk is significantly increased [2].

3.2. Identification dilemmas and symptom characteristics

The clinical identification of childhood depression faces multiple challenges [2]. First of all, limited by cognitive and language expression abilities, children often cannot accurately describe emotional experiences like adults. Depressive symptoms are often "disguised" through behavioral problems, somatic discomfort (such as headache, stomachache) and mood swings, which can easily be misjudged by parents as "rebellion",

"laziness" or "pretending to be ill". Secondly, childhood depression is often comorbid with anxiety disorders, and the clinical manifestations are complex and intertwined, further increasing the difficulty of diagnosis. In addition, early symptoms are often non-specific, and may only manifest as decline in academic performance or occasional low mood, leading a large number of children to suffer in a hidden state, until serious problems such as self-injurious behavior or school refusal occur before they attract attention.

3.3. Analysis of risk factors

Domestic and foreign studies have consistently shown that the occurrence of depression in children and adolescents is the result of the interaction of multiple factors such as biology, psychology and environment [3, 4].

- Family factors: Family environment is a key field shaping children's mental health [5]. Studies have confirmed that rejection and overprotection in parental rearing styles, as well as family dysfunction (such as extreme families) can significantly increase the risk of illness. Parent-child conflict, parental history of depression, and neglect or abuse suffered in childhood are all important predictors of depression [6].
- Social and school factors: Academic pressure is the main environmental stressor. Studies have shown that for every 1 unit increase in learning pressure, the risk of depression increases significantly [7]. In addition, bad peer relationships and school bullying are also non-negligible risk factors [8].
- Individual factors: In addition to genetic susceptibility, individual cognitive patterns play an important role in the occurrence of the disease. Dysfunctional attitudes and negative automatic thoughts are closely related to depression. Recent studies have also found that differences in gut microbiota composition may be associated with the development trajectory of depressive symptoms [9].

3.4. Treatment and intervention strategies

Current clinical intervention programs mainly cover pharmacotherapy, psychotherapy and physical therapy [10].

- Psychotherapy: Cognitive Behavioral Therapy (CBT) is a widely used and effective method at present, and is recommended as the first-choice intervention for mild to moderate depression [11].
- Pharmacotherapy: Selective Serotonin Reuptake Inhibitors (SSRIs) can be used in children and adolescent patients on the premise of strictly grasping indications and implementing close monitoring, but potential adverse reactions need to be highly vigilant [12].
- Comprehensive intervention: Research evidence shows that the combined regimen of pharmacotherapy and psychotherapy may be superior to single treatment models in terms of remission rate and overall effectiveness. In addition, the design of healing space based on the concept of "humanistic care" also provides a new perspective and path for adjuvant therapy [13].

4. Conclusion and prospect

Based on the analysis of domestic and foreign literature, current domestic scholars' research on depression in children and adolescents mainly focuses on epidemiological characteristics, family and school risk factors, and clinical treatment methods, and has achieved fruitful results [14]. The academic community generally agrees that depression is the product of the combined action of multiple factors, and advocates that prevention and treatment strategies should be promoted collaboratively from multiple dimensions such as optimizing family environment, reducing school pressure, and standardizing clinical treatment [15]. In comparison, foreign studies focus more on the exploration of neurobiological mechanisms, the construction of cognitive behavioral

models, and the research and development of new antidepressant drugs, emphasizing the concepts of early intervention and precision medicine [15].

Although the research perspectives at home and abroad present a diversified pattern, existing literature still has certain limitations: most of the research objects focus on adolescents aged 12 to 18, and practical studies are mostly based on clinical cases or industry cases. Longitudinal follow-up studies on young children under 10 years old, in-depth exploration of biological markers such as gut microbiota, and intervention studies on specific groups such as rural left-behind children are still relatively scarce [16].

To sum up, existing studies have laid a solid foundation for understanding the pathogenesis of depression in children and adolescents, and provided abundant evidence-based basis for clinical treatment. However, in view of the insufficient attention to young children and the limitations at the operational level of family intervention in current research [17], future research should focus on the development of early screening tools for young children, and further explore the specific implementation path of family system therapy. This is not only an inherent requirement for improving the existing theoretical system, but also an urgent task to respond to realistic clinical needs.

References

- [1] Qiao, N., Xu, W. Z., & Li, J. (2026). Research progress on treatment of refractory depression in children and adolescents. *Journal of Modern Medicine & Health*, 42(8), 1853–1856.
- [2] Gao, Y. F. (2026). Understand childhood depression for early detection and early intervention. *Mom & Baby*, (3), 68–69.
- [3] Xu, H. P., Du, X. Y., Ding, D. D., Zhu, Y. R., Su, X. D., & Yang, Y. Y. (2026). Correlation between childhood trauma, dysfunctional attitudes and automatic thoughts in adolescent patients with depression. *Journal of Clinical Research*, 43(2), 344–346.
- [4] Wang, X. F., Hao, M., & Tao, G. S. (2026). Research progress in clinical diagnosis and treatment of comorbid depression and anxiety in children/adolescents. *Psychology Monthly*, 21(1), 219–221+240.
- [5] Fang, J., & Zhou, R. Q. (2025). Family action guide for preventing childhood depression. *Parenting*, (13), 9–10.
- [6] Liang, K. (2021). Neglected depression is the most important pathogenic factor for adolescents. *Health for Everyone*, (18), 32–33.
- [7] Zheng, Y. (2024). Identification and treatment of childhood depression. *Safe Campus*, (3), 10–15.
- [8] Ma, H., Guo, P., Li, K., Yin, H., Liu, A. H., & Ma, L. (2021). Correlation analysis of childhood depression with parental rearing styles and neglect. *Journal of International Psychiatry*, 48(2), 255–257.
- [9] Fang, Y. N., Cao, Q., & Lan, Y. L. (2023). Analysis on the current situation of depression among children and adolescents in China and its gender and urban-rural differences. *China Preventive Medicine*, 24(4), 380–387.
- [10] Chang, J. J. (2023). *Study on influencing factors of development trajectory of depressive symptoms in adolescents and differences in gut microbiota composition* [Doctoral dissertation, Anhui Medical University].
- [11] Tian, Y. H., & Liu, H. Z. (2025). Attention to initial assessment and treatment of depressive disorders in children and adolescents. *Chinese Journal of Psychiatry*, 58(11), 807–814.
- [12] Lin, Y. (2025). *Research on the design of healing space for childhood depression under the concept of "humanistic care"* [Doctoral dissertation, Jingdezhen Ceramic University].
- [13] Fang, J., & Zhou, R. Q. (2025). Family action guide for preventing childhood depression. *Parenting*, (13), 9–10.
- [14] Zhu, X. X. (2022). Progress in non-pharmacological treatment of depression in children and adolescents. *Popular Science & Technology*, 24(10), 105–108.
- [15] Shi, J. J. (2022). Childhood depression. *Open Book: Seeking Medical Advice*, (10), 46.

- [16] Xu, H. M., Zhang, H., Tao, Y. M., Zhang, H., Zou, S. K., Deng, F., Tang, X. W., Wang, X. L., Wang, Y. P., Fu, X., Huang, L. J., & Yin, L. (2021). Important psychosocial factors of depression in children and adolescents. *Journal of Psychiatry*, 34(6), 499–502.
- [17] Zhang, L. L., Yang, S., Zhang, X. W., Yu, Y. X., Yi, Q. Z., Li, K. Q., & Zhang, Y. S. (2021). Study on suicide and related influencing factors of depression in children and adolescents. *Journal of Neuroscience and Mental Health*, 21(4), 254–258.