

Chatbots and Child and Adolescent Mental Health: Opportunities and Ethical Challenges

S. Bounouh^{1*}, N. Meriem¹, E. Sara¹, H. Kisra¹

¹Department of Child and Adolescent Psychiatry, Ibn Sina University Hospital – AR-RAZI Hospital, Faculty of Medicine and Pharmacy of Rabat, University Mohammed V, Rabat, Morocco

DOI: <https://doi.org/10.36347/sjmcr.2025.v13i11.018>

| Received: 25.08.2025 | Accepted: 20.10.2025 | Published: 07.11.2025

*Corresponding author: S. Bounouh

Department of Child and Adolescent Psychiatry, Ibn Sina University Hospital – AR-RAZI Hospital, Faculty of Medicine and Pharmacy of Rabat, University Mohammed V, Rabat, Morocco

Abstract

Review Article

The rapid integration of artificial intelligence (AI) into healthcare has revolutionized the way professionals and patients interact. Among these innovations, chatbots have emerged as promising tools for supporting child and adolescent mental health care. These conversational agents provide accessible, immediate, and often anonymous support for young individuals struggling with emotional or psychological difficulties. However, the rise of these digital companions raises ethical concerns regarding confidentiality, empathy, and the potential substitution of human relationships. This review explores the potential benefits and ethical challenges associated with chatbot use in child and adolescent psychiatry.

Keywords: Chatbots, Artificial Intelligence, Adolescents, Mental Health, Ethics.

Copyright © 2025 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

1. INTRODUCTION

In recent years, artificial intelligence (AI) has become an integral part of various healthcare systems, particularly in mental health care. Chatbots, designed to simulate human-like conversations, have been increasingly used as therapeutic tools [3]. These AI-driven agents offer guidance, cognitive-behavioral interventions, and crisis management support, particularly for younger populations who are more comfortable with technology [4]. Nevertheless, their use in child and adolescent psychiatry introduces specific ethical and clinical questions regarding their impact on empathy, confidentiality, and the therapeutic alliance [5].

2. Opportunities in Child and Adolescent Psychiatry

2.1 Accessibility and Early Intervention

Chatbots can provide mental health support at any time and in any location, thereby overcoming common barriers such as stigma, geographic isolation, or limited access to care. They may serve as a first point of contact for youths hesitant to engage with professionals, promoting early detection and intervention [1].

2.2 Psychoeducation and Self-Management

AI chatbots can deliver psychoeducational content, teach relaxation techniques, and guide emotional regulation exercises. Such tools empower

adolescents to actively participate in their care, reinforcing autonomy and awareness [2].

2.3 Reducing Stigma

Because chatbots are non-judgmental and anonymous, they can encourage young people to express distressing emotions more freely, helping reduce stigma associated with mental illness [2].

3. Ethical Concerns and Clinical Limitations

3.1 Confidentiality and Data Protection

One of the main concerns relates to data security. Children's and adolescents' psychological data are highly sensitive, and breaches may have long-term implications. Transparent policies regarding data collection and use are essential [5].

3.2 Empathy and Human Connection

Although chatbots can simulate empathy through natural language processing, they cannot replace the emotional attunement and relational depth offered by a therapist. Excessive reliance on AI could reduce opportunities for genuine interpersonal interaction, crucial for therapeutic progress [3].

3.3 Accuracy and Reliability

AI models depend on the quality of their data and algorithms. Biases or technical errors may lead to

misinformation or inappropriate advice, potentially causing harm to vulnerable users [4].

Table 1: Summary of Risks and Benefits of Chatbot Use in Adolescent Mental Health

Risks	Benefits
Social isolation	24/7 accessibility
Emotional dependence	Anonymity, reduced stigma
Inaccurate advice	Psychoeducation (CBT-based tools)
Privacy concerns	Continuity of care
Lack of clinical oversight	Early symptom detection
Equity issues	Scalable, cost-effective support

4. DISCUSSION

The integration of chatbots in child and adolescent psychiatry presents both promise and complexity. Their efficiency in providing rapid support and psychoeducation is undeniable, yet their ethical implications warrant careful regulation. Collaboration between clinicians, AI developers, and ethicists is necessary to ensure that chatbot systems complement—rather than replace—human care [1,3].

5. CONCLUSION

Chatbots offer innovative possibilities for promoting mental health among children and adolescents. However, ethical safeguards and clinical supervision are critical to ensure that these technologies remain supportive rather than substitutive of human relationships. Future research should explore how chatbots can be effectively integrated into multidisciplinary care frameworks to enhance accessibility while preserving empathy and confidentiality [2,5].

REFERENCES

1. Fulmer R, Joerin A, Gentile B, *et al.*, Using psychological artificial intelligence (Tess) to relieve symptoms of depression and anxiety: Randomized controlled trial. *JMIR Ment Health*. 2018;5(4): e64.
2. Inkster B, Sarda S, Subramanian V. An empathy-driven, conversational artificial intelligence agent (Wysa) for digital mental wellbeing: Real-world data evaluation. *JMIR mHealth uHealth*. 2018;6(11): e12106.
3. Vaidyam AN, *et al.*, Chatbots and conversational agents in mental health: A review of the psychiatric landscape. *Can J Psychiatry*. 2019;64(7):456–464.
4. Montenegro JLZ, da Costa CA, da Rosa Righi R. Survey of conversational agents in health care: Approaches, taxonomy, and challenges. *J Med Internet Res*. 2019;21(12): e16110.
5. Miner AS, *et al.*, Smartphone-based conversational agents and responses to questions about mental health, interpersonal violence, and physical health. *JAMA Intern Med*. 2016;176(5):619–625.