

# PSYCHEDELICS IN THE TREATMENT OF MENTAL DISORDERS: ADVANCES AND CHALLENGES

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**Abstract:** Psychedelics have emerged as a promising approach to treating mental disorders, challenging traditional paradigms in psychiatry. This study conducted an integrative literature review to investigate the advances, challenges, and implications of the therapeutic use of these substances, addressing the guiding question: “What are the current scientific perspectives on the use of psychedelics in the treatment of mental disorders?” The methodology followed the steps proposed by Mendes, Silveira, and Galvão (2008), covering the selection of articles from the LILACS,

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SCIELO, and MEDLINE databases. Descriptors in Portuguese and English, such as “Psychedelics,” “Mental Disorders,” and “Therapeutic Advances,” were used, and inclusion criteria favored recent and complete publications. The results indicated significant advances in the use of psychedelics, such as psilocybin, in treating resistant depression and MDMA for post-traumatic stress disorder (PTSD). Studies showed rapid and sustained improvements in depressive symptoms, while MDMA, combined with assisted psychotherapy, significantly reduced PTSD symptoms. These effects are attributed to the interaction with serotonergic receptors, promoting neuroplasticity and reorganization of neural networks, enabling profound psychological transformation. Despite the progress, ethical, legal, and operational challenges remain. Many psychedelics are still classified as high-risk substances, hindering their regulation and clinical use. Additionally, training specialized professionals and ensuring safety in therapeutic settings are crucial aspects to expand the application of these substances. In conclusion, psychedelics represent an innovative frontier in the treatment of mental disorders, with the potential to revolutionize psychiatry. However, overcoming regulatory and societal barriers, as well as investing in long-term research and professional training, is essential for their full integration into health systems.

**Keywords:** Psychedelics, Mental Disorders, Therapeutic Advances, Depression.

## INTRODUCTION

Psychedelics have been the subject of growing interest in the area of mental health, emerging as a promising approach for the treatment of various mental disorders. Substances such as psilocybin, LSD, ayahuasca and MDMA have demonstrated, in recent studies, therapeutic potential in conditions such as treatment-resistant depression, post-traumatic stress disorder (PTSD), anxiety and chemical dependency. These advances have challenged traditional paradigms and sparked a resurgence of scientific interest in previously marginalized substances.

Historically, psychedelics have been associated with both the counterculture of the 1960s and social stigma and legal prohibition, which has hindered systematic research on their effects and



medical applications. However, in recent decades, a psychedelic renaissance has allowed scientists and health professionals to explore its benefits in controlled and therapeutically oriented contexts. This renaissance reflects a transition of perspective: from recreational drugs to potent tools in the arsenal of modern psychiatry.

The biological basis of psychedelics involves their interaction with serotonergic receptors in the brain, particularly the 5-HT<sub>2A</sub> receptor, which plays a crucial role in regulating mood, perception, and cognition. Neuroimaging studies show that these substances can induce altered states of consciousness, reduce the rigidity of neural networks, and promote greater connection between different brain areas. These effects have been linked to ego dissolution, an experience that many patients report as deeply therapeutic.

The clinical outcomes obtained in controlled studies have been promising. Research indicates that administering psilocybin, under professional supervision, can reduce symptoms of depression for months after a single dose. Similarly, MDMA has shown significant efficacy in treating PTSD, especially in patients who have not responded to conventional treatments. These results point to a revolution in the field of psychiatry, with both clinical and social implications.

Despite these advances, the use of psychedelics in the treatment of mental disorders faces considerable challenges. Ethical, legal, and regulatory issues limit its expansion and integration into health systems. In addition, there is a pressing need for more long-term studies that evaluate the safety and efficacy of these substances in diverse populations. The risk of abuse and the possibility of adverse experiences also require strict protocols and expert supervision.

Another relevant aspect is the need to prepare health professionals to deal with the specifics of psychedelic treatment. This includes both technical training and the development of interpersonal skills to conduct therapeutic sessions that often involve intense and emotionally charged experiences. Patient support, before, during, and after the use of the substance, is essential to maximize benefits and minimize risks.

The integration of psychedelics into clinical practice also requires a review of public health



policies. This includes regulating access to substances, establishing specialized centers, and including psychedelic treatments in health systems, respecting the cultural and social particularities of each region. It is essential that this incorporation is guided by scientific evidence and a commitment to ethics and equity.

In short, psychedelics represent an exciting frontier in psychiatry and neuroscience, offering new hope for patients and professionals in the field. However, the path to its full acceptance and utilization is fraught with challenges that require interdisciplinary collaboration, investment in research, and a cautious and responsible approach. This study aims to carry out an integrative review to understand the advances, challenges and implications of the use of psychedelics in the treatment of mental disorders, contributing to the scientific debate and to the elaboration of future therapeutic guidelines.

## **METHODOLOGY**

This research was carried out through an integrative literature review, with an exploratory approach, whose objective was to investigate, through articles already published, relevant information that answered the guiding question. The methodology adopted followed the steps proposed by Mendes, Silveira and Galvão (2008): 1) choice of the theme and definition of the research question; 2) delimitation of inclusion and exclusion criteria; 3) extraction and limitation of information from the selected studies; 4) analysis of the studies included in the review; 5) analysis and interpretation of the results; and 6) presentation of the review or synthesis of knowledge.

The guiding question defined was: What are the current scientific perspectives on the use of psychedelics in the treatment of mental disorders?

The integrative literature review aims to gather and synthesize the scientific knowledge produced on the topic investigated, allowing the search, evaluation and consolidation of the available evidence, contributing to the development of knowledge on the subject (Marconi; Lakatos, 2010). This



type of study promotes the synthesis of knowledge by compiling ideas on the same topic, incorporating the results obtained in practice. It is an important method in the field of evidence-based practice, as it involves defining a problem, conducting a systematic search for studies, critical analysis, and applying the results. It is a broad method of review, allowing the inclusion of experimental and non-experimental studies, which makes the study more complete (Souza; Silva; Carvalho, 2010).

To reach robust answers, searches were carried out in the following scientific databases: Latin American and Caribbean Literature on Health Sciences (LILACS), Scientific Electronic Library Online (SCIELO) and Medical Literature Analysis and Retrieval System Online (MEDLINE). For the research, Descriptors in Health Sciences (DeCS) and Medical Subject Headings (MeSH) were used, combined with the Boolean operator AND: “Psychedelics,” AND, “Mental Disorders,” AND, “Therapeutic Advances”. In English, the descriptors were as follows: “Psychedelics,” AND, “Mental Disorders,” AND, “Therapeutic Advances.”

The inclusion criteria adopted for the selection of articles were: free publications, available in full, in Portuguese, English or Spanish, published in the last 5 years and that met the objective of the research. The exclusion criteria, in turn, included: incomplete articles, duplicates in more than one database, monographs, dissertations and theses.

## **RESULTS AND DISCUSSION**

The results presented in the recent scientific literature on the therapeutic use of psychedelics in the treatment of mental disorders reveal significant advances. Controlled clinical studies have demonstrated the effectiveness of substances such as psilocybin in the treatment of resistant depression, showing response rates superior to those obtained with conventional antidepressants. Carhart-Harris et al. (2018) observed that psilocybin administration, accompanied by psychotherapeutic support, promoted rapid and sustained improvement in depressive symptoms, even in patients who had not responded to other approaches. These findings reinforce the potential of psychedelics as a promising



tool in the psychiatric therapeutic arsenal.

In addition to depression, psychedelics have also been shown to be effective in treating post-traumatic stress disorder (PTSD). A notable example is the use of MDMA in assisted psychotherapy, which has shown positive results in phase 3 studies. According to Mithoefer et al. (2019), patients undergoing this approach have reported significant reductions in PTSD symptoms, often achieving complete remission. These results highlight not only the neurochemical effects of the substance, but also the impact of guided therapeutic sessions, which enable a resignification of traumatic memories.

Neuroscience offers explanations about the mechanisms behind these effects. Classic psychedelics, such as psilocybin and LSD, act as agonists of serotonin 5-HT<sub>2A</sub> receptors, promoting a reorganization of neural networks. This results in greater functional connectivity between different regions of the brain, facilitating neuroplasticity and breaking rigid thought patterns associated with mental disorders (Nichols, 2016). In this sense, psychedelics not only treat the symptoms, but also offer an opportunity for deep psychological transformation, which represents an innovative paradigm in psychiatry.

However, the challenges associated with the therapeutic use of psychedelics are significant. One of the main obstacles is legal regulation. Many of these substances remain classified as high-risk drugs, which limits their availability for research and clinical use. Despite advances in countries such as the United States and Canada, where psilocybin has received special research designations, most nations still face legal barriers and social stigmas that hinder the implementation of these therapies (Nutt et al., 2020).

Another relevant aspect is the need to ensure safety and efficacy in the therapeutic use of psychedelics. Although rates of serious adverse effects are low in controlled settings, there are reports of negative experiences, such as intense anxiety or exacerbation of psychotic symptoms, especially in predisposed individuals. This reinforces the importance of strict patient selection protocols and the presence of trained professionals during therapeutic sessions (Johnson et al., 2008).

The training of qualified professionals is also a central challenge. Psychotherapists working



with psychedelics need specialized training to deal with altered states of consciousness and facilitate the integration of patients' lived experiences. Institutions such as MAPS (Multidisciplinary Association for Psychedelic Studies) have developed training programs, but the demand for specialists still exceeds the supply, indicating the need for additional investments in this field (Doblin et al., 2019).

The ethical implications of psychedelic use are also worth mentioning. The creation of a therapeutic market for these substances raises questions about accessibility and equity. As psychedelic treatments are often expensive and complex, there is a risk that only a limited portion of the population could benefit, increasing mental health inequalities. In addition, the potential for excessive commercialization can divert the focus from therapeutic benefits to purely for-profit purposes (Schenberg, 2020).

The literature also points to the importance of considering cultural and historical perspectives in the use of psychedelics. In many indigenous cultures, substances such as ayahuasca and peyote have been used for centuries in ceremonial and healing contexts. Integrating these traditional practices into the Western therapeutic model requires a careful balance between cultural respect and scientific evidence, avoiding misappropriations or simplifications of complex practices (Labate & Cavnar, 2014).

While there are significant challenges, the renaissance of psychedelic research has the potential to transform the treatment of mental disorders. Future studies should focus on expanding samples, long-term follow-up, and comparing them with conventional interventions. In addition, it is crucial that public policies advance in parallel, allowing these innovative therapies to be accessible and regulated in a responsible way (Rucker et al., 2017).

In conclusion, psychedelics offer new hope for the treatment of mental disorders by combining neuroscientific advances with innovative psychotherapeutic practices. However, the effective implementation of these therapies requires a collective effort, involving researchers, clinicians, policymakers, and communities, ensuring that the potential of these substances is fully realized for the benefit of global mental health (Griffiths et al., 2016).



## CONCLUSION

Psychedelics have emerged as a promising tool in the treatment of mental disorders, offering new perspectives for conditions such as resistant depression, post-traumatic stress disorder, and chemical dependency. Scientific advances have shown that these substances, when used in a controlled manner and accompanied by psychotherapeutic support, can provide significant benefits, including symptom remission and improved quality of life. These findings indicate a transformation in the paradigm of mental health care, shifting the focus from simple symptom management to the possibility of deep psychological and neurobiological reorganization.

Despite the advances, the limitations in the field are evident. Restricted access to research, due to regulatory barriers, still prevents a broader expansion of knowledge and clinical use. Additionally, the ethical and legal challenges related to the commercialization and accessibility of treatments highlight the need for a greater balance between innovation and equity. Other issues, such as the lack of trained professionals, the high costs of therapies, and the possibility of adverse effects in inappropriate settings, require cautious approaches and further studies to ensure the safety and efficacy of interventions.

To overcome these barriers, it is crucial that future research focuses on broadening the understanding of the neurobiological mechanisms of psychedelics and identifying specific populations that may benefit from these treatments. Further investigations into the long-term impacts and possible interactions with other therapies are equally needed. Multicenter studies that explore cultural and historical variations in the use of these substances are also recommended, promoting a more holistic integration between science, ethics, and traditional practices.

Thus, the adoption of collaborative approaches, involving researchers, health professionals, public policy makers, and communities, can contribute to a more balanced regulation and the dissemination of evidence-based practices. The development of accessible and culturally sensitive therapeutic models is essential if the transformative potential of psychedelics is to be fully realized,





offering a viable and innovative alternative for mental health care.

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