

Should Psychedelic Drugs Be Offered as a Treatment for Mental Illness?

Ruoqi Zhang

The Institute for International Research on Criminal Policy (IRCP), Ghent University, Gent, Belgium.

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***Corresponding author:** Ruoqi Zhang, The Institute for International Research on Criminal Policy (IRCP), Ghent University, Gent, Belgium.

Abstract

Psychedelics are becoming increasingly popular as an entry point into difficult-to-treat psychiatric illnesses and a supplement to existing treatments. However, many people view these substances with caution due to increased incidents where they've been used illegally in unsupervised settings. This paper argues that adding psychedelics to the treatment of mental illness can be beneficial for both patients and society as a whole. These drugs could help those who suffer from conditions such as anxiety or depression by providing them with new perspectives on their problems. Additionally, psychedelic therapy may provide psychiatrists with additional options when treating more severe cases of disorders such as PTSD or bipolar disorder. This paper will discuss the clinical effects and physiological processes of action of psychedelic substances, which justifies their use in psychotherapy from three perspectives. First, it will cover the history of these drugs, explaining how they have been used throughout different cultures for centuries. Second, it will examine the safety and efficacy of using psychedelics in therapy. Third, this article provides arguments for why psychedelic therapies should be utilized by therapists across a variety of disciplines.

Keywords

Psychedelic drugs, Mental illness, New treatments

1. Introduction

Psychedelic substances have a long history, dating back thousands of years when hallucinogenic plants (such as mushrooms, nutmeg, and cannabis) and their derivatives (such as opioids, alcohol, and stimulants) were identified and employed for medicinal or pleasant purposes (Belouin & Henningfield, 2018). The discovery of lysergic acid diethylamide (LSD) led to the first research and therapeutic development of psychedelic drugs to treat mental and behavioural disorders. LSD was identified as a promising treatment for severe psychiatric disorders such as anxiety, depression, schizophrenia, alcoholism, and wartime stress reactions at the time of its discovery, and clinical trials have shown a high safety profile and long-term sound effects, and for a time became an essential topic of discussion in the behavioural sciences and neurology (Hofmann, 2019). Other psychedelic substances, such as psilocybin and mescaline, began to enter the line of sight of psychopathological and neuropharmacological research as possible treatments for psychiatric disorders as a result of the LSD research, and their potential in pharmacological treatment was confirmed (Davis et al., 2021; Bogenschutz et al., 2015; Dinis-Oliveira et al., 2019; Malcolm & Thomas, 2021). However, the usage and study of LSD eventually devolved into an uncontrollable habit of abuse. In the 1960s, LSD became famous as a drug class, and clandestine manufacture and distribution flourished, causing social upheaval and disturbance in the United States.

2. Literature Review

The approved use of LSD, marijuana and other psychedelic substances was substantially curtailed. The United States and other countries acknowledged the necessity for stricter regulation of drugs that may be abused or lack safety. Nonetheless, the mental health profession's most advanced clinical development methodologies and procedures are intrinsically tied to brain function and medication action mechanisms. The less effective components of evidence-based therapies still necessitate psychedelic drug research and therapeutic use. As a result, research limits on psychedelic drugs were loosened over the twentieth century. The use of 3,4-methylenedioxymethamphetamine (MDMA) as an additional psychotherapy drug in the treatment of posttraumatic stress disorder (PTSD) is one such example (Feduccia & Mithoefer, 2018). Clinical studies must be rigorous, ongoing, and systematic because research is the scientific foundation for the safe use of psychedelic substances and is vital for understanding psychedelic drug usage's circumstances, dangers, and benefits. The increased use of psychedelic substances as an addition to psychotherapy in clinical conference themes is also meant to lessen the risk of harm to patients and enhance public acceptability of psychedelic drug use.

The availability of psychedelic substances was first demonstrated in clinical trials. Patients suffer from the persistence of behavioural problems and the limited benefits of evidence-based therapies for symptoms and instances that do not improve with evidence-based therapies, driving the development of medication-assisted psychotherapy. To date, research on psychedelic drugs has shown that using them in psychotherapy could not only be a potential breakthrough treatment for a variety of major psychiatric disorders (e.g., depression, anxiety, PTSD, and addiction) (Carhart-Harris et al., 2017; Gasser et al., 2014; Sanches et al., 2016), but could also aid in the understanding of the brain and its functions, as well as the treatment of brain (Belouin & Henningfield, 2018). The potential efficacy of various types of psychedelic drugs for patients with psychiatric disorders that are difficult to treat with evidence-based therapies was again demonstrated through safety trials for psychiatric disorders such as terminal anxiety, refractory depression, obsessive-compulsive disorder, and tobacco use disorders in an evaluation of classical psychedelics (psilocybin, LSD, DMT) and MDMA by Chi and Gold (2020). Despite the lack of controls and the elimination of placebo effects, psilocybin was found to reduce end-of-life anxiety and depression symptoms in a small number of clinical trials. This finding suggests a treatment for refractory depression. In addition, despite the risk of adverse effects and addiction, psilocybin was found to be usually well tolerated. Many of the side effects of physiological changes are medically minor and only last a short time, with little impact on the patient's functional health.

Furthermore, neurobiological evidence supports the availability and safety of psychedelic substances in treating psychiatric diseases. According to behavioural and neuroimaging data, psychedelics appear to activate and modify brain circuits related to mood and emotional disorders, primarily through 5-hydroxytryptamine type 2A receptors, according to behavioural and neuroimaging data (Vollenweider & Preller, 2020). Long-term psychedelic usage does not result in addiction or a loss of bodily function. According to Canal and Murnane (2016), tolerance induced by downregulation of 5-HT_{2A} receptors develops quickly, resulting in a steady decline in psychedelic effects as consumption increases. This procedure enhances animal neuroplasticity, suggesting a mechanism that could help patients with psychiatric diseases ameliorate their symptoms over time. Bottom-up sensory input from the thalamus to the cerebral cortex is processed by neurons, as is top-down central brain network processing. To induce intra-thalamic perceptual effects, psychedelic medications can facilitate or block glutamate release during neurotransmission by triggering specific neuronal synapses or cortical pathways. Moreover, it has been shown that hallucinogenic and non-hallucinogenic receptors activate different intracellular signalling pathways in cortical vertebral neurons. However, only hallucinogenic drugs like LSD increase the expression of early growth protein I (EGR1) and EGR2 in cortical vertebral neurons (Vollenweider & Preller, 2020). This knowledge can generate more specific molecules with innovative therapeutic capabilities to address brain damage in psychiatric diseases like depression. However, there are still some unanswered questions about the role of hallucinogenic chemicals in neural mechanisms in neurophysiology. For example, the effects and actions of LSD on dopamine receptors have yet to be discovered, and the current investigation lacks a component for post drug blocking.

Addiction and safety are the main arguments against the usage of psychedelic substances. According to the ICD-10 definition, addiction to a substance is a set of behavioural, cognitive, and physiological manifestations that arise following repeated use of a substance. Physical inability to control one's body, acute drug cravings, recklessness, drug preference, increasing drug tolerance, and withdrawal symptoms are common. Classic psychedelics' molecular mechanisms of action have an inadequate affinity for dopamine receptors and dopaminergic systems to

activate the reward regions linked to addictive behaviour. Second, psychedelics have been demonstrated to have considerable impacts as emotional catalysts, facilitating the catharsis of sentiments and emotions that contribute to suppression. In addition to its use in treatment, population studies and qualitative research have found that using psychedelic drugs recreationally is related to a lower prevalence of mental health disorders (Hendricks, Thorne, Clark, Coombs, & Johnson, 2015). Recreational use of psychedelics is associated with deepening interpersonal relationships, self-positive attitudes, and repressed acceptance. According to studies of various mental health-related assessment items and related studies of psychedelic drug use status, it may be a protective factor related to addiction. According to the ICD-10 description, addiction tends to neglect other forms of interest, although the opposite is often true in patients who use psychedelics. Watts et al. (2017) discovered that old hobbies began to resurface in a group of individuals treated with naked capsaicin. Participants in this study were given a mix of ACT and psychedelics. While they were dissatisfied with traditional treatment, they appeared to have good treatment outcomes after receiving ACT-psychedelic treatment. Finally, while psychedelic substances can cause hallucinations and alter one's state of consciousness, the amounts required for this process are minimal, and the effects on the autonomic nervous system are negligible. As a result, no irresponsible ongoing usage, or an uncontrollable strong desire to use psychedelic drugs does not constitute addiction.

3. Results

In terms of psychedelics' safety, it has already been stated that they are a relatively safe therapy technique. Subjects in psychedelic studies are generally excluded if they have a history of mental illness or bipolar disorder because psychotic episodes or vulnerability to mental disease are among the health hazards linked with psychedelic use. Furthermore, psychedelics may increase the likelihood of developing hallucinogenic persistent perception disorder (HPPD) (Argento et al., 2017). After a few days of psychedelic usage, flashbacks, visual distortions, and HPPD symptoms may arise. On the other hand, these adverse effects are evident in the absence of medical supervision for illicit use. There is currently no evidence for potential differences in consequences under medical care. In studies with insufficient oversight, the fear response can be harmful. Traditional psychedelics can have an emotional influence and create modest unfavourable psychological reactions, but these side effects are readily managed. Pharmaceutical treatments for all types of psychiatric diseases are now limited, and they frequently produce significant adverse effects and go against the patient's treatment desires.

In contrast, all psychedelic-related research has identified no significant side effects, indicating that psychedelic usage in clinical trials and treatment is safe. Furthermore, while unsupervised psychedelic use is dangerous, Johnson et al. (2019) found that psychedelics are relatively safe even without medical supervision. This study included a population sample of nearly 200,000 people, which is sufficiently generalizable and convincing.

4. Discussion

In conclusion, the use of psychedelic medicines in the therapy of psychological illnesses has many benefits. Psychedelic medicine has advanced the role of psychedelic drugs in the neuropharmacological part of the brain and has contributed to understanding the human brain and brain consciousness, brain function, and other aspects. However, there are many new scientific and empirical issues in the field. The use of psychedelics in psychology, addiction medicine, psychiatry, and other professions has benefited from a better knowledge of physiological mechanisms. The physiological mechanisms of action of psychedelics that are used to explain their effects can aid in determining the optimal therapy form and regimen for various ailments. Future studies should attempt to mix various psychotherapeutic approaches with various psychedelic drugs and classify the impacts of each aspect of the treatment into data to get a more explicit level of understanding. In addition, new psychedelic chemical treatments for mental and substance use disorders should contain a time variable during the intervention so that the therapy process may be controlled appropriately. This study would significantly lower the financial burden of therapy on patients, allowing more people to receive safer and more effective medical treatment.

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