HIGH SCHOOL EDITION
Journal of Student Research
Volume 13 Issue 4 (2024)

Exploring Psychotherapeutic Benefits of Psilocybin and Psychedelics in Controlled Medical Settings

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ABSTRACT

Psychedelics are emerging as an effective way to combat mental health disorders such as anxiety, depression, PTSD, and substance abuse. Psychedelics such as psilocybin can decrease overactivity in regions of the brain that are associated with anxiety and depression; for instance, psilocybin acts as an agonist on brain receptors to induce consciousness-altering neural responses. Compared to other drugs, psilocybin's effects are noticeable with fewer dosages and last longer than current pharmaceutical drugs used in the mental health industrty. When implemented in conjunction with medical therapy, psilocybin psychotherapy has been proven to reduce depressive symptoms, aid cases of addiction by increasing sobriety, and relieve symptoms of PTSD by cultivating trust and reducing fear. By ensuring that psilocybin psychotherapy is regulated and only implemented with federal consent, medical careproviders can provide the best quality of care to patients and strive to improve mental health outcomes in the United States. Therefore, the case for implementing psychedelics in the healthcare industry to combat the ramifications of mental health disorders is strong and should be welcomed and integrated into medical practice with federal regulations.

Revolutionizing Mental Health with Psychedelics

Nearly 50 million adults in the US are affected by some form of a psychiatric or mental health illness, with 20% to 60% of these patients being treatment-resistant (Irizarry et al., 2022). Janna Lawrence, writer from the Pharmaceutical Journal, defines Psilocybin as a drug that "decreases activity in the parts of the brain that are overactive in depression, addiction and ingrained behaviors" (Lawrence, 2014). Building on Lawrence's definition, Kenneth Tupper, professor in the School of Public Health at the University of British Columbia, elucidates that psychedelics act as agonists on receptors in the brain, thus causing numerous conscious-altering neural responses (Tupper et al., 2015). Psychedelics, notably psilocybin, have been demonstrated as mechanisms for combating illnesses including PTSD, anxiety and depression, and substance abuse, with effects lasting from four to eight weeks; furthermore, compared to its counterparts such as anti-depressants, psilocybin is more effective as only two doses are required to decrease depression for triple the amount of time as antidepressants do (Irizarry et al., 2022). Dr. Ricardo Irizarry, a psychiatrist with over 22 years of experience, claims that "in controlled settings most patients show encouraging responses to psychedelic drugs," neglecting to underscore that some experience "elevated blood pressure and gastrointestinal distress" in controlled settings, as observed by Shawn Ziff, a medical student at St. George's University (Irizarry et al., 2022; Ziff et al., 2022) While adverse effects are possible in controlled settings, Ziff describes these effects as "transient," thus demonstrating that the long term benefits of psilocybin and psychedelics outweigh the potentially harmful effects (Ziff et al., 2022). Finally, Ziff asserts that to benefit from psychedelic psychotherapy, patients should consume psilocybin in a therapeutic setting, guided by a trained therapist (Ziff et al., 2022). Therefore, the federal government should allow for contained medical use of psychedelics because its benefits regarding depression and anxiety, addiction, and PTSD through psychotherapy outweigh its potentially harmful nature.

Psychedelics in Treatment for Anxiety and Depression

When used jointly with psychotherapy, psychedelics like psilocybin aid mental illnesses like anxiety and depression by altering perceptual, cognitive, and emotional parts of the brain, leading to mood improvements for long periods of time, demonstrating that emotional challenges from mental illnesses like anxiety and depression can be combated with regulated use of psilocybin (Bogadi & Kaštelan, 2021). While reviewing a study on the effectiveness of psilocybin-psychiatry treatments, Dr. Irizarry notes that within a day of psilocybin ingestion, cerebral blood flow to the amygdala decreases; this is correlated with a decrease in depressive symptoms, thereby supporting the efficacy of the usage of psilocybin treatment (Irizarry et al., 2022). In a review of a study analyzing mood and anxiety disorders in response to psilocybin, Dr. Johnson, a professor of Psychiatry and Behavioral Sciences at Johns Hopkins University, concluded that "psilocybin may decrease symptoms of depression and anxiety in the context of cancer-related psychiatric distress for at least 6 months" (Johnson & Griffiths, 2017). Additionally, Dr. Agrawal, a medical oncology specialist that developed a therapy center addressing the emotional effects of cancer diagnoses, emphasizes that, in a clinical trial, after patients took a dose of psilocybin combined with psychotherapy, half of trial participants no longer had clinical depression eight weeks after the dose, and nearly 80% of patients had their depression scores drop by at least 50% (Agrawal, 2022, p. 4). Through Agrawal and Johnson conveying that psilocybin-oriented psychotherapy mitigates depression for patients within clinical trials, psilocybin therapy and its beneficial effects are understood and therefore, should be implemented under controlled medical settings. Moreover, in a Johns Hopkins University study analyzing the effect of psilocybin in patients battling depression for the past two years, researchers concluded that "depression severity remained low one, three, six and 12 months after treatment" (Martinez, 2022). While Martinez's observations hold true for patients with depression in the past two years, Dr. Johnson adds an additional consideration when he analyzes the claim in the context of treatment-resistant major depression in his review of psilocybin and mental health disorders (Martinez, 2022; Johnson & Griffiths, 2017). Johnson reveals that when the patients reached the three-month follow up, approximately 42% of them were in remission, and about 67% of them were in the threshold for remission, demonstrating psilocybin-psycotherapy's versatility in treating different types of mood disorders with different magnitudes (Johnson & Griffiths, 2017). Therefore, to support overcoming and combating mental illnesses, psilocybin-oriented psychotherapy should be implemented in a controlled manner to mitigate the harmful physical and emotional effects of anxiety and depression.

Overcoming Addiction with Psilocybin-Based Psychotherapy

In conjunction with psychotherapy, psilocybin enables patients struggling with addiction to abstain from substance abuse, decreasing withdrawal symptoms such as depression and cravings, while ensuring patients do not develop dependence on psilocybin, given its non-addictive nature; thus benefiting patients because they can overcome addiction, while mitigating the risks of withdrawal and dependency (Johnson & Griffiths, 2017; Irizarry et al., 2022). While discussing the benefits of psilocybin, Dr. Irizarry reports that patients taking psilocybin "experienced lower rates of dependency or addiction when compared to study participants using ketamine or other pharmaceuticals," thereby solidifying psilocybin's advantage over other drugs as it provides similar results without the risk of future addiction (Irizarry et al., 2022). In a study in which patients received 15 weeks of structured nicotine-cessation treatment, at the six-month follow up, "80% of patients were not smoking," and in comparison with drugs currently used to treat addiction (with only 35% abstaining after six months), psilocybin dominates its opponents regarding efficiency as it enables significantly more patients to abstain from smoking in the long term than current treatments and drugs (Lawrence, 2014). In addition to smoking, in an evaluation of four studies where psilocybin was used to combat alcoholism, Pim B. Van der Meer, a medical doctor and neuropsychologist from the University Medical Center Utrecht, reported that with an average follow-

up duration of six years, 32% of patients abstained from alcohol (Van der Meer et al., 2023). Connecting both Lawrence and Van der Meer's studies, the high efficacy rates of abstinence in cases of alcoholism and smoking over long periods of time convey psilocybin's superiority over modern pharmaceuticals, corroborating the need to employ psilocybin in contemporary drug abuse treatments. Therefore, to effectively respond to challenges with addiction, psilocybin psychotherapy should be responsibly utilized to prevent the deterioration of humans' physiological health due to substance abuse.

The Role of Psychedelics in PTSD Treatment

By reducing fear and fostering trust within PTSD patients, psychedelics and psilocybin-like drugs assist patients experiencing PTSD to cope with trauma and memories from tragic events, thus enabling patients with trauma to work towards achieving peace and relief, without debilitating memories (Khan et al., 2022; Kupferschmidt, 2014, p. 22). In her evaluation of psilocybin as a treatment for trauma-related disorders, Dr. Khan, a research fellow in the Department of Psychiatry at the University of California, San Diego, and a provider of trauma-informed treatments, articulates that traumatized AIDS survivors found that psilocybin-assisted psychotherapy "reduced PTSD symptoms, attachment anxiety, and demoralization," symptoms that patients experiencing PTSD encounter (Khan et al., 2022). Furthermore, Dr. Khan suggests that several psilocybin-based psychotherapy trials have had success in "confronting traumatic memories, decreasing emotional avoidance, depression, anxiety, pessimism, and disconnection from others" as well as "increasing acceptance, self-compassion, and forgiveness of abusers," skills essential in overcoming PTSD and trauma. Finally, in a review evaluating the role of psychoactive drugs in managing PTSD, Elsouri, a medical school student at Nova Southeastern University, addresses patients with treatment-resistant PTSD which can benefit from psilocybin because the drug targets and decreases fear and anxiety pathways in the brain, resulting in healing and recovery (Elsouri, 2022). Furthermore, Elsouri remarks that psilocybin and other psychoactive drugs in part with psychotherapy can reorganize the structure and function of neural circuits to produce positive behavioral effects, hence aiding PTSD patients in overcoming trauma. Both Khan and Elsouri's demonstrations of the healing potential of psilocybin in cases of PTSD, signify psilocybin's success in fighting trauma. Therefore, to act effectively against PTSD, psilocybin-oriented psychotherapy should be implemented in trauma treatments to restore normalcy to the lives of patients and diminish the deleterious physiological effects of PTSD.

Acknowledgments

I would like to thank my advisor for the valuable insight provided to me on this topic.

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