The Psychedelic Frontier: A Cross-Profession Review of Healthcare Providers' Attitudes on Psychedelic-Assisted Therapy in the US

Stefan Sampy[1], Rohan Sampy[2]

[1] Schulich School of Medicine & Dentistry, Western University, London, ON, Canada

[2] Department of Biomedical and Molecular Sciences, Queen's University, Kingston, ON, Canada

Correspondence:
Stefan Sampy;
stefansampy@gmail.com

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ABSTRACT

Psychedelics, historically used for transcendent experiences, have garnered renewed interest for their potential therapeutic applications, particularly in treating mental health conditions such as depression, PTSD, and addiction. Despite initial enthusiasm in the mid-20th century, the War on Drugs led to a decades-long hiatus in research. However, recent studies have demonstrated promising clinical outcomes, reigniting interest in integrating psychedelic-assisted therapy (PAT) into modern medical practice. This review examines healthcare professionals' attitudes toward PAT, exploring how these attitudes vary across professions. A systematic literature review of 11 relevant articles, drawn from PubMed, Medline OVID, and EMBASE, assessed U.S. healthcare professionals' perceptions of PAT, focusing on attitudes and concerns. Healthcare professionals expressed cautiously favorable attitudes toward PAT, supporting further research and education, while concerns centered on potential psychiatric and neurocognitive risks, addiction relapse, and a lack of trained providers. The review also highlighted the importance of increasing awareness, training, and education in psychedelic medicine, with guidelines from the American Psychedelic Practitioners Association (APPA) emphasizing licensure and continued professional development. Despite some limitations, including an overrepresentation of psychiatrists and psychologists in the literature, this review underscores the importance of interdisciplinary collaboration and further research to facilitate PAT's integration into clinical practice.

RÉSUMÉ

Les psychédéliques, historiquement utilisés pour des expériences transcendantes, suscitent un regain d'intérêt en raison de leurs applications thérapeutiques potentielles, en particulier dans le traitement de troubles mentaux tels que la dépression, le syndrome de stress post-traumatique et la toxicomanie. Malgré l'enthousiasme initial au milieu du 20e siècle, la guerre contre la drogue a entraîné une interruption de plusieurs décennies dans la recherche. Cependant, des études récentes ont démontré des résultats cliniques prometteurs, ravivant l'intérêt pour l'intégration de la psychothérapie assistée par psychédéliques (PAP) dans la pratique médicale moderne. Cette revue examine les attitudes des professionnels de santé à l'égard de la PAP, en explorant comment ces attitudes varient selon les professions. Une revue systématique de la littérature portant sur 11 articles pertinents, tirés de PubMed, Medline OVID et EMBASE, a évalué la perception des professionnels de santé américains à l'égard de la PAP, en se concentrant sur leurs attitudes et leurs préoccupations. Les professionnels de santé ont exprimé des attitudes favorables mais prudentes à l'égard de la PAP, soutenant la poursuite de la recherche et de l'éducation, tout en exprimant des préoccupations centrées sur les risques psychiatriques et neurocognitifs potentiels, la rechute de la dépendance et le manque de prestataires formés. La revue a également souligné l'importance de sensibiliser, de former et d'éduquer davantage dans le domaine de la médecine psychédélique, avec des directives de l'American Psychedelic Practitioners Association (APPA) mettant l'accent sur l'octroi de licences et le développement professionnel continu. Malgré certaines limites, notamment une surreprésentation des psychiatres et des psychologues dans la littérature, cette revue souligne l'importance de la collaboration interdisciplinaire et de la poursuite des recherches pour faciliter l'intégration de la PAP dans la pratique clinique.

INTRODUCTION

Psychedelics are broadly defined as psychoactive substances that alter perception, cognition, and affect by acting on neural circuits in the brain.[1] Often, this can induce profound changes in consciousness, including visual and auditory hallucinations, ego dissolution, and mystical experiences.[2] These compounds can be classified into several pharmacological groups based on their primary mechanism of action. The classical serotonergic psychedelics, such as lysergic acid diethylamide (LSD), psilocybin (found in "magic mushrooms"), and N,N-dimethyltryptamine (DMT, the active compound in ayahuasca), primarily act as agonists or partial agonists at the 5-HT2A serotonin receptor, leading to increased cortical entropy and altered thalamocortical processing.[1,3] Ayahuasca, in particular, is a brew containing DMT and a monoamine oxidase inhibitor (MAOI) such as harmaline, which prevents the breakdown of DMT in the gut and liver, thereby extending its psychoactive effects from minutes to several hours.[4] In contrast, 3,4-methylenedioxymethamphetamine (MDMA) is classified as an empathogen-entactogen rather than a classical psychedelic; it primarily increases synaptic availability of serotonin, dopamine, and norepinephrine, fostering emotional openness and reduced fear processing—effects that have made it especially promising in the treatment of post-traumatic stress disorder (PTSD).[5] Additionally, substances such as ketamine, often considered a dissociative anesthetic, modulate glutamatergic neurotransmission via NMDA receptor antagonism, producing rapid-acting antidepressant effects and dissociative states.[6] Understanding these neuropharmacological distinctions is essential for clinicians and researchers evaluating the therapeutic potential of psychedelic-assisted therapies across diverse clinical settings.

For nearly 3000 years, humans have used psychedelic substances to access altered states of consciousness, providing mystical and transcendental experiences.[7] While traditionally linked to shamanic practices, modern scientific exploration of psychedelics began in 1938 with the synthesis of LSD by Swiss chemist Albert Hofmann, who also ingested the substance before his celebrated bicycle-ride home.[8] Profoundly affected by its psychological effects, Hofmann became a lifelong advocate for its potential therapeutic value. Through his writings and scientific advocacy, particularly in his memoir *LSD: My Problem Child*, Hofmann emphasized the importance of studying psychedelics within a medical and psychiatric framework. His influence helped shift early scientific attitudes from skepticism to curiosity, laying the groundwork for subsequent research into their clinical applications.[9] Since then, psychedelics have created both division and unity among those who were aware of their mind-altering effects.

The 1950s saw a surge in medical interest, with psychiatrists using LSD to treat tens of thousands of patients for conditions such as depression and substance use disorders.[10-12] As medical use grew, so did illicit use, and some viewed psychedelics as politically revolutionary, allowing these substances to shape the counterculture of the United States (US) in the 1960s.[8] In response to rising drug use, President Richard Nixon's War on Drugs, launched in 1971, led to the criminalization of psychedelics, effectively halting research and clinical applications for nearly two decades.[11,13,14]

Following years of advocacy from psychologists and psychiatrists, rigorous studies exploring the clinical utility of psychedelics have now expanded significantly.[8] In an era marked by growing mental health concerns and a crisis around "Deaths of Despair" (suicide, overdose, alcoholism), both of which were only exacerbated by the COVID-19 pandemic, the stage is set for psychedelics to transition from a taboo topic to one of therapeutic significance.[15,16] Research into LSD, psilocybin, MDMA, and ayahuasca has shown promise in treating conditions such as treatment-resistant depression, PTSD, autism, chronic pain, assisting in end-of-life care, and even in modulating the gut-brain axis.[17-21]

In light of the therapeutic potential of psychedelics, questions arise as to how modern medical professionals view the use of these substances in treating patients. While some research has assessed general attitudes among healthcare providers, there is a notable gap in literature examining profession-specific perspectives. Considering both that healthcare professionals were the primary drivers of the renaissance surrounding psychedelics and that many illnesses appear with complex comorbidities, the functioning of the interdisciplinary healthcare team has inevitably become tied to understanding the various current opinions in using psychedelic-assisted therapy (PAT). This review aims to assess current attitudes toward PAT across different healthcare professions, with the goal of enhancing interdisciplinary communication, informing clinical decision-making, and ultimately improving patient care.

METHODS

Article Collection

Articles were collected from the electronic databases PubMed, Medline OVID and EMBASE. The search involved a combination of MeSH (Medical Subject Headings), keywords, and title and abstract searches, utilizing a mix of terms related to 'historical perceptions & attitudes', 'psychedelic substances' and 'psychedelic-assisted therapy', that are outlined in **Table 1**.

Article Selection

The inclusion criteria for this study encompassed articles that 1) were published in English; 2) focused on healthcare providers in the U.S.; and 3) discussed the attitudes of various healthcare providers toward psychedelic-assisted therapies. Articles were excluded if they: 1) focused on populations other than healthcare providers; 2) focused on non-American healthcare providers; and 3) were not fully published articles at the time of this study (including abstracts and posters) or had been retracted. The article selection process is illustrated in **Figure 1**.

RESULTS

Following the initial search criteria, a total of 430 papers were collected (PubMed: 315, OVID Medline: 41, EMBASE: 74). Then, 47 duplicates were removed leaving 383 papers for further screening. Next, a title review was conducted which reduced the relevant articles to 53. An abstract review condensed the article number to 20 and a deeper manuscript review resulted in 6 papers. Finally, a manual search on Google yielded 6 additional articles for a total of 12 articles that fit within the research aim and inclusion criteria. Articles were excluded based on a predetermined exclusion criterion. One of the six manually identified articles had restricted access; despite efforts to contact the original author, the full text could not be obtained, reducing the final article count to 11. A summary of the findings from each article is detailed in **Table 2**.

Common Attitudes, Concerns and Predictive Factors

The final set of 11 articles comprised two systematic reviews, one interview thematic analysis and eight cross-sectional surveys. Overall, healthcare professionals expressed cautiously favorable attitudes towards PATs.[23-25] Common positive attitudes toward psychedelic therapies included broad support for further research and education, legalization of psychedelics for recreational and medical use and its potential as an alternative therapy for patients experiencing existential struggles.[22-32] Common concerns expressed by healthcare professionals included long-term psychiatric and neurocognitive damage, addiction relapse, ethical considerations, lack of research, lack of trained providers and financial costs.[22-29,31] Predictors of more positive attitudes toward PATs included greater awareness of PAT research, increased knowledge of psychedelics, younger age, male gender, and personal experience with psychedelics.[22,25-27,29,30,32]

Profession-Specific Attitudes Towards PAT

The healthcare professionals in this review encompassed psychologists, psychiatrists, social workers, counsellors, addiction specialists and mental health providers. There were no clear differences in positive attitudes across the professions with all expressing a degree of support for the therapeutic potential of PAT and the need for further research, education and training.

However, there were notable differences regarding the

Table 1. MeSH Terms and Keywords Used in the Literature Search

Category	MeSH Terms & Keywords
Historical Perceptions & Attitudes	Historical Perception, Health Humanities, Clinical Medicine, Attitude to Health, Cultural Evolution, Social Determinants of Health, Psychiatric History, Society and Health, Public Opinion, Cultural Views, Attitudes toward psychedelics, Social Perception, Psychedelic Stigma, Public Attitudes, Historical Views, Psychedelic Perception
Psychedelic Substances	Psychedelic Substances, Psychotropic Drugs, LSD, Lysergic Acid Diethylamide, Psilocybin, MDMA, 3,4-methylenedioxymethamphetamine, Dimethyltryptamine, Ayahuasca, Ketamine, Microdosing
Psychedelic-assisted Therapy	Psychedelic Therapy, Treatment-resistant Depression, Psychedelic-Assisted Therapy, Psychedelic Research, Psychedelic Psychiatry, Mental Health Treatment, Psychotherapy, Psychedelic Treatments, LSD therapy, Psilocybin Therapy, MDMA Therapy, Therapeutic Psychedelics, Psychedelic Medicine, Psychedelic Integration, Psychedelic drug research

MeSH – Medical Subject Heading; LSD – Lysergic Acid Diethylamide; MDMA –3,4-methylenedioxymethamphetamine

concerns of various healthcare professionals. Psychologists and psychiatrists were concerned with the psychiatric and neurocognitive risks of psychedelic use.[23,25] Addiction specialists were apprehensive about the addictive potential of psychedelics and the risk of relapse in patients with substance use disorders.[24,31] Social workers emphasized the necessity of psychological support in the administration of PAT, while mental health providers expressed concerns about the shortage of trained personnel.[27]

Unsurprisingly, each of the professionals' concerns were closely tied to their own profession demonstrating a profession-specific bias that influenced attitudes toward PAT. This implicit bias could affect the way clinicians make decisions about healthcare policies regarding the implementation of PAT, demonstrating the need for interdisciplinary consultation.[33] Negative media reporting of psychedelics may further compound existing biases by providing readily available information for clinicians to disprove the therapeutic potential of PAT.

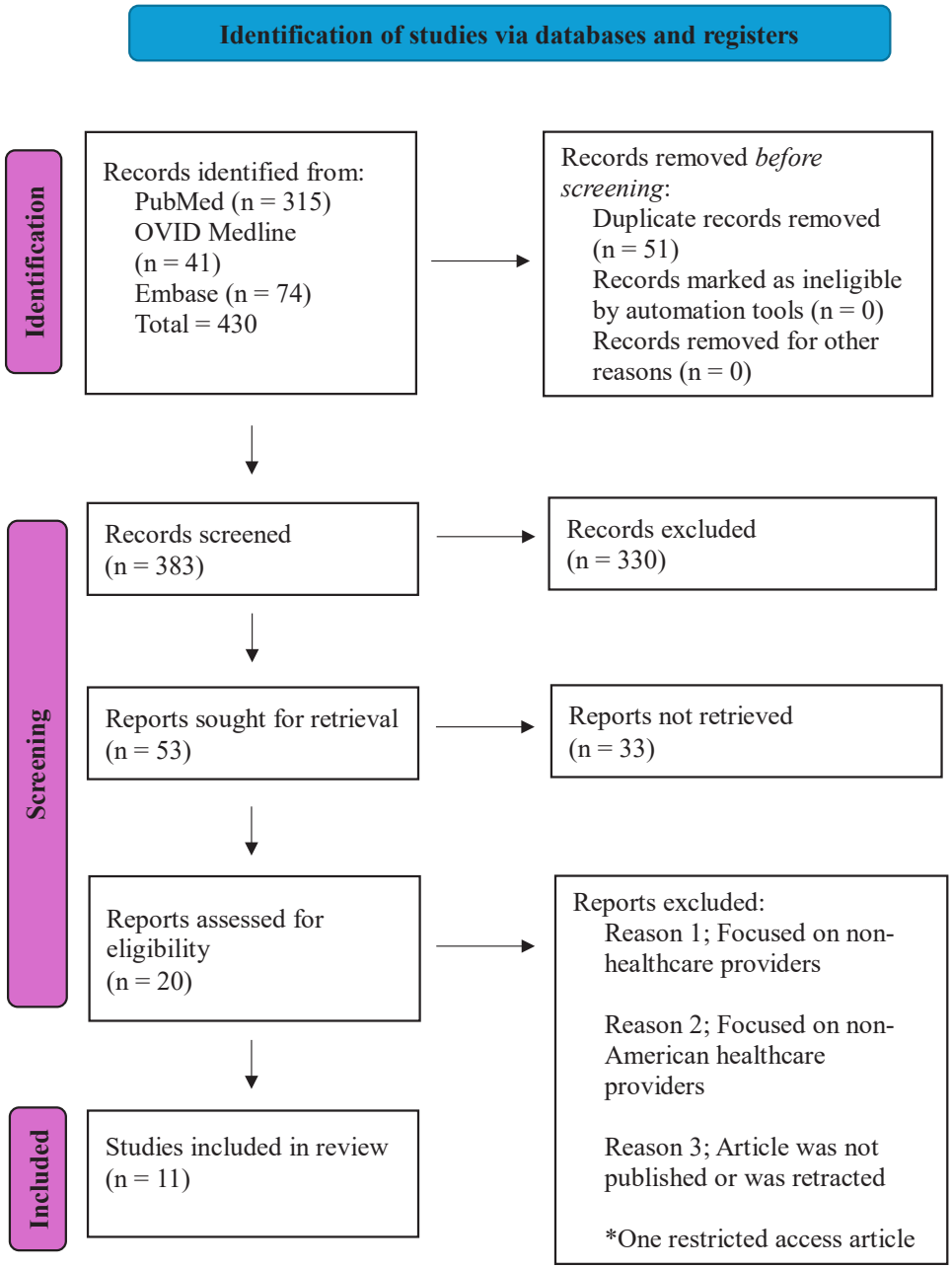

Figure 1. PRISMA flowchart for article selection

Table 2. Summary of Various Healthcare Providers' Attitudes Toward PAT (11 articles)

Author	Study Design	Healthcare Profession	Healthcare Providers' Attitudes & Perspectives	Study Limitations
Barta et al.[22]	Systematic Review (n=9 studies)	Undisclosed	-Greater awareness of PAT led to more receptive attitudes -Unreceptive attitudes over risks, ethics, media portrayals, practical barriers and stigma -Supported further research and education on PAT	-Exclusion of culturally diverse attitudes (such as traditional healers) -Mostly White participants limiting generalizability -Only studied four countries
Davis et al.[23]	Survey (n=366)	Clinical Psychologists	-Cautiously favorable attitude due to psychiatric and neurocognitive risks -Lack of understanding on psychedelics -Support for consultation and further research	-Low sample size creating sampling bias -Self-report, social desirability and stigma could influence results -Only surveyed clinical psychologists -Type 1 errors
Kim & Suzuki[24]	Survey (n=145)	Addiction Specialists	-Overall positive attitudes -Significant support for legalization -Concern for addictive potential -Greater awareness of PAT research led to more receptive attitudes	-Low response rate (32.4%) and sample size -Self-selection bias limited generalizability -Type 1 errors -Did not assess how clinical practice settings affect attitudes -Did not account for nonclassical psychedelics (e.g. Ibogaine)
Kucsera et al.[25]	Survey (n=237)	Psychiatrists, Psychologists, Therapists, Social Workers	-Limited knowledge on psychedelics and counselling -Supported further research, recreational & medical use and therapeutic potential -Concern over psychiatric risks -Uncomfortable discussing the effects of use -Increased knowledge led to more receptive attitudes	-Selection bias -Only included participants from California limiting generalizability -Self-report measures of clinical practice could lead to misclassification
Hearn et al.[26]	Survey (n=223)	Counselling Professionals	-No clear stance on PAT -Expressed concern over psychiatric and cognitive risks -Supported therapeutic potential -Older age and experience led to less positive attitudes -Females had less positive attitudes than males -Personal use of psychedelics led to more positive attitudes	-Low response rate (10%) -Self-selection bias -Did not assess counsellors' knowledge on psychedelics -Most participants from Wyoming and Ohio -Respondents were mostly White (83%) limiting generalizability -Did not analyze psychedelic-specific risks or stigma
Wang et al.[27]	Survey (n=879)	Physicians, Nurses, Mental Health Providers (MHPs)	-Supported therapeutic potential and legalization of psilocybin and MDMA, favoring psilocybin -Low knowledge on therapeutic use, risks, and pharmacology -Concern over untrained providers, cost, and contraindications	-No delineation between psilocybin-containing mushrooms and clinical grade psilocybin affecting attitudes -Convenience sampling and self-reports may create sampling and selection bias

			-Psychedelic use, increased knowledge, younger age, and profession predicted receptivity	-More psilocybin research than MDMA -Most participants were White females, limiting generalizability
Niles et al.[28]	Thematic Analysis of Interviews (n=19)	Physicians, Nurses, Psychologists, Social Workers	-Supported further research and access to PAT -Allows patients to reframe existential struggles -Alternative therapy to sedation or MAID -Concern over insufficient research & education, stigma, addiction and long-term risks -More negative attitudes toward LSD compared to psilocybin and ketamine -Difficult to integrate PAT into existing treatments	-Convenience and snowball recruiting methods may create sampling bias -Sample was skewed towards younger and less experienced clinicians who may have more positive attitudes -Minimal racial diversity limiting generalizability
Wells et al.[29]	Systematic Review (n=29 studies)	Psychiatrists, Doctors, Psychologists, Counsellors, Therapists, Support Workers	-Mixed beliefs on therapeutic potential -Male gender, younger age, and personal use predicted favourable attitudes -Supported more research and education -Concerns about legal status, funding, access, side-effects, and implementation -Limited knowledge on therapeutic application, risks and benefits	-Some studies had poorly outlined rationales, low sample sizes, unjustified data collection tools and incomplete reporting -Search criteria was adjusted after search which could have led to missing articles -Some of the included studies did not address the original research objectives
Reynolds et al.[30]	Survey (n=245)	Cancer healthcare practitioners	-Potential benefits for cancer patients -Supported PAT research including spiritual and Indigenous perspectives -Previous research experience predicted referrals to PAT trials -More experienced doctors were less likely to support further PAT research	-Attitudes were not stratified by different U.S states -Convenience and snowball recruiting methods could have led to self-selection bias limiting generalizability
Szpak et al.[31]	Survey (n=146)	Peer Recovery Coaches, Addiction Recovery Coaches	-Supported the use of psychedelics for substance use disorder (SUD) -Supported additional training and education -Concern over harmful effects, addiction relapse and legalization -Participants using 12-step programs were concerned about harmful effects -Personal history of psychedelics led to greater support for use in SUD treatment	-Low response rate (13.5%) -Participants only came from Massachusetts limiting generalizability -Sample participants were too homogenous -Did not consider how work settings or specific psychedelics could influence attitudes -Self-users were not controlled for, biasing attitudes
Sims and Holzworth[32]	Survey (n=168)	Social Workers	-Overall positive attitudes -Personal use, previous training, being male, and non-Christian predicted positive attitudes -Low knowledge on delivering psychedelics with psychological support, but willing to learn	-Convenience sampling led to unrepresentative sample population and self-selection bias -Personal use of psychedelics was not controlled for, biasing attitudes

PAT – Psychedelic-assisted Therapy; MDMA – 3,4-Methylenedioxymethamphetamine; LSD – Lysergic acid diethylamide; U.S – United States; SUD – Substance Use Disorder

DISCUSSION

The following section will discuss how negative media portrayals of psychedelics can bias attitudes toward PAT. Additionally, educational and regulatory actions required for the effective implementation of PAT into clinical practice will be discussed. Finally, the therapeutic promise and neuropsychiatric risks associated with psychedelic use will be highlighted.

Risk of Bias in Negative Media Reporting of Psychedelics

One of the most prominent examples of media framing to produce bias is COVID-19 coverage in the US. The use of the term "Chinese virus" by politicians and the media generated rampant misinformation and inflamed bigotry towards East Asian communities.[33] Blaming a disease on a specific ethnic population can reinforce xenophobia, stigma, and even shape public health policy in directions that are not evidence-based. This was observed at the beginning of the pandemic when misinformation regarding the origin of the virus led to a spike in anti-Asian hate crimes, racial profiling, and refusal of care by Asian-presenting healthcare providers.[34] This type of racialized framing also affected trained professionals. A national U.S. survey of healthcare workers found that Asian American medical professionals reported heightened workplace discrimination, patient mistrust, and even verbal abuse, contributing to psychological distress and professional burnout during the pandemic.[35] These findings demonstrate that biased media narratives can not only shape public sentiment but also permeate clinical environments, affecting how trained professionals are perceived and treated within the healthcare system.

Likewise, the general heritage of negative media representation of psychedelics as harmful, illegal drugs devoid of medicinal utility, has influenced professional and public opinion. The current public discourse broadcasts the use of psychedelics to the general population in a criminal, deviant, or plain socially undesirable context, minimizing or disregarding growing clinical research findings for the therapeutic promise of psychedelics.[36] This biased coverage is perhaps one factor in healthcare professionals' hesitation to view PAT as a viable treatment approach.

A response was justifiably warranted to counter the misinformation and racial bias amidst the COVID-19 pandemic with responsible reporting and public education, so the same should be warranted to clear up myths surrounding PAT. Clearly, there is a need for evidence-based education to aid healthcare professionals in critically evaluating emerging research, separating fact from stigma, and developing informed, unbiased positions regarding psychedelic therapies.

Increasing PAT Awareness, Training and Education Among Healthcare Professionals

As PAT clinical practice evolves, clinicians need to develop a sophisticated knowledge of its mechanisms, benefits, and limitations. To address this need, the American Psychedelic Practitioners Association (APPA) released 12 guidelines in 2023 to instruct practitioners in this new and evolving field.[37] The first three guidelines are directed at raising awareness, training, and education to support the safe and effective translation of PAT into clinical practice.

Increasing Awareness through Licensure and Certification

The initial guideline to raise awareness, encourages practitioners to familiarize themselves with the licensure and certification organizations overseeing PAT. Licensure, aside from being mandated by law, delineates a framework of professional duty. Certification requirements generally demand substantial education and supervised clinical practice, which are designed to supply a level of competence that is standard in nature among practitioners. By adhering to these standards, practitioners guarantee their commitment to the delivery of evidence-based and ethically appropriate care. Apart from this, increased awareness of regulatory requirements reduces possible legal risks and promotes more organized and rightful practice of PAT.

Comprehensive Training in Psychedelic Medicine

The second guideline points to the imperatives of thorough training of health professionals to equip them with the skills to navigate the complex psychological, physiological, and spiritual components of psychedelic experiences. Unlike other pharmacotherapies, PAT involves profound shifts in consciousness that demand specialty therapy intervention. Successful training programs must therefore involve a multidisciplinary curriculum in neuroscience, psychopharmacology, psychotherapy practices, harm reduction approaches, and ethics.

Other institutions have already developed education modules for these training needs. Yale University, for example, introduced an elective course, *Psychedelic Medicine: Past,*

Present, and Future, on some of the most significant topics such as indigenous healing traditions, psychedelic neurobiology, historical and contemporary research, clinical treatment models, and ethical considerations for psychedelic medicine[38]. The course has been popular, and this only goes to highlight the necessity of formal training courses in this discipline. Practitioners become competent and credible when they undergo such training, which serves to promote increased peer and patient confidence.

Dedication to Continuing Education and Professional Development

The third guideline is the need for continuing education and exposure to the latest research in PAT. As this is a rapidly evolving discipline, it is critical that practitioners remain cognizant of emerging clinical trials, evolving therapeutic paradigms, and updated regulatory guidelines. Continuing education may be obtained in many formats, including formal classes, attendance at professional conferences, participation in peer-reviewed research, and consultation with experts in the field. In addition, developing core therapeutic competencies—i.e., having a good relationship with patients, being non-judgmental and empathetic in one's presence, and being dedicated to highest ethical standards—is still at the heart of delivering effective PAT. For instance, Mastinu et al.'s review is a broad synthesis of psychedelic plant derivatives, pharmacological effects, legal frameworks, and clinical applications and is therefore an exceedingly helpful report for clinicians wishing to develop their knowledge practice in psychedelic medicine.[39]

Neurocognitive and Psychiatric Effects of Psychedelic Use

Concerns about the long-term neurocognitive and psychiatric consequences of psychedelics remain a powerful discouragement to their overall clinical embrace. A systematic review conducted by Velit-Salazar et al. discussed the neurocognitive consequences of various psychedelic drugs, including MDMA, cannabis, psilocybin, LSD, and ayahuasca, in otherwise healthy individuals.[40] The findings suggest that while the drugs hold therapeutic potential, they also pose novel risks to cognitive function and mental health.

MDMA impaired response inhibition, memory, and cognitive flexibility and induced rigid decision-making patterns.[41-46] Psychomotor performance, however, was improved when on MDMA. Cannabis, on the other hand, demonstrated widespread cognitive impairments, with detrimental effects on motor coordination, attention, memory, processing speed, and executive function.[47-49] LSD was found to be related to processing speed, memory, and executive function impairment but yielded inconclusive results for the effect on attention. Interestingly, certain studies also reported language-based skill improvement with LSD use.[40] Psilocybin was reported to exert a negative effect on executive function, processing speed, memory, and psychomotor function but is unclear regarding its effect on attention.[40] Ayahuasca, a natural plant psychedelic, was associated with executive function and memory impairment as well as reduced reaction time paradoxically[50].

Aside from cognitive effects, psychiatric effects of psychedelic use have also been reported. A case series systematic review by Yildirim et al. evaluated the prevalence of psychiatric conditions following psychedelic use.[51] The review identified seventeen schizophrenia, seventeen affective disorders (depression, mania, or both), three anxiety disorders, one depersonalization disorder, and one case of an unclassifiable psychiatric condition that occurred following the use of psychedelics.

Worryingly, 11 of 17 instances of affective disorders and schizophrenia occurred after a single psychedelic drug experience.[51] In spite of symptom resolution over time in some of the patients with drug-induced affective disorders and flashback symptoms, long-term psychiatric disturbance was noted in most of them.[51]

The risk of adverse psychiatric outcomes following psychedelic use may also be tied to individual vulnerability, particularly genetic predisposition to psychotic or affective disorders. Serotonergic hallucinogens such as LSD and psilocybin are known to exert psychomimetic effects, transiently inducing experiences that resemble psychosis, including perceptual distortions, paranoia, and ego dissolution.[1] These effects are generally short-lived in healthy individuals but may precipitate or unmask underlying psychiatric illness in susceptible populations.[41,52] Genetic predisposition to schizophrenia and bipolar disorder, for instance, has been implicated in amplifying sensitivity to serotonergic dysregulation and cortical excitation, both of which are core neurochemical effects of classical psychedelics.[3] In light of this, most modern PAT trials explicitly exclude participants with a personal or first-degree family history of psychotic disorders, acknowledging the elevated risk of decompensation in this population.[53] In the

large-scale review conducted by Yildirim et al, many of the reported cases of psychedelic-induced schizophrenia or mania likely reflected the emergence of latent psychopathology rather than de novo onset in previously unaffected individuals.[51] Thus, while concerns about long-term psychiatric sequelae are valid, they must be contextualized within the broader framework of pre-existing vulnerability and trial design.

These results highlight the need for a guarded and evidence-driven strategy for incorporating PAT into clinical practice, requiring careful patient screening, clearly established dosing regimens, and follow-up evaluations to avert adverse effects. As studies in this area evolve, further research is needed to clarify the determinants of adverse outcomes and to create detailed guidelines for optimizing therapeutic benefit while ensuring patient safety.

Comparative Provider Attitudes Toward Other Controversial Therapies

To contextualize healthcare professionals' views on PAT, it is informative to examine attitudes toward other once-stigmatized therapies such as medical cannabis and ketamine. Similar to psychedelics, early perceptions of medical cannabis were marked by skepticism due to its recreational use and legal status. However, studies have shown that as evidence accumulated for its efficacy in chronic pain, multiple sclerosis, and chemotherapy-induced nausea, provider attitudes became more favorable—especially among younger physicians and those with greater clinical exposure to cannabis therapies.[54] Ketamine, traditionally used as an anesthetic, also faced initial resistance due to its dissociative and addictive potential. Yet, growing evidence for its rapid-acting antidepressant effects in treatment-resistant depression has led to broader acceptance, particularly in psychiatric settings, though concerns about long-term cognitive risks and misuse remain.[55,56] These parallels suggest that attitudes toward emerging therapies are often shaped less by the intrinsic properties of the substance and more by regulatory legitimacy, public discourse, and the strength of clinical evidence. Thus, the evolving perceptions of cannabis and ketamine provide a roadmap for understanding the cautious optimism—and ongoing concerns—surrounding PAT.

Strengths and Limitations of the Final Articles

A key strength of the systematic reviews conducted by Barta et al. and Wells et al. was their comprehensive synthesis of attitudes, concerns, and predictive factors within a single publication.[22,29] However, the review conducted by Barta et al. was limited by the narrow participant demographic and the inclusion of only four countries.[22] The review by Wells et al. was limited by the poor quality of analyzed papers and the revision of the search criteria which could have led to missing articles.[29]

The eight cross-sectional surveys benefited from larger sample sizes but shared common methodological limitations. The use of self-reports, convenience sampling and snowball recruitment techniques could have led to sampling and selection bias thus limiting the generalizability of the findings. Other survey limitations included homogenous sample participants, low response rates and the potential for bias among participants who had personal histories with psychedelics.[23-27,30-32]

Niles et al. conducted the only content analysis among the selected studies, providing valuable insights from healthcare providers with firsthand experience using PATs in clinical practice.[28] Furthermore, the study compared attitudes toward different psychedelics offering more specific views. However, the same study was limited by convenience and snowball recruiting techniques.[28] Furthermore, Niles et al. reported that their sample skewed toward younger, less experienced clinicians with minimal racial diversity, resulting in an unrepresentative participant pool.[28]

Limitations of the Present Review

This review has several limitations that must be acknowledged. Firstly, there is a notable scarcity of literature that examines how attitudes toward different psychedelics vary by profession. Popular psychedelics benefit from increased media exposure and accessibility by garnering more research interest. However, this possibility makes it challenging to evaluate the attitudes toward less popular psychedelics. Moreover, the search criteria employed may have inadvertently excluded relevant and insightful articles, particularly those focused on less common psychedelics.
Another limitation was the disproportionate representation of psychiatrists and psychologists in the selected studies, which restricted the ability to identify meaningful differences in attitudes across a broader range of healthcare professionals. However, it is important to acknowledge that the predominance of psychiatrists and psychologists in the literature may, in part, reflect the current regulatory and professional landscape of PAT. In most jurisdictions, psy-

chotherapy is a controlled act legally restricted to certain professionals, including psychologists and psychiatrists, who are also most likely to possess the clinical authority to supervise or prescribe psychedelic treatments under investigational or compassionate-use frameworks.[57] Consequently, their overrepresentation in PAT studies may not reflect a sampling bias, but rather the reality that these professionals constitute the core group qualified to implement and evaluate such therapies. This underscores the need for future research to explore interdisciplinary collaboration in PAT delivery, while recognizing the specialized training and legal scope of practice that currently centers PAT within mental health disciplines.

Another important limitation concerns the potential for sampling bias across the included studies. Many relied on self-selected participants from professional organizations or online surveys, which may overrepresent individuals with pre-existing interest or favorable views toward PAT, thereby skewing results. Furthermore, definitional inconsistencies across studies—such as variable criteria for what constitutes "support," "concern," or even "psychedelic-assisted therapy"—complicate direct comparisons and synthesis of findings. These disparities limit the interpretability of aggregated data and may obscure subtle but meaningful differences between professional groups. The lack of longitudinal data in most included studies also hinders our ability to evaluate how attitudes evolve over time, especially in response to shifting legal frameworks or emerging clinical trial results. Finally, the use of only U.S.-based studies introduces a geographic bias that may limit the global applicability of our findings. Given that healthcare delivery models, regulatory structures, and cultural attitudes toward psychedelics vary internationally, these results may not fully reflect the perspectives of clinicians in other countries.58 Future research should prioritize more representative sampling, harmonized definitions, cross-national comparisons, and longitudinal tracking to enhance the generalizability and depth of understanding in this emerging field.

The present study was not able to examine one relevant article due to restricted access. The article was titled *Psychoanalyst attitudes towards psychedelic-assisted therapy* and was published by Kraiem et al.[59] Although, efforts were made to contact the author, the paper remained inaccessible which limited the scope our review.

In spite of these limitations, the overall effect of this review is still robust. The fact that a variety of healthcare professionals were included gives a wide-ranging view of attitudes towards PAT, counteracting the overrepresentation of psychologists and psychiatrists. Furthermore, an attempt was made to obtain a high breadth of studies by using extensive search criteria, reducing the exclusion of pertinent articles. Although a few psychedelics garnered more media attention than others, the trends found nevertheless offer useful insight in the context of general perception of PAT. Finally, the absent study was discussed openly so that its absence cannot take away from the integrity of our results.

CONCLUSION

Overall, the healthcare professionals across the different disciplines had a cautious positive perception of PAT. Though there was consistency in the recognition of its therapeutic value, the objections were discipline-specific, reflecting bias and concerns in each discipline. Some of the major recommendations emerging from this review are increased awareness, profession-specific training, and ongoing updating of healthcare professionals for facilitating informed and responsible adoption of PAT. Second, this review underscores the necessity to respect the presumed neurocognitive and psychiatric risks of psychedelic administration. Such considerations need to guide the next phase of developing proof-of-concept protocols that maximize therapeutic benefit and minimize risk. Further research would need to longitudinally evaluate the effect of targeted training and education interventions on the attitudes of healthcare professionals towards PAT. Clinical trials evaluating the effectiveness and harms of PAT would also be imperative to informing best practice and evidence-informed policy regarding the implementation of psychedelics in mainstream clinical practice.

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Conflicts of Interest Disclosure
There are no conflicts of interest to declare.