

COMMENT

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Beyond the numbers: reimagining healing with psychedelics for eating disorders

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Abstract

Psychedelic medicine is currently being evaluated for numerous mental health indications, and there is significant interest in applying these models of care to eating disorders (EDs) given the limited efficacy of available treatment models, especially for those living with anorexia nervosa. Preliminary findings across a number of studies suggest promise. In this commentary, researchers with experience in psychedelics and EDs present a rationale and considerations for the application of psychedelic medicine, including psychedelic-assisted therapy (PAT) for EDs. These contributions are informed by those with lived experience as well as the authors' experiences in the field. By addressing underlying psychological and transpersonal factors and improving treatment engagement, psychedelic medicine, though not without risks, may offer a valuable adjunct to existing treatments, enhancing overall outcomes for some living with an ED. This commentary also aims to provide a multi-dimensional perspective to inform the field, including with respect to the etiology of these illnesses, as psychedelic medicine becomes more accessible in naturalistic, research and clinical settings.

Keywords Psychedelics, Eating disorders, Anorexia nervosa, Psilocybin treatment

Beyond the data: reimagining healing with psychedelics for eating disorders

Some psychedelic substances have been used in indigenous traditions for healing and sacramental practices for millennia. Recent years have seen a surge of interest in the potential of psychedelic compounds in the treatment of mental health conditions. Psychedelic medicine involves the use of psychedelics (e.g., psilocybin, lysergic acid diethylamide [LSD], dimethyltryptamine [DMT], mescaline) or psychedelic-like compounds (3, 4-Methylenedioxy methamphetamine [MDMA], ketamine) for

healing. Existing studies suggest that recovery efforts that are supported by psychedelics may be a potent tool for developing new perspectives and exploring meaningful psychological and mnemonic material. Psychedelic-assisted therapy (PAT) is the combination of these medicines with therapeutic support. Both research and naturalistic settings emphasize the potential value of drug-free psychotherapeutic preparation and integration sessions enveloping the drug session to support psychological healing when using psychedelic medicines.

Given the current paucity of effective treatments, there is a natural interest in psychedelic medicine, including PAT, as a potential treatment for eating disorders (EDs). A handful of researchers and research centres across the world have begun to explore this avenue and have uncovered promising preliminary results pointing to its potential. Here we bring together four lead researchers on psychedelics in the treatment of EDs to provide an overview of their research and to share their observations and insights. These observations and insights are informed by data as well as qualitative experiences with research

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participants and anecdotal reports. Reflective of current research, many of these insights pertain to anorexia nervosa (AN), however a variety of voices are included. We hope that this commentary will not only provide insight into the potential for psychedelic medicine but inspire clinicians and researchers to think differently about assessment, treatment, healing, and recovery from an ED, with and without the support of psychedelics.

Introduction to the researchers

Dr. Stephanie Knatz Peck served as co-investigator and lead clinician on a Phase 1 pilot study evaluating psilocybin treatment (single 25 mg synthetic dose of psilocybin delivering alongside psychological support) for AN and has been involved more broadly with clinical research investigating psilocybin treatment for mental illness. This study was the first published formal clinical study of a psychedelic treatment for AN (Knatz [9]). Though larger, controlled trials are needed to substantiate these findings across sub-groups, the results of this pilot study suggest that psilocybin treatment can be safe, tolerable, and highly acceptable for some people from this vulnerable population. Outcome analyses also suggest that the treatment may be promising in reducing ED psychopathology in a subset of those with AN. Seventy percent of the sample endorsed an overall quality of life improvement and a shift in personal identity, and 40% achieved clinically significant reductions in ED psychopathology, sustained at 3-month follow-up. Preliminary findings show high treatment acceptability and self-reported quality of life improvements in most, and a potential pathway for cognitive ED improvements in a subset, irrespective of weight gain. These conditions, while not sufficient for full recovery, are necessary and often missing in currently available treatments. Treatments that improve engagement rates and directly target core psychopathology are needed and may represent an important adjunct.

Dr. Meg Spriggs was a lead research associate for a study of psilocybin-assisted therapy for AN at Imperial College London [12]. This study was preceded by a survey study indicating that psychedelic experiences increased wellbeing and decreased symptoms of depression in people living with EDs [13]. The drive to establish this trial came from Meg's lived experience of AN and her first hand understanding of the paucity of effective treatments. The lived experience voice was further included in protocol design through Public Patient Involvement (PPI), which informed procedures and measures used in the trial [12]. The pilot study aimed to assess the feasibility and preliminary outcomes of treating AN with psilocybin-assisted therapy (NCT04505189). Over a period of 6 weeks, participants partook in eight study visits, including three psilocybin dosing sessions of up to 25 mg,

MRI scans, EEG recordings and a range of psychological measures (questionnaires and interviews). Participants identified a next-of-kin who was provided with education and support throughout the trial informed by theory and techniques of Emotion-Focused Family Therapy (EFFT, Lafrance et al., 2019). This was the first study of psilocybin-assisted therapy for AN to include both qualitative and quantitative measures from an identified support person. Across the 21 individuals who took part in the trial (M age = 32, M BMI at screening = 16.4, M length of illness = 10.8 years), there was generally good tolerability and promising efficacy data at the end of the 6-week trial period and at 3-month follow-up—as based on the Eating Disorder Examination (EDE), global scores. Further results are forthcoming.

Dr. Natalie Gukasyan has been involved as a clinical researcher in trials of psychedelics for therapeutic purposes, and written broadly on the topic of EDs and psychedelic-assisted therapies [4], as well as the effect of psychedelics on menstrual function, which may be impacted in people with a history of ED [2]. She served as lead investigator and clinician on a pilot study of psilocybin-assisted therapy for individuals with AN (NCT04052568). The open-label pilot study investigated the effects of up to four doses of psilocybin (with doses between 20 and 30 mg) with psychotherapeutic support in a cohort of participants with at least three years since diagnosis and at least one previous attempt at treatment. Preliminary findings from 19 participants showed medium to large effect sizes for improvements in quality of life, ED symptom severity, and mood at one-month post treatment (Gukasyan et al., in preparation). Subjective drug effects such as rates of attribution of personal meaning or spiritual significance were rated lower compared to prior studies in other populations without AN, reflecting anecdotal reports of lower intensity subjective effects compared to individuals without EDs. Participants experienced typical rates of common mild adverse effects of psilocybin such as nausea and headache, though few instances of elevated blood pressure or heart rate. While not always clearly related to psilocybin, significant medical adverse events were expected and were indeed encountered in the study, including one severe adverse event involving a participant with symptomatic bradycardia requiring inpatient monitoring a week after receiving psilocybin. Another notable event involved a volunteer experiencing syncope during a treatment session. Overall, however, the intervention was broadly well tolerated and acceptable.

Dr. Adele Lafrance has been involved in several qualitative and quantitative studies exploring the potential of psychedelic medicine for EDs over the last decade. Highlights include a qualitative study on the use of ayahuasca

EDs indicating its potential with respect to improved body perception and emotion processing, enhanced interpersonal relationships, spiritual connectedness, and reduction or cessation of ED symptoms [5]. A follow-up study also revealed that, in comparison to conventional treatment, participants felt ayahuasca had provided more effective, “deeper” healing, facilitated love, self-love, and self-care; added a welcome spiritual element to ED healing; and could complement standard treatment [10]. More recent studies have involved qualitative interviews of ceremony leaders perspectives on the use of ayahuasca in the treatment of EDs [14], including special considerations [15]. A recent study on the use of MDMA-assisted therapy (MDMA-AT) in the treatment of post-traumatic stress disorder (PTSD) showed significant reductions in ED symptoms in a randomized placebo-controlled trial [1]. In those who completed the study ($n=82$), significant reduction were noted in total Eating Attitude Test (EAT-26) scores in the total group of PTSD participants following MDMA-AT versus placebo. There were also significant reductions in total EAT-26 scores in women with high baseline EAT-26 scores following MDMA-AT versus placebo. A group-based ketamine study also indicated the potential for this medicine to be used in residential ED treatment to target co-morbid symptoms [11]. In this study, the majority of the participants experienced clinically significant improvements in a measure of depression and dosing sessions were well tolerated with no serious adverse events reported. Finally, a recently completed trial on the application of Emotion-Focused Ketamine-Assisted Therapy (EFKAP) for AN which involved EFFT-informed caregiver support also revealed promising results in that no serious adverse events occurred and, relative to baseline, there were significant improvements in ED psychopathology, anxiety, emotion dysregulation, embodied experiences, self-esteem, and self-compassion (Lafrance et al., in preparation).

What have we learned from research on psychedelics for eating disorders?

Although extant literature remains limited, the above studies indicate that psychedelic medicine may be a promising avenue for the treatment of EDs and deserves further pursuit. Our work has offered new insights into the complex nature of the disorder as well as providing a lens through which to identify limitations with conventional treatment. We wish to encourage continued research across the continuum of severity for the different presentations of ED, and we offer a few ideas for consideration—punctuated by quotes from those with lived experience—that extend beyond traditional outcome measures. Whether or not clinicians integrate

psychedelic medicine into their work, these insights may also offer valuable lessons for the field at large.

First, it is common knowledge that current treatment options for EDs, and AN in particular, carry significant limitations. Many have high rates of treatment non-response and relapse, and no single treatment has clearly proven to be superior. Furthermore, current treatments are often inadequate with respect to addressing and/or resolving core symptoms. Conventional treatments can rely on weight restoration as a primary driver for reductions in AN pathology. While weight restoration is unequivocally important, it does not always lead to cognitive remission and reductions in mental psychopathology, and therefore it seems that many people continue to suffer in “partial remission” or with an invisible or unrecognized illness. Furthermore, treatment utilization and engagement rates are low, in part because of the behavioral focus on nutrition and weight rehabilitation, a primary feared outcome for many who struggle. Psychedelic medicine and PAT may emerge as treatment options that are more client-centred, perhaps enabling individuals to reconnect with hope and redefine recovery. By reframing recovery as a process of rediscovering autonomy and self-identity, psychedelic medicine not only offers a promising avenue for addressing core symptoms associated with ED, but also for questioning traditional views of EDs as resistant to change. Through this approach, people are empowered to set their own goals and take ownership of their recovery journey, fostering a sense of agency and motivation that may be lacking in conventional treatment modalities. This can result in a deepening of connections to identities outside of their ED for those we support. A study participant shared:

I think the first thing that I did was grieve how much I put myself through. I felt like I was forgiving myself for what I'd done and then I had this weird, almost like turnkey thought process of, you don't have to live as her. And I was able to visualize myself from the outside, like outside of my body and I just saw this version of myself. Almost like a puppet. [...] The way I look, the clothes I wore, the body I was living in, the job I had, the friends I had, the personality I embodied [...] and so I think when I had that moment of, you don't have to live as her, you could be whoever you want to be without judgment, without anorexia, without all of these things.

Another shared:

I had this feeling of realizing that I thought my eating disorder was me, being responsible for my life and taking control of my life. And then after dosing, I remember feeling like participating in my life and being active in it and being self-aware. I just

had this, like, great sense of responsibility. And so I feel like that's been the biggest change I've carried is reminding myself and being in check. This is me being responsible for my life and no one else. It's just like up to me to like whether I keep on this positive trajectory going forward.

We would also like to emphasize the nuanced approach required in facilitating behavior change among those with ED through PAT specifically. While preliminary results have been encouraging, the context beyond the psychedelic compound must be carefully considered for some. The importance of “setting” to the outcomes of psychedelic therapy has received much attention in the literature. Setting refers to the context beyond the drug, and this extends beyond the therapy room, to adequate pre-drug preparation and post-drug integration. This is why we refer to therapy with psychedelics as *psychedelic-assisted* therapy and view it more as a psychotherapy than a drug treatment, in particular for EDs. There are few other contexts where adequate integration following the drug experience is more important, and for additional long-term therapeutic intervention whilst participants are more receptive to addressing underlying psychological factors. This may vary for individuals but could include both nutritional and psychological support.

Relatedly, psychedelic medicine paradigms offer an opportunity to examine factors that may be unique to the etiology of one's illness, and not frequently addressed in current treatments. For example, some people shared that through their psychedelic healing experiences, they came to reconceptualize their illness as a response to the historical oppression of women in their lineage, as a means of coping with unexpressed emotions because of dominant culture messaging to which they and their families were inculcated, or as a protective response to external circumstances in the absence of sufficient resources. Some also reported transpersonal understandings of their suffering which proved to bring tremendous meaning to their healing journey. A woman who healed with psychedelics in naturalistic settings offered this anecdote:

An eating disorder is so complex and like there are so many layers and I definitely found that through working with psychedelics there was this ability to really see the map, that involved my lineage, the collective and my early childhood development, like this tapestry of forces, of cultural forces, of institutional forces, community, family through the generational line, and in some ways I was quite intimidated, seeing the complexity of it all but it also showed me the way through.”

Uncovering a narrative that includes a more personalized understanding of illness – and that de-pathologizes and de-stigmatizes their experience—offers insight, perspective, and can create the conditions for one to feel more deserving of support, as well as more engaged and connected to a path forward in recovery. It can also be a powerful antidote to the hopelessness that often emerges in situations where individuals are deemed “treatment-resistant”, a term that can be highly stigmatizing for people who already carry such deep self-stigma.

We also found across our investigations that participants generally experienced psychedelic medicine in a positive manner, and as fundamentally different from conventional treatments. In fact, a number of participants spoke of the importance of a focus on love – including self-love and universal love with the therapist/co-therapist team, as well as deeply spiritual experiences. This was in stark contrast to their reports relating to previous experiences of ED treatment, and an important marker of high acceptability.

I think it was the first and only time of my life that I can remember actually wholeheartedly feeling like I loved myself. And I just felt this universal kind of feeling of connectedness with every other living being, human, animal, plant and just like kind of this connectedness to this kind of higher sense of good and love that. And I felt like if I was a part of this beautiful world, this beautiful system, this beautiful, connected system of love and unanimity. And just so you know, like if I feel this love and connectedness to other beings and that means that I'm inherently deserving too.

In line with advances in the field, some of our experiences also suggest that family involvement—whether of origin or chosen—can be critical in these contexts. Healing with psychedelics can lead to rapid and sometimes dramatic changes to a person's experience of themselves and of others/the world. It can also uncover challenging memories or emotions that have been outside of awareness for years. As such, the “integration” phase of psychedelic medicine and PAT can be as important as the drug experience itself, particularly for EDs where healing is often a protracted and active process. It can therefore be tremendously helpful to prepare an individual's support system both with skills and support for navigating these potentially challenging situations. Strategies to support family members throughout the therapeutic process have included: providing comprehensive information about the therapy protocol, increasing awareness of potential disruptions to established systems during the healing process, preparing family members for the emergence of new perspectives, behaviors, or emotions (like anger) in

their loved one, and providing them with skills and practice to respond effectively. With the participant's consent, family members have also been provided with support to navigate challenges or difficulties they may have personally experienced alongside their loved one's healing trajectory. We have observed that this involvement of family has been powerfully important for all involved.

While further research is needed to fully elucidate its efficacy and safety, psychedelic medicine may offer a promising avenue for empowering individuals in their recovery journey by fostering the sense of hope, autonomy, and agency that are crucial for long-term freedom from the cognitive, emotional and behavioral symptoms of EDs. The collection of our work also highlights the importance of the lived experienced voice beyond the confines of formal study, and a unique potential for psychedelic medicine beyond what can be captured by research measures alone. The research and practice of psychedelic medicine can also serve to inform the evolution of conventional medical and psychotherapeutic approaches more generally, including the potential importance of love and spirituality as legitimate healing technologies, and the integration of inter-generational and socio-cultural influences in the understanding of EDs. In fact, the field could benefit from broadening the conceptualizing of the etiologies of EDs, thereby enhancing psychological safety for those we serve.

We also wish to note that psychedelic medicine, and perhaps in particular when offered to support those living with EDs, can carry a range of medical and psychological risks. While not always clearly related to psychedelic medicines, adverse events, including at least one severe adverse event, have been observed following psilocybin as described above. Though more emphasis seems to be placed on physical risks in the context of formal study—and with good reason—we are equally concerned with the potential psychological risks that may come with inadequate support before, during and after psychedelic experiences from well-informed clinicians and close others. The desperation for healing, coupled with the current enthusiasm regarding the potential of psychedelic medicine, may propel some people with EDs toward psychedelic medicine experiences without sufficient preparation or weighing of risks. Given the growing interest in psychedelics and the increasing accessibility through initiatives like state-level legalization of natural psychedelic products, healthcare providers should strive to remain informed and prepared to engage in harm-reduction discussions with people with ED considering psychedelic use. Finally, as some of the consciousness-altering substances noted in the paper come from

indigenous traditions, the field of eating disorders could greatly benefit from the wisdom of those who have been serving these medicines for millennia as we continue to re-imagine treatments for those living with ED. We wish to encourage the fostering of collaborations between practitioners of traditional medicines and researchers and clinicians in the field in order to move bridge different paradigms of healing.

Final author's note

For some of us, our time spent in researching psychedelic medicine for EDs has been more than an academic exercise. Meg Spriggs stepped away from her role leading the trial in 2022 due to a relapse of her own ED and to focus on her own healing. This was a difficult yet pivotal decision for her own wellbeing. The time Meg spent understanding the potential of psychedelic therapy contributed to a re-framing of the eating disorder she had been living with for over 12 years:

"I have no doubt that witnessing the client-centred and empowering process of self-rediscovery enabled through all facets of psychedelic therapy contributed to my personal journey to healing. For that I am eternally grateful."

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Declarations

Ethics approval and consent to participate

All above referenced studies conducted by the authors were reviewed and approved by institutional review boards.

Competing interests

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