




## Original Research

# Amid magic and menace: psychiatrists' attitudes to psilocybin therapy

Andrew Gribben<sup>1</sup>, Tara Burke<sup>1</sup>, Colm Harrington<sup>1</sup> , Amanda Husein<sup>2,3</sup>, Kevin S. Murnane<sup>2,3,4,5</sup>, Peter S. Hendricks<sup>6</sup>, Katy Tobin<sup>9</sup>, Jo-Hanna Ivers<sup>7,10</sup> , Guillaume Thuery<sup>8,9,10</sup>, Andrew Harkin<sup>9,10,11</sup> and John R. Kelly<sup>1,8,9,10</sup> 

<sup>1</sup>Tallaght University Hospital, Dublin, Ireland, <sup>2</sup>Department of Psychiatry and Behavioral Medicine, School of Medicine, Shreveport, LA, USA, <sup>3</sup>University Health Sciences Center – Shreveport, Shreveport, LA, USA, <sup>4</sup>Department of Pharmacology, Toxicology & Neuroscience, School of Graduate Studies, Louisiana State University Health Sciences Center – Shreveport, LA, USA, <sup>5</sup>Louisiana Addiction Research Center, Louisiana State University Health Sciences Center – Shreveport, LA, USA, <sup>6</sup>Department of Psychiatry and Behavioral Neurobiology, School of Medicine, University of Alabama at Birmingham, Birmingham, AL, USA, <sup>7</sup>Department of Public Health and Primary Care, Institute of Population Health, School of Medicine, Trinity College Dublin, Ireland, <sup>8</sup>Department of Psychiatry, Trinity College Dublin, Ireland, <sup>9</sup>Trinity Institute of Neurosciences, Trinity College Dublin, Ireland, <sup>10</sup>Psychedelic Research Group, Trinity College Dublin, Ireland and <sup>11</sup>School of Pharmacy and Pharmaceutical Sciences, Trinity College Dublin, Dublin, Ireland

## Abstract

**Objectives:** Understanding variations in knowledge and attitudes of psychiatrists to psilocybin therapy is important for the collective discourse about the potential impact on clinical practice and public health in Ireland.

**Methods:** A 28-item questionnaire was designed based on previous studies and distributed to psychiatrists in Ireland via online mailing lists and at in-person academic events.

**Results:** 151 psychiatrists completed the questionnaire (73.3% were under 40 years of age, 76.0% were trainees, and 49.0% were female). In the total sample, 81.5% agreed that psilocybin therapy shows promise in the treatment of psychiatric disorders and 86.8% supported funding research, 86.8% would be willing to refer a patient if it was licensed and indicated, and 78.1% would consider the treatment for themselves, if indicated. Conversely, 6.6% agreed that psilocybin therapy was unsafe even under medical supervision, and 21.9% thought it was potentially addictive. 15.9% of the total sample reported at least one concern including, lack of robust evidence, long-term effectiveness, superiority to current interventions, potential harmful effects, cost and accessibility, and impartiality. Less than half of respondents felt knowledgeable (40.0%) and 9.9% felt adequately prepared to participate in psilocybin therapy. Consultant psychiatrists trended towards less optimism for a potential role in bipolar depression and emotionally unstable personality disorder compared to trainee psychiatrists.

**Conclusion:** Overall psychiatrists in Ireland held positive attitudes towards psilocybin therapy. However, there was a lack of knowledge evident. Addressing the knowledge gap and aligning with the best available evidence will be key if psychedelic therapy is to prevail in a clinical setting.

**Keywords:** Psilocybin; psilocybin therapy; psychedelics; attitudes; hallucinogens; psychiatrists

(Received 1 March 2024; revised 26 August 2024; accepted 16 September 2024; First Published online 7 November 2024)

## Introduction

From ancestral use to prohibition to optimistic resurrection, the history of human interaction with psychedelics is complex. Research involving sessions with a trained therapist before, during and after psychedelic administration is progressing rapidly, and attempts to navigate the extremes of ‘magic and menace’ in the modern era.

However, the real-world impact of psychedelic therapy in the clinic has yet to be determined. There are many questions to be

answered, and attitudes amongst clinicians, regulators and the public remain divided for a myriad of reasons. These include questions around efficacy, safety, regulation, resource allocation, and broader societal and cultural concerns (BMJ, 2024, McCrone et al., 2023, McGuire et al., 2024, Metaxa and Clarke, 2024).

There are high levels of inter-individual variability in response to psychedelic therapy, and issues related to blinding, expectancy and self-selecting biases are just some of the challenges within the field (Aday et al., 2022; van Elk and Fried, 2023). Some commentators, lamenting the failures of precision psychiatry, underscored by the bigger issue of a lack of a scientific basis in psychiatry, have suggested that the enthusiasm for these compounds signal psychiatry's desperation rather than its salvation (Miller and Raison, 2023).

**Corresponding author:** John R. Kelly; Email: [kellyjr@tcd.ie](mailto:kellyjr@tcd.ie)

**Cite this article:** Gribben A, Burke T, Harrington C, Husein A, Murnane KS, Hendricks PS, Tobin K, Ivers J-H, Thuery G, Harkin A, and Kelly JR. (2024) Amid magic and menace: psychiatrists' attitudes to psilocybin therapy. *Irish Journal of Psychological Medicine* 41: 451–459, <https://doi.org/10.1017/ipm.2024.49>

© The Author(s), 2024. Published by Cambridge University Press on behalf of College of Psychiatrists of Ireland. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted re-use, distribution and reproduction, provided the original article is properly cited.

Notwithstanding the challenges, clinical trial data, of increasing quality, suggests that psilocybin therapy may play a meaningful therapeutic role in major depressive disorder (Carhart-Harris et al., 2021; Davis et al., 2021; Raison et al., 2023; von Rotz et al., 2023), treatment-resistant depression (TRD) (Carhart-Harris et al., 2018; Carhart-Harris et al., 2016; Goodwin et al., 2022, 2023a, 2023b) and substance use disorders (Bogenschutz et al., 2022; Pagni et al., 2024; Yaden et al., 2024).

Preliminary clinical trial data across a range of other disorders, such as eating disorders, obsessive-compulsive disorder, and body dysmorphic disorder, point towards the possibility of transdiagnostic therapeutic applications and a personalized paradigm (Kelly et al., 2021; Moreno et al., 2006; Peck et al., 2023; Schneier et al., 2023).

Psilocybin and 3/4-methylenedioxymethamphetamine (MDMA) have already been approved as treatments in Australia. This allows authorized psychiatrists to prescribe psilocybin and MDMA to patients diagnosed with TRD and treatment-resistant post-traumatic stress disorder (PTSD), respectively, outside of a clinical trial setting (Kisely, 2023).

In contrast, the United States Food and Drug Administration recently declined to approve MDMA-assisted therapy for the treatment for PTSD (Reardon, 2024). The expressed concerns related to expectancy effects, blinding, the lack of long-lasting benefits, together with poor standardization of psychotherapy, and safety data not being adequately recorded.

Alongside the impetus to improve the quality of future trials, it is important to examine the trajectory of knowledge and attitudes of psychiatrists to this rapidly evolving field. Variations in the knowledge and attitudes of psychiatrists may influence future research and the uptake of psychedelic therapy into clinical practice.

Previous studies focusing on psychiatrists' attitudes generally show high levels of support for further research, alongside favorable attitudes towards the promise of psychedelic therapy in the treatment of psychiatric disorders (Berger and Fitzgerald, 2023; Grover et al., 2023; Page et al., 2021). Furthermore, in recent years, there appears to be an overall positive shift in psychiatrists' attitudes toward the therapeutic potential of psychedelics (Barnett et al., 2023; Barnett et al., 2018; Žuljević et al., 2024b).

Some studies indicate that psychiatrists who are younger, male, and in training uphold greater optimism about the therapeutic potential of psychedelics and may perceive psychedelics as less risky (Barnett et al., 2023, 2018; Grover et al., 2023; Žuljević et al., 2024b). Another study of psychiatrists highlighted an openness to learn more about psychedelic therapy, alongside a lack of preparedness and training in the delivery of psychedelic therapy (Page et al., 2021).

The accumulation of clinical evidence supporting the therapeutic potential of psilocybin, the ongoing phase 3 trials for TRD, and the approval of psilocybin as a medical treatment for depression in certain jurisdictions, underscores the need for empirically grounded insights into the ongoing discourse about the potential impact on clinical practice and public health.

This study seeks to bridge the gap between theoretical anticipation and empirical understanding by exploring the intricacies of psychiatrists' perspectives on psilocybin therapy in the Irish context.

## Methods

### Ethical approval

Tallaght University Hospital/St. James's Hospital Joint Research Ethics Committee approved this study (REC: 2020-08 List 29).

### Survey design

A questionnaire was designed based on previous studies (Barnett et al., 2018; Corrigan et al., 2022) to investigate the attitudes of psychiatrists to psilocybin with psychological support (psilocybin therapy). The survey consisted of 28 items. A 5-point Likert scale (strongly agree, somewhat agree, neither/neutral, somewhat disagree, and strongly disagree) was used to capture attitudes about psilocybin therapy. The last question (*I have concerns about psilocybin with psychological support*), contained a free text option (*Please comment:*). The anonymous survey was hosted online via the Qualtrics platform and consent for participation was obtained online. See the supplementary information (SI) for the survey.

### Participants and procedure

The survey of psychiatrists practicing in Ireland was conducted over six weeks in February and March 2023. Recruitment emails were sent with information on the study and a secure link to a Qualtrics survey. Respondents affirmed that they were psychiatrists. The survey was distributed via national psychiatry trainee and consultant online mailing lists encompassing both rural and urban clinical sites. The survey was also distributed at the in-person Irish College of Psychiatrists NCHD conference and at journal club meetings at Tallaght University Hospital and St James's Hospital, Dublin. To facilitate accessibility, the survey was available in hard copy and via a QR code.

### Data analysis

Data were collected using Qualtrics and analyzed using SPSS Statistics version 27.0. Descriptive statistics were calculated for each survey item. The number of people who responded Strongly Agree and Agree were summed and presented as net agree percentages. Similarly, the number of people who responded Strongly Disagree and Disagree were summed and presented as net disagree percentages. See SI Tables for expanded data. Mann-Whitney U tests and Kruskal-Wallis tests were used and adjusted for multiple comparisons. GraphPad was used for the figures.

## Results

### Demographics

A total of 151 psychiatrists completed the questionnaire. There was one missing value for professional grade and age. See Table 1 for demographic and professional characteristics.

### Total sample attitudes

#### Attitudes to psilocybin therapy for various conditions

Of all the 151 participants, 81.5% ( $n = 123$ ) agreed that psilocybin therapy shows promise for the treatment of psychiatric disorders, ranging from 80.1% ( $n = 121$ ) for depression, 58.3% ( $n = 88$ ) for chronic pain, 53.6% ( $n = 81$ ) for anxiety, 45.0% ( $n = 68$ ) for drug and alcohol addiction, 38.4% ( $n = 58$ ) for eating disorders, 37.7% ( $n = 57$ ) for depressive episodes in bipolar affective disorder, 29.1% ( $n = 44$ ) for emotionally unstable personality disorder (EUPD), and 8.6% ( $n = 13$ ) for psychotic disorders (Figure 1a, Table S1).

#### Attitudes and acceptability

Less than half of the participants (40.0%,  $n = 60$ ) reported being knowledgeable about psilocybin. Furthermore, 80.8% ( $n = 122$ ) reported they did not feel adequately prepared or trained to

**Table 1.** Demographic and professional characteristics

Total ( <i>n</i> = 151)	
Age ( <i>n</i> = 150) (Freq., (%))	
20–29 years	27 (18%)
30–39 years	83 (55.3%)
40–49 years	22 (14.7%)
50–59 years	15 (10%)
60–69 years	2 (1.3%)
70–79 years	1 (0.7%)
Gender (Freq., (%))	
Female	74 (49%)
Male	73 (48.3%)
Prefer not to say	4 (2.6%)
Professional Grade ( <i>n</i> = 150) (Freq., (%))	
Consultant	36 (24%)
Trainee	
Senior Registrar	24 (16%)
Registrar	72 (48%)
Senior House Officer	18 (12%)
Job classification (Freq., (%))	
Clinician	113 (75.3%)
Academic	2 (1.3%)
Both	35 (23.3%)
Practice classification (Freq., (%))	
Biological	49 (32.9%)
Psychotherapeutic	6 (4%)
Both	94 (63.1%)
Practice setting (Freq., (%))	
Community	32 (21.2%)
Hospital	35 (23.2%)
Both	84 (55.6%)
Specialization/Area of interest (Freq., (%))	
General Adult	76 (51%)
Child and Adolescent	15 (10.1%)
Psychiatry of Later Life	19 (12.8%)
Liaison	11 (7.4%)
Addiction	11 (7.4%)
Forensics	9 (6%)
Intellectual Disability	4 (2.7%)
Perinatal	2 (1.3%)
Rehabilitation psychiatry	2 (1.3%)

participate in the delivery of psilocybin therapy (Figure 1b, Table S2).

The majority of participants (86.8%, *n* = 131) agreed that psilocybin therapy should be granted medical treatment status if supported by evidence from clinical trials and provided in licensed facilities under the supervision of psychiatrists; 86.8% (*n* = 131)

supported funding psilocybin research; 86.8% (*n* = 131) would be willing to refer a patient if it was licensed and clinically indicated; and 78.1% (*n* = 118) would consider psilocybin therapy themselves if they had a mental health disorder, and if it was an evidence-based and licensed therapy (Figure 1b, Table S2).

In relation to possible subjective effects, many agreed that psilocybin may aid in fostering deeper connections with oneself, others, and nature (66.9%, *n* = 101), and may lead to mystical or spiritual experiences (79.5%, *n* = 120) (Table S2).

#### *Influence of gender*

There were no significant differences between males and females (Table S3).

#### *Influence of professional grade: consultant compared to trainee psychiatrists*

The total sample was divided into consultant psychiatrists (24.0%, *n* = 36) and non-consultant hospital doctors (NCHDs) (76.0%, *n* = 114), which can act as a proxy for trainee psychiatrists. Mann-Whitney U tests, adjusted for multiple comparisons, indicated that consultant psychiatrists were significantly more likely to agree that psilocybin should be illegal for recreational purposes compared to trainee psychiatrists ( $p = 0.005$ ) and were significantly more likely to strongly disagree that psilocybin therapy could potentially be a treatment in psychotic disorders ( $p = 0.025$ ) (Figure 2, Table S4).

Consultant psychiatrists trended towards more disagreement about the potential therapeutic role of psilocybin therapy in the treatment of bipolar depression, but the differences were not statistically significant when adjusted for multiple comparisons (Figure 2, Table S4).

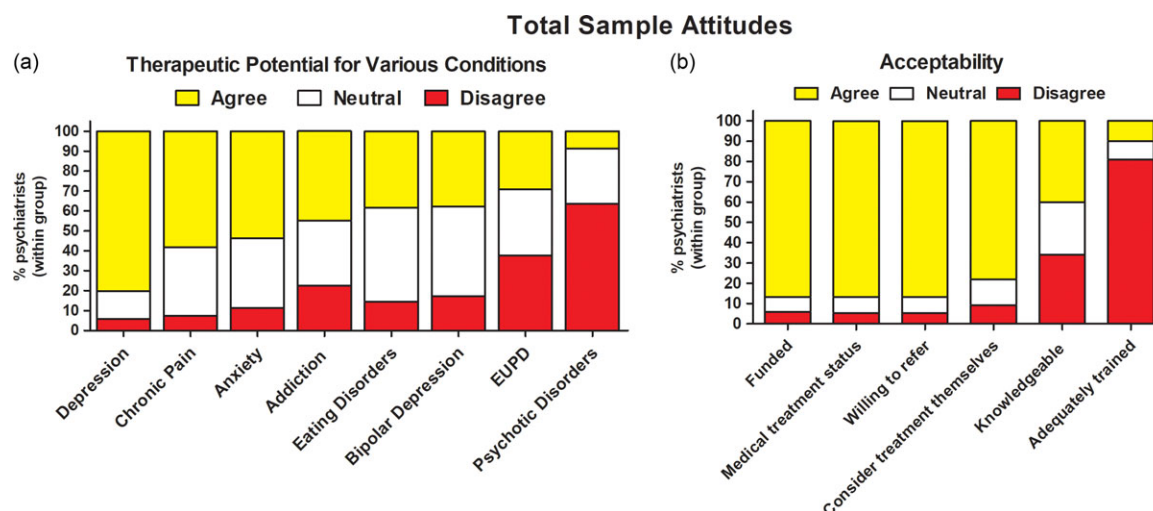
#### *Influence of age*

The total sample was divided into those who were under 40 years of age (73.3%, *n* = 110) and those who were 40 years of age and older (26.7%, *n* = 40). Professional grades closely aligned with age, as only three consultants were under 40 years of age, and seven NCHDs were over 40 years of age. Psychiatrists under 40 years of age were significantly more likely to disagree that psilocybin should be illegal for recreational purposes ( $p = 0.025$ ).

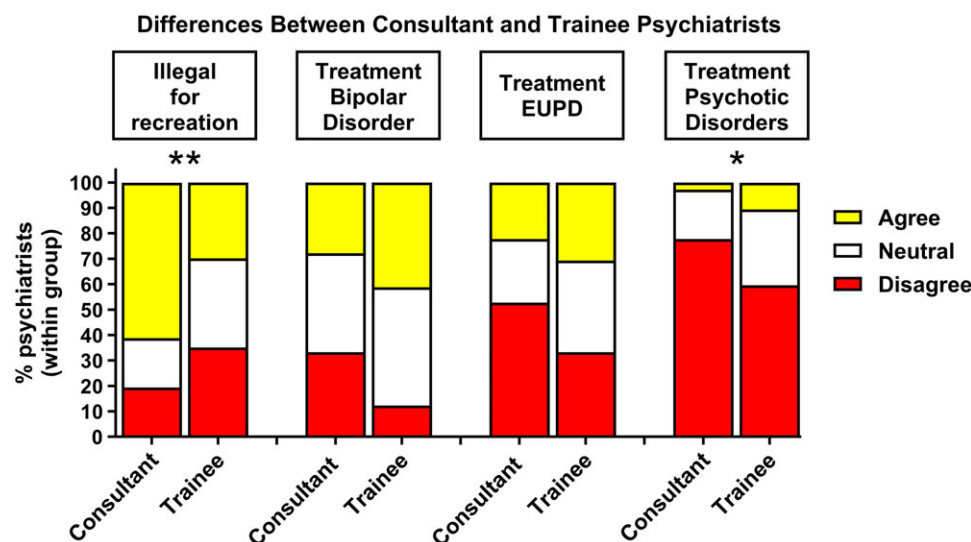
Psychiatrists over 40 years of age were more likely to disagree that psilocybin therapy had potential as a treatment in psychotic disorders, but this was not significant after adjusting for multiple comparisons (Table S5).

#### *Influence of self-reported knowledge on attitudes to psilocybin therapy*

Out of the total sample, 40% (*n* = 60) of psychiatrists agreed that they were knowledgeable about psilocybin compared to 34% (*n* = 51) who disagreed. After adjusting for multiple comparisons, psychiatrists with self-reported knowledge compared to no self-reported knowledge were significantly more likely to agree that psilocybin could enhance connections with oneself, others and nature; (81.7%, *n* = 49 *v.* 58.8%, *n* = 30,  $p = 0.012$ ); were significantly more likely to agree that psilocybin therapy could be a treatment for anxiety disorders (68.3%, *n* = 41 *v.* 39.2%, *n* = 20,  $p = 0.006$ ); for drug and alcohol addiction (61.7%, *n* = 37 *v.* 27.5%, *n* = 14,  $p = 0.003$ ); for eating disorders (61.7%, *n* = 37 *v.* 21.6%, *n* = 11,  $p < 0.0001$ ); for bipolar depression (48.3%, *n* = 29 *v.* 31.4%, *n* = 16,  $p = 0.012$ ); for EUPD (43.3%, *n* = 26 *v.* 25.5%, *n* = 13,  $p < 0.0001$ ); and felt more adequately prepared/trained to participate in the delivery of psilocybin therapy (21.7%, *n* = 13, *v.* 2.0%, *n* = 1,  $p = 0.03$ ) (Figure 3, Table S6).



**Figure 1.** Total sample attitudes to psilocybin therapy. (a) Therapeutic potential for various conditions (% net agree): depression (80.1%), chronic pain (58.3%), anxiety (53.6%), addiction (45.0%), eating disorders (38.4%), bipolar depression (37.7%), EUPD (29.1%), psychotic disorders (8.6%). (b) Funded (86.8%), medical treatment status (86.8%), willing to refer (86.8%), consider treatment themselves (78.1%), knowledgeable (40.0%) and adequately trained (10%).



**Figure 2.** Differences in attitudes between consultant and trainee psychiatrists. Illegal for recreation (% net agree) Consultants 61.1%, Trainees 29.8%; therapeutic potential for bipolar depression: Consultants 27.8%, Trainees 41.2%; therapeutic potential for EUPD: Consultants 22.2%, Trainees 30.7%; therapeutic potential for psychotic disorders: Consultants 2.8%; Trainees 10.5%. Consultant psychiatrists were significantly more likely to agree that psilocybin should be illegal for recreational purposes ( $p = 0.005$ ) and were significantly more likely to (strongly) disagree that psilocybin therapy could potentially be a treatment in psychotic disorders ( $p = 0.025$ ).

### Attitudes to safety and legality, and concerns about psilocybin therapy

Approximately one fifth of the total sample thought psilocybin was potentially addictive (21.9%,  $n = 33$ ), and a small minority (6.6%,  $n = 10$ ) thought psilocybin was unsafe even under medical supervision (Figure 4a, Table S7).

Twenty-four psychiatrists (15.9% of the total sample) expressed at least one concern about psilocybin therapy in the open-ended question. Responses were grouped into 9 themes (Figure 4b). The numbers in brackets represent the number of times each theme was mentioned.

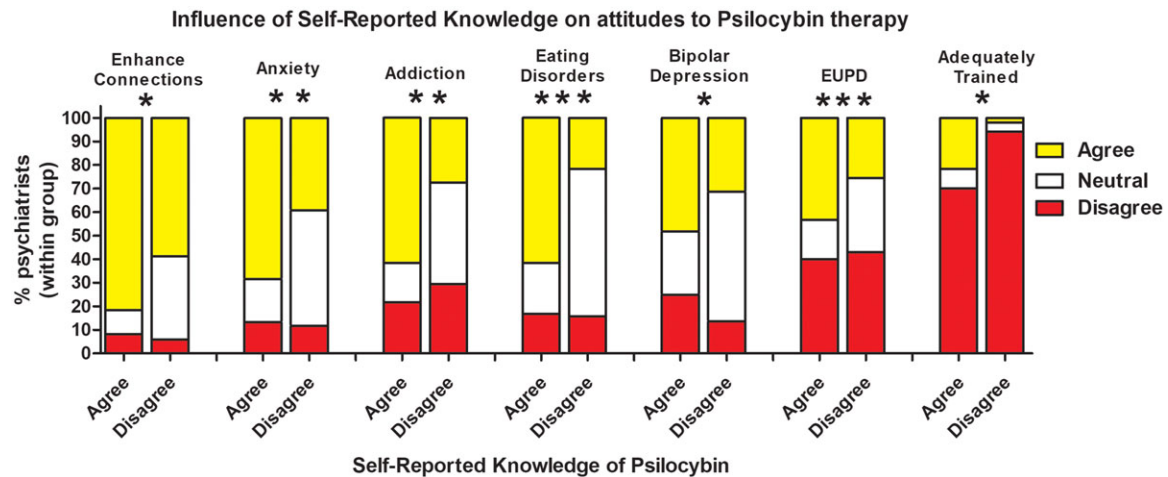
The most frequent theme related to an *Evidence Deficit* (19), which comprised of: lack of robust evidence and comparison trials (13), lack of long-term data (3), real-world effectiveness as treatment (2), and duration of therapeutic effect (1).

The second most frequently reported theme related to *Harmful effects* (13), which comprised of abuse potential (drug seeking) (6), harmful effects (non-specified) (2), harmful effects (psychosis) (2), individualized and unpredictable effects (2), and repeating mistakes of the past (1).

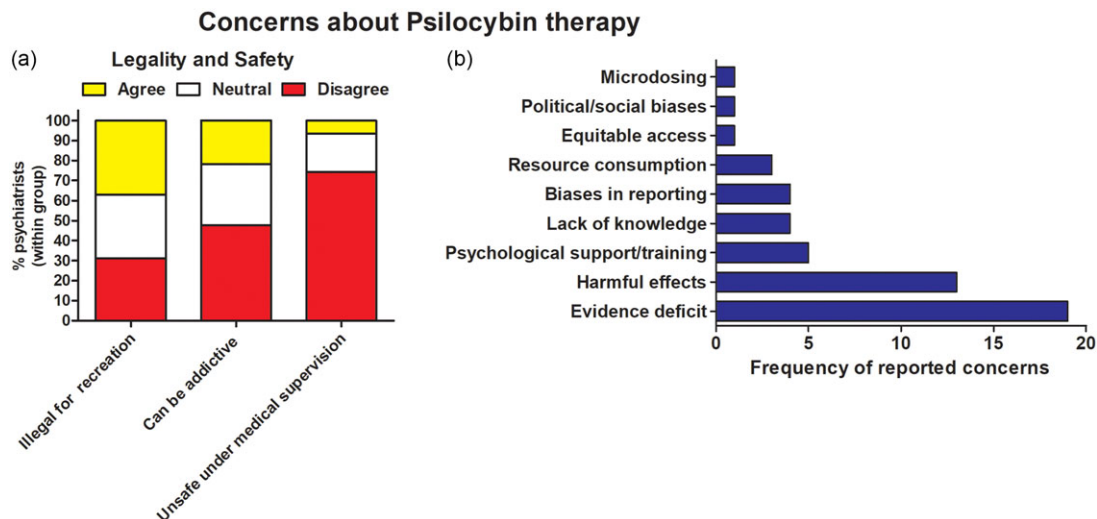
The third most frequent theme related to *various concerns with psychological support/training* (5), which comprised: psychological support as a means to make psychiatrists feel they are acting responsibly (1), psychological support not aligned with established therapy (1), qualifications and training of therapists (1), awareness of cultural aspects in therapist training (1), benefit from psychological support rather than psilocybin (1).

The fourth most frequently reported themes were *lack of personal knowledge about psilocybin* (4) (no sub-themes) and *biases in reporting* (4), comprising positive biases in the reporting





**Figure 3.** Influence of self-reported knowledge on attitudes to psilocybin therapy. Psychiatrists with self-reported knowledge were more likely to agree that psilocybin could enhance connections with oneself, others and nature, held more positive attitudes towards the potential of psilocybin therapy as a treatment for anxiety, addiction disorders, eating disorders, bipolar depression, and EUPD, and felt more adequately prepared to participate in the delivery of psilocybin therapy compared to psychiatrists with no self-reported knowledge (% net agree, % neutral, % net disagree).



**Figure 4.** Psychiatrists' concerns about psilocybin therapy. (a) Illegal for recreation (37.1%), potentially addictive (21.9%), unsafe under medical supervision (6.6%) (total sample, % net agree). (b) 15.9% ( $n = 24$ ) of the total sample expressed at least one concern about psilocybin therapy in the open-ended question. Concerns were grouped into 9 themes. Numbers represent the frequency of reported concerns.

of studies/trials (2), biases in participants subjective reporting (1), and patients exaggerating symptoms to gain access to the trials (1).

The fifth most frequently reported theme was psilocybin therapy being *resource intensive* (3), comprising concerns about extra staff and time required (2), and diverting resources from established evidence-based therapies (1).

The remaining themes relate to *equitable access* (1), *political and social biases impeding scientific approach* (1) and *microdosing* (1).

## Discussion

This study provided further insights into the attitudes of psychiatrists to the rapidly evolving field of psilocybin therapy. It showed that the vast majority of psychiatrists in Ireland agreed that psilocybin therapy shows promise in the treatment of psychiatric disorders and supported further research. Most

psychiatrists would be willing to refer their patient if it were a licensed treatment. However, less than half of respondents reported feeling knowledgeable about psilocybin therapy and a small minority reported feeling adequately prepared or trained to participate in the delivery of psilocybin therapy.

A small minority (6.6%) of respondents agreed that psilocybin therapy was unsafe under medical supervision, and one fifth (21.9%) of the total sample had concerns about the addictive potential of psilocybin, which appears somewhat disproportionate to the existing evidence base (Calderon et al., 2023; Henningfield et al., 2022; Johnson et al., 2018). Approximately 15% of the total sample reported at least one concern, related to themes which included: lack of robust clinical evidence, long-term effectiveness, superiority to current interventions, harmful effects, cost and accessibility, and impartiality.

Our results are broadly in line with previous studies showing that the majority of psychiatrists hold favorable attitudes towards

the potential of psilocybin therapy across a range of mental health disorders and are supportive of further research (Barnett *et al.*, 2023; Berger and Fitzgerald 2023; Grover *et al.*, 2023; Page *et al.*, 2021). In terms of perceived therapeutic utility across the various mental health disorders, unsurprisingly, and in line with the current gradient of evidence, the greatest level of agreement for a possible therapeutic indication was for the treatment of depression. There were more tentative views on therapeutic indications of psilocybin therapy for the other mental health disorders. While self-reported knowledge of psilocybin was low in our study, those who reported knowledge held more positive attitudes towards the potential of psilocybin therapy.

Younger psychiatrists tended to hold more favorable attitudes to the potential of psilocybin therapy for the treatment of people with emotionally unstable personality disorder and bipolar depression compared to older psychiatrists. A recently published pilot trial suggested that psilocybin therapy may be a viable option in depressive episodes in bipolar affective disorder type II (Aaronson *et al.*, 2024). However, it is important to note, that our study did not distinguish between bipolar affective disorder type I and type II, and is thus a limitation.

As expected, the least amount of agreement for a possible therapeutic indication was for psychotic disorders. Only a small minority (8.6%) agreed that psilocybin therapy might be useful for such disorders, which is unsurprising, considering psychosis or even family history of psychosis are exclusion criteria for clinical trials. In contrast to some of the preceding studies, our study did not identify significant differences between male and female psychiatrists (Barnett *et al.*, 2023; Barnett *et al.*, 2018; Grover *et al.*, 2023).

In general, previous surveys of psychologists and other mental health professionals show similar attitudes to the potential of psychedelic therapy, and high levels of support for further research (Davis *et al.*, 2022; Hearn *et al.*, 2022; Kucsera *et al.*, 2023; Meir *et al.*, 2023; Meyer *et al.*, 2022). More positive attitudes to psilocybin, greater self-reported knowledge and personal history of psychedelic use may be associated with greater openness to engage patients with psychedelic therapy (Davis *et al.*, 2022; Hearn *et al.*, 2022; Meir *et al.*, 2023; Meyer *et al.*, 2022). Some studies have started to examine differences between mental health disciplines, but a consistent picture has yet to emerge (Armstrong *et al.*, 2023; Ginati *et al.*, 2022; Olafsson *et al.*, 2023).

Our survey suggests that should psilocybin be licensed in the future, the overwhelming majority (86.8%) of psychiatrists would consider referring their patients, if clinically indicated. This is higher than the rate of psychologists (77%), in a previous study, who agreed they would inform eligible patients about psychedelic therapy (Meir *et al.*, 2023). Alongside the positive shift in American psychiatrists' attitudes toward the therapeutic potential of psychedelics, approximately half reported intentions to incorporate psychedelic-assisted therapy into their practice if regulatory approval is granted (Barnett *et al.*, 2023; Barnett *et al.*, 2018).

Similar to previous surveys of psychologists (Davis *et al.*, 2022) and psychiatrists (Page *et al.*, 2021), our study highlighted that psychiatrists feel under-prepared to participate in the delivery of psychedelic therapy. Again, this is unsurprising, given that phase 3 trials are not yet complete. While not all psychiatrists will prescribe or administer psychedelic therapy should it be licensed, it is nonetheless important that psychiatrists have some understanding of the potential indications, risks and limitations.

It appears that personal use of psychedelics may be common among psychedelic therapists (Aday *et al.*, 2023). However, it is not

yet clear whether personal recreational/naturalistic psychedelic use would influence the actual therapeutic outcomes in psychedelic therapy. This also raises interesting issues regarding disclosure of such information, both for service users and professionals (Boehnke *et al.*, 2023). Our survey, intentionally, didn't enquire about personal use of psychedelics. However, it is notable that 78.1% of psychiatrists in our study would consider psilocybin therapy themselves if they had a mental health disorder and psilocybin therapy was licensed.

A recent survey of 419 European psychiatrists (not involving Ireland) using the recently developed Attitudes on Psychedelics Questionnaire showed that 24.3% had previous personal experience with psilocybin, and that past psychedelic use and personal experience with psychedelic-assisted psychotherapy and psychedelic research were both strongly associated with more positive attitudes on psychedelics (Žuljević *et al.*, 2024b). Future larger studies examining nation-specific differences would be interesting.

The use of psilocybin in most regions, including Ireland, is illegal and the legal status of psychedelics is a complex and often divisive issue. Curiously, 31.1% of the total sample disagreed that recreational psilocybin should be illegal, with trainee psychiatrists holding more liberal views on the legalization of recreational psilocybin. A far larger proportion (86.8%) of the total sample supported medical treatment status for psilocybin therapy.

Our study provides insights into psychiatrists' concerns about psilocybin therapy and largely overlap with previous studies of psychiatrists (Hartter *et al.*, 2024; Žuljević *et al.*, 2024a). The primary concern reported by respondents was the lack of a robust evidence base for psilocybin therapy. Indeed, the accumulation of well powered, high-quality clinical trial data with long follow-up periods will likely play the main role in addressing the apprehensions of psychiatrists.

It is important to note that there have been no phase 3 trials of psilocybin therapy conducted to date. The largest trial of a single dose of psilocybin with psychological support in TRD showed an antidepressant response rate of 37% at week 3 in the group that received the psilocybin 25 mg dose, dropping to 20% at week 12 (Goodwin *et al.*, 2022). A preceding and smaller trial did not show superiority over the SSRI escitalopram, at least in the primary outcome measure (Carhart-Harris *et al.*, 2021). Regardless, an additional, potentially effective therapeutic strategy would be welcome and would potentially open avenues to advance personalized treatment approaches and optimize therapeutic outcomes (Kelly *et al.*, 2023).

Our survey did not specifically ask about cost or accessibility, but both were communicated as concerns. The optimal delivery of psilocybin therapy has not yet been fully deciphered (McGuire *et al.*, 2024). The development of a Psychedelic Science Research Centre, embedded within the public health system in Ireland, perhaps using a hub and spoke model, could optimize existing resources, provide standardization, quality and accountability, accessibility (particularly for those in marginalized/vulnerable communities), together with an opportunity to facilitate the collection of long-term data.

Developing closer links with the College of Psychiatrists of Ireland, perhaps via the establishment of a Psychedelic Medicine Special Interest Group, together with advocacy groups, such as IDPAT (Irish Doctors For Psychedelic Assisted Therapy), and Patient and Public Involvement networks (Close *et al.*, 2021) could foster a vibrant and collaborative ecosystem of education, training and innovation in psychedelic research in Ireland and could help to align attitudes/knowledge with the most up to date and best quality

evidence. This growing and diverse inter- and cross-disciplinary collaborative research community in Ireland may also create opportunities for linking with international networks.

## Conclusions

Overall, this study showed that psychiatrists in Ireland held positive attitudes towards the potential of psilocybin therapy. Yet, most did not feel knowledgeable about psilocybin therapy and did not feel adequately prepared to participate in the delivery of psilocybin therapy. A minority expressed concerns related to lack of robust evidence, long-term effectiveness, superiority to current interventions, potential harmful effects, cost and accessibility, and impartiality. Addressing the knowledge gap and aligning attitudes of psychiatrists, service users and the public, based on the best available evidence will be key if psychedelic therapy is to prevail in a clinical setting.

## Limitations

While our study provides valuable insights into psychiatrists' attitudes toward psilocybin therapy and contextualizing them within the broader landscape of psychedelic research, certain aspects may warrant further critical examination and elaboration.

While the survey was distributed via national mailing lists for consultants and trainees, we acknowledge that these mailing lists often aren't comprehensive and certain trainees or consultants may be missing. In addition, these mailing lists may not include psychiatry NCHDs who are currently working but not in training. The survey may have been forwarded appropriately amongst clinical colleagues and we are unable to estimate the number of participants the survey was sent to via email.

Additionally, the number of psychiatrists who declined to participate in the survey via hard copy or QR code is not known, so it is not possible to estimate the number of psychiatrists the survey was distributed to in-person. We appreciate that our sample may not be fully representative of all psychiatrists practicing in Ireland. As such, we acknowledge the potential influence of non-response bias and its implications for the reliability of the reported attitudes. We further acknowledge that our sample was predominately composed of trainees, and therefore may not fully reflect the broader attitudes of psychiatrists. This lack of sample representativeness may have led to a possible overinflation of positive attitudes.

Exploration of attitudinal variations according to, for example, speciality training, would be interesting, but subgroup analyses lack sufficient power to derive meaningful interpretations. We did not ask about personal psychedelic use, leaving that aspect to future studies, and our survey did not distinguish between bipolar affective disorder type I and type II.

We fully appreciate the nuances of the ongoing debate between psychedelic therapy and psychedelic-assisted psychotherapy (Aday et al., 2024; Goodwin et al., 2024a, 2024b; O'Donnell et al., 2024). However, for the purposes of this paper and for simplicity, we opted for psilocybin/psychedelic therapy.

We acknowledge some of the survey questions, particularly related to 'mystical or spiritual experiences' are suboptimal. Alas, a discussion around this issue is outside the scope of this paper.

**Supplementary material.** The supplementary material for this article can be found at <https://doi.org/10.1017/ipm.2024.49>.

**Acknowledgements.** We would like to thank the respondents who took part in this survey. More broadly, we would like to sincerely thank all of our research participants in the psychedelic trials and other studies, whose contributions of time and spirit make this research possible. We would also like to thank the staff at Sheaf House. We thank Christopher Connolly for his feedback on the paper.

**Financial support.** This research received no specific grant from any funding agency, commercial or not-for-profit sectors.

**Competing interests.** JRK is principal investigator (Ireland) on COMPASS, GH and Transcend Therapeutics sponsored clinical trials in Dublin, Ireland. JRK has consulted for Clerkenwell Health and has received grant funding from the Health Research Board (ILP-POR-2022-030, DIFA-2023-005). AH is supported by the Health Research Board (ILP-POR-2022-030, DIFA-2023-005). PSH has been in paid advisory relationships with the following organizations regarding the development of psychedelics and related compounds: Bright Minds Biosciences Ltd., Eleusis Benefit Corporation, Journey Colab Corporation, Reset Pharmaceuticals Inc., and Silo Pharma. PSH has received research funding from the NIH and Heftor Research Institute.

**Ethical standards.** Tallaght University Hospital/St. James's Hospital Joint Research Ethics Committee approved this study (REC: 2020-08 List 29). The authors assert that all procedures contributing to this work comply with the ethical standards of the relevant national and institutional committee on human experimentation with the Helsinki Declaration of 1975, as revised in 2008.

## References

- Aaronson ST, van der Vaart A, Miller T, LaPratt J, Swartz K, Shoultz A, Lauterbach M, Sackeim HA, Suppes T (2024). Single-dose synthetic psilocybin with psychotherapy for treatment-resistant bipolar type II major depressive episodes: a nonrandomized open-label trial. *JAMA Psychiatry* 81, 555–562.
- Aday JS, Heifets BD, Pratscher SD, Bradley E, Rosen R, Woolley JD (2022). Great expectations: recommendations for improving the methodological rigor of psychedelic clinical trials. *Psychopharmacology (Berl)* 239, 1989–2010.
- Aday JS, Horton D, Fernandes-Osterhold G, O'Donovan A, Bradley ER, Rosen RC, Woolley JD (2024). Psychedelic-assisted psychotherapy: where is the psychotherapy research? *Psychopharmacology (Berl)* 241, 1517–1526.
- Aday JS, Skiles Z, Eaton N, Fredenburg L, Pleet M, Mantia J, Bradley ER, Fernandes-Osterhold G, Woolley JD (2023). Personal psychedelic use is common among a sample of psychedelic therapists: implications for research and practice. *Psychedelic Medicine* 1, 27–37.
- Armstrong SB, Levin AW, Xin Y, Horan JC, Luoma J, Nagib P, Pilecki B, Davis AK (2023). Differences in attitudes and beliefs about psychedelic-assisted therapy among social workers, psychiatrists, and psychologists in the United States. *Journal of Psychedelic Studies* 7, 61–67.
- Barnett BS, Arakelian M, Beebe D, Ontko J, Riegel C, Siu WO, Weleff J, Pope HG (2023). American psychiatrists' opinions about classic hallucinogens and their potential therapeutic applications: a 7-year follow-up survey. *Psychedelic Medicine* 2, 1–9.
- Barnett BS, Siu WO, Pope HG Jr (2018). A survey of American psychiatrists' attitudes toward classic hallucinogens. *Journal of Nervous and Mental Disease* 206, 476–480.
- Berger JJ, Fitzgerald PB (2023). The prescription of psychedelic therapies in Australia and New Zealand: a brief survey of psychiatrists. *Australasian Psychiatry* 31, 190–194.
- BMJ. (2024). EXPRESSION OF CONCERN: efficacy of psilocybin for treating symptoms of depression: systematic review and meta-analysis. *Bmj* 385, q1025.
- Boehnke KF, Cox K, Weston C, Herberholz M, Glynnos N, Kolbman N, Fields CW, Barron J, Kruger DJ (2023). Slouching towards engagement: interactions between people using psychedelics naturalistically and their healthcare providers. *Frontiers in Psychiatry* 14, 1224551.
- Bogenschutz MP, Ross S, Bhatt S, Baron T, Forchimes AA, Laska E, Mennenga SE, O'Donnell K, Owens LT, Podrebarac S, Rotrosen J, Tonigan JS, Worth L (2022). Percentage of heavy drinking days following



- psilocybin-assisted psychotherapy vs placebo in the treatment of adult patients with alcohol use disorder: a randomized clinical trial. *JAMA Psychiatry* 79, 953–962.
- Calderon SN, Bonson KR, Reissig CJ, Lloyd JM, Galati S, Chiapperino D (2023). Considerations in assessing the abuse potential of psychedelics during drug development. *Neuropharmacology* 224, 109352.
- Carhart-Harris R, Giribaldi B, Watts R, Baker-Jones M, Murphy-Beiner A, Murphy R, Martell J, Blemings A, Erritzoe D, Nutt DJ (2021). Trial of psilocybin versus escitalopram for depression. *New England Journal of Medicine* 384, 1402–1411.
- Carhart-Harris RL, Bolstridge M, Day CMJ, Rucker J, Watts R, Erritzoe DE, Kaelen M, Giribaldi B, Bloomfield M, Pilling S, Rickard JA, Forbes B, Feilding A, Taylor D, Curran HV, Nutt DJ (2018). Psilocybin with psychological support for treatment-resistant depression: six-month follow-up. *Psychopharmacology (Berl)* 235, 399–408.
- Carhart-Harris RL, Bolstridge M, Rucker J, Day CM, Erritzoe D, Kaelen M, Bloomfield M, Rickard JA, Forbes B, Feilding A, Taylor D, Pilling S, Curran VH, Nutt DJ (2016). Psilocybin with psychological support for treatment-resistant depression: an open-label feasibility study. *The Lancet Psychiatry* 3, 619–627.
- Close JB, Bornemann J, Piggan M, Jayacodi S, Luan LX, Carhart-Harris R, Spriggs MJ (2021). Co-design of guidance for patient and public involvement in psychedelic research. *Frontiers in Psychiatry* 12, 727496.
- Corrigan K, Haran M, McCandliss C, McManus R, Cleary S, Trant R, Kelly Y, Ledden K, Rush G, O'Keane V, Kelly JR (2022). Psychedelic perceptions: mental health service user attitudes to psilocybin therapy. *Irish Journal of Medical Science* 191, 1385–1397.
- Davis AK, Agin-Liebes G, España M, Pilecki B, Luoma J (2022). Attitudes and beliefs about the therapeutic use of psychedelic drugs among psychologists in the United States. *Journal of Psychoactive Drugs* 54, 309–318.
- Davis AK, Barrett FS, May DG, Cosimano MP, Sepeda ND, Johnson MW, Finan PH, Griffiths RR (2021). Effects of psilocybin-assisted therapy on major depressive disorder: a randomized clinical trial. *JAMA Psychiatry* 78, 481–489.
- Ginati YD, Madjar N, Ben-Sheetrit J, Lev-Ran S, Weizman A, Shoval G (2022). A nationwide study comparing mental health professionals' willingness to try hallucinogenic drugs in basic research or clinical practice. *Journal of Psychoactive Drugs* 54, 177–187.
- Goodwin GM, Aaronson ST, Alvarez O, Arden PC, Baker A, Bennett JC et al. (2022). Single-dose psilocybin for a treatment-resistant episode of major depression. *New England Journal of Medicine* 387, 1637–1648.
- Goodwin GM, Aaronson ST, Alvarez O, Atli M, Bennett JC, Croal M et al. (2023a). Single-dose psilocybin for a treatment-resistant episode of major depression: impact on patient-reported depression severity, anxiety, function, and quality of life. *Journal of Affective Disorders* 327, 120–127.
- Goodwin GM, Croal M, Feifel D, Kelly JR, Marwood L, Mistry S, O'Keane V, Peck SK, Simmons H, Sisa C, Stansfield SC, Tsai J, Williams S, Malievskaia E (2023b). Psilocybin for treatment resistant depression in patients taking a concomitant SSRI medication. *Neuropsychopharmacology* 48, 1492–1499.
- Goodwin GM, Malievskaia E, Fonzo GA, Nemeroff CB (2024a). Must psilocybin always “Assist psychotherapy”? *American Journal of Psychiatry* 181, 20–25.
- Goodwin GM, Malievskaia E, Fonzo GA, Nemeroff CB (2024b). Psychological support for psilocybin treatment: reply to letters on our commentary. *American Journal of Psychiatry* 181, 79–81.
- Grover C, Monds L, Montebello M (2023). A survey of Australian psychiatrists 2019; and psychiatry trainees 2019; knowledge of and attitudes towards psychedelics in the treatment of psychiatric disorders. *Australasian Psychiatry* 31, 329–335.
- Hartter N, Däumichen M, Jungaberle A, Schmidt C, Wolff M, Gründer G, Jungaberle H (2024). Einstellungen zur einföhrung der psychedelischen therapie. *Qualitative Fokusgruppen-Studie mit Ärzten, Psychotherapeuten und Patienten* 43, 357–365.
- Hearn BG, Brubaker MD, Richardson G (2022). Counselors' attitudes toward psychedelics and their use in therapy. *Journal of Counseling & Development* 100, 364–373.
- Henningfield JE, Coe MA, Griffiths RR, Belouin SJ, Berger A, Coker AR, Comer SD, Heal DJ, Hendricks PS, Nichols CD, Sapienza F, Vocci FJ, Zia FZ (2022). Psychedelic drug abuse potential assessment research for new drug applications and controlled substances act scheduling. *Neuropharmacology* 218, 109220.
- Johnson MW, Griffiths RR, Hendricks PS, Henningfield JE (2018). The abuse potential of medical psilocybin according to the 8 factors of the controlled substances act. *Neuropharmacology* 142, 143–166.
- Kelly JR, Clarke G, Harkin A, Corr SC, Galvin S, Pradeep V, Cryan JE, O'Keane V, Dinan TG (2023). Seeking the psilocybiome: psychedelics meet the microbiota-gut-brain axis. *International Journal of Clinical and Health Psychology* 23, 100349.
- Kelly JR, Gillan CM, Prenderville J, Kelly C, Harkin A, Clarke G, O'Keane V (2021). Psychedelic therapy's transdiagnostic effects: a research domain criteria (RDoC) perspective. *Frontiers in Psychiatry* 12, 800072.
- Kisely S (2023). The down-scheduling of MDMA and psilocybin(e): too fast and too soon. *Australian & New Zealand Journal of Psychiatry* 57, 933–934.
- Kucsera A, Suppes T, Haug NA (2023). Psychologists' and psychotherapists' knowledge, attitudes, and clinical practices regarding the therapeutic use of psychedelics. *Clinical Psychology & Psychotherapy* 30, 1369–1379.
- McCrone P, Fisher H, Knight C, Harding R, Schlag AK, Nutt DJ, Neill JC (2023). Cost-effectiveness of psilocybin-assisted therapy for severe depression: exploratory findings from a decision analytic model. *Psychological Medicine* 53, 7619–7626.
- McGuire AL, Cohen IG, Sisti D, Baggott M, Celidwen Y, Devenot N, et al. (2024). Developing an ethics and policy framework for psychedelic clinical care: a consensus statement. *JAMA Network Open* 7, e2414650–e2414650.
- Meir P, Taylor L, Soares JC, Meyer TD (2023). Psychotherapists' openness to engage their patients in psilocybin-assisted therapy for mental health treatment. *Journal of Affective Disorders* 323, 748–754.
- Metaxa A-M, Clarke M (2024). Efficacy of psilocybin for treating symptoms of depression: systematic review and meta-analysis. *BMJ* 385, e078084.
- Meyer TD, Meir P, Lex C, Soares JC (2022). Magic mushrooms – an exploratory look at how mental health professionals feel and think about psilocybin. *Psychiatry Research* 316, 114727.
- Miller AH, Raison CL (2023). Psychedelics and ketamine are a symptom of psychiatry's woes, not a cure. *Molecular Psychiatry* 28, 3167–3168.
- Moreno FA, Wiegand CB, Taitano EK, Delgado PL (2006). Safety, tolerability, and efficacy of psilocybin in 9 patients with obsessive-compulsive disorder. *The Journal of Clinical Psychiatry* 67, 1735–1740.
- O'Donnell KC, Anderson BT, Barrett FS, Bogenschutz MP, Grob CS, Hendricks PS, Kelmendi B, Nayak SM, Nicholas CR, Paleos CA, Stauffer CS, Gukasyan N (2024). Misinterpretations and omissions: a critical response to Goodwin and colleagues' commentary on psilocybin-assisted therapy. *American Journal of Psychiatry* 181, 74–75.
- Olafsson RP, Kvaran K, Ketilsdottir K, Hallgrimsdottir K, Sigurdsson EL, Sigurdsson E (2023). [Psychedelics and treatment of mental disorders: a survey of attitudes and knowledge among psychiatrists, general practitioners and psychologists in Iceland]. *Laeknabladid* 109, 495–503.
- Page LA, Rehman A, Syed H, Forcer K, Campbell G (2021). The readiness of psychiatrists to implement psychedelic-assisted psychotherapy. *Frontiers in Psychiatry* 12, 743599.
- Pagni BA, Petridis PD, Podrebarac SK, Grinband J, Claus ED, Bogenschutz MP (2024). Psilocybin-induced changes in neural reactivity to alcohol and emotional cues in patients with alcohol use disorder: an fMRI pilot study. *Scientific Reports* 14, 3159.
- Peck SK, Shao S, Gruen T, Yang K, Babakanian A, Trim J, Finn DM, Kaye WH (2023). Psilocybin therapy for females with anorexia nervosa: a phase 1, open-label feasibility study. *Nature Medicine* 29, 1947–1953.
- Raison CL, Sanacora G, Woolley J, Heinzerling K, Dunlop BW, Brown RT et al. (2023). Single-dose psilocybin treatment for major depressive disorder: a randomized clinical trial. *JAMA* 330, 843–853.
- Reardon S (2024). FDA rejects ecstasy as a therapy: what's next for psychedelics? Nature.
- Schneier FR, Feusner J, Wheaton MG, Gomez GJ, Cornejo G, Naraindas AM, Hellerstein DJ (2023). Pilot study of single-dose psilocybin for serotonin



- reuptake inhibitor-resistant body dysmorphic disorder. *Journal of Psychiatric Research* **161**, 364–370.
- van Elk M, Fried EI (2023). History repeating: guidelines to address common problems in psychedelic science. *Therapeutic Advances in Psychopharmacology* **13**, 20451253231198466.
- von Rotz R, Schindowski EM, Jungwirth J, Schuldt A, Rieser NM, Zahoranszky K, Seifritz E, Nowak A, Nowak P, Jäncke L, Preller KH, Vollenweider FX (2023). Single-dose psilocybin-assisted therapy in major depressive disorder: a placebo-controlled, double-blind, randomised clinical trial. *eClinicalMedicine* **56**, 101809.
- Yaden DB, Berghella AP, Hendricks PS, Yaden ME, Levine M, Rohde JS, Nayak S, Johnson MW, Garcia-Romeu A (2024). IUPHAR-review: the integration of classic psychedelics into current substance use disorder treatment models. *Pharmacological Research* **199**, 106998.
- Žuljević MF, Breški N, Kaliterna M, Hren D (2024a). Attitudes of european psychiatrists on psychedelics: a qualitative study. *Frontiers in Psychiatry* **15**, 1411234.
- Žuljević MF, Hren D, Storman D, Kaliterna M, Duplancić D (2024b). Attitudes of European psychiatrists on psychedelics: a cross-sectional survey study. *Scientific Reports* **14**, 18716.