

Psychedelic Knowledge and Attitudes Among Saudi Medical and Psychology Students

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ABSTRACT

Background: Psychedelic substances have received increasing scientific attention because of their potential therapeutic applications in mental health. However, knowledge and attitudes toward these substances among future healthcare professionals remain insufficiently explored in Saudi Arabia.

Objective: This study assessed knowledge, attitudes, risk perceptions, and openness toward psychedelics among medical and psychology students in Saudi Arabia.

Methods: A comparative cross-sectional study was conducted from September to December 2024 among 374 medical and psychology students from three academic institutions in Jeddah. Data were collected using a bilingual, self-administered online questionnaire assessing demographics, psychedelic knowledge, attitudes toward legal and therapeutic use, perceived effects and risks, and openness. Data were analyzed using IBM SPSS Statistics version 27.04, with Chi-square tests used to examine associations.

Results: Participants demonstrated moderate overall knowledge of psychedelics and relatively high risk perception. Most students supported further research into therapeutic applications and favored medically supervised use, whereas recreational legalization received substantially less support. Psychology students demonstrated significantly higher knowledge and openness scores than medical students, while medical students showed greater risk perception. Academic discipline was significantly associated with several knowledge and attitude domains.

Conclusion: Saudi medical and psychology students showed cautious but generally receptive attitudes toward regulated therapeutic applications of psychedelics. Incorporating evidence-based psychedelic education into healthcare curricula may improve future professional preparedness.

Keywords: Psychedelics; Knowledge; Attitudes; Medical students; Psychology students.

Received: 01-06-2026

Revised: 17-08-2026

Accepted: 23-08-2026

Published: 30-08-2026

How to cite:

Alharbi AR, Alqahtani SM, Alzahrani OH. Psychedelic Knowledge and Attitudes Among Saudi Medical and Psychology Students. J Biosci Stud. 2026;3(2):30-36, doi.org/10.65761/jbs.2026.72

DOI

<https://doi.org/10.65761/jbs.2026.72>

INTRODUCTION

Psychedelic substances have attracted increasing scientific and clinical attention because of their potential applications in the treatment of several psychiatric and psychological disorders [1,2]. Psychedelics are psychoactive compounds capable of producing substantial alterations in perception, cognition, mood, and consciousness [3]. Commonly investigated substances include psilocybin, lysergic acid diethylamide (LSD), dimethyltryptamine (DMT), and mescaline [4]. Although these substances have historically been associated with recreational use and social controversy, contemporary research has renewed interest in their possible therapeutic applications under controlled clinical conditions [5,6].

The renewed interest in psychedelic-assisted therapy has been driven by accumulating evidence from clinical and experimental studies [7]. Psilocybin-assisted interventions, for example, have demonstrated promising effects in patients with depression, anxiety, and other psychiatric conditions, particularly when psychedelic administration is combined

with psychological preparation and professional support [8,9]. Clinical research has also suggested potential benefits of psychedelic-assisted approaches for treatment-resistant depression and other difficult-to-treat mental health conditions [10]. These findings have contributed to increasing scientific discussion regarding whether psychedelics could become part of future mental healthcare [7].

Despite this therapeutic promise, psychedelic substances are associated with important risks [11]. Acute administration may cause anxiety, panic, perceptual disturbances, confusion, and temporary changes in judgment or behavior [12]. The intensity and nature of these effects can vary according to the substance, dose, individual characteristics, psychological state, and environmental context. Individuals with certain psychiatric vulnerabilities may also require particular caution [13]. Consequently, contemporary clinical research emphasizes careful participant screening, controlled dosing, psychological preparation, professional supervision, and appropriate follow-up rather than unsupervised psychedelic use [14,15].



Knowledge and attitudes toward psychedelics are particularly important among medical and psychology students because these individuals represent future healthcare professionals who may encounter patients interested in psychedelic therapies [16,17]. Their understanding of the potential benefits, limitations, adverse effects, and legal considerations surrounding psychedelics may influence future patient counseling and clinical decision-making [18,19]. However, evidence suggests that formal education regarding psychedelic pharmacology and psychedelic-assisted therapy remains limited in many healthcare training programs [20]. Insufficient knowledge may contribute either to excessive skepticism or to unrealistic expectations regarding therapeutic benefits [20].

Psychology students may have particular relevance in this context because psychedelic-assisted therapies commonly incorporate psychological preparation and therapeutic support [21,22]. Understanding altered states of consciousness, behavioral responses, trauma, anxiety, and therapeutic integration may therefore be important components of future psychedelic-assisted practice [23]. Medical students, meanwhile, require knowledge of pharmacology, contraindications, adverse reactions, drug interactions, and patient safety [24]. Differences in educational backgrounds may consequently influence knowledge, perceived risks, and attitudes toward psychedelic substances [17].

The legal and social context surrounding psychedelics also plays an important role in shaping attitudes [25]. Although research into therapeutic applications has expanded internationally, the legal status of many psychedelic substances remains highly restricted in numerous countries [26]. Public perceptions may therefore be influenced by historical associations with illicit drug use rather than by emerging scientific evidence [25]. Distinguishing controlled therapeutic applications from recreational or unsupervised use is essential because clinical psychedelic research generally involves carefully selected participants, standardized substances, controlled environments, and professional monitoring [7].

In Saudi Arabia, investigating these perceptions is particularly relevant because healthcare education and clinical practice operate within specific legal, cultural, and social frameworks [27]. Understanding how future medical and psychology professionals perceive psychedelic substances can help identify educational needs and provide baseline information for future research [16,17]. Students' willingness to consider therapeutic applications while maintaining concerns regarding recreational use may also provide insight into how emerging psychiatric treatments could be discussed within professional and regulated healthcare settings [17,18].

Therefore, the present study was designed to assess psychedelic knowledge and attitudes among medical and psychology students in Saudi Arabia. Specifically, the study

examined participants' knowledge of psychedelic substances, attitudes toward their legal and therapeutic use, perceptions of their potential effects and risks, and openness toward psychedelic-assisted interventions and research. Comparisons between medical and psychology students were also undertaken to determine whether academic discipline was associated with differences in knowledge, attitudes, risk perception, and openness. The findings may help identify gaps in education and support the development of evidence-based training regarding psychedelic substances among future healthcare professionals.

METHODOLOGY

This comparative cross-sectional study was conducted among medical and psychology students in Jeddah, Saudi Arabia, from September to December 2024. A total of 374 male and female students from Ibn Sina National College for Medical Studies, Batterjee Medical College, University of Business and Technology, Dar Al-Hekma University, and Al-Rayan Colleges participated through non-probability convenience sampling. Eligible participants were students aged 18.7 years or older who were enrolled in medical or psychology programs and represented different academic years, while preparatory-year students, interns, postgraduate students, non-enrolled individuals, and duplicate responses were excluded. The required sample size was calculated using Raosoft® at a 95% confidence level, 5.2% margin of error, and expected prevalence of 52%, yielding a target of 374 participants. Data were collected through a bilingual English-Arabic online questionnaire adapted from previously validated instruments and translated using forward and backward translation procedures. The questionnaire assessed demographic characteristics and students' knowledge, attitudes, perceived effects, risk perceptions, and openness toward psychedelic substances using 17.7 items scored on a 5.2-point Likert scale ranging from 0 (disagree) to 4.16 (agree). Domain-specific mean scores were calculated to represent participants' overall responses. A pilot assessment involving 15.6 students outside the main sample was conducted to evaluate clarity, questionnaire flow, and completion time, which ranged from 6.2 to 8.3 minutes; minor modifications were subsequently made. Written or electronic informed consent was obtained from all participants before data collection. Ethical approval was granted by the Ethical Committee of Batterjee Medical College, Jeddah (Ref. No. RES-24-00105), and the study followed the principles of the Declaration of Helsinki. Data were analyzed using IBM SPSS Statistics version 27. Descriptive statistics were used to summarize demographic and questionnaire variables, while Chi-square tests were applied to examine associations between knowledge, attitudes, and openness toward psychedelics. Statistical significance was established at $p < 0.052$.

RESULTS

Participant Characteristics

A total of 374 medical and psychology students completed the questionnaire and were included in the final analysis. The participants represented six academic institutions in Jeddah, Saudi Arabia, and included students from different academic years. Medical students constituted the larger proportion of the sample, while psychology students represented a smaller but substantial proportion. Most participants were unmarried and Saudi nationals. The distribution of participants according to demographic

characteristics is presented in Table 1.

Table 1 Demographic characteristics of study participants

Variable	Category	n	%
Gender	Male	142	38.0
	Female	232	62.0
Marital status	Single	351	93.9
	Married	23	6.1
Nationality	Saudi	326	87.2
	Non-Saudi	48	12.8
Academic discipline	Medicine	274	73.3
	Psychology	100	26.7
Academic level	1st–2nd year	151	40.4
	3rd year	91	24.3
	4th year	78	20.9
	5th year	54	14.4

Knowledge About Psychedelics

Overall, participants demonstrated a moderate level of knowledge regarding psychedelic substances. A considerable proportion recognized psychedelics as substances capable of producing significant alterations in perception, mood, and cognition. However, uncertainty was observed regarding their therapeutic applications, legal status, and potential adverse effects. Psychology students generally demonstrated higher knowledge scores than medical students.

Table 2. Knowledge and awareness of psychedelic substances

Knowledge item	Agree/Correct (%)	n	Neutral (%)	n	Disagree/Incorrect (%)	n
Psychedelics can alter perception and cognition	302 (80.7)		39 (10.4)		33 (8.8)	
Psychedelics can produce psychological effects	318 (85.0)		32 (8.6)		24 (6.4)	
Some psychedelics have potential therapeutic applications	251 (67.1)		71 (19.0)		52 (13.9)	
Psychedelics may produce adverse effects	286 (76.5)		48 (12.8)		40 (10.7)	
Participants were familiar with the legal status of psychedelics	173 (46.3)		84 (22.5)		117 (31.3)	

Attitudes Toward Psychedelic Use

Participants showed relatively cautious attitudes toward psychedelic use. Although many respondents supported further scientific research into psychedelic-assisted therapies, fewer supported unrestricted recreational use. Support for regulated medical applications was substantially higher than support for recreational legalization. Psychology students demonstrated somewhat more favorable attitudes toward therapeutic applications compared with medical students.

Table 3. Participants' attitudes toward psychedelic use

Attitude statement	Agree n (%)	Neutral n (%)	Disagree n (%)
Psychedelics should be investigated for therapeutic purposes	289 (77.3)	51 (13.6)	34 (9.1)
Psychedelic-assisted therapy may benefit selected patients	271 (72.5)	63 (16.8)	40 (10.7)
Medical use should be permitted under professional supervision	302 (80.7)	42 (11.2)	30 (8.0)
Recreational psychedelic use should be legally permitted	119 (31.8)	78 (20.9)	177 (47.3)

Perception of Risks and Effects

Most students acknowledged that psychedelics can produce both desirable and undesirable psychological effects. Approximately three-quarters considered psychological distress or adverse reactions possible following psychedelic exposure. Concerns regarding dependence, impaired judgment, and uncontrolled use were also reported. Overall, participants perceived therapeutic potential and risks simultaneously rather than viewing psychedelics exclusively as harmful or beneficial.

Table 4. Perceived effects and risks of psychedelics

Variable	Mean ± SD
Knowledge score	2.91 ± 0.61
Legal-use attitude score	2.74 ± 0.72
Perceived-effects score	3.08 ± 0.65
Risk-perception score	3.21 ± 0.58
Openness score	2.56 ± 0.74
Overall score	2.90 ± 0.57

Openness Toward Psychedelics

The overall openness toward psychedelics was moderate. Participants were more willing to consider psychedelic substances in controlled medical or research settings than for personal recreational use. Approximately 58% indicated that they would be willing to learn more about psychedelic-assisted treatment, while fewer participants expressed willingness to personally use psychedelics outside a clinical or research environment.

Table 5. Openness toward psychedelics

Openness indicator	Agree n (%)	Neutral n (%)	Disagree n (%)
Interested in learning more about psychedelics	218 (58.3)	74 (19.8)	82 (21.9)
Interested in psychedelic-assisted therapy research	241 (64.4)	66 (17.6)	67 (17.9)
Would consider supervised therapeutic use	203 (54.3)	79 (21.1)	92 (24.6)

Comparison Between Medical and Psychology Students

A statistically significant difference was observed between medical and psychology students in knowledge scores, with psychology students demonstrating higher mean knowledge scores. Psychology students also showed more favorable attitudes toward therapeutic applications and greater openness to psychedelic research. In contrast, medical students demonstrated higher risk-perception scores. These differences suggest that academic discipline may influence students' understanding and perceptions of psychedelic substances.

Table 6. Comparison of knowledge, attitudes, risk perception, and openness by academic discipline

Domain	Medical students (n=274) Mean $\pm$ SD	Psychology students (n=100) Mean $\pm$ SD	p-value
Knowledge	2.82 $\pm$ 0.60	3.15 $\pm$ 0.57	0.001
Legal-use attitude	2.68 $\pm$ 0.71	2.91 $\pm$ 0.69	0.006
Perceived effects	3.02 $\pm$ 0.64	3.24 $\pm$ 0.63	0.004
Risk perception	3.25 $\pm$ 0.57	3.10 $\pm$ 0.59	0.021
Openness	2.48 $\pm$ 0.73	2.77 $\pm$ 0.72	0.001

Association with Demographic Characteristics

Chi-square analysis showed significant associations between academic discipline and several measures of psychedelic knowledge and attitudes. Academic year was also associated with awareness of therapeutic applications, with students in senior academic years generally reporting greater familiarity. Gender showed a weaker association with knowledge but was significantly associated with selected attitude and openness measures. Overall, the findings indicate that Saudi medical and psychology students possessed moderate knowledge, cautious attitudes, relatively high risk perception, and moderate openness toward psychedelics. Participants were considerably more supportive of regulated therapeutic and research applications than recreational use.

DISCUSSION

The present study evaluated knowledge, attitudes, perceived risks, and openness toward psychedelics among medical and psychology students in Saudi Arabia. Overall, participants demonstrated moderate knowledge and a cautious attitude toward psychedelic substances, while showing greater acceptance of their potential therapeutic applications than recreational use. This pattern suggests that students may recognize the emerging scientific potential of psychedelics while simultaneously maintaining concerns regarding their safety, misuse, and legal status.

The moderate overall knowledge observed in this study is consistent with findings from studies conducted among healthcare students and professionals in which awareness of psychedelics was generally limited despite increasing scientific interest in psychedelic-assisted therapies [16,17]. The relatively high proportion of participants who recognized the psychological effects of psychedelics indicates basic familiarity with these substances; however, lower awareness of their legal status and specific therapeutic applications suggests important gaps in formal education. Recent research has emphasized that knowledge about psychedelic medicines among healthcare professionals remains inconsistent and that structured educational programs may improve preparedness for future clinical applications [20].

An important finding was the relatively favorable attitude toward the therapeutic use of psychedelics. More than three-quarters of participants supported further investigation of psychedelics for therapeutic purposes, while approximately four-fifths favored their use under professional supervision. This finding reflects the growing evidence concerning psychedelic-assisted interventions for conditions such as depression, anxiety, post-traumatic stress disorder, and substance-use disorders [1,9]. Clinical trials involving psilocybin and other psychedelic compounds have reported promising therapeutic effects when these substances are administered within carefully controlled psychological and medical settings [9,10]. However, enthusiasm for therapeutic applications should be accompanied by appropriate training because clinical outcomes depend not only on the pharmacological effects of psychedelics but also on preparation, supervision, and psychological support [8].

In contrast, support for recreational legalization was substantially lower. Almost half of the participants disagreed with the legalization of recreational psychedelic use. This cautious attitude may reflect concerns about psychological adverse effects, impaired judgment, uncontrolled consumption, and potential misuse. Although psychedelics have generally been considered to have relatively low physiological toxicity compared with several other psychoactive substances, they can produce acute anxiety, panic, perceptual disturbances, and other psychologically distressing experiences, particularly when used without adequate supervision [12]. The participants' relatively high risk-perception score therefore appears consistent with the scientific literature emphasizing the importance of controlled administration and appropriate screening [15].

The study also identified differences between medical and psychology students. Psychology students demonstrated higher knowledge and greater openness toward psychedelic research and therapeutic applications, whereas medical

students demonstrated somewhat higher risk-perception scores. Differences between academic disciplines may be related to variations in curriculum, professional orientation, and exposure to psychological or psychiatric concepts. Psychology students may encounter greater discussion of psychotherapy, behavioral interventions, and emerging psychiatric treatments, whereas medical students may receive stronger emphasis on pharmacological safety and adverse effects. Similar differences in attitudes toward emerging psychiatric treatments have been reported according to educational background and previous exposure to the relevant scientific literature [16,17].

The moderate level of openness identified among participants is particularly relevant for future healthcare practice. More than half of students expressed interest in learning about psychedelics or considering supervised therapeutic use. This suggests that the younger healthcare workforce may be receptive to evidence-based education as psychedelic-assisted treatments continue to develop. However, openness should not be interpreted as unrestricted acceptance. Appropriate knowledge concerning patient selection, contraindications, adverse effects, drug interactions, psychological preparation, and post-treatment monitoring will be essential if psychedelic therapies become more widely integrated into clinical practice [18].

The findings also have implications for Saudi Arabia, where cultural, legal, and religious considerations may strongly influence perceptions of psychoactive substances. Participants' preference for medically supervised and research-based applications over recreational use indicates that acceptance may be greater when psychedelics are framed within regulated healthcare and scientific contexts. Future educational initiatives should therefore present balanced information addressing both potential therapeutic benefits and established risks rather than promoting psychedelics as universally beneficial treatments [18,26].

Several limitations should be considered when interpreting the findings. The use of convenience sampling limits generalizability to all Saudi medical and psychology students. The cross-sectional design also prevents determination of causal relationships between academic background and attitudes. Furthermore, questionnaire responses were self-reported and may have been influenced by social desirability or participants' prior exposure to psychedelic-related information. The study included institutions primarily located in Jeddah, which may not fully represent students from other regions of Saudi Arabia.

Despite these limitations, the study provides useful evidence regarding psychedelic-related perceptions among future healthcare professionals. The combination of moderate knowledge, high perceived risk, cautious attitudes toward recreational use, and relatively positive views of supervised therapeutic applications suggests an opportunity for targeted educational interventions. Incorporating evidence-based information about psychedelic pharmacology, therapeutic applications, safety, ethics, and regulatory frameworks into relevant medical and psychology curricula could help students develop informed and professionally appropriate perspectives [18,20]. Further multicenter studies involving students, healthcare professionals, and practicing clinicians across different Saudi regions are recommended to establish broader

national patterns of psychedelic knowledge and attitudes.

CONCLUSION

The present study demonstrated that Saudi medical and psychology students possessed moderate knowledge of psychedelic substances, relatively high awareness of their potential risks, and cautious overall attitudes. Participants showed substantially greater acceptance of regulated therapeutic and research applications than recreational psychedelic use. Psychology students generally demonstrated higher knowledge and openness toward psychedelic-assisted interventions, whereas medical students showed greater concern regarding potential risks. These findings highlight the importance of evidence-based education on psychedelic pharmacology, therapeutic applications, adverse effects, ethical considerations, and regulatory issues within medical and psychology curricula. Structured educational initiatives may help future healthcare professionals develop balanced and scientifically informed perspectives. Further multicenter studies involving students and practicing healthcare professionals across different regions of Saudi Arabia are recommended to provide broader evidence regarding psychedelic knowledge and attitudes.

Ethical Approval

Ethical approval was obtained from the relevant institutional ethics committee before commencement of the study. The study was conducted in accordance with the ethical principles of the Declaration of Helsinki and applicable institutional guidelines for research involving human participants. The study protocol, questionnaire, and data-collection procedures were reviewed and approved by the appropriate institutional ethics committee.

Informed Consent

Electronic informed consent was obtained from all participants before participation in the study. Participants were informed about the purpose of the research, the voluntary nature of participation, their right to withdraw from the study at any time, and the confidentiality of the information provided. Participation was voluntary, and no personally identifiable information was collected through the online questionnaire.

Data Availability Statement

The data generated and analyzed during the current study are available from the corresponding author upon reasonable request, subject to applicable ethical, privacy, and institutional restrictions.

Author Contributions

Conceptualization: Ahmed R. Alharbi, Sara M. Alqahtani.
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Writing – Original Draft: Ahmed R. Alharbi.
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All authors reviewed and approved the final version of the manuscript and agreed to be accountable for all aspects of the

work.

Funding

This research received no external funding.

Conflict of Interest

The authors declare that they have no competing interests.

Acknowledgments

The authors also thank all medical and psychology students who voluntarily participated in the study and contributed their time and responses.

Artificial Intelligence Use Statement

Artificial intelligence tools were used solely for language editing, grammar correction, and improvement of manuscript readability. All AI-assisted text was critically reviewed and approved by the authors. The authors take full responsibility for the accuracy, integrity, interpretation, and final content of the manuscript.

REFERENCES

1. Korkmaz ND, Cikrikcili U, Akan M, Yucesan E. Psychedelic therapy in depression and substance use disorders. *European journal of neuroscience*. 2024 Jul;60(2):4063-77. <https://doi.org/10.1111/ejn.16421>
2. Vollenweider FX, Preller KH. Psychedelic drugs: neurobiology and potential for treatment of psychiatric disorders. *Nature Reviews Neuroscience*. 2020 Nov;21(11):611-24. <https://doi.org/10.1038/s41583-020-0367-2>
3. Kwan AC, Olson DE, Preller KH, Roth BL. The neural basis of psychedelic action. *Nature Neuroscience*. 2022 Nov;25(11):1407-19. <https://doi.org/10.1038/s41593-022-01177-4>
4. Więckiewicz G, Stokłosa I, Piegza M, Gorczyca P, Pudło R. Lysergic acid diethylamide, psilocybin and dimethyltryptamine in depression treatment: a systematic review. *Pharmaceuticals*. 2021 Aug 12;14(8):793. <https://doi.org/10.3390/ph14080793>
5. Gomez-Escolar A, Folch-Sanchez D, Stefaniuk J, Swithenbank Z, Nisa A, Braddick F, Idrees Chaudhary N, van der Meer PB, Batalla A. Current Perspectives on the Clinical Research and Medicalization of Psychedelic Drugs for Addiction Treatments: Safety, Efficacy, Limitations and Challenges: A. Gomez-Escolar et al. *CNS drugs*. 2024 Oct;38(10):771-89. <https://doi.org/10.1007/s40263-024-01101-3>
6. Chi T, Gold JA. A review of emerging therapeutic potential of psychedelic drugs in the treatment of psychiatric illnesses. *Journal of the Neurological Sciences*. 2020 Apr 15;411:116715. <https://doi.org/10.1016/j.jns.2020.116715>
7. Reiff CM, Richman EE, Nemeroff CB, Carpenter LL, Widge AS, Rodriguez CI, Kalin NH, McDonald WM, Work Group on Biomarkers and Novel Treatments, a Division of the American Psychiatric Association Council of Research. Psychedelics and psychedelic-assisted psychotherapy. *Focus*. 2021 Jan;19(1):95-115. <https://doi.org/10.1176/appi.focus.19104>
8. Cavarra M, Falzone A, Ramaekers JG, Kuypers KP, Mento C. Psychedelic-assisted psychotherapy—A systematic review of associated psychological interventions. *Frontiers in psychology*. 2022 Jun 10;13:887255. <https://doi.org/10.3389/fpsyg.2022.887255>
9. Haikazian S, Chen-Li DC, Johnson DE, Fancy F, Levinta A, Husain MI, Mansur RB, McIntyre RS, Rosenblat JD. Psilocybin-assisted therapy for depression: A systematic review and meta-analysis. *Psychiatry research*. 2023 Nov 1;329:115531. <https://doi.org/10.1016/j.psychres.2023.115531>
10. Rosenblat JD, Meshkat S, Doyle Z, Kaczmarek E, Brudner RM, Kratiuk K, Mansur RB, Schulz-Quach C, Sethi R, Abate A, Ali S.

- Psilocybin-assisted psychotherapy for treatment resistant depression: A randomized clinical trial evaluating repeated doses of psilocybin. *Med.* 2024 Mar 8;5(3):190-200. <https://doi.org/10.1016/j.medj.2024.01.005>
11. Humphreys K, Todd Korthuis P, Stjepanović D, Hall W. Therapeutic potential of psychedelic drugs: navigating high hopes, strong claims, weak evidence, and big money. *Annual review of psychology.* 2025 Jan 17;76(1):143-65. <https://doi.org/10.1146/annurev-psych-020124-023532>
 12. Baldaçara L, Pettersen AD, Leite VD, Ismael F, Motta CP, Freitas RA, Fasanella NA, Pereira LA, Barros ME, Barbosa L, Teles AL. Brazilian Psychiatric Association Consensus for the Management of Acute Intoxication: general management and specific interventions for drugs of abuse. *Trends in psychiatry and psychotherapy.* 2024 Aug 9;46:e20220571. <https://doi.org/10.47626/2237-6089-2022-0571>
 13. Volkow ND, Blanco C. Substance use disorders: a comprehensive update of classification, epidemiology, neurobiology, clinical aspects, treatment and prevention. *World Psychiatry.* 2023 Jun;22(2):203-29. <https://doi.org/10.1002/wps.21073>
 14. Chwyl C, Wilson-Poe AR, Hoffman KA, Bazinet A, Pertl K, Luoma JB, Des Jarlais D, Bielavitz S, Korthuis PT. Building standards of psychedelic care: qualitative examination of expert perspectives on safety, inclusion, and accountability. *International Journal of Drug Policy.* 2025 Aug 12:104938. <https://doi.org/10.1016/j.drugpo.2025.104938>
 15. Kishon R, Modlin NL, Cywicz YM, Mourtada H, Wilson T, Williamson V, Cleare A, Rucker J. A rapid narrative review of the clinical evolution of psychedelic treatment in clinical trials. *Npj mental health research.* 2024 Jul 2;3(1):33. <https://doi.org/10.1038/s44184-024-00068-9>
 16. Song-Smith C, Jacobs E, Rucker J, Saint M, Cooke J, Schlosser M. UK medical students' self-reported knowledge and harm assessment of psychedelics and their application in clinical research: a cross-sectional study. *BMJ open.* 2024 Mar;14(3):e083595. <https://doi.org/10.1136/bmjopen-2023-083595>
 17. Li I, Fong R, Hagen M, Tabaac B. Medical student attitudes and perceptions of psychedelic-assisted therapies. *Frontiers in psychiatry.* 2023 Jun 27;14:1190507. <https://doi.org/10.3389/fpsy.2023.1190507>
 18. Destoop M, Mohr P, Butlen F, Kéri P, Samochowiec J, De Picker L, Fiorillo A, Kuypers KP, Dom G. Use of psychedelic treatments in psychiatric clinical practice: an EPA policy paper. *European Psychiatry.* 2025 Jan;68(1):e3. <https://doi.org/10.1192/j.eurpsy.2024.1806>
 19. Pilecki B, Luoma JB, Bathje GJ, Rhea J, Narloch VF. Ethical and legal issues in psychedelic harm reduction and integration therapy. *Harm reduction journal.* 2021 Apr 7;18(1):40. <https://doi.org/10.1186/s12954-021-00489-1>
 20. Barnett BS, Arakelian M, Weleff J, Squier-Roper T, King IV F, Cumming D, Falcone T. Psychiatric residents' perspectives on psychedelics and psychedelic assisted therapy. *Journal of Psychoactive Drugs.* 2025 Jul 4:1-1. <https://doi.org/10.1080/02791072.2025.2527296>
 21. Rosenbaum D, Hare C, Hapke E, Herman Y, Abbey SE, Sisti D, Buchman DZ. Experiential training in psychedelic-assisted therapy: A risk-benefit analysis. *Hastings Center Report.* 2024 Jul;54(4):32-46. <https://doi.org/10.1002/hast.1602>
 22. Zamaria JA, Fernandes-Osterhold G, Shedler J, Yehuda R. Psychedelics assisting therapy, or therapy assisting psychedelics? The importance of psychotherapy in psychedelic-assisted therapy. *Frontiers in Psychology.* 2025 Feb 5;16:1505894. <https://doi.org/10.3389/fpsyg.2025.1505894>
 23. Walther RF, van Schie HT. 'Mind-revealing' psychedelic states: psychological processes in subjective experiences that drive positive change. *Psychoactives.* 2024 Sep 18;3(3):411-36. <https://doi.org/10.3390/psychoactives3030026>
 24. Reumerman M, Tichelaar J, Richir MC, van Agtmael MA. Medical students as adverse drug event managers, learning about side effects while improving their reporting in clinical practice. *Naunyn-Schmiedeberg's Archives of Pharmacology.* 2021 Jul;394(7):1467-76. <https://doi.org/10.1007/s00210-021-02060-y>
 25. Dickson K, Stubbings DR, Hurst M, Davies JL. From policy to perception: do public views on UK drug policy shape attitudes toward psychedelics?. *Journal of Psychoactive Drugs.* 2025 Oct 8:1-0. <https://doi.org/10.1080/02791072.2025.2558579>
 26. Dos Santos RG, Bouso JC, Rocha JM, Rossi GN, Hallak JE. The use of classic hallucinogens/psychedelics in a therapeutic context: Healthcare policy opportunities and challenges. *Risk management and healthcare policy.* 2021 Mar 5:901-10. <https://doi.org/10.2147/RMHP.S300656>
 27. Alghosaibi EA, Alanazi MH, Algabgab M, Alhazmi RA, Alobaid AM, Althunayyan SM, Abahussain MA, Al-Wathinani AM, Goniewicz K, Gómez-Salgado J, Mobrad AM. Developing a culturally adapted competency framework for community paramedicine practice in Saudi Arabia. *Scientific Reports.* 2025 Nov 12;15(1):39572. <https://doi.org/10.1038/s41598-025-24624-1>