

# Psychedelics and the Treatment of Nicotine Dependence

## Webinar References:

- Ahmad, F. B., Cisewski, J. A., & Anderson, R. N. (2024). *Mortality in the United States—Provisional data, 2023*. *MMWR Morbidity and Mortality Weekly Report*, *73*, 677–681. <https://doi.org/10.15585/mmwr.mm7331a1>
- Aixalà, M. B. (2022). *Psychedelic integration: Psychotherapy for non-ordinary states of consciousness*. Synergetic Press.
- Barbosa, P. C. R., Tófoli, L. F., Bogenschutz, M. P., Hoy, R., Berro, L. F., Marinho, E. A. V., Areco, K. N., & Winkelman, M. J. (2018). Assessment of alcohol and tobacco use disorders among religious users of ayahuasca. *Frontiers in Psychiatry*, *9*, 136. <https://doi.org/10.3389/fpsy.2018.00136>
- Bogenschutz, M. P., Forcehimes, A. A., Pommy, J. A., Wilcox, C. E., Barbosa, P. C., & Strassman, R. J. (2015). Psilocybin-assisted treatment for alcohol dependence: A proof-of-concept study. *Journal of Psychopharmacology*, *29*(3), 289–299. <https://doi.org/10.1177/0269881114565144>
- Bogenschutz, M. P., Ross, S., Bhatt, S., Baron, T., Forcehimes, A. A., Laska, E., Mennenga, S. E., O'Donnell, K., Owens, L. T., Podrebarac, S., Rotrosen, J., Tonigan, J. S., & 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. <https://doi.org/10.1001/jamapsychiatry.2022.2096>
- Bogenschutz, M. P., & Forcehimes, A. A. (2017). Development of a psychotherapeutic model for psilocybin-assisted treatment of alcoholism. *Journal of Humanistic Psychology*, *57*(4), 389–414. <https://doi.org/10.1177/0022167816673493>
- Bogenschutz, M. P., & Johnson, M. W. (2016). Classic hallucinogens in the treatment of addictions. *Progress in Neuro-Psychopharmacology & Biological Psychiatry*, *64*, 250–258. <https://doi.org/10.1016/j.pnpbp.2015.03.002>
- Brown, A. E., Tonigan, J. S., Pavlik, V. N., Kosten, T. R., & Volk, R. J. (2013). Spirituality and confidence to resist substance use among Celebrate Recovery participants. *Journal of Religion and Health*, *52*(1), 107–113. <https://doi.org/10.1007/s10943-011-9456-x>
- Calina, D., Carvalho, F., & Docea, A. O. (2021). Toxicity of psychedelic drugs. In A. M. Tsatsakis (Ed.), *Toxicological risk assessment and multi-system health impacts from exposure* (pp. 545–556). Academic Press. <https://doi.org/10.1016/B978-0-323-85215-9.00022-2>
- Chapron, S. A., Bonazzi, G., Di Lodovico, L., de Ternay, J., Landmann, C., Nourredine, M., Salvo, F., Sessa, B., Das, R., Rolland, B., Garcia-Romeu, A., & Auriacombe, M. (2025). Impact of psychedelics on craving in addiction: A systematic review. *Journal of Psychopharmacology*. Advance online publication. <https://doi.org/10.1177/02698811241308613>
- Dinis-Oliveira, R. J. (2017). Metabolism of psilocybin and psilocin: Clinical and forensic toxicological relevance. *Drug Metabolism Reviews*, *49*(1), 84–91. <https://doi.org/10.1080/03602532.2016.1278228>
- Floris, G., Dabrowski, K. R., Zanda, M. T., & Daws, S. E. (2025). Psilocybin reduces heroin-seeking behavior and modulates inflammatory gene expression in the nucleus accumbens and prefrontal cortex of male rats. *Molecular Psychiatry*, *30*(5), 1801–1816. <https://doi.org/10.1038/s41380-024-02788-y>
- Garcia-Romeu, A., Griffiths, R. R., & Johnson, M. W. (2014). Psilocybin-occasioned mystical experiences in the treatment of tobacco addiction. *Current Drug Abuse Reviews*, *7*(3), 157–164. <https://doi.org/10.2174/1874473708666150107121331>

- Gersner, R., Barnea-Ygael, N., & Tendler, A. (2023). Moderators of the response to deep TMS for smoking addiction. *Frontiers in Psychiatry, 13*, 1079138. <https://doi.org/10.3389/fpsy.2022.1073138>
- Heal, D. J., Gosden, J., & Smith, S. L. (2018). Evaluating the abuse potential of psychedelic drugs as part of the safety pharmacology assessment for medical use in humans. *Neuropharmacology, 142*, 89–115. <https://doi.org/10.1016/j.neuropharm.2018.01.049>
- Goldberg, S. B., Pace, B. T., Nicholas, C. R., Raison, C. L., & Hutson, P. R. (2020). The experimental effects of psilocybin on symptoms of anxiety and depression: A meta-analysis. *Psychiatry Research, 284*, 112749. <https://doi.org/10.1016/j.psychres.2020.112749>
- Grim, B. J., & Grim, M. E. (2019). Belief, behavior, and belonging: How faith is indispensable in preventing and recovering from substance abuse. *Journal of Religion and Health, 58*(5), 1713–1750. <https://doi.org/10.1007/s10943-019-00876-w>
- Haikazian, S., Chen-Li, D. C. J., Johnson, D. E., Fancy, F., Levinta, A., Husain, M. I., Mansur, R. B., McIntyre, R. S., & Rosenblat, J. D. (2023). Psilocybin-assisted therapy for depression: A systematic review and meta-analysis. *Psychiatry Research, 329*, 115531. <https://doi.org/10.1016/j.psychres.2023.115531>
- Hartmann-Boyce, J., Livingstone-Banks, J., Ordóñez-Mena, J. M., Fanshawe, T. R., Lindson, N., Freeman, S. C., Sutton, A. J., Theodoulou, A., & Aveyard, P. (2021). Behavioural interventions for smoking cessation: An overview and network meta-analysis. *Cochrane Database of Systematic Reviews, 1*, CD013229. <https://doi.org/10.1002/14651858.CD013229.pub2>
- Herman, R. J., & Schmidt, H. G. (2024). Targeting GLP-1 receptors to reduce nicotine use disorder: Preclinical and clinical evidence. *Physiology & Behavior, 281*, 114565. <https://doi.org/10.1016/j.physbeh.2024.114565>
- Higgins, G. A., & Sellers, E. M. (2021). 5-HT<sub>2A</sub> and 5-HT<sub>2C</sub> receptors as potential targets for the treatment of nicotine use and dependence. *Progress in Brain Research, 259*, 229–263. <https://doi.org/10.1016/bs.pbr.2021.01.007>
- Johnson, M. W., Garcia-Romeu, A., Cosimano, M. P., & Griffiths, R. R. (2014). Pilot study of the 5-HT<sub>2A</sub>R agonist psilocybin in the treatment of tobacco addiction. *Journal of Psychopharmacology, 28*(11), 983–992. <https://doi.org/10.1177/0269881114548296>
- Johnson, M. W., Garcia-Romeu, A., & Griffiths, R. R. (2017a). Long-term follow-up of psilocybin-facilitated smoking cessation. *American Journal of Drug and Alcohol Abuse, 43*(1), 55–60. <https://doi.org/10.3109/00952990.2016.1170135>
- Johnson, M. W., Garcia-Romeu, A., Johnson, P. S., & Griffiths, R. R. (2017b). An online survey of tobacco smoking cessation associated with naturalistic psychedelic use. *Journal of Psychopharmacology, 31*(7), 841–850. <https://doi.org/10.1177/0269881116684335>
- Jones, G. M., & Nock, M. K. (2022). Exploring protective associations between the use of classic psychedelics and cocaine use disorder: A population-based survey study. *Scientific Reports, 12*, 2574. <https://doi.org/10.1038/s41598-022-06580-2>
- Jones, G., Ricard, J. A., Lipson, J., & Nock, M. K. (2022). Associations between classic psychedelics and opioid use disorder in a nationally representative U.S. adult sample. *Scientific Reports, 12*, 4099. <https://doi.org/10.1038/s41598-022-08085-4>
- Jones, G., Lipson, J., & Nock, M. K. (2022). Associations between classic psychedelics and nicotine dependence in a nationally representative sample. *Scientific Reports, 12*, 10578. <https://doi.org/10.1038/s41598-022-14809-3>
- Karnieg, T., & Wang, X. (2018). Cytisine for smoking cessation. *CMAJ, 190*(19), E596. <https://doi.org/10.1503/cmaj.171371>

- Koning, E., Chaves, C., Kirkpatrick, R. H., & Brietzke, E. (2024). Exploring the neurobiological correlates of psilocybin-assisted psychotherapy in eating disorders. *Journal of Eating Disorders*, 12(1), 214. <https://doi.org/10.1186/s40337-024-01185-8>
- Krebs, T. S., & Johansen, P. O. (2012). Lysergic acid diethylamide (LSD) for alcoholism: Meta-analysis of randomized controlled trials. *Journal of Psychopharmacology*, 26, 994–1002.
- Krediet, E., Bostoen, T., Breeksema, J., van Schagen, A., Passie, T., & Vermetten, E. (2020). Reviewing the potential of psychedelics for the treatment of PTSD. *International Journal of Neuropsychopharmacology*, 23(6), 385–400. <https://doi.org/10.1093/ijnp/pyaa018>
- Mosurinjoh, S., Roseman, L., & Girn, M. (2023). Psychedelic-induced mystical experiences: An interdisciplinary discussion and critique. *Frontiers in Psychiatry*, 14, 1077311. <https://doi.org/10.3389/fpsy.2023.1077311>
- Meshkat, S., Malik, G., Zeifman, R. J., Swainson, J., Balachandra, K., Reichelt, A. C., Zhang, Y., Burbach, L., Winkler, O., Greenshaw, A., Vermetten, E., Mayo, L. M., Tanguay, R., Jetly, R., & Bhat, V. (2025). Efficacy and safety of psilocybin for the treatment of substance use disorders: A systematic review. *Neuroscience & Biobehavioral Reviews*, 173, 106163. <https://doi.org/10.1016/j.neubiorev.2025.106163>
- Modlin, N. L., Williamson, V., Maggio, C., Stubbley, J., Kirlic, N., Cleare, A., & Rucker, J. (2025). Clinical conceptualisation of PTSD in psilocybin treatment: Disrupting a pre-determined and over-determined maladaptive interpretive framework. *Therapeutic Advances in Psychopharmacology*, 15, 20451253251342319. <https://doi.org/10.1177/20451253251342319>
- Noorani, T., Garcia-Romeu, A., Swift, T. C., Griffiths, R. R., & Johnson, M. W. (2018). Psychedelic therapy for smoking cessation: Qualitative analysis of participant accounts. *Journal of Psychopharmacology*, 32(7), 756–769. <https://doi.org/10.1177/0269881118780612>
- Pardini, D. A., Plante, T. G., Sherman, A., & Stump, J. E. (2000). Religious faith and spirituality in substance abuse recovery: Determining the mental health benefits. *Journal of Substance Abuse Treatment*, 19(4), 347–354. [https://doi.org/10.1016/S0740-5472\(00\)00125-2](https://doi.org/10.1016/S0740-5472(00)00125-2)
- Pollan, M. (2018). *How to change your mind*. Penguin Press.
- Rigotti, N. A., Benowitz, N., & Jacobs, C. (2023a). Cytisinicline for smoking cessation. *JAMA*, 330(2), 152–160. <https://doi.org/10.1001/jama.2023.10042>
- Rigotti, N. A., Benowitz, N., & Jacobs, C. (2023b). Cytisinicline for vaping cessation in adults using nicotine e-cigarettes: The ORCA-V1 randomized clinical trial. *JAMA Internal Medicine*, 184(8), 922–930. <https://doi.org/10.1001/jamainternmed.2024.1313>
- Romeo, B., Hermand, M., Pétilion, A., Karila, L., & Benyamina, A. (2021). Clinical and biological predictors of psychedelic response in the treatment of psychiatric and addictive disorders: A systematic review. *Journal of Psychiatric Research*, 137, 273–282. <https://doi.org/10.1016/j.jpsychires.2021.03.002>
- Romeo, B., Fauvel, B., Dejean, S., Strika, L., Amirouche, A., Verroust, V., Piolino, P., & Benyamina, A. (2023). Impact of a naturalistic psychedelic experience on smoking: A retrospective survey. *Journal of Psychoactive Drugs*, 55(5), 640–649. <https://doi.org/10.1080/02791072.2023.2227171>
- Talin, P., & Sanabria, E. (2017). Ayahuasca's entwined efficacy: An ethnographic study of ritual healing from "addiction." *International Journal of Drug Policy*, 44, 23–30. <https://doi.org/10.1016/j.drugpo.2017.02.017>
- Thomas, G., Lucas, P., Capler, N. R., Tupper, K. W., & Martin, G. (2013). Ayahuasca-assisted therapy for addiction: Results from a preliminary observational study in Canada. *Current Drug Abuse Reviews*, 6(1), 30–42. <https://doi.org/10.2174/15733998113099990003>

- U.S. Department of Health and Human Services. (2004). *The health consequences of smoking: A report of the Surgeon General*. Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.
- U.S. Department of Health and Human Services. (2020). *Smoking cessation: A report of the Surgeon General*. Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.
- U.S. Food and Drug Administration. (2021). *Letter to Brainsway re: Transcranial magnetic stimulation system for neurological and psychiatric disorders and conditions*.  
[https://www.accessdata.fda.gov/cdrh\\_docs/pdf20/K200957.pdf](https://www.accessdata.fda.gov/cdrh_docs/pdf20/K200957.pdf)
- van der Meer, P. B., Fuentes, J. J., Kaptein, A. A., Schoones, J. W., de Waal, M. M., Goudriaan, A. E., Kramers, K., Schellekens, A., Somers, M., Bossong, M. G., & Batalla, A. (2023). Therapeutic effect of psilocybin in addiction: A systematic review. *Frontiers in Psychiatry, 14*, 1134454.  
<https://doi.org/10.3389/fpsy.2023.1134454>
- Young, J. R., Galla, J. T., & Applebaum, L. G. (2022). Transcranial magnetic stimulation treatment for smoking cessation: An introduction for primary care physicians. *American Journal of Medicine, 134*(11), 1339–1343. <https://doi.org/10.1016/j.amjmed.2021.06.037>
- Wulff, A. B., Nichols, C. D., & Thompson, S. M. (2023). Preclinical perspectives on the mechanisms underlying the therapeutic actions of psilocybin in psychiatric disorders. *Neuropharmacology, 231*, 109504. <https://doi.org/10.1016/j.neuropharm.2023.109504>