

Rural Rounds: Psychedelic-Assisted Therapy in the Rural Setting

Dr. Pamela Kryskow, MD, CCFP, FCFP

Dr. Gordon Horner (moderator)

November 2, 2023 | 0800-0900 PST



THE UNIVERSITY OF BRITISH COLUMBIA

Continuing Professional Development

Faculty of Medicine

LAND ACKNOWLEDGMENT

I work, live, and play on the traditional, ancestral and unceded territory of the Snuneymuxw, Klahoose, Tla'amin and Homalco Nations



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

PRESENTER DISCLOSURES

- Medical Lead - Roots To Thrive Non Profit
- Founding board member - Psychedelic Association of Canada Non Profit
- Medical Chair - Vancouver Island Post Graduate Certificate in Psychedelic Assisted Therapy (Adjunct Professor)
- UBC Department of Family Medicine Clinical Instructor
- Interim Medical Director - QI Wellness
- Unpaid advisor - Nectara (General Advisor), Synaptic (Oregon Psilocybin Services), University of Washington Center for Novel Therapeutics in Addiction
- Future Warrants - Numinus - clinical protocol advisor
- Scientific Advisor - Mycomedica Life Sciences Public Benefit Corporation
- Roots to Thrive receives research grants - I am on the team & receive no compensation



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

MITIGATION OF BIAS

- All content developed as part of this program was reviewed for potential bias by the members of the program planning committee.
- Financial relationships are unrelated to presentation.
- I will speak about generic & naturally occurring medications.
- I will use my clinical experience in my opinions and will try to clearly point out any bias.



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

LEARNING OBJECTIVES

- Review the current regulatory landscape for psychedelic-assisted therapy
- Identify how psychedelic medicines are currently accessed for Canadians
- Examine research evidence for treatment of PTSD, depression, end of life distress and other mental health challenges
- Describe how rural practitioners can prepare to work with psychedelic medicines in service to their patients



CASE EXAMPLE

Jane is a 32-year-old woman identifying (she/her) has been diagnosed with treatment-resistant depression since the age of 20, she had tried various conventional treatments with limited success including 3 SSRIs, a SNRI, herbs, acupuncture and meditation. She has been working with a therapist who she has a good therapeutic alliance with and has suggested that psilocybin might be an option. She has done some research on it and sees it frequently mentioned in the media. She wants to discuss this option with you



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT



The current regulatory landscape for psychedelic-assisted therapy

UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT



Identify how psychedelic medicines are currently accessed for Canadians

UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT



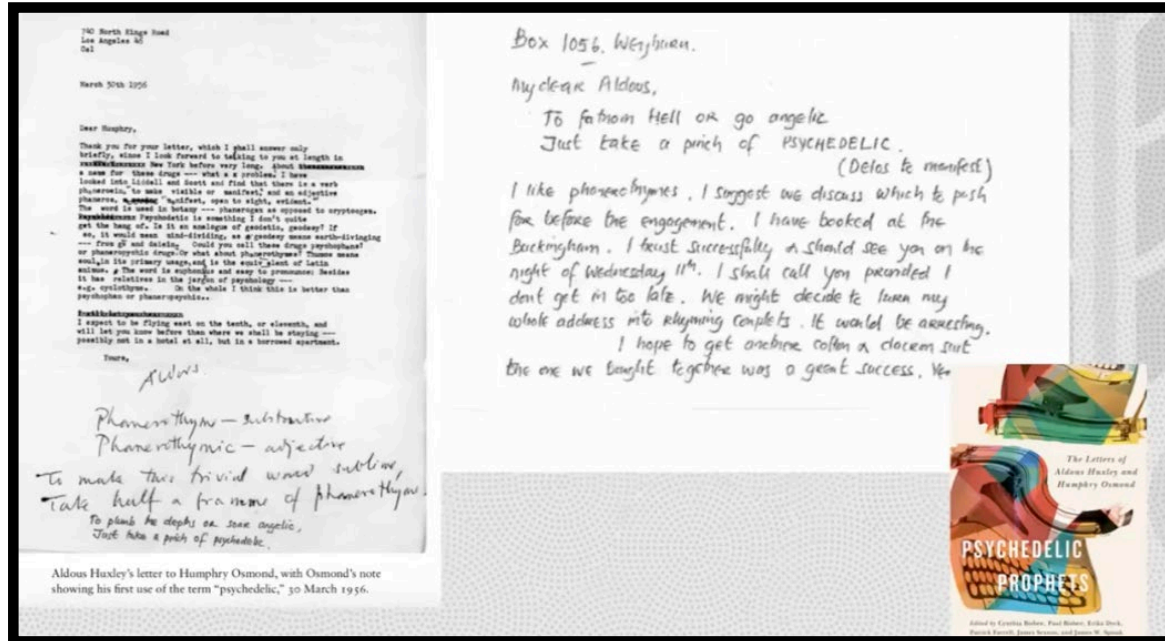
A bit of history first...

UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

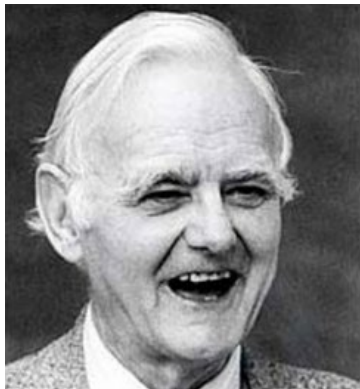
HISTORIC CONTEXT



Weyburn Mental Hospital - Saskatchewan 2012-2017



Psychedelic Prophets - The Letters of Aldous Huxley and Humphrey Osmond



To fathom Hell or soar angelic, just
take a pinch of psychedelic.

— Humphrey Osmond —

Humphrey Osmond - 1956



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

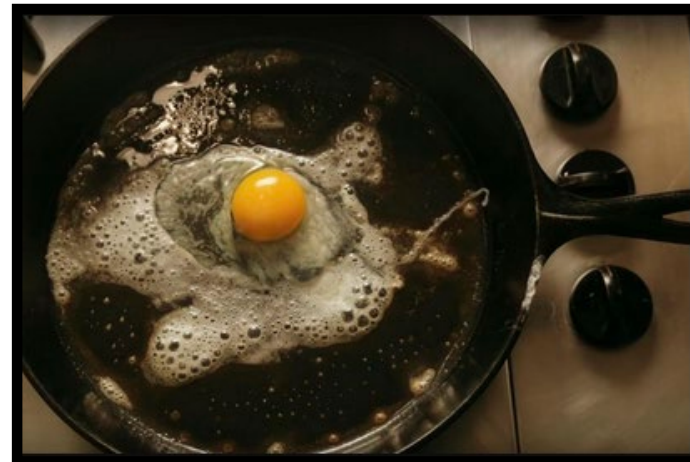
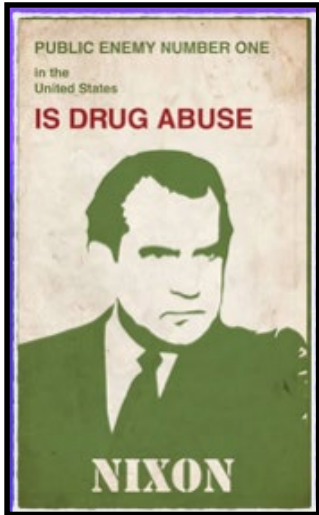
HISTORIC CONTEXT

Controlled Substance Act US (1970)

MDMA - Schedule – 1985

“No medical use”

“High potential for abuse”

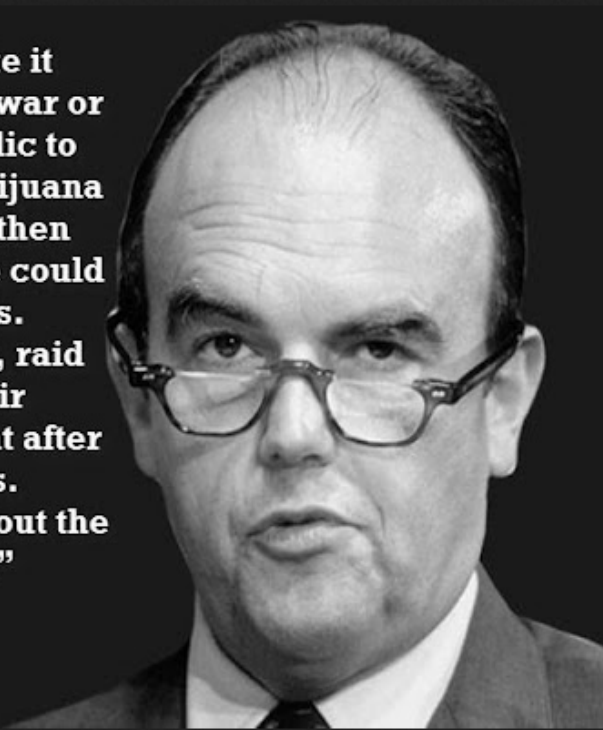


UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

HISTORIC CONTEXT

"We knew we couldn't make it illegal to be either against the war or black, but by getting the public to associate the hippies with marijuana and blacks with heroin, and then criminalizing both heavily, we could disrupt those communities. We could arrest their leaders, raid their homes, break up their meetings, and vilify them night after night on the evening news. Did we know we were lying about the drugs? Of course we did."

**- John Ehrlichman
Nixon policy advisor**



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

REGULATORY LANDSCAPE

Canadian Schedules Controlled Drugs and Substances Act (CDSA)

- Schedule I –
 - MDMA
 - Ketamine
- Schedule III -
 - DMT/Ayahuasca
 - Psilocybin
 - LSD
- Ibogaine - regulated prescription drug but not authorized for medical use



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

REGULATORY LANDSCAPE

- 2012 - Moved into Schedule J - making them ineligible for Special Access Program (SAP)
- Section 56(1) exemptions - case by case application - Dr. Bruce Tobin (2017)
- Section 56.1 exemptions - clinical trials (2013)
- Special Access Program (SAP) - January 2021



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

REGULATORY LANDSCAPE

Special Access Program (SAP)

Psilocybin ~ 125 granted
End of Life Distress & Treatment Resistant Depression

MDMA ~ 25 granted
PTSD



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

Health Canada Santé Canada
Protected B when completed

Special Access Program
Form A - Patient specific request - C08.010(1)

A	B	C	D	E	FGH	I	J	K	L	M
Section A: Practitioner Information										
Practitioner's name: (First Last) Pamela Kryskow										
Hospital or clinic name: Roots To Thrive										
Practitioner's address: 1984 Woobank Rd, Nanaimo BC V9X 1K6, Canada										
City: Nanaimo			Province: BC			Postal Code:				
Telephone #: 2502089717					Fax #: 2502448426					
Email: doctor.pamela@gmail.com										
If alternate contact is available complete section below										
Alternate contact name: (First Last)										
Telephone #:					Fax #:					
Email:										
Shipping information										
Send drug c/o:										
In-patient hospital pharmacy			Practitioner's office			Nuclear medicine				
Blood bank			Government agency depot			Community				
Shipping address: 1660 Seaford Road, Cortes Island, BC, V0P1T0										
City: Cortes Island			Province: BC			Postal Code: V0P1T0				
Telephone #: 2502089717					Fax #: 2502448426					

DECRIMINILIZATION

- Psilocybin - Vancouver, Kingston, Toronto
- MDMA - British Columbia



UBC CPD
Medicine

CONTINUING
PROFESSIONAL
DEVELOPMENT

CHURCHES

SECTION 56 EXEMPTIONS

Sante Daime – Ayahuasca

- Céu do Montréal
- Beneficent Spiritist Center União do Vegetal
- Ceu da Divina Luz do Montreal
- Église Santo Daime Céu do Vale de Vida
- Ceu de Toronto



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT



Examine research evidence for treatment of PTSD, depression, end of life distress and other mental health challenges

UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

REGISTERED TRIALS

- 1000's of ketamine trials - PTSD, depression, chronic pain, eating disorders, neurological conditions, OCD, anxiety
- 156 Psilocybin - PTSD, depression, anxiety, migraines, eating disorders, PD, OCD, grief, fibromyalgia, SUD, Burnout (Professional, Caregiver), Alcohol Use, Cancer, Palliative, Well-being, OUD, Borderline personality
- 142 MDMA - PTSD, anxiety, alcohol use, combat stress, cognition, SUD, autism, chronic pain, exposure therapy
- 5 LSD - cluster headaches, anxiety, ADHD, palliative care, depression,
- Iboga, Peyote, Huachuma, 5MEO DMT, MEAI, Ayahuasca and more



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

RESEARCH EVIDENCE

- Psilocybin - alcohol use disorder, tobacco cessation, eating disorders, PTSD, violence reduction
- MDMA - PTSD, disordered eating, chronic pain
- LSD - substance use disorders, anxiety, depression, alcohol use disorder
- Ketamine - depression, OCD, disordered eating, substance use challenges, chronic pain, suicidality
- DMT/Ayahuasca - substance use challenges, anxiety, depression, trauma



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

RESEARCH EVIDENCE

John Hopkins - Psilocybin & End of Life Distress (2000)



- Regulatory approval 2000
- Published 2006
- Lab synthesized psilocybin
- Top 5 significant experiences of their lives



Photo credit: John Hopkins

UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

RESEARCH EVIDENCE

Depression & Anxiety in Patients with Life Threatening Cancer

- 2 sessions 5 weeks apart
- 1 or 3mg/70kg vs 22 or 30mg/70kg
- 92% in high dose vs 32 in low dose clinically significant response
- Anxiety remission 52%(high dose) vs 12% (low dose)
- Depression remission 60% (high dose) vs 16% (low dose)

Griffiths RR, Johnson MW, Carducci MA, et al. Psilocybin produces substantial and sustained decreases in depression and anxiety in patients with life-threatening cancer: A randomized double-blind trial. *J Psychopharmacol.* 2016;30(12):1181-1197.



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

RESEARCH

Psilocybin



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

RESEARCH EVIDENCE

JAMA Psychiatry | [Original Investigation](#)

Effects of Psilocybin-Assisted Therapy on Major Depressive Disorder A Randomized Clinical Trial

Alan K. Davis, PhD; Frederick S. Barrett, PhD; Darrick G. May, MD; Mary P. Cosimano, MSW; Nathan D. Sepeda, BS;
Matthew W. Johnson, PhD; Patrick H. Finan, PhD; Roland R. Griffiths, PhD

2 psilocybin sessions (20mg/70kg & 30mg/70kg)

Supportive psychotherapy

71% had clinically significant results at 4 weeks:

- > 50% reduction in GRID-HAMD score
- 54% in remission

(waitlist control)



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

RESEARCH EVIDENCE

Clinical Trial > [N Engl J Med. 2021 Apr 15;384\(15\):1402-1411. doi: 10.1056/NEJMoa2032994.](#)

Trial of Psilocybin versus Escitalopram for Depression

[Robin Carhart-Harris](#)¹, [Bruna Giribaldi](#)¹, [Rosalind Watts](#)¹, [Michelle Baker-Jones](#)¹,
[Ashleigh Murphy-Beiner](#)¹, [Roberta Murphy](#)¹, [Jonny Martell](#)¹, [Allan Blemings](#)¹, [David Erritzoe](#)¹,
[David J Nutt](#)¹

2 Psilocybin doses 25mg at 3 and 6 weeks and
daily 1 mg psilocybin for 6 weeks

2 Psilocybin doses 1 mg at 3 and 6 weeks and
daily escitalopram

Psychological support



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

RESEARCH EVIDENCE

Clinical Trial > N Engl J Med. 2021 Apr 15;384(15):1402-1411. doi: 10.1056/NEJMoa2032994.

Trial of Psilocybin versus Escitalopram for Depression

Robin Carhart-Harris ¹, Bruna Giribaldi ¹, Rosalind Watts ¹, Michelle Baker-Jones ¹,
Ashleigh Murphy-Beiner ¹, Roberta Murphy ¹, Jonny Martell ¹, Allan Blemings ¹, David Erritzoe ¹,
David J Nutt ¹

Psilocybin demonstrated non-inferior efficacy in depression at 6 weeks (QIDS-SR-16)

Secondary endpoints favored psilocybin: Well-being, pleasure or loss of anhedonia, flourishing



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

RESEARCH EVIDENCE

Tobacco Cessation (n=15)

Mean age 51 years

19 cigarettes a day

31 year smoking history

Johnson MW, Garcia-Romeu A, Griffiths RR. Long-term follow-up of psilocybin-facilitated smoking cessation. *The American Journal of Drug and Alcohol Abuse*. 2017;43(1):55-60.



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

RESEARCH EVIDENCE

Tobacco Cessation (n=15)

2-3 high dose sessions (20-30mg) (5 & 7 weeks, 13 week optional)

4 weeks preparation, CBT, mindfulness, guided imagery

67% abstinent at 12 months (n=10)

86.7% (n=13) “most personally meaningful and spiritually significant experiences of their lives”

Johnson MW, Garcia-Romeu A, Griffiths RR. Long-term follow-up of psilocybin-facilitated smoking cessation. *The American Journal of Drug and Alcohol Abuse*. 2017;43(1):55-60.



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

RESEARCH EVIDENCE

Alcohol Use - Binge Drinking (n = 93)

2 sessions (4 and 8 weeks) optional open label 38 week

Psychotherapy - 4 pre session, 4 between session 1 & 2, 4 post 2nd session
(CBT and motivational interviewing)

25mg/70kg - 30mg/70kg - 40mg/70kg

Percentage of heavy drinking days 50% than at screening and 41% lower than
diphenhydramine group

Johnson MW, Garcia-Romeu A, Griffiths RR. Long-term follow-up of psilocybin-facilitated smoking cessation.
The American Journal of Drug and Alcohol Abuse. 2017;43(1):55-60.



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

RESEARCH

MDMA



UBC CPD
Medicine

CONTINUING
PROFESSIONAL
DEVELOPMENT

RESEARCH EVIDENCE

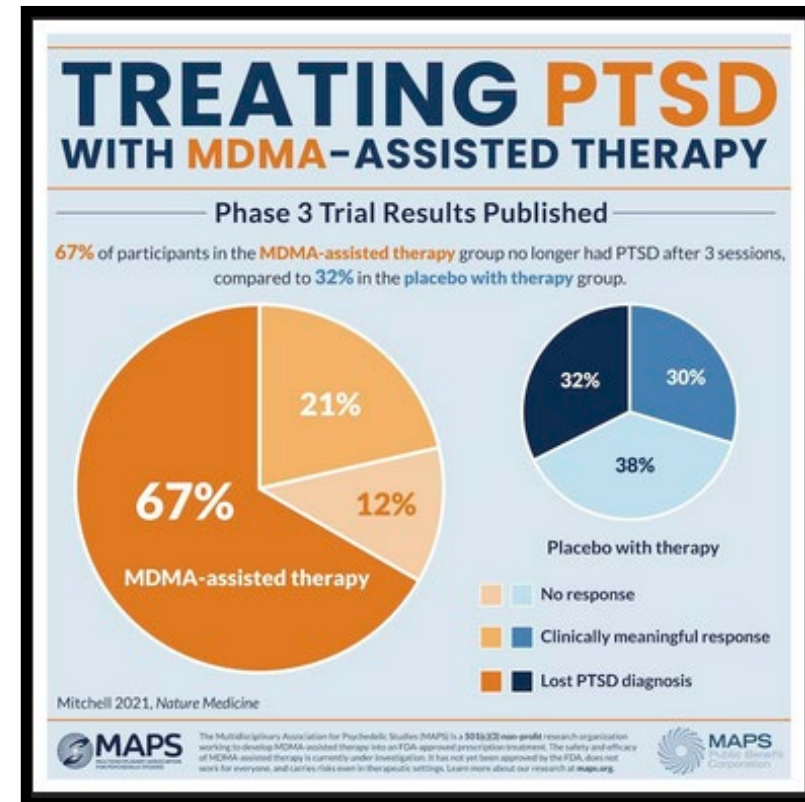
Clinical Trial > Nat Med. 2021 Jun;27(6):1025-1033. doi: 10.1038/s41591-021-01336-3.

Epub 2021 May 10.

MDMA-assisted therapy for severe PTSD: a randomized, double-blind, placebo-controlled phase 3 study

Jennifer M Mitchell ^{1, 2}, Michael Bogenschutz ³, Alia Lilienstein ⁴, Charlotte Harrison ⁵,

- Average of 15 years of PTSD (highest 50 years)
- 84% developmental trauma
- Average of 13 medications



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

RESEARCH EVIDENCE

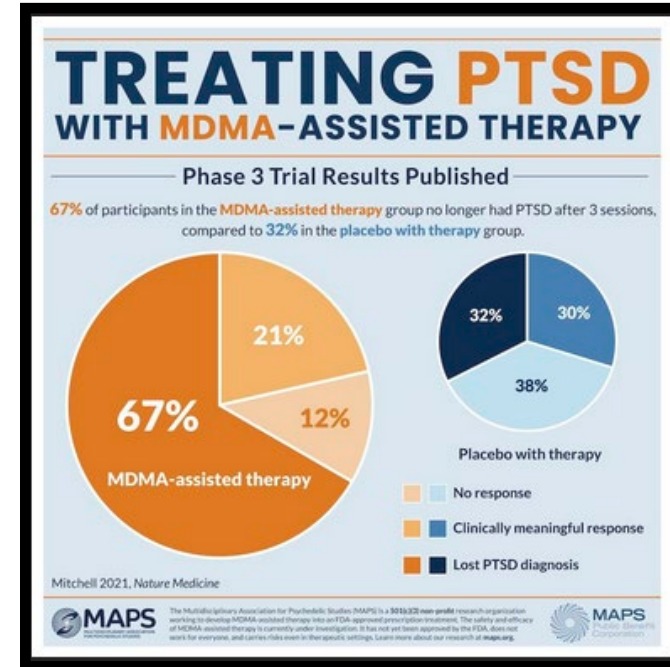
Clinical Trial > Nat Med. 2021 Jun;27(6):1025-1033. doi: 10.1038/s41591-021-01336-3.

Epub 2021 May 10.

MDMA-assisted therapy for severe PTSD: a randomized, double-blind, placebo-controlled phase 3 study

Jennifer M Mitchell ^{1, 2}, Michael Bogenschutz ³, Alia Lilienstein ⁴, Charlotte Harrison ⁵,

- 3 MDMA Sessions with 2 therapists - 8 hour sessions
- Supportive Therapy - 42 hours
- 67% of patients with PTSD no longer qualified for the diagnosis (@ 12 months)
- 88% clinically meaningful reduction in symptoms
- Sept 2023 - confirmatory Phase 3



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

RESEARCH

LSD



UBC CPD
Medicine

CONTINUING
PROFESSIONAL
DEVELOPMENT

RESEARCH EVIDENCE

LSD & Alcohol Use Disorder

Significant and beneficial effects on alcohol use to 3 months, lost significance at 6 months

Krebs TS, Johansen PØ. J Psychopharmacol. 2012 Jul;26(7):994-1002

LSD & Anxiety

Decreased state and trait anxiety that was sustained at 12 months

Gasser P, et al. J Nerv Ment Dis. 2014 Jul;202(7):513-20.



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

RESEARCH

Ketamine



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

RESEARCH EVIDENCE

Intranasal - treatment resistant depression - on label (esketamine)

- at 4 weeks not clinically significant reduction in MADRS scores (<12 for 3 weeks)
- \$2500-\$7500/month

Intravenous - acute suicidality (0.2mg/kg)

Maguire, L., Bullard, T., & Papa, L. (2021). Ketamine for acute suicidality in the emergency department: A systematic review. *The American Journal of Emergency Medicine*, 43, 54-58.

Intravenous - depression (0.5mg/kg)

Marcantoni, W. S., Akoumba, B. S., Wassef, M., Mayrand, J., Lai, H., Richard-Devantoy, S., & Beauchamp, S. (2020). A systematic review and meta-analysis of the efficacy of intravenous ketamine infusion for treatment resistant depression: January 2009–January 2019. *Journal of Affective Disorders*, 277, 831-841.



RESEARCH EVIDENCE

Adjunctive Ketamine With Relapse Prevention–Based Psychological Therapy in the Treatment of Alcohol Use Disorder

Meryem Grabski, Ph.D., Amy McAndrew, Ph.D., Will Lawn, Ph.D., Beth Marsh, B.Sc., Laura Raymen, M.Sc., Tobias Stevens, Ph.D., Lorna Hardy, Ph.D., Fiona Warren, Ph.D., Michael Bloomfield, ... [See all authors](#) ✓

Published Online: 11 Jan 2022 | <https://doi.org/10.1176/appi.ajp.2021.21030277>



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

3 weekly ketamine infusions

Supportive psychotherapy

86% abstinent from alcohol at 6 months
Relapse rates 2.7 times less than placebo

RESEARCH EVIDENCE

CASE REPORT article
Front. Psychiatry, 12 January 2022
Sec. Psychopharmacology
<https://doi.org/10.3389/fpsyt.2021.803279>

This article is part of the Research Topic
Therapeutic Use of Ketamine in Psychiatric Disorders
[View all 12 Articles >](#)

A Cohort-Based Case Report: The Impact of Ketamine-Assisted Therapy Embedded in a Community of Practice Framework for Healthcare Providers With PTSD and Depression

 Shannon Dames^{1*},  Pamela Kryskow¹ and  Crosbie Watler²



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

91% saw improvements in generalized anxiety

79% saw improvements in depression

86% of those who screened positive for PTSD now screen negative

92% had significant life/work functionality improvements

ACCESSIBILITY

Describe how rural practitioners can prepare to work with psychedelic medicines in service to their patients



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

ACADEMIC PSYCHEDLIC PROGRAMS

- Vancouver Island University - Fall 2022
- University of Ottawa - 3 course Summer 2020
- Trinity Western University - one course
- Justice Institute of BC - one course



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

ACADEMIC PSYCHEDLIC PROGRAMS

- CIIS - Center for Psychedelic Therapies and Research
- John Hopkins - Center for Psychedelic & Consciousness Research
- UC Berkeley Center for Psychedelic Science
- UCSF Neuroscape Psychedelic Division
- Naropa



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

CAVEATS

- NOT another biological model
- Skill & mentorship is needed BEYOND training
- Multidisciplinary teams are needed
- Payment model is needed
- Safe access is needed



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

REFERENCES AND RESOURCES

Psychedelic Prophets The Letters of Aldous Huxley and Humphry Osmond
Edited by Cynthia Carson Bisbee, Paul Bisbee, Erika Dyck, Patrick Farrell, James Sexton and James W. Spisak

Griffiths RR, Johnson MW, Carducci MA, et al. Psilocybin produces substantial and sustained decreases in depression and anxiety in patients with life-threatening cancer: A randomized double-blind trial. J Psychopharmacol. 2016;30(12):1181-1197.

Grob CS, Danforth AL, Chopra GS, et al. Pilot study of psilocybin treatment for anxiety in patients with advanced-stage cancer. Arch Gen Psychiatry. 2011;68(1):71-78.

Ross S, Bossis A, Guss J, et al. Rapid and sustained symptom reduction following psilocybin treatment for anxiety and depression in patients with life-threatening cancer: a randomized controlled trial. J Psychopharmacol. 2016;30(12):1165-1180.

Carhart-Harris R, Bolstridge M, Day C, et al. Psilocybin with psychological support for treatment-resistant depression: Six-month follow-up. Psychopharmacology (Berl). 2018;235(2):399-408.

Carhart-Harris RL, Bolstridge M, Rucker J, et al. Psilocybin with psychological support for treatment-resistant depression: an open-label feasibility study. Lancet Psychiatry. 2016;3(7):619-627.

Johnson MW, Garcia-Romeu A, Cosimano MP, Griffiths RR. Pilot study of the 5-HT2AR agonist psilocybin in the treatment of tobacco addiction. J Psychopharmacol. 2014;28(11):983-992.



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

REFERENCES AND RESOURCES

Johnson MW, Garcia-Romeu A, Griffiths RR. Long-term follow-up of psilocybin-facilitated smoking cessation. *The American Journal of Drug and Alcohol Abuse*. 2017;43(1):55-60.

Bogenschutz MP, Forcehimes AA, Pommy JA, Wilcox CE, Barbosa P, Strassman RJ. Psilocybin-assisted treatment for alcohol dependence: a proof-of-concept study. *Journal of psychopharmacology (oxford, england)*. 2015;29(3):289-299.

Moreno FA, Wiegand CB, Taitano E, Delgado PL. Safety, tolerability, and efficacy of psilocybin in 9 patients with obsessive-compulsive disorder. *The Journal of Clinical Psychiatry*. 2006;67(11):1735-1740.

Goldberg SB, Pace BT, Nicholas CR, Raison CL, Hutson PR. The experimental effects of psilocybin on symptoms of anxiety and depression: A meta-analysis. *Psychiatry Res*. 2020;284:112749.

Anderson BT, Danforth A, Daroff PR, et al. Psilocybin-assisted group therapy for demoralized older long-term AIDS survivor men: An open-label safety and feasibility pilot study. *EClinicalMedicine*. 2020;27:100538.

Davis AK, Barrett FS, May DG, et al. Effects of Psilocybin-Assisted Therapy on Major Depressive Disorder: A Randomized Clinical Trial. *JAMA Psychiatry*. 2021;78(5):481-489.

Carhart-Harris R, Giribaldi B, Watts R, et al. Trial of Psilocybin versus Escitalopram for Depression. *N Engl J Med*. 2021;384(15):1402-1411.



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

REFERENCES AND RESOURCES

Matthew W. Johnson , Albert Garcia-Romeu & Roland R. Griffiths (2017) Long-term follow-up of psilocybin-facilitated smoking cessation, The American Journal of Drug and Alcohol Abuse, 43:1, 55-60, DOI: 10.3109/00952990.2016.1170135



UBC CPD
Medicine
**CONTINUING
PROFESSIONAL
DEVELOPMENT**