# What are the Benefits of Psilocybin Therapy to Reduce Depression Following a Terminal Diagnosis?

Elizabeth Boudreau, PA-S | Krissa Orlowski, DMSc, PA-C

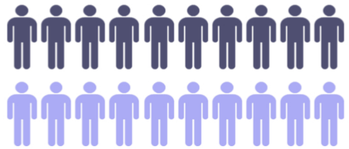
Affiliation: University of Washington Department of Family Medicine

## INTRODUCTION

Following a terminal diagnosis, individuals can experience a wide range of psychological distress with depression the most common psychiatric diagnosis.[1,2] Depression is commonly not recognized in terminally ill (TI) patients because of its overlap with grief.[2] Psilocybin may decrease symptoms of depression and anxiety in the context of cancer-related psychiatric distress for at least six months following a single acute administration.[3]

## DEPRESSION

- Depression can increase physical symptoms such as pain, interfere with treatment adherence, and shorten survival in some illnesses.[4]
- Individuals with a TI and depression are 4.1 times higher to request for euthanasia compared to individuals without depression and a TI.[5]
- 13% of palliative care patients had a diagnosis of major depression, and 44% had a diagnosis of depression, dysthymia, and other depressive disorders.[2]
- It is estimated that untreated depression, a chronic illness, may increase the cost of care by 50%.[4]
- Traditional SSRIs take several weeks for effective results.[4]



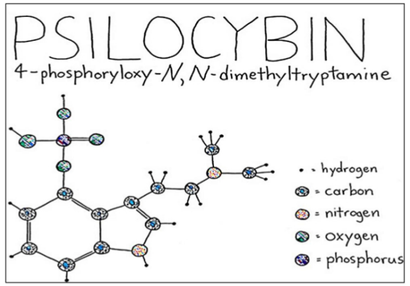
At least 50% of terminally ill suffer from depression

## SCREENING DEPRESSION

- Grief is a universal, highly personalized response to losses and is an expected part of living with a terminal diagnosis.[4] Depression shares some common features with grief but are distinctly different.[4]
- Depression includes feelings of pervasive hopelessness, helplessness, worthlessness, guilt, lack of pleasure and suicidal ideation, which distinguish depression from grief.[4]
- Due to overlap in symptoms, many providers do not take the time to distinguish between grief and depression.[4]

## PSILOCYBIN

- Psilocybin is a naturally occurring substance and has been used by humans for religious and spiritual ceremonies for many millennia.[5]
- Serotonergic drugs interact with serotonin receptors (5-HT/2A 5-hydroxytryptamine receptors) and the corresponding subtypes densely located in the brain and other organs.[5]
- These receptors mediate emotions and moods such as anxiety and aggression, cognition, sex, learning, memory, appetite, and other biological, neurological, and neuropsychiatric processes.[5]



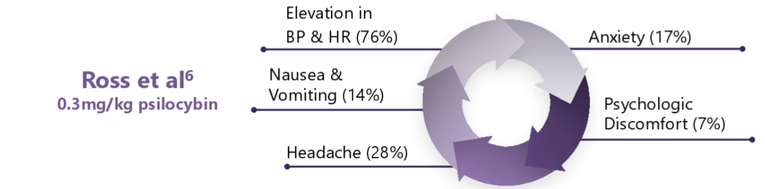

### Carhart-Harris et al.

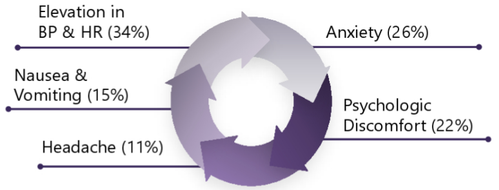
- Double-blind, randomized control trial involving patients with long-standing moderate to severe major depressive disorder and the intervention of psilocybin compared to escitalopram.[7]
- Decrease in depressive scores of 70% among the psilocybin group and 48% in the escitalopram group at six weeks.[7]
- Remission scores were met in 57% of the psilocybin group and 28% in the escitalopram group post six weeks.[7]

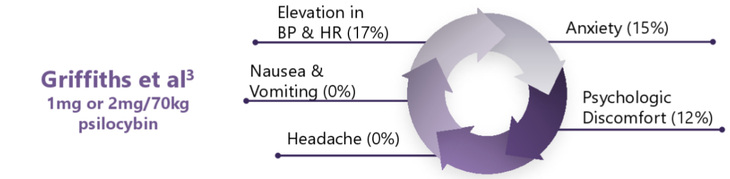
### Griffiths et al.

- Blind control study of 51 participants with a life-threatening diagnosis of depression.[3]
- Groups were given either low or high first-doses of psilocybin.[3] Sessions were accompanied by a psychologist.[3]
- Five weeks after session one, 92% of the high-dose participants showed clinically significant responses compared to 32% of the low-dose first group.[3]
- At six-month follow-up, 80% of participants continuing to show clinically significant decreases in depressed mood and anxiety.[3]

## SIDE EFFECTS




***No serious adverse events attributed to psilocybin administration occurred. All these adverse events had resolved fully by the end of the sessions with two exceptions of a headache the day following.[6]***

## CONCLUSION

- Effectively treating depression can lead to less physical suffering, optimal communication with family, providers, and prolong the remaining quality of life.[6]
- Psilocybin shows promising and even favorable results and side effects profiles for individuals with depression following a terminal diagnosis.
- Providers must be adequately educated on the safety and effectiveness of psilocybin to change the stigma surrounding its use from an illegal substance to a power tool in medicine.

## REFERENCES

1. Bache X, Bolton J. Depression: Diagnosis and management in terminal illness. *British Journal of Hospital Medicine*. 2005;66(6):349-352. doi:10.12968/hmed.2005.66.6.18415
2. Asghar-Ali, A. A., Wagle, K. C., & Braun, U. K. (2013). Depression in terminally ill patients: Dilemmas in diagnosis and treatment. *Journal of Pain and Symptom Management*, 45(5), 926–933. https://doi.org/10.1016/j.jpainsymman.2012.12.011
3. 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. *Journal of Psychopharmacology*. 2016;30(12):1181-1197. doi:10.1177/0269881116675513
4. Widera, MD, E. W., & Block, MD, S. D. (2012). Managing grief and depression at the end of life. *American Family Physician*, *Volume 86*(Issue 3), 259–264
5. Lowe, H., Toyang, N., Steele, B., Valentine, H., Grant, J., Ali, A., Ngwa, W., & Gordon, L. (2021). The therapeutic potential of psilocybin. *Molecules*, *26*(10), 2948. https://doi.org/10.3390/molecules26102948
6. Ross S, Bosses 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. *Journal of Psychopharmacology*. 2016;30(12):1165-1180. doi:10.1177/0269881116675512
7. Carhart-Harris, R. L., Giribaldi, B., Watts, R., Baker-Jones, M., Murphy-Beiner, A., Murphy, R., Martell, J., Blemings, A., Erritzoe, D., & Nutt, D. J. (2021). Trial of psilocybin versus escitalopram for depression. *New England Journal of Medicine*, 384(15), 1402–1411