



NEWS

Sixty seconds on ... psilocybin

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Shades of Aldous Huxley and Timothy Leary—are magic mushrooms back on the menu?

Not so fast. There's a long way to go. But a study in London has shown that the active ingredient in magic mushrooms, psilocybin, may be effective against treatment resistant depression. Its effects were quick—within a week—and more than 40% of the patients treated were still in remission three months later.¹

Good news, surely?

Yes, as far as it goes. These were people whose depression had not lifted despite trying at least two conventional therapies. Some had been depressed for decades; half were unemployed.

"As far as it goes"?

Never bet your money on an open label trial. There were only 12 participants, mostly self selected, and five had tried psilocybin before. The procedure was complex, with pre-enrolment screening, briefings, psychiatrists and others in attendance, and soothing music played as the drug was taken. So confounding could be present: by selection or a powerful placebo effect (or both).

A randomised controlled trial might be more persuasive?

Yes, and the researchers, from Imperial College London and the Beckley Foundation, are keen to do one. But even this preliminary trial took years to arrange, so it's no small ask. The ethical and bureaucratic obstacles are substantial. There's also the issue of the placebo: a sugar pill would quickly unblind the trial, so they might have to give the control group another psychoactive drug, such as scopolamine.

Psychedelic drugs have a bad reputation, don't they?

Unwarranted, says David Nutt, the study's senior author and former chairman of the government's Advisory Council on the Misuse of Drugs. He says that psilocybin is safe, rarely causing psychosis. The worst adverse effects found were headache and nausea, easily tolerable if the drug genuinely relieves depression and its effects are lasting. The costs of depression to individuals and society are enormous.

What's next?

The team has scanned the brains of these 12 volunteers and another eight, and the results are due for publication soon. If they show changes in brain function consistent with the clinical findings, it would give the approach biological plausibility and enhance the chance of funding a randomised controlled trial.

1 Carhart-Harris R, Bolstridge M, Rucker J, et al. Psilocybin with psychological support for treatment-resistant depression: an open-label feasibility study. *Lancet Psychiatr*, 2016, doi:10.1016/S2215-0366(16)30065-7.

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