

Can psychedelic drugs play a role in palliative care?

Ben Sessa believes it is a good thing that, after a 40-year hiatus, international trials are revisiting the role of psychedelic drugs in assisting patients with terminal cancer to explore – and resolve – anxiety-inducing existential issues surrounding their illness

'He who dies before he dies does not die when he dies.' – Siddhartha Gautama

Psychedelic drugs are agents that may assist a person in approaching existential issues. They enjoy a rich history in ancient, non-Western cultures and, more recently, in psychiatric research of the 1960s. After a 40-year hiatus, international trials are now under way to revisit the role of psychedelic drugs in assisting patients with terminal cancer to explore – and resolve – anxiety-inducing existential issues surrounding their illness.

What are psychedelic drugs?

Classical psychedelic (hallucinogenic) drugs include the agents D-lysergic acid diethylamide (LSD) and psilocybin (the active component in

'magic mushrooms'). Another class of drugs, the entactogens, includes the agent MDMA (ecstasy). Contemporary researchers are asking whether the unique psychotropic qualities of these drugs can be useful as adjuncts to psychotherapy in reducing the burden of anxiety and pain for palliative care patients.

The classical hallucinogens are non-addictive, physiologically non-toxic substances, which may offer the user an experience of self-reflection through exposure to personal existential issues. They facilitate a deeper access to repressed parts of the psyche and were studied extensively in the 1950s and 1960s.¹ They were subsequently shelved for socio-political reasons, in the wake of the 1960s drug culture that grew out of their mainstream use.²

MDMA (3,4-methylenedioxymethamphetamine), better known as the street drug ecstasy, has been well known for the past 20 years, through its association with the rave dance scene. Like LSD, MDMA began its life in medicine, when used in the early 1980s as a drug to enhance the psychotherapeutic process. MDMA promotes relaxation, loosens the ego and encourages increased contemplativeness.³ These effects can produce a state of improved insight and aid a greater exploration of otherwise painful memories, by 'inhibiting the subjective fear response to an emotional threat'.⁴ This makes MDMA a particularly useful drug for patients experiencing anxiety associated with the process of dying.⁵

Contemporary research consistently demonstrates that the classical psychedelic drugs (LSD and psilocybin) present with no demonstrable physiological concerns and no risk of dependency.^{6,7} Although debate still goes on about the relative risks of using frequent

Key points

- Contemporary researchers are asking whether the unique psychotropic qualities of psychedelic drugs can be useful as adjuncts to psychotherapy in reducing the burden of anxiety and pain for palliative care patients.
- The classical hallucinogens D-lysergic acid diethylamide (LSD) and psilocybin (the active component in 'magic mushrooms') may offer the user an experience of self-reflection through exposure to personal existential issues.
- MDMA (3,4-methylenedioxymethamphetamine), better known as ecstasy, is a particularly useful drug for patients experiencing anxiety associated with the process of dying.
- Currently, four scientific studies into psychedelic agents are in progress, in the USA and in Switzerland.
- Today's medical psychedelic community looks beyond the sensationalist stories of the past to a more balanced, objective and evidence-based approach to psychedelic drugs.

doses of recreational ecstasy, there are consistently no such concerns with the proposed use of MDMA-assisted psychotherapy, as proposed in the studies described here.⁸

For the past 40 years, there has been a relative absence of research into psychedelic compounds. However, they are currently enjoying a renaissance in medical research.

Death as an existential process

It is well recognised that the issue of death tends to be repressed in Western culture. We frequently over-medicalise death at the expense of acknowledging its emotional aspects, tending to focus more on delaying it rather than on improving the quality of the remaining days of life.⁹ The risk, for the individual, of developing a diagnosis-associated adjustment disorder is significant.¹⁰ Using a structured, problem-focused approach, adjuvant psychological therapy partially addresses elements of depression and anxiety associated with adjustment disorder.¹¹ However, to what extent does this address an individual's fears about the existential issue of death?

In contrast to the Western model, many indigenous cultures embrace or even celebrate death as an important existential transition. Some cultures employ psychedelic plants as sacraments in a psychotherapeutic context. Examples include the Native Americans' use of the peyote cactus (which contains mescaline), the Mexicans' use of magic mushrooms, the Amazonians' use of the ayahuasca plant (which contains dimethyltryptamine, or DMT), the West Africans' use of the root iboga (which contains ibogaine) and the use of cannabis for religious purposes in India, the West Indies and East Africa. These psychedelic-assisted ceremonies are led by a shaman – a respected tribal leader with the combined status of a healer, doctor and priest. Their use is very different from the Western version of recreational drug abuse. Instead, they offer a powerful group experience, which has a profoundly cohesive and positive effect on the individual and their community.¹²

Psychedelics and the existential issue

A common experience with psychedelic drugs in the non-Western context is that of symbolic death or rebirth. The indigenous use of

psychedelic drugs may provide a symbolic experience of what it is to die, thus 'giving one a realisation of life's impermanence, and providing an insight into the transcendent nature of consciousness'.¹³ In this context, the shaman can be seen as a 'psychopomp', an agent assisting the process of dying. A recent study at Johns Hopkins University explored the spiritual phenomenon frequently reported by users of psychedelic drugs.¹⁴ In a double-blind study, participants were given psilocybin or a placebo and rated their experience of spiritual feelings, giving a fascinating objectivity to the well-established existential experiences described by users of psychedelic drugs.

The issue of spirituality often sits uncomfortably with many doctors (myself included), as it does not fit readily into the medical model. Nevertheless, the broader concept of existential issues, especially when faced with imminent death, may be more readily embraced by scientists within a less spiritual and wider psychological context. The psychedelic drugs can be recognised, therefore, as organic agents, well placed to address this fundamental psychological need.

The psychedelic researcher Stanislav Grof has explored the possibility of improving the Western approach to death and dying by describing how psychedelics can play a role in assisting individuals to better understand these

'Magic mushrooms', which contain the active ingredient psilocybin



existential aspects. This has much in common with the modern concept of having a death plan, just as pregnant women often have a birth plan. This concept is increasingly entering mainstream palliative healthcare in the form of Midwives for the Dying,¹⁵ professionals who work alongside dying patients with a multifaith perspective to prepare them for the transition of death – much as birthing midwives assist the process of birth. Attention is paid to creating a loving and spiritual supportive environment.

The role of psychedelic drugs in palliative care

For 20 years, following the discovery of the psychedelic properties of LSD in the 1940s by Dr Albert Hofmann,¹⁶ the newly developed drug was studied as an adjunct to psychotherapy for many psychiatric conditions on more than 40,000 patients.¹⁷ It showed particular promise in treating anxiety disorders and was frequently noted to reduce an individual's fear of death.

This latter property was further studied by the anaesthetist Eric Kast, who was interested in whether LSD's ability to distort body image could reduce the perception of pain. He compared the analgesic effects of LSD with two other commonly used opioid analgesics and found it superior to both in relieving pain.¹⁸ In further studies, he went on to explore LSD's ability to induce a spiritual-type experience that allowed terminally ill patients to better identify with the emotional aspects of dying, to improve their sleep and reduce their anxiety for many weeks after the initial treatment.^{19,20}

Contemporary research

Contemporary psychedelic research draws on some of the principles of Kast's work. These studies have many similarities in their design.

- Participants have a diagnosis of cancer and have developed a secondary anxiety disorder that has been unsuccessfully treated with traditional methods – such as anxiolytic medication or traditional psychotherapy.
- The studies employ a combination of non-drug and drug-assisted psychotherapy sessions. Initially, there are several non-drug sessions, so that the patient and therapist can build up a rapport, and during which baseline psychiatric assessment scales are completed. Then, two drug/placebo sessions are conducted – spaced several weeks apart – and followed up by further supportive, non-drug sessions.



The peyote cactus, which contains mescaline, is traditionally used by Native Americans in a psychotherapeutic context

- During the drug sessions, the patient is initially encouraged to lie down, wearing an eye mask. The psychotherapy is largely non-directed, with the therapist encouraging the patient to free associations. Music is frequently employed to assist the process.
- Despite the very low risks involved, physiological data are measured throughout the experimental sessions, which take place within a general hospital environment where emergency facilities are available.
- Attention is paid to fostering a favourable 'set and setting'. That is, participants are adequately informed about the nature of the psychedelic experience and the environment for the sessions is relaxed and comforting.
- Psychological data are collected to measure depression, pain and anxiety at baseline, during sessions and at several months' follow-up. Most of the studies also include a component measuring quality-of-life factors.

Current studies

There are now four studies into psychedelic agents in progress, as described below.

Study into psilocybin

This is taking place at the University of California in Los Angeles, USA. The principal investigator is Charles Grob, Professor of

LSD ... was frequently noted to reduce an individual's fear of death

Psychiatry and Behavioral Sciences at UCLA. In this trial, patients with end-stage cancer and secondary anxiety disorder are treated with placebo-controlled, psilocybin-assisted psychotherapy in a double-blind study. The hypotheses are that the psilocybin group, compared with the controls, will experience a greater reduction in pain, anxiety and depression that will persist beyond the duration of the study and lead to a reduced need for *pro re nata* anxiolytic and analgesic medication. A brief video of an interview with Pamela Sakuda, one of the participants, discussing her experience of psychedelic psychotherapy, can be seen online.²¹

Study into MDMA

A study into MDMA is taking place at the McLean Hospital, Harvard Medical School, USA. The principal investigator is John Halpern, Assistant Professor of Psychiatry at Harvard. The study is similar to the above but is using MDMA as the adjunct to psychotherapy for patients with anxiety secondary to end-stage cancer.

Study into LSD

This is taking place in Solothurn, Switzerland and the principal investigator is Peter Gasser, a Consultant Psychiatrist. The design of this study is identical to the MDMA study above but is using LSD as the psychedelic agent.

Proposed study into psilocybin

This proposed study will take place at the Johns Hopkins University, Baltimore, USA. The principal investigator will be Roland Griffiths, Professor of Behavioral Biology, and of Neuroscience, at the University. This study, which plans to use psilocybin-assisted psychotherapy, will differ from the previous three in that participants will not have to be suffering from end-stage cancer; it may also include those with early, non-terminal cancer.

Details of all these studies can be found on the websites of the Multidisciplinary Association for Psychedelic Studies (MAPS)²² and of the Heffter Research Institute.²³

Learning from ancient history

Many of these studies have been decades in the planning. The ethical considerations restricting this kind of research are vast. The past history of abuse and damage to individuals and society from the misuse of recreational drugs are undeniable. Nevertheless, a lot of water has

passed under the bridge since the 'turn on, tune in and drop out' days of the 1960s. Today's medical psychedelic community looks beyond the sensationist stories of the past to a more balanced, objective and evidence-based approach to psychedelic drugs.

It appears that there is a lot the medical profession can learn from the ancient history of non-Western cultures about improving the manner in which we approach death, and psychedelic drugs may have an important role to play in this lesson. If there is a possibility that these fascinating chemicals could safely and effectively relieve the suffering of those with terminal illness, then we owe it to these patients to carry out this research.

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