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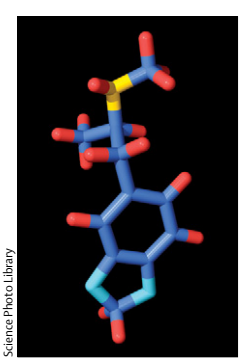
Shaping the renaissance of psychedelic research



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MDMA

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Psychedelic drugs have a rich and vibrant history as clinical aids for psychiatry. For two decades after the discovery of lysergide (LSD) in the 1940s, psychedelics were extensively studied and clinical progress was good.[1] But research collapsed rapidly in 1966 when LSD was made illegal, and there was a subsequent hiatus of psychedelic research. After 40 years, this pause is now coming to an end, with many new studies and a refreshing approach to the research of psychedelic drugs.[2]

Since the late 1980s, several new organisations have emerged: the Multidisciplinary Association for Psychedelic Studies (MAPS), the Heffter Research Institute, and the Beckley Foundation are all re-visiting psychedelic research, undertaking preclinical studies with LSD, psilocybin, ayahuasca, ibogaine, and methylenedioxymetamfetamine (MDMA). Several phase 2 clinical studies have been published and more are underway, with an emphasis on anxiety disorders and addictions. By undertaking methodologically sound studies, contemporary researchers are describing how psychedelics—when carefully managed in a supervised clinical environment—can safely harness the transformative power of the peak experience to improve the engagement and depth of psychotherapy.

With information from functional neuroimaging and reassessment of the harm and safety profiles of psychedelic drugs,[3] there is a strong commitment to get research into psychedelics right this time around, by undertaking meticulously planned randomised, controlled, double-blind studies, in contrast to the anecdotal studies of the 1960s. A noticeable shift in attitudes from the mainstream medical community has seen increasing publications in high impact journals in recent years and a major UK conference in 2011, Breaking Convention.

The active component in so-called magic mushrooms, psilocybin, has been investigated for the treatment of the anxiety, pain, and existential crises associated with end-stage cancer[4] and also as a potential new treatment for obsessive-compulsive disorder.[5] Ketamine has been studied as a treatment for alcohol and opiate addictions[6] and for management of depression.[7] Psychedelic research can also teach us about the nature of consciousness. In a study at Johns Hopkins University (Baltimore, MD, USA), psilocybin was used to explore how an induced peak experience can improve negative personality traits,[8] and at Imperial College London (London, UK), functional MRI was used to show how psilocybin can improve

psychotherapy by allowing for an increased recall of repressed emotional memories.[9]

Further work investigating psilocybin as a potential new treatment for nicotine addiction and depression is underway, and the psychedelic drug ibogaine is increasingly being applied in the treatment of opiate, alcohol, and methamfetamine addictions. Additionally, LSD and psilocybin are being explored as treatments for unremitting cluster headaches[10] and for anxiety (Gasser P, Private Practice, Solothurn, Switzerland, personal communication).

However, perhaps the area where psychedelics show the greatest promise is in enhancement of trauma-focused psychotherapy; in particular MDMA, which can reduce the overwhelming fear response to memories of trauma and improves engagement with therapy.[11] In 2010 came the first published randomised controlled trial of MDMA-assisted psychotherapy for treatment-resistant post-traumatic stress disorder (PTSD),[12] which has now been replicated. Given the growing clinical burden of post-combat PTSD, a viable and innovative approach is sought. Together with Jon Bisson (Cardiff University, Cardiff, UK) and David Nutt (Imperial College London, UK), I am currently seeking funding for a controlled study to investigate MDMA-assisted psychotherapy for treatment-resistant PTSD, for which we will then seek ethical approval. We propose a design with 20 randomised patients who will receive a standard 16-week course of cognitive-behavioural therapy versus 20 patients who will receive a 16-week course of therapy in which three sessions are MDMA assisted, with the other non-drug sessions used to integrate their drug experiences. Patients will be monitored by functional MRI scans before and after treatment to assess neurophysiological changes associated with MDMA therapy. Our study puts an emphasis on delivering this treatment at a standard National Health Service (NHS) clinic so that the immediate clinical relevance can be realised.

Doctors in the specialty of psychiatry recognise that research with psychedelic compounds is controversial. These drugs are powerful substances and have a negative image in society. Certain patient groups are appropriately contraindicated from using them clinically, such as people with a personal or family history of psychosis. These drugs do have capacity to cause harm, and many such examples of misuse have occurred when they are used recreationally.[13] However, if careful attention is paid to the mindset of the users and the clinical setting in which psychedelics are prescribed, such harms can be minimised to adequately satisfy a risk:benefit analysis.

We must learn from both the successes and mistakes of the 1960s. We have gained some useful information from those early studies, and disregarding entirely the unique transpersonal approach of psychedelic therapy is not the answer. But new treatments must be framed in a modern context, be relevant to today's therapeutic culture, and must avoid the pitfalls of the past by separating the therapeutic uses of these drugs from their historical recreational misuse. We need focused, practical, and deliverable clinical advances. If we can achieve this, we may find these fascinating substances have a fresh role in modern psychiatry.

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I declare that I have no conflicts of interest.

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