psychedelic-enhanced psychotherapy: time for a scottish special interest group?

"The conventional view serves to protect us from the painful job of thinking." J. K. Galbraith

"It's important to keep an open mind, but not so open that your brains fall out." Traditional

introduction: This short article has two main aims. One is to provide a brief state-of-the-art update on where research has got to in clarifying the potential therapeutic benefits of psychedelics such as psilocybin, LSD & ayahuasca. The second aim is to propose that the time is now ripe for interested health professionals to learn more about this field and to launch a Scottish psychedelic-enhanced psychotherapy special interest group.

There are hundreds of scientific papers on psychedelics, but I've been asked to limit this article to just 2,000 words. Rather than try to cover the whole field very shallowly, I have simply focused on brief overviews of four topic areas – what does emerging research currently say about the potential therapeutic benefits of psychedelics, what are psychedelics, what are the risks involved in taking them, and how can we best respond as therapists interested in new, potentially powerful ways of helping our clients?

I have written a series of extended blog posts on these subjects on my website, as well as covering other areas like traditional sacramental use of psychedelics, early research efforts, mechanisms of action, best practices in helping clients integrate psychedelic experience, the possible value of therapists own personal exploration of these areas, and potential benefits in non-distressed general populations. The blog posts are also extensively hyperlinked to background research underpinning the points being made. I mention just four interesting papers at the end of this article but have well over two hundred research references in my own database, with more than half having been published in the last couple of years.

If you visit the website *www.goodmedicine.org.uk* and look for *'psychedelics'* in the search engine or tag cloud, you'll turn up the blog post series and will also be able to email me if you're interested in the formation of a Scottish psychedelic-enhanced psychotherapy special interest group (PEP Scotland?). This group could have a number of potentially useful functions – including keeping members informed of important advances in this field, inviting up lecturers & workshop leaders from psychedelic research groups in the South, and exploring how these developments can most helpfully be made relevant for our clients.

emerging research: In January, at London Imperial College, the Psychedelic Research Group began their double-blind, randomized controlled trial comparing six weeks of a daily SSRI antidepressant against two doses of psilocybin and supportive psychotherapy in the treatment of major depression. They have been pipped at the post though by a Brazilian group who showed in a double-blind, placebo-controlled RCT published last year, that a single dose of ayahuasca (containing the psychedelic DMT) produced a 64% response and 36% remission rate in sufferers from treatment resistant depression at one-week post-dose. Meanwhile in a bigger international multi-centre initiative, COMPASS – a life sciences company – has started a phase IIb psilocybin dose-ranging study with 216 patients suffering from treatment-resistant depression, intending then to move onto a major phase III study to better help those suffering from this horribly common and difficult to treat disorder. University research centres involved already include

Newcastle, Manchester, London Kings College & Dublin, as well as groups in the Netherlands, Canada & the United States.

Fascinatingly, the US Food and Drug Administration (FDA) has given psilocybin therapy for treatment-resistant depression (as well as MDMA for PTSD) *'Breakthrough Therapy'* designation. This classification highlights that the treatment has demonstrated significant potential in early clinical trials, opening the way for the FDA to expedite subsequent development and review processes. And there are many other disorders where psychedelic-assisted psychotherapy is demonstrating exciting potential for improving treatment outcomes. For example, there is an encouraging meta-analysis on alcohol dependency, quite startling studies on smoking cessation, excellent work on helping distress in severe terminal illness, and important developments for the treatment of PTSD. Studies on anxiety, OCD, opioid dependency, dementia-related distress, and anorexia have also begun or are in the pipeline. The major *Clinialtrials.gov* database lists 31 research trials using psilocybin (that are recruiting, active or completed), 9 using LSD, and a further 45 using the psychedelic-linked MDMA.

In the latter part of last year, at least three academic journals – the *Journal of Psychopharmacology*, the *International Review of Psychiatry*, and *Neuropharmacology* – all devoted whole issues to psychedelics. The latter's special issue *"Psychedelics: New doors, altered perceptions"* led with a paper by Belouin & Henningfield who wrote *"Accumulated research to date suggests psychedelic drug assisted psychotherapy may emerge as a potential breakthrough treatment for several types of mental illnesses including depression, anxiety, post-traumatic stress disorder, and addiction that are refractory to current evidenced based therapies. This research equally shows promise in advancing the understanding of the brain."*

US John Hopkins researchers have led the way in this renaissance of interest in how psychedelic-assisted therapy can help in an increasing number of difficult-to-treat disorders. But they have also shown how psilocybin can produce long-lasting positive changes for normal, non-distressed subjects as well as strongly augmenting the benefits of meditation and spiritual practice. They are now enrolling for a research study on the potential benefits of psychedelic experience for religious leaders.

There's such a surge of international scientific interest in the potential benefits of psychedelic-assisted psychotherapy. And this goes along with an increasing need for education for health professionals in these areas. Trainees at the California Institute of Integral Studies' certificate course on psychedelic-assisted therapies and research have been graduating since 2016. As the Institute highlights *"With current discussions of phase 3 and expanded access research programs for psilocybin-assisted and MDMA-assisted psychotherapies, there will be a great need for competent therapists trained in this clinical specialty."*

But as I quoted at the beginning of this article – *"It's important to keep an open mind, but not so open that our brains fall out."* It's usual, when a new field opens up, for small scale studies done by enthusiasts to produce startling results. I'm a medical doctor and psychotherapist who has been working in these areas for several decades and I've seen many new *"wonder treatments"* come and go. The renaissance in psychedelic research is just gathering momentum. A recent *"systematic review of systematic reviews"* on the use of psychedelics for mood, anxiety and substance-use disorders highlights both the promising early results and the need for further RCT's with bigger samples and longer duration. When these studies report, some of the fairly extraordinary initial claims will almost certainly be scaled back. However psychedelic-enhanced psychotherapy is a genuinely different approach with broad application across many psychological disorders. These are exciting times – as described so well in Michael Pollan's excellent book *"How to change your mind: the new science of psychedelics"* – and the field is already demonstrating

genuine, worthwhile advances in relieving suffering, promoting wellbeing, and taking forward our understanding of consciousness.

what are psychedelics? The term *"psychedelic"* means *"mind-manifesting"* and it was proposed by the pioneering researcher Humphry Osmond in 1957. It has been used to describe a wide variety of compounds. One of the better definitions is from Grinspoon and Bakalar (1979) who wrote that a psychedelic is *"A drug which, without causing physical addiction, craving, major physiological disturbances, delirium, disorientation, or amnesia, more or less reliably produces thought, mood, and perceptual changes otherwise rarely experienced except in dreams, contemplative and religious exaltation, flashes of vivid involuntary memory, and acute psychosis."* Other terms that have been used include *"hallucinogens"* (over narrow & somewhat inaccurate), *"entheogens"* (highlighting these substances' traditional & current spiritual use), and *"psychoplastogens"* (a potentially useful broad descriptor).

Classic psychedelics fall into two general structural classes. One involves variations on tryptamine and includes LSD (the widely known 60's drug), psilocybin (present in "magic mushrooms') and dimethyltryptamine – DMT (present in the South American sacramental beverage "ayahuasca"). The second structural class involves variations on phenethylamine and includes mescaline found in peyote, San Pedro and Peruvian torch cacti. A variety of synthetic compounds (e.g. 2C-B, 25I-NBOMe) also fall into this phenethylamine group. 'Ecstasy' – methylenedioxymethamphetamine (MDMA) is an analogue of phenethylamine. It causes psychoactive effects which only partially overlap with classic psychedelics, and they occur primarily via serotonin release rather than 5-HT_{2AR} receptor agonism. Like MDMA, other drugs sometimes labelled as psychedelic – e.g. NMDA antagonists, anticholinergics, cannabinoids, salvinorin A, and ibogaine – act via a variety of rather different mechanisms and produce overlapping but different subjective *"fingerprints".*

what are the risks? David Nutt is a professor of neuropsychopharmacology and a widely respected voice of sanity in the debate on drugs – see, for example, his helpful book *"Drugs without the hot air".* He has written *"Although a bad LSD trip can be extremely frightening and distressing, psychedelics overall are among the safest drugs we know of. When the ISCD expert panel were rating LSD and mushrooms (which contain psilocybin) by our 16 criteria, they both scored either 0 or 1 (on 0-100 scales) in everything apart from specific and related impairment of mental functioning. It's virtually impossible to die from an overdose of them; they cause no physical harm; and if anything they are anti-addictive."*

So, the first point I want to make about the risks of classical psychedelics (e.g. DMT, LSD, mescaline & psilocybin) is that in terms of direct physical damage to users, damage to non-users, and costs to society – these drugs are very safe compared with alcohol & tobacco. However, the second point I want to make is to contrast the care taken when using these substances in traditional sacred/healing rituals around the world – or when administering them in health professional settings – with the potentially considerably more risky practice of casual recreational use. Carbonaro & colleagues from John Hopkins ran a survey asking about psychedelic users' *"worst 'bad trip'".* They reported *"1,993 individuals completed an online survey about their single most psychologically difficult or challenging experience (worst "bad trip") after consuming psilocybin mushrooms. Thirty-nine percent rated it among the top five most challenging experiences of his/her lifetime. Eleven percent put self or others at risk of physical harm; factors increasing the likelihood of risk included estimated dose, duration and difficulty of the experience, and absence of physical comfort and social support."*

"Eleven percent (during their worst 'bad trip') put self or others at risk of physical harm." This isn't good. Why would anybody want to risk experiencing these kinds of reactions? Well actually the authors comment that *"A substantial majority of participants (84%) rated that they benefited*

from the challenging portions of their sessions. Almost half (46%) endorsed that they would want to repeat their chosen session and all that had happened in it, including the difficult or challenging portions of the session." Intriguing, and it is clear that these kinds of responses are hardly even a pinprick when compared with the explosion of damage produced by, for example, alcohol which has been shown in recent major research to be the leading risk factor for death in 15-49 year olds worldwide (GBD 2016 Alcohol Collaborators, 2018). However, even if damage caused by psilocybin and other classic psychedelics (DMT, LSD & mescaline) is just a *pinprick*, it can still hurt badly if you or someone you know are one of the few to suffer the *pinprick*.

The research group at John Hopkins, in a 2008 paper, wrote *"The most likely risk is overwhelming distress during drug action ('bad trip'), which could lead to potentially dangerous behaviour such as leaving the study site. Less common are prolonged psychoses triggered by hallucinogens. Safeguards against these risks include the exclusion of volunteers with personal or family history of psychotic disorders or other severe psychiatric disorders, establishing trust and rapport between session monitors and volunteer before the session, careful volunteer preparation, a safe physical session environment and interpersonal support from at least two study monitors during the session."*

where from here? How do we, as therapists, want to respond to this growing wave of new research on the potential value of psychedelics for people suffering with psychological difficulties? At minimum it seems of value to stay reasonably well informed about these developments. Extrapolating from US prevalence data, it's likely that very approximately 100,000 people in Scotland take some form of (mostly illegal) psychedelic each year. Many of these experimenters will also have some psychological symptoms. Making sense of and integrating their psychedelic experiences into their lives can be of real importance. We as therapists can make ourselves available, ask about such events and offer help with integration when appropriate.

Also, as increasing numbers of people are realising, it's legal to travel to the Netherlands and take psilocybin 'truffles' (compact masses of hardened fungal mycelium that also contain the psilocybin found in the illegal above-ground mushroom 'fruiting bodies'). The Dutch Psychedelic Society provide links to experienced 'trip-sitters' who can help with acute safety issues. However, for resident Scots, early pre-session orientation and later post-session integration is likely to be better done by therapists here in Scotland who can provide ongoing support. Additionally, the UK Psychedelic Society offers regular three-day guided retreats in the Netherlands. Knowing about this option could be helpful for clients who are increasingly likely to be considering exploring potential benefits from psychedelics. And – with experienced facilitators – this service could be offered too by a group of Scottish therapists.

A rapidly growing body of research increasingly supports the potential value of psychedelic-assisted psychotherapy for a number of difficult-to-treat disorders. This seems an excellent time to start a Scottish psychedelic-enhanced psychotherapy special interest group (PEP Scotland?). Group members could help each other keep up to date with the emerging research, potentially invite speakers & workshop leaders from some of the teams doing psychedelic research in Newcastle, Manchester, London & elsewhere, inform each other about the pluses & minuses of psychedelic truffle taking options in the Netherlands, dialogue with interested meditation teachers, oncologists & psychiatrists, and provide mutual support in any other areas that may prove useful. If you are interested in hearing about or helping form a Scottish health professionals' psychedelic therapy special interest group, please contact me through the website *www.goodmedicine.org.uk*.

Griffiths, R. R., et al. (2018). "Psilocybin-occasioned mystical-type experience in combination with meditation and other spiritual practices produces enduring positive changes in psychological functioning and in trait measures of prosocial attitudes and behaviors." J Psychopharmacol 32(1): 49-69.
Rucker, J. J. H., et al. (2018). "Psychiatry & the psychedelic drugs. Past, present & future." Neuropharmacology 142: 200-218.
Schenberg, E. E. (2018). "Psychedelic-assisted psychotherapy: A paradigm shift in psychiatric research and development." Frontiers in Pharmacology 9 (733).
Walsh, Z. and M. S. Thiessen (2018). "Psychedelics and the new behaviourism: considering the integration of third-wave behaviour therapies with psychedelic-assisted therapy." International Review of Psychiatry 30(4): 343-349.