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COMMENTARY

The 21st century psychedelic renaissance: heroic steps forward on the back of an elephant

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Abstract Given the plethora of new studies and published papers in the scientific press and the increasingly emerging presence of articles about positive psychedelic experiences appearing in the popular media, there is little doubt that we are in the midst of a Psychedelic Renaissance. The classical psychedelic drugs LSD and psilocybin and the entactogen MDMA are showing promise as tools to assist psychotherapy for a wide range of mental disorders, with multiple pilot studies demonstrating their safety and efficacy. In this article, the author describes how MDMA in particular has inherent characteristics that make it well suited for assisting trauma-focused psychotherapy in a population of patients who have experienced child abuse. But despite these advances, there remain many obstacles ahead of the widespread mainstream acceptance of psychedelic medicines. The author argues that the Misuse of Drugs Act 1971 is one such obstacle. Other impediments include a prevailing attitude of pseudoscience and rigidity from within the non-scientific psychedelic community itself. Resolution of these conflicts must be sought if medicine and society are to see psychedelics gaining a place in mainstream culture and science.

Introduction

As a Child and Adolescent Psychiatrist who also works with adults with substance misuse problems, I have front-line experience of how psychiatry's management of trauma-based disorders remains poor. After 100 years of modern psychiatry, our profession is infected by learned helplessness. Unable to 'cure' our traumatised patients, we treat them palliatively; their presentations in adolescence keeping them within our profession for life. At best, we might paper over the cracks of abuse traumas with maintenance treatments.

It is this lack of efficacy of both pharmacological and psychotherapeutic options that has brought my career to the door of psychedelic drugs. Successive contemporary studies have investigated psychedelics' safety and efficacy for a range of disorders, including addictions (Johnson et al. 2014; Krupitsky and Grinenko 1997; Bogenschutz et al. 2015), PTSD (Mithoefer et al. 2011, 2013; Oehen et al. 2013), other anxiety disorders (Grob et al. 2010; Danforth et al. 2015; Gasser et al. 2014; Moreno et al. 2006) and depression (Carhart-Harris et al. 2016a; Ross et al. 2016; Griffiths et al. 2016), as well as their usefulness revealing the neurophysiological basis of brain function and our understanding of consciousness (Carhart-Harris et al. 2012, 2016b). Both scientifically and culturally, we are experiencing a Psychedelic Renaissance that has eclipsed the 1960s (Sessa 2017b).

However, despite these advances, psychedelic research is under threat. An aversive risk bias from the public and professionals persists, distorted by the politically motivated Misuse of Drugs Act 1971 (MDA (Parliament of the United Kingdom 1971)), whose irrelevance to pharmacology renders it unfit for purpose; seriously hampering research and failing to protect the public from the harms of the drugs to which it applies.

Furthermore, today's psychedelic renaissance is at risk from a growing schism within the psychedelic community

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itself. Because psychedelics are equally rooted in popular culture *and* science, establishing their ownership is complex. But for the benefit of the hundreds of thousands of patients who could potentially gain from psychedelic medicine, and for the wider progress of humanity in these turbulent times, we need to find a common voice by which to resolve this issue for our scientific, social and cultural development.

Trauma and child development

The quality of a child's early years forms the blueprint for lifelong psychological functioning. Disruption to early attachment reduces one's capacity to make and form relationships, causing lasting feelings of low self-esteem and vulnerability to mental disorder (Mikulincer and Shaver 2012; Lee and Hankin 2009). Unstable childhood environments are associated with the sustained release of stress hormones, producing an exaggerated amygdala-driven fear response (Streeck-Fischer and van der Kolk 2000), disequilibrium of the dopamine-mediated reward system (Maté 2012), and the subsequent risk of adult substance misuse (Brady et al. 2004), self-harm and completed suicide (Ferry et al. 2008).

Lack of efficacy with traditional treatments

With no established single drug that gets to the root cause of trauma, traditional medical treatments use multiple drugs symptomatically: antidepressants, hypnotics, mood stabilisers and antipsychotics (NCCMH 2005. Similarly, multiple psychotherapies, including cognitive behavioural therapy, dialectical behavioural therapy and eye-movement and desensitisation reprocessing, are only partially effective. By the time adult patients come to the attention of services, often already in the throes of addiction, there is a high treatment-resistance for PTSD sufferers (Hoskins et al. 2014).

How MDMA psychotherapy works

Table 1 highlights some of the indirect theories of how MDMA's psychotherapeutic effects might relate to its unique receptor profile. Increased activity at 5-HT_{1A} and 5-HT_{1B} receptors lifts the mood (Brunner and Hen 1997), novel thinking is facilitated via 5-HT_{2A} activity (Nash et al. 1994), and motivation is increased via raised dopamine and noradrenaline levels (Cozzi et al. 1999). A concurrent paradoxical alpha-2-mediated relaxation counters hypervigilance effects, (Lavelle et al. 1999) and oxytocin release, the hormone associated with infantile bonding, increases empathy and closeness (Thompson et al. 2007). The totality of these effects provide the optimum level of arousal (Foa et al. 2009) and give rise to MDMA's description as an 'entactogen' (Nichols 1986) and its epithet as 'the perfect drug for psychotherapy' (Sessa 2011).

Generally, MDMA produces a relatively consistent subjective positive experience (Vollenweider et al. 1998), increased sociability, greater compassion and increased empathy for self and others (Harris et al. 2002; Hysek et al. 2013) and is safe in clinical settings (Doblin et al. 2014). Decreased cerebral blood flow in the amygdala and hippocampus reduces the fear response on recall of negative memories and prosocial behaviour improves (Gamma et al. 2000; Hysek et al. 2012; Carhart-Harris et al. 2014), providing the opportunity to reflect upon painful memories of trauma without being overwhelmed by negative affect. However, a consistently subjectively positive experience in the usual sense might not be present in all populations. People with PTSD may find the experience quite painful and difficult at times, though they do consistently report it as positive in the sense of useful and worthwhile to go through. For example, in Mithoefer et al. 2011 58% experienced anxiety on the day of the MDMA session.

Contemporary clinical studies with MDMA-assisted psychotherapy

Uncontrolled case studies described the beneficial use of MDMA therapy before it was banned in the mid-1980s (Greer 1985; Greer and Tolbert 1986, 1990) and between 1988 and 1993 by the *Swiss Medical Society for Psycholytic Therapy* (Gasser 1995).

More recently, the Multidisciplinary Association for Psychedelic Studies (MAPS) has amassed positive data from Phase 2 studies in the USA, Switzerland, Israel and Canada for MDMA therapy as a treatment for treatment-resistant PTSD (Mithoefer et al. 2011, 2013; Oehen et al. 2013; Chabrol and Oehen 2013). And MAPS now have FDA approval for Phase 3 studies in the USA. Pending the progress of the US Phase 3 studies, European Phase 3 studies will be applied for within the next year following negotiations with the European Medicines Agency (EMA). MDMA is on track to be licenced for use in the USA by the FDA for PTSD in 2021 (Doblin 2017).

Is MDMA safe or dangerous?

Like everything else, MDMA is not 100% safe. But are knives safe? Are cars dangerous? The answer is always 'It depends'. All medical interventions from sticking plasters to cancer chemotherapy are simultaneously invasive and beneficial. So, when assessing the risks and benefits of MDMA and other psychedelics, the same principles of evidence-based clinical governance must be applied:

Table 1 How MDMA's psychotherapeutic effects relate to its unique receptor profile (Sessa 2017a)

Receptors or brain region involved	MDMA effects	How effects relate to the treatment of PTSD		Neurobiological correlates
Serotonin	Reduces depression and anxiety	Provides patient with an experience of positive mood and reduced anxiety in increased engagement (Harris et al. 2002; Hysek et al. 2013)		Release of pre-synaptic 5-hydroxytryptamine at 5-HT_{1A} and 5-HT_{1B} receptors (Brunner and Hen 1997)
	Stimulates alterations in the perceptions of meaning	Opportunity to see old problems in a new light		Increased activity at the 5-HT_{2A} receptors (Nash et al. 1994)
Dopamine and nor-epinephrine	Raises levels of arousal	Stimulating effect increases motivation to engage in therapy	Optimum level of arousal (Foa et al. 2009)	Release of dopamine and noradrenaline (Cozzi et al. 1999)
Alpha-2 adreno-ceptors	Increases relaxation	Reduces hypervigilance associated with PTSD		Increased alpha 2-adrenoceptor activity (Lavelle et al. 1999)
Hormonal effects	Improves fear extinction learning	Allows reflection on traumatic memories during psychotherapy without being overwhelmed		Release of noradrenaline and cortisol
	Increases emotional attachment and feelings of trust and empathy	Improved relationship between patient and therapist. Capacity to reflect on traumatic memories		Multiple factors, including release of oxytocin (Thompson et al. 2007)
	More likely to use words relating to friendship, and intimacy	Generate discussion about wider aspects of the patient's social and emotional relationships.		
	Reduced social exclusion phenomena	Opportunity to reflect upon patients' wider social functioning		
Regional brain changes	Improved detection of happy faces and reduced detection of negative faces	Enhances levels of shared empathy and prosocial functioning		Increased PFC activation and decreased amygdala fear response (Gamma et al. 2000; Hysek et al. 2012)
	Reduced subjective fear response on recall of negative memories	Opportunity to reflect upon painful memories of trauma during psychotherapy		Decreased cerebral blood flow in the right amygdala and hippocampus (Carhart-Harris et al. 2015)

What are the *relative risks,* versus the *relative benefits,* of using *this intervention,* at *this time,* in *this patient*?

Clinical MDMA and recreational ecstasy are incomparable in terms of drug purity, administration and the screening and monitoring of selected participants. Over 1600 doses of clinical MDMA have being administered in research settings in recent years, with only one report of a self-limiting serious adverse event and no deaths (MAPS 2016).

However, even when we *do* look at recreational ecstasy, we see low rates of morbidity and mortality. An estimated 750,000 doses of ecstasy are consumed *every weekend* for the last 25 years in the UK, yet less than five deaths per year involve MDMA alone (Schifano et al. 2003). Harm reduction initiatives such as pill testing could further reduce harms associated with recreational use (EMCDDA 2002). But the risk-averse governmental approach contributes to the harms associated with recreational ecstasy use. Prohibition of MDMA and other illicit drugs increases, not reduces, the potential harms of drug use, and results in unnecessarily expensive pressure on psychedelic research (Sessa and Nutt 2007).

Post-ecstasy come down: is it due to MDMA?

Recreational ecstasy users frequently describe low mood, irritability and fatigue for several days after recreational use; referred to as the 'mid-week blues' or 'Blue Monday' and users often anecdotally attribute this to serotonin depletion. However, ecstasy is usually taken at night, and users miss sleep, dance, use other drugs and go without food, which likely explains the phenomenon (Curran and Travill 1997; Scott et al. 2013; Pirona and Morgan 2010; Huxster et al. 2006). Although Greer did report fatigue for hours to days in the majority of patients in his 1986 study, the data from most *clinical* studies with MDMA—when such environmental factors are controlled—do not support a clear post-session syndrome attributable to the pharmacological effects of MDMA (Greer 2017; Mithoefer et al. 2011; Mithoefer 2017; Jerome 2017). Whilst anecdotally some recreational ecstasy users take 5-HTP as a reliever of post-MDMA low affect, the theory of serotonin depletion remains untested with pure MDMA and much more robust, controlled research needs to be done to explore the phenomenon.

The importance of tackling misinformation and stigma

The great PR 'success' of the sustained War on Drugs has created a negative bias towards MDMA and other psychedelic substances. Despite the rarity of MDMA toxicity, whenever a young person dies having consumed a drug assumed to be ecstasy, it receives media attention, which disproportionally demonises psychedelics in comparison to the annual 9000 alcohol-related (ONS 2014) and 80,000 tobacco-related deaths (HSCIC 2016).

By way of an illustration of this disproportionate fear, at the 2015 Royal College of Psychiatrists conference, a concerned Emergency Medicine consultant in the audience expressed displeasure at hearing me suggest psychedelics were predominantly safe. He described what he considered a dangerous incident, in which a young person had come into the emergency department having taken *17* blotter tabs of LSD, removed his clothes and was performing somersaults in the hospital corridors. I asked the doctor whether the patient required admission to hospital or referral to psychiatric services. No, he said, after several hours of monitoring, he was allowed home under the supervision of his friends and required no further follow-up. I asked the challenging doctor to describe what might have been the scenario had someone attended his department having consumed 17 g of cocaine, heroin or, for that matter, 17 bottles of wine? The doctor acknowledged that under those scenarios, such a person would have ended up in intensive care or could have easily died. So, I said to the audience member, here is a young person who took *17 times* the recommended dose of a substance and the only pathology was that of performing naked somersaults.

The elephant in the room: the Misuse of Drugs Act 1971

It is over 45 years since the Misuse of Drugs Act (MDA (Parliament of the United Kingdom 1971)) came into law, intended to provide a beneficial effect on the individual and wider society by reducing the harms, deaths and usage of the banned substances to which it refers. But does the Act achieve these goals? The grouping of drugs into classes A to C follows no meaningful principles of psychopharmacology, toxicity profiles, addictive qualities or the relative risks or potential benefits of the drugs in each class. This is particularly true for the psychedelic drugs and MDMA (Nutt et al. 2007).

In recent years, there has been a growing spotlight of attention on drug prohibition, which far from protecting the public, rather increases the harms and usage of drugs. The word 'prohibition' itself is of interest. Until recently, prohibition was primarily a description of the globally recognised socio-political failure in which the USA banned alcohol in the early twentieth century. Prohibition of the 1920s and 1930s was a folly that failed to eliminate alcohol use or harms and created an underground system of criminal networks (Towne 1923), which parallels starkly the current policy in respect of illegal drugs since 1971.

Some governments are waking up to this folly. Per capita drug usage is lower for those countries with a less prohibitionist stance (Rolles 2010). Lifetime use of cannabis amongst the Dutch in

2010, compared to those in the USA, was 25.7 and 41.5%, respectively (SAMHSA 2010; NIMHA/MSJRDC 2012). And in the UK, when cannabis was briefly reduced from class B to class C for 5 years, there was a significant decrease in its use, with its declining popularity attributed to the loosening of the prohibitionist stance (Home Office 2007). In another striking example, deaths from cocaine, which had been steadily climbing for 30 years, experienced a small but significant drop for 2 years between 2008 and 2010. But this was not due to the 'success' of the MDA (Parliament of the United Kingdom 1971). Rather cocaine deaths reduced for those 2 years when many cocaine users shifted towards (the safer and then legal drug) mephedrone (M-Cat). The reduction in cocaine deaths quickly rose again when M-Cat was subsequently banned in 2010 (King 2011).

For those of us who work in the addiction services, we see daily evidence that the illegality of drugs has little impact on the revolving-door use of drugs. Drug misuse and addiction is not about drugs, but rather it is a psychological, social and physical state of mind, rooted in early trauma that takes hold long before a person meets any drugs. Addiction is linked to childhood abuse and trauma (Khoury et al. 2010), social deprivation (ACMD 1998), racism (Jahannes 1987) and mental illness (Conway et al. 2006). With no hope of escape from their psycho-social circumstances, prohibition keeps sufferers paralysed, and otherwise law-abiding citizens are criminalised down a delinquent pathway towards the use of harder drugs (RSPH 2016).

Most drug-related arrests are for possession, not sale or production. Cannabis possession accounts 65% of arrests alone (ONS 2015). The trajectory for a young person criminalised by the MDA (Parliament of the United Kingdom 1971) for a victimless cannabis offence, with permanently blighted educational, employment and travel prospects, makes cannabis a 'gateway drug'. Not because of any pharmacological aspects of the drug itself, but because the MDA (Parliament of the United Kingdom 1971) exposes users to criminal networks containing harder drugs (van Ours 2001).

Implementing current drug laws costs an astonishing £16 billion a year (TDPF 2009), prompting Steve Rolles, of the UK charity, *Transform, to state:*

> *'The UK Government has wasted £100 billion in the last decade…It is unconscionable that UK drug enforcement spending continues to deliver such appalling outcomes, whilst remaining immune to meaningful scrutiny and evaluation.'* (TDPF 2009).

The assumption that 40,000 years of humanity's psychoactive drug use (Froese et al. 2013) can be eradicated by simply banning drugs is extreme folly. Organised crime networks oversee a market size for cocaine, heroin, cannabis, amphetamines and ecstasy estimated at £4.6 billion in England and Wales in 2003/04 (Pudney et al. 2006). The prohibited drug industry has no boundaries; using slave labour, human trafficking, sexual exploitation and murder in pursuit of big money.

But arguably, it is prohibition's effect on the extreme variability of drug quality that is the biggest killer. A heroin user today could inject five bags of 3% heroin and barely notice an effect, then tomorrow inject half a bag of 85% heroin and die. Imagine buying a bottle of alcohol and not knowing if it is 3 or 85% proof? Overdose is further increased by lone use and lack of access to help. Illegal drugs are predominantly used in secret. Because of the stigmatisation of criminalisation, the MDA (Parliament of the United Kingdom 1971) reduces access to services by delaying potentially life-saving—and money saving—interventions (Room et al. 2001). A common scenario for drug deaths involves a user becoming unwell but failing to call an ambulance for support because they know they are carrying out an illegal activity and fear retribution. As a professional, would *you* go to your GP if worried about a cocaine habit? Instead users suffer in silence until before the courts. In this respect, the MDA (Parliament of the United Kingdom 1971) can increase, not reduce harm by impairing safer use projects such as needle exchanges, prescribed diamorphine, injecting sites and teaching children about how to use drugs safely.

Drugs needn't kill people. Prohibition does.

The MDA (Parliament of the United Kingdom 1971) is a pseudoscientific and pseudomoralistic smokescreen with little evidence for its efficacy. Rather it relies on a didactic argument for prohibition, providing an opportunity for media-sustained polarisation, which turns a blind eye to the real causes of drug misuse and addiction: poverty and exclusion.

Is the war on drugs almost over?

I am an addiction doctor. My goal is not seeing more people using drugs. But I do want to see a safer society with fewer deaths and more stable, cohesive and affordable communities. Although the evidence is stacked against the MDA (Parliament of the United Kingdom 1971) as a mechanism to achieve these goals, people remain fearful of legalising and regulating drugs. But, is it possible to imagine any other system worse than the one we have?

We are seeing a coalescence of anti-prohibitionist groups with increasing political and social impact, such as Release, NORML, Drug Policy Alliance and Transform. Their agendas are not new. But with mounting evidence against the MDA (Parliament of the United Kingdom 1971), they are becoming increasingly mainstream. And why is it that the MDA (Parliament of the United Kingdom 1971) has gone unaudited for over 45 years? Since 1971, multiple laws that govern the prisons, schools, transport, social services and health have all

rightly changed in line with emerging evidence. Yet the MDA (Parliament of the United Kingdom 1971) remains largely unchanged, with its original narrative: Everything is illegal except alcohol and cigarettes.

We watch closely those courageous nations (USA, Uruguay, Holland, Portugal, Israel, Canada, Spain and Czech Republic) who have taken steps to dismantle prohibition. Data so far looks promising. In Portugal, for instance, since rebranding drugs as a health, not a criminal, problem, use amongst young people has reduced (Balsa et al. 2013), drug deaths have fallen (Hughes and Stevens 2012) and new cases of HIV infection have dropped to a 10th of previous rates (EMCDDA 2014).

But if drugs were legalised and available through a regulated market in the UK, would everyone be high all the time? There is no evidence for this. I am not on methamphetamine right now. Is this because it is illegal or I don't know where to get it? No. Anyone can buy any drug today within a few clicks of a mouse. And if I really wanted to be on crystal meth, I would not be swayed by its legal status. The reason I am not on that, or any other drug, is simply because I don't want to be. Most people want to be sober most of the time so they can communicate with their friends, look after their families and carry out their jobs.

So, if drug prohibition doesn't work and psychedelic therapy does, then why is the current system not shifting more quickly? This is a complex question and there is no simple answer. Fear and misinformation seem to be central to the status quo. Politicians call this phenomenon the seatbelt effect.

The seatbelt effect

For decades, the Royal Colleges of Physicians and Emergency Medicine lobbied the UK government to make wearing seat belts in cars compulsory. The evidence for the reduction of head injuries and deaths was irrefutable. But successive governments said it could never be done. The people would never stand for it. There would be riots in the streets. It would be political suicide. Then, in 1983 the politicians acquiesced. Within weeks, everyone was wearing seatbelts, no one complained, there were no riots. The same thing happened with smoking in pubs: It could never be done. What if legalisation of drugs followed the same pattern? What if an improved system of drug education, better rehabilitation and addiction facilities alongside a regulated system for drug provision worked to reduce harms, crimes, deaths and usage associated with drugs?

Yet when I put this to the Royal College of Psychiatrists annual general meeting in 2015, suggesting the College take a firmer stance on lobbying the government to review the Parliament of the United Kingdom 1971, referring to it as the 'elephant in the room', I was met with a response by the executive committee that it is not our job to question the government. It is our job to follow the law. I passionately disagree with this reply. Surely, it is *precisely* the job of the Royal Colleges to bring to the attention of the UK government the latest evidence-based data about medical and social issues, and to seek policy changes in line with this data? Other Royal Colleges have lobbied governments for changes to policies in respect of smoking and obesity. So why is the Royal College of Psychiatrists not pushing the government on this issue of impractical, dangerous and ineffective drug laws? Perhaps part of the reason is because the psychedelic research community itself lacks cohesion.

Psychedelic schism and rebranding

Psychedelic research has an image problem. Psychedelic conferences tend to present divergent and seemingly irresolvable disciplines. From suited scientists delivering the data from robust controlled trials, to bare-torsoed hippies reflecting on their anecdotal trip experiences, everyone is welcome, every viewpoint valid and all ideas up for discussion. But this spectacle induces divisions. For those outside the psychedelic community, there appears to be no differentiation, or even any need to differentiate, between beliefs and facts. This could prevent psychedelic research from finding the common voice necessary to move forward as a cohesive group into a non-prohibition world.

Pursuing psychedelic medical research is difficult. Convincing one's conservative colleagues on hospital boards and ethics committees about the healing potential of psychedelic drugs is a challenge. The propaganda of the War on Drugs has been extremely successful: Drugs are bad > psychedelics are drugs > psychedelics are bad. And when factions of the psychedelic community align themselves with subjective claims and pseudoscientific opinions with spurious empirical validity, to many conservative thinkers prohibition is justified. Perhaps this is why, after all this time and in the face of so much evidence about the safety and efficacy of psychedelics, they remain banned almost everywhere.

Having said this, total medicalisation of psychedelics is not the answer either. The non-medical psychedelic community carries cultural validity; arising as it has—and influencing as it does—the varied fields of art, spirituality and religion. Psychedelic science has showed these compounds have a good safety profile when used wisely and can be employed not only within clinical medicine to provide a much-needed breakthrough for those thousands of people suffering refractory mental disorders, but also a tool for self-development and growth for non-clinical populations (Krebs and Johansen 2013). So why are health authorities and politicians not queuing up to open ayahuasca clinics, ibogaine retreats, MDMA gyms and LSD spas? Because, I would contend, of the

pseudoscientific elements of the psychedelic community. Arguably, it is the scientists who have done more in the last 10 years to open the mainstream debate about the safety and benefit of psychedelics than any of the socio-culturally mediated attempts of the previous decades. It was science that got medicinal cannabis into American states and launched projects with LSD, psilocybin, DMT and MDMA all over the world. For the first time ever, we are getting positive media coverage describing safe psychedelic use in a legal setting. And, if anything can, it will be science that pulls down the pillars of prohibition.

But science lacks colour and romance. At its heart is a methodical process that requires repetition, time and effort. But it gives us data and when it comes to politicians making decisions about important social issues, data is the best weapon we have with which to change hearts and minds.

Or is it?

Feeling impotent

Despite the proven efficacy and safety of psychedelics, politicians are still not listening. As a scientist interested in drug development, this is frustrating. In 2010, David Nutt experienced this frustration when he provided the British government with a plethora of meticulous, peer-reviewed evidence about the safety and efficacy of MDMA, requesting a change in its scheduling and permission to get life-saving research underway, only to find himself sacked. And if a luminary like Nutt can be so cynically swept aside, where does that leave others with even less influence? As scientists, data is all we have to present to those in authority about evidence-based change. But, if neither the hippies and their calls for cognitive liberty, nor the sober and rigorous Nutt, playing by the rules with his scientific data, has succeeded, what is the way forward?

This is where an entirely new, creative approach, something that spans science and culture, comes in. Psychedelics need a facelift. Forget data and forget our cognitive rights. What we need now is simply *good PR*. Not necessarily Saatchi and Saatchi (although that might be interesting), but rather the skill and ingenuity of the media-savvy. The recent growth of groups such as the Psychedelic Society, MAPS, Heffter and the Beckley Foundation are slowly bringing psychedelics into mainstream consciousness with positive results. But they can only do this if they are prepared to challenge an unhelpful undercurrent of arrogant exclusivity that exists within some parts of today's psychedelic community. The community, which so often criticises the medical model and imagines itself as 'right on' and open, is often, just like clinical medicine, rife with rigid stereotypes that exclude access to many. Pseudoscientific beliefs are a turn off for many people. The patients in my clinics are mostly poor and uneducated, everyday people. Mandalas and sitar music are not their world. Yet it is precisely these people, my worthy patients, that are most in need of psychedelic medicine. There are upwards of 100,000 cases of untreated PTSD in the UK (Kessler et al. 1995). They cannot all fly off to Californian spas or spend 4 months in the Peruvian jungle to get their medicine. With equal measures of ignorance and arrogance on both sides of the debate, enthusiastic but non-trained pseudo-experts peddling half-truths about complex subjects are no better than the readily maligned short-sighted doctors and scientists who cannot see beyond the end of their stethoscopes.

But this schism emerging in the field of psychedelics is not new. The concept of 'Are You Experienced?' has been there since the beginning. The moment Hofmann stumbled back into the lab after his bicycle experience, and he and Stoll sat down with the others at Sandoz to discuss who in the department was going to try this new LSD-25 next and, crucially, who was *not*, the schism was in place. The rapid growth of ayahuasca interest in recent years has created a new version of this phenomenon. Is an Ayahuasca experience gained from 4 months in a Peruvian jungle better than one in a kitchen in Swindon with products bought online? Quite possibly, at some levels, but not to the extent that the latter has no validity whatsoever. Exclusivity amongst the psychedelic community needs to be tackled. It is snobbishness in the extreme to say otherwise; and such attitudes risk undermining accessibility to psychedelics for everyone, providing critics further ammunition to rubbish the subject.

Outing psychedelics

Psychedelics need normalisation. Neither venerated as mystical and spiritual, only to be used in exclusive circumstances by exclusive intellectuals, or prohibited and maligned. We can learn from other minority groups. Although the loud exchanges and placard waving of the 1960s and 1970s were an essential part of minority groups' liberation, it was not until diversity became normal and, dare I say it, appropriately boring and ordinary, in the 1990s, that we started seeing barriers coming down and a move towards equality. Of course, homophobia, sexism and racism are far from eradicated; tackling discrimination is a work in progress. Diversity matters, and unfortunately psychedelic history, like most, written by the likes of Hofmann, Huxley, Leary and the rest, is primarily represented by middle class, old, white men. This *must* change. This includes daring to criticise those indigenous cultures—whilst acknowledging the skilful means by which they have integrated psychedelic use within their social systems—where sexism, racism and homophobia are often abundant. To deny this is to fall into the patronising trap of the noble savage and devalue what must be a global jump forward into the

future—not a pathetic fall backwards into a far from perfect past.

Conclusion: a return to those abused children

We are today at a place in psychiatry where general medicine was 100 years ago. In the late nineteenth century, patients were dying from infectious diseases, but the medical profession was yet to discover the miracle cure of antibiotics. We knew all about the epidemiology of smallpox, tuberculosis and post-operative infections, but Victorian physicians were powerless to stop them. Then, in the twentieth century antibiotics were discovered and this transformed the face of general medicine. Today in modern psychiatry, we are similarly expert at the diagnosis, classification and categorisation of our common mental diseases. As psychiatrists, we write detailed manuals for the diagnosis and categorisation of our common disorders; depression, anxiety and addictions. And we well-understand the common aetiological roots of these disorders; childhood trauma. But our current best treatments are unsuccessful at effecting a lasting cure for trauma. Instead we provide a wide pharmacopoeia of medications, from antidepressants to mood stabilisers to antipsychotics and hypnotics, which do little more than mask the symptoms of the underlying psychological problems.

Psychedelic therapies—and particularly MDMA-assisted psychotherapy for tackling underlying trauma—that aim not simply to symptomatically paper over the cracks of trauma, but rather provide an opportunity for patients for the first time in their lives to address and resolve those traumatic childhood memories, could be as transformative for twenty-first century psychiatry as antibiotics were 100 years ago. We owe it to that population of patients—*my* patients suffering since childhood—to carry out this research.

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

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