Novel treatment of opioid use disorder using ibogaine and iboga in two adults

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ABSTRACT

Ibogaine is a naturally occurring psychedelic medicine with anti-addictive properties. While research on ibogaine is limited, several observational studies have shown ibogaine can mitigate opioid withdrawal, as seen with reductions in clinical and subjective opioid withdrawal scores and reduced drug use severity (Noller, Frampton, & Yazar-Klosinski, 2018; Brown & Alper 2018). Furthermore, the psychoactive experience may help individuals to realign their values, purpose and sense of connection, as seen with post treatment reductions in depression scores (Noller et al., 2018; Mash et al., 2000).

Case series: This case series describes two cases of individuals accessing ibogaine through private unregulated clinics in the Vancouver area to treat their opioid use disorder. Conclusions: In case 1, the client achieved total abstinence from all opioids within 5–6 days of starting ibogaine treatment, did not experience any opioid withdrawal symptoms after ibogaine treatment and maintained abstinence from opioids for 3 years. In case 2, the patient took ibogaine/iboga in multiple treatments over a short period of time (<4 months). The patient stopped all non-medical opioids after the first iboga treatment and then used ibogaine to aid with further dose reductions of her opioid agonist therapy (OAT) and has maintained abstinence from opioids for 2 years. Ibogaine offers a unique and novel therapeutic approach to treating opioid use disorder. Further studies are needed to establish the safety, risks and potential role for ibogaine as a mainstream, evidence-based addiction treatment.

KEYWORDS

ibogaine, iboga, opioid use disorder, transformation, withdrawal mitigation, psychedelics, refractory, novel therapeutics

INTRODUCTION

Opioid use disorders (OUD) have had a devastating impact on society, health care, patients and the economy. At present, there is a paucity of treatment options available, with opioid agonist therapy (OAT) being the gold standard. Unfortunately, many individuals have to be on OAT for prolonged periods of time, or for whom this therapy is not effective, leaving few other treatment options. Ibogaine offers an alternative or adjunct treatment for OUD, with potential for rapid titrations off OAT or illicit opioids and helping individuals achieve abstinence from opioid use. Furthermore, ibogaine may offer therapeutic benefit in cases of treatment refractory and complex opioid use disorder.

The Tabernanthe iboga shrub has been used for therapeutic purposes in West Africa for centuries and was introduced to western medicine in the late nineteenth century (Alper, Stajjic & Gill, 2012). T. Iboga has naturally occurring psychedelic properties, the root bark can be chewed, or the tree root bark can be dried into an alkaloid form, sometimes referred to as indra or iboga. Modern treatments most often utilise ibogaine, which is an indole alkaloid extracted from the tree root bark refined using hydrochloric acid. Ibogaine allows for fewer side effects and more precise therapeutic dosing, making it a desirable therapeutic choice (Brown, 2013). Both iboga and ibogaine hydrochloric acid (HCL) offer slightly different therapeutic properties, due to the presence of different indole alkaloids.
Ibogaine gained notoriety in the 1960's as a novel therapy to treat opioid use disorder. There is now a resurgence in interest in mainstream medicine around the utility of using ibogaine to treat substance use disorder. However, there is a lack of high quality clinical trials to support the use of ibogaine as a standard therapy at this time. Nonetheless, there have been a number of observational case studies and retrospective studies dating back to the early 1990s, consistently finding that ibogaine is effective in reducing opioid withdrawal symptoms, reducing in drug seeking behaviour and increasing in the frequency that patients were able to achieve prolonged periods of abstinence from drug use, earning ibogaine the name ‘addiction interrupter’ (Alper, Lotsof, Frenken, Luciano, & Bastiaans, 1999; Brown & Alper, 2018; Noller, Frampton, & Yazar-Klosinski, 2018).

The purpose of documenting this case series is to add to the extent current knowledge by way of better understanding the impacts of a psychedelic experience on substance use, explore approaches that enable rapid detox from opioids and to explore alternative treatments to opioid agonist therapeutics. There is a significant variance in the population that uses opioids; there should be significant variance in the treatment options available to better provide for individualistic needs.

CASE PRESENTATION

Two patients accessed ibogaine/iboga at two different private clinics in the greater Vancouver area. These ibogaine clinics varied in their approach; client 1 accessed a combination of both iboga and ibogaine, while client 2 utilised the less refined iboga product. However, client 2 also independently used small doses of ibogaine to assist with OAT titrations between iboga treatment sessions.

Case 1

At the time of treatment client 1 was a 35-year-old male with a 5-year history of opioid use disorder. He had developed opioid use disorder secondary to chronic pancreatitis, pain and an escalating oxycodone prescription. His physician had addiction concerns and weaned his opioid prescription. With ongoing poorly controlled pain, the patient turned to an illicit source of oxycodone to supplement his weaning opioids prescription. He used illicit oxycodone tablets, 10–40 mg strength (consumed orally) which he took for 1 year prior to accessing ibogaine treatment and was consuming up to 55 tablets a day, which he believed was about 900 mg morphine equivalent daily. His opioid use had greatly escalated since seeking illicit opioid sources. He had no prior mental health or addiction history, other than tobacco use. His motivation to trial ibogaine came initially from television, followed by online reading. He wanted a quick result and to restore his financial situation. Client 1 did not like the idea of conventional treatment approaches, in part because of the likelihood of prolonged treatment. He also had a negative stigma of both residential treatment and OAT, and felt that standardised medical approaches had largely contributed to the development of his OUD. As a result, he did not trust conventional treatments. Furthermore, client 1 was hesitant to approach his family doctor for help, as his doctor did not know he was accessing illicit opioids.

Client 1 was screened for baseline lab work and an ECG prior to accessing care. A test dose of ibogaine was given on day 1 to screen for potential tolerance issues and observe the patient overnight. Additional support services were also provided. The following days, ibogaine/iboga doses were administered in a progressive manner while the patient was monitored. On day 4 of treatment, a flood dose of iboga and ibogaine was provided to promote a deep psychoactive experience and robust opioid detox. The patient would engage in informal counselling services throughout the process but was largely non-verbal through most of the treatments. Two other clients were also in treatment with the client and they all formed a bond as treatment progressed. As ibogaine is a stimulant, the clinic provided 10 mg diazepam between treatments to help the patient sleep. Ibogaine can cause nausea and vomiting – therefore antiemetic and proton pump inhibitors were available as needed.

In total, treatment occurred over 6 days and the patient stayed at the clinic 8 days. Oxycodone was administered to the patient for the first 4 days of ibogaine treatment, provided from the clients remaining legal prescription. The opioid doses were titrated down as the days progressed, with the patient receiving 380 mg morphine equivalent day 2, 300 mg day 3 and 240 mg day 4. After day 4 of treatment, all opioid medications were ceased. Client 1 did not experience any post ibogaine treatment opioid withdrawal symptoms after day 4 of treatment. Furthermore, the client has remained abstinent from any opioid use for 3 years, confirmed by negative urine drug screens.

Client 1: psychedelic impact. Iboga and ibogaine have a long half-life of 28–49 h. After ingestion, withdrawal symptoms from opioids usually dissipate within 1–2 h (Glue et al., 2016). One hour after ibogaine ingestion, clients will enter the acute or visual dream phase ranging from 4 to 8 h in which the patient experiences deep memory recall, visual flashbacks and can develop ataxia (Alper et al., 1999). Hallucinations are sometimes reported but this feature is not as prominent as memory recall. The patient will then enter the intellectual phase that lasts an additional 8–20 h, ataxia resolves and this phase is deeply introspective, often focuses on processing information from the acute phase, evaluations of prior life experiences or choices and can be intermixed with light sleep and lucid dreaming (Sheppard, 1994). This second phase can be considered spiritual in nature and can involve internal problem solving or story completion.

With client 1, the most impactful vision of treatment was early in treatment when he saw himself rising from the dead, wrapped in cloth in the desert and then running towards a bright light, while carrying suitcases. The suitcases swung open and were empty. The light which client 1 interpreted as the creator and the empty suitcases represented being...
unprepared with the life he was leading up to that point, and to meet his creator.

Client 1 also had deep memory recall. He reported recalling events in his life that he felt sure he had distanced himself from long ago, such as childhood bullying. Having to process these unexpected issues, was somewhat overwhelmed initially but the client reported that once treatment was done, he had processed many things including guilt, remorse and shame and was able to move forward 'without boundaries'. The client also reported, 'if a vision was too much or if I didn’t want to process that, I just had to shut my eyes and when I opened them again, a different vision had appeared’. Some of the visions were long and did not make a lot of sense, such as a vision of being in a space filled with only numbers and letters, which client 1 later interpreted as his soul being reprogrammed. Other visions were more relatable, such as seeing his body cleaned and scrubbed free of drugs.

Client 1 found ibogaine to be transformative beyond treating his addiction. He reports prior to treatment being a very confident and proud man, he was quick to anger, slow to forgive and stubborn. After treatment, he has become a new person, which he refers to as version 2.0 of himself. 'Ibogaine was an honesty gate for me, it broke me and opened my eyes to being honest with myself and humbled me to the point I had to submit'. After treatment client 1 describes being in awe of the beauty in the world, having a better relationship with everyone in his life and reports now ‘having no shame in admitting when I am wrong’. 'I appreciate people so much more’. Prior to treatment client 1 reports he was an Orthodox Muslim, after treatment he has converted to a more spiritual Muslim, ‘I found the Orthodox to be too constraining and rigid, I needed to break boundaries with my relationship with God. God went from being a textbook concept for me to being a realization’. Client 1 reports he is much more happy and at peace in his life now.

An unexpected outcome of ibogaine treatment was that after the flood dose on day 4 of treatment, client 1 no longer had any chronic pain issues. He now has adapted a very healthy lifestyle, has lost 70 lbs and tries to take only natural health products to this day. He reports during stress he will have the very occasional craving for escapism and opioids but these are only fleeting thoughts and easy to redirect.

Case 2

At the time of treatment client 2 was a 34-year-old female with polysubstance use disorder. She started using prescription opioids and cocaine via insufflation at age 24. She went to treatment for cocaine and alcohol use disorder at age 28 and relapsed after 9 months. The patient started smoking and using intranasal heroin/fentanyl at age 29, which she initially started to help offset the stimulating effects from her cocaine use. By age 32, opioids had become her drug of choice. She soon found the opioids too sedating and replaced her cocaine use with crystal methamphetamine use (consumed orally) to counterbalance the opioid induced sedation.

Prior to iboga treatment, she had also tried all available OATs including methadone, buprenorphine/naloxone and sustained release oral morphine (SROM) to manage her OUD with poor effect. On methadone, she had titrated up to 80 mg once daily and stayed on this therapy for 2.5 years. She found that if she titrated the dose higher, she had adverse effects, such as fatigue but at 80 mg, she was able to keep using opioids with effect. 'The methadone didn’t stop me from using, I still had cravings and wanted to use, if anything methadone just increased my opioid tolerance'. She found methadone contributed to depression and social isolation, worsening her methamphetamine use. Furthermore, the client also found she had increased sugar consumption on methadone, which bothered her.

Client 2 accessed outpatient addiction treatment services many times. She had never been able to stop using illicit opioids for more than a few days since age 29. At the time client 2 accessed iboga therapy, she was using 500 mg a day of illicit opioids (i.e. fentanyl/heroin) via inhalation/smoking, in addition to 600 mg of prescribed SROM. Urine drug screens consistently showed positive results for polysubstance use.

Client 2 accessed a specialised iboga clinic. The clinic provides iboga in treatment ceremonies closely following African traditions. The ceremonies involve a talking circle where clients set intentions, followed by iboga dosing and close monitoring through the initial phase of treatment. Followed by rest and recovery days before a subsequent iboga ceremony. The client received a total of five iboga ceremonies, in three different admissions over 4 months.

During the late stage of the first iboga treatment admission, client 2 self-administered 25 mg of quetiapine orally to aid with sedation unbeknownst to the iboga clinic. She soon developed increased visual features and felt unwell. She was taken by the clinic to a nearby emergency department. Cardiac monitoring was done, showing QTc prolongation of 512 ms and bradycardia with a heart rate of 53 beats per minute, thought to have occurred due to compounding effects from iboga and quetiapine. Client 2 was provided IV fluids and zopiclone to sleep in emergency and monitored. The patient’s symptoms quickly resolved, her cardiac rhythm returned to normal, confirmed with a second ECG and she was discharged 9 hours later.

Client 2 was discharged from emergency and had returned home. The next day she presented to emerge again to restart SROM. ‘After that first iboga treatment, I had no
desire or cravings to use opioids, I restarted on SROM because I had physical withdrawal symptoms I needed to manage, but mentally I did not want to use drugs again. Client 2 was restarted on 200 mg of SROM, which managed her remaining opioid withdrawal symptoms. Over an 8-day duration and as a result of the iboga treatment, client 2 was able to reduce her SROM from 600 to 200 mg and stopped all illicit opioids, representing an 85% reduction in total opioid use.

Client 2 returned to the iboga clinic two additional times over the next 4 months, for 3–8 day treatments, involving a total of three more iboga ceremonies. These treatment sessions focused more on healing as well as detoxification. She had no further cardiac issues or complications from treatment and tolerated the remaining treatments well.

Client 2 reduced her remaining 200 mg of SROM by 20 mg increments every 2 weeks in the community in-between iboga sessions. To support the dose reduction, she took ibogaine HCL 100 mg once daily as an outpatient for 2 days, which she received independent of the iboga clinic. She found this minimised any opioid withdrawal symptoms and stress. Client 2 stopped all opioid medications after the final iboga admission and has maintained abstinence from opioids, cocaine, amphetamines and alcohol for 2 years, which was confirmed with urine drug screens. Client 2 has used psilocybin for therapeutic purposes intermittently since treatment on 2 occasions and has found this has helped her continue with psychological growth and development post ibogaine treatment.

**Client 2: psychodelic impact.** Client 2 found the first two-detox iboga admissions to be very overwhelming. ‘Because I didn’t sleep for days, I was so exhausted. My anxiety levels were high and I was trying to process the iboga treatment. It felt like too much’. Once she was able to sleep again, she realised how beneficial the ibogaine treatments had been and felt very reassured about the process.

Some of the more transformative moments in treatment with client 2 include a vision of her seeing her own death. ‘I saw myself getting assaulted and left for dead in a back alley. Before that vision, I did not know if I wanted to live or die. That vision made me realise I wanted to live. It also made me realise how fragile life was and that life was a gift’. Client 2 also describes visualizations as ‘odd dreams for days, some of it didn’t make sense at the time, but it was more of a feeling, an emotional experience’. The potential to help drug users move past ambivalence and realise life has value, has great potential to make other therapies more effective and make clients more goal orientated in their care (Table 1).

Client 1 and 2 had different post ibogaine treatment opioid withdrawal experiences. With both patients, opioid withdrawal was mitigated. Client 1 experienced no physical opioid withdrawal symptoms after day 4 of treatment and

### Table 1. Case comparison

| Case comparison                  | Client 1                              | Client 2                                                                 |
|----------------------------------|---------------------------------------|--------------------------------------------------------------------------|
| Period of opioid use             | 5 years                                | 9 years                                                                  |
| Drug use amount at time of tx    | 55 illicit oxycodone daily             | 500 mg fentanyl + 600 mg long acting Morphine                            |
| Treatment                        | 1 Ibogaine treatment/detox session over 6 days | 3 Ibogaine treatment/detox sessions + 100 mg Ibogaine doses × 4 |
| Doses                            |                                        |                                                                          |
| Day 1: test dose 50 mg HCL       |                                        |                                                                          |
| Day 2: Ibogaine HCL 200 mg + Iboga 100 mg |                                        |                                                                          |
| Day 4: 525 mg HLC + 900 mg Iboga |                                        |                                                                          |
| Day 6: 275 mg HCL                |                                        |                                                                          |
| Day 6: 400 mgI                   |                                        |                                                                          |
| HCL + 500 mg Iboga calculated at 50% as concentrated at HCL = 2,425 mgHCL |                                        |                                                                          |
| 2,425 mg/95 kg = 25.5 mg/kg      |                                        |                                                                          |
| Treatment period                 | 6 days                                 | 4 months                                                                 |
| Poly-substance use               | Opioids, nicotine                      | Yes Multiple modalities (Suboxone, long acting morphine, methadone + detox) |
| Opioid agonist treatment history | None                                   | Yes both inpatient and outpatient                                      |
| Hx of attending drug treatment centre | None                               | Fearful of withdrawal, unsuccessful with conventional tx                |
| Motivations for seeking ibogaine | Sense of urgency to address opioid use, distrustful of conventional medicine | Better than other withdrawal experiences                                 |
| Withdrawal experience            | None                                   | OAT, accessed other psychological support                               |
| Concurrent treatment             | None                                   | Initial treatment challenging                                           |
| Psychological experience         | Initially very challenging             | Total opioid cessation × 2 years                                        |
| Opioid use post treatment        | Total opioid cessation × 3 years        |                                                                          |
reported less emotional distress versus client 2. This may be attributed to a less severe illicit drug use pattern prior to treatment as well as a shorter duration of OUD and fewer prior negative experiences with opioid withdrawal. Furthermore, client 1 was also provided with adjunct Diazepam 10 mg in between treatment sessions, allowing him to sleep more over the course of his treatment experience. In contrast, client 2 had no adjunct medications during her treatment. Iboga has more drug interactions and is most often used in monotherapy – resulting in greater sleep deprivation and associated stress (Table 2).

Alignment to other cases

In comparison to other studies, iboga/ibogaine dosing approach aligned to other approaches. In the treatment of OUD, doses are typically 20–25 mg/kg. Client 1 was given 25 mg/kg over 5 days of active treatment, while client 2 received the equivalent of 13.3–30.6 mg/kg of ibogaine per treatment ceremony. Larger doses can be used to mitigate greater opioid withdrawal symptoms, with dosing depending on client response to incremental dose increases. Noller et al. observed doses up to 55 mg/kg being used for OUD treatment over 4-day treatment (2018). Participants in both the Alper et al. (1999) and Sheppard (1994) studies were dosed the lowest and had the poorest outcomes and incidents of treatment failure. This is suggestive of a sub therapeutic dose at <13 mg/kg.

Client 2 also supplemented her iboga treatment sessions, with ibogaine 100 mg daily for 2–3 days around opioid titrations. Psychotropic effects from ibogaine are thought to occur at 200–300 mg (Sheppard, 1994). Client 2 did not report any psychotropic effects using 100 mg ibogaine to assist with opioid titrations and reported she was able to function well on these adjunct doses.

Both client 1 and 2 found improved mood, engagement in activity and improved relations post ibogaine treatment. Noller et al. study had similar findings with participants having a reduction in depressive symptoms, regardless of if they were able to achieve abstinence from opioids use (2018). Feedback from other ibogaine treatments was that it helped clients gain insight into their situation. Client 1 and 2 both expressed a feeling of increased self-awareness, positivity and determination post ibogaine treatment. Furthermore, client 2 had long-standing struggles with anxiety and depression prior to ibogaine treatment, which have largely resolved post ibogaine treatment without the use of pharmaceutical treatments.

DISCUSSION

The two cases demonstrate a positive association between ibogaine therapy and the management of OUD. Prior to accessing treatment client 1 had not tried conventional

| Literature Review of Ibogaine Studies | Sheppard, 1994 | Alper et al. 1999 | Mash et al., 2000 | Brown & Alper, 2018 | Noller et al., 2018 |
|--------------------------------------|----------------|------------------|------------------|-------------------|---------------|
| Study type                           | Observational, 14 weeks, up to 12 months | Observational 12 months | Observational 30 days | Observational 12 month | Observational 12 month |
| N                                   | = 7 Netherlands | = 33 26 in Netherlands 1989–1993 8 in USA | = 27 St Kitts 12–14 days tx, 30 day f/u | = 30 Mexico flood dose ± booster, 3 day stay for detox tx | = 14 New Zealand. 3 day detox treatment with f/u × 12 months |
| Treatment location/Time frame        | 11.7–25 mg/kg 700–1,800 mg | 19.3 mg/kg | Randomly assigned 500, 600 or 800 mg | 1,540 mg ± 920 mg total HCL | 22–55 mg/kg HCL |
| Average dose                         |                |                  |                  |                  |               |
| Study measured                       | Opioid use at 14 wks in 3 clients nil-3 others significantly decreased use | Reduced opioid withdrawal and drug seeking post tx-resolution of post ibogaine treatment opioid withdrawal –76% of pts | Self reported depression scores improved post tx and a reduction in opioid cravings | Opioid withdrawal reduced, SOWS reduced 17 points & drug use severity improved | Reduced drug use severity, improved functionality scores & reduced subjective opioid withdrawal scores improvement in beck depression scores |
| Themes                               | Emergence of repressed memories. Decreased satisfaction with drug use |                    |                  | Insight personal change | Insight |
therapies for OUD and was resistant to trialing them. While client 2 had tried and failed conventional OUD therapies, ibogaine’s modality to mitigate or greatly decrease opioid withdrawal, while concurrently addressing patients high opioid tolerance is a great advantage of this therapeutic. In Western Canada, the main illicit opioid is now fentanyl and its analogues (2019). Fentanyl is a very potent opioid and many patients are finding they experience more significant withdrawals then they experienced when taking heroin, making the need for opioid withdrawal mitigation all the more important.

A second advantage ibogaine provides is that it is most often administered in a single or multiple treatment sessions over a short duration of time. Rapid detox is a unique benefit over most other treatments for OUD, which often have prolonged daily treatment schedules. A short therapeutic schedule also allows the individual to be free of constraints and able to better engage in the workforce and their personal interests. This provides an economic and functional advantage.

As a third benefit, ibogaine offers the benefits of a psychedelic experience, which appears to help individuals gain insight, align values, feel connected to high powers and find tranquillity. Both clients in this case spoke of moments in their treatment that changed their prospective and altered their trajectory. This psychedelic experience is postulated to result in neural network reorganizing, effectively interrupting the psychological processes that underlies substance use disorder (Tupper, Wood, Yensen, & Johnson, 2015).

Ibogaine is not without risk. It is an indole alkaloid that can cause cardiac arrhythmias by interfering with the potassium channel activity. This can lead to QT prolongation, as seen with client 2. There have been 22 deaths associated with ibogaine between 1991 and 2014. Most of these cases had confounding factors, such as pre-existing cardiac issues, drug interactions that further contributed to QT prolongation or electrolyte imbalances (Koenig & Hilber, 2015). Unfortunately, many drugs of abuse can also prolong the QT interval including alcohol, cocaine and opioids, potentially worsening the risk of cardiac complications when ibogaine is used for detoxification purposes (Schenberg, de Castro Comis, Chaves, & da Silveira, 2014). Both outpatient clinics from this study did pre-screening ECGs, screened for comorbidities and had ongoing cardiac monitoring. The staff at the iboga clinic client 2 attended were able to assess and appropriately manage the cardiac complications that did occur.

Some individuals also poorly metabolise ibogaine. Ibogaine is metabolised by the p450 cytochrome enzyme CY2D6. Genetic variants mean that up to 10% of Caucasians lack the gene to synthesise the enzyme to metabolise ibogaine (Meyer, Skoda, & Zanger, 1990). This can result in these individuals having plasma levels that double the levels of those with normal p450 metabolism (Noller et al., 2018). Because ibogaine has both a prolonged half-life and is also commonly administered multiple times in a short duration, this further increases the risk of high plasma concentrations (Glue et al. 2016). Both clinics from this study gave patients test doses of ibogaine/iboga and observed clients response before providing clients a therapeutic dose. Genotype screening of patients seeking ibogaine treatment could add to further safety and risk mitigation.

A concern that frequently arises when using psychedelics as a therapeutic agent is that secondary addiction to the psychedelic medicine may develop. Psychedelics are not considered to be highly addictive, as they are serotonergic medications (Nichols, 2004). Psychedelics have shown promise in helping treat other substance use due to the capacity to promote introspection and personal growth (Brown, 2013; Tupper et al., 2015). Ibogaine in particular is not associated with euphoria and the psychedelic episodes experienced on ibogaine are not regarded as pleasant as they are often correlated with feelings of profound regret or remorse and introspection. Neither client in our case study had any desire to repeat ibogaine/iboga treatment after therapy both reporting the experience was heavy to process and exhausting, which is consistent with other case findings (Brown, 2013).

To conclude, this case series describes two cases of individuals with OUD from divergent backgrounds – one of whom had never trialed OAT and the other had tried all available oral OAT. Both patients derived benefit from iboga/ibogaine and were able to maintain long-term abstinence from opioids post ibogaine treatment. In the context of the current opioid overdose crisis, an increase in the number of treatment options is urgently needed to provide more individualistic care to patients – particularly for those who are recalcitrant to existing therapies. Ibogaine remains a novel therapy and patients must be well informed of the current evidence and risks before pursuing this modality. There is a need for a greater alignment between Western Medicine approaches to substance use disorder and the acceptance of alternative therapies into practice. Better alignment and collaboration between services will provide safer and more patient focused care. With the emergence of more unregulated clinics and the increasing demand for ibogaine treatment, more research is needed to determine optimal and safe drug administration, the full therapeutic potential of this therapy and to understand the transformative experience this psychedelic can provide.

Conflict of interest: None.

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