

## **Ibogaine treatment outcomes for opioid dependence from a twelve-month follow-up observational study**

Noller, G., Frampton, C. etc.

Contact: Geoff Noller, PhD, Substance Use and Policy Analysis  
271 Ravensbourne Rd., Dunedin 9022, Aotearoa / New Zealand  
Tel. +64 3 4710340 E. geoff.noller@gmail.com

### **Abstract**

*Background:* Anecdotally the psychoactive indole alkaloid ibogaine has for many years been associated with encouraging treatment outcomes for opioid dependence. Despite numerous positive reports, however, ibogaine's illegal status has inhibited evaluation of treatment efficacy beyond the acute post-administration period.

*Objectives:* To examine treatment outcomes over a 12-month period for individuals receiving ibogaine therapy for opioid dependence in New Zealand, where ibogaine is available on prescription.

*Method:* Reductions in withdrawal, cravings and drug use for consecutively presenting individuals were recorded over 12-months post-treatment using the *Addiction Severity Index (ASI)* and *Beck Depression Inventory (BDI)* at baseline and follow-up for months 1, 3, 6, 9 and 12 post-treatment. The *Subjective Opioid Withdrawal Scale (SOWS)* assessed immediate pre- and post-treatment opioid withdrawal symptoms.

*Results:* Comparisons (*Friedman Test*) between baseline and 12-month follow-up for subjects completing all interviews (n=8) showed a significant reduction for the ASI drug use (p=0.002) composite score, while the medical score increased (p=0.031). Reductions between baseline and 12-month post-treatment BDI scores were strongly significant (p>0.001). Unsuccessfully treated patients (n=4) also showed significant reductions in ASI drug use scores (p=0.001) and family/social status problems (p=0.04). Significant reductions in SOWS scores for all subjects (n=14) were also observed (p=0.015; *T-Test*).

*Conclusion:* A single ibogaine treatment reduced substance withdrawals and yielded either cessation or sustained reductions in opioid use in a group of dependent individuals as measured over 12-months. Comparison with treatment environments elsewhere suggests that with ibogaine, outcomes may be improved where legislation supports treatment providers to work closely with other health professionals.

## **Some comments regarding the NZ study, and in relation to the Mexican-based US study (Tom K-B):**

As with the Mexican-based study, it appears from the New Zealand study that ibogaine does have a level of efficacy in treating opioid dependence, on the basis of a single treatment or dose.

Thus reductions in withdrawals, cravings and use were observed, the latter over a 12-month period.

It is important to appreciate, however, that these two studies suffered from a number of weaknesses, e.g. they reported on the treatment of convenience samples, i.e. samples of people who decided to be treated with ibogaine and then decided (or not) to participate in these studies. Moreover, the two samples were small: US/Mex (n=30), NZ (n=14).

So, we cannot generalise from the results of these studies to say, for example, that between 20% (US/Mex) and 50% (NZ) of all people treated with ibogaine would be opioid free at 12-months.

Nonetheless, clearly we are seeing some level of efficacy here AND when we compare these results with other treatment modalities, which show success rates of typically no more than 40-50% at best, it is at least appropriate to consider that ibogaine might offer another “**string to the bow**” of treatment for opioid dependence.

For comparison check Mattick et al., 2009, a Cochrane review reporting statistical efficacy of methadone maintenance treatment (MMT) for retaining people in treatment but not in reducing drug-related crime or mortality. We should also note that in New Zealand, at least, it's generally accepted that around 50% of those on MMT programmes will still be injecting.

However, ibogaine is NOT a maintenance treatment, it's effectively a single dose rapid detox, so comparisons with MMT may not be the best option.

It is also important to consider at least three other factors: a) the different ways ibogaine treatment may be undertaken, e.g. regulated vs non-regulated, b) recent research on safety, and c) relative risks of not treating v treating opioid dependence.

### **Regulated v non-regulated**

In most environments around the world, ibogaine is either unregulated or is actually illegal (e.g. the US). This significantly impacts on how treatments occur, e.g. whether there is appropriate clinical oversight or even whether the treatments are managed with any degree of expertise, including the quality of the ibogaine administered.

In New Zealand ibogaine is available on prescription as a non-approved medicine, i.e. it has not passed through phased clinical trials. This situation arose following review of ibogaine's efficacy by New Zealand's medicines' control organisation, Medsafe, in late 2009.

This legal availability of ibogaine in New Zealand allows the development of transparent and supporting relationships between the various health and allied professionals and carers associated with the treatment of people, using ibogaine. This is important, not only so that all concerned are kept informed about the treatment, including what drugs a patient may be taking, but also because it encourages the legitimate sourcing of appropriate quality ibogaine and leads to the possibility of a continuum of care, including vitally important aftercare.

### **The impact of recent research on ibogaine's safety**

Recent research (e.g. Glue et al., 2015) suggests that due to how some people's bodies process ibogaine (specifically how ibogaine is metabolised [converted] into noribogaine), some people may be more or less vulnerable to greater risk from ibogaine treatment. This issue describes what is referred to as poor CYP2D6 metabolism, something that between 5-10% of Caucasians are prone to. It is important to identify this group in the context of treating people with ibogaine, as they may have a greater chance of experiencing dangerous cardiac events associated with ingesting ibogaine. A relatively simple and inexpensive genetic test is available to identify this group and it seems increasingly appropriate that this test should be added to those for cardiac and liver function, which are standard for anyone intending ibogaine treatment.

### **Treatment v non-treatment**

Related to the issue of safety is the argument of whether to treat or not treat an opioid-dependent person with ibogaine, due to risks of treatment. Alper and colleagues' (2012) important paper describing ibogaine treatment fatalities has highlighted the potentially inherent risks associated with ibogaine treatment, particularly in relation to cardiac function.

Nonetheless, this debate regarding ibogaine's risks can obscure the risks opioid-dependent people face every day. These include (using New Zealand data) a ten-fold risk of fatality for people who inject drugs (PWID) v those who do not inject, with this still being a five-fold risk for those receiving MMT. Moreover, as noted previously, in New Zealand it is accepted that at least 50% of those receiving MMT will still be injecting.

Leaving aside immediate fatality, PWID face numerous other risks, not the least of these being exposure to blood borne viruses. The most obvious of these include HIV and HCV, both of which impose not only personal catastrophe on the individual but also massive costs on health services. Thus, while a person remains injecting, they are exposing themselves, their families and wider society to a range of significant harms. The argument that treating people with ibogaine is too risky must, therefore, be weighed against the negative consequences of non-treatment or at the least, against those of being limited to currently available treatments, many of which are known to be problematic or to be of limited efficacy.

## References

Alper KR, Stajić M, Gill JR. Fatalities temporally associated with the ingestion of ibogaine. *Journal of forensic sciences*. 2012 Mar 1;57(2):398-412.

Glue P, Winter H, Garbe K, Jakobi H, Lyudin A, Lenagh-Glue Z, Hung CT. Influence of CYP2D6 activity on the pharmacokinetics and pharmacodynamics of a single 20 mg dose of ibogaine in healthy volunteers. *The Journal of Clinical Pharmacology*. 2015 Jun 1;55(6):680-7.

Mattick RP, Breen C, Kimber J, Davoli M. Methadone maintenance therapy versus no opioid replacement therapy for opioid dependence. *Cochrane Database Syst Rev*. 2009 Jan 1;3(CD002209).

Medsafe. Minutes of the 42<sup>nd</sup> Meeting of the Medicines Classification Committee. Medsafe Nov 3. 2009. Accessed on 16 February 2016 from:  
<http://www.medsafe.govt.nz/profs/class/mccmin03nov2009.htm>