IBOGA COMMUNITY ENGAGEMENT INITIATIVE

PHASE 1 REPORT

December 2019

ICEERS

A project by:
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Thank you....

As with any intitiative, this project has come to fruition thanks to the generosity of many collaborators, interviewees and survey participants. Hundreds of individuals shared knowledge, opinions, concerns, time, and visions for a future where iboga and ibogaine are valued and integrated into the global society and the rights of people connected to these practices are protected. We extend a heartfelt thank you to each and every one of them, for this report would not have been possible without their contributions. Our hope is that this report be received as the weaving of knowledge that it is, as a collection of perspectives, to be engaged with, challenged, expanded upon, and leveraged to build a brighter future.

Dedication...

This report is dedicated to Doug Greene.
Although he is no longer with us, his gentle, persistent
dedication to the healing of humanity
will continue to inspire.

CONTENTS

Introduction

Introduction

Practices with iboga and ibogaine are expanding. The cultural, social, and political contexts surrounding the human relationship to this plant and its alkaloids are extremely complex, warranting a careful consideration of the impacts of their globalization. From Gabon to Canada, Spain, Brazil, Afghanistan, Costa Rica, and all corners of the globe, the market for iboga and ibogaine is growing, as is broader awareness of it as a tool for supporting individuals with substance dependencies and for personal or spiritual exploration and growth.

Many issues have arisen around the **globalization** of these practices and treatments—ranging from pressures on the sustainability of iboga in the African forest and the impact on the cultures that have stewarded it for generations, to concerns related to safe practice for treating addictions, to the need for regulation and policy that enables sustainability, safety, to the *importance of honoring culture*, spiritual practice, and the sacredness of the plant. Out of this growing web of complexities, the question arises: How can we respectfully harness the potential of iboga for a modern, globalized worlda world where despite increased ease of high-speed travel and communication, disconnection remains one of our greatest obstacles with regard to a collective stewardship of iboga and ibogaine, a world where today, more than ever, healing is needed for individuals, communities, and ecosystems. Furthermore, how can we do so while ensuring that the traditional stewards of the plant and related practices in Central Africa are meaningfully included and that issues arising at this ancestral source are considered?

ICEERS's vision is to create a world where practices with plants, such as iboga, are integrated and valued. Therefore, when some members of the iboga/ine community asked us to offer our skills and support to help define the steps needed to realize this vision, we agreed. This is how the ***Iboga/ine Community Engagement Initiative*** was created. It was designed to explore the above questions through an engagement with the global community to crowdsource opinions and ideas about what an ideal future looks like for iboga and ibogaine in global society. There are two phases to this engagement project. The current report is the result of Phase 1 of the initiative—a global engagement conducted primarily online and through video conferencing in order to assess current key issues and to develop a collective vision.

Phase 1 overview

This project is being carried out in **two phases.** The goal of Phase 1 was to carry out a process of engagement with the international actors. This was done primarily online and through video conferencing with the aim of assessing current key issues and to develop a collective vision. Phase 2 will focus on a more in-depth connection with Gabon through a field visit, during which we will engage diverse actors, capturing their firsthand perspectives and visions about the present and future of iboga in Gabon. The current report is the result of Phase 1 of the initiative.

The **objective of Phase 1** was to engage with the global iboga and ibogaine community, working together to enable positive change by identifying the community's strengths and assets and identifying a shared vision for the future. In other words, we have been actively working to connect with the global iboga/ine community as broadly as possible as available resources allowed identify what strengths and tools currently exist that could be leveraged to make this vision a reality. Engaging the community in a project of this size presented a tremendous opportunity, not only to gather ideas for the future but also to get a sense of current context and practices related to iboga/ine internationally.

This iniatitive used an **appreciative inquiry** approach. This approach is based on the premise that in every organization, movement, or system there is something that "works." Finding what "works" is a matter of discovering and giving voice to the stories that sow the seeds of positive change. Appreciative inquiry focuses on understanding challenges as well as strengths, identifying what is working, and provides a framework for creating an imagined future. Using this approach, we asked questions with the goal of strengthening the system's capacity to apprehend, anticipate, and heighten positive potential. Therefore, it is important to note that this report is not intended to be a comprehensive report on *Tabernanthe iboga* or ibogaine, but rather a resource that allows us to understand some of the points of view regarding aspirations, strengths, opportunities and challenges of the international communities related to iboga and ibogaine.

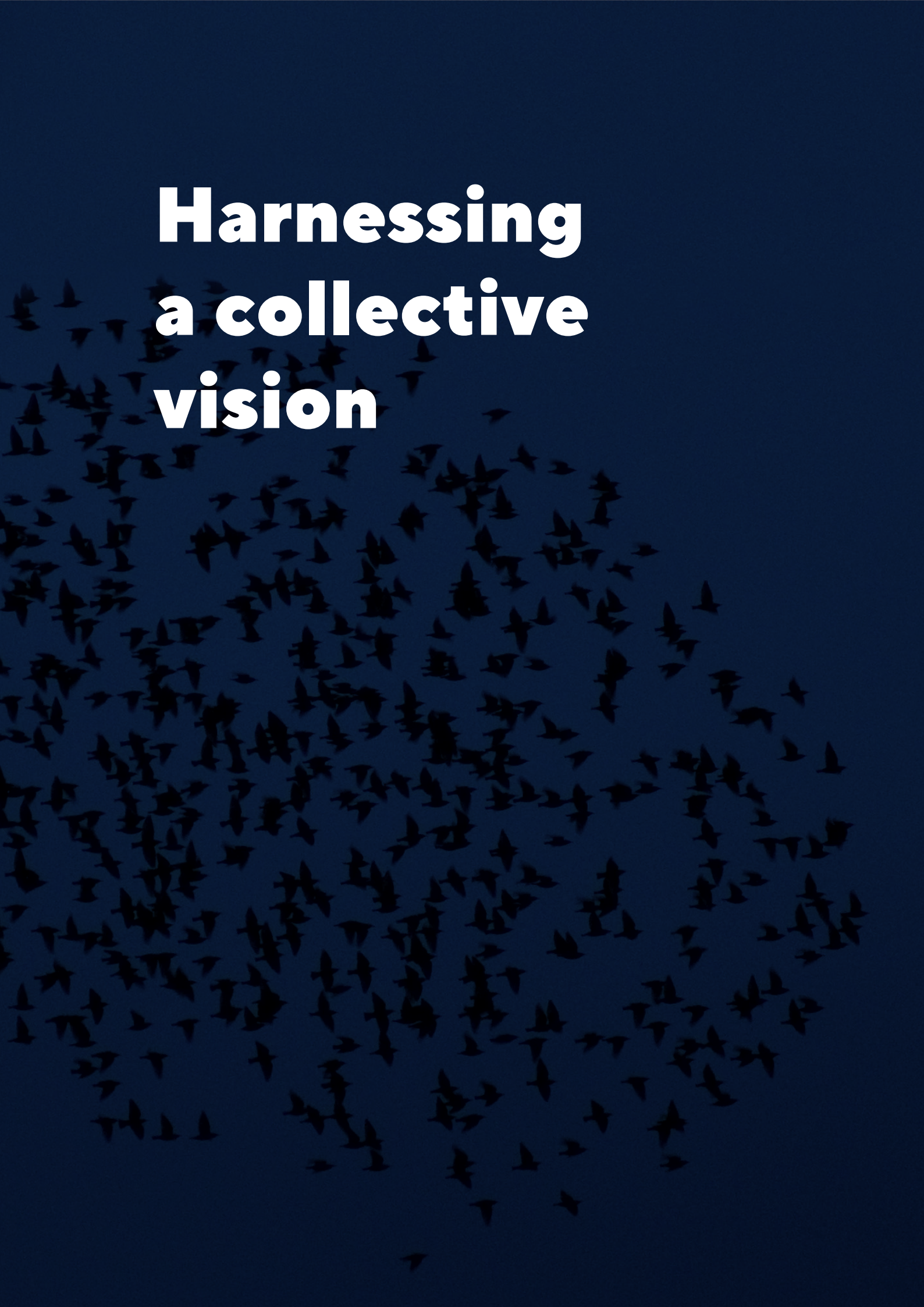
We employed a mixed methodological approach for Phase 1 (see page 25 for details), combining document analysis along qualitative and quantitative techniques for data collection and analysis. Our methodology (detailed on page 26) has limitations, due to the virtual methods used, however we were able to harvest a diversity of perspectives from 283 people (116 women, 157 men and 12 non-binary individuals) from 34 countries on all continents. Phase 2 will expand on the first phase with activities, seeking to include additional African perspectives in the global conversation. This second phase includes a field visit to Gabon in the fall of 2019 to connect with local communities. We anticipate that results will be available in early 2020.

This **report** has been organized to include key findings and synthesis at the beginning, followed by a more in-depth findings and analysis for those who would like more detailed information. Thus, the report begins by presenting a collective vision—eight aspirations based on input from the diverse communities that relate to iboga and ibogaine. The report then goes on to outline and explore five ***strengths*** of the global movement that we identified, as well as five opportunities that emerge at this time. The first section ends with an executive summary of the findings presented in the following pages.

The second half of the report outlines the methodology used and the general findings relating to the perceived state of iboga and ibogaine in the world. This part of the report is divided into five sections: [1] The plant and its alkaloids; [2] The people and their motivations; [3] Sourcing: sustainability, quality, and the global marketplace; [4] Risk reduction and benefit maximization; and [5] Policy, regulation, access, and availability. It is important to note that this report does not yet contain a section of conclusions or recommendations, which will be developed following Phase 2 of this initiative so that the perspectives shared by Gabonese stakeholders are included.

A note on language

Iboga is a plant whose root bark contains several active alkaloids, one of which is called ibogaine. This alkaloid is credited for producing most of the psychoactive effects. The use of either the plant, iboga, or of its main alkaloid, ibogaine, thus induces a similar type of psychoactive result, although their effects may be experienced in very different ways, depending on important differences derived from the so-called "entourage" effect (which is a result of the interaction of ibogaine with the other alkaloids and molecules present in the iboga plant), as well as factors such as dosage, modes of use, or ritualized context, to name a few. Within this report we use the term "iboga" to refer to the plant, "ibogaine" to refer to the alkaloid or synthesized product, and "iboga/ine" when we are referring to both generally.



Harnessing a collective vision

A North Star

A collective vision can serve as a North Star, supporting community leaders, visionaries, practitioners, and policy-makers to navigate through unknown terrain, and to remain focused on a future even though the exact path to be taken is not yet illuminated. Developing a collective vision required harnessing the knowledge that lives in various sectors of the community and we are grateful to all who participated. We could not have developed what follows without the contributions of the community.

A magic wand

We began by conducting individual exploratory interviews with 14 stakeholders, plus two focus groups of 14 people who were using iboga/ine for different reasons. The perspectives of these 28 people informed the development of an online survey, which was circulated through international networks (promoted primarily via email, an online video, and social media). Among the 228 people in the community who filled out the survey, 103 of them answered the specific open question about the vision for the future (additional details on participant demographics are outlined on page 26 of this report). In total, 131 people in the international community from 34 countries actively participated in the initial construction of this collective vision.

We asked: "Imagine that you have a magic wand. What future would you create for iboga or ibogaine in five or 10 years?" The answers were diverse and passionate. While among the participants there was a consensus that the status quo is not working and that there are many challenges to be addressed, when it came to answering this question it was very clear that participants were ready and willing to share their dreams about what an ideal future could look like.

We shared our initial analysis with 27 stakeholders in five groups who explored them in interactive dialogue sessions that focused on distinct topics from sustainability, to policy, to treatment, and psycho-spiritual uses. Participants provided feedback that we then incorporated, developing the following eight aspirations for what is possible.

A community's vision

It is important to note that what is articulated here comes from the community and is not meant to represent ICEERS's opinion or vision. Equally, this vision does not belong to ICEERS but rather to the community. We encourage all those interested in iboga/ine to engage with these aspirations—discussing them, critiquing, improving, building on, and expanding them. And, importantly, like most things change is made possible through relationships—strong relationships and community ties are essential for overcoming all obstacles. The following section will outline the aspirations that exist within the iboga/ine global community that can be drawn on in developing plans, collaborations, actions, and for strengthening existing and new relationships and partnerships.

Aspirations

1. Wild iboga plants, ecosystems, and the cultures that surround them will be protected. Cultivation and harvesting will be sustainable, will benefit local communities, and iboga will be accessible to local Bwiti communities

- More evidence will be available about the legal and illegal iboga market within Gabon in order to inform policy, sustainability planning, and regulation for the international market.
- Agricultural production of iboga will be environmentally and culturally sustainable and will have a positive economic impact on African communities.
- Iboga in the wild will be protected from poaching and over-harvesting, and local Bwiti communities will have access to iboga for cultural and ceremonial practices.
- Programs and policies will be adopted to repair the damage that has occurred to local habitats and communities in Africa related to the increase in international demand for iboga, poaching, and illegal markets. African iboga communities will be honored as the traditional cultural and biological source for iboga practices and spirituality.

2. Iboga and ibogaine will be legal, valued, and respected by global society and by governments

- Iboga and ibogaine will be recognized as valuable and important tools for healing and spiritual growth.
- International, national, and regional policies in the areas of drugs, public health, and sustainability will provide a sensible framework and will be evidence-based and culturally sensitive. Regulations and policies will focus on maximizing benefits, minimizing risks, and respect for culture and the sacredness of iboga.
- The general public will have a better understanding of the plant, its cultural history and context, as well as modern day uses, which will foster deeper respect and will support its integration into society. Public discourses around iboga and ibogaine will not be sensationalistic but rather informed by evidence and community knowledge and will educate the public about the value of iboga and ibogaine in society and how to ensure safe, respectful use.

3. Iboga and ibogaine will be universally accessible for therapeutic, cultural, or psycho-spiritual purposes

- Treatments and ceremonies with iboga/ine will be legal, safe, affordable, and accessible to anyone who may benefit from them, and iboga/ine's psycho-spiritual benefits will be acknowledged, respected, and valued.
- Best practice therapeutic models will be universally applied for therapeutic administration of sustainably produced good manufacturing practice (GMP) ibogaine for health issues or problematic substance use.
- No one will experience stigma for using or working with iboga/ine, and people seeking treatments for drug dependencies will be consistently treated with dignity and care.
- Educational information on how to minimize risks and maximize benefits related to iboga/ine treatments, ceremonies, or self-administration will be widely available. Guidance will be accessible for all phases, from preparation to integration.

4. Good manufacturing practice (GMP) ibogaine will be produced from sources other than African *Tabernanthe iboga* and distributed through a regulated, legal market

- Ibogaine will be sustainably produced from certified sustainable sources other than *Tabernanthe iboga,* minimizing the negative impact and maximizing benefits for African communities and ecosystems.
- Production and sales of iboga will not be monopolized by large pharmaceutical companies, and international trade, production and sales will follow a regenerative business model, contributing to the restoration and repair of the damage incurred in Central Africa due to the rise in international demand for iboga.

5. A large body of research evidence will be available and accessible. Multi-disciplinary research will be rigorous, well-funded, and ethical and will respect and acknowledge traditional African and modern medical subculture knowledge

- Expanded opportunities for conducting research will result in a diverse body of evidence available to inform practice, policies, sustainability initiatives, and bio-cultural activities. Research evidence will outline risks and potential benefits, allowing for safer more effective use of iboga/ine therapeutically.
- Scientific research around iboga/ine will build on and respect traditional African knowledge and knowledge held by those involved in the medical subculture.
- Research will be rigorous, well-funded and ethical and research institutions will enable researchers to engage in clinical and multidisciplinary studies.

6. Therapeutic or medical treatments will be safe, evidence-informed, draw on diverse sources of knowledge, and include access to complementary therapies and support

- Treatments with iboga/ine will be informed by evidence-based protocols and guidelines; integrate harm reduction philosophy and practice; and include access to psychotherapy, complementary nutrition, spiritual and integration practices.
- Although self-administration will not be encouraged, individuals choosing to self-administer iboga or ibogaine will have access to safe sources and support, including harm reduction information and pre-and post-care guidance.
- Professional care teams will be well-trained and multidisciplinary; include peers (i.e. former patients); and will have access to support, clinical supervision, self-care structures, and mentorship and training.
- Practitioners who were providing treatments prior to new regulatory frameworks and clinical models will be valued and provided with opportunities to share their expertise and to provide input into regulatory models and treatment guidelines.
- People with lived experience with iboga/ine (i.e. peers) will be valued and provided opportunites to be involved in new models of care as peer support and given opportunities to provide input into regulatory models and treatment guidelines.

7. Ceremonial or spiritual traditions and practices of iboga/ine will be valued and structures will exist to guarantee that spiritual, cultural, and cognitive liberties are respected

- Bwiti communities will be protected and supported to preserve their cultural heritage and guaranteed access to iboga for rituals and ceremonies. These communities will provided with opportunities to give input into international policies around iboga and traditional medicines.
- Traditional, ceremonial, or spiritual practices will be valued and maintained as medical models are developed. Ceremonial use of iboga/ine will be a protected human right.

8. The community will be characterized by trust, integrity, mutual aid, collaboration, and knowledge sharing

- The global iboga/ine community will be strongly aligned around a common vision; will work collaboratively towards common goals; and will be characterized by high levels of trust, respect, mutual aid, and transparency.
- Doors will open to enable greater collaboration between the community and other actors, such as governments, medical systems, and producers and distributors.

Strengths & opportunities

A diverse community

Globally, people interested in iboga/ine represent diverse perspectives and experiences—from cutural heritage, to spirituality, to clinical practice, to research, and beyond. Some were born into it as part of their culture in Africa, while others say it saved their lives, and yet others speak to its impact on their spritual development. Some believe that it should be freely accessible to all, while others believe that using it outside of Africa is cultural appropriation, and still others seek to build profitable businesses with it. Those with an interest in iboga and ibogaine are scattered across the globe, many of them unlikely to ever meet. These facts lead to an important question—is having an interest in iboga/ine (whether personal or professional) enough to make someone a member of an international "community"?

On est ensemble

The subject of what constitutes a community is complex and certainly cannot be explored in depth within this report. While it is complex, it is perhaps as simple as "we're all in this together"—which is the expression that Bwiti practioners in Gabon say when parting ways ("on est ensemble"). There is strength in knowing that there are numerous individuals around the globe who have iboga or ibogaine in common and are interested in its protection as a treasure for humanity. The interview and survey responses that informed the aspirations show that what is needed is an ecosystems approach, one that recognizes the interaction between multiple elements within the ecosystem. While not everyone will agree with the aspirations put forward above, they present a starting point for further dialogue on what a preferred future looks like.

How do we get there?

If this is a starting point, an important follow up question is—how do we get there? While there are many challenges that need to be addressed, there are also many strengths that exist within the current networks, communities, and groups. Within the interviews and the survey, we asked people to identify strengths that could be leveraged to create forward momentum in building a more sustainable, equitable future for iboga/ine and those engaged with it. The following section outlines these key strengths as well as some of the opportunities identified that could be seized.

Strengths

1. A diverse, passionate community, committed to giving back

- The international iboga/ine community is diverse and is made up of passionate individuals with varied skills and talents who are committed to making a contribution to a positive future.
- Individuals who have had beneficial personal experiences with iboga/ine (peers) are often very motivated to give back to the community, contributing valuable knowledge derived from lived experience.

2. Acknowledgement and valuing of the traditions and knowledge of original African iboga cultures

- Among many people in the community, there is an acknowledgement and respect for the Bwiti ancestral traditions that have stewarded the plant.
- Non-African psycho-spiritual practicioners find grounding and meaning in the ancestral African spiritual traditions of Central Africa.

3. Strong commitment to social and environmental justice

- Many members of the community are strongly committed to social justice—working to address the stigma against people who use drugs, advocating for equitable access to treatment and spiritual development, and building awareness around sustainability issues and the cultural rights of traditional knowledge holders.

4. Diverse experience and expertise treating substance use dependencies.

- Experimental treatment for substance dependence with iboga have a long history dating back to the 1960s. And, since the 1980s, underground providers and small clinical operations have built on this knowledge, developing protocols and gaining experience and knowledge.
- Many individuals who have personally benefited from iboga or ibogaine in treating substance use dependencies have become involved. This experiential knowledge—particularly in addressing addiction, and best practices relating to preparation, and integration support—can inform new approaches, standards for care, guidelines, research, etc.

5. Strong culture of innovation within the therapeutic community

- There is a strong culture of innovation in the iboga/ine therapy community that has lead to the development of various treatment protocols, research projects, integration initiatives, clinic models, ethical frameworks, etc.
- Experienced researchers are interested in conducting futher studies, which include new areas such as the use of ibogaine for treating Parkinson's disease.

Opportunities

We are at a unique moment in the history of iboga—with growing interest in psychedelics, rising rates of addiction and overdose, and shifting policy landscapes around indigenous knowledge and sustainability. The current context provides for a few distinct opportunities that can be engaged with or leveraged to address current challenges and to collaborate for a more positive political and social landscape.

1. The Gabonese government's recognition of iboga as a "national treasure"

- In 2000 the Gabonese government declared iboga to be a national treasure, establishing a foundation for policies that respect traditional medicines and spiritual practices.
- To ensure iboga's sustainable management, on February 4, 2019, the Gabonese government issued an order that suspended the total or partial export of iboga, raw or derived, as a precautionary measure. This action illustrates an acknowledgement of the impact that the international demand is having on iboga's sustainability, and on Gabon's culture and economy. However, the implications of this new order are not clear at this point.

2. The "psychedelic renaissance" has sparked research and popular interest in the therapeutic and spiritual potential of psychoactive plants

- The unique properties of iboga and ibogaine have been recognized within the psychedelic research and therapeutic fields and there is growing interest in exploring the role they can play in achieiving greater wellbeing/healing, stronger social connectivity, connection to nature, and exploration of life's bigger ontological questions.
- The psychedelic renaissance has led to cross-polination between various communities, and best practices for preparation, integration, and support (for example, between the ayahuasca and iboga communities) are now being shared.
- Popular interest in the role of psychedelics in modern society has led to increased media attention on iboga/ine and growing general awareness of the potential that these practices hold for addressing some of modern society's biggest challenges at their roots.

3. Rising rates of addiction and the opioid epidemic have created openings for policy-makers and clinicians to consider novel or unconventional treatments

- Ibogaine shows promise for supporting individuals to detox from certain substances (such as opiods) and for treating problematic substance use, addiction, and other non-desired habits. The overdose crisis in several countries has created an unforeseen opening for conducting research and for policy change that allows for building evidence and piloting health services.
- Families of people with addictions or who have died of an overdose are advocating for novel solutions, including access to ibogaine, for treating substance use dependencies.

4. Iboga and ibogaine may have potential for treating Parkinson's disease and other nervous system-related illnesses

» At a neurological level, ibogaine increases the expression level of the glial cell-derived neurotrophic factor (GDNF) protein, which protects and stimulates the regeneration of neurons that secrete dopamine. These findings open promising possibilities for the mitigation of Parkinson's disease symptoms.

5. Growing interest in ibogaine is bringing new resources to the community that can be harnessed for conducting research and other initiatives

» Growing interest in the production, development, and commercialization of ibogaine has led to new potential funding sources for research and development. There is an opportunity to ensure that these investments also flow to supporting sustainability, educational, and community-led initiatives.

Executive summary of findings

Global context

There are concerning reports that wild iboga (*Tabernanthe iboga*) may be in danger of extinction in the wild. The increase in demand for iboga/ine and the crisis around wild plant sustainability can be linked to several interrelated factors: the rise in international demand, the impact of prohibition and involvement of organized crime, improper harvesting techniques, and a lack of a system for tracing product origins. Although alternative sources exist for the extraction of ibogaine, *Tabernanthe iboga* remains the primary plant source for both the bark and the ibogaine alkaloid. The consequence of this is that poaching and un-regulated harvest of wild iboga are putting pressure on the species and having an impact on the traditional communities of Bwiti practitioners.

In February 2019, the Gabonese government responded to these pressures, suspending exports of wild-harvested *Tabernanthe iboga*. Since this move, it is only possible to legally export iboga from Gabon if the plant has been cultivated on private land and all permits are obtained from the Ministry of Forestry and the Environment. As of the writing of this report, the Gabonese Government had not, to our knowledge, granted any export permits. It is too early to understand what the impacts of this policy change will be.

The growth in the international market for iboga and ibogaine is having an impact on traditional practices with iboga in Central Africa. The iboga shortage and resulting price increases have meant that Bwiti communities are experiencing challenges sourcing quality root bark for their ceremonies. Reports also indicate that "false" iboga is circulating in Gabon, which presents health risks for those ingesting it (at least one death has been reported). There is a need to expand *Tabernanthe iboga* cultivation in Gabon and other countries and for additional research into the use of other species in the production of GMP (good manufacturing practice) ibogaine.

On an international level, there is also concern about quality, purity, and sustainability of iboga/ine being sold. With regards to sourcing iboga or ibogaine for treatments, ceremonies, or personal use, the primary concerns reported by participants were quality and sustainability. Personal trust in the supply source was noted as being most important on a practical level; however, when a trusted source was not available, participants reported purchasing from unknown sources. Interviewees in Africa noted the lack of reliable vendors, indicating that many products that are circulating are of poor quality with low alkaloid levels or that have been confused or purposefully adulterated with other types of wood or root bark. The need for certification or other mechanisms for tracing back to the source for iboga and for ensuring the quality of the alkaloids sold was noted as important, as currently vendors are offering fake "evidence" with regards to quality and sustainability.

Current trends indicate that the demand for iboga and ibogaine will continue to increase. Firstly, the growing public health challenge of the opioid crisis in several countries (such as the US and Canada) has led to interest in the potential that iboga/ine presents as a treatment for problematic substance use and for detoxification from certain drugs. The crisis is presenting an opportunity for engaging in clinical research and in policy advocacy to address barriers to conducting research and to providing clinical treatment. A second important trend is what is been referred to as the "psychedelic renaissance," with growing awareness and acceptance of the potential presented by psychoactive plants for personal growth, increased health and well being, and spiritual exploration. There is a general growing openness to the potential of psychoactive plant practices.

Diverse practices

Globally, people interested in iboga/ine represent diverse perspectives and experiences—from cultural background, to spirituality, to clinical practice, to research, and beyond. Each of these subsections of the community has their own discourses, visions, and understandings of what iboga and ibogaine are, the potential benefits and risks that come with varied practices, and have diverse opinions on what actions should be taken to protect the plant and practices or on how to create a more positive political environment. Taking this diversity into account, the first step towards building knowledge is to create a space for multiple opinions to be shared, to listen deeply, and to acknowledge that no one perspective can encompass the great diversity of views, experiences, hopes and dreams.

Through this project we identified three main ways that people are engaged in practices related to iboga and ibogaine. First, there are the Bwiti practitioners in Gabon and Central Africa (who may or may not be of African origin). Second, there is the medical subculture where there are people who provide treatment for problematic substance use in either sanctioned or unsanctioned clinics or retreat centers and their clients—those seeking help for their addictions or other health concerns. Within this category we also find individuals who themselves have benefited from iboga or ibogaine experiences who then want to help others. Lastly, an area that appears to be growing is that of individuals who are offering and seeking experiences with iboga and ibogaine who are interested primarily in psycho-spiritual or psychotherapeutic aspects. Some of these may be drawing on traditional Bwiti or other traditional ceremonial practices, while others are developing practices that do not draw on any specific traditions. Interesting to note is that within this category, there are individuals who seem to be generally interested in entheogenic practices—who first have an experience, for example, with ayahuasca, and then seek out an experience with iboga/ine or vice versa.

While the above practices are done within the containers of treatment or retreat centers or ceremonies, there are also individuals who for one reason or another, choose to self-administer iboga or ibogaine. In some cases, individuals self-administer a flood dose (which might be over 200mg of pure ibogaine) with the goal of addressing addiction or problematic substance use or because they are seeking a psycho-spiritual experience. For some individuals who struggle with addiction, the cost of treatment and traveling to treatment centers is a significant barrier, and therefore they purchase the substance and self administer either alone or with a friend to support them. In many cases the only harm reduction information available for these individuals is obtained through online research. This practice was seen by many as being controversial, considering the risks associated with it and our findings indicate that those self-administering need access to harm reduction information.

We also found that taking low or micro doses of iboga or ibogaine is a somewhat common practice with 70% of participants reporting having taken low or micro doses. Microdosing, generally defined, is the taking of small doses of the substance occasionally or regularly. The reasons provided for this were varied—mainly, seeking psychological and emotional benefits and maintaining benefits following a flood dose with regards to managing substance use. Some individuals reported microdosing occasionally, while others reported microdosing daily for an extended period of time.

Detox and treatment for problematic substance use

Internationally, there are an estimated 80 to 90 treatment centers offering specialized services with iboga or ibogaine for addiction and problematic substance use. These are located primarily in Mexico, Canada, Australia, and New Zealand; in a dozen of European countries; in Central American and Caribbean countries, such as Costa Rica, Guatemala, Panama, and Bahamas; in South American countries such as Brazil, Argentina, and Ecuador; and in African countries, such as South Africa and Mauritius. Participants indicated three elements that they most value in a treatment center. They were primarily concerned with the quality of the treatment that was available. Secondly, being treated with dignity within a stigma-free environment was noted as important, followed by wanting to feel safe and accompanied throughout the treatment process.

Of those who had sought treatment for detox or addiction treatment support, two-thirds reported use of opioids or other substances (such as cocaine). It is notable that most participants reported poly-substance use, combining these substances with others, such as benzodiazepines and alcohol. This finding is concerning considering the potential risks for patients, particularly since 40% of treatment providers reported that they do not perform blood tests prior to administering a flood dose to individuals seeking support for drug dependency.

In terms of risk reduction and improving safety, treatment providers and ceremony facilitators have an important role to play in the safe provision of experiences. Participants noted a high level of trust in their providers and facilitators. However, screening practices were limited among both treatment providers and ceremony facilitators. Around half of ceremony facilitators and 25% of treatment providers reported that they do not perform EKGs prior to administering a flood dose of iboga or ibogaine. Adequate screening is not currently integrated into practices. Risk management and benefit promotion can be effectively managed by treatment providers if they have adequate training, protocols, screening tools, and are dedicated to their implementation.

While both health screening and support during the experience are of the utmost importance, additional important practices noted were: Offering support and adequate information prior to the experience, support with the psycho-spiritual aspects of the experience, and post-session integration support and follow-up. These elements were indicated as important by both providers and participants; however, according to respondents, they are not currently widely nor consistently available.

Capacity building for those providing treatments or facilitating ceremonies is a key element for increasing safety and benefits associated with iboga and ibogaine practices. It was noted that peers (people who themselves have had personal experiences with iboga or ibogaine) have an important role to play in wholistic service provision. However, personal experience is not in and of itself enough and additional training is required. Multidisciplinary teams were noted as being a strength within service provision—teams that include clinical expertise, psychological and nutritional support, as well as peer support. Participants indicated priority areas for training for all those providing sessions: how to manage and reduce risk, how to deal with spiritual emergencies, context of care, understanding and implementation of inclusion/exclusion criteria, treatment and general considerations, training on interactions and counterindications with other substances, dosing protocols, interventions, post-care integration, cultural and traditional origins of iboga, and how to source safe products.

The community of treatment providers is no doubt committed and passionate about providing access to these treatments. There is a sense of community within the treatment realm, which sometimes leads to the boundaries between treatment providers and patients to become blurred. There is a commitment to providing stigma-free care to people with ad-

dictions and problematic substance use. While the community of providers was once small and close-knit, as the number of clinics and treatment centers has expanded, a culture of competition and distrust has arisen, resulting in general feeling of divisiveness within the community and the circulation of a significant amount of anecdotal reports of unethical or risky practices. This situation presents barriers to moving towards a collaborative community of practitioners that shares of protocols and safety information, and engages in cohesive advocacy strategies.

Legal and policy context

Decriminalization, regulation, and increased accessibility of iboga and ibogaine were noted as being of great importance to the majority of respondents. Participants envision a future where iboga and ibogaine are universally accessible and benefits are acknowledged and supported by governments. The current unregulated context for iboga and ibogaine has negative impacts on sustainability, safety, risk, and accessibility. The demand for the regulation of iboga and ibogaine is growing in order to address these concerns. This demand is being driven by several factors. The opioid crisis in North America and other parts of the world has opened the door to exploring unconventional treatments for opioid addiction. Linked to this, the number of investors exploring avenues for research, development, and production of ibogaine is increasing. While the psycho-spiritual use of iboga and ibogaine appear to be growing, the medical model and clinical opportunities are those that are driving regulation in non-African countries.

Research interest in iboga and ibogaine is growing and greater openness amongst regulators and potential financial support from investors may lead to the development of research studies. In addition to interest in iboga and ibogaine for addiction treatment, there is interest in research for the treatment of Parkinson's disease and other degenerative diseases.

Methodology

General objectives

Project goal

» To engage with the global iboga and ibogaine community, working together to enable positive change by identifying the community's strengths and assets and identifying a shared vision for the future.

Objectives

» To bring together multiple perspectives and generate new understandings of critical issues, such as ecological and cultural sustainability, maximizing therapeutic potentials and minimizing harms, and identifying progressive and just policy alternatives.

» To build solidarity, trust, and a culture of appreciation and generosity among diverse actors in the global iboga community.

» To identify key directions for a shared vision that builds on community strengths and assets, promising strategies, and best practices.

Methodological approach

Table 1. A mixed methodological approach

Appreciative inquiry approach	In every organization, movement, or system there is something that "works." Finding what "works" is a matter of discovering and giving voice to the stories that sow the seeds of positive change. Appreciative inquiry focuses on what is being done right and provides a framework for creating an imagined future. Using this approach, we have asked questions with the goal of strengthening the system's capacity to apprehend, anticipate, and heighten positive potential.
Qualitative approach	Qualitative methodology establishes that, in many dimensions, human actions cannot be reduced to numbers. According to this premise, priority is given to the analysis and interpretation of opinions and assessments that people express on both their own actions and those of others. Thus, qualitative methods emphasize the significant character of human behavior, giving special importance to language and actions as a vehicle of meaning and to interpretation and understanding as fundamental strategies of the approach to social phenomena.
Quantitative approach	The standard and quantitative registers that are obtained with questionnaires and surveys allow an extensive treatment of the information and facilitate comparative analysis. Even so, we believe that the objectives of this initiative required an approach that allowed an intensive data treatment prior to its extensive analysis. This approach has permitted a more comprehensive understanding of the dimensions that affect and explain the elements and central factors involved in the significance of iboga and ibogaine for the different people and communities engaged with them.

In the context of this initiative, we used the approach of appreciative inquiry to engage in a systematic discovery of what gives "life" to the iboga/ine community eco-system when it is most alive, most effective, and most constructively capable in economic, business, community, and strategic terms. This lens was applied when formulating questions in data analysis, looking to identify the community's strengths, opportunities, and trends and taking this valuable opportunity to create space for the community to articulate what their ideal future would look like for iboga/ine. In accordance with the objectives of this initiative, we considered pertinent the use of a mixed methodological approach that could integrate appreciative inquiry with qualitative and quantitative research methodologies. Thus, the methodological approach is based on a previous qualitative immersion that has allowed us to generate data, based on interviews and focus groups. Qualitative data from the first part of the process was used to develop a survey that gathered information more quantitative in nature. The results obtained then formed the basis for dialogue sessions with experts from diverse fields. All in all, this approach has allowed us [1] to identify different strengths and aspirations of the various communities engaged with iboga and ibogaine, [2] to identify opportunities that the current context and challenges provide, and [3] to identify possible directions related to four areas: sustainability, safety, policy, and community.

Table 2. Community outreach

Treatment Providers, Psychoespiritual Comunity, Vendors & Distributors, Policy Makers, Activist & NGO Representatives, Scientific Community, African Nimas	
55 people interviewed 24 women (44%) 31 men (56%)	**From 12 countries:** Bangladesh, Brazil, Canada, France, Gabon, Germany, Mexico, New Zealand, Spain, South Africa, UK, US
228 people surveyed 92 women (40%) 126 men (55%) 12 non-binary gender (5%)	**From 34 countries (broken down by continent):** Europe (44%), North America (42%) , South and Central America (6%) , Africa (5%). Oceania and Pacific (2%) , Asia and the Middle East (2%)

Methodological notes and limitations

The African context

The inclusion of perspectives from Bwiti communities in a global discussion on the present state and future of iboga and ibogaine is not only important, it is essential. Indigenous knowledge keepers from Gabon and Cameroon have stewarded this cultural treasure for generations; they are also those most impacted by the increased demand for iboga and its main alkaloid, ibogaine. Engaging with these key stakeholders in an ethical and fair way means meeting them where they are—on the ground, in their communities, and close to the plants themselves.

The ibogaine used within international contexts is sourced primarily from iboga shrubs that are grown in Central Africa—from Gabon and other countries, such as Cameroon. Several respondents spoke to how these are countries with complex political climates; they are plagued with black market networks and corrupt officials within governments who allow illegal smuggling. While we made efforts to be inclusive of traditional indigenous voices within this project, this social and political complexity provided yet another compelling argument for gathering information from additional stakeholders through a field visit. However, due to limited resources, a field visit to these contexts (Bwiti ceremonies, therapeutic centers, psycho-spiritual settings, etc.) was not initially possible.

With the available resources, we developed a methodology that would allow for data collection (individual and group interviews and a survey) through digital mechanisms, which meant there would be barriers in reaching African participants. This digital divide prevented the effective development of the initially designed methodology in the Central African countries. With this in mind, we decided to conduct the project in two phases—first engaging with the international community (Phase 1), and then securing funding to engage with the Bwiti community and various actors in Gabon and Central Africa (Phase 2). Phase 2 has been designed and planned and will be carried out in the fall of 2019 and reported on in early 2020.

However, in spite of the barriers initially predicted in terms of accessing potential participants in Africa, we were successful in interviewed nine African and non-African people who either reside in Gabon or travel to the country regularly. Among them were two *nimas* (spiritual elders), two Bwiti practitioners, two anthropologists, one biologist, one vendor, and one NGO director. Their contributions to this study have been fundamental to providing a better understanding both of what is happening in Gabon and informing the development of Phase 2.

A diverse and dispersed community

The global community linked by iboga and ibogaine is very diverse—both in terms of geography and primary language of communication. Additionally, individuals who come into contact with iboga and ibogaine may have different motivations for doing so, and everyone's path to discovering this plant is unique—some are seeking relief and healing from addiction, others are seeking a psycho-spiritual experience, while others are interested in its potential as a psychotherapeutic tool or would like to have a ceremonial experience with a psychoactive plant. Some are seeking all of the above. This project therefore took an intersectional approach—recognizing that people have many intersecting identities and many overlapping motivations and experiences. On a methodological level, this required that we deploy specific recruitment strategies for each group, diffusing information through various networks and offering the online survey in four languages (French, Portuguese, Spanish, and English).

Varying policy contexts

Legislation around iboga/ine varies depending on the international, regional, and local context. Iboga/ine is not regulated in a large number of countries, yet its use is prohibited in others.[1] This contributes to how practices are relatively visible in some regions, while in others activities are kept below the radar. This situation has been circumvented through outreach and dissemination among circles and global networks of people and groups that are in contact with each other because of their relationship with iboga and ibogaine.

Gender balance

Throughout the project, addressing gender diversity was important in order to ensure that we could account for gender differences and apply a gender lens to our analysis. We made efforts to include the voices and perspectives of all genders—taking actions to balance the gender variable in the data collection phase, especially with regard to the qualitative elements. Although no significant differences according to gender have been detected in the analysis, some results have been broken down by gender in order to provide depth of analysis.

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1 Iboga/ine is currently illegal in 10 countries (the US and 9 European countries, namely, Belgium, Denmark, France, Hungary, Ireland, Italy, Norway, Switzerland, and Sweden); there are three countries where it is regulated (Australia, Israel and Canada); and three more countries where it is legal as a prescription pharmaceutical substance, "compassionate use," or extended access (New Zealand, South Africa and Brazil). See page 88 of this report for further information.

Qualitative sample

Most of the information that we collected was qualitative—an approach that does not seek to produce conclusions that are representative but rather looks for results that are meaningful to understand core issues in depth and to include perspectives of key stakeholders in their own words. In this sense, a model was designed that sought to include and neutralize different population variables. Thus, a gender parity was sought between women (24) and men (31), and interviews were held with people from multiple countries (12) across Europe, Africa, North America, South America, Asia and Oceania. Also, representatives of different communities and areas of knowledge were selected. We believe that the qualitative results are highly significant and that they largely reflect the great variability of existing sensitivities worldwide. As noted above, while we were able to include some individuals from Gabon, Phase 2 of this project will focus primarily on Central Africa to generate a more in-depth understanding of these perspectives.

Quantitative sample

We gathered qualitative data through a survey, however our intention was not to seek a representative sample, which would require randomization, a different recruitment approach, and larger sample size. The limitation of this study, therefore, is that participants were self-selected, recruited through ICEERS channels and social networks open to the global community. It is possible that there are people who did not have positive experiences with the Iboga/ine who we did not reach or who were not able or willing to fill out the survey. While the results below represent findings from over 200 surveys, each question has been answered by a varying number of people, sometimes fewer than 100. To show the greatest limitations with regards to specific issues, the report shows the specific "n" of each analyzed figure of the sample. This means that, although the qualitative findings of this study are highly significant, the survey data must be interpreted as non-representative, therefore please note these specific findings cannot be generalized to the whole population. Rather, the data and results of this study are significant and highly illustrative of the current situation, opinions, wishes, and visions of the people connected to the global iboga and ibogaine community.

Techniques

Document review | **Literature review** | **Individual Interviews** | **Outreach materials** | **Focus groups [therapy & psycho-spiritual]** | **Online Survey** | **Dialogue sessions**

Individual interviews	In the initial exploratory phase, seven people with expertise in several fields were interviewed. The objective of this phase was to engage participants in a conversation in order to weave a tapestry, with each thread providing insights into key topics and important questions. Defining these topics helped us to map out key areas for further exploration through the focus groups and the survey. Seven other experts were interviewed at different points over the course of the project in order to check or consolidate new information arising as the project progressed.	14 interviewees (8 W | 6 M) Seven exploratory interviews at the beginning of the process, prior to the focus groups. Seven interviews to consolidate the data, following the focus groups.
Focus groups	Two focus groups were organized with people who had completed at least one iboga/ine treatment (Profile 1) or at least one psycho-spiritual ceremonial session (Profile 2) in the past year. The focus groups were held via videoconference.	14 interviewees (6 W | 8 M) FG1. Patients seeking help for detox or addictions FG2. Psycho-spiritual seekers
Outreach materials	Outreach materials were produced and included a short video. Its goal was to engage the iboga/ine community in the process and also to disseminate the online survey. The video was adapted to be viewed on smartphones and was launched on different social networks and disseminated in several online groups linked to these communities. The video can be viewed at https://www.youtube.com/watch?v=JB7MJ_IU8mA	Outreach materials sent to 82 clinics and disseminated through different social networks: Facebook (36,000 video views), 595 post interactions (58% were men and 42% women), YouTube (126 views), Twitter, and Reddit.

Online survey	An online survey was designed, disseminated, and administered. The objective was, firstly, to engaging with the broader community while expanding the number of people contributing to the process. And secondly to build on the opinions and perspectives gathered in the interviews and the focus groups.	289 respondents | 228 valid surveys Gender: 40% W | 55% M | 5% non-binary Age: 18-29% (13%) | 30-49 (58%) 50-64 (18%) | Over 65 (7%) Have taken: Iboga (31%) | Ibogaine (26%) Both (22%) | Neither (20%) From: Europe (44%) | North America (42%) | Central & South America (5%) | Africa (4%) | Asia and Mid-East (2%) | Oceania (2%) Profile: Patient (41%), Activist (38%), Treatment provider (27%), Researcher (27%), Ceremony facilitator or sitter (22%), Pre/after care expert (12%), Policy maker (7%), Distributor or Vendor (5%), Other (10%)
Dialogue sessions	The goal of the dialogue sessions was to bring together key stakeholders for the purpose of validating and interpreting initial findings as well as seeking additional perspectives on the aspirations and next steps.	27 Interviewees (10 W | 17 M) DS1. Sustainability DS2. Policy DS3. Psycho-spiritual DS4. Treatments DS5. Mixed group

TABLES

FIGURES

General findings

The plant and its alkaloids

What are iboga and ibogaine?

Tabernanthe iboga, or simply Iboga, is a shrub from the *Apocynaceae* family that is native to several countries of Central Africa, such as Gabon, Cameroon, Equatorial Guinea, Central African Republic, Republic of the Congo, and Democratic Republic of the Congo. Its root bark is used in initiatory rituals in Gabon and Cameroon, where it is considered a spiritual sacrament[2]. The root bark contains the principal alkaloid ibogaine and 12 other iboga alkaloids.[3] The first mention in the literature of the use of the root of a plant used as a stimulant and aphrodisiac in Gabon and the Congo was by a French Navy doctor, Griffon du Bellay, in 1864.[4] Bellay collected samples of the plant and took it to France , referring to it as "iboga" because of one of its vernacular names in the region. Tabernanthe as a genus was later described by H. Bâillon, as early as 1889, as one species, *Tabernanthe iboga*, although he warned that the plant could later be housed in the neighboring genus Tabernaemontana. The initial classification of the genus Tabernanthe included two species, both confined to Central Africa: *Tabernanthe iboga* and *Tabernanthe elliptica*.[5] In 1895, Otto Stapf stabilized the genus by describing a series of seven other varieties of Tabernanthe, including the *Tabernanthe manii*. Hybridization has been observed between the different so-called species, giving rise to fruit plants whose carpels are more or less fused, with or without some feathers.[6] The different varieties of *Tabernanthe iboga* in Gabon can be distinguished by the naked eye according to different physical qualities, such as the shape of its fruit. However, in the absence of conclusive taxonomic studies, it has been questioned as to whether all these varieties belong to the genus Tabernanthe iboga as it is currently defined.

Ibogaine is a monoterpene indole alkaloid, which is considered the key psychoactive component of the plant.[7] It is used for different purposes, such as treatment of problematic drug use, for psycho-spiritual or ceremonial experiences, or as a psychotherapeutic tool.

Recognized sources of the ibogaine alkaloid are: *Tabernanthe iboga, Voacanga africana, Tabernaemontana* and *Tabernanthe manii*. *Tabernanthe iboga* seems, by far, to be the most commonly used among the different plants. The majority of ibogaine used by treatment providers comes from *Tabernanthe iboga*, although semi-synthesized ibogaine from the voacangine present in *Voacanga africana* seems to be used increasingly (see Figure 1).

A controversial, complex, and multifaceted substance

There are many perspectives about what iboga/ine is and is not. It can be considered a miraculous cure or a fraud, a psychedelic plant or toxic poison, a sacred plant or a commercial commodity. As part of our exploration of this complex and controversial substance, in this section we will outline some of the diverse discourses at play when exploring this topic.

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2 Brown, 2017

3 Taylor, 1965.

4 Ott, 1993

5 Goutarel, Gollnhofer and Sillans, 1993.

6 Stapf, 1895; Pope, 1969; Leeuwenberg, 1989.

7 Alper, Lotsof & Kaplan, 2008; Brown, 2013, 2017.

As with all discourses, they may complement each other or be contradictory, and there are elements of truth in each of them. Language and framing hold power, and how we talk about a phenomenon helps to shape it. With this in mind, our intention is to provide a space to describe the many ways that iboga/ine is represented, experienced, and discussed, allowing for an opportunity to take a step back and see "what is" in order to provide a platform from which to see what "might be." In other words, these discourses provide insight into how iboga/ine is currently seen or understood that can be instructional when considering what directions can be taken to create a sustainable, legitimate future for the plants and associated practices.

Discourse 1: The sacred nature of iboga

This discourse frames iboga as a sacred plant that should be protected and treated with great respect. Iboga has been used ancestrally for centuries in Central Africa by the Pygmies, and later on became a fundamental sacrament of several Bwiti spiritual traditions of the Bantu peoples. Within the framework of these traditions, it is considered a sacred plant that grows freely in the forests, where it is also part of a complex ecosystem with a relationship to elephants and other wild animal species of the forest. Traditionally, Bwiti practitioners in Gabon have not cultivated it because it has always naturally proliferated in the forest and always been freely available.

Discourse 2: Ibogaine as a pharmaceutical substance

This discourse frames iboga, and especially ibogaine, as a substance that has the potential to be produced and commercialized in the international market as a medicine for those who need it. Ibogaine is present in *Tabernanthe iboga,* as well as a few other plant species, and it is understood as a pharmacological product with important characteristics that hold potential for its production and commercialization on a large scale, subject to quality controls. In an unregulated market, ibogaine is often of debatable quality and controlled by the black market. Within this discursive framing, it is seen as urgent to work toward regulation and a medical model for providing access to ibogaine.

Discourse 3: Iboga/ine as a magic bullet cure for drug addiction

This discourse frames iboga/ine as an infallible cure for addiction. Among those who have found healing through iboga/ine for problematic substance use, it can be is often passionately described as "miraculous." From this perspective, it is stressed that, in many cases, a single flood dose seems sufficient to end even the most challenging symptoms of a long-standing addiction. Within this discourse, iboga/ine always works, and therefore should be accessible as a "cure" for addiction. Iboga/ine is also presented as the ultimate solution to the North American opioid crisis. This discourse emphasizes one approach to understanding addiction—that it is a disease, like a bacterial infection, that can be cured with a "magic bullet."

Discourse 4: Iboga/ine as an addiction interrupter

In contrast to the previous one, this discourse frames the narrative that promotes iboga/ine as an infallible cure for addictions as a myth. It describes how some people may report an initial period of relief from the withdrawal symptoms typical of addiction, but after a few weeks or months they might revert dramatically to the same addictive (or compulsive) habits or other harmful behaviors. Explanations as to why this happens describe addiction as a

complex phenomenon that goes beyond a "chemical hook" and links it to broader, variable bio-psycho-social factors with multiple causes that no single substance or medication can address.[8]

Discourse 5: The spiritual nature of iboga/ine

This discourse frames iboga as a plant teacher or spirit that opens the door to psychological and psycho-spiritual benefits. There are accounts of people with or without previous experience with psychedelic substances that define iboga/ine as a substance that has deeply affected their lives, generally in very positive terms. Some talk about extensive changes with regards to life purpose, deepened spiritual connection, and reconciliation with themselves and others. This discourse places iboga/ine as a source of "profound healing," "personal freedom," "development of intelligence," "honesty with oneself," "empathy and a calling to help others;" as the beginning of a "spiritual awakening and sense of sacredness;" or as a "moral and ethical guide." Within this discourse, the ceremonial context of use is highly valued, and iboga is often spoken about as a "plant teacher" or "spiritual entity" that provides practitioners and those who consume it with guidance and insights. The plant and its alkaloid are considered sources of guidance for practitioners, who stress that untrained people should not "play around" with these substances, as there could be spiritual repercussions. Within this discourse it is also understood that healing is connected to the intelligence of the spirit.

Discourse 6: Iboga/ine as a dangerous substance

This discourse frames iboga/ine as a toxic and dangerous substance that, if used without adequate knowledge and skill, can result in death. Of the various psychoactive plants and substances used ceremonially, iboga/ine carries increased risks, which include death, if certain protocols or parameters are not followed. Reports of fatalities and other adverse events have created an ethos within which iboga/ine use is approached with a deep respect, if not fear. Currently available scientific evidence adds to the debate, providing only limited evidence as to whether these risks are linked to the substance itself (dose, purity, protocol followed), to pre-existing medical comorbidities (mainly cardiovascular),[9] to drug contraindications (alcohol withdrawal and benzodiazepines could cause seizures that are too intense),[10] or the health status and pre-existing medical conditions (for example heart issues) of the individual using the substance.[11]

Brief history: From Africa to the world

African origins and the Bwiti traditions

Bwiti is an ancient spiritual tradition that is practiced in Gabon and, to a lesser extent, in the rest of Central Africa. The ritualized use of iboga has been a Bwiti practice for several

8 For more on this, see Hari, 2016.
9 Alper, Stajic and Gill, 2012.
10 Ibid.
11 Wodak, 2008.

centuries and was likely practiced among Pygmies in much earlier times.[12] Within Gabon there are many versions of the origin of the Bwiti and the ritual use of iboga. As with most oral cultures there is not a consensus about its origins, given that there are no firm historical or archaeological records. However, there are a few points that many of the stories share. The first is that the pygmies are credited with passing on knowledge about iboga to the Bantu. It is also said that the first Bantu peoples to receive the knowledge of the iboga by the Pygmies were the Mitsogho, although in other accounts peoples such as the Massango, the Akele or the Apindji are also named as the first to have received the knowledge. It is also commonly believed that the Fang—who, even though they have emigrated to Gabon in relatively recent times, now represent the largest ethnic group—incorporated iboga and the Bwiti as their own spiritual tradition from their contact with the Mitsogho people in the early twentieth century. Traditional practitioners used the root bark of mature (seven to 10 years or older) iboga shrubs for fatigue, hunger, and thirst; as a stimulant; and for treating infertility. The root bark has been sacramentally used by the Bwiti for centuries as a spiritual and social "binding" tool. [13] In this tradition, higher doses are used for healing and initiation rites.[14] During colonialism, rather than deteriorating, Bwiti became even more deeply rooted as a tool of "collective psychological resistance" against the French occupation.[15]

French pharmaceutical industry launches ibogaine into the international market

The first *Tabernanthe iboga* specimen was brought to France in 1864. In 1901, ibogaine was first isolated from *Tabernanthe iboga* by Dybowsky and Landrin.[16] In 1939, it was extracted from *Tabernanthe manii* and sold in France as a tablet under the name of Lambarène (the name of a city in Gabon) for the treatment of fatigue and depression. It contained 0.2g of extract per tablet, approximately 8mg of ibogaine. It was popular among athletes who used it as a stimulant and to accelerate the production of red blood cells. In 1957, the US-based Ciba Pharmaceutical (now a division of Novartis, a Swiss multinational) patented ibogaine after one of its pharmacologists found that it potentiated morphine analgesia and reduced tolerance to opioids in people with chronic pain.[17] The synthesis of ibogaine was performed in 1966,[18] and since then several other synthesis methods have been developed.[19] Lambarène was prohibited that same year, 1966, when the sale of ibogaine containing products was made illegal in France.[20]

Iboga falls under prohibition

Clinical use of ibogaine began in the 1950s, when clinicians and researchers viewed it much as they did other compounds classified as hallucinogens. There was a growing interest among researchers and therapists in ibogaine as an adjunct tool for psychotherapy.[21] Like

12 Fernandez, 1982.

13 Fernandez, 1982; Fernandez and Fernandez, 2001.

14 Mash et al., 2000.

15 Alper et al., 2008.

16 Goutarel, Gollnhofer and Sillans, 1993.

17 United States Patent Office, 1957.

18 Büchi et al., 1966.

19 Frauenfelder, 1999.

20 Alper, 2001. Freedlander, 2003.

21 i.e., Jan Bastiaans, M.D. (Snelders and Kaplan, 2002), Leo Zeff, Ph.D. (Stolaroff, 2004), and Claudio Naranjo, M.D. (Naranjo, 1973); in Alper, Lotsof and Kaplan, 2008.

other hallucinogens, ibogaine was also of interest as an experimental model of psychosis,[22] and it may have been investigated for military or intelligence purposes as a "truth serum" or a means of brainwashing or incapacitating an adversary, which was the focus of a US Central Intelligence Agency project known as MK Ultra that ran from 1953 until 1964. Harris Isbell, MD, apparently one of the participants in the MK Ultra project, directed the Addiction Research Center in Lexington, Kentucky, where he reported administering ibogaine to human subjects in a letter to Ciba Pharmaceutical, the manufacturer at that time.[23] In the US, sale and distribution of ibogaine was regulated in 1967, and it was listed as Schedule I under the Controlled Substances Act in 1970.[24] In France, ibogaine was definitively banned in 2007 after an ibogaine-related death was reported.[25]

The power of ibogaine as effective for opioid detoxification is discovered

In 1962, a 19-year-old New York student, Howard Lotsof, who was using heroin and amphetamines, tried ibogaine after having heard about it. At the end of his 36-hour experience, Lotsof had no desire to use heroin and no withdrawal symptoms.[26] Over the course of the following months, Lotsof administered ibogaine to several other people who had been using heroin and/or cocaine, finding that some of them abstained from drug use afterwards, with no withdrawals, for periods ranging from six to 18 months.[27]

Activists start advocating for ibogaine regulation

In the 1980s, Lotsof started offering underground treatments and providing ibogaine for Junkie Bond, an advocacy group for drug users established in the Netherlands. This work served as the foundation for the "users helping users" movement, a treatment modality rooted in harm reduction and self-treatment. The use of ibogaine spread across Europe and was brought to the Americas by Eric Taub in 1992, who had contacted Lotsof in 1989.[28] The ibogaine scene that existed in the Netherlands from 1989 to 1993 featured the strong participation of European and US drug user self-help advocates, including the aforementioned Dutch Junkie Bond, which was a model for subsequent European drug user unions and a vanguard of the harm reduction movement.[29]

Ibogaine treatment centers start opening in different parts of the world

During the 1980s, the International Coalition for Addict Self-Help, led by Dana Beal, Howard Lotsof, and Bob Sisko, began to publicly campaign in the US about ibogaine's ability to interrupt substance use disorders.[30] In 1991, activists succeeded in convincing the US National Institute on Drug Abuse's (NIDA) Medications Development Division (MDD) to start an ibogaine development project. In 1993 and 1994, NIDA held a total of four Phase I/II protocol

22 Turner et al., 1955; Fabing, 1956; Salmoiraghi and Page, 1957; Schneider and Sigg, 1957; in Alper, Lotsof and Kaplan, 2008.
23 Isbell, 1955; in Alper, Lotsof & Kaplan, 2008.
24 Greene, 2014, 2016.
25 EIF, 2017.
26 Greene, 2016.
27 Ibid.
28 Ditton, 2007.
29 Grund, 1995; De Rienzo and Beal, 1997; Alper et al., 2001, 2008; Lotsof and Alexander, 2001. In Alper, Lotsof and Kaplan, 2008.
30 De Rienzo & Beal, 1997. In Greene, 2016.

development meetings for cocaine dependence. In 1995, the MDD held an ibogaine review meeting, and external consultants convinced them not to proactively pursue clinical studies with ibogaine.[31] By the mid-1990s, ibogaine-assisted treatment was being provided in a variety of underground and medical settings in the US. Over time, dozens of clinics have opened worldwide (some opening and closing monthly), with a significant number of them in Mexico, in different European countries, and in Central America. (See Figure 17 for an overview of where treatments are currently being provided.)

Research looks for alternative alkaloids related to ibogaine

Many clinicians working with ibogaine in the 1990s sought alternatives that would not have the cardiac effects, tremors, ataxia, and visions associated with ibogaine, and they initially found them in noribogaine and 18-MC.[32] Noribogaine is the primary metabolite of ibogaine and remains in the body long after ibogaine has vanished. 18-MC, on the other hand, is a synthetic drug that uses the ibogaine skeleton as a model.[33]

Part of the interest in these alternative alkaloids is that they may eliminate the psychedelic effects of ibogaine, yet this assumption is not completely proven because there are currently still no published or reported cases of humans taking it—however, as discussed below, five survey respondents reported taking it. In this sense, beyond the evidence that these other alkaloids may work on the reduction of withdrawal symptoms, there is an open debate on the efficacy of removing the psychedelic effects; it is argued that the psychoactive aspect is an important part of the healing that occurs.[34]

31 Vocci, 1999.

32 Glue et al., 2016; Greene, 2016.

33 Brown, 2017.

34 Ibid.

Research opens promising perspectives for Parkinson's disease treatment

Glial cell line-derived neurotrophic factor (GDNF) is a protein that was discovered in 1991, which has an extraordinarily positive effect on nerve cell tissue. On a neurological level, ibogaine increases the expression level of this protein, which both protects and stimulates the regeneration of neurons that secrete dopamine.[35]

In addition to having the ability to regenerate nerve cells in the brain, GDNF also appears to possess neuroprotective properties. These discoveries offer promising new perspectives in medicine, since there is evidence that ibogaine could not only be effective for detoxification through repair of the brain's reward system; it could also mitigate the symptoms of Parkinson's disease without the side effects of current pharmaceutical options.[36]

The "psychedelic renaissance" positions iboga as an emergent psychoactive plant medicine

At the beginning of the 2000s, and especially following 2010, a new era in Western society's relationship with psychedelic substances emerged. This new era has been touted as the "psychedelic renaissance" and has been marked by a revival in psychedelic research. The renaissance has also been fueled by the Internet Age, where information and accessibility to psychoactive plants are more available than ever before. Facts, fiction, and personal accounts are widely circulated, as is growing media coverage of iboga/ine. The dark web has also provided an underground marketplace for buying and selling psychoactive substances. These elements add to the global nature of the community, supporting connections and networks that would never have been possible before. Therefore, little by little, certain circles and communities are becoming aware of iboga, including medical, psychedelic, and spiritual subcultures.

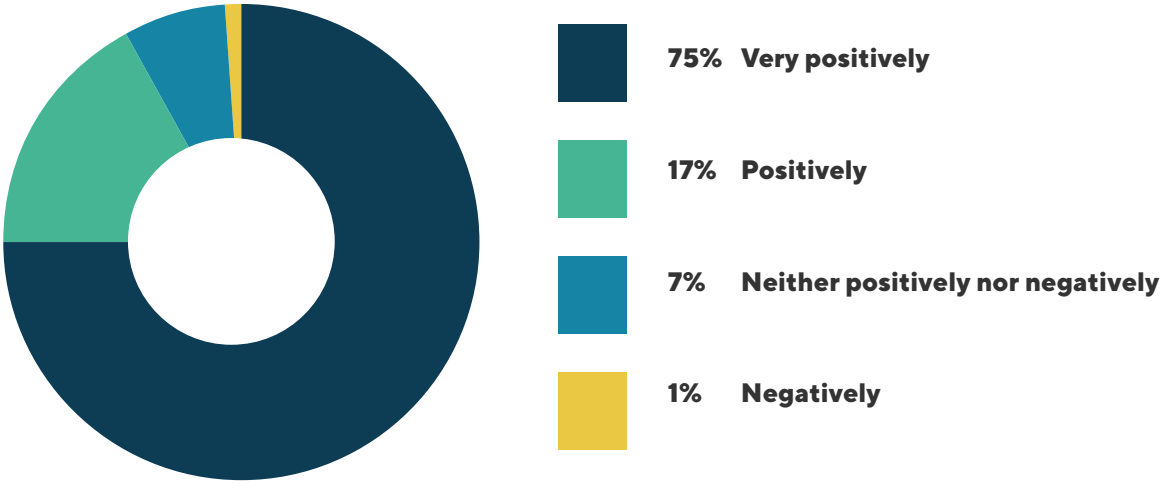
> *I had a kind of an awakening through ayahuasca In 2014 and... it changed my life completely. I heard about the iboga and I was able to get some, and my friend and I set up a little mini ceremony where he basically just watched me... Big life changer. My intention after my kind of awakening with ayahuasca it was just to move on and become the best version of myself. The best I can be. [DS2-P13_11:24]*

35 Ditton, 2007
36 EIB, 2017

The people and their motivations

Who makes up this elusive international "community?" Through this initiative, we sought to get a more extensive picture of the kinds of people that connect to iboga or ibogaine. It is important here to stress that this section attempts to map out the generic features of this population, and the data shown here are not intended to be representative, but are rather illustrative of some of the characteristics of this population.

Figure 1. How has iboga/ine influenced your life? (n=180)



Experience and motivations for use

Ninety-two percent of our sample stated that iboga/ine has influenced their lives in a very positive or positive way (see Figure 1)

Disaggregated by gender, the data do not present significant differences (91% women, 93% men), although the proportion of women who feel the influence of iboga in their life as very positive was slightly higher in our sample (78% women, 73% men). As for the small proportion of people expressing indifference (7%), the majority were individuals who had only consumed very low doses and only once, which leads us to suspect that, for the most part, they did not experience the anticipated physical or psychological effects.

When interviewees and focus group participants were asked about their primary reasons for initiating or further developing a relationship with iboga/ine, several reasons were given. The three top cited reasons were (see Figures 2 and 3 below): (1) psycho-spiritual connection, (2) detoxification and treatment for substance dependency, and (3) psychotherapeutic treatment. Previous literature has also noted these motivations; however, they have not previously been measured.[37]

37 Alper, Lotsof and Kaplan, 2008.

Individuals have multiple reasons for trying iboga/ine, which are not exclusive and are often complex, overlapping, and interconnected

For example, there are people who initially take ibogaine to detoxify from an opioid and then continue their relationship with iboga for psycho-spiritual reasons, even traveling to Gabon to be initiated into the Bwiti spiritual tradition. Similarly, some individuals who begin their exploration of iboga for purely psycho-spiritual reasons reported being surprised to suddenly abandon old patterns of behavior linked to repetitive and unwanted habits (for example quitting smoking). In the case of treatment for psychotherapeutic reasons, many people do so largely because they understand that this work can profoundly improve the quality of their psychological wellbeing. Likewise, many people who have developed problematic patterns with drugs have also experienced challenges related to social stigma, trauma, and psychotherapeutic disorders that—beyond the treatment of addiction—were helped by ibogaine. Finally, there are people who try iboga or ibogaine for other reasons: because they work with it clinically, are researchers or policy makers, want to have a better understanding of it, their friends were taking it, or out of sheer curiosity. It is therefore important to take this diversity and complex behavior patterns into account when interpreting findings from this inquiry.

We conducted a qualitative analysis of the initial interviews and focus groups that informed the development of the survey questions regarding personal motivations for taking iboga/ine. The results point to participants' intial motivations for taking iboga/ine (see Figure 2) as well as general reasons for taking it over their lifetimes (see Figure 3). The reasons for taking iboga/ine shown in Figure 3 are not necessarily mutually exclusive, while the initial motivations shown in Figure 2 are exclusive.

Figure 2. Initial motivations for taking iboga/ine (n=142)

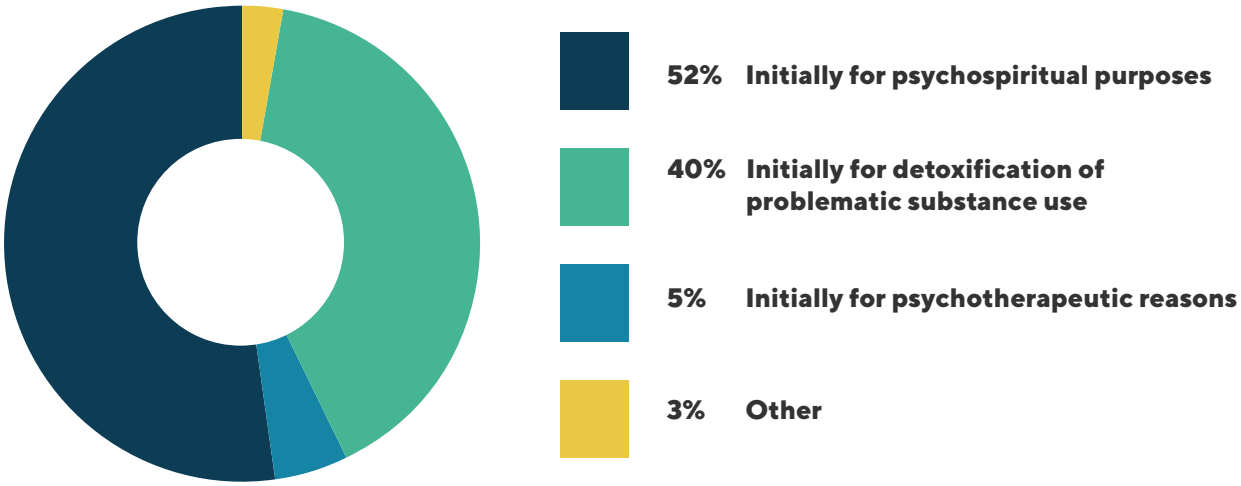
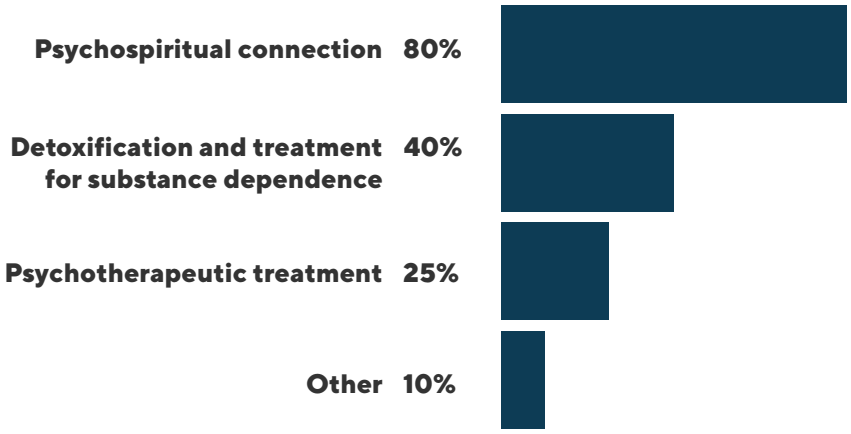


Figure 3. Reasons for taking iboga/ine (n=142)
(multi-response)



Psycho-spiritual connection (80%)

An increased sense of connection and unity is a commonly reported effect of iboga/ine that has been reported in other studies.[38] This dimension appears linked to a component of personal work on the psychological level. Since the purpose (or at least one of them) for using iboga/ine has to do with psychological and spiritual healing and growth, it is often referred to as psycho-spiritual. The results of our inquiry show that among respondents the psycho-spiritual dimension is the most commonly valued, being positively appreciated by a very significant number of respondents (80%). Some of these individuals encountered iboga/ine through what they call the "medicine community" or "plant teacher community," while others came across it through connection with what they call the "psychedelic community." Others did not initially connect to iboga/ine because of its psycho-spiritual effects but for other reasons—mainly to initiate a detoxification or treatment process for problematic drug use—and through this experience they discovered previously unknown profound and meaningful psycho-spiritual experiences.

Furthermore, a majority of respondents also point to the psycho-spiritual dimension as the reason they sought the experience in the first place (52%). These results are not consistent with those of previous studies, which concluded that the reasons for taking ibogaine were more to alleviate opioid withdrawal symptoms than to pursue spiritual or psychological goals.[39]

A possible explanation of this discrepancy could be found in the so-called "psychedelic renaissance" of the last decade and in the growing attraction among diverse groups to the power of the plant and its main alkaloid. It is only in the past few years that ibogaine has gone from being the black sheep in the psychedelic community to slowly being embraced as a valuable psycho-spiritual tool.

> *I felt a deep sense of connection to the universe and everything around me. [FG1-P7_26:37]*

38 Lotsof and Alexander, 2001.
39 Alper, Lotsof and Kaplan, 2008.

> *So for me it was absolutely revolutionary for my... like it was my, I would say my first spiritual experience. My first... like spiritual awakening. I think I'd had spiritual experiences before, but this was like a real... A real awakening in a way that there was no denying you know, that the messages I got were divine. [EI2_2:36]*

Detoxification and treatment for problematic substance use (40%)

A very significant proportion of our respondents (40%) first used iboga/ine with the motivation to detox or to address problematic substance use, and not necessarily only from opioids. The popularity of iboga/ine to treat drug addictions (especially for opioids but not exclusively) is highly valued. Some people assert that iboga/ine treatments for problematic substance use do not always work or do not have lasting effects. On the other hand, there are many more who credit iboga/ine for ending their long-term drug addiction. Both these assertions are repeated over and over, but it is perhaps the latter—the "miraculous" success after countless failures with other treatment modalities—that raises the most passion, particularly among those who believe that iboga/ine has changed their lives positively forever, or that it saved their lives.

> *It works, so that helps. Like, honestly, I can say, by working with substance users in a lot of different contexts, it works better than anything I've ever seen. And it's like the novelty doesn't wear off. It's still a miracle to me and it still feels like, you know, being blessed by association when you're going through that with someone because... Because it's not just the drug use that's being addressed, but the serotonin balance can be sort of reset and, you know, for some people it can resolve depression and physical ailments, and trauma, and like it's really beautiful to see people kind of be affected on so many different levels, not just with addiction reset. So I think that's a huge benefit. There's nothing else like it in the world. There's nothing else that works this well. And so that's something that's kind of like undeniable. [EI2_25:45]*

Nevertheless, not everyone reports positive results with iboga/ine in this regard. Some people expressed that although some changes occurred, their struggles with addiction continued.

> *Helped me to detox from opiates, which was great, but it did not help my drug addiction in any way shape or form. Since it "messed up" my opiate use, all it did was make me change drugs of choice until I found a real solution. The fact that the place promoted marijuana and LSD and even Xanax was absolutely terrible as well. [OS_AI66]*

It seems that although iboga/ine is not a magic bullet, it does appear to hold potential for helping people cease or reduce substance use when other methods have not succeeded.[40] Ibogaine interacts with multiple neurotransmitter systems in the brain to reduce and sometimes reverse the cravings and debilitating effects of addiction[41] and appears to have a substantive treatment effect particularly in opioid detoxification,[42] showing significant attenuation of withdrawal symptoms, sustained reduction in drug craving/use, and cessation of use in some cases.[43] Although case reports gathered since the 1960s claim a very promising

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40 A systematic literature review of human studies assessing the anti-addictive effects of ibogaine can be found at dos Santos, Bouso and Hallak (2016)

41 Ditton, 2007

42 Brown and Alper, 2018

43 Noller, Frampton and Yazar-Klosinski, 2018.

role in treating even the most severe drug abuse and helping an individual to cease destructive habits,[44] others warn that it must not be declared a panacea, but that with appropriate support and after-care, significant impvrovements can be observed in most drug dependent recipients.[45]

It is important to note that although abstinence seems to be a notable goal for many who use iboga/ine, this goal is not necessarily exclusive. Many within the community (including Howard Lotsof) are proponents of a harm reduction approach, where abstinence is one of many possible goals along a continuum. Within this framework, treatment with iboga/ine can support many objectives, from taking a break from drug use, reducing dosage, especially for chronic pain patients, or as a way to seek relief or support for an emotional burden or challenge. Iboga/ine may not be a magic bullet, but it can often be an important first step in someone's recovery process.

Psychotherapeutic treatment (25%)

Twenty-five per cent of respondents indicated that they see the psychotherapeutic power of iboga/ine as being one of its primary benefits. Although most in this group explicitly value iboga/ine's psychotherapeutic power as part of a broader psycho-spiritual dimension, there are others who explicitly disregard the spiritual dimension. These individuals explain that when they have taken iboga/ine they have done so strictly for psychotherapeutic reasons, and ignore the spiritual or addiction treatment aspects that others seek in the experience. This issue has been discussed for many years, and it has often been argued that the iboga/ine experience can be compared to a psychotherapy session where the individual can rediscover and gain psychological strength and physical energy that gives motivation and direction for change.[46] Some guides refer to iboga/ine as a very useful tool to disengage mental images or connotations from certain pathologies and obsessive motivational states, providing a valuable opportunity for insight and positive change.[47] Thus, a cleansing feeling, enhanced self-confidence, and decreased anxiety have been reported in some studies as the most common after-effects of the experience.[48]

> *I wasn't looking for healing because I didn't think I needed it [laughing]. And I really like clearly I really did. […] I wasn't like searching for some kind of fix or solution or anything because I just had no awareness of my own, you know, like suffering. Anyway, so I did it and and then yeah, just got a whole lot more than I had ever expected. [EI7_10:28]*

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44 Belgers et al., 2016; Schenberg et al., 2016; dos Santos et al., 2017, ; Wilkins et al., 2017.

45 Kohek et al., (in press).

46 Ravalec et al. 2007. In Kohek et al., in press.

47 Stolaroff, 2004

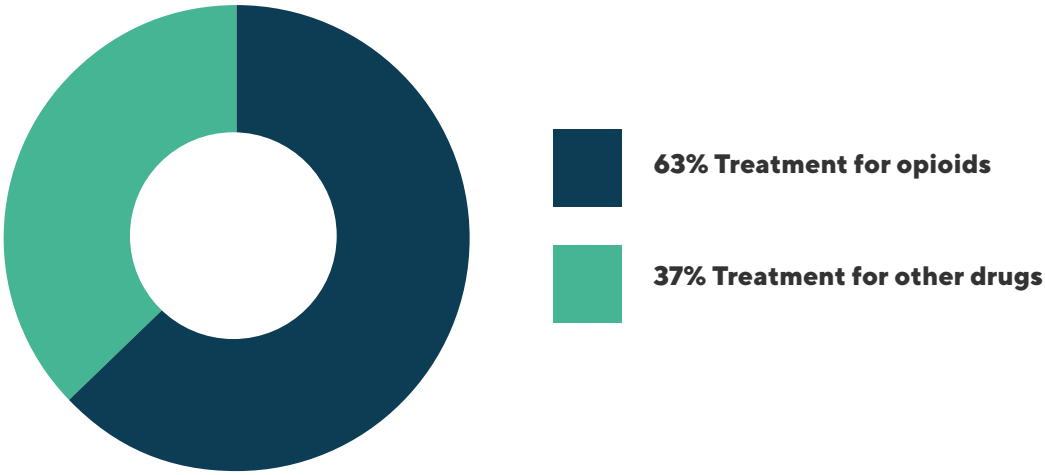
48 Lotsoff and Alexander, 2001.

Treatment for substance dependence

Almost two thirds of those using iboga/ine for detox purposes (63%) were using opioids prior to treatment with iboga/ine (see Figure 4)

No significant differences were detected by gender (61% women, 64% men). Respondents reported that at the time of the initial treatment they were taking heroin, a pharmaceutical opioid (tramadol, Norco/hydrocodone, oxycodone, fentanyl, etc.), or that they were undergoing opioid substitution therapy (methadone, Suboxone/buprenorphine, Kadian, etc.). Most were engaged in poly drug use, having consumed different types of opioids at different times, or even all at once, before their ibogaine treatment. For example, 47% also indicated kratom use, 30% cocaine, and, notably, 37% were also taking benzodiazepines.

Figure 4. Drugs used prior to treatment (n=40)



From the total of this subgroup, only 16% take opioids alone. They are used in combination with:

+ 53% Tobacco
+ 47% Kratom
+ 37% Benzodiazepines
+ 32% Cocaine
+ 26% Alcohol
+ 24% Antidepressants
+ 21% Methamphetamine
+ 18% Amphetamines
+ 16% Cannabis
+ 5% Antipsychotic med.

From the total of this subgroup, the most common combination is Alcohol + Cocaine. Other combinations include:

+ 73% Alcohol
+ 55% Cocaine
+ 45% Tobacco
+ 29% Methamphetamine
+ 27% Amphetamines
+ 27% Cannabis
- 0% Benzodiazepines
- 0% Antidepressants
- 0% Antipsychotic med.
- 0% Kratom

More than one third of respondents (37%) who took iboga/ine for treatment purposes sought freedom from problematic use of drugs other than opioids, primarily cocaine (see Figure 5)

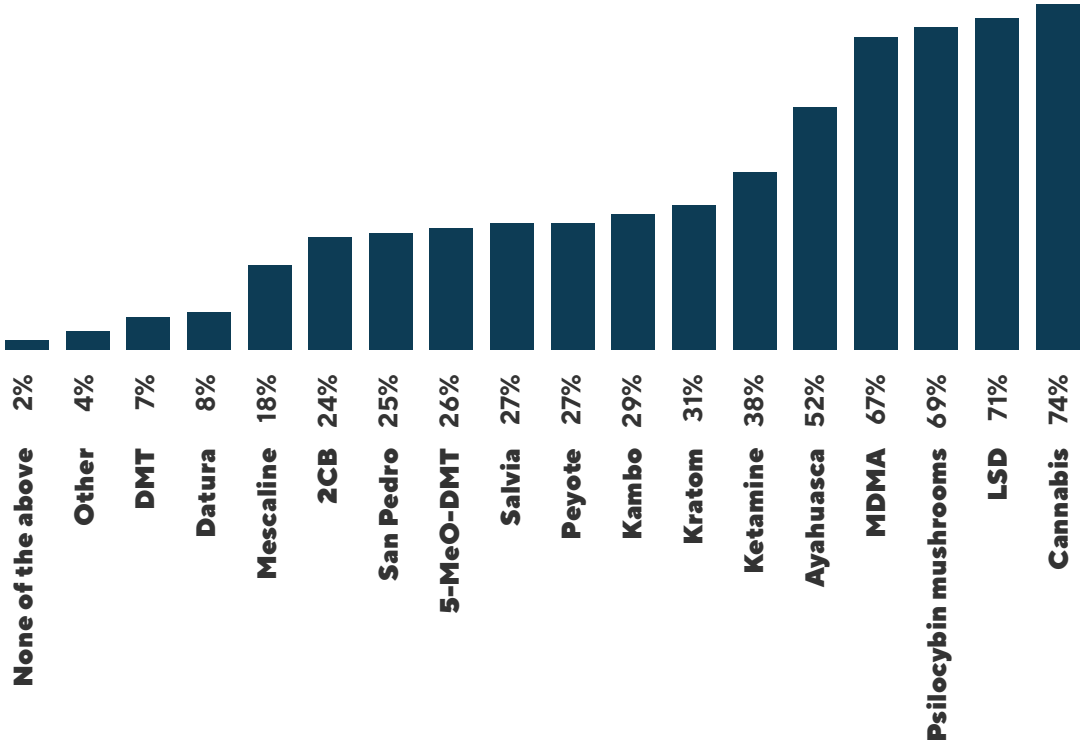
In fact, the majority indicated use of both cocaine and alcohol (55%). Among these individuals, a few of them were supplementing use of cocaine and/or alcohol with methamphetamine or amphetamines. We also found, although to a lesser extent, some individuals who used only methamphetamine, alcohol, or amphetamines.

A significant proportion of respondents have used one or more psychedelic plants and substances in addition to iboga/ine

The majority of respondents (between 67% and 74%) claim to have taken a series of other substances at least once (cannabis, LSD, psilocybin mushrooms, and MDMA). Furthermore, half of respondents (52%) have taken ayahuasca. A more detailed analysis shows that of those who also had experience with ayahuasca, around 60% of them used ayahuasca first, while the other 40% had their first experience with iboga/ine. The latter mainly corresponds to individuals who initially sought out iboga/ine for support with problematic drug use, and upon experiencing the psycho-spiritual dimension wanted to continue on this path and decided to participate in ayahuasca ceremonies. Increasingly, retreat centers offer ceremonies for several kinds of psychoactive substances—ranging from iboga to ayahuasca and kambô—and there is discussion within the community about the usefulness of ayahuasca for integrating (weeks or months later) an iboga/ine treatment or session. However, it must also be noted that poly-substance use (i.e., using 5-MeO-DMT in close proximity to taking iboga/ine) can present additional health risks that individuals may not be aware of.

Figure 5. Previous use of psychedelics (n=109)

(multi-response)



About one fourth of participants in our sample had also taken other substances that are popular within the psychedelics community. 2-CB, San Pedro, Bufo, salvia, peyote, or kambô are plant or animal-based psychoactive substances that are less well known by the general public. Unlike other more well-known psychedelic substances used in mainstream "recreational" environments (MDMA, LSD, psilocybin mushrooms), these substances are primarily used within a very limited context of psychedelic community communities (especially substances like 2-CB).

Sourcing and the global marketplace

Selling and purchasing

Respondents reported that *Tabernanthe iboga* is the primary source for both root bark (62% to 67%) and the ibogaine alkaloid (49% to 56%)

With regards to iboga and ibogaine, we find several types of products. Figure 6 shows the degree of familiarity with the different products expressed both by those who provide them and by those who use them. Their statements are quite consistent with each other, so we can estimate that the actual proportions could be somewhere between each pair of figures.

- *Tabernanthe iboga* is, by far, the most common product available, both in root bark form (60%-62%), and in the form of ibogaine extracted from it (49%-53%).
- *Voacanga africana* is far behind *Tabernanthe* as the primary source, however up to 20% of providers say they have used ibogaine derived from this species, which is notable.
- Other varieties, such as *Tabernaemontana* or *Tabernanthe Manii,*[49] also appear as outliers, showing insignificant use.
- It is also notable that 1% (two people) of those responding this question claim that they have provided noribogaine to someone, and 2% (four people) reported taking it. This information is very significant because, although a clinical trial has been carried out in which noribogaine was administered directly to 27 patients aattempting to discontinue an opioid substitution treatment with methadone,[50] the literature to-date states that there is no evidence of human use of noribogaine in non-clinical trial contexts.[51] This means that, although these reports come from an anonymous and confidential source, this may be the first documented evidence of use of noribogaine outside a research context.

49 *Tabernanthe Manii is* one of the seven varieties defined by Otto Stapf in 1895, and for decades it was the variety from which ibogaine was extracted for use in products in the French drug market (see section "The plant and its alkaloids").

50 Glue et al., 2016.

51 Brown, 2017.

Figure 6. Different types of products provided and used

(multi-response)

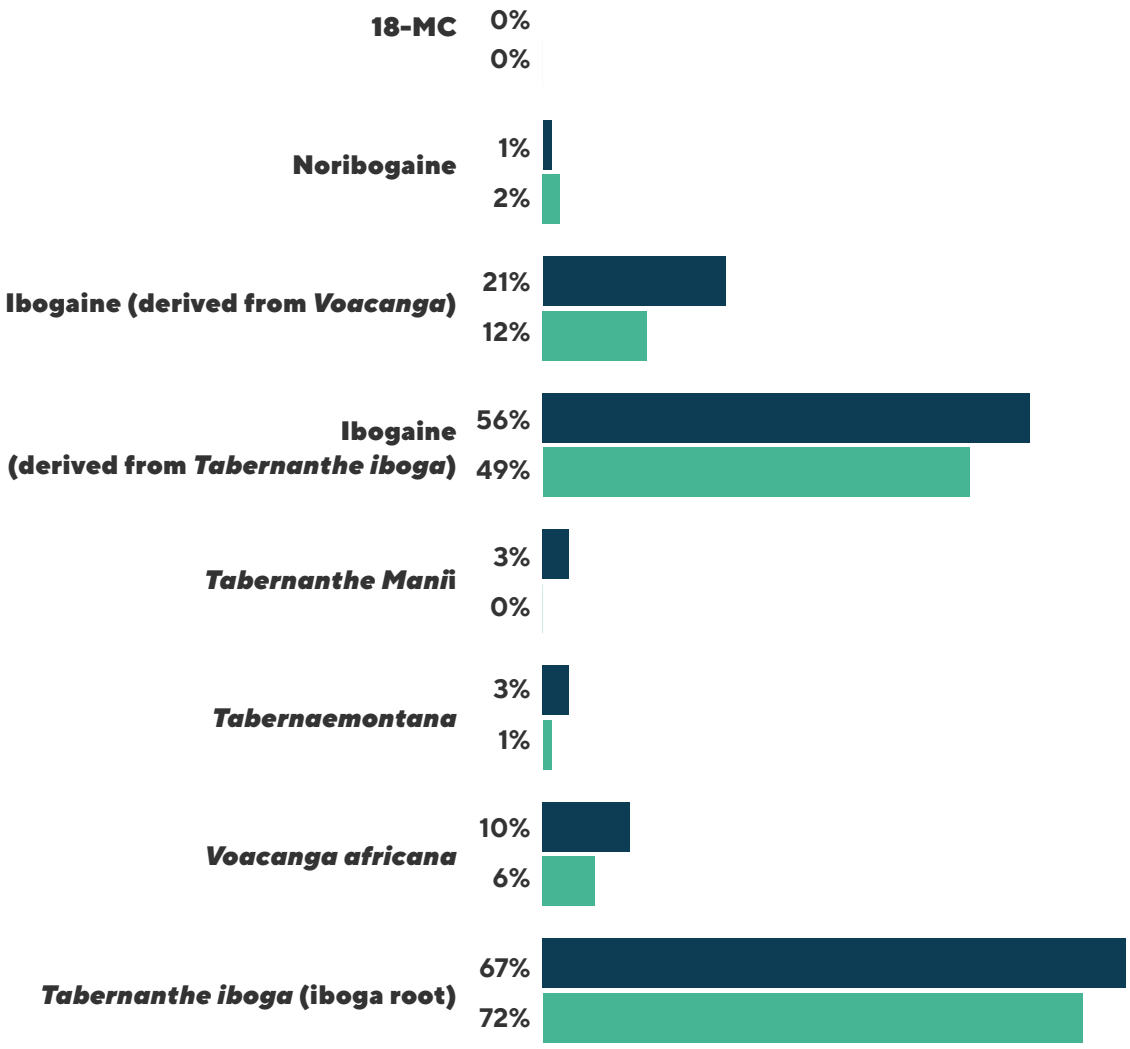
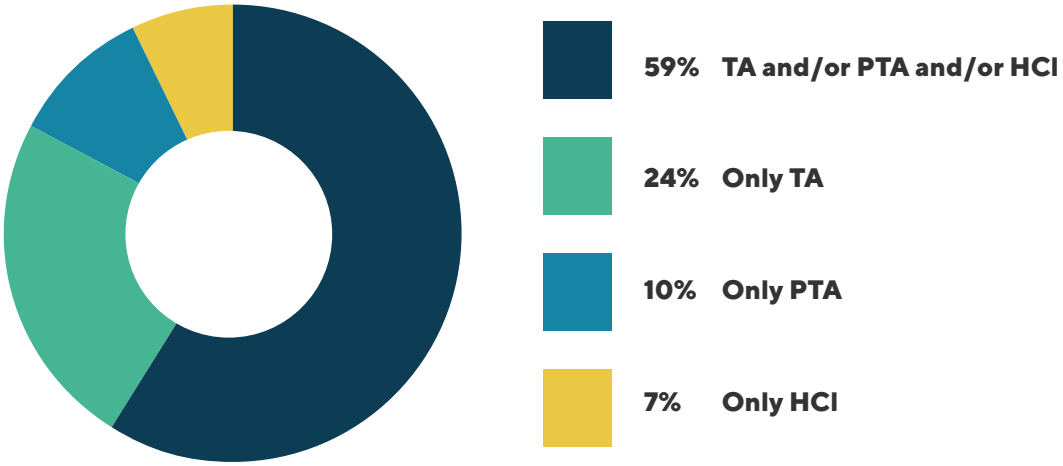


Figure 7: Primary types of ibogaine provided (n=38)



With respect to the ibogaine extracts primarily used in treatments, Figure 7 shows that most suppliers (around 60%) have worked with one or another type on different occasions. The most popular among them is the "total alkaloid" extract of iboga (TA). Second and third most used therefore are the total alkaloid from the plant (PTA) and ibogaine hydrochloride (HCl).[52]

The main buyers are those for whom iboga/ine is an important part of their livelihood

Generally, around half of the total respondents purchased iboga or ibogaine themselves, either to self-administer or to provide it to others (see Figure 8). Broken down by gender, we see that men are a bit more likely to purchase (53% of men indicated that they have made purchases) than women (only 43% of women did so) and than non-binary people (40% of non-binary identified individuals reported purchasing). If we disaggregate it by profile (see Figure 9),[53] we see that the primary type of person who purchases iboga or ibogaine is someone who works with it professionally. Specifically, almost all treatment providers (90%) reported buying products. In the case of facilitators of psycho-spiritual ceremonies, this proportion was slightly lower (75%) but is still remarkably high. Since iboga/ine is not regulated in most countries and is even banned in some,[54] most of the vendors and providers operate on the black market and below the radar of local authorities. However, in certain countries where the substance is legal, suppliers are operating under the criteria of legality, although not without certain administrative difficulties.

52 TA means "total alkaloid", and is created by a simple chemical extraction process; It offers a more natural experience with all the alkaloids present, but without the need to consume large amounts of root bark. PTA means "purified total alkaloid" and involves performing another chemical process to further concentrate the alkaloids to reduce it to only three: ibogaine, ibogaline and ibogamine. HCL means "hydrochloride" and refers to ibogaine hydrochloride; it is achieved through a different purification process, which uses HCL to remove various impurities and other substances, resulting in a compound that contains approximately 85-99 percent pure Ibogaine.

53 Although respondents to the survey could choose multiple responses when defining their profile (for example, a person could define herself at the same time as a treatment provider, researcher, and user of ibogaine for psycho-spiritual reasons), we have considered it convenient to filter these profiles here to be able to perform a more detailed analysis. In this way, people who are treatment providers or facilitators of ceremonies have been excluded from the "Patients (or used it for treatment on their own)" profile. With regard to the "Psycho-spiritual use (or Bwiti practitioner)" profile, people who have also taken iboga/ine at some point to follow a therapeutic or detoxification process have been excluded from this category. Finally, all those who marked one of the previous profiles have been excluded from the category "Researchers"; the researcher category as defined here therefore represents participants who identified as researchers but did not also identify as individuals who provide it to others.

54 See in section 2.5 below: Legal situation of iboga/ine in the world.

So I started doing treatments here [in Brazil] and the problem that we have here is that we need a ANVISA [Brazilian Health Regulatory Agency] authorization for each import. It's very bureaucratic, yes. For each individual importation of the medicine... Yes, yes, if we need to buy the medicine for 10 patients, you need to get 10 different authorizations. It's very, very bureaucratic. [DS2-P5_16:51]

Figure 8. Have you ever purchased iboga or ibogaine? (n=145)

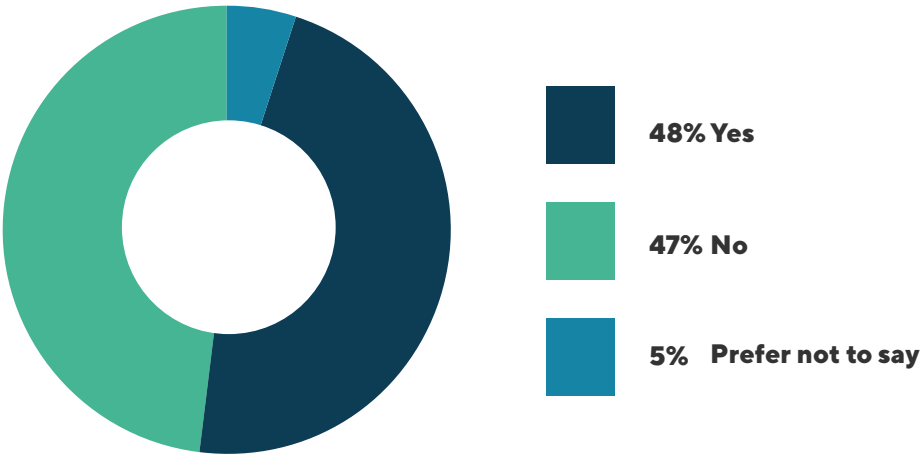
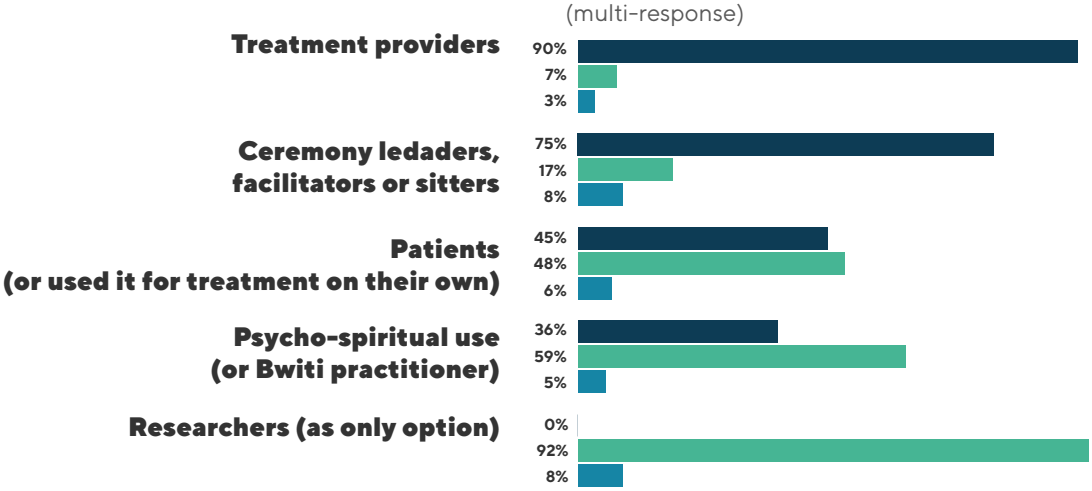


Figure 9. Purchase of iboga or ibogaine by profile (n=145)

(multi-response)



Almost half of respondents who used iboga/ine for addictions treatment (45%) and more than a third who used it exclusively for psycho-spiritual purposes (36%) purchased it for self-administration purposes

Having excluded people who are able to buy the plant or alkaloid to do business with third parties, this profile is exclusively composed of people whose only relationship with iboga/ine is one of use. The resulting data are, therefore, very significant, since this means that an important proportion of people buy the substance to self-administer it, either alone or in a group.

Researchers are the only group in our survey of which the vast majority (90%) reported that they have never purchased iboga/ine

We did not ask whether the iboga/ine had been purchased for personal or therapeutic use, so therefore we cannot describe the motivations of the 10% of researchers who indicated that they had purchased iboga/ine. What is known, however, is that the current unregulated or illegal status of ibogaine in many countries serves as a significant barrier to conducting research.

> *Obviously we do... or actually the Brazilian Corporation, I should say, produces some ibogaine, but right now it's in... It's for research. Research quantities. There is no supplying clinics or anything else like this. It is strictly for the research project. And for that we do not use iboga, we use Voacanga. [DS1-P2_19:22]*

Most respondents rank quality as the number one priority when purchasing iboga/ine

We asked the respondents to rank, from 1 to 4, the criteria they apply when purchasing iboga/ine (see Table 3). Individual responses were multiple and varied; however, after weighing the general results we determined that overall, quality was ranked as the most important factor and price as the least important. This may point to the concerns that arise when a substance is sold primarily on the black market with regards to purity and quality—particularly in the case of iboga/ine for which risks need to be mitigated even when the quality of the substance is trusted. Additionally, we must bear in mind that we are referring only to an assessment of the iboga/ine purchase criteria (not to the therapeutic services or thei r cost). On the other hand, people who cannot afford the high cost of a clinical treatment with ibogaine, or who travel to another country to participate in a ceremony with iboga, may choose to buy it themselves and thus reduce the cost significantly; and once the price is affordable, quality returns to the most important priority, as reported by respondents.

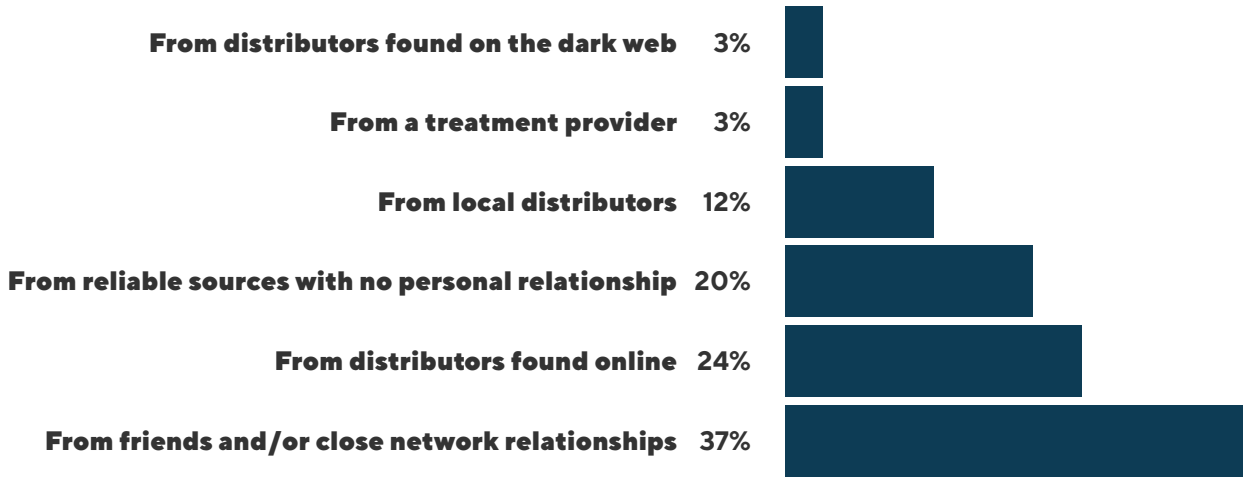
Table 3. Purchase priorities

Quality	**Priority 1**
Sustainability	**Priority 2**
Availability	**Priority 3**
Price	**Priority 4**

On a practical level, personal trust in the supply source comes first when deciding where to purchase iboga/ine

Although buyers (both those who buy it to provide it to others and those who buy it for self-administration) state that quality and sustainability are their two primary concerns when purchasing iboga or ibogaine, their answers reveal that most of them (40%) get it from friends or close acquaintances, and in the specific case of those who self-administer, from their treatment providers or ceremony facilitators (see Figure 10). Verifying the quality and sustainability of the product is basically delegated to treatment/ceremony providers, therefore even if these factors are a major concern for the user, the main concern when buying the product appears to be trust in the source person.

Figure 10. Usual sources for purchasing (n=77)



> *The origins of the iboga really come down to my trust in the facilitators that I work with, and I put my life in their hands in a very real way. And I can feel in their presence. The integrity that the wood comes from as good as source as is available to bring to our circle. [FG2-P10_01:01:38]*

When there's no direct access to a close and trustworthy person, respondents indicated that they resort to purchasing from unknown sources

Although it does not appear to be a preferred option, many purchase iboga/ine from people who they do not know, either from online sources (24%) or someone who is considered reliable, even if they do not know them (20%), or sourcing from the dark web (3%). We observed that the decisions of around half of those who purchase iboga or ibogaine (47%) are influenced by the market of what is available.

> *Yes, I was very concerned about the quality I was getting [...]. And I'm still concerned about the supply. I really am. I don't want it to be tainted in any way or altered in any way. [FG1-P5: 01:12:04]*

This is where quantitative data can tell us only part of the story—on the one hand, respondents indicate that quality is the most important factor to them, followed by sustainability, availability, and price. Yet when asked about how and where they source products, these factors do not seem to be influencing decisions. Although this survey was anonymous, these responses could be influenced by what is known in social science research as the "social desirability bias," which is a tendency of survey respondents to answer questions in a manner that will be viewed favorably by others. However, the qualitative information we collected fills out the picture somewhat, indicating that there is a genuine concern with quality and sustainability. The problem here, as we will see below, is that the marketplace is not set up in a way that allows for these considerations to be adequately addressed, so that buyers have to compromise their criteria and concerns to what the market offers. And the inability to confirm quality can indeed lead to health risks for those consuming the product.

Vendors offer alleged "evidence" to certify the quality and sustainability of the product purchased

In the absence of accredited sources for the legal purchase of iboga/ine, interviewees reported requesting evidence from vendors to prove the quality and sustainability of the product.

> *I don't have a way to kind of verify, you know, that information, but at least I know that the plant is... I believe in danger [...] or it could have been cut down more frequently than what has been planted, [...] and also needs to have some specific technique applied to the roots to be able to harvest it properly, and [to make sure that] you're not damaging the entire tree. So those are all things I've been aware of, and I ask those questions, and I get satisfactory answers. So then, you know, I proceed with the purchase. I may not have the way to sort of independently verify if what I was being told was totally truthful, but at least they are aware of that stuff and I asked about it. [FG2-P9_57:37]*

According to interviewees, vendors and distributors claim that they replant after harvesting; they may even claim that profits are invested in improving the living conditions of the local population—going as far as to provide photos of plantations or of happy local communities. In some cases, distributors provide legal documentation from the government of Cameroon certifying that the iboga plant comes from private plantations and has a legal export permit. From these accounts, it seems that suppliers are responding to user concerns with efforts to persuade them of the quality and sustainability of the product.

Figure 11. Trust in sources (n=52 & n=59)
(multi-response)

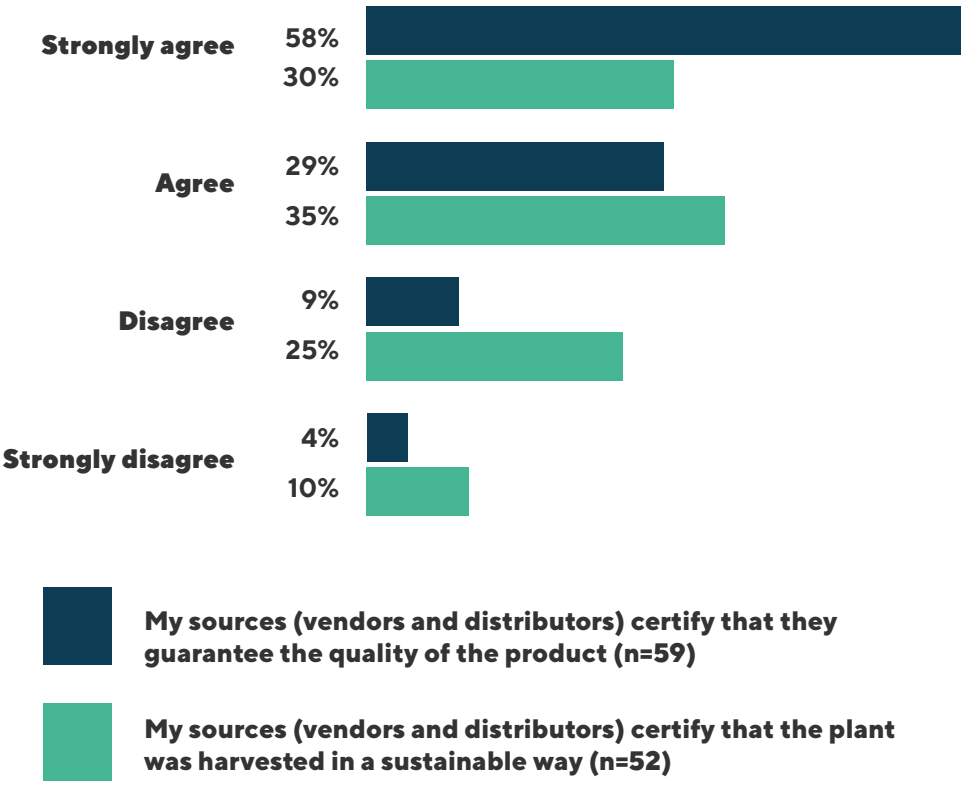


Figure 11 shows that the degree of confidence that buyers have with regard to the quality of the product is quite high (87%), which shows a certain level of optimism. When it comes to sustainability, the degree of confidence in the claims, images, and documents provided by suppliers is still quite significant (65%); however, it does show that with regard to sustainability, buyers are less likely to believe their suppliers. These responses surely provide only a snapshot into the complex global market, but they illustrate that there is a dance at play between producer/distributor and user wherein claims are being made in order to facilitate sales.

The new green ivory

Reports from sources in Africa warn about the poor reliability of many vendors, who may in fact be distributing impure products with low or no alkaloids or even fake iboga, that is not iboga at all or that has been adulterated (i.e., mixed with other substances)

The quality of products circulating is of concern. Iboga/ine, as we know, requires the implementation of several safety measures to be administered adequately, including appropriate dosage. The unregulated marketplace therefore increases the risk associated with iboga/ine, creating a situation similar to that of other black-market substances, where lack of ethics and profits are prioritized at the expense of peoples' health. One of our interviewees—someone who has been extracting ibogaine from iboga for many years—believes that a bit less than one third of the

iboga coming from Gabon and Cameroon sources may contain no ibogaine alkaloids at all. His explanation was that there are varieties of iboga that do not contain ibogaine or that what is being sold is root bark from plants that are harvested too young (less than five years old).

> *The concern was that during that six years of important route back from Cameroon, there were times that I had maybe 30% of the root bark that came to me... it was basically... had no ibogaine alkaloids in it when we did the extraction. In fact, the black market that came on, it was very toxic, looked very dangerous. [DS1-I3_38:31]*

Another important problem in terms of safety is the possible confusion, involuntary or not, of the iboga root bark with other similar plants. Since 1944 there have been references in the literature mentioning "false" iboga, specifically in relation to other species of the same apocynacea family, such as *Rauvolfia monbasiana* and *Pterotaberna inconspicua*, both described by Stapf.[55] There is another apocynacea, known as *Rauvolfia vomitoria*, which also closely resembles the iboga root bark, and which is in fact widely used in traditional medicine to treat diarrhea, jaundice, venereal diseases, rheumatism and snake bites, as well as to reduce colic and fever, to calm anxiety or epilepsy attacks, and to lower blood pressure.[56] However, in the absence of a conclusive forensic confirmation, individuals we spoke with in Gabon warned about the possible sale of root bark of this plant instead of iboga, which if consumed in large quantities could be toxic and even lethal.

> *Yeah, what's happening already is that they're cutting it with Rauvolfia Vomitoria root powder, so it's already becoming a problem. It's a massive health problem. I mean, it really doesn't do you any good, [and some] people are dying because they're taking root that's been cut with Rauvolfia or God knows with what else. [...] you can sell the Rauvolfia roots and they look and smell and seem very, very like iboga. [I1_31:11]*

Iboga is undergoing a process of sustained extraction from the public domain, while its cultivation in the private domain is growing at a very slow pace

As the global demand for iboga/ine increases, more information is needed to be able to address this significant concern. As discussed above, sellers and distributors strive to guarantee to their international buyers that the *Tabernanthe iboga* they are selling is not wild harvested and they make claims that it is part of a production system that includes cultivation and investment in local communities. However, organizations such as Blessings of the Forest (BOTF) have claimed for several years now that this is not the case, and several interviewees also shared this same perspective, one that raises alarm bells around iboga sustainability in Gabon. These voices report that the population of wild iboga shrubs has declined dramatically over the last 10 years. No in-depth studies or inventories have been done to confirm this; however, we have heard this report from a variety of sources in Gabon. Meanwhile, the market for iboga is becoming privatized (i.e. rather than being wild harvested, iboga is grown on private land for local commercial sale), a process that appears to be incipient and too slow to meet the eventual needs of local and global demand. Although this process may have advantages for

55 Delourme-Houdé, 1944.
56 Neffati, Najjaa and Máthé, 2017.

the development of a controlled, safe and proven traceability of the product, its eventual disappearance from the public domain (i.e. forests) would present a serious detriment to its primary consumers—Bwiti practitioners in Gabon. Although the Gabonese Bwiti practitioners have not traditionally cultivated iboga because it was freely found in the wild, they have the customary right to harvest a certain limited amount annually, which has never been guaranteed by decree.

> *One thing that is happening in Gabon, because I mean we've lost possibly up to 90% of our wild plants, in the last 10 years. We don't actually have surveys, so I can't put a number on it, but it's it's a lot. It's a real lot. [DS1-I1_30:36]*

The increase in demand for iboga/ine and the crisis around wild plant sustainability can be linked to several, interrelated factors. Five key factors are:

Factor 1: Growth in international demand

- There has been an exponential growth in international demand for ibogaine, primarily for addiction treatment. The overdose crisis, primarily in North America, is having a tremendous impact on families and communities who are seeking alternative therapeutic options. Ibogaine treatment, associated with reduced opioid use, attenuation of withdrawal symptoms, and cessation of cravings,[57] offers an underutilized yet promising option in response to the limitations of available treatments.[58] Reducing opioid-related overdoses and deaths requires an extreme shift in government policies along with comprehensive evidence-based options including detoxification, behavioral, psychoanalytic, and counseling therapies with access to all available pharmacotherapies.[59] Media and online stories featuring ibogaine as the possible "solution" to the opioid epidemic have attracted attention to the promise of iboga/ine, which could also be a factor in increasing the demand.

Factor 2: Improper harvesting techniques

- Iboga plants are being uprooted rather than partially harvesting the root bark and leaving the plant in place. Far from being replanted in the forest, the iboga plants seem to be collected en masse. According to some accounts, illegal harvesters sometimes pay neighbors of certain villages to allow them to completely tear up the plants, thus maximizing their immediate benefit. Iboga plants require seven to 10 years to mature. Uninterrupted uprooting over the past 10 years has broken the sustainability chain, so that both the current and future supply seems to be literally running out.

> *We've got people taking bulldozers and you know bulldozing down whole trees to get the roots. Obviously, we've got a huge amount of impact. [DS1-I1_30:36]*

57 Popik et al., 1995. In Noller and Yazar-Klosinski, 2018.
58 Noller and Yazar-Klosinski, 2018.
59 Volkow et al., 2014.

Factor 3: No system for product traceability

» Currently, there is no tracing system in place (either public or private) to monitor the origins of iboga. For example, while it appears as though some officials of the Ministry of Agriculture of Cameroon are granting permits to export iboga, as long as traceability certificates are not required there can be no true guarantee that the plants do not come from neighboring Gabon. Distributors who have purchased iboga from Cameroon indicated in our survey that they have not visited the plantations.

I have made a trip also to Gabon last year, but obviously, in order for us to go and visit the plant and the farms, or the places where these things are grown, you have to travel by rivers, by a boat through the rivers in order to get to these very difficult non accessible areas where it claims that there are a lot of villages that have iboga, and also obviously there is also a lot of wild iboga growing, which people are not aware of. But I could never visit any of that, so I don't know if that is true or not. [DS1-I3_39:04]

Factor 4: Prohibition and organized crime

» Prohibition and a mostly unregulated market create a space within which organized crime and corruption operate. It has been suggested that there is a link between elephant poaching and iboga poaching—making the iboga market the new green ivory trade. Elephants and iboga shrubs are part of a unique symbiotic relationship, wherein elephants eat the fruit of the tree, spreading iboga seeds throughout the forest. Losing one or both of these will have a deep and possibly irreversible impact on the ecosystem.

Cameroonian poachers are 90% of the of the business on the web. Cameroonians go to Gabon, they poach in Gabon, they go back from Gabon and they say that they sell from Cameroon. That's bullshit! [...] In Cameroon you can't find any iboga in the wild, it's very rare, because the forests have been destroyed, the elephants have been killed, and people didn't practice Bwiti originally in Cameroon. It's from very recent times that people started to practice a form of Bwiti there [...] and it's also very recent that people started to plant there. But most of the Cameroonians sell iboga from Gabon. [IE4_59:48]

Factor 5: Bureaucracy and corruption

» Lastly, several respondents reflected on the tremendous challenges that exist in Central African countries with regards to developing policies that prioritize the wellbeing of humans and the environment and to putting in place effective processes for their implementation. According to these respondents, entangled bureaucracy is a problem, as are high degrees of corruption across all levels of government in these countries.

Impact on Bwiti communities

The growing shortage of iboga in Gabon and exponential price increases are having a negative impact on the spiritual practices of Bwiti communities

According to some of the interviewees from Gabon, there is currently no strong institutional or official support for the Bwiti tradition there, for several reasons. Firstly, although Bwiti is a recognized traditional religion, Christianity has been the primary official religion since colonial times and nowadays is the most common. Secondly, efforts are being made by the government to introduce and spread the use of Western medicine to rural areas, and Bwiti and other traditional practices are often seen as obstacles to implementing important public health measures. Therefore, there is a tension, as in many places in the world, between traditional indigenous ways of knowledge, sometimes classified as "superstitious," and the pressure to modernize.

While in Africa in general, and in Gabon in particular, governments do not promote traditional spiritual practices, they also do not actively discourage or repress them. The challenges currently faced by Bwiti communities arise from external pressures and the impact of the growing global demand for the plant, which as noted above is impacting its availability for local ceremonies. Local practitioners tell us that the scarcity crisis is new but nevertheless very palpable—although more so in some regions than in others. This situation has led some of them to plant iboga for the first time in their lives. However, these efforts are being thwarted. Often even immature plants that have not yet developed their medicinal properties are stolen by poachers.

> *The problem is that there is sort of traditional ways of life and believing in sorcery and relying on traditional medicines. And this brings a whole bunch of other problems. And so, on one hand, the government is pushing for people to have more faith in Western health care for things like basic hygiene vaccinations. Childbirth, fixing broken bones, road accidents, all of these things that Western medicine is actually performing better at than traditional medicine. I mean, things like massive trauma of a road accident is something that traditional Bwiti doesn't do. It wasn't faced with that. [DS1-I1_01:02:38]*

The negative impacts of these shortages can be summarized as follows:

- **Increasing challenges in obtaining quality root bark for Bwiti ceremonies**
  Low-quality iboga is increasingly common. Sometimes, the root bark comes from plants that are too young to be useful for ceremonial use (two years or even younger), and therefore the anticipated effect is not obtained. The severity of this supply problem depends on the region.
- **Exponential growth in the local price for iboga**
  Reportedly, the price has increased exponentially over the last 15 years.

> *So basically what is happening is that Gabonese people can't afford iboga. Iboga became 10 times more expensive in 15 years. So now the best quality Iboga, the cost of Iboga is one-month salary of a Gabonese guy who is working [...] so for many people it's become very difficult to buy iboga in Gabon. [IE4_37:38]*

- **There are concerns that iboga is increasingly scarce for use in Bwiti ceremonies**
  Some respondents reported that high-quality iboga is increasingly difficult to obtain in the capital of Gabon, Libreville, and in its metropolitan area, the Estuary region. The

reasons attributed to this growing scarcity are, on the one hand, its disappearance from the public domain, and on the other hand, the systematic seizing of iboga carried out by police officers on the roads of Gabon.

» **"False" iboga is creating concern in Gabon**

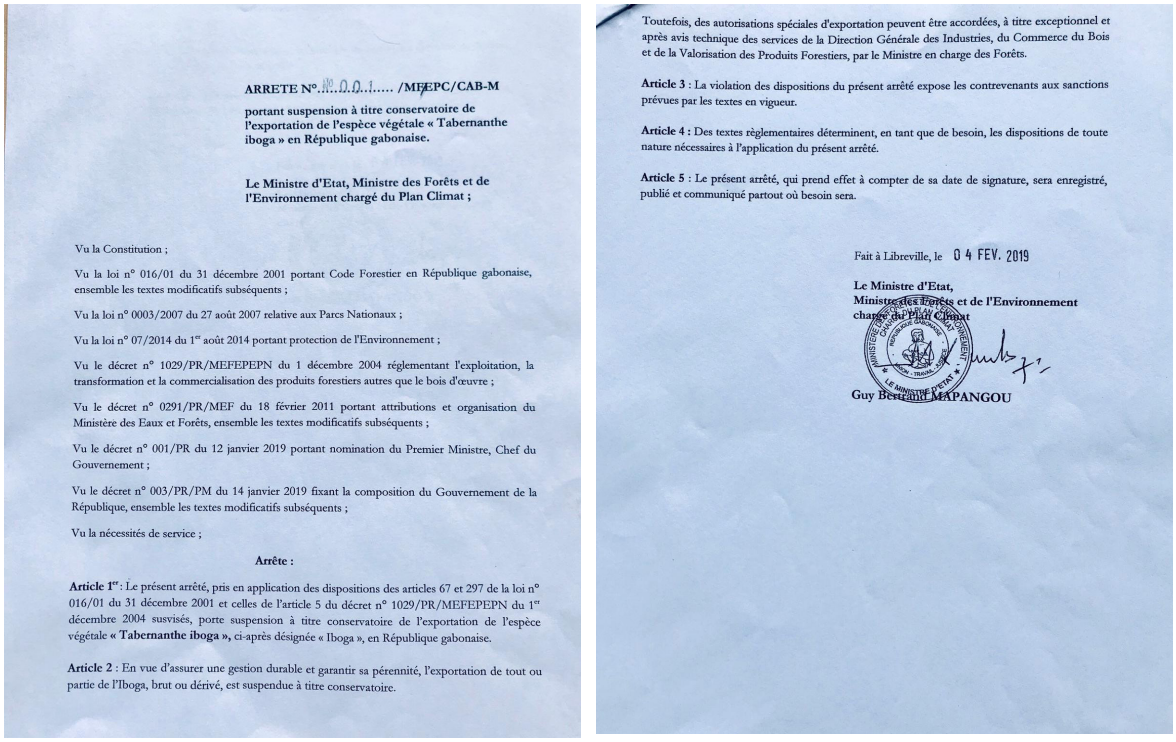
According to respondents (a fact that we were not able to confirm through official documentation), there has been at least one death has been reported as a result of someone consuming something that was fake iboga (allegedly *Rauvolfia monbasiana* or *Rauvolfia vomitoria*). It is necessary to clarify that deaths linked to adulterated iboga are part of a new phenomenon in Gabon, according to interviewees.

Protecting iboga and diversifying the supply

On February 4, 2019, the Gabonese Republic suspended exportation of wild-harvested *Tabernanthe iboga*

As a result of growing concerns around sustainability for what was declared a "national treasure" in 2000 by the Council of Ministers, Gabonese authorities have taken a decisive step to address the sustainability of this highly valued plant species. "To ensure sustainable management and ensure its sustainability, the total or partial export of Iboga, raw or derived, is suspended as a precautionary measure," stipulates Article 2 of Order No. 0001 / MFEPC / CAB-M signed by the Minister of Forestry and the Environment, Guy-Bertrand Mapangou (see Figure 12).

Figure 12. Gabonese Order suspending the export of *Tabernanthe iboga*



ARRETE N°...0001..... /MFEPC/CAB-M

portant suspension à titre conservatoire de l'exportation de l'espèce végétale « Tabernanthe iboga » en République gabonaise.

Le Ministre d'Etat, Ministre des Forêts et de l'Environnement chargé du Plan Climat ;

Vu la Constitution ;

Vu la loi n° 016/01 du 31 décembre 2001 portant Code Forestier en République gabonaise, ensemble les textes modificatifs subséquents ;

Vu la loi n° 0003/2007 du 27 août 2007 relative aux Parcs Nationaux ;

Vu la loi n° 07/2014 du 1er août 2014 portant protection de l'Environnement ;

Vu le décret n° 1029/PR/MEFEPEPN du 1 décembre 2004 réglementant l'exploitation, la transformation et la commercialisation des produits forestiers autres que le bois d'œuvre ;

Vu le décret n° 0291/PR/MEF du 18 février 2011 portant attributions et organisation du Ministère des Eaux et Forêts, ensemble les textes modificatifs subséquents ;

Vu le décret n° 001/PR du 12 janvier 2019 portant nomination du Premier Ministre, Chef du Gouvernement ;

Vu le décret n° 003/PR/PM du 14 janvier 2019 fixant la composition du Gouvernement de la République, ensemble les textes modificatifs subséquents ;

Vu la nécessités de service ;

Arrête :

Article 1er : Le présent arrêté, pris en application des dispositions des articles 67 et 297 de la loi n° 016/01 du 31 décembre 2001 et celles de l'article 5 du décret n° 1029/PR/MEFEPEPN du 1er décembre 2004 susvisés, porte suspension à titre conservatoire de l'exportation de l'espèce végétale **« Tabernanthe iboga »,** ci-après désignée « Iboga », en République gabonaise.

Article 2 : En vue d'assurer une gestion durable et garantir sa pérennité, l'exportation de tout ou partie de l'Iboga, brut ou dérivé, est suspendue à titre conservatoire.

Toutefois, des autorisations spéciales d'exportation peuvent être accordées, à titre exceptionnel et après avis technique des services de la Direction Générale des Industries, du Commerce du Bois et de la Valorisation des Produits Forestiers, par le Ministre en charge des Forêts.

Article 3 : La violation des dispositions du présent arrêté expose les contrevenants aux sanctions prévues par les textes en vigueur.

Article 4 : Des textes règlementaires déterminent, en tant que de besoin, les dispositions de toute nature nécessaires à l'application du présent arrêté.

Article 5 : Le présent arrêté, qui prend effet à compter de sa date de signature, sera enregistré, publié et communiqué partout où besoin sera.

Fait à Libreville, le 04 FEV. 2019

Le Ministre d'Etat,
Ministre des Forêts et de l'Environnement
chargé du Plan Climat

Guy Bertrand MAPANGOU

The decree also states that "the Minister in charge of the forests can grant special export authorizations, with exceptional character and previous technical advice of the services of the General Directorate of Industries, Trade, Wood and Valorization of Forest Products." This order is the result of years of work by the environmental NGO Blessings of the Forest (BOTF), whose founder, Yann Guignon, has been sounding the alarm since 2006 .[60]

It is important to note that this decree only mentions wild harvested iboga, meaning that *Tabernanthe iboga* cultivated or harvested on private land is, in principal, legal for export. According to those who advocated for this ordinance, it was written with the goal of enabling the State to protect the survival of the *Tabernanthe iboga* in the public domain, as well as to favor the production of regulated iboga for the communities and individuals who cultivate it. However, it's unclear as to whether this ordinance will lead to the establishment of a market respectful of the plant, local communities, and the environment. To date the Ministry of Waters and Forests has not yet processed any special authorization for export, which means that all exports are currently illegal, even if the plant is grown on private plantations. It appears that if the Gabonese government does not take steps to shift this situation, export of *Tabernanthe iboga* will continue to be dominated by the black market and by criminal elements.

The crisis related to the sustainability of *Tabernanthe iboga* in Gabon is leading to an increased need for alternative supplies to meet global demand

Tabernanthe iboga is not a plant that can be easily grown. It is not yet well understood it grows well in some places, while in others it does not or does so with difficulties, when the soil or growing conditions seem similar. Additionally, for reasons not well understood, it seems that a small number of plants mature without ever developing alkaloids (especially ibogaine). To-date there is no evidence yet of *Tabernanthe iboga* being successfully cultivated outside of Gabon that have developed sufficient alkaloid content for therapeutic or spiritual use. In the absense of adequate evidence, it is up for debate whether this species is endemic to Gabon and the region, or if it is simply a plant that requires very specific conditions for cultivation that are not yet understood. In any case, there are currently several initiatives in development to produce ibogaine from sources other than Gabonese *Tabernanthe iboga* .

Cultivation of *Tabernanthe iboga* in countries other than Gabon

Several sources have reported that plantations have been initiated on private property in several African countries other than Gabon, such as Cameroon, Ghana, Congo, the Democratic Republic of the Congo, and Mozambique. Some of these initiatives are apparently adhering to cultivation criteria that might be aligned with efforts to transform the illegal iboga trade in the entire region into a regulated market. There is also interest in developing plantations in other North, Central and South American countries (such as Mexico, Costa Rica, Peru, and Brazil), and in other tropical countries of Southeast Asia, such as Indonesia, since cultivation in these climates may be possible. As noted above, it is unknown whether these plants grown outside of Gabon will have adequate alkaloid levels as they are still young plants.

60 Mussavu, 2019.

Research on the production of good manufacturing practice (GMP) ibogaine in laboratories from alternative sources to *Tabernanthe iboga*.

There are different options:

- **Cell culture technology**

  While a promising option, cell culture technology seems to be costly and would need to be scaled in order to produce large enough quantities to be cost effective. One company has demonstrated that it is possible to produce ibogaine HCL from a specific cell culture technology. According to some interviewees, it is not yet clear that this method would work for large-scale production. However, there is little consensus on this point and other respondents reported that there are laboratories in Russia that are working with cell culture technology, which could result in them seeking patents worldwide.

- **The production of ibogaine from *Voacanga africana* or other ibogaine-containing plants**

  For some time now, investors have been showing interest in developing initiatives aiming to combine research and venture capital investment to produce large and sustainable quantities of GMP ibogaine. This product would be delivered in the context of a medicalized model in countries where ibogaine is legal, either as a prescription pharmaceutical, through "compassionate use" or extended access (as it is currently the case in New Zealand, South Africa, and Brazil). It appears as thought there is at least one facility in South Africa that has made progress on producing GMP ibogaine from Voacanga africana.

Voacanga, as people can attest to, is in wide supply in numerous countries throughout Africa. It's harvested sustainably. Fair enough, the yield results [of voacanga] during production and extraction processes is obviously much lower, I mean, tremendously lower, and this is why people go seek iboga. So it becomes... for some people it become cost prohibitive. But if you're going to to cease the rape and pillage of iboga in Gabon and elsewhere you have to look to other plants than Tabernanthe iboga and Tabernanthe voacanga. [DS1-I2_22:53]

- **Semi-synthetic ibogaine extract, synthesized from the Voacangine present in *Voacanga africana***

  This product has been patented and initiatives are currently being financed to produce semi-synthetic ibogaine extract. It's not yet clear whether this is a vaible option that is is scalable, and whether patents will hold up in international courts in order to expand into the world markets. It is difficult to know what will happen, although according to some interviewees it looks that this option will probably not be able to scale up.

  Furthermore, the patents for semi-synthetic ibogaine hydrochloride by voacangine extraction are owned by a company that, according to some interviewees, is ready to challenge any attempt to infringe on the patent. On the other hand, there are stories speaking to the existence of laboratories in countries such as China, that according to interviewees, would not respect intellectual property. Products developed in these labs are often rejected by the global market. As these varying perspectives illustrate, the future for semi-synthetic ibogaine extract synthesized from voacangine does not seem promising at this time.

So there's [a company] who appears to be largely locked down to labs in India without ability to export worldwide, and with great difficulty exporting to Brazil, which essentially requires each individual patient, to receive each individual dose, and then check into a hospital environment to do it. Is [name of a company] going to stand up in court? No, it's not. [I14_09]

» **Synthetic ibogaine**

Since 1966, it has been possible to produce synthetic ibogaine from existing precursors, no plant material being needed.[61] Some see this as the future of ibogaine. Developed in 1996, 18-MC (18-methoxycoronaridine) is a synthetic congener of ibogaine that was designed to be non-hallucinogenic but still maintain anti-addictive properties. Those stewarding this forward have faced challenges finding financing for already approved clinical trials. However, just a few months before the publication of this report, an important investment initiative was made public that aims to create a drug development pipeline of psychedelic-inspired medicines. Individuals are planning or undertaking FDA trials and preparing 18-MC for a Phase 2 FDA clinical trial for the treatment of opioid addiction.[62] According to some interviewees, full synthetic ibogaine will eventually arrive and become the norm, solving some of the concerns regarding the ethics of sustainability.

» **Potential investors interested in the cultivation of iboga and in obtaining ibogaine do not have confidence in working in Gabon**

Several interviewees spoke to the fact that Gabon is perceived to be a highly unstable country politically and economically. These individuals spoke to how the unreliability of the area did not prove conducive to any investments in cultivation or production there, and attributed this mistrust to the fragility of the instituted government, corruption, and to the enormous difficulty of securing investors willing to take this risk.

Out of all the people I know from the corporate perspective of things, there is absolutely nobody who has any interest in dealing with Gabon. It is marked as a de-stabilized region [...] that's perpetually on the verge of collapse. Not a good place to invest any time or money, or rely upon to fulfill contracts they enter into. [I14_03]

61 Büchi et al., 1966.

62 Globe Newswire, 2019.

Risk reduction and benefit maximization

Once providers or consumers obtain iboga/ine, there are several key issues that arise in terms of risk reduction, safety, and benefit maximization, which will be outlined in the following section. It is important to note that what is presented here reflects the types of administration methods described by the participants and is in no way intended to be a best practice guide for the use of iboga/ine.[63]

Dosage

The higher the dose, the greater the risks

The dosage of iboga or ibogaine, as with any medication or drug, is of critical importance in terms of both safety and in managing effects. Quality of the substance, dosage, administration, and care protocols, as well as set and setting, are elements that play key roles in risk reduction. There are three common approaches to dosage (micro, low, or high dose), although for practical and analytical reasons we have condensed them into two:

- **Microdose and low-dose**
  The former usually refers to a sub-perceptual or slightly perceptual dose that may be taken on a semi-regular schedule. The latter, a low dose, is usually perceptible and can also lead to intense experiences; however, there is a greater capacity to manage the experience and fewer physical side effects.

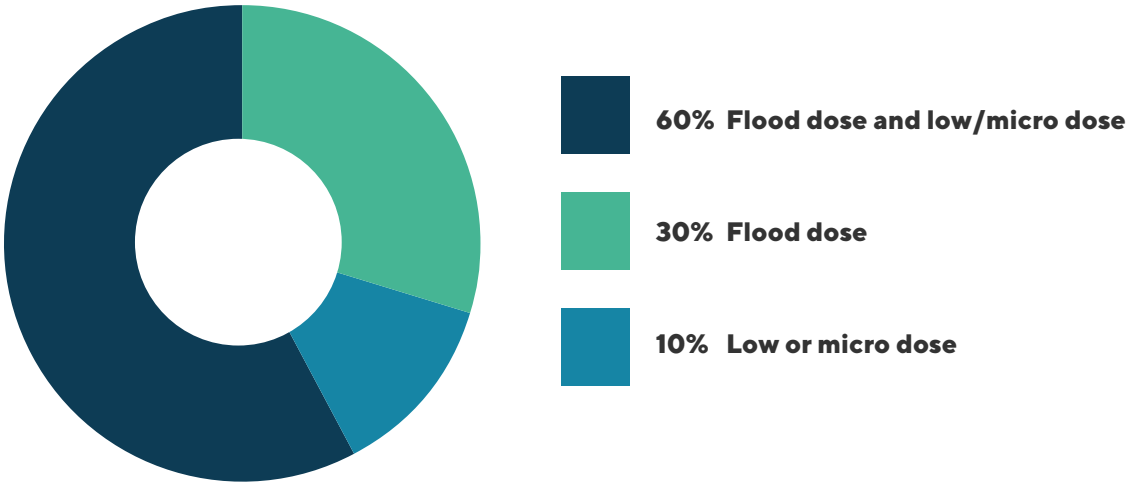
- **Flood dose**
  It refers to a full dose or "saturation dose" of iboga or ibogaine, and the experience is typically quite intense. It is at this level of dosing that the most significant risks to physical, mental, or emotional health can manifest.

Ninety percent of those who reported having taken iboga/ine had taken at least one flood dose

If we break this down further (see Figure 13), one third of survey respondents (35%) had done this once, while half (52%) had taken between two to five flood doses. We also see that, although positioned as statistical outliers, a very small number of individuals reported having taken a flood dose more than 10 times (2%) or more than 20 times (1%).

63 For detailed information on ibogaine administration guidelines for detoxification and treatment in a clinical setting, see the "Clinical Guidelines for Ibogaine-Assisted Detoxification," published by the Global Ibogaine Therapy Alliance (GITA), 2016.

Figure 13. Types of doses (n=164)



Remarkably, 70% of participants reported taking low doses or microdoses

One third (31%) of participants who microdosed reported taking it for one week, while another third microdosed for between two weeks and a month—although it is unclear whether they were taking it daily or with rest days in between, as is typical with many microdosing protocols. A smaller number of individuals reported integrating microdosing of iboga or ibogaine into their daily life. Some individuals reported engaging in phases of microdosing at different times in their life—some had microdosed over 20 times (10% of all respondents) or more than 50 times (another 10%), and there were some who reported microdosing continuously for periods longer than six months (8% of the respondents). In other cases, participants described taking small doses sporadically or intermittently over long periods of time, even years, or that they had adapted their protocols over the years. Overall, these participants described being satisfied with their use and did not report any negative impacts on their health. It's important to remember that this information is based on self-reports from our online survey and does not represent a clinical study on the impacts or effects of microdosing iboga/ine.

When asked to share their motivations for microdosing, respondents cite various reasons, such as:

- Seeking the psychological and emotional benefits related to the psychoactivity of the plant and/or its alkaloid, while avoiding the risks of high doses.
- Maintaining benefits following a flood dose with regards to managing substance use.

Also noteworthy is that several participants mentioned that one of the benefits of iboga/ine pertains to sexuality, in particular an increase in sexual desire and "virility." These accounts are consistent with those documented in the literature,[64] which describe how this effect is not experienced with flood doses and appears only with low or micro doses.

64 Kohek et al., in press.

Dosage is a relevant factor in relation to possible levels of risk. Knowing the necessary doses and procedures of use is important in risk management. Below are some key elements of risk management reported by participants, both in the context of self-administration and in accompanied use.

> *So for me, one of the, I guess benefits or things that I saw the medicine offers, was something I wasn't expecting was just cleaning up thinking patterns, specifically when I was microdosing. It was like, you know, take some a little bit of a tincture or something and, shortly after, I'd be thinking about the situation or, you know, family issues or something [...] and be able to sort of, I guess, analyze the situation and look at it differently in my thinking patterns, and kind of rebuild that stuff. So for me it was something that it kind of rebuild just my sort of cognition around things. And that was something I wasn't expecting. And it was actually pretty awesome. [FG2-P12_14:13]*

> *I take Iboga almost every day. [S_V:118]*

> *So I started with microdosing. The effect is clear and pronounced. I find that my strength (not clad physical strength) clarity of the mind presence of the heart. All consistently are supported by this medicine. It also brings me energy vitality and virility. [FG2-P10_15:05]*

Risk management in self-administration

As far as context for the experience, the vast majority of people who take iboga/ine at least once do so in a formal setting where someone else is in charge

As shown in Figures 14 and 15, the administration or facilitation of iboga/ine by a provider is the risk-reduction measure with which the vast majority of individuals are most familiar, whether used for drug detoxification and treatment (72%) or psycho-spiritual exploration (86%). The figures also show that one fourth of the former group (25%) and 1/3 of the latter (34%) have alternated, on one or several occasions, between using iboga/ine in formal environments and self-administration.

Figure 14. Self-administration versus accompanied use for detox/treatment (n=42)

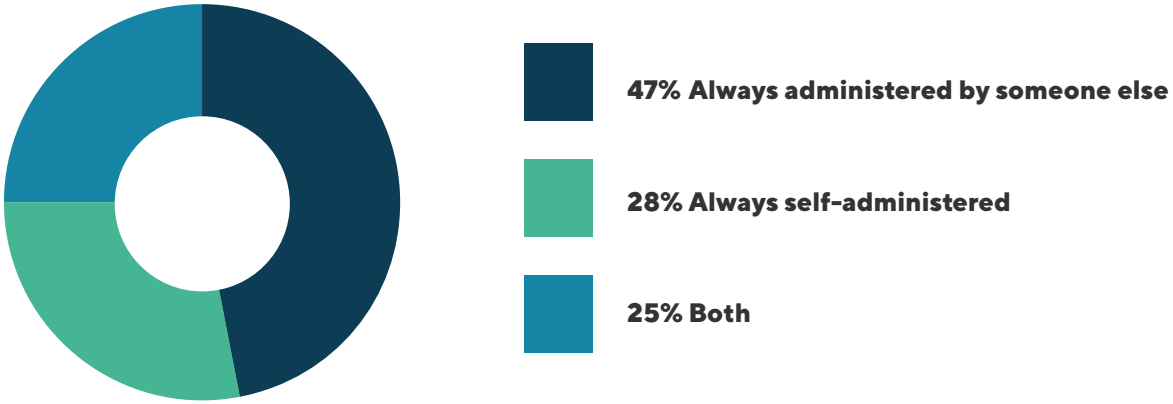
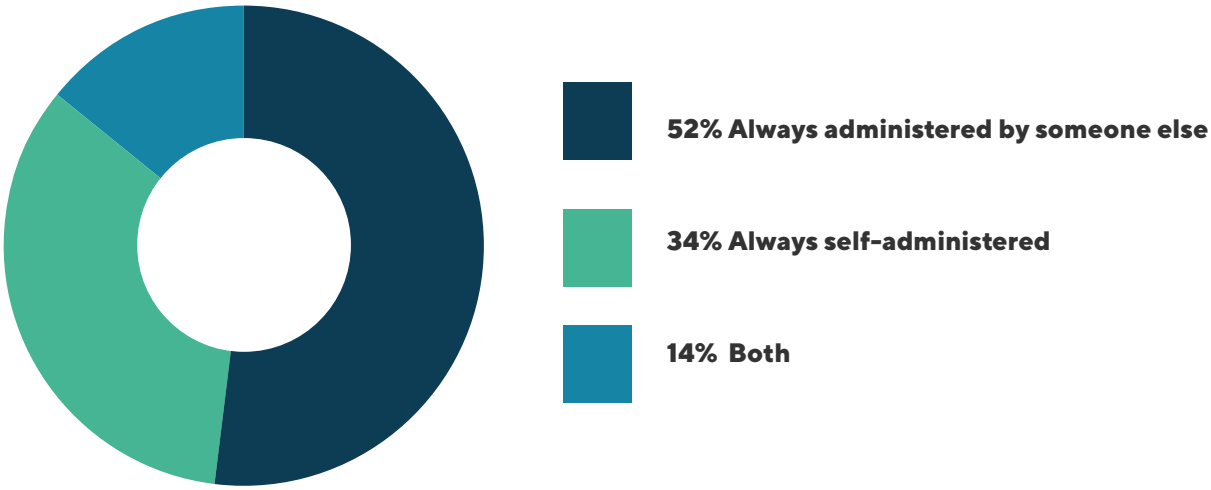


Figure 15. Self-administration versus accompanied use for psycho-spiritual purposes (n=38)



Self-administration is a very common intake method reported by half of respondents

This finding is consistent both among people who take iboga/ine mainly for detoxification or treatment purposes (53%) as with those who report taking it exclusively for psycho-spiritual reasons (48%). A common practice is to opt for high doses in formal settings and to self-administer microdoses. This last case—in which flood dose and microdosing are combined—takes two steps:

- A flood dose is carried out, followed by a self-administered period to sustain the positive effects of the initial experience.
- A brief period of self-administered microdosing is performed prior to a flood dose to test the body's reaction as a risk reduction method.

Those at risk of experiencing challenging incidents are individuals who choose to self-administer very high doses of iboga/ine without the accompaniment or advice of an experienced provider or facilitator

This was noted both in people taking iboga/ine for addiction treatment as well as psycho-spiritual seeking. The main reason provided for why individuals chose to self-administer was the high cost associated with formal treatments or ceremonies. Many factors contribute to high costs—from the need to travel to countries where it is available, the extended stay needed for treating complicated cases, and/or the need for a high number of staff/facilitators per individual in order to maintain safety. Individuals unable to make this financial investment will therefore seek out methods for taking iboga/ine on their own.

> *I did an HCL ibogaine flood dose. I did it because I was a heroin and crack cocaine addict that had messed with it over twenty years and it was just crazy. You know, I was ready to roll the dice and I was totally at peace with the decision to do it. Yeah, it's pretty fucking hardcore, isn't it? Oh, excuse my language. Yeah, it was intense. [FG1-P4_11:52]*

> *At the time I was actually in a spot where I didn't have the financial ability to go get an EKG or get some testing done. So I started with microdosing and from what I understood it was like that if you take some root bark, even a small amount, can affect someone that already has some sort of heart condition... So I gently increased my dose over time and got to a point, I took a few grams of root bark at once, and that seemed to go fine, and then after that I took the plunge and took a gram of TA. And that was fine, even though I was scared. And I told my roommate what I was doing. And so he was sort of on alert, if you will, in the living room. The next few hours just, you know, in case anything happened or to come in and check on me if I didn't come out, you know, after a few hours or something. And, you know, it all worked out. But I was definitely scared. [FG2-P12_47:43]*

Figure 16. Actions taken to minimize risks before first experience (n=109)

(multi-response)

Sixty percent indicated that they conducted in-depth research prior to the experience

Respondents stress that they would often conduct this research after receiving guidance from someone who stressed the importance of safety (see Figure 16). These individuals sought to prepare themselves, both mentally and physically, for the experience.

> *So I took amino acids, and by doing that, sleeping and eating every night and taking amino acids, I feel like I prepared myself properly. I also juiced occasionally, you know, months prior to it. [FG1-P5_01:00:03]*

> *So, I went into it, knowing full well what that was going to be like, I also went deeper into my meditation practice and my yoga practice for about three months prior to going into the first ceremony. [...] I know that helped me a lot with my concentration and my intention of going into that. [FG2-P7_54:14]*

Adequate guidelines are not available for individuals who decide to take iboga/ine on their own

Of all the topics that arose among participants, the need for harm reduction information for self-administration was one of the most controversial. While some people express concern over the lack of available information on how to self-administer iboga/ine safely, many hold strong opinions that iboga/ine should never be self-administered because of the high level of potential risk, arguing that guidelines on how to do so should therefore not be made available. There is a fear that providing this information would promote it. The debate around harm reduction related to substance use is not new—these same arguments have existed around drug education and harm reduction services for decades (for example, the argument that providing people who inject drugs with sterile needles promotes drug use versus the importance of these supplies in reducing the health risks associated with sharing needles).

> *Yes, I went to the moon and back, and I was afraid but I prepared myself though. There was not enough clinical guidelines. I don't think there are many online. [FG1-P8_01:00:57]*

Proponents of harm reduction education have successfully shown that providing educational information reduces risks. Therefore, even if self-administration is not the ideal method for consuming iboga/ine, the risks of not providing information on how to do so safely is too great and this information needs to be more available, particularly based on the high numbers of individuals reporting self-administration. Another way to decrease the risks of self-administration is to increase the affordability and availability of accompanied use.

Not all those who self-administered had done in-depth research to inform themselves of safety measures. Out of the 40% of individuals in this category, a significant number (18%) noted that they were not aware of or did not care about the risks. Evidently, the risks taken by this group are very high. The reasons they provided are diverse; however, three stand out.

- **Naïve ignorance**
  Some just go for the full experience without knowing what is going to happen next; it is not until much later that they realize how naïve and ignorant they were of what to expect.

> *When I did it with my friend. I didn't know anything about what was going to happen. He just watched me during the evening and when the visual part of it went away in the morning, and I was in the absolute brutality of the misery of the pain, or whatever... It was more like black, very painful. I kind of like felt really fruition. I actually got my car and left because I couldn't lay on the floor anymore and wanted to get home, to get to a bed. And that was very interesting drive down the hill. Don't try this at home! But I noticed that afterwards... like I didn't know that you should, like, take it easy for days on each end. [FG2-P13_34:34]*

- **Attraction to risk taking**
  For some in the psychedelic community, there is an attraction to the risk involved in testing mental, psychological, and spiritual boundaries. Seeking peak experiences or simply being comfortable with altered states is what draws them to taking iboga/ine without doing much prior research.

> *You know, maybe it's a different medicine that would be the best. But anyway, it's been very experimental and also likely in a way, as far as much speculation practitioners would say, it's probably unsafe in the way I've been doing it. But for me, I knew the risks going into it, and wanted to explore it anyway, sort of even aside from that. [FG2-P12_49:43]*

» **Denial of, or comfort with, the risk of death**

For people with severe problematic substance use, tainted drug supplies mean that every time they take substances, they are playing Russian roulette. Many participants with severe addiction shared that they already face death as a daily possibility or have learned to put it out of their minds. For these individuals the risk of death involved in taking iboga/ine is worth it because their death feels imminent and iboga/ine offers the hope of relief from the chains of addiction.

> *I actually don't believe that's basically negative. I don't care what the doctors say about it. I believe that if someone is meant to die that at that point iboga is so much a connection with reality and somehow a deep... Maybe that is the time for that person would die and they would have died at some other point. [FG1-P2_53:47]*

Individuals who take flood doses on their own are left without the support of professionals and the pre- and post-care they can provide

These individuals also miss out on connecting with peers and community, which in addition to providing safety and moral support, is an element of treatment that brings many benefits.

> *From other medicine work I've done like with ayahuasca, I've found that... when I feel the best after that work is when it comes from a place of community. And doing it solo you know the great period like the couple days after even after my major floods was probably about 7 to 10 days. I was really not feeling super well and then I came back online. And of course, at that point, you know, about a week or two later, I felt great for the next, you know, six to eight weeks or next next couple months and then of course that sort of trailed off... So for me, I'd say, what didn't work was doing it solo. If I could do it all over again, I would love to have a community of people to plug into. For me, the clinics were a little bit expensive, so I wasn't able to get out there and get to a clinic. And I know there's some ceremonies like up in Canada. I'm in in the States. As a Bwiti sort of tradition, I would eat root bark for a couple days and that sort of ... was a little bit more cost effective for me... It's something that I wish I had a community to do with. But, of course, everyone's saying the community's kind of sparse and somewhat separated. So yeah, I'd love some way to find out other ways that could participate in it you know with with other folks. [FG2-P12_29:10]*

Different settings for accompanied use

When it comes to accompanied use, there are different formats and services available in several countries. We identified three types of settings in which people can take high doses of iboga or ibogaine: Bwiti ceremonies in Gabon, other psycho-spiritual settings (Bwiti-inspired or not), and treatment centers.

Gabon is the country where Bwiti initiations are most common, and where ceremonial use of iboga is most widespread among the local population[65]

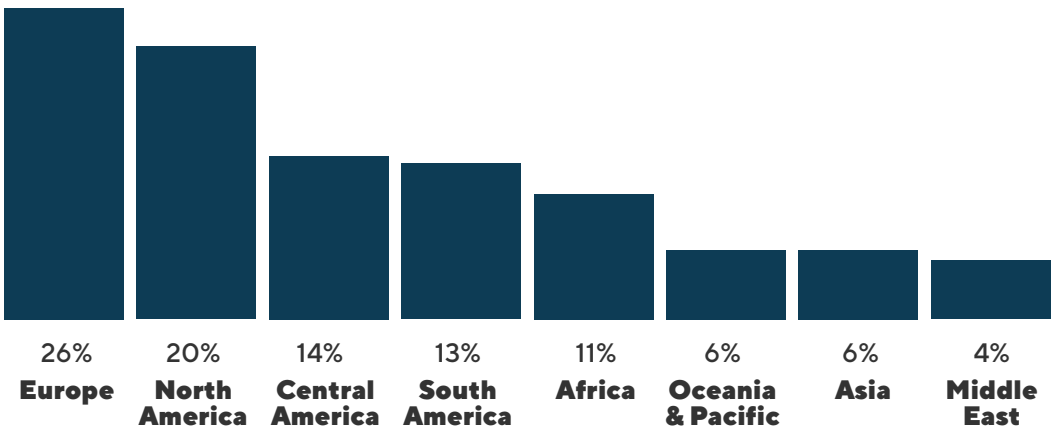
According to our survey, up to one fifth of respondents traveled to Africa at some point to take iboga root bark in a ceremonial context. Flood doses for clinical purposes are available in other countries, such as South Africa or Mauritius, but the African epicenter of Bwiti is Gabon. Almost half of those who traveled to Africa (9% of all respondents) were initiated into Bwiti in Gabon. This country certainly occupies a symbolic importance for the international community interested in iboga.

Outside of Africa, Europe (40%) and North America (35%) were cited as the locations of the majority of treatments and ceremonies

There are some countries that also stand out within each global region (see Figure 17). Please note that this does not represent a comprehensive mapping of where treatment and ceremonial providers are operating. These findings represent the countries indicated by respondents. It is believed that most clinic providers are actually located in Mexico.

- Europe: The Netherlands, Portugal, Slovenia, Spain, and the UK.
- North America: Primarily Mexico, but also Canada.
- Africa: Primarily Gabon and South Africa.
- Central America: Costa Rica.

Figure 17. Regions where people participate in ceremonies or treatments (n=109)



65 As explained as explained above, Phase 2 of this project will dive deeper into the topic of iboga use and sustainability in Gabon.

People who connect with iboga/ine are poised to interact with the psy-cho-spiritual dimension

Although this dimension emerges in different settings, such as conventional psychotherapeutic treatments, in clinics, or even informally during self-administration, there are specialized settings to facilitate psycho-spiritual experiences with iboga as a plant medicine.

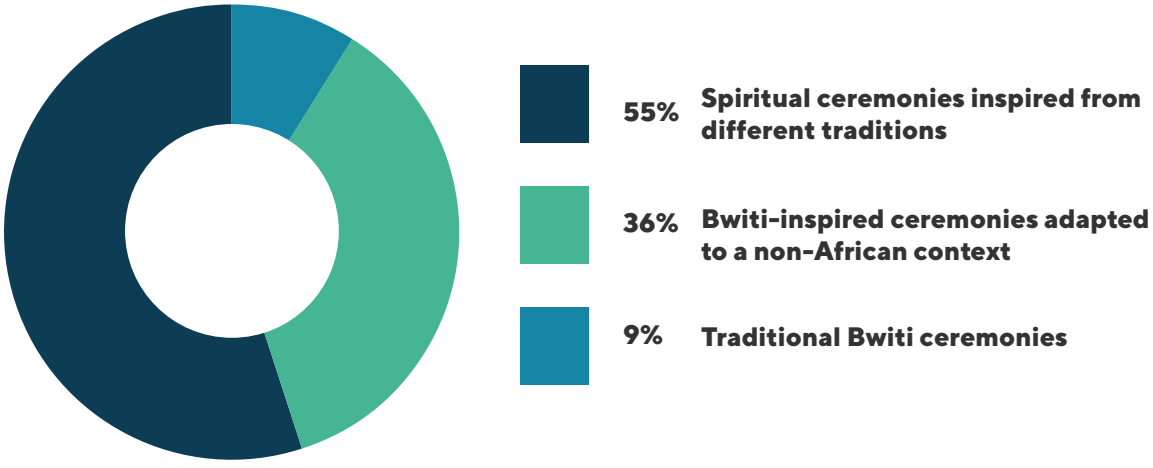
The international community seeking iboga/ine ceremonies strictly for psycho-spiritual reasons can access three types of ceremonies (see Figure 18):

» **Spiritual ceremonies inspired by various traditions**.
This is the most common option among our respondents (55%). These ceremonies are very similar to others that are carried out with different plants and psychedelic medicines such as ayahuasca, peyote, San Pedro, or psilocybin mushrooms.

» **Traditional Bwiti ceremonies**.
As noted above, 9% of those surveyed reported having traveled to Gabon to participate in a traditional Bwiti ceremony. Because local Gabonese Bwiti practitioners did not fill out this survey, these data refer to foreigners who have traveled to the country to undergo their initiation and then return home. This points to a type of psycho-spiritual tourism focused on Gabon, which is in some ways similar to ayahuasca tourism in the Amazon basin.

» **Bwiti-inspired ceremonies adapted to a non-African environment**.
A third of the respondents (36%) say they have participated in least one of this type of ceremony.

Figure 18. Types of psycho-spiritual ceremonies (n=29)



There are four elements respondents valued most in ceremonial settings

» Psycho-spiritual power (intensity) of the experience

It was a huge experience. It was having like my heart being the center of connection to the universe, at the center of creation. And having a very, very intense experience of that. [...] I felt a deep sense of connection to the universe and everything around me. [DG2-P11_21:16]

» Ceremonial and sensory elements of the experience

I think what I value... No, looking back at it is that it provided a spiritual context that I wasn't used to it. At the time I wasn't a terribly spiritual person, so when I found myself in a in a proper traditional ceremony with songs, and for me back then... Horrible, horrible music, and fire, and ritual, and so on. I struggled. I will be honest. I understood, much later how much value it actually has, and had, and I've been to Gabon twice now, to learn more about that. It's a real science. And that it's not just a show, but it's it's actually... it's these steps of the way. They have meaning and they make sense. I think it added a dimension to my personal life that I now really really value, that I underestimated. [FG1-P1_36:04]

» Experienced facilitators and ceremonial leaders

Addressing the difference that an experienced facilitator, with experienced assistants, who've been initiated into Bwiti, in Gabon, really makes the difference [...] And being in such a vulnerable open state, surrounded by experienced people who are working in a cultural context with which we all in our own way resonate, though it's from a completely different culture, the Bwiti culture, make for more powerful experiences being possible. [FG2-P10_40:46]

» Post-experience integration and care

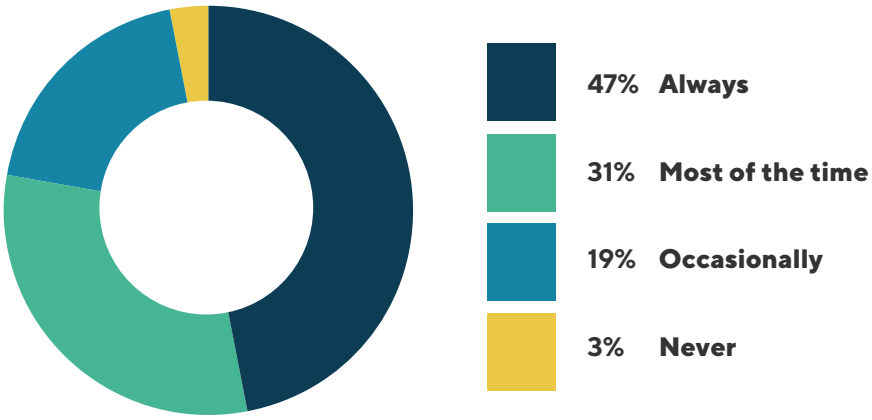
When the medicine is done and it's time to rest, rest away, we would all go out into the garden, find a place by a tree and just lay down there in the sunshine for hours, as we slowly come back to ourselves. Really, really beautiful to have several days. This has to be done in five days,[or at last] two and a half, three days. We're just for rest, for integration, for nature walk, for group hypnosis, for fire ceremony... Basic simple activities that would support the healing process without intruding on it. But mostly it is just this time for the people who will have been going through this experience to really come back to themselves, to have a place where you can talk and make some of the important lasting friendships in life. [FG2-P10_42:01]

Currently, it appears that there are about 80 to 90 treatment centers operating around the world that offer psychotherapeutic services specializing in drug detoxification and treatment[66]

There are centers on all continents, concentrated mainly in Mexico (31), Latin America and the Caribbean (18), Europe (17), Africa (6), Canada (6), Southeast Asia (2) Oceania (3). These centers, and others that may open, are unregulated. It is understandable then that medical and nonmedical uses of ibogaine have been collectively described as a "vast uncontrolled experiment."[67]

Most respondents (78%) have had generally good experiences and are satisfied with the service and treatment received (see Figure 19). However, it is important to highlight that one third of them also believe that things were not optimal. It is also relevant that 22% believe that, in general, the service they were provided was inadequate. If we compare these results with those shown in Figure 1, which shows that 92% of respondents feel that iboga/ine has had a positive or very positive impact on their lives, it seems that a certain part of the success of the treatments is attributed directly to the therapeutic power of iboga/ine itself, rather than to the professional merits of some clinics.

Figure 19. Satisfaction with service and treatments (n=42)



66 This list was reviewed and updated by our Advisory Committee on July 20, 2019; it includes treatment centers specialized in detox and treatment. No information is available about independent or underground providers. Other ceremonial centers not specifically focused on this issue are also not included in this list.

67 Vastag, 2005.

There are three elements that people interviewed valued most about the service provided by treatment centers

» **The effectiveness of the treatment**

> *"I had spent many, many years, simply failing every detox. And when I did ibogaine... I mean, when you do it you're roughly six to eight hours past your last dose of opioids and "in full" withdrawal, you're in pain. Sweating. You're shaking it feels like your bones are being smashed and it's extraordinarily unpleasant, and within 30 to 45 minutes of taking ibogaine which was, you know, Ibogaine hydrochloride, it just feels like there's this ball of warm in your solar plexus, and it's very slowly moving up your spine, and the pain is letting go, and then... It feels like you're suspended in a warm ocean of energy. And then, of course, you start to trip are very busy for the next six hours. And this problem I had for 16 years suddenly just went away. That was the closest [I've come to a] miracle [...] It's like you take a trip, you come down, and you're no longer a drug addict. Which was amazing and I saw that everyone who is drug dependent needs to have this possibility and be able to experience this because It works. And I've tried literally everything else and everything else does not work." [P3_12:41]*

» **The lack of social stigma experienced when dealing with the professional team**

> *Because I was... was treated like a human being, not like somone with addiction. That's the point. That's no different. There were rich people, poor people, everybody was alike. [FG1-P3_40:19]*

» **The feeling of protection and accompaniment throughout the treatment**

> *You're in the middle of it. And they would hang in the room. And if I had trouble if I needed some water or something, I could ask for it and they come help me. Was very comfortable. The thing I think about it was that you were very lonely, solitary and experiencing the whole thing. But you did have protection. [...] it's such an intense experience that anybody could have a sudden attack, a panic, sort of... Also the situation. We can't walk. So the bucket, they would come and take away, you know, urine, or something like that, if I needed, and they would make sure that I wasn't worried about that too. And that was comforting. [FG1-P2_42:07]*

Screening and monitoring prior to treatments and ceremonies

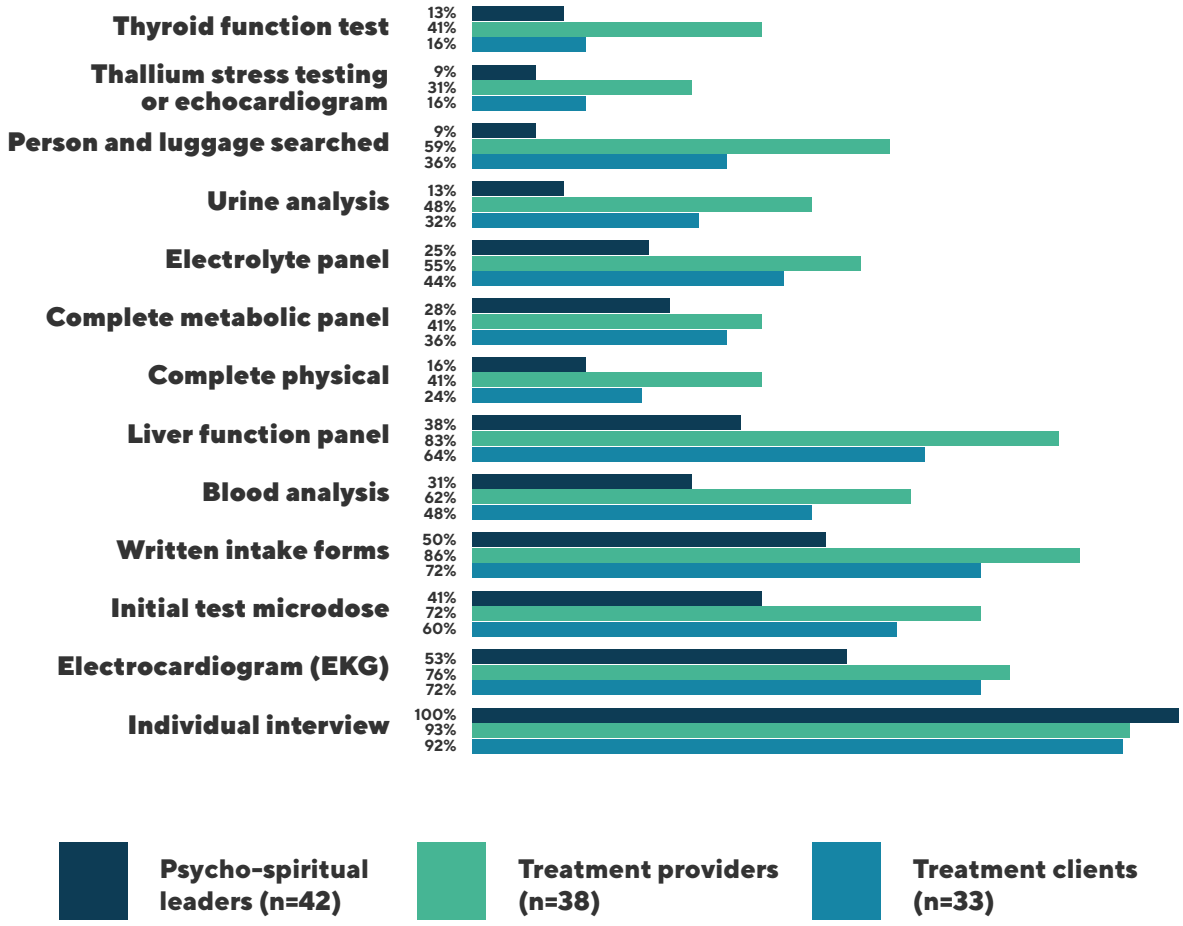
Screening and monitoring are key safety standards to reduce risks associated with flood doses

According to the Clinical Guidelines for Ibogaine-Assisted Detoxification,[68] prior to an iboga/ine treatment, various tests should be performed–an EKG, a liver (hepatic) function panel and an electrolyte panel. When patients arrive, it is recommended that they and their person and luggage be searched, and a urine toxicology performed. This is to ensure that

68 GITA, 2015.

Figure 20. Screening or monitoring tools prior to the session or ceremony

(multi-response)



there are no unknown drugs in their system that could lead to complications. The guidelines recommend a test dose (2-3 mg/kg) be given prior to administration of a large dose in order to monitor for allergic reactions and observe metabolic reactions to ibogaine. It is also recommended that the patient lie down prior to administration in a peaceful, protected environment. All these recommendations are important considerations in the existing unregulated therapeutic context where there are adverse incidents, including deaths, at some clinics. A 2008 study provided an estimated ratio of one ibogaine-related death for every 427 treatment episodes.[69] A subsequent systematic review examined all available autopsy, toxicological, and investigative reports for known fatalities outside of Central Africa between 1990 through 2008 that were temporally related to the use of ibogaine. This review concluded that advanced pre-existing medical comorbidities—which were mainly cardiovascular,

69 Alper, Lotsof and Kaplan, 2008.

and/or one or more commonly abused substances—explained or contributed to the death in most cases. Other apparent risk factors include seizures associated with withdrawal from alcohol and benzodiazepines and the uninformed use of ethnopharmacological forms of ibogaine.[70]

> *If we want iboga to become a credible therapeutic tool then... then people shouldn't be dying for no good reason. Or better, not at all, not at all! [FG1-P1_56:32]*

Ibogaine may also have proarrhythmic effects on some patients, which is another reason that screening should be done. High doses of ibogaine may induce bradycardia and prolong the QTc interval,[71] which can be life-threatening. Ibogaine administration has been associated with several fatalities (>25 cases), which appear to involve increases in cardiac arrhythmias, previous cardiovascular diseases, and use of opiates/opioids or other drugs during the acute effects of ibogaine.[72] QT prolongation is another major risk with ibogaine—the QT interval is a measure of the heart's electrical cycle, or the time it takes for the ventricle to get ready from one contraction to the next. During this period, the heart is vulnerable to cardiac arrhythmias and other serious complications. Benzodiazepine and alcohol withdrawal both result in QT prolongation as well, therefore combining ibogaine with an alcohol or benzodiazepine detox can be extremely dangerous.[73] For this reason, candidates for ibogaine-assisted treatment must be carefully screened and monitored.[74] These findings indicate that risk of death could be significantly reduced through proper safety standards and screening, particularly for individuals who are detoxing from drug or alcohol use.

Figure 16 (page 68) shows that around 40% of respondents requested medical screening tests at treatment clinics or retreat centers. In some cases, some of them sought screening independently of the clinics or centers. These respondents tend to be more aware of the risks associated with taking high doses of iboga or ibogaine.

> *Prior to going to the ceremony I asked a lot of questions. And so... what to expect, and what the Integration was going to be like right after. And that was all provided for me. And that was beautiful, you know, otherwise I wouldn't have gone through the ceremony and doing that. [FG2-P7_33:37]*

On the flip side, up to 60% of the respondents were not aware of the importance of pre-screening and entrusted their wellbeing to the treatment provider or ceremony facilitator.[75]

Forty percent of treatment providers reported that they do not perform blood tests prior to administering a flood dose to individuals seeking support for drug dependency

Benzodiazepines and alcohol can be detected through blood tests or urinalysis. Figure 20 shows that blood tests are more common as a monitoring tool than urinalysis. Fewer than half of individuals who were administered a flood dose reported that they were not screened. Ac-

70 Alper, Stajic and Gill, 2012.

71 Litjens & Brunt, 2016; Hildyard, Macklin, Prendergast, & Bashir, 2015; Meisner, Wilcox, & Richards, 2016, Wilkins et al., 2017.

72 Litjens & Brunt, 2016; Meisner et al., 2016, Wilkins et al., 2017.

73 May, 2018.

74 Koenig & Hilber, 2015; Greene, 2016.

75 For detailed information on pre-screening in a clinical setting, see the "Clinical Guidelines for Ibogaine-Assisted Detoxification," published by the Global Ibogaine Therapy Alliance (GITA), 2016.

cording to our survey, only two thirds of individuals who underwent an iboga/ine treatment (62%) and one third of those who participated in a psycho-spiritual setting (31%) did a blood test. Additionally, only 60% of treatment providers searched people and their luggage for medications, such as benzodiazepines (a practice that is done to ensure that patients do not take other substances prior to the experience without the knowledge of the providers).

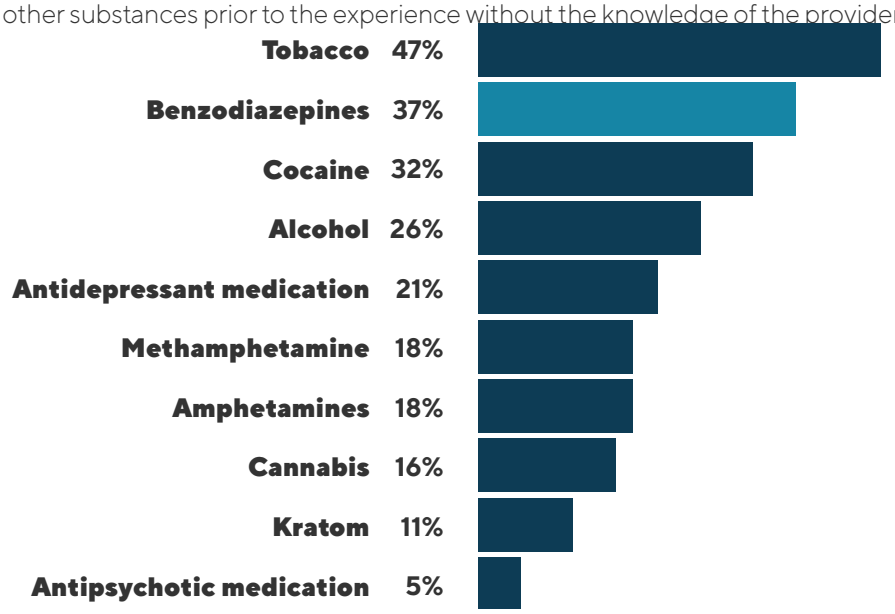


Figure 21. Reported substances used in addition to opioids (n=50)
(multi-response)

A significant proportion of the respondents who attended treatment were also using benzodiazepines (37%) and alcohol (25%)

To date, there is no solid evidence on the degree of safety or danger derived from the combination of iboga/ine with substances such as benzodiazepines or alcohol (see Figure 21). While there are accounts that explain that these two substances may be combined safely, benzodiazepines and alcohol have also been linked to deaths related to ibogaine treatments.[76] Addressing the lack of pre-screening could be an important shift in practice that has the potential for significant impact in terms of preventing adverse events.

In addition to the combined use of substances shown in Figure 21, an interviewee with experience in the provision of treatments indicated hormone restoration therapies are also quite common among individuals seeking treatment.

76 Important risk factors include seizures associated with withdrawal from alcohol and benzodiazepine and the uninformed use of ethnopharmacological forms of ibogaine (Alper, Stajic and Gill, 2012)..

> *I'd say that roughly one third of our middleage patients, both male and female, are all on hormonal restoration therapy. Test is mostly neutral. Women are doing whatever combination of progesterone, estrogen and sometimes test, that reconfigures everybody's individual baseline [...]. There are also a handful of people who are pro bodybuilders who have done ibogaine because they're strung out on painkillers or do too many stimulants. [I14_16]*

Around half of ceremony facilitators and a quarter of treatment providers reported that they do not perform EKGs prior to administering a flood dose of iboga or ibogaine

This finding points to a lack of preventative measures and harm reduction. Among those who had taken a flood dose of iboga/ine, one fourth of those seeking treatment for drug use (24%) and almost half of those attending psycho-spiritual ceremonies (47%) reported that they were not screened with an electrocardiogram (EKG). In some cases, ceremony facilitators will check blood but not urine or perform EKGs but no liver panel. According to respondents, it appears that many practitioners believe that they are generally following a comprehensive set of safety standards, even if they are not.

> *The other thing is... something could have changed in my body. I might well have liver problems. Now, I think I do. The fact that somebody could have checked that and hadn't checked it is slightly worrying. [FG2-P11_53:29]*

> *There is this myth out there amongst providers that somehow psycho-spiritual treatments are just automatically safer. This can't be further from the truth. Yeah, but I hear it from people all the time that want to contact me to support their psycho-spiritual retreat or whatever. And I'm like, I don't feel comfortable doing that one. ... And they will be like, well, we only treat psycho-spiritual people and then I'll go to their website and they're talking all about addiction on their website. And then I asked them, do you test everyone? Because how do you know you're only treating psycho-spiritual people? You know, there's a lot of covert detox attempts that happen and then, you know, that's all contributing to the unsafe part of this. [DS3-I8_01:08:32]*

As for providers and facilitators, the results of our survey indicate that they have an important role to play in the safe provision of iboga/ine, particularly since they are entrusted by participants with their health and their lives. As the above illustrates, adequate screening is far from the current reality. Risk management and benefit promotion can be effectively managed by treatment providers if they have adequate training, protocols, screening tools, and are dedicated to safe practices.

Pre-care and post-care support

Best practices encompass much more than the protocols applied for the administration of iboga/ine and the experience itself. Survey participants, when asked what elements of their experience could have been improved, repeatedly referred to pre- and post-care support. These services may consist of several elements, namely, establishment of a therapeutic alliance, assessment of physical and psychological health, advice and guidance regarding diet and lifestyle preparation, nutritional support to ensure best outcome, education about harm reduction theory and practices, advice about switching or titrating substances or other moderation techniques, assistance with ongoing therapeutic support, referral to aftercare therapists or centers, continued communication and monitoring over time, links to engagement with the ibogaine community and advocacy work, and assistance with re-entry to prior environment.

Two thirds of respondents (65%) have either always, or most of the time, received some type of pre-treatment preparation support

Most often, this took the form of guidance and explanations on how to prepare. Figure 22 shows that the other third never (22%) or only occasionally (13%) received this support. In an ideal situation, those receiving treatment would be provided with individualized information based on their specific needs.

Figure 22. Participation in preparation sessions before treatment (n=42)

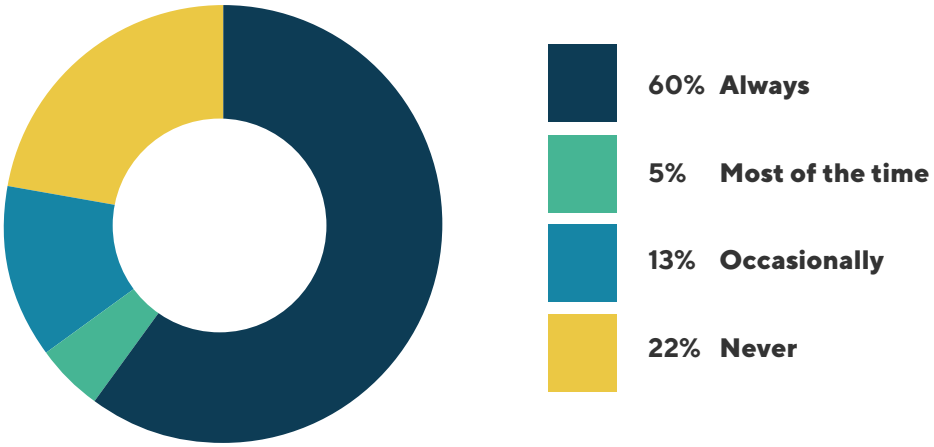
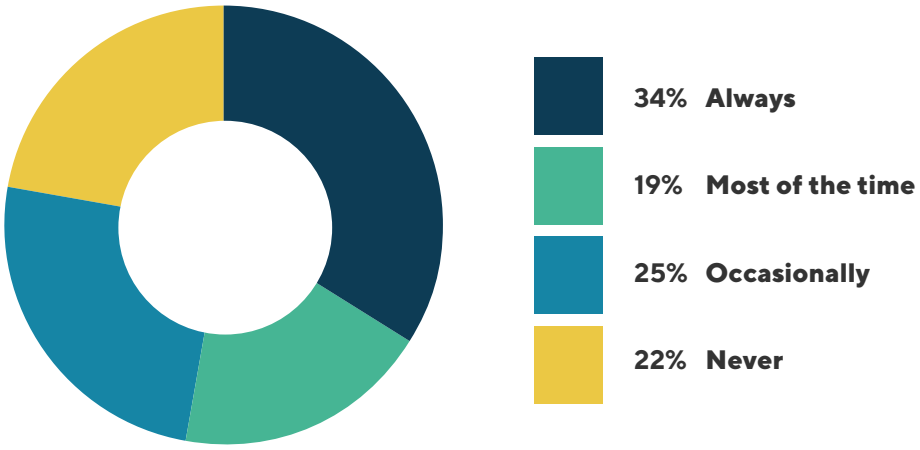


Figure 23. Guidance/support with pyschospiritual dimension was offered (n=42)



About half of respondents who attended treatment (53%) always, or in most cases, received some guidance or support with the psycho-spiritual dimension of the experience

This means that in many of the cases where support was provided, it addressed technical or physical issues rather than offering guidance on how to prepare psycho-spiritually (see Figure 23).

The experience of taking iboga/ine, according to those we interviewed, can be highly transformative and is generally described as very positive, which does not mean that it is easy

The experience may be rather mild or profoundly intense depending on the dose ingested and can vary depending on personal and contextual variables. At times, an individual may gain insights during the experience that they are not able to understand or integrate into their lives, which can generate unnecessary suffering. According to interviewees:

- The experience is long and challenging even for people who have experience with psychedelics. For some, it is a life-changing experience.
- The lack of sleep during the experience can be difficult.
- Coming down after the experience can be difficult.

> *The first one [treatment] I was in… I didn't know what to expect. Then, being in it and knowing that I was going to be in that state of, like, working on the very tip of nauseous and having to cope with that. And I was just in this hell realm of which I encounter in other medicine situations, but like I just really… I felt like I don't know how I can possibly cope. [FG2-P11_28:58]*

Over half of respondents never (28%) or only occasionally (25%) participated in integration sessions following treatment

In recent years, integration has become increasingly recognized as an important element in maximizing the benefits of a therapeutic experience with psychoactive plants, particularly iboga/ine (see Figure 24).

Approximately two thirds of respondents never (47%) or only occasionally (16%) received follow-up and psychological support after the experience (see Figure 25). The number of people who are not provided aftercare is somewhat alarming, particularly considering the large number of treatments for problematic substance use that are conducted, for which aftercare is essent if the best possible outcome is to be achieved.

> *I think that's important, and from what I hear on the circuit in terms of psycho-spiritual development that there is really hardly any aftercare to speak of. So I think that definitely needs to be a better plan. I feel to not leave people alone with an experience that so utterly turns you inside out. I think that, for I know for me, it was the most horrific 36 hours of my life. I was in very good hands. But if I had that somewhere where I wouldn't have been looked after as well… It would have shocked me to a great degree. [FG1-P1_49:38]*

Figure 24. Participation in integration sessions after the treatment (n=42)

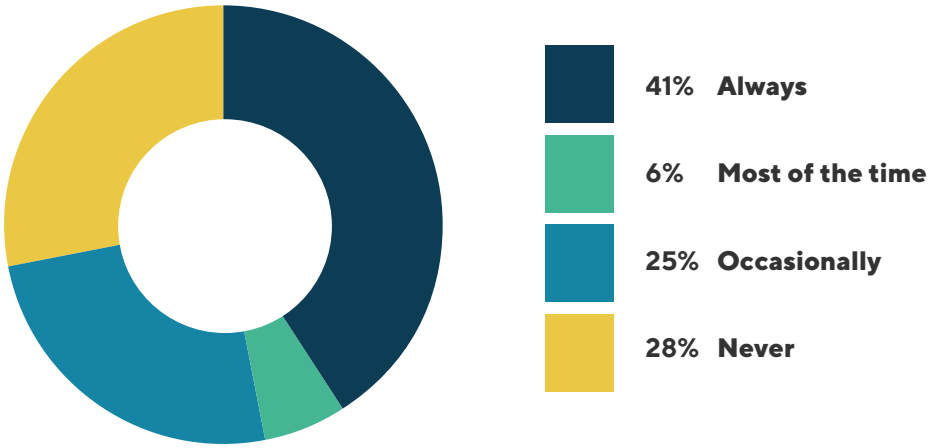
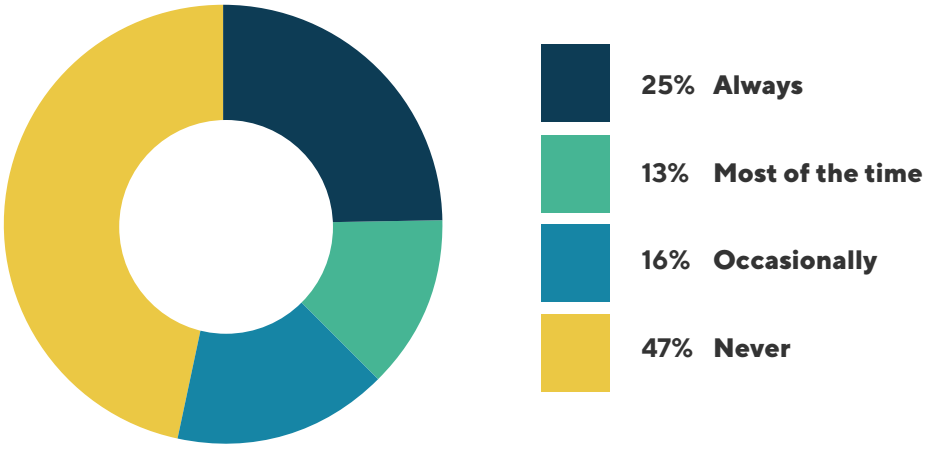


Figure 25. Psychological and follow up support (n=42)

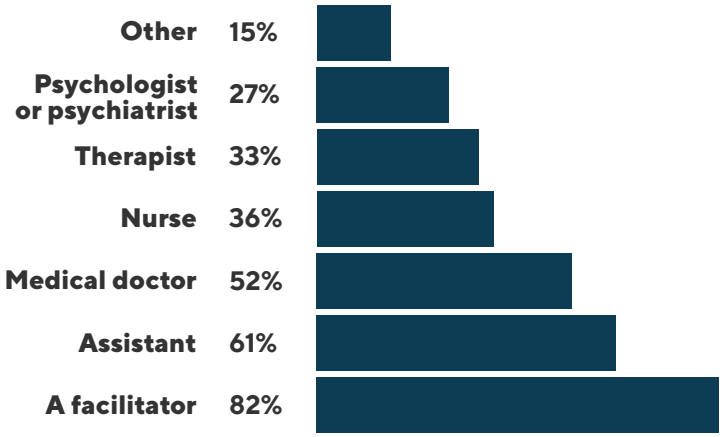


Professional staff at treatment centers

The presence of peers as part of professional teams is a component of the treatments that was highly valued by the interviewees. In the current context, the majority of people who provide treatments for drug detoxification are individuals who have previously undergone an ibogaine experience and then become providers.

Figure 26. Professional staff present during the therapeutic process (n=43)

(multi-response)



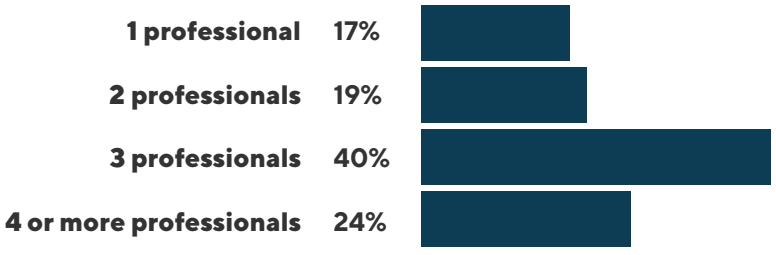
Eighty-two percent of the treatments were led by a peer facilitator

The other eighteen percent of treatments where there is no facilitator were primarily led by a medical doctor or by a therapist (see Figure 26). In some cases, they provide the sessions alone or may be accompanied by a nurse, an assistant, or both.

Two thirds of the sample had access to three or more professional staff present during the session

The most common combination is the therapeutic triad formed by facilitator and assistant plus medical doctor. In the majority of cases, when nurses, therapists, psychologists, or psychiatrists are included, it is because they are part of larger teams in which the aforementioned therapeutic triad is also involved. However, there are several exceptions to this model (see Figure 27). There are combinations in which the facilitator does not have an assistant, or where there is no therapist, or where there is no doctor but a nurse instead, or where one of the others illustrated in Figure 27 is present.

Figure 27. Number of professional staff present during the treatment (n=43)



One third of the people surveyed have been supported by a single person (17%), who in some cases relies on additional on-call support (19%). The majority of individuals who carry out sessions alone are, according to our sample, facilitators, medical doctors, or therapists. When two people work together the pair usually is comprised of a facilitator and an assistant, although another common combination is also that of a facilitator with a medical doctor.

Interviewees indicated that there is a strong need for professional teams who have extensive medical and psychological training

Although the incorporation of peers in treatment teams is highly valued, personal experience with iboga/ine treatment is not, in itself, seen as adequate training for handling the intrinsic risks of working with iboga/ine.

> *I think what can be improved is... if there were more trained therapists in the actual process. While I really appreciate a lot of the facilitators on the hard work they have done, I found that perhaps a lot of the facilitators have not done enough of their own work. And so the conversations that were taking place were very... actually detrimental rather than improving. So I had to go to different places and make sure that I wouldn't get angry or upset, because that's taking away from the iboga experience. [FG1-P6_45:31]*

Interviewees provided an overview of training needs for facilitators and treatment providers, and we then asked survey respondents to rank them, indicating levels of priority:

Table 4. Training areas addressed by treatment providers

1. Risk management	Psychological and medical risks and minimum safety standards.
2. Working with spiritual emergencies	Psychotherapeutic training, psychedelic therapy training.
3. Context of care	Informed consent, medical supervision, set and setting, adjunct therapies.
4. Inclusion/Exclusion criteria	Screening and monitoring, cardiac risk factors, drug interactions.
5. Treatment and general considerations, by substance	Opioids, benzodiazepines, stimulants, antidepressants, steroids.
6. Dosing	Method of administrations, flood doses, microdoses.
7. Interventions	Basic treatment interventions, acute/emergency intervention, reporting, termination of treatment.
8. Post-care integration	General information.
9. Iboga's cultural origins	General information.
10. Sourcing	Quality and sustainability.

The impact of being underground: community trust

Commitment and passion are two characteristics present within the community of treatment providers

Many of of those deeply involved have had personal experience with problematic substance use and overcome them with iboga/ine. The experience not only led them away from their drug dependencies but also provided them with a new purpose and way of life—that of helping others. Those who have been working in this area for many years also appear very dedicated to the community and to the elders who paved the way.

Beyond their experiences with iboga/ine, community members are also bonded by a commitment to fight for dignity for people who use drugs. Stigma towards people who use drugs impacts their ability to access health and social services, as well as relationships with family and friends. The lack of stigma towards people who use drugs within the iboga/ine community creates a therapeutic space where individuals can seek help without encountering discrimination.

> *I think this plant inspires a lot of passion, obviously as you can probably see, in people. You know, I think that like in a way I've never had a choice but to devote a lot of my life to working with this medicine. It's always felt like it's something sort of out of my power. And I might sound sort of mystical but... But yeah, I believe that like when people are really touched and changed by this medicine, that people really want to continue to work with it and give it to other people, which is probably why a lot of these sort of unsafe practices that I was talking about exist, because people... you know, it's not coming from a malicious place, it's coming from a place of, like, they were so changed and wanted to give it to[this is imcomplete other people. [EI2_24:08]*

> *There's so much shame and stigma attached to this population... It's like swimming upstream with combat boots, you know. [...] But we decided many years ago that we wanted it to be dignified, because I have stood in line at a methadone clinic and, you know, we have been marginalized so poorly when being admitted into the hospital. And because drug histories had that effect on how we were treated and you know it's really, really... So why are we drawn to it? Because we've been exposed, we've experienced it. So a lot of people are people who've gone through this, because no one else has stood up for us. It's always been these other so-called experts. [EI1_48:53]*

A sense of community is often engendered, in which boundaries between providers and patients become blurred

The fact that providers were once patients generates empathy and a type of compassion that patients rarely find in professional teams that do not have this lived experience.

> *One thing that I see... that I found around ibogaine, and that I saw that a lot of other people found around ibogaine was community. And I think that [was happening] because there was very low barriers, because there wasn't professional boundaries in a lot of places, or at least like conventional professional boundaries, like most of the time the person doing the treatment wasn't a professional psychiatrist, [although] sometimes they were. [...] Because there was not always these psychiatrists who were in power inside of psychiatric institutions, people that went to the treatment... It was much easier for them to become part of the community afterwards and then be around and be able to serve in some way. [EI6_32:15]*

Howard Lotsof played a cohesive leadership role in the community

Howard Lotsof's legacy has left an impact on the early generations of the iboga/ine movement. He was deeply respected and admired in the community. According to the people interviewed, Lotsof was a loving, paternal, and ethical figure in a community that tried to overcome its own fragility, formed by people who had suffered a lot and found a movement to restore their dignity, a community to belong to. When Lotsof died, this movement lost its torch bearer and peacemaker.

> *When Howard died a big gap was left. A huge, gigantic gap was left in this movement, and it was one of leadership, one of compassion, of deep understanding of the nature of addiction, personally and through friends of his who had come and gone. [EI1_54:12]*

What began as a feeling of community has progressively developed into a culture of distrust that has grown over time

According to the people interviewed, in its beginnings the community gathered around a few dozen people (and their clinics), especially in places not far from the US, such as Mexico or Costa Rica. In a deregulated context, in which no scientific research had been conducted nor therapeutic protocols established, people worked to create and improve their own protocols via trial and error, often with fatalities among their clients. Over time, some clinics were no longer willing to share their protocols with newcomers.

> *There was a point where... we had a sweet spot point, where we were essentially focused on one goal, and that was to create information and communication amongst other providers. And then... it kind of got broken down. [DS4-I17_41:22]*

Some of those interviewed lament that those who suffer most from distrust in the community are the people seeking treatment. Although there are no clear data, reports of deaths in the context of ibogaine treatments are still common. Although research and the practical creation of protocols and safety standards began more than 20 years ago, there are still clinics that basically start from scratch. This situation does not benefit anyone, and there is a great desire among many to establish a code of ethics and to provide training.

> *There's, like, a major culture of fear and secrecy, of people stealing each other's secrets. And it's like really hilarious to me because it's like, you know, don't we all benefit if we can do this safer? Because like the more deaths that we have, you know, it's more strikes against the movement as a whole. So wouldn't it be better if we could, for everybody, if we could make this safer for each other or better? And, you know, improve treatments in any way and share information and collaboration more freely. And that's really a problem. [EI2_38:55]*

> *In the way I look at it is if we, as the psychedelic community, can't get along with each other, there's no hope for the rest of the world. We are the ones with the tools, you know, we're the ones with the insight of these medicines. We're not even looking for a win win situation. We're looking for one giant win for everyone. [DS4-I15_47:55]*

Policy, regulation, access, and availability

Toward a regulatory model

Legalization and accessibility to iboga/ine for those who need it or wish to consciously take it under safe and sustainable conditions is the ideal future expressed by a majority (70%) of respondents

The path toward legalization and regulation of iboga/ine is defined as the ability to legally produce, distribute, and sell it in a controlled way, ensuring that it is available to those people who could benefit from it. Respondents indicated that access should not be limited to therapeutic use; it should also be accessible to those seeking a psycho-spiritual experience, provided that safety measures are in place to protect their health and wellbeing.

> *Medicine made available to everyone who needs it. It would be spectacular. That has been the goal since the very beginning... And the world is changing. [I9_01:27]*

The current unregulated context is characterized as being underground, a medical sub-culture,[77] or as this report acknowledges, as a spiritual subculture. With regard to the clinical underground, the lack of regulation paired with the stigma associated with illicit drug use has led to a what might be called an *anarcho-capitalist model*.

> *It's how the community has been operating. It's a lot of small businesses operating in an unregulated marketplace. So a lot of the interventions, or the lot of the solutions that we were coming up with as a... as a community organization, were right out of the playbook of anarcho-capitalism, like focusing on patient advocacy and this this kind of thing, and this sense of liberty, and cognitive liberty, and harm reduction were also very important. They're running small businesses. A lot of them are expatriates from the United States that were there because, for whatever reason, didn't fit culturally or didn't agree politically with the United States and they were operating unlicensed private enterprises in Mexico. [EI6_35:43]*

Unregulated clinics and retreat centers are the livelihood of many; therefore, as the context for iboga/ine service provision shifts, there will be a need for these centers to evolve.

There are three major concerns that arise from unregulated ibogaine practices.

According to the interviewees, there are certain major problematic issues that exist within this underground and unregulated medical network.

At one point, the creation of a certification system was proposed for clinics, but the process did not get the traction needed. Over the years, those who participate in ibogaine community discussion forums have sought solutions for addressing these problems and promoting best practices within clinical settings. Certification has come up as a possible way forward,

77 Alper, Lotsof and Kaplan, 2008.

yet it is one with an uncertain path given the lack of a certification body and the international nature of service provision. In the absence of a certification program, there is potential for clinics to voluntarily adhere to basic safety protocols and, while efforts have been made, only minor progress has been achieved.

> *That was the notion for GITA [The Global Ibogaine Therapy Alliance] also. That, you know, people have at minimum, this, this, this and this, and then they can say this has been a GITA approved organization or something. [EI1_43:18]*

Table 5. Major problems arising from an unregulated model

Sustainability	Safety	Availability
Dramatic exploitation of the plant in Gabon, including poaching and overharvesting. Corruption and black market growth. Adulteration of the product. Fatalities reported in Gabon and elsewhere.	Fatalities are not reliably reported or documented. Lack of universal and quality pre- and post-care or integration services. Lack of screening and safety measures.	Elitism: Only the wealthy can access treatments. Lack of availability to those who need it. Decreasing availability of iboga for traditional Bwiti practitioners.

Demands for regulation are growing stronger within the community

Some interviewees had strong opinions on the need for standardized monitoring measures.

> *I think that it's also a culture of a community of kind of like [...] cowboys, that want to like branch out, and do their own thing, and not comply with like medical standards, which I get because I'm kind of the same way. Like I hate hospitals. I hate protocols. [...] I think that's kind of why I fit into this wacky community. But when you're dealing with people's lives, you know, I think it's really important to let that go. You know, you don't have to be an innovator. It's not about you! It's not about you being this creative doser, or like with your protocols and your methods. It's more about how do we keep this person alive and safe, and reduce the awful symptoms that can come with taking ibogaine. [EI2_42:47]*

Legal situation of iboga/ine in the world

Currently, in most countries iboga and ibogaine are not scheduled substances

However, the lack of regulation does not necessarily imply that ibogaine can be considered to be a legal substance. Furthermore, even when there is no legal framework that properly clarifies its legal status, administering a substance to people without a license may lead to criminal charges or administrative penalties according to domestic legal frameworks in a given country. There are, though, some countries with specific pieces of legislation on ibogaine:

- There are 10 countries where ibogaine is completely illegal–the US and 9 European countries, namely: Belgium, Denmark, France, Hungary, Ireland, Italy, Norway, Switzerland, and Sweden.
- There are three countries where ibogaine is legal either as a prescription pharmaceutical, through "compassionate use" or extended access: New Zealand (prescription only medicine),[78] South Africa (Schedule 6 and can only be prescribed by a medical practitioner),[79] and only in the State of São Paulo (Brazil) iboga and ibogaine can be administered under medical and clinical supervision.[80]
- In some countries were there is no regulatory framework, there are a variety of centers operating. For example, The Netherlands (where after some recent fatalities, it is no longer permitted to offer iboga/ine treatments); Mexico (where regardless of a lack of regulation, there are numerous centers operating); and the UK, where it is not classified under the Misuse of Drugs Act or the Misuse of Drugs Regulation, and falls under the Psychoactive Substance Act, so it is illegal to produce or distribute, but perfectly legal to possess.[81]
- The legal situation of iboga/ine in Gabon shifted in early 2019, with regards to exportation. In this country, its use is recognized as cultural patrimony, and a new law forbids any export from public plantations.[82]

The majority of participants (84%) stated that they have never experienced trouble with the authorities because of their iboga/ine practices (see Figure 28). Of those who said that they had experienced difficulties or responded that they would "prefer not to say," two thirds of them were treatment providers based at clinics, around one third were individuals who were purchasing for self-administration, and one individual identified as a researcher.

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78 New Zealand Misuse of Drugs Act 1975, 2018.

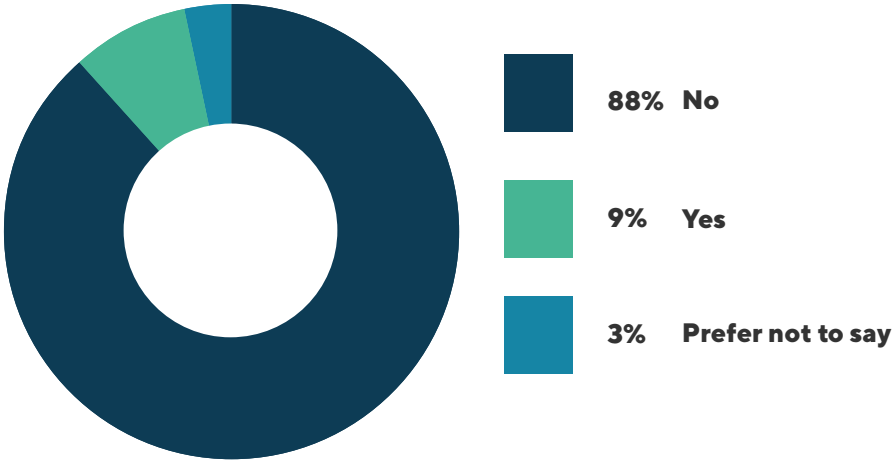
79 South Africa Health Department. Medicines and Related Substances Act, 1965. 2017.

80 Diario Oficial Poder Executivo, Seçao I. São Paulo, 126(8). 14 de janeiro de 2016.

81 In addition to those mentioned, there are also some other countries, such as Guatemala, Antigua and Costa Rica where active intervention policies against the administration or the use of iboga/ine are not being developed, and therefore it might seem that this substance is legal in these countries. However, we have not found specific legislation that grants legal status in any other country beyond those mentioned above. It should therefore be clear that although a substance is not prohibited, nor is it persecuted, and even if there are centers that administer it openly in several specific countries, it does not necessarily mean that it is legally and officially allowed. Thus, as with any other non-controlled substance, in the case of iboga/ine there will be no public intervention by the health authorities that verify standards of quality, distribution, taxation, official certification of clinics of the secretariat of health , license numbers, health inspections, security, permits, etc.

82 See Section "Protecting iboga and diversifying the supply" on page 59, for further information.

Figure 28. Trouble with local authorities because of iboga/ine (at least once) (n=143)



Respondents identified three primary issues related to the slow progress towards developing legal and policy frameworks.

Reported and unreported fatalities

Iboga/ine's reputation is characterized by its potential to cause fatalities due to various factors, such as preexisting medical conditions (particularly cardiovascular disease, pulmonary thromboembolism), drug use during treatment, seizures associated with withdrawal from alcohol and benzodiazepines, and the uninformed use of dried *Tabernanthe iboga* root bark in excess.[83] When fatalities are reported in the media, coverage is often sensationalistic. Even well-known leaders in the psychedelic community have kept their distance from iboga/ine until recently. This link to "risk" has meant that the level of understanding and education needed for policy makers is significant, and progress has been slow.

Limited research

Creating evidenced-based policy requires evidence. Until recently, the doors of research institutions were closed to psychedelics, and the amount of funding required, as well as bureaucratic processes necessary to work with these substances, has presented a great barrier for researchers. Trials with MDMA and psilocybin are paving the way for psychedelic research, and the current opioid crisis has created some openings for research on ibogaine for treating addiction. In this regard, there are plans to develop human trials with 18-MC that could open the door to eventually work with this alternative alkaloid.

83 Alper, Stajic and Gill, 2012.

The war on drugs has led to increased stigma against people who use drugs and all psychoactive substances

Psychedelics in general suffer from stigma within the medical establishment and governments are generally challenged to create sensible policy around all drugs. Ibogaine is subjected to a double stigma, first because it is framed as a "drug" rather than as a medicine or sacrament, and second because it has potential for helping people who use drugs, a demographic still treated with disdain and as criminal by many societies.

> *The stigma of psychedelics is the main issue probably why they don't use it all the all over the world. [FG1-P2_18:36]*

Growing interest in global regulation

The current context provides an opportunity for novel approaches

In the US and Canada, the expansion of the ibogaine subculture coincides with a substantial increase in the public health impact of opioid use disorders[84] and a toxic drug supply. According to the US Centers for Disease Control and Prevention, "since 1999, the number of overdose deaths involving opioids (including prescription opioid pain relievers and heroin) nearly quadrupled. From 2000 to 2014 nearly half a million people died from drug overdoses. Seventy-eight Americans die every day from an opioid overdose."[85] The problem has repeatedly been described as an "epidemic," and a drug abuse and treatment bill was recently signed into US law after passing through the House and Senate.[86] Simultaneously, in the EU, and according to the 2016 European Drug Report,[87] European authorities are seeing an increasingly complex relationship between the use of heroin and synthetic opioids, accompanied by a worrying increase in overall estimates of opioid-related deaths.[88] Canada is facing a similar crisis, with staggering numbers of overdose deaths devastating communities across the country.

> *This is a specific moment in time due to the opioid epidemic. And the numbers keep getting worse and worse and worse, both in the United States and Canada. If you look at Canada, they just opened heroin maintenance clinics. I mean, that works, it's harm reduction, their government has essentially given up, please take this free heroin and stop dying from Fentanyl. I mean, the governments are as receptive right now as they have ever been in all of history. [DS2-I7_56:44]*

Furthermorethe so-called "opioid crisis" has dramatically affected middle and upper class populations as well as poorer communities, and their families and communities are pressuring governments for a change in the current regulation. The crisis is so significant that it presents an opportunity for regulation among governments, particularly in the US and Canada,

84 Compton and Volkow, 2006.
85 Centers for Disease Control and Prevention, 2016.
86 Spangler, 2016.
87 EMCDDA, 2016.
88 Wilkins et al., 2017.

where despite harm reduction measures and increased availability of treatments, overdose deaths continue. Drastic changes to the drug laws are being called for as well as innovative treatment options, such as heroin-assisted therapy or ibogaine. Also, as one informant noted, for African American people struggling with addictions, iboga may be a fitting and culturally appropriate avenue for treatments in these communities, who are not as well represented generally within traditional psychedelic research and spaces.

Progress is slow, however there were two significant changes recently in the US, where in May 2019 citizens of Denver citizes voted to decriminalize possession of psilocybin mushrooms and in Oakland where in June 2019 the city council voted on a resolution to "decriminalize nature," resolving that city funds will not be used to enforce laws imposing criminal penalties for entheogenic plants, including iboga. These ordinances do not provide for the regulation of clinical practices with iboga, but they do amount to a crack in the wall of drug control.

Some nations are leading the regulatory process: Brazil, South Africa, New Zealand, and Canada

For many, harm reduction may be their motivation—the recognition that regulation is needed in order to protect public health. In July 2017 the Canadian government added ibogaine to the Prescription Drug List, which means that it will be able to be used only once it has gone through Phase 3 trials unless compassionate use permissions are obtained because of the current overdose crisis.

Investor start-ups are showing interest in ibogaine

The pharmaceutical industry is considered partly responsible for the current opioid crisis in North America among some people within the community. Conversely, the potential for profit may provide the impetus for progress.

> *There's a lot of motivation and government officials and people and different agencies have been very responsive, which is brand new, because they have... Their agenda, of course, is commercialization. They're fine with having created the opioid epidemic and made a lot of money off it. They're also fine with helping solve it if they make a lot of money off it. [DS2-I7_55:55]*

A medical model for regulation is on the horizon

Medicalization is considered by some as the only way to ensure safe treatments. Moving in this direction will mean significant changes to the current medical subculture. It may also mean that treatments become more affordable and accessible for patients.

However, respondents noted several concerns with the medical model:

- **The profit motive of the pharmaceutical industry**

  There is a strong demand to include a strong ethical framework within a medically regulated model. Ideally, medicalization should lead to a situation in which the product is accessible to those who need it and where all the requirements for its ecological sustainability are also met.
- **A medical model may create barriers**

  Access for people seeking to use iboga/ine for non-medical purposes might be blocked. While it seems that some people seedking addiction treatments will welcome highly medicalized care, respondents expressed concern that sterile, medical environments will strip iboga/ine of its psycho-spiritual elements and that a medical model will not allow for psycho-spiritual experiences outside of clinical contexts.

» **The future of the community-led movement is uncertain**

Social movements are built around struggle and there are questions about how the community will evolve during this time of change. There are concerns particularly around ensuring that people with the personal lived experience of healing with iboga/ine have a place in the new model and that they be able to continue to inform the development of stigma-free treatment environments.

Interest in discovering the key to overriding opioid withdrawal

As noted, with the opioid crisis and shifting politics around psychedelics, there is growing research interest in iboga/ine. Ibogaine is being increasingly used in the treatment of problematic drug use, especially for opioid withdrawal management, due to its unique ability to rapidly reduce the symptoms of opioid withdrawal and craving for multiple substances. However, more research (including randomized controlled trials) is needed to assess ibogaine's effectiveness in promoting both short and longterm recovery.[89] Despite the beneficial results suggested by animal studies and case studies, there is a lack of clinical trials to assess the safety and efficacy of ibogaine. Moreover, the majority of reports described cases of heroin-dependent individuals, with and without concomitant use of methadone, using high doses of ibogaine.[90] While there is much that still needs to be supported by evidence, we nonetheless know that iboga/ine works on a practical and clinical level. This leaves a wide opening for pioneer researchers to shine in a very promising field still open to exploration.

> *I am a psychopharmacologist and I think that ibogaine presents one of the most interesting psychopharmacological paradigms to occur in my generation. So I'm working on it. [EI3_1:15]*

89 Greene, 2016.
90 Wilkins et al., 2017.

A closing note

Next steps

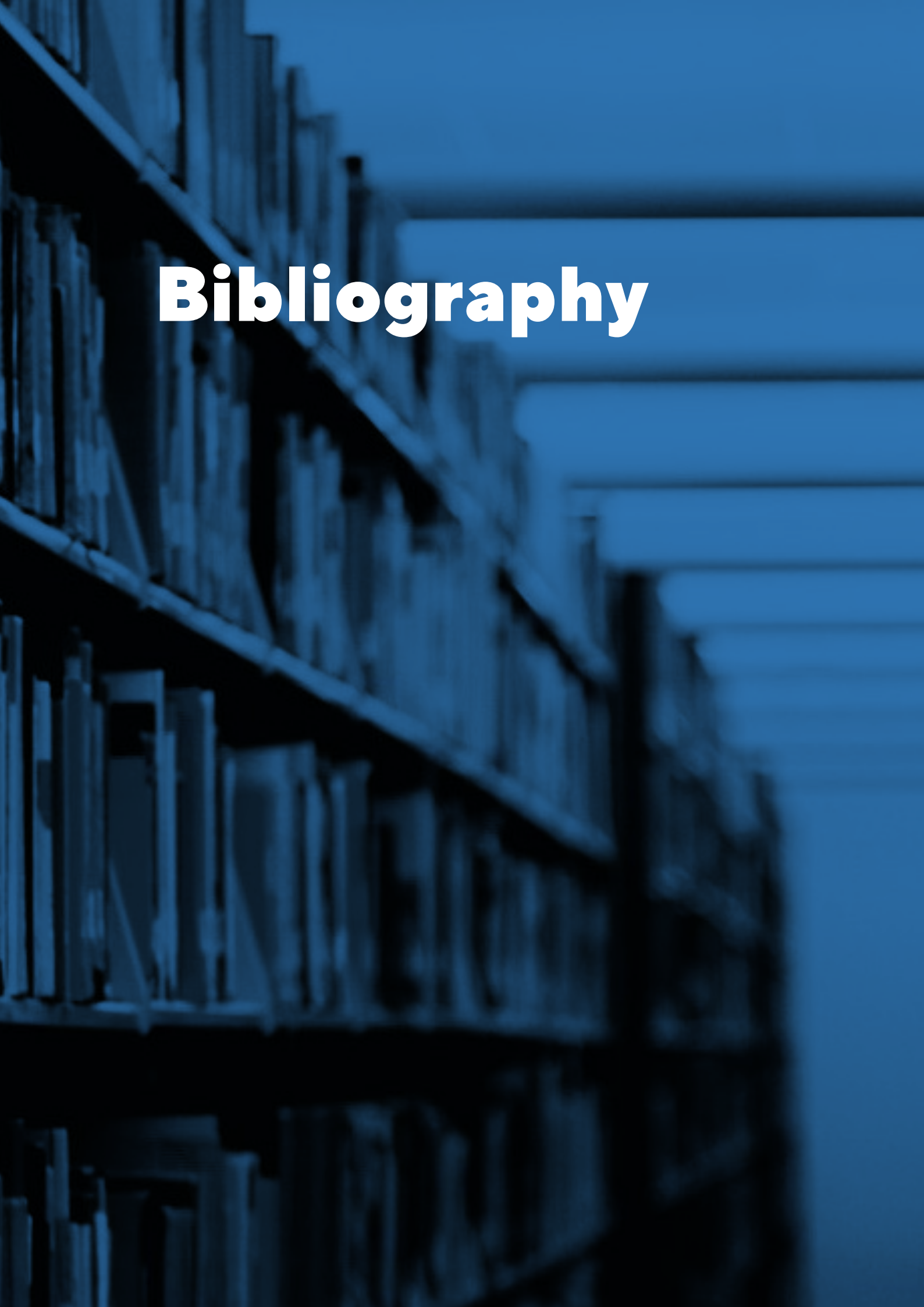
Bringing these findings back to the community completes Phase 1 of the *Iboga/ine Community Engagement Initiative*. This phase was carried out in 2018 and 2019 thanks to the collaboration of individuals and communities from over 34 countries. Phase 2, which has just begun and will be completed in early 2020, focuses on capturing the perspectives and visions of stakeholders in Gabon, the source country for almost all the iboga that is consumed worldwide and the homeland of iboga spiritual practices. Because of digital and linguistic divides, these affected communities are not always able to participate in global debates and discussions. Following Phase 2 we will be able to provide additional information on key issues such as sustainability, culture, and how to ensure that as global demand for iboga/ine increases, harm to local cultures and ecosystems is minimized and benefits flow back to Central Africa.

Working together

As noted earlier, the aspirations and perspectives in this report came from hundreds of people, and for this we are grateful. The findings presented here do not belong to ICEERS but rather to the community. We encourage all those interested in iboga/ine to engage with this report—discussing the findings and critiquing the aspirations, improving, building on, and expanding them. Change is made possible through relationships—strong relationships and community ties are essential for overcoming all obstacles. There are many strengths that we share collectively, and it is our hope that these can be leveraged to care for the future of this cultural treasure.

An ecosystem approach

We invite the community come together to commit to taking an ecosystems approach to creating a better future, an approach that recognizes the interaction between multiple elements within the ecosystem. An ecosystems-based approach begins with the plant itself, considering its future and all that it needs to countinue to grow in the wild, as well as the traditional peoples and cultures that have safeguarded and stewarded rituals, knowledge, and ceremonial practices for generations. As we move forward, let us consider the needs of the earth's inhabitants—who are seeking spiritual growth and healing from addiction and long to feel connected—and those who develop close relationships with plants so that they can accompany individuals on their journeys. And finally, as we move forward, let us consider the needs of Mother Earth, our sacred home within this great universe. *We are all together.*



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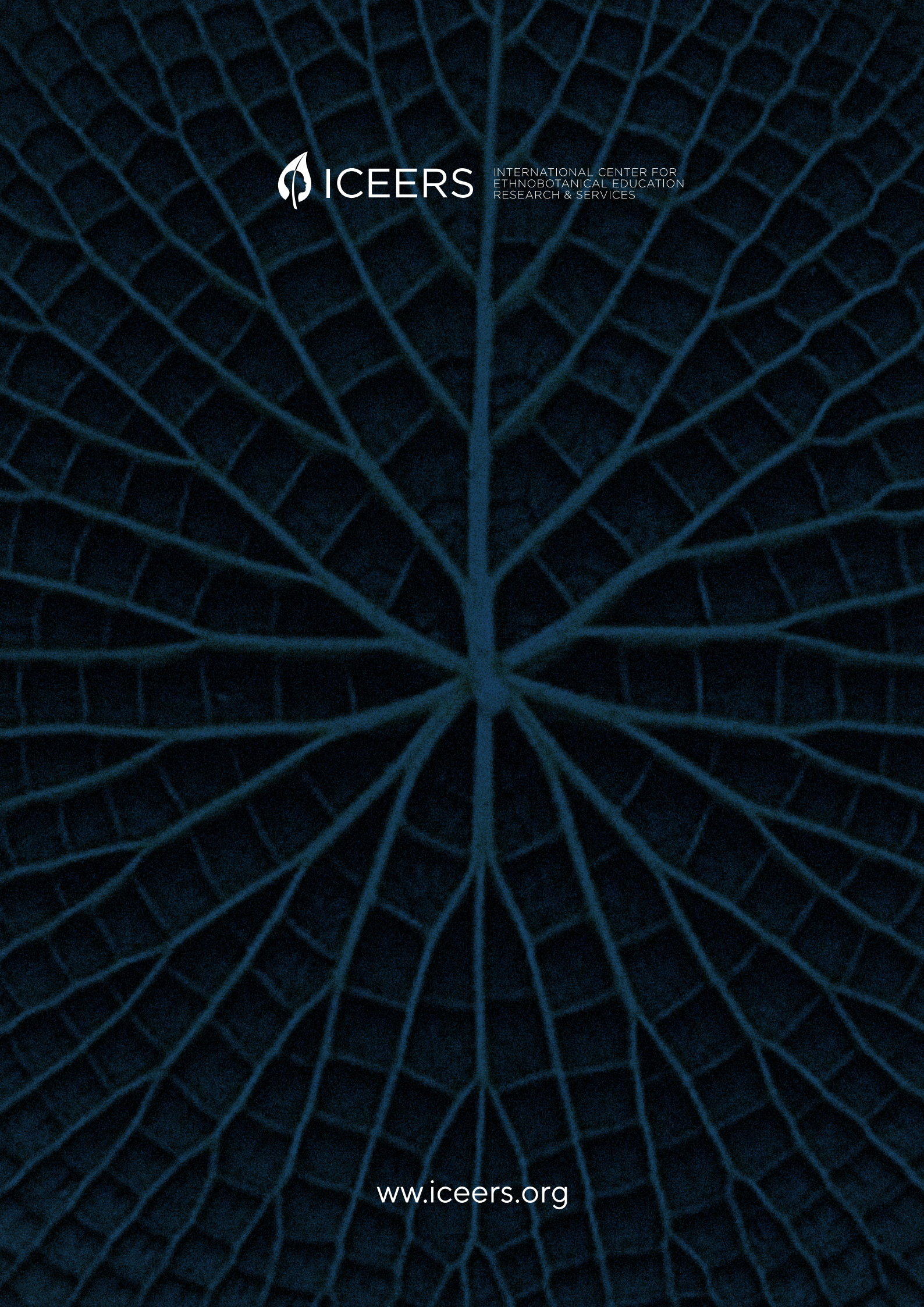
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