

Communalistic use of psychoactive plants as a bridge between traditional healing practices and Western medicine: A new path for the Global Mental Health movement

Genís Ona^{1,2}, Ali Berrada³ and José Carlos Bouso^{1,2} 

Abstract

The Global Mental Health (GMH) movement aims to provide urgently needed treatment to those with mental illness, especially in low- and middle-income countries. Due to the complexity of providing mental health services to people from various cultures, there is much debate among GMH advocates regarding the best way to proceed. While biomedical interventions offer some degree of help, complementary approaches should focus on the social/community aspects. Many cultures conduct traditional rituals involving the communal use of psychoactive plants. We propose that these practices should be respected, protected, and promoted as valuable tools with regard to mental health care at the community level. The traditional use of psychoactive plants promotes community engagement and participation, and they are relatively affordable. Furthermore, the worldviews and meaning-making systems of local population are respected. The medical systems surrounding the use of psychoactive plants can be explained in biomedical terms, and many recently published clinical trials have demonstrated their therapeutic potential. Psychoactive plants and associated rituals offer potential benefits as complementary aspects of mental health services. They should be considered as such by international practitioners and advocates of the GMH movement.

Keywords

Global Mental Health, ayahuasca, community, mental health, psychoactive drugs

We had a lot of trouble with Western mental health workers who came here immediately after the genocide [...] they came and their practice did not involve being outside in the sun where you begin to feel better, there was no music or drumming to get your blood flowing again, there was no sense that everyone had taken the day off so that the entire community could come together to try to lift you up and bring you back to joy, there was no acknowledgement of the depression as something invasive and external that could actually be cast out again. Instead they would take people one at a time into these dingy little rooms and have them sit around for an hour or so and talk about bad things that had happened to them. We had to ask them to leave.

Rwanda inhabitant (Kaklauskas & Nettles, 2019, p. #)

Introduction

The quotation above cited by Kaklauskas and Nettles (2019) has been used in various forums as expressive of culturally inappropriate mental health interventions in

¹ICEERS – International Center for Ethnobotanical Education, Research, and Service, Barcelona, Spain

²Department of Anthropology, Philosophy and Social Work, Medical Anthropology Research Center (MARC), Universitat Rovira i Virgili, Tarragona, Spain

³Unidad de Medicina Interna, Hospital del Mar, Barcelona, Spain

Corresponding author:

José Carlos Bouso, International Center for Ethnobotanical Education, Research, and Service, C/ Sepúlveda, 65 Bajos 2 – 08015, Barcelona, Spain.
Email: jcbouso@iceers.org

countries of the Global South. While several other authors have raised this concern before (especially in the context of Global Mental Health or the Global Mental Health movement), the aim of this article is to further extend the point of view that takes into consideration cultural context to the traditional use of psychoactive plants. Genuine medical systems have been developed around the practices using psychoactive plants, which are generally carried out in ritual or ceremonial settings. However these practices have often been vilified as a result of social stigma or drug policies, among other reasons. Global Mental Health (GMH) has been defined as a movement, discipline or coalition that engages in collective action in order to provide evidence- and human rights-based treatments for people living with mental health disorders. Such disorders are a major cause of morbidity and mortality (Bloom et al., 2011; Collins et al., 2011; Insel, 2009). It is therefore reasonable to devote considerable efforts to ensuring that people with mental illness receive appropriate treatment. Indeed, since GMH was launched in 2008, 225 institutions and over 15,000 individuals have joined the movement (GMH, 2019).

The GMH movement focuses its actions especially on low- and middle-income countries (LMICs) where the number of people who do not receive the care that they need is particularly high (Demyttenaere et al., 2004; Wang et al., 2007). This situation was named “the treatment gap” by Patel et al. (2010). With the aim of reducing this gap, the World Health Organization (WHO) developed the *Mental Health Gap-Action Programme* (mhGAP-AP) in 2008 (WHO, 2008) and the *Mental Health Gap-Intervention Guide* (mhGAP-IG) in 2010 (WHO, 2010a). The aim of these initiatives was to develop guidelines for non-specialist health workers to address mental disorders when providing routine health care services.

The core of the WHO strategy involves scaling up services and task-shifting procedures. The appropriate services would ideally be selected by identifying evidence-based practices that could be made more widely available in LMICs (Chisholm et al., 2007). However, due to the scarcity of health practitioners, task-shifting (which consists of delegating basic care tasks to local non-specialist health workers) is also promoted for the delivery of mental health treatments. Task-shifting has shown satisfactory results in several studies (Bolton et al., 2007; Dias et al., 2008; Rahman et al., 2008).

Despite the enduring need for the GMH movement, it has been criticized by authors from a variety of disciplines, ranging from medical anthropology (Campbell & Burgess, 2012; Han, 2013; Read et al., 2009; Read, 2012) to psychiatry (Fernando, 2011; Summerfield, 2008, 2012, 2013). The main critique is wary of the predominantly biomedical orientation of the GMH movement and its subsequent medicalization (Clark, 2014). The biomedical model rarely considers social determinants of health, which are crucial to

consider in light of the socioeconomic situations in the majority of LMICs (WHO-CGF, 2014). Additionally, the biomedical model risks disqualifying and ignoring traditional local practices that involve the use of psychoactive plants because there is no available evidence regarding their efficacy or safety in terms of Western research standards. Other controversial claims regarding the GMH movement note the lack of cross-cultural validity of both diagnostic criteria and the concept of mental health, as they were developed in wealthy Western countries (Hinton & Good, 2015; Summerfield, 2012), and thus being another way of colonization (Mills, 2014); as well as the lack of evidence of the efficacy of “evidence-based” practices in LMICs, since most relevant clinical trials were conducted in high-income countries (Baingana et al., 2015; Kieling et al., 2011; Patel & Kim, 2007; Razzouk et al., 2010). In general, many authors demand that a culturally sensitive psychiatry be used in the context of the GMH movement.

We consider the GMH movement to present a great challenge but also as a major opportunity to reduce the high human and material costs of psychological distress on a global scale. Some of the limited number of proposals for improving GMH strategies suggest that people affected by mental illness and experiencing psychological distress engage in local, traditional healing practices (depending on the setting, these include religious rituals, plant medicine, or the induction of trance-like states, among others) (Snodgrass et al., 2017; Sood, 2016). Engaging in traditional medicine practices is reasonable in light of their potential efficacy (Deng & Xu, 2017; Sax, 2014; Snodgrass et al., 2017; Tang et al., 2017; Zheng et al., 2016) and the problems associated with excessive psychiatric interventions, such as the adverse effects associated with psychiatric drugs (Cooper, 2015; Göttsche, 2015; Mulder & Frampton, 2014; Murthy, 2015). However, the WHO’s Mental Health Action Plan 2013–2020 mentions the usefulness of traditional medical systems only marginally, qualifying them as “informal”: “Greater collaboration with ‘informal’ mental health care providers, including families, as well as religious leaders, faith healers, traditional healers, school teachers, police officers and local nongovernmental organizations, is also needed” (WHO, 2013, p. 14). Similarly, the Lancet Commission on Global Mental Health and Sustainable Development’s report dedicates a single sentence to collaboration with traditional healing systems, stating that “global mental health practitioners have shown that integrating understanding of local explanatory models of illness experiences is possible while respecting the complementary role of Western biomedical and local traditional approaches to treatment” (Patel et al., 2018, p. 13).

The aim of this article is to provide a theoretical background for exploring the use of traditional medicine as a possible health care option. Specifically, traditional

practices involving the use of psychoactive plants will be discussed, in accordance with our previously published works (Bouso & Sánchez-Avilés, 2020) and our fieldwork experience. Given the renewed interest within the Global North in psychedelic-assisted psychotherapy and the remarkable advances in the field, this discussion is timely and necessary.

The role of community and traditional medicine in mental health

Community engagement plays a crucial role in mental health, and the traditional use of psychoactive plants can help to enhance it. Increased social inclusion is recognized as a key predisposing factor among individuals with psychological distress in LMICs (Baumgartner & Burns, 2014; Wang et al., 2007). Moreover, community interventions should be given a more central role in harnessing resources and promoting psychological well-being. It has been observed that focusing on actions at the community level, and thus enhancing social cohesion, can have a more positive psychological impact than individualistic approaches (Góngora, 2010; Scholte et al., 2011; Verduin et al., 2014). Similarly, some authors have emphasized this community-oriented approach, noting that certain social characteristics (e.g., a more fluid, less categorical approach to culture, medicine, and politics) of the countries belonging to the Global South might make the approach more effective when addressing mental health issues globally (Di Nicola, 2020). In this vein, White et al., (2017), discussing community-based interventions within GMH, cite the “Recovery Approach” (Anthony, 1993) as an example of how the GMH movement can benefit from approaches focused on promoting connectedness, hope, identity, meaning, and empowerment, rather than simply trying to reduce the severity of psychiatric symptoms. Community-based rehabilitation (WHO, 2010b) and community-based system dynamics (Hovmand, 2014) are among the other methods mentioned in the recent literature concerning community-based interventions in the context of GMH.

When we think about practices that involve the participation of a whole community, and that are therefore commonly viewed as strengthening social bonds, rituals and religious feasts are prime examples. In fact, Durkheim described “collective effervescence” as resulting from situations whereby people gather to engage in spiritual or religious celebrations. Turner’s concept of “communitas” might also be mentioned. Participants in these gatherings tend to feel connected, accepted, and, thus, potentially less stressed and anxious (Durkheim, 2000; Turner, 1982). In addition, it is noteworthy that religious beliefs and practices offer psychological and social benefits (Heim & Schaal, 2014; Vallverdú, 2010; Webb et al.,

2011). Indeed, medicine and religion were not initially separated, and they still converge in the “shamanic complex,” which has been studied as a healing mechanism (Apud & Romaní, 2017; Winkelman, 2010). According to some authors, the figures of the shaman and other traditional healers who use psychoactive plants (e.g., ayahuasca, iboga, and psilocybin mushrooms) in traditional rituals, must be represented within pluralistic medical systems (Apud & Romaní, 2017; Singer & Baer, 2012). These paradigms not only respect local ways of expressing and dealing with distress, but also suggest the need for as many health care alternatives as possible (Apud & Romaní, 2017). In that regard, in its Traditional Medicine Strategy 2014–2023, the WHO called for dynamic policies that reinforce the role of traditional medicines in the maintenance and promotion of health (WHO, 2013). This WHO strategy also emphasizes the need to integrate traditional medicine in public health systems.

Examples of the traditional use of psychoactive plants as a health care strategy

Psychoactive plants have been used for centuries in many cultures, mainly in communal ceremonies (Badham, 1984; Cawte, 1985; Dobkin de Ríos, 1968; Luna, 1986; Shanon, 2002; Sobiecki, 2012; Talin & Sanabria, 2017). The traditional use of ayahuasca, *Tabernanthe iboga*, and peyote (*Lophophora williamsii*) exemplifies how psychoactive plants are used and their involvement in medical systems.

One contemporary example of ayahuasca being used to prevent and/or heal community mental health issues is the case of the members of the UMIYAC (Unión de Médicos Indígenas Yagaceros de Colombia), a coalition of *taitas yagaceros* or shamans of the Putumayo region in Colombia. These *taitas* travel to various regions, conducting what they have termed “*brigadas de salud*” (health brigades). During their travels, they visit villages affected by the armed conflict that the country faced and organize communal ceremonies in which ayahuasca is used. This allows them to prevent and to heal trauma through a communitarian intervention involving local traditional medicine (Caicedo, 2010). Recent findings would support the use of ayahuasca in this context, since it has been observed that it possesses notable antidepressant (Palhano-Fontes et al., 2018) and anxiolytic properties (dos Santos et al., 2007). Furthermore, it has been observed that naïve users experience sustained improvements in mental health and quality of life (Jiménez-Garrido et al., 2020).

In the case of iboga, this psychoactive plant is used by practitioners of Bwiti, the spiritual tradition of the Bantu population of Gabon, in Central Africa (Pope, 1969). Iboga is used in small amounts during spiritual/musical

soirees, which are performed in each village almost every weekend. These soirees involve singing, dancing, playing percussion instruments, externalizing emotions, sharing insights, and creating a very strong concept of brotherhood. The iboga is consumed in large quantities on particular occasions, such as by a neophyte during an initiatory rite. Different effects have been associated with iboga/ibogaine. In small doses it exerts psychostimulant effects, and for that reason it was commercialized in France until 1970 as a neuromuscular stimulant. It was sold in tablets containing 8 mg of ibogaine and was prescribed mainly to individuals presenting fatigue or depression (Goutarel et al., 1993). Recent preclinical studies have found antidepressant effects after a single administration of ibogaine in rats (Rodriguez et al., 2020), as well as potential antiparkinsonian effects (Marton et al., 2019).

Iboga and its active compound, ibogaine, have been used for decades in Western countries to treat drug dependence, mainly in terms of opioids (dos Santos et al., 2017). Although the use of iboga in Western culture differs from traditional contexts (individual medical treatment in the West instead of as part of a communitarian practice in traditional settings), the benefits may be similar in certain ways (e.g., when used to assist with detoxification from drugs of abuse). However, the benefits may be greater in traditional contexts, since it is not only the individual who receives a direct benefit from the substance, but the whole community benefits, as the use of iboga cannot be separated from the whole ritual, which is rich in symbolic elements. Indeed, the traditional use of iboga has been considered a tool for social “binding” (Fernandez & Fernandez, 2001). Through the culturally meaningful symbolic elements contained in the ritual, and the sharing of such practice and the morning-after meal of communion, the traditional use of iboga becomes a way in which social relationships are enhanced (Fernandez & Fernandez, 2001). Thus, in the traditional context, the individual would expect not only the potential benefits of the substance, but also the well-known benefits of being part of a community. Another example of a psychoactive plant that is used in a communal manner as a health care tool is peyote. Currently, the Indigenous people of Mexico belonging to *huicholes*, *tarahumaras*, *coras*, and *tepehuanes* can legally use peyote in traditional rituals. In the United States, members of the Native American Church can also cultivate and use peyote in traditional ceremonies that take place on reservations. Generally, peyote meetings can be organized whenever an individual has a social, spiritual, or health need. The peyote is used communally during an all-night ceremony (Wiedman, 1990), and some neuropsychiatric research has shown that this practice has not involved significant risks (Bergman, 1971; Halpern et al., 2005).

The traditional use of peyote offers a perfect example of how different medical systems can coexist and serve a common purpose. Ethnographic studies have documented

individuals who have attended peyote meetings to treat blindness, hernia, high blood pressure, and congestive heart failure. In all of these cases, the individuals were also treated by physicians or by the U.S. Indian Health Service (Wiedman, 1990). The different medical systems operate independently—there is no exclusive provider of care. At the same time, the use of peyote is considered ineffective in cases of cancer or diabetes, which are considered to be better treated by the *White man* (Wiedman, 1990). Additionally, it has been observed that complex interventions conducted by Native Americans that include peyote ceremonies could be effective in the treatment of alcoholism (Albaugh & Anderson, 1974; Hill, 2013).

In addition to the social benefits that these communal gatherings offer, where individuals not only participate in an important cultural ritual but also gain renewed social support, feeling a sense of identity and social solidarity, there is also a more efficient resource distribution. It is common for all participants of a peyote ritual to have supper together the evening before the ceremony, and they also have dinner together the next afternoon. The remaining food may be taken by elderly people, especially males who live alone, making this one of the few times that they eat home-cooked meals (Wiedman, 1990). This arguably important nutritional supplement can also improve individual and collective health. So, peyote ceremonies can be conceived of as very complex and holistic interventions that include moral values, cultural elements, pharmacological effects, and nutritional improvements, among other aspects. These interventions serve not only as treatments, but they also have a protective effect on mental health.

Bridging the traditional use of psychoactive plants with biomedicine

Considering the high prevalence of and preference for traditional healers in developing countries (Armijos et al., 2014), as well as the shortage of biomedical human resources, and patients’ difficulties with adhering to a prescription for the medication (Teferra et al., 2011), there is an obvious need for mental health care programs to align traditional and spiritual healers with biomedical care.

In contemporary Western cultures, the use of psychoactive plants and subsequent induction of altered states of consciousness is commonly understood as a positive or adaptive practice. Such practices have been carried out over centuries by various cultures, serving as tools of cohesion, medicine, and sacraments, among other uses (Furst, 1976; Harner, 1976). Additionally, the use of these plants offers a link between traditional healing practices and the biomedical model, since the latter can provide valuable insights in order to understand the potential efficacy or safety of these practices, while the former provides clues regarding how to address complex health problems.

Rituals or ceremonies involving psychoactive plants promote community engagement and participation, they are culturally and financially accessible, the worldview and meaning-making systems of local populations are respected, and traditional healers who provide the plants are generally experts in managing social stressors (De Jong, 2001; Frank & Frank, 1991). There is a vast body of literature about the “community engagement” paradigm, which Community Psychology and Community Psychiatry both specifically focus on. These disciplines, partially the legacy of the anti-psychiatry movement, significantly influenced the mental health reforms at the UN-level. These reforms were based on human rights systems, whether involving the use of psychoactive plants or not, and are community-based approaches, since community practices are central in traditional cultures (Waldrum, 2000). The above-mentioned cases of UMIYAC regarding ayahuasca and the communities using peyote and iboga are good examples of the community engagement paradigm, since they seem to work properly within their respective contexts. However, the shift to a community approach is ultimately a political rather than solely a scientific move, since it is only by developing policies that strengthen communities that we can achieve community-level mental health interventions. The expanding use of ayahuasca and other ceremonies involving psychoactive plants that take place in group settings offer an excellent example of how people seek practices that strengthen community bonds, which is expected considering that we are inherently social animals (Wilson & Hölldobler, 2005). Given the complexity of the examples described, it would be risky to delineate general and transposable recommendations for different contexts in an effort to bridge these two different knowledge systems (traditional and biomedical). The first steps that we propose should focus on scaling up the traditional use of psychoactive plants in the communities with a history of use of such substances (e.g., in different Mexican, Andean, and Amazonian regions, among Native Americans in the US, etc.), in order to potentiate their communal health benefits. This would mean working in various areas and from various disciplines, confronting inappropriate drug policies, respecting human rights, and protecting the territory and the environment. Bridging the traditional use of psychoactive plants with Western medicine should be a two-way, decolonizing process. In the framework of a biomedical model that validates the health benefits of practices involving use of psychoactive plants (using different research methods that range from neurobiological inquiries to epidemiological or public health studies), researchers would be gaining traditional knowledge in order to improve current Western mental health treatments. One clear example in this regard is the proposed combination of traditional knowledge regarding psychoactive plants, the psychedelic research field, and the polypharmacology paradigm, a groundbreaking paradigm in pharmacology (Ona & Bouso,

2021; Ona et al., 2020). Polypharmacology refers to the use of drugs that bind to multiple drug targets, as opposed to the classical pharmacology paradigm of “one gene, one drug, one disease,” which involves designing highly selective ligands (Jalencas & Mestres, 2012). From this polypharmacology perspective, traditional medicines based on herbal therapy are gaining legitimacy, since the methods used (involving omics or network biology) are able to mimic the complex interactions of multiple compounds commonly found in natural products (Yuan et al., 2017). This same idea can be applied in the case of traditional medicines that involve psychoactive plants or other natural products, as has been recently proposed (Ona et al., 2020).

Apart from this recent paradigm, the mental health benefits of psychoactive plants have been studied for over 20 years. Their clinical use has been extensively researched (dos Santos et al., 2018), showing therapeutic potential for conditions like depression (Carhart-Harris et al., 2017; Palhano-Fontes et al., 2018), anxiety (Griffiths et al., 2016; Ross et al., 2016), and addiction (Bogenschutz et al., 2015; Johnson et al., 2014). Furthermore, our knowledge of the underlying neurobiological mechanisms at work is certainly growing (Kyzar et al., 2017).

Some specific mechanisms through which psychoactive plants exert therapeutic effects have been proposed, although these mechanisms have yet to be completely described. First, the anthropological literature has largely discussed placebo and other related effects potentially involved in ritualistic settings. In that regard, Apud (2020) pointed out how social contexts decrease the top-down executive control of the brain, depleting cognitive resources through causal opaqueness, stereotyping, formality, redundancy, and/or the presence of a charismatic authority. This process makes the ritual participant more suggestible, and therefore more permeable to collective memories, narratives, and ideas. In relation to that, Dobkin de Rios also suggested that “doctrinal submission” could be involved in health improvements observed after participating in rituals (Dobkin de Rios, 1976).

In pharmacological terms, it was recently reported that *N,N*-dimethyltryptamine (DMT), a compound found in the ayahuasca beverage, promotes neural plasticity via TrkB, 5-HT_{2A} receptors, and the mammalian target of rapamycin (mTOR; Ly et al., 2018). The same study showed that noribogaine, a metabolite of ibogaine, the main psychoactive substance of *Tabernanthe iboga*, promotes neurogenesis. This effect is probably due to an increase in the brain-derived neurotrophic factor (He et al., 2005), which is associated with both neurogenesis and spinogenesis (Cohen-Cory et al., 2010). These findings are highly relevant, since atrophy in the neurons of the prefrontal cortex (PFC) plays a key role in mental and neurological disorders (Autry & Monteggia, 2012; Duman & Aghajanian, 2012; Duman et al., 2016; Qiao et al., 2016), and it can be

counteracted by compounds capable of increasing neural plasticity in the PFC (Castrén & Antila, 2017; Cramer et al., 2011; Kolb & Muhammad, 2014).

Another potential mechanism of action concerns the effects of psychoactive plants on brain connectivity. A decrease in connectivity within the default mode network (DMN) was observed following psilocybin and ayahuasca administration (Carhart-Harris et al., 2012a, 2012b; Palhano-Fontes et al., 2015). This is relevant because increased activity and connectivity within this network has been associated with depression, attention deficit-hyperactivity disorder (ADHD), schizophrenia, and anxiety (Drevets et al., 2008; Gudayol-Ferré et al., 2015; Hamilton et al., 2015). While these effects are found in the DMN, regarding global brain connectivity, psilocybin was found to reduce segregation between different regions, establishing new topological, long-range functional connections (Petri et al., 2014; Roseman et al., 2014). It has been suggested that the disintegration of the DMN and increased global connectivity disrupts the connections responsible for disorders, replacing them with stronger, more functional connections. This ensures the reconnection of networks in a “healthy” manner (Kyzar et al., 2017). Other potential mechanisms include neuroendocrine (Schindler et al., 2018), anti-inflammatory (Flanagan & Nichols, 2018), and glutamatergic actions (Vollenweider & Komater, 2010). Recently, it has been suggested that the mechanisms through which psychedelic drugs exert their therapeutic effects should be studied in light of the polypharmacology paradigm, since they display a complex, multi-target effect on several sites of the central nervous system (Ona et al., 2020). Other scientifically-validated psychological mechanisms are related to changes in personality (Bouso et al., 2018), psychological process measures (Franquesa et al., 2018; Soler et al., 2018), meaning-enhancing properties (Hartogsohn, 2018), and the effect of the psychedelic/spiritual experience itself (García-Romeu et al., 2014; Majic et al., 2015).

Furthermore, population studies have shown that the use of psychedelic drugs is not a risk factor for the development of mental health issues (Krebs & Johansen, 2013). It has also been shown that their use is not linked with heightened distress or suicidal behavior (Hendricks et al., 2015; Johansen & Krebs, 2015). Observational studies comparing ritual practitioners with non-practitioners in traditional settings have shown improvements in mental health status and neuropsychological functions both in the case of peyote (Halpern et al., 2008) and ayahuasca (Barbosa et al., 2012, 2016; Bouso et al., 2012, 2015).

Almost all of this evidence, however, has been collected through research in non-traditional settings, far from the original context of use. Among the lessons that have been learned in the field of ethnobotany, the natural product of interest's attachment to its traditional use is often

mentioned. This is because such long-standing use might have involved the gradual development of the most appropriate ways of harvesting, drying, preparing, and administering the product. Thus, the ritual and ceremonies in which these psychoactive plants are commonly ingested play a vital role in terms of enhancing their benefits and reducing their risks (Apud, 2020; Talin & Sanabria, 2017). Notably, some recent studies regarding traditional Amazonian medicine report their effectiveness when it comes to the treatment of substance-use disorders (Berlowitz et al., 2019, 2020) and grief (González et al., 2020).

Final thoughts: Implications of psychedelics for GMH

Every society has its methods of healing, which should be respected. The GMH movement should be seen as offering an opportunity to build a global network for care and support, integrating traditional approaches within a broader range of disciplines that extends beyond biomedicine. Fortunately, in recent years the GMH field has incorporated a wide variety of evidence, resulting from research that used quasi-experimental, participatory, and anthropological designs (Jain & Orr, 2016; Kirmayer & Pedersen, 2014; Kohrt et al., 2016). This comprehensive perspective should embrace the traditional use of psychoactive plants as well, as they are recognized for their relevance in the context of complex medical systems, as has been shown above. The use of psychoactive plants is widespread globally, but it is often restricted to specific communities or even prohibited by governments, particularly when the psychoactive natural products are reduced by authorities to their active compounds, which are scheduled under international and national legislations (ayahuasca and its psychoactive compound, DMT, are an example). Moreover, there is an astonishing paradox when peyote is classified as a Schedule I drug (meaning that it has no medical use and a high potential for abuse) but, at the same time, peyote is recognized by numerous indigenous groups as a sacred plant and a potent medicine. So, the use of psychoactive plants is located in a wide variety of legal and cultural contexts that must be accurately analyzed.

Due to the complexity of every context where GMH advocates aim to intervene, we suggest using an active dialogue between community members, researchers, and service providers, given equal status, in order to identify and coordinate the best way to integrate all resources. The methodology of *Knowledge Dialogues* can be useful, since it is actually used for very similar purposes: the involvement of a whole community in dealing with health issues, the restoring of traditional knowledge, and the finding of “meeting points” between traditional medicine and modern Western medicine (Hernández-Rincón et al.,

2017). We should not conceive of traditional communities in LMICs as passive, waiting for external experts to solve their problems, but rather as active agents with well-established local worldviews and their own medical systems, framed by cultural beliefs. In this sense, other methodologies such as participatory action (Bergold & Thomas, 2012; Stomski & Morrison, 2017) are highly relevant. The participatory action methodology offers an opportunity to establish a dialogue between clinicians and communities with the objective of revealing common and relevant struggles, for which solutions can then be co-developed.

The traditional use of psychoactive plants must be conceived of as a very complex phenomenon that, beyond strengthening social cohesion, also includes ecological preservation, territorial autonomy, ethnic identity, and moral values (Langdon, 2016; Wiedman, 1990). Since mental health problems are also complex phenomena, with several causal factors and ramifications, it seems adequate to adopt a complex approach when dealing with them, and also when aiming for prevention. In this sense, there is an increasingly urgent demand to stop using outdated approaches to treat mental health issues, not only in the field of GMH, but also in local medical contexts. We can see this interest in complex approaches being expressed by citizens of Western countries who seek treatments involving ayahuasca and other psychoactive plants in traditional settings. This growing phenomenon should be a key object of reflection within the GMH framework. Given the recently highlighted concerns about the classification of mental disorders (Allsopp et al., 2019) and the limited efficacy of treatments provided by the biomedical model (Hyman, 2012; Rose, 2016), the Special Rapporteur of United Nations encouraged efforts to enrich psychiatric practice with a human rights-based approach (Pūras, 2019). This latter approach might be better able to provide holistic, equitable, community-centered treatments, as it involves modulating the complex social determinants of mental health, not only organic or personal variables through individualistic approaches. This would undoubtedly be a better framework for the recognition and promotion of traditional rituals involving psychoactive plants.

Further reflection is necessary regarding the objectives of the GMH movement. This movement started with the intention to address the “treatment gap,” providing mental health services in locations with little access to health care facilities. However, as Fernando (2011, p. 22) noted, an important question remains: “has psychiatry been such a success to entitle us to export it all over the world?” There are many voices in high-income countries (HICs) calling for a paradigm change in the field of mental health. The whole psychiatric nosology (represented by the *Diagnostic and Statistical Manual of Mental Disorders* or *DSM*) has been highly criticized, including by Allen Frances, who chaired the task force responsible

for the development of the 4th edition of the *DSM* (Frances, 2014). Additionally, the treatments that have been developed in psychiatry are mostly pharmacological, and they have proven to treat only symptom severity at best (Bracken et al., 2012; Kleinman, 2012), and through non-specific mechanisms (Moncrieff & Cohen, 2005). The root of these challenges is partially found in the explanatory model that psychiatry has adopted. The model assumes that mental disorders can be classified in discrete categories, that their origin can be located in the brain, and that the cure should constitute treatments capable of correcting biochemical imbalances. Despite its appeal, this model has not yet been validated and we do not have reliable biological markers for psychiatric disorders (Lacasse & Leo, 2005; Rose, 2016).

Considering the recent interest in Western culture in the therapeutic potential of psychedelic drugs, as noted above, the traditional conceptions and uses of those plants and related-products can serve as a model for “modern” psychedelic therapies taking place in HICs. In contrast to oversimplified biomedical views regarding treatments and mental disorders, and psychotherapeutic practices in which therapists and patients develop one-on-one or small group relationships, traditional rituals involving psychedelic drugs involve the whole community. In the cases discussed above, it can be easily observed that these practices involve several aspects both inside and outside of the ritual itself, constituting a long and extended process that can eventually help to promote and enhance mental health. Notably, the inclusion of traditional views (where social reconnection is emphasized) in modern psychedelic therapies involving psychoactive plants would be useful if we consider the detrimental effects of loneliness and isolation. There is substantial evidence that a perceived lack of social support predicts greater severity of symptoms, slower recovery, and worse treatment outcomes in people affected by depression, bipolar disorder, and anxiety (Wang et al., 2018).

The traditional use of psychoactive plants can be framed within recent trends in the GMH movement that effectively include a wide range of disciplines and approaches to the field (Kirmayer & Pedersen, 2014). Given that GMH practitioners seem to have shifted towards community-based, participatory, integral interventions that go beyond the strict biomedical approach, a focus on traditional psychoactive plants is timely and appropriate. This traditional practice is highly complex, involving not only pharmacological effects that can be elucidated, but also social, environmental, and cultural factors valuable to the GMH movement. The contemporary use of psychedelic drugs, such as ayahuasca and psilocybin, in psychotherapy might benefit from traditional knowledge, for which potentially supportive evidence has been found within recently developed paradigms, such as *polypharmacology* (using ligands with a multi-target profile, rather than highly selective ligands) (Ona & Bouso, 2021).

Conclusion

The GMH movement is moving towards recognizing the vital role that local worldviews and practices can play in terms of addressing mental health issues. This article calls for the development of a new mentality on the part of the world's health authorities, whereby they should take advantage of the traditional and communal use of psychoactive plants, as established in various cultures. This traditional practice offers new ways to address mental health issues at a community level while respecting local worldviews and fostering social reconnection. Additionally, the therapeutic potential of psychoactive plants as a treatment for mental health conditions has been demonstrated in Western culture. These plants and their associated rituals might be crucial for improving health care practices. Moreover, they have the potential to bridge traditional practices and Western medicine combining the knowledges that can be obtained from both sides.

Author Contribution

All authors contributed equally to this work. All authors read and approved the final manuscript.

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ORCID iD

José Carlos Bouso  <https://orcid.org/0000-0003-1115-9407>

Supplemental material

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Genís Ona, MSc, PhD candidate, is a psychologist and specialist in pharmacology research. He is currently developing scientific research at the International Center for

Ethnobotanical Education, Research, and Service and the Medical Anthropology Research Center of Universitat Rovira i Virgili, Tarragona, Spain, focusing on the relationship between psychedelic drugs and health.

Ali Berrada, MD, is a nephrologist and emergency physician. He has a broad experience in drug addiction and has worked in several drug dependence centers and therapeutic communities in Barcelona, Spain. He is currently an emergency physician at Hospital del Mar, Barcelona, and collaborates with the International Center for Ethnobotanical Education, Research, and Service as a co-investigator in psychedelics and mental health research.

José Carlos Bouso, PhD, is Scientific Director of the International Center for Ethnobotanical Education, Research, and Service (ICEERS), member of the Medical Anthropology Research Center (MARC) at the University of Rovira i Virgili in Tarragona, Spain, and a professor of psychopharmacology at the São Paulo University at Riberão Preto, Brazil. As the Scientific Director of ICEERS, he oversees studies on the potential benefits of psychoactive plants, principally cannabis, ayahuasca, and ibogaine, with the goal of improving public health. His current work is focused mainly on studying ways of dialogues between scientific and traditional epistemologies under the framework of the Right to Science.