# International Journal of Human Sciences Research

# PSYCHEDELIC THERAPY IN THE TREATMENT OF RESISTANT MENTAL DISORDERS

Ana Cláudia Drumond de Araújo Lima Undergraduate student in Psychology at the institution: Faculdade de Pará de Minas

#### Eunaihara Ligia Lira Marques

Institution teacher: Faculdade de Pará de Minas, Degree in Psychology from the Faculdade Santo Agostinho, Specialization in Neuropsychology by theCentro Universitário Internacional, Master's in Psychology from UFMG



All content in this magazine is licensed under a Creative Commons Attribution License. Attribution-Non-Commercial-Non-Derivatives 4.0 International (CC BY-NC-ND 4.0).

**Abstract:** This article aims to bring up the discussion about the possible effects of Psychedelic Therapy, that is, the use of psychoactive substances in the treatment of some resistant mental disorders. For this, such understandings were sought from the literature in the national and international context. It is noteworthy that there is a scarcity of studies and to understand the reason for this lack of scientific material in an area of so many possibilities, it was necessary to carry out a survey of the historical context of the prohibition of the use of these substances. Thus, it was observed that this ban did not necessarily occur, due to scientific research that proved some harmful effect on physical or mental health, but for adverse reasons, such as political, financial interests and even discriminatory practices, which discouraged and delayed, for decades, academic research in this very promising area. However, current studies suggest that the effects of these drugs in psychedelic therapy can change the mind, altering brain activities and driving new connections in the brain's organizational structure, providing positive effects in mental disorders that did not respond satisfactorily to conventional therapies. However, negative effects can also arise. Thus, it would be necessary to use these substances properly, by trained professionals, and in controlled environments.

**Keywords:** Psychoactive substances, psychedelic therapy, resistant mental disorders.

#### INTRODUCTION

The following study opens a space for information and discussion on Psychedelic Therapy, a scientifically and socially marginalized topic, but which, according to recent research, when performed properly and in controlled environments, can have considerable positive effects for the treatment

of disorders. within the field of mental health, in relation to conventional treatments.

In this study, we will seek to highlight the possible effects of Psychedelic Therapy, that is, the use of psychoactive substances in the treatment of some mental disorders. It is also proposed to expand this discussion by explaining the effects and contributions of this therapy to the field of psychology, contextualizing the historical and political aspects that psychoactive substances emerged and developed therapeutically.

The topic has great relevance for promoting reflection, since themes such as these elucidate and provide opportunities for dialogues about the stigmas associated with treatments with the use of psychoactive substances. In addition, there are few discussions and studies in the area in the Brazilian context. It is believed that debates such as these will favor a better understanding of how these substances, based on monitored treatment, may or may not contribute to an improvement in a patient's clinical condition.

According to the website of the State Division of Narcotics (DENARC) of the state of Paraná of the Brazilian government, the concept of drug or psychoactive substance refers to any chemical substance capable of acting on the Central Nervous System (CNS), where it alters the brain function and temporarily changes an individual's perception, mood, behavior, and consciousness, classifying psychoactive substances into three groups: depressants, stimulants, and central nervous system disruptors. (DENARC, 200?).

The main substances explored in this article are classified as CNS disturbing drugs, as they distort and qualitatively modify brain activity, which can cause delusions, hallucinations and changes in sensory perception and, for these reasons, are also called hallucinogens. This group includes the following substances: marijuana,

hallucinogenic mushrooms, lysergic acid (LSD), methylenedioxymethamphetamine (MDMA) and anticholinergics. (DENARC, 200?).

The National Secretariat for Drug Policies (SENAD) informs the historical course and sociocultural contexts of drug use, clarifying thatitisacommonhuman practice, with the aim of promoting altered states of consciousness through the consumption of psychoactive substances. This is a phenomenon considered quite old and persistent throughout human history, dating back to prehistory and, since then, being used and reinvented in different cultures, varying in their purposes, which can be recreational, religious, scientific or medical-pharmacological. They also report that for thousands of years men smoked marijuana, used opium to treat pain, masked cocaine leaves for more energy, and ingested psychoactive substances to communicate with the Gods. (MACRAE, 2017).

The use of these substances as Psychedelic Therapy to treat Mental Disorders emerged around the 1950s. Currently, studies in contexts, mainly international, aim to scientifically show that psychoactive substances may have potential, when used in therapeutic contexts, obtaining results. effective. Studies that were banned over the past century as a result of the war on drugs policy around the world, but which are being discussed again. In general, the objective of this emerging therapy is to intersperse therapeutic sessions with the use of psychoactive substances in a controlled environment, as a form of treatment for resistant mental and behavioral disorders, which I intend to put on the agenda throughout this research.

According to the definition of the Diagnostic and Statistical Manual of Mental Disorders DSM-V (APA, 2014), a mental disorder is understood as a syndrome characterized by clinically significant disturbance(s) in

cognition, emotion regulation, or behavior of an individual who reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning, often associated with significant distress or disability that affects social, occupational, or other important activities.

As for resistant mental disorders Ferrão and Fontenelle (2007) as well as Carvalho, Nardi and Quevedo (2015) propose that even the use of indicated or state-of-the-art psychotropic drugs and even the use of evidence-based psychotherapies, in some subjects affected by disorders respond adequately, that is, there are no satisfactory answers regarding the conventional treatment used, showing themselves to be resistant and even refractory. Thus, resistant mental disorders are those that, when treated with appropriate and recommended methods, do not show any satisfactory response to the remission of symptoms.

As a consequence, these individuals usually have a relapse rate three times higher than other people affected by the same disorder, and greater social and personal damage can occur. In addition, they tend to seek more health services, more prone to suicidal behavior, to the use of psychoactive substances and to violence, with increased possibilities of developing comorbidities and more negative prognoses. (FERRÃO; FOTENELLE, 2007).

This way, the article, based on the few studies carried out and found in the area, will highlight the historical context of the use of psychoactive substances and possible results and implications of psychedelic therapy in the treatment of resistant mental disorders, thus contributing to the expansion of discussions in the field of studies of treatment of psychological disorders. It is believed that all investments for studies of therapeutic resources that promote mental health benefits must be taken into account.

In order to explore and understand the theme, as well as to explain the proposed objectives, several scientific studies and articles published in recent years were sought. The academic search tools offered on digital platforms in the national and international context were used for bibliographic research. First, a survey of a variety of articles on the use of psychoactive substances and psychedelic therapy in the treatment of psychological disorders was carried out, which, after reading, were separated according to their relevance.

### PSYCHOACTIVE SUBSTANCES: HISTORICAL AND STIGMATIZING PERSPECTIVES

Psychoactive substances, according to Silveira and Silveira (2017), are drugs that are used to produce changes in mental activity, sensations, emotional state, consciousness that may occur intentionally or not. The changes vary according to the characteristics of the person who uses it, the type of drug used and the amount ingested. Drugs can be divided into licit and illicit. Legal drugs are those permitted by law for access and commercialization, while illicit drugs are those whose commercialization is prohibited by justice.

There is also a subdivision of existing drugs according to the effects produced, making it possible to identify them into three groups. Silveira and Silveira (2017) classify the first as depressant drugs that decrease mental activity, causing the brain to function more slowly. Examples of this group are: anxiolytics (tranquilizers), alcohol, inhalants (glue) and narcotics (morphine, heroin). The second includes stimulant drugs, which, unlike depressant drugs, increase mental activity, making the brain work faster. Examples are caffeine, tobacco, amphetamines, cocaine and crack. Both groups are considered be potentially addictive. The

group comprises the hallucinogenic drugs (psychodysleptic or psychedelic) of interest in this study.

In this third group they comprise drugs that alter the functioning of the brain, causing hallucinations and distortions of reality. Although they can bring harm, they have low potential for dependence. Examples are: LSD, ecstasy, marijuana and other substances derived from plants or mushrooms (ayahuasca, ibogaine, sage, mescaline, psilocybin, etc.). They are frequently used in religious rituals, in recreational contexts, and several scientific identified researches have satisfactory therapeutic potential, in a controlled context, for many mental illnesses. (SILVEIRA; SILVEIRA, 2017).

#### PSYCHOACTIVE SUBSTANCES IN AN INTERNATIONAL CONTEXT

On the US government website of the Drug Enforcement Administration - D.E., there are stigmatizing records about drugs throughout history. They point out that thousands of years ago men smoked marijuana, used opium to treat pain, masked cocaine leaves to have more energy (in the Andes, the leaf is chewed by the natives to recover the strength lost due to altitude, during an activity) and ingested psychoactive substances to communicate with the Gods. But in the last century, the United States of America (USA), adopted a radical model against drugs: prohibition. It is thought that the ban came from the noble desire to protect users, but according to the information found in the records of this governmental entity things do not seem so virtuous. (DEA, 2002).

In the early 1800s there were no federal restrictions on the sale or possession of marijuana in the US, and the plant's fiber was raw material for making clothes, paper, and rope. Medicinal use was common, but not known as a drug for recreational use. In the

1900s, as a result of the Mexican Revolution, there was a large movement of immigration by Mexicans to the southern states of the USA, in search of realizing the "American dream". The white majority was very dissatisfied with this invasion and, just as the Chinese brought opium, the Mexicans also brought their own traditions - the recreational use of marijuana and, as a result, the fight of whites against marijuana began, propagating slogans such as "all Mexicans are crazy and it is marijuana that makes them crazy", they even used the Spanish term "marijuana" instead of the traditional cannabis, precisely to relate the problems to Mexicans. (DEA, 2002).

According to the DEA (2012), one of the main responsible for the marginalization of marijuana was Harry Anslinger, who popularized, without any scientific support, the idea that marijuana induced violence and, by connecting the drug to the Mexican and black population, created the perfect horror package to be spread by the media. A huge sensationalism was created, with news that said that Mexicans under the influence of marijuana raped white girls, or even killed them with axes. President Franklin D Roosevelt even encouraged the adoption of marijuana restrictions, supported by Anslinger's arguments, even with the opposition of the American Medical Association, which argued in favor of the therapeutic benefits of marijuana. According to some historians, certain families of industrial tradition, of great influence in the market at the time, were not able to see in this plant an opportunity for diversification, but rather as a great financial threat to their businesses, since it was a low-cost raw material and high versatility of use, which could collapse their profitable businesses, as they would open up competition with their inflexible businesses. Therefore, they saw the perfect opportunity to take the competition out of the way, by banning the use of raw material as a whole.

In 1870, large numbers of Chinese immigrants arrived in the US looking for a better life. In addition to facing racism, they were forced to perform the most degrading and poorly paid jobs at the time. The Chinese, in addition to their strong work ethic, brought with them to America something else: the habit of smoking opium. Over time, the estrangement between peoples ceased to be a priority and the idea of smoking opium became popular among white Americans. In 1890, journalist William Randolph Hearst, outraged at the rapprochement between Chinese and Americans, started a series of false publications about how Chinese men seduced white women with opium, which led to an increase in prejudice towards the Chinese on the part of of the American population, which was an important way of keeping Asians and Americans segregated. (DEA, 2002).

In parallel with the Chinese opium controversy, in the 1900s, cocaine abuse became associated with blacks, primarily as a way to increase energy at work, but also in the artistic milieu, among *jazz* musicians in nightclubs of the time. Once again, the racist media began to spread news about "cocaine crazed niggers" attacking white women in the southern states of the country, and in response to this news, the fight against blacks and their cocaine was escalated. (DEA, 2002).

Opium and cocaine were the first steps towards the prohibition of all recreational substances in the US, with its heyday in 1919 with alcohol prohibition, which had great support from conservative religious communities, who saw the opportunity to fight those considered immoral. of the time, that is, immigrants. Prohibition of alcohol was revoked in 1933 and, in addition to being extremely unsuccessful, it was noticed that, with the prohibition, the number of young people who consumed the drink was very

high, since there was no age control for the illegal sale of the product. (DEA, 2002).

It is also important to mention that in the 1950s, the C.I.A. (Central Intelligence Agency) had a mind control program called Project: MKUltra, who performed illegal experiments on humans, using psychedelic substances. These experiments were intended to identify and develop substances capable of making individuals more likely to make confessions from the manipulation of mind control. The project: MKUltra used various formulas for manipulating mental states and modifying brain functions, including the administration of drugs and other chemical substances, hypnosis, sensory deprivation, isolation, sexual and verbal abuse, among other forms of torture. The main objective of the project was to develop mind-controlling drugs to be used against the Soviet bloc in response to alleged Soviet, Chinese and North Korean mind control techniques used against American prisoners during the Korean War. (DEA, 2002).

In the 1960s, there was the hippie movement that was not very well accepted by the older and more conservative generations, leading to various types of conflicts, after all, something very "harmful" must be disturbing the judgment of those people, making them have thoughts "terrible" ones such as racial equality, the legitimacy of sexual pleasure and the possibility of finding one's own spiritual path. And what could be responsible for these unacceptable thoughts? Probably the substances they used. In 1970, at the height of hippie power, the Controlled Substance Act was passed, in which all psychoactive substances known to the government were banned. (DEA, 2002).

In this context, it is clear that the prohibition of psychoactive substances occurred mainly for reasons of political, financial, racist, xenophobic interests, etc.,

and not because their harmful effects on the body have been directly proven. In parallel, there is also great interest on the part of the American government, in deepening the research of the Project: *MKUltra* to achieve its goals against the Soviet bloc, without there being a legitimate concern for some kind of benefit for possible treatment.

#### PSYCHOACTIVE SUBSTANCES IN A NATIONAL CONTEXT

According to the Ministry of Justice (2017), in the national context, the use of psychoactive substances began with the Indians. It occurred, therefore, at the beginning of colonization, when the Portuguese, upon arriving in Brazil, discovered that there was in the indigenous custom the practice of drinking a substance based on cassava, called "cauim", as well as the use of tobacco, which was unknown. of the Portuguese. Such practices were associated with festivals and rituals. On the other hand, Brasil (2017) points out that "the Portuguese knew about wine and beer and would soon learn to make cachaça". The discovery took place from the process of manufacturing the must (broth in the fermentation process), the substance (molasses) that was left over from the fermentation was placed as leftovers in the "trough for animals and slaves, called "cagaça", which later came to be used by man and called cachaça. (BRAZIL, 2017).

The use of marijuana was introduced in Brazil by African slaves and also spread among indigenous peoples. In the beginning, the herb was used for medicinal purposes and in recreational activities, such as fishing and conversation circles. According to Pernambuco Filho and Botelho (1924) apud Brasil (2017), between 1900 and 1930, two categories were distinguished: the "elegant vices", practiced by white elites who used morphine, heroin and cocaine; and the "inelegant vices", practiced by the poor, blacks

and their descendants, especially alcohol and marijuana. (BRAZIL, 2017).

The Ministry of justice (2017) clarifies that other substances considered illicit, such as inhalants, emerged from the 80s and 90s of the last century, and their use is more frequent by children and adolescents from ethnic and socially disadvantaged minorities. Cocaine, in Brazil, had a considerable increase from the 80s of the last century, used by the higher social class, and its use, at that time, was to replace drugs such as dextropropoxyphene (Algafan) and amphetamine derivatives ("balls"); (BRAZIL, 2017).

Although today, the devastating potential of cocaine is known, the Ministry of Justice (2017) also highlights that:

Cocaine has been freely marketed by the Bayer laboratory in the past and praised for its medicinal qualities. The MERCK Manual, a book widely used in the health area, in its first edition in the last quarter of the 19th century, indicated cocaine with the dosage to be used in situations of tiredness and discouragement (BRASIL, 2017, p. 22).

Finally, Brasil (2017) states that the act of drinking, smoking, as well as using marijuana are at the origin of Brazilian civilization. However, drinks are produced and advertised in sophisticated advertisements, at all times and places. On the other hand, this Ministry (2017) draws attention that the same press from the mid-1950s, emphasized "the characteristic of "disorderly" and "deviation of character" attributed to people who used marijuana and other illicit drugs".

Thus, it is worth noting that the role played by the media was more intense than the revelations of scientific research at the time. This media is considered, in part, responsible for the way the new generations were educated on this subject and how the Brazilian scientific community was not interested in proposing research studies on the benefits of psychoactive substances. (BRAZIL, 2017).

This way, throughout our history and in our social reality, drugs have been associated with the "poor, black, stoner, marginal and bandit" class. (BRAZIL, 2017). Thus, society in general did not allow any process of approximation to possible studies on scientific benefits in the controlled treatment of mental disorders. Therefore, studies with Psychedelic Therapy in our context are scarce, of little visibility and still stigmatized.

## PSYCHODELIC THERAPY: THERAPEUTIC POTENTIAL, BENEFITS AND UNFAVORABLE IMPLICATIONS

Psychedelic Therapy involves the use of small amounts of psychedelic substances in a controlled clinical setting with the psychotherapists. trained presence of Different substances are used for different purposes, the main ones being MDMA (methylenedioxymethamphetamine), (lysergic psilocybin and LSD diethylamide). The drugs used in this type of therapy differ from those found on the street because they have a high pharmaceutical level, which means that the exact dose and what it contains is known. (MICHAEL; WINKELMAN, 2019).

According to *Mind Medicine Australia* - *MMA*, Psychedelic Therapy involves traditional therapeutic sessions along with the ingestion of some classic psychedelic substance such as psilocybin, LSD, MDMA or Ayahuasca (known as Santo Daime). Psychedelic Therapy is generally divided into three phases: preparation, acute psychedelic experience, and integration. Usually people participate in several therapy sessions with a trained therapist who will be present during the psychedelic session, in which session "set" and "setting" are considered paramount. "Set" refers to mindset, a complex mixture of more transient phenomena such as expectation and

mood, and more enduring phenomena such as personality and past experience. "Setting" refers to the context or environment in which the session takes place, including basic factors such as the comfort and aesthetic quality of the room and more complex factors such as the quality of the relationship with the physicians. (MMA, 2018).

Eduard Schenberg (2015), considered one of the references in Brazil about Psychedelic Therapy, in his text entitled "And can psychedelic therapies work?" explains that MDMA-assisted psychotherapy is an innovative model that includes many hours of psychotherapy with a pair of therapists and three eight-hour sessions with evocative instrumental music to facilitate deep emotions and the empathogenic effects of MDMA. According to Schenberg, this therapy is effective because MDMA has the ability to decrease the feeling of anxiety and fear, while increasing empathy and trust, which allows the patient to be in a very favorable state for psychotherapy, since that, by reducing fear and increasing confidence, they are encouraged to face their trauma and give new meaning to it.

Schenberg (2015) explains that MDMA also decreases the activation of the amygdala, which is the fear-related region in the brain, and that it increases the activation of the hippocampus and frontal cortex, which are areas related to memory and reasoning. The substance then facilitates the evocation of memories of the trauma, at the same time that it strongly reduces the fear and apprehension of approaching the subject, which allows the patient to re-signify the memory of the trauma, dissociating it from the fear that he previously felt when remind her. This same author says that, in addition to being more effective, this type of treatment implies fewer risks and side effects when compared to other traditional methods that, in general, include the continuous and prolonged use

of psychoactives, while the use of MDMA is limited. just three sessions.

According to the researcher, "The first two published scientific studies showed that 83% of PTSD patients until then considered intractable no longer met the criteria for the disorder at the end of treatment with MDMA, against 25% in the placebo group, who underwent the treatment. same therapy, but without the substance." When they were re-evaluated four years after undergoing psychedelic therapy, the group was still on the same level of improvement, which made the healing potential of MDMA for PTSD patients considered spectacular by the most important scientific journal in the world, the British: "Nature". (SCHENBERG, 2015).

#### BRAIN REACTIONS AND POSITIVE EFFECTS

In 2014, Professor David Nutt conducted a clinical study of people who had already tried LSD, and scanned their brains for about eight hours while under the influence of the drug. He looked at blood flow and electrical activity in different parts of the brain. From these observations, Nutt concluded that under the influence of LSD, parts of the brain that do not normally connect are now connected, which allows for an increase in communication between brain networks that are usually highly segregated. Studies suggest that the effects of these drugs can change the mind, quieting traditional brain activities and boosting the creation of new connections between areas of the brain that previously did not communicate with each other, that is, the brain starts to create new pathways to share the information. (NUTT, 2016a).

These substances seem to encourage the brain to create new links through previously disconnected areas, temporarily altering the organizational structure of the brain, freeing it from its normal and rigid structure, even

showing that the part of the brain that tends to lead to depression has been turned off by these substances, much like antidepressants, and studies suggest that the effects can last for weeks or months. Nutt carried out two more studies with LSD and magic mushrooms, which showed promising results from the use of these drugs in people who are in the terminal phase, as the idea of unity with the universe that they cause in the individual makes it easier to accept finitude. These studies showed that a single treatment with these substances helped people become less anxious about dying. (NUTT, 2016a).

According to Nutt (2016a) the brain is the most complex organ in the universe and brain diseases are great challenges for the treatments offered, since they are efficient for some, but not for others; which leaves us with a gap in the treatment options for these problems, which we still don't know how to fill. This complexity makes the pharmaceutical industry lose interest in developing research in this area, continuing to treat these disorders with drugs from fifty years ago. For Nutt (2016a), now is the time for something new and he believes that the research done on psychoactive substances has great potential.

In a study by researchers at the University of California at Davis (2018), in which they exposed lab-grown human neurons, rats, and other animals to the effect of psychedelics, most psychedelics were found to promote the growth of new dendrites in the neuron, as well as an increase in the density of dendritic spines, driving the growth of new synapses between neurons. According to the study authors, the net result of these changes is that they improve brain plasticity. They also demonstrated that psychedelics such as LSD, for example, promote dendritic branching and/or increase the number of synapses both in cultured neurons and in vivo. These results

provide a potential explanation for the known ability of these substances to produce lasting changes in personality and positively impact circuits relevant to the treatment of various disorders through psychedelic therapy. (UC DAVIS, 2018).

Brain plasticity is defined as "the ability of the nervous system to change its structure and function throughout life in response to environmental diversity. It allows the regeneration of neurons, both anatomically and functionally, and the formation of new synaptic connections." So, it's the brain's ability to recover and restructure. (UC DAVIS, 2018).

In a pilot study Nutt (2016b) administered a single dose of *psilocybin* to 12 patients suffering from "resistant" major depression, who had already been treated with traditional medications but had not had satisfactory results. In half of them, there was remission of symptoms for several months.

Magalhães et al. (2018) stated that "therapeutic monitoring combined with some psychoactive substances such MDMA, psilocybin and ayahuasca can improve symptoms of anxiety, depression and post-traumatic stress disorder (PTSD)". Danforth's Studieset al. (2016) of Los Angeles Biomedical Research Institute also corroborate these statements, further proposing that the social anxiety prevalent in autistic adults with few treatment options proved to be effective when using psychedelic therapy. These same authors claim that the positive effects of using MDMA and therapies lasted for months, even years, for most volunteers in the study. In this study specifically, 12 autistic adults with moderate to severe social anxiety underwent two treatments in which they received pure doses of MDMA during therapy and showed significant results and lasting reductions in symptoms.

#### NEGATIVE AND UNFAVORABLE EFFECTS

According to Michael and Winkelman (2019) the risks of psychedelic therapy are minimal, both for clients and therapists, when substance use is carried out in a controlled setting. The risk of dependence is also minimal, but there is a possibility that the client may become "addicted" to good sensations and insights, which is called "psychic dependence." These same authors report that psychedelic therapy must not be given if the client is already undergoing therapy with a lithium-based drug.

According studies, **MDMA** to increase blood pressure and there is a list of medications that cannot be used together. Therefore, it is suggested that clients over fifty years of age must have an electrocardiogram previously performed, as MDMA can raise the body's pressure. Despite the minimal possibility of these side effects, there were no adverse effects during the sessions performed, but preventively, there are always one or two doctors in the group, in addition to first aid kits and a defibrillator. (MICHAEL; WINKELMAN, 2019).

About the "bad trip", which is a term or slang that applies to the unpleasant physiological and psychological sensations caused by the use of psychoactive substances during psychotropic effects, Michael and Winkelman (2019) state that, despite being an unwanted experience in the use recreational, it is considered desired in a controlled setting, for it is precisely this traumatic and powerful psychic material that must be brought to the surface in psychedelic therapy, which is essentially bringing unconscious material into the light in order to dissolve its destructive power, making it possible to redefine it.

There are risks of side effects with Psychedelic Therapy, as with any other type of therapy. In any form of effective therapy, developmental processes will be initiated, and the inherent risk of these therapies is change that may not please the people who live with the client. On the part of the therapist, the risks are the lack of adequate expertise and the "know-how" necessary to deal with difficult situations.

Finally, during the survey on the negative and unfavorable effects related to the use of substances during Psychedelic Therapy, it was observed that these were always related to the abusive and indiscriminate use of the same outside a controlled environment, and that in some cases they can lead to addiction, cause overdoses and even lead to death.

#### CONCLUSION

The subject covered in this article has always been fascinating to me. Through the research carried out, it was possible to perceive that, despite the possible negative effects caused by the indiscriminate use of these substances, when used in controlled environments and with psychological monitoring, they can offer very positive results for people who suffer from resistant mental disorders.

As a future professional in the field of psychology, I believe that we must always seek all possible alternatives to alleviate the suffering of our clients and, even if these alternatives are more eccentric, the main objective will always be the well-being of people. So, one of the reasons that led me to this topic was to have accompanied my grandmother in her fight against cancer. For years I followed her suffering and saw her languishing to death, without there being anything traditional medicine could do for her. If there had been a greater investment in research and scientific studies related to psychedelic therapy, perhaps my grandmother's terminal phase could have been less agonizing, both for her and for us who watched her die little by little.

Based on the concept of brain plasticity and the changes caused in the brain by the effect of psychoactive substances, I would like to leave open the hypothesis that these changes in brain structure associated with the use of psychoactive drugs, in addition to the increase in the number of synapses connecting various parts of the brain that were previously incommunicable, can lead to the recovery of lost brain functions, from the stimulation of new brain connections and, perhaps, fulfill the dream of many people and family members in the process of "healing" their loved ones. Therefore, it is important to clarify that it is not the psychoactive substance itself that is responsible for the favorable results of Psychedelic Therapy, but the correct management of this experience, carried out by a multidisciplinary team of professionals, with the role of the psychologist as the protagonist, in the construction of a patient-professional relationship, where the right moment of the psychedelic experience is used to help the patient to re-signify their traumas, thus enabling the success of the treatment.

I believe that Psychedelic Therapy can be another path of great innovation in mental treatments, which has enough credibility to sustain itself completely exempt from the context of apologizing to drugs and/ or their indiscriminate use, but from a serious therapeutic treatment, with the use of micro doses of substances and, mainly, with the accompaniment of a duly trained multidisciplinary team. This way, I hope that my preliminary surveys and studies will serve as incentives for other works, in order to, together, always strengthen the field of mental health.

#### **REFERENCES**

AMERICAN PSYCHIATRIC ASSOCIATION (APA). Tradução: Maria Inês Corrêa Nascimento et al.; revisão técnica: Aristides Volpato Cordioli et al. 5. ed. **Manual Diagnóstico e Estatístico de Transtornos Mentais - DSM - 5.** Porto Alegre: Artmed, 2014.

BRASIL. Ministério da Justiça. O uso de substâncias psicoativas no Brasil: módulo 1. – 11. ed. – Brasília: Secretaria Nacional de Políticas sobre Drogas, 2017.

CARVALHO, A. F.; NARDI, A. E.; QUEVEDO, J. Transtornos Psiquiátricos Resistentes ao Tratamento: Diagnóstico e Manejo. Porto Alegre: Artmed. 2015.

DANFORTH, Alicia L. et al. MDMA-assisted therapy: A new treatment model for social anxiety in autistic adults. Prog NeuroPsychopharmacol Biol Psychiatry, 2015.

Divisão Estadual de Narcóticos (DENARC). Secretaria de Segurança Pública e Administração Penitenciária, 200? Disponível em: www.denarc.pr.gov.br. Acesso em: 01 out. 2019.

Drug Enforcement Administration (DEA). Prohibition in America: A brief history. Disponível em: https://thedea.org/a-short-history-of-prohibition-and-the-drug-war/. Acesso em: 10 mar. 2019.

FERRÃO, Y.; FONTENELE, L. Discutindo casos resistentes e refratários em psiquiatria. **Revista Brasileira de Psiquiatria**. v. 29, suppl. 2. São Paulo, 2007.

MACRAE, Edward. A História e os contextos socioculturais. Eixo Políticas e Fundamentos. Portal de Formação à distância. Secretária Nacional de Políticas sobre Drogas (SENAD). 2017. Disponível em: http://aberta.senad.gov.br/medias/original/201705/20170509-102625-001.pdf. Acesso em: 25 mai. 2020.

MAGALHÃES. Cristina. L. et al. Can Psychedelic Drugs Heal? Psychologists explore potential benefits of hallucinogens for mental health disorders. American Psychological Association, 2018. Disponível em: https://www.apa.org/news/press/releases/2018/08/psychedelic-drugs-heal Acesso em: 25 mai. 2020.

MICHAEL, J.; WINKELMAN, SESSA, B. Advances in Psychedelic Medicine: State-of-the-Art Therapeutic Applications. Santa Bárbara: ABC-CLIO, 2019.

MINDMEDICINE AUSTRALIA (MMA). What is Psychedelic-Assisted Therapy. Disponívelem: https://mindmedicineaustralia.org/what-is-psychedelic-assisted-therapy/. Acesso em: 03 nov. 2019.

NUTT, D. Addiction psychiatry: how can brain research empower new treatments?. **Australian and new zealand journal of psychiatry**. v. 50, p. 4-4, 2016a.

\_\_\_\_\_. Psilocybin for anxiety and depression in cancer care? Lessons from the past and prospects for the future. **Journal of Psychopharmacology**. v. 30, p.1163-1164, 2016b. Disponível em: https://journals.sagepub.com/doi/10.1177/0269881116675754. Acesso em: 10 mar. 2019.

SCHENBERG, E. E. E as terapias psicodélicas podem funcionar. 2015. Disponível em: https://outraspalavras.net/semcategoria/e-as-terapias-psicodelicas-podem-funcionar/. Acesso em: 02 nov. 2019.

SILVEIRA, Dartiu Xavier; SILVEIRA. Evelyn Borges Doering. Padrões de uso de drogas. Eixo Políticas e Fundamentos. Portal de Formação à distância. Secretária Nacional de Políticas sobre Drogas (SENAD), 2017. Disponível em: http://www.aberta.senad.gov.br/medias/original/201704/20170424-094251-001.pdf Acesso em: 25 mai. 2020.

UC DAVIS. **Psychedelic Drugs Change Structure of Neurons:** Psychedelics as Possible Treatments for Depression and PTSD. 2018. Disponível em: https://www.ucdavis.edu/news/psychedelic-drugs-change-structure-neurons/. Acesso em: 10 mar. 2019.