MAIN HERBAL MEDICINES USED IN THE TREATMENT OF ANXIETY DISORDER

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ABSTRACT

Brazil stands out in the potential for phytotherapies due to its rich plant and cultural diversity, integrating traditional knowledge with scientific validation. Phytotherapy, regulated by the SUS in 2006, has gained momentum in the treatment of disorders such as anxiety, a growing public health problem. Medicinal plants offer alternatives to psychotropic drugs, which have adverse effects such as dependence. Studies point to an increase in the use of anxiolytic herbal medicines, guided by ethnobotany and ethnopharmacology. The goal is to expand access to effective treatments with less risk.

Keywords: Phytotherapy. Anxiety.

INTRODUCTION

Brazil has great potential for the development of phytotherapies, as it has the greatest plant and social diversity in the world. The use of medicinal plants was linked to traditional popular knowledge and technological projection, in order to scientifically validate such knowledge. The use of these plants means producing and reproducing fields and practices of knowledge from different cultures and from the social and productive organization in traditional communities (FONTENELE et al., 2013).

Phytotherapy is a therapy characterized by the use of medicinal plants in their different pharmaceutical forms without the use of isolated active substances, even if of plant origin, these products of plant origin have constituted the basis for the treatment of different diseases over the years. The use of herbal medicines in various parts of the world has seen a significant increase, both in the use of herbal medicines and in food supplements, especially in Europe, the United States and Australia, due to the popularity of Alternative and Complementary Medicine (DIAS et al., 2018).

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The use of medicinal plants in Brazil was regularized in the Unified Health System (SUS) in 2006, with the publication of Ordinance No. 971, Decree No. 5813, which regulated the National Policy of Integrative and Complementary Practices (PNPIC) and the National Policy of Medicinal Plants and Herbal Medicines, expanding access to this therapy, expanding the offer of training processes on phytotherapy, allowing the prescription of herbal medicines by various health professionals, and consequently boosted research to delimit safety and efficacy (BRASIL, 2015).

The prescription of herbal medicines with anxiolytic action has been widely explored in recent years, due to the high prevalence of cases of anxiety, which has become a real public health problem. Anxiety is a biological characteristic of human beings, however, when this condition becomes excessive and persistent, it can reach a pathological level, impairing the well-being and quality of life of the affected individual and becoming a disorder (CAVALER; CASTRO, 2018). This disorder has been growing every day and affecting more and more people, taking them away and limiting them from performing actions they performed in their routine.

In anxiety episodes, the body's various reactions such as awakening and alertness, autonomic reflexes, negative emotions, corticosteroid secretion, and defense behaviors happen in an anticipatory way, regardless of external stimuli (RANG et al., 2016).

Thus, pathological anxiety is related to low levels of quality of life, as well as educational, social, and occupational problems (MOURA et al., 2018). Anxiety can be triggered by several factors, leading to crises and can reach an acute level of the disease, if not diagnosed and treated early.

Anxiety is caused by excessive fear, worry, sadness, and apprehension due to pressures and stresses, leading to psychological distress, changes in behavior, and thinking. When these symptoms prevail for prolonged periods and become more recurrent, it is understood that it is not a natural reaction, but a pathology called anxiety disorder (CAVALER; CASTRO, 2018).

Anxiety disorder affects children, young people, adults and the elderly, but studies show that women are the most affected by this disease, which has become common in the daily lives of many patients, its symptoms can vary according to each individual, causing from physical to psychological problems such as: nervousness, sweating, fear of the future, lack of concentration, uncontrolled thoughts of a negative nature, fatigue, headache, insomnia, tremors, among others, depending on the intensity that occurs in each patient (SOUSA; OLIVE TREE; CALOU, 2018).

The treatment of anxiety disorders involves, in addition to psychological approaches, the use of psychotropic drugs. For several decades, pharmacological treatment used

anxiolytics/hypnotics such as benzodiazepines and barbiturates, which have many adverse effects such as tolerance, physical dependence and amnesia. However, antidepressants, antiepileptics and antipsychotics or even agonists of 5-hydroxytryptamine (5-HT) receptors are currently used, not leaving aside the use of benzodiazepines because they have an immediate effect and are used as a —SOS base‖, especially in acute anxiety and insomnia (RANG et al., 2016).

However, the continuous use of psychotropic drugs ends up generating adverse reactions, and may even cause dependence and withdrawal syndrome, in addition to possible drug toxicity. Thus, it is important to consider that treatment with anxiolytic drugs should be individualized according to the patient's needs, availability of resources, severity, risks, benefits, and costs. Pharmacotherapy should be considered in acute situations where immediate symptom reduction is required. (RIBEIRO, 2016).

Aiming at alternatives to the use of psychotropic drugs, research aimed at the discovery of new anxiolytic substances has gained momentum in recent years, since the population is looking for alternatives with less or no adverse effects. Currently, there is a variety of medicinal plants in which the therapeutic potential has been evaluated, directed by two sciences, ethnobotany and ethnopharmacology, which take into account the empirical knowledge of the population regarding the therapeutic potential of plants (SOUSA; OLIVE TREE; CALOU, 2018).

In this context, the present study aims to analyze the scientific evidence available in the literature on which are the main herbal medicines in the treatment of anxiety disorder are used, in addition to highlighting the importance of the topic in question, because, through the dissemination of knowledge and expansion of therapeutic methods, the population is enabled to be accessible and tolerable to the treatment of anxiety disorder. to achieve the desired clinical response.

METHODOLOGY

For the elaboration of this work, an integrative literature review was carried out, in order to group and synthesize information available in electronic databases, to clarify gaps on the subject. This type of work consists of a research method, whose purpose is to develop an analysis on a topic already investigated, on which there are works in the literature. Integrative review allows the creation of new scientific knowledge from the analysis and synthesis of published studies (DE SOUSA et al., 2017).

For the elaboration of this work, six stages of an integrative review were adopted. The first was characterized by the elaboration of the guiding question, being the most important phase,

as it is from this that the best studies were included, based on the information collected and the means chosen to identify these studies. This was followed by the search phase in databases in the literature. These are essential to demonstrate reliable results, correlating them with the guiding question. The third was data collection: to extract data from the selected articles, it is necessary to use an instrument that is previously prepared and that has the ability to ensure that the data are relevant in their entirety where they were extracted, minimize the risk of transcription errors, ensure accuracy in checking the information and serve as a record (SOUZA; SILVA; CARVALHO, 2010).

The fourth phase consisted of the critical analysis of the studies, in which the information was rigorously organized. The fifth phase was the discussion of the results, with the identification of knowledge gaps. The last phase included the presentation of the review (SOARES et al., 2019).

The research was carried out during the period from February to December 2024, through files available in the following databases: electronic journals Capes, SciElo, Google Scholar, Science Direct, Pubmed, Medline. The literature search was delimited in the period of the last 5 years (2019-2024) the following terms (keywords and delimiters) and combinations of them were used: 1) medicinal plants; 2) herbal medicines; 3) anxiety 4) treatments; 5) adverse effects.

The articles were considered in the three languages, Portuguese, English and Spanish, they should contain relevant information about the subject chosen for study and follow some established criteria: Articles that had studies and/or reviews with an approach to medicinal plants; articles with studies and/or reviews with an approach to anxiety; articles addressing pharmacological treatments with herbal medicines; and articles with titles and/or abstracts of the descriptors chosen in the review work. Studies in the form of editorials, theses, dissertations, books, book chapters, manuals, congresses, and conferences were excluded; studies that, due to the title and/or after reading the abstract, did not address the theme related to the objectives of the study; repeated articles in two or more databases.

DEVELOPMENT

ANXIETY DISORDER

Anxiety is a complex psychological condition whose clinical manifestations can be triggered by several factors, such as trauma, mood swings, stress, and comorbidities. These factors directly influence the individual's life, aggravating their clinical condition and can lead to significant psychological complications. When symptoms become persistent, excessive, and seemingly uncontrollable, anxiety becomes common as a disorder, as described in the DSM-5.

This manual covers a number of related pathologies, including Generalized Anxiety Disorder (GAD), Panic Syndrome, and Social Anxiety Disorder or Social Phobia, among others (DSM-5, 2014).

In cases where anxiety reaches a pathological level, its physical and emotional manifestations become more intense, and are often associated with irritability, insomnia, headaches, diarrhea, a feeling of loss of control, and avoidance behaviors (NAUE; WELTER, 2017). In Generalized Anxiety Disorder, for example, excessive and constant worry about various aspects of daily life, such as work, health, finances, and family well-being, results in subjective distress and significant impairments in the individual's social and professional functioning (RANG et al., 2016).

In addition, anxiety can trigger other debilitating symptoms, such as fatigue, sadness, rapid heartbeat, changes in sleep, recurring negative thoughts, migraines, and sweating. These factors directly affect the quality of life and performance of the individual in different spheres, including social, professional and academic. The development of these disorders can be related to biological and social factors, family conflicts and financial problems, and can manifest themselves from childhood or adolescence (TAVARES et al., 2011).

The persistence of anxiety and the increase in negative thoughts can contribute to the development of other mental disorders and aggravate existing problems. Treatment involves psychological approaches, such as psychotherapy, and the use of psychotropic drugs. For decades, pharmacological treatment was based on the use of anxiolytics and hypnotics, such as benzodiazepines and barbiturates, known for their adverse effects, such as tolerance, physical dependence, and amnesia. Currently, there is a trend towards the use of antidepressants, antiepileptics, and antipsychotics, as well as 5-hydroxytryptamine (5-HT) receptor agonists. However, benzodiazepines are still used as an emergency resource for acute anxiety and insomnia, due to their immediate effect (RANG et al., 2016).

In the current scenario, anxiety has become one of the main mental health problems, intensified by social and economic pressures and by technological advances (MOURA et al., 2018). The lifestyle imposed by modern society requires constant adaptation to high standards of productivity and performance. When an individual fails to meet these criteria, he or she may develop anxiety crises of different intensities (SOUSA; OLIVE TREE; CALOU, 2018). Thus, understanding the factors that contribute to anxiety and adopting prevention and treatment strategies become essential to improve the quality of life and mental health of the population.

In view of the above, it is evident that pathological anxiety is a condition of great impact on the lives of individuals, affecting their quality of life, social relationships, and professional

performance. Its constant growth in modern society may be related to biological, social, and environmental factors, requiring therapeutic approaches ranging from psychological interventions to the use of psychotropic drugs. The advancement of studies on anxiety and its treatments is essential to ensure safer and more effective strategies, promoting a balance between mental health and well-being in the face of the pressures and challenges of contemporary life.

PHYTOTHERAPY AS A MEDICINAL ALTERNATIVE

Herbal medicines, according to Brazilian health legislation, are medicines obtained using exclusively active plant raw materials, whose efficacy and safety are validated through ethnopharmacological surveys, use, techno-scientific documentation or clinical evidence. It is characterized by knowledge of the efficacy and risks of use, as well as by the reproducibility and constancy of its quality. (Anvisa, RDC No. 14, of March 31, 2010)

Herbal medicines used for weight control act in the body as metabolism accelerators or appetite modulators, promoting a decrease in food intake, reducing serum cholesterol levels, in addition to antioxidant, lipolytic and diuretic effects. A great diversity of natural substances has been analyzed for their potential in the treatment of obesity. These are generally complex products, with different constituents and different pharmacological and chemical characteristics (RODRIGUES; RODRIGUES, 2017; BRITO et al., 2019).

The use of phytotherapy in gynecological problems also stood out with neroli oil (Citrus aurantium L. var. amara), a herbal compound that, in addition to minimizing the symptoms of menopause, also increases sexual desire and lowers blood pressure in the postmenopausal period. The oil can be considered an innovative and useful intervention in reducing stress and improving the endocrine system.

> Systemic arterial hypertension is diagnosed based on the periodicity and permanence of high blood pressure, thus being a comorbidity that has several conditioning pathological aggregations. The growing evolution of the programs led to the creation of several booklets based on the interest of the population, which awakened the professionals who deal directly with low-income elderly, having the opportunity of this alternative means for the treatment of SAH (Systemic Arterial Hypertension). (ATALIBA et al., 2017).

Another example is Ginkgo biloba, which is widely used in traditional Chinese medicine. In studies conducted by Canevelli et al., Kasper and Howland, the use of Ginkgo biloba (Gb) associated with additional cognitive and functional benefits in patients with Alzheimer's disease already on treatment with cholinesterase inhibitors (ChEIs) was evaluated, and it was reported that this approach may represent a beneficial addition therapy in individuals with dementia who

already receive "conventional" pharmacological treatments aimed at intercepting different pathophysiological mechanisms.

It is estimated that approximately 60% of cancer patients use alternative methods of treating their disease.

> Factors such as the lack of uniformity in cancer treatment, the need to reduce patients' anxiety and for them to regain control of their health are pointed out as possible reasons for cancer patients to seek non-conventional medicine. Studies increasingly show the increased use of phytotherapy as an alternative form of cancer treatment worldwide (DELL'ANTONIO LR, et al, 2015).

In this context, the search for herbal treatments for various diseases is observed, as it is expected that the adverse effects will be smaller, such as chemical dependence on medications, for example, in addition to the expectation of patients to be undergoing a natural-based treatment.

STUDIES PROVING THE EFFICACY OF THE USE OF MEDICINAL PLANTS

The efficacy of anxiolytic herbal medicines is due to their formulation based on medical plants, such as Melissa officinalis L. by pharmacological studies is linked to its mechanisms of action in the GABAa system, inhibition of Acetylcholinesterase (AChE) and inhibition of metalloproteinase-2, the main component of anxiolytic effect is rosmarinic acid (SHAKERI et al., 2016; AWAD et al., 2019).

Another herbal anxiolytic with proven efficacy are capsules of Matricaria chamomilla L. (500 mg) three times a day in the long term (38 weeks) that showed anxiolytic activity, in addition to reducing body weight and blood pressure in individuals diagnosed with Generalized Anxiety Disorder (GAD) (MAO et al., 2016).

In the same vein, Abdelhalim et al., 2015, used mice in an elevated cross maze test and light/dark box, obtaining as a result the anxiolytic efficacy of Rosmarinus Officinalis, and demonstrated action on the GABAa receptor.

Another interesting study in which the extract of Pimpinella anisum was inserted in oral probes for two groups of mice, simulating anxiety, the probes with the extract were offered once a day, with the clear box and open field test, in both results were better than the control group that received the administration of bromazepam (ES-SAFI et al., 2021).

The efficacy of medicinal plants has also been proven by Cinglia, Fioreli and Viana (2020) who discuss the use of Valeriana Officinalis in people living with HIV, showing that tests with animal models have revealed anxiolytic effects of valerian, while indicating that the potential

anxiolytic effect is derived from valerenic acid as the active ingredient with the mechanism of action associated with GABA type A receptors, highlighting different dosage regimens and other physiological characteristics that influence the effectiveness of valerian treatment.

A study with the essential oil of Lippia alba in rats, in which the extract was applied intraperitoneally for 14 days; then they were placed in a T-maze, and obtained results compared to the action of Diazepam. It was observed that the natural product carvone would be the main constituent and responsible for its anxiolytic effect (HATANO et al., 2012).

There are several clinical studies on Melissa officinalis with positive results regarding its effectiveness in the symptoms of anxiety and depression, such as a study that compared a group of people who received treatment with leaf extract capsules and another group that received placebo capsules, administered 2 times a day, the test lasted 14 days, a decrease rate of 42.8% in anxious patients was observed (LOPES, 2021).

Regarding the effectiveness of Passiflora incarnata, a clinical study was carried out with 60 patients who would undergo spinal anesthesia. Some ingested the aqueous extract of Passiflora incarnata and others ingested the placebo; at the end, it was observed that patients who received the extract had a reduction in anxiety before the application of anesthesia, proving its effectiveness (ASLANARGUN et al., 2012).

Corroborating this theme, it was observed that a study with Valeriana officinalis. reports that 40 people were separated into 2 groups, one of the groups received placebo and the other received the Valeriana officinalis tablets, in a period of 21 days, at the end of the clinical study, it was noted the proof of efficacy by the reduction of anxiety symptoms and the absence of adverse effects in the group that received valerian, its effectiveness is mainly due to valepotriates that act by restoring the physiological autonomic balance, stabilizing the vegetative and emotional centers (SOLDATELLI; RUSCHEL; ISOLAN, 2010).

Based on studies developed, we can conclude that anxiolytic herbal medicines demonstrate significant efficacy in reducing anxiety symptoms, acting on different neurochemical mechanisms, such as modulation of GABAa receptors, inhibition of Acetylcholinesterase and other relevant biochemical pathways. Plants such as Melissa officinalis, Matricaria chamomilla, Rosmarinus officinalis, Pimpinella anisum, Valeriana officinalis, Lippia alba and Passiflora incarnata have demonstrated proven anxiolytic effects in clinical and experimental studies, often comparable to scientific drugs, but with fewer adverse effects. Thus, the use of these medicinal plants represents a promising and natural alternative in the management of anxiety, and it is necessary to deepen investigations to determine ideal therapeutic regimens and ensure greater safety and efficacy in clinical use.

PHYTOTHERAPY AS A TREATMENT FOR ANXIETY DISORDER

Phytotherapy presents itself as an excellent alternative to the use of synthetic drugs in the treatment of anxiety disorders, as many patients do not tolerate its adverse effects or do not show any response to conventional pharmacological treatments. "Many herbal medicines have mechanisms of action similar to synthetic medicines, with the advantage of having fewer or no adverse effects (COTTA; GARCIA, 2024).

> Medicinal plants and herbal medicines have been a therapeutic resource for the treatment of anxiety. The National Policy on Medicinal Plants and Herbal Medicine (PNPMF) and the National Policy on Integrative Practices (PNPIC) in the Unified Health System (SUS) seek to enable more pharmacological therapeutic options with access to medicinal plants and herbal medicines and thus seek greater safety and efficacy for patients in the process of treating anxiety (SANTANA et al., 2015).

As well as the reduction of many side effects, through scientific and clinical studies. Herbal medicines are used as an alternative to the use of medicines and are obtained exclusively from active plant raw materials (ANVISA, 2021).

> Phytotherapy makes use of medicinal plants for the treatment and prevention of some diseases. Several studies have been carried out in search of evidence that proves the effectiveness of herbal medicines in the treatment of anxiety disorders. There are many herbal medicines for the treatment of this disease that affects many Brazilians, the species that has the most studies is the Cava- cava (Piper Methysticum), it has proven efficacy, induces relaxation and sleep and calms nervous conditions, however, it causes side effects when used in high doses, which can cause hepatotoxicity and interaction in the metabolism of other drugs (SANTANA; SILVA, 2015).

According to Melro et al., 2011, the plants used in the treatment of anxiety by the population that have proven efficacy are chamomile (Chamomilla recutita, Matricaria chamomilla) in the form of tea made from the leaf and flower, lemongrass 19 (Cymbopogon citratus) in the form of tea made from the leaves, melissa (Melissa officinalis) in the form of tea made from the leaves, passion fruit (Passiflora alata or incarnata) in the form of tea prepared from the leaves.

Lippia alba, widely used as an anxiolytic, was added to the List of Medicinal Plants (REPLAME) of the State of Ceará to offer it at Farmácia Viva, with indication for anxiety and insomnia (CARDOSO et al. 2017).

Along with this line of treatment, according to Pagani (2016), some plants can be inserted as therapeutic alternatives in anxiety disorder, such as Melissa officinalis L. (lemon balm), Cymbopogon citratus (lemongrass) and Rosmarinus officinalis (rosemary), medicinal plants that have specific properties that act on the CNS with calming action.

In general, medicinal plants are inexhaustible sources of resources, and can be used as a whole, not using them indiscriminately, as the natural can also cause adverse reactions, especially if the patient already has a clinical picture of other diseases, so in order to seek new complementary alternatives, herbal medicines become auxiliary to this treatment, as well as the decrease in the symptoms that cause the anxiety disorder.

In the research of Silva et al. (2020) it was found that the Brazilian industry produces some herbal medicines, among 220 pharmaceutical laboratories operating in the country, only 29 (14.35%) manufacturing units produce herbal medicines. Of the drugs produced in the Brazilian industry, a significant number correspond to formulations aimed at 29 for the treatment of anxiety and depression (75.86%) and the others are related to other pathologies (24.14%).

Table 1: Main herbal medicines used in the treatment of anxiety

Herbal medicine	Medicinal Plant	Therapeutic indication
Valerimed	Valeriana officinalis L.	Anxiety, insomnia.
Valeriane	Valeriana officinalis L.	Anxiety, insomnia, stress.
Sintocalmy	Passiflora incarnata L.	Anxiety, nervous agitation, insomnia.
Serenus	Passiflora incarnata L. Crataegus oxyacantha L. Salix alba L.	Anxiety and insomnia.
Seakalm	Passiflora incarnata L.	Anxiety, nervous agitation, insomnia.
Pazine	Passiflora incarnata L.	Anxiety, nervous agitation, insomnia.
Pasalix	Passiflora incarnata L. Crataegus oxyacantha L. Salix alba L.	Anxiety, nervous agitation, insomnia.
Prakalmar	Passiflora incarnata L.	Anxiety, nervous agitation, insomnia.
Passion Fruit Herbarium	Passiflora incarnata L.	Anxiety, nervous agitation, insomnia, irritability.
Maracugina PI	Passiflora incarnata L. Crataegus oxyacantha L. Erythrina mulungu L.	Anxiety, sedative
KavaKava	Piper methyscum L.	Anxiety and insomnia
Calmasyn	Passiflora incarnata L.	Anxiety, nervous agitation, insomnia, irritability.
Calm down	Passiflora incarnata L. Crataegus oxyacantha L.	Anxiety, nervous agitation, insomnia.

(Source: Author, 2025)

As shown in table 1, Passiflora incarnata L. is the most used plant active ingredient in the manufacture of herbal medicines used in anxiety, as it acts as a nonspecific depressant of the Central Nervous System (CNS). A clinical study carried out with participants diagnosed with insomnia and mild anxiety allowed us to conclude that tablets based on the dry extract of Passiflora were 15 effective in the symptomatic control of anxiety and mild insomnia.

According to the National Health Surveillance Agency – ANVISA, herbal medicines that contain Passiflora in their composition should not be used when there is alcohol intake, in

association with other medicines that have a sedative effect, and it is also not recommended for pregnant or breastfeeding women (SILVA et al., 2020).

Another medicinal plant widely used in the production of herbal medicines is Valeriana officinalis L. (valerian), this plant is effective in the treatment of Generalized Anxiety Disorder (GAD), leading to an increase in the concentration of GABA in sympathetic clefts, which when used in high doses and for prolonged periods, can lead to excitability, nausea, diarrhea, headache, dizziness, bradycardia, drowsiness,   These effects disappear only with the suspension of treatment. It is contraindicated for pregnant and lactating women, as well as for patients with previous liver disease and the use of alcoholic beverages should always be avoided (SILVA et al., 2020).

In this context, it is verified that the herbal medicines found in the market are produced based on the following species: Passiflora incarnata (passion fruit), Valeriana officinalis L. (valerian) and Piper methysticum L. (kavakava), not forgetting their associations that make their mechanism of action more evident.

POSSIBLE ADVERSE EFFECTS

The consumption of plant derivatives requires attention, as many species cultivated in Brazil have not yet been sufficiently studied for their toxicological potential. To understand the possible adverse effects of certain compounds, laboratory experiments are carried out that allow data to be obtained and methods to be standardized. These studies make it possible to evaluate toxicity at different concentrations and dosages, helping to safely use this substance (DOS SANTOS et al., 2020).

Among the widely used herbal medicines, Passiflora incarnata stands out for being an alternative to psychotropic medications, presenting a lower risk of side effects and dependence. However, its use can cause adverse reactions, such as fatigue, nausea, vomiting, cramps, and destruction. In addition, symptoms such as headache, fever, myalgia, epigastralgia, insomnia, adynamia, chest pain, and improvement can also be observed with some frequency (MAYKE LOPES et al., 2017).

The interaction of Passiflora incarnata with other substances also requires caution. Concomitant consumption with alcoholic beverages or hypnotic and anxiolytic medications may intensify pain, while their association with antiplatelets and nonsteroidal anti-inflammatory drugs (NSAIDs) may increase the risk of hemorrhages. In addition, its simultaneous use with neuropsychic medications can reduce blood flow, resulting in body numbness (ARAÚJO et al., 2021).

Another widely consumed herbal medicine is Valerian, considered safe for most adults when used in recommended doses and for short periods. However, excessive use can trigger mild side effects, such as headache, stomach pain, irritability, moderate and even insomnia. In addition, the herbal medicine has contraindications for children under three years of age and for individuals with hypersensitivity to its components (VEIGA JUNIOR; PINTO, 2008).

Piper methysticum, on the other hand, when used within the recommended doses, has no adverse effects. However, its prolonged use can cause allergic reactions, gastrointestinal problems, headache, dizziness, skin pigmentation, morning fatigue, involuntary contractions and, in more severe cases, impairment of liver and kidney function. In the face of such symptoms, immediate suspension of the herbal medicine is recommended (PERES et al., 2014).

Like synthetic medicines, herbal medicines can contain substances capable of triggering adverse reactions and drug interactions. Such effects can occur both by the composition of the assets themselves and by the presence of contaminants or adulterants in the production processes. Thus, the guarantee of strict quality control – from planting and collection to the protection of active ingredients and final formulation – is essential for consumer safety (MENEZES; DEUNER, 2024).

Given this, although herbal medicines are widely used due to their therapeutic benefits, it is essential that their consumption is done with caution and professional monitoring. Self-medication can pose serious health risks, especially for more sensitive groups, such as pregnant women and people with allergies. In addition, it is essential to make the population aware of the need to respect the recommended dosages and avoid inconvenient modifications with other medications. The responsible use of herbal medicines, combined with strict regulation, can ensure greater safety and effectiveness in the treatment of various health conditions.

ROLE OF THE PHARMACIST IN THE PRESCRIPTION OF HERBAL MEDICINES

According to the Federal Council of Pharmacy (2019), the pharmacist is a professional who must always work seeking health and guiding patients. Its objective is to achieve efficient and safe therapeutic results, privileging the patient's health and quality of life.

The pharmacist must present knowledge about medicinal plants, especially with regard to toxicity, preparation, indications, contraindications and dosages, so that he can integrate the patient's popular knowledge with the scientific one (SILVA et al., 2017). The pharmacist can also work in the production process of herbal medicines, ensuring a quality and effective product for the patient. In addition, it is essential to pay greater attention to the dispensation and guidance to the patient on the safe use of the herbal medicine (SILVA et al., 2017).

With the publication of Resolution No. 586 of August 29, 2013, which regulates pharmaceutical prescription and other measures in the country. The pharmacist can indicate a 30 medication as part of the care for the problem, as transcribed from the Resolution in its article 5: below are some prescriptions that can be made by the pharmacist.

Table 2: Medicinal plants for the treatment of anxiety that can be prescribed by the pharmacist.

Melissa officinalis L.	Erythrina verna
Melissa officinalis L.	Erythrina verna
Citrus aurantium	Matricaria recutita
Cymbopogon citratus	Passiflora incarnata
Passiflora alata	

Source: (ANVISA, 2014)

The pharmacist may prescribe medicines and other products for therapeutic purposes, whose dispensation does not require a medical prescription, including industrialized medicines and magistral, allopathic or dynamized preparations, medicinal plants, plant drugs and other categories or lists of medicines that may be approved by the federal health agency for the pharmacist's prescription (BRASIL, 2013).

Since the creation of the National Drug Plan (PNM), in 1998, the pharmacist has gained more space in the scope of Primary Health Care, due to his scientific knowledge about medicines, there was then the expansion of Pharmaceutical Care, in 2004, the SUS implemented the National Plan of Pharmaceutical Care, in the sense that the pharmacist acts from obtaining medicines to patient care (OLIVEIRA, ASSIS, BARBONI, 2010).

The Resolution of the Federal Council of Pharmacy No. 477, of May 28, 2008, provides that it is the pharmacist's technical responsibility to provide pharmaceutical care services on medicinal plants and herbal medicines. Resolution No. 546 of July 21, 2011 strengthened the procedure for indicating herbal medicines and CFF Resolution No. 586 of August 29, 2013 regulated the right of pharmacists to prescribe herbal medicines (BRASIL, 2015).

In addition, society believes that herbal medicines, as they come from medicinal plants, do not offer risks or adverse reactions. However, every drug can cause adverse reactions and side effects, and this includes herbal medicines – whether these reactions are psychological or physiological and even lethal. Thus, the pharmacist can be an aid to general and reliable guidelines for promoting the safe and rational use of herbal medicines, through appropriate prescription, and avoiding, for example, self-medication and possible risks of poisoning. It is possible that clarification of possible adverse reactions and side effects, review of pharmacotherapy, and pharmacotherapeutic follow-up can be made (DA SILVA OLIVEIRA et al., 2024).

In this sense, it is essential to adopt pharmaceutical care practices in order to prevent, identify and solve problems related to the use of medicinal plants and herbal medicines. This patient-centered care aims to promote the effectiveness of drug treatment, reducing health risks and errors, and at the same time ensuring quality of life (CARVALHO; OLIVE TREE; SIQUEIRA, 2021).

FINAL CONSIDERATIONS

In view of the above, it is important to search for new knowledge and deepen the existing ones about the varieties of medicinal plants existing in the world, whether in relief and/or treatment, and contributing in a relevant way to the dissemination and dissemination of their therapeutic potentialities.

These natural sources represent alternatives for the treatment of anxiety disorder, which has been considered a real aggravation to public health; and due to the wide variety of adverse effects that conventional medicines bring to the population, in addition to their low cost and ease of access, having good adherence, as they have been strengthened in popular knowledge and corroborated by public policies, that herbal medicines can be great allies in the treatment of anxiety disorder.

Therefore, the study provided evidence that anxiolytic herbal medicines, as well as medicinal plants, are a viable alternative for the treatment of anxiety disorders and their symptoms, which compromise the quality of life of patients. It was observed that P. incarnata, P. methysticum and V. officinalis demonstrate pharmacological properties and/or effects similar to those of benzodiazepines, with P. incarnata and V. officinalis being compared to midazolam and oxazepam, respectively. These species and new discoveries are being studied and already contribute to the development of new products in the herbal market, as a source of drugs through their effective and safe synthetic extracts or derivatives, but need more robust studies with greater evidence, such as randomized clinical trials.

Among health professionals, the pharmacist is the professional who has important knowledge about medicinal plants and/or herbal medicines, acquired during his academic training, being able to prescribe some medicinal plants, and mainly face indiscriminate use, highlighting their risks. Dispensing, guiding, providing pharmaceutical assistance, as well as clinical services for pharmacotherapeutic follow-up and pharmacotherapy review; therefore, qualified in the prescription for the treatment of anxiety; This ratifies its importance in the field of health and in comprehensive patient care, contributing to the health of society, with the purpose of improving the patient's quality of life.

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