



## MEDICINAL PLANTS IN NON-FORMAL EDUCATION

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### SUMMARY

This work is an excerpt from the Master's Dissertation that addresses **MEDICINAL PLANTS IN NON-FORMAL EDUCATION: A STUDY OF TRADITIONAL KNOWLEDGE IN THE COVID-19 PANDEMIC IN BENJAMIN CONSTANT-AM**. Medicinal plants, because they have the ability to help cure or treat various diseases, have been identified and used throughout human history. The use of plants as medicine is based on non-formal knowledge and the culture of each people. This study has the general objective of understanding how people use medicinal plants in the treatment of coronavirus only with popular knowledge, which underpins non-formal education. The present study reports the benefits of medicinal plants used by residents during the COVID-19 pandemic. The research was carried out using a quantitative and qualitative approach. It can be noted that people know some benefits that medicinal plants have, having as the main source of knowledge the family culture. The use of medicinal plants in the treatment of diseases goes beyond ethnic, social and geographical barriers. Phytotherapy is among the most widespread health practices in the world. **Keywords:** Medicinal plants. Non-formal education. COVID 19.

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Keywords: Medicinal plants. Non-formal education. COVID-19.

### INTRODUCTION

In view of the current situation that the world is going through, due to the Covid-19 pandemic, this research aimed to understand the use of medicinal plants that support the dialogue in the non-formal knowledge of residents of the municipality of Benjamin Constant, regarding the consumption of herbal home remedies in the treatment of coronavirus. According to the World Health Organization (WHO), medicinal plants can be defined as any vegetable that has, in one or more organs, substances that can be used for therapeutic purposes or that are precursors of semi-synthetic drugs (VEIGA JUNIOR et al., 2005).

When we talk about medicinal plants, we refer to the history of past centuries, articulating care systems and culture, since the ways of thinking and facing problems of this nature do not happen in isolation, but rather are inserted in a historical context (FARIA et al., 2004). Within this context, it is understood that medicinal plants are all those that bring with them active principles and benefits to the health and beauty of the body. They are used in the pharmaceutical and cosmetic industries in the production of medicines and body products, in addition to domestic use, with recipes and homemade infusions.

Medicinal plants complement and treat various diseases, in addition to having calming and

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therapeutics. Anyone can use medicinal plants, but it is necessary to have the support of someone who knows the subject to give the appropriate instructions and choose the right plants for each type of health problem. How does the population use this traditional knowledge, in relation to the informal knowledge of a certain natural remedy? Medicinal plants, because they have the ability to help cure or treat various diseases, have been identified and used throughout the history of humanity. Indigenous peoples had plants as traditional knowledge, being the only alternative to cure diseases at the time and even today in places where medicine does not reach. Amid the Covid-19 pandemic, people from Benjamin are seeking help in home remedies with medicinal plants in an attempt to strengthen the immune system, and thus prevent the symptoms of the disease from becoming more severe.

Taking popular education into consideration, since it means a process of seeking to acquire knowledge, combined with education in general, it can be said that it prepares human beings for the development of their activities throughout their lives. Just like non-formal education, which is that which occurs outside the formal education system, being complementary to it. One of the great challenges of society, from ancient times to the present day, is caring for health and well-being. However, health care, guided by the positivist paradigm, works with a fragmented view of the human being and establishes a hierarchical relationship, generating impotence in the user. This perspective implies less autonomy of the subject in conducting his/her life, since his/her worldviews for caring for his/her health are often not considered relevant in planning his/her care. This traditional knowledge is generated, transmitted and preserved by the family and traditional communities (indigenous, quilombola, agricultural, riverside, etc.), having their own forms of social organization, which occupy and use territories and natural resources as a condition for their cultural, social, religious, ancestral and economic reproduction, using knowledge, innovations and practices acquired from generation to generation.

Medicinal plants are usually used after being recommended by friends and family, since few doctors recommend the use of these natural medications. During the Covid-19 pandemic, this information that some people were being cured by drinking tea made from certain medicinal plants led many people to take the recipe and also start drinking these homemade teas (popular saying). This information was increasingly spreading in the research municipality and also in Brazil, through social networks. In this way, knowledge of the benefits of these plants, often unknown, became evident through publicity, people began to research and study these benefits and thus they were built into popular knowledge.

This final paper is composed of the following structure: Introduction, where the subject is presented, enabling a global view of the theme and defining the research problem; Assumptions, where the hypotheses regarding the research question are formulated; Objectives, specifying what is intended to be achieved by carrying out the study; Theoretical Framework and Literature Review, which present the knowledge that supported the research, based on the presentation of studies carried out by other authors, with updated ideas on the topic addressed; Methodology, with a description of the research plan adopted for the development of the study, exposing techniques and processes employed; Conclusion, a reflection on all the work carried out and finally the References used to prepare the work.

## 1. Medicinal plants in Education Nto theFormal

In the cultural context, which introduces reflective practice and critical thinking into the process of knowledge construction, health is understood as a complex phenomenon with historical-cultural roots that involve social symbols (Siles, 1997). Consequently, health education cannot be reduced to the biological view of the process; it needs to be exercised through techniques that dialogue with culture. Dialogue, in Freire, requires critical thinking and starts from a concrete situation, from which there is a rethinking of practice and education. It is understood that non-formal education has some of its objectives close to education formal, such as the formation of a citizen who is concerned with social education, but also has the possibility of developing some objectives that are specific to them, depending on the form and spaces where their actions are developed within society.

Non-formal education is considered an area of knowledge still under construction. The possibility of this process in school councils and the learning that results from the participation of civil society in these councils is studied (Gohn, 2003). From this perspective, we know that formal education is made up of teachers. In non-formal education, the great educator is the "other", the one with whom we interact or integrate. In informal education, the educational agents are parents, family in general, friends, neighbors, schoolmates,

parish church, the mass media, etc.

Knowledge about medicinal plants often symbolizes the only therapeutic resource for many of these communities and ethnic groups. The use of plants in the treatment and cure of illnesses is as old as the human species. Even today, in the poorest regions of the country and even in large Brazilian cities, medicinal plants are sold in street markets, popular markets and found in residential backyards (López, 2006). Many people earn money just by selling medicinal plants, while others use the space in their homes to plant without having to leave their homes.

For Saviani (2015), what differentiates man from other animals is that animals in general adapt. They are related to natural reality, having their existence naturally guaranteed, and man needs to continually produce his own existence. To this end, instead of adapting to nature, he has to adapt nature to himself, that is, make his existence possible. Medicinal plants represent a factor of great importance for maintaining people's health conditions. In addition to proving the therapeutic action of several popularly used plants, phytotherapy represents an important part of a people's culture and is also part of a knowledge used and disseminated by populations over several generations (TOMAZZONI; NEGRELLE; CENTA, 2006). They can be used fresh, immediately after collection, or dried, depending on the species and how it should be prepared. The method of preparation also varies with the species and should be carefully evaluated. In some cases, for example, using the plant as a tea can cause its effects to be lost.

COVID-19 has reinforced the debate on the production of herbal medicines to combat the novel coronavirus and other diseases, using medicinal plants from the Amazon, since there is a habitual and cultural demand for them. In addition, there is a need to train health professionals on the subject, although the Unified Health System (SUS) already promotes actions for the use of herbal medicines. The installation, in 2019, of the Bioamazonas Hub, which brings together public and private institutions of education, research, production and services, including UFAM, was an important step in the development of proposals to promote the production chain of medicinal plants from Amazonian biodiversity that are currently underway, an important initiative that meets the agenda of the Organization for Economic Cooperation and Development (OECD) for the bioeconomy, concludes Professor Rosana Mafra.

In Brazil, considering the wide diversity of plant species, as well as the ethnic-cultural richness, plants should occupy a prominent position in relation to the importance of plants for popular medicinal use. Carrying out ethnobotanical studies makes it possible to recover and preserve the popular knowledge of the community involved. According to Costa (2002), this knowledge involves relationships of information exchange between people and their understanding of the environment in which they live, and is permeated by cultural and social factors. Tartuce (2006, p. 5) explains the concept of knowledge as a starting point for understanding how knowledge is constructed:

Thus, knowledge can be defined as the manifestation of the consciousness of knowing. When living, human beings have progressive experiences of pain and pleasure, hunger and satiety, hot and cold, among many others. It is the knowledge that occurs through the circumstantial and structural experience of the properties necessary for the adaptation, interpretation and assimilation of the internal and external environment of the being (TARTUCE 2006, p. 5).

Within this context, knowledge can be acquired from high-ranking individuals through experiences lived throughout life. However, it must be clear that knowledge is acquired after numerous attempts, that is, through unplanned actions. According to the authors Calixto & Ribeiro (2004), they reiterate that medicinal plants play a very important role in the socioeconomic issue, both for populations living in rural areas and those living in urban areas. The use of medicinal species, most of which are native to your region or grown in your backyard, can reduce spending on medicines.

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synthetic medications. This is an aspect that may also be motivating the practice of using these medications naturally amid the pandemic, as there was an abusive increase in the prices of medicines.

Interest in the knowledge that populations have about plants and their uses has grown, after it was discovered that the empirical basis developed by them over centuries can, in many cases, be scientifically proven.

Pereira (2005) highlights that collecting information from populations is essential to obtain specific characteristics of each study site, based on their cultural aspects. This popular knowledge is influenced by the sociocultural, economic and physical context in which the population is inserted. Trade is growing, with groups of wholesale traders responsible for supplying



ment of all open-air markets by region.

Practitioners and traders call themselves differently depending on their activity, such as mateiros (traders of medicinal plants in street markets), rezadores (who use tea and other “medicines” in prayers), midwives (incorporating cultural traditions) and raizeiros (healers, who use folk medicine).

## CONCLUSION

It can be concluded from this work, based on the information collected, that it is clear that humans are aware of the benefits of medicinal plants and herbs, but that there is still a lack of knowledge regarding the contraindications that many plants have. Every plant only has a medicinal effect if used properly, because if ingested in high concentrations, poisoning or side effects may occur.

And that nowadays their use has been a common practice in folk medicine, the result of a centuries-old accumulation of knowledge from informal education. Through informal knowledge about medicinal plants, the population uses them to treat illnesses, has the habit of growing plants at home and passing on knowledge of herbs to family, friends and neighbors. Given the research carried out today, it is essential for schools to participate much more effectively, since it is mainly in this environment that the formation of new thoughts and values about the world is promoted, whether formally or informally.

It is important that topics related to knowledge of medicinal plants, when introduced in the classroom, provide a challenge to students, so that they can perceive different connections within a multidisciplinary context, where the content is within a globalizing plan and not as something isolated. Acting in the school environment by providing more interesting classes indicates an attempt to make theoretical scientific knowledge viable in a contextualized way and in tune with the awakening of attitudes and practices that encourage students to reflect on everyday issues and that have social relevance, as is the case of the traditional culture that involves medicinal plants, emerges as an important pedagogical proposal to awaken this knowledge in the school environment.

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