O Boletim de Conjuntura (BOCA) publica ensaios, artigos de revisão, artigos teóricos e empíricos, resenhas e vídeos relacionados às temáticas de políticas públicas.

O periódico tem como escopo a publicação de trabalhos inéditos e originais, nacionais ou internacionais que versem sobre Políticas Públicas, resultantes de pesquisas científicas e reflexões teóricas e empíricas.

Esta revista oferece acesso livre imediato ao seu conteúdo, seguindo o princípio de que disponibilizar gratuitamente o conhecimento científico ao público proporciona maior democratizacão mundial do conhecimento.



BOLETIM DE CONJUNTURA

BOCA

Ano V | Volume 16 | Nº 48 | Boa Vista | 2023

http://www.ioles.com.br/boca

ISSN: 2675-1488

https://doi.org/10.5281/zenodo.10359608

BOLETIM DE CONJUNTURA

www.ioles.com.br/boca

HEALERS FROM THE COAST OF PARANÁ: BETWEEN ETHNOBOTANY AND MODERNITY[1]

Adilson Anacleto[2]

Cassiana Baptista Metri[3]

Michelle Valério de Ramos[4]

Abstract

The coast of Paraná has had a strong relationship with healers, specifically, the *benzedeiras*. Since the colonization of Brazil, when due to the absence of doctors, the *benzedeiras* assumed the role of health caretakers, as they had empirical knowledge about plants with medicinal properties and their uses to cure people. Despite their relevance, in recent decades, there has been a reduction in the number of *benzedeiras* in this region. Also, there is an absence of studies explaining the reason behind it and whether technology has influenced this matter. Thus, given the sparse information on this issue, our study aimed to investigate whether technology can cause the loss of traditional knowledge of the *benzedeiras* from the coast of Paraná. In this context, descriptive exploratory research was conducted with six *benzedeiras* residing in this geographical area. The interviewees' average age of 77.5 years old (between 70 and 85 years old), with an average working time of 57 years. They consider that they have a gift that manifested itself in their youth (between 8 and 17 years old). The source of learning was orality. In addition, 80% of the services provided correspond to mothers seeking medicine for illnesses or spiritual encouragement for children. The interviewees believe that their wisdom is not valued as it used to be and that young people are no longer interested in the profession, mainly due to the ease of access to technology. In addition, discrimination towards mystical issues may decrease the profession's demand among new generations. Moreover, fifty plant species from twenty-seven botanical families were registered, revealing great ethnobotanical expertise by the *benzedeiras*. Finally, concerning the use of medicinal plants in healthcare, their knowledge proved to be vast and still enjoyed by those who seek it.

Keywords: Blessing; Medicinal Plants; Technologies; Traditional Communities; Traditional Knowledge.

Resumo

O litoral do Paraná tem forte relação com as benzedeiras desde o processo de colonização do Brasil, quando devido à ausência de médicos, assumiram o papel de vigilantes da saúde, as pessoas que possuíam o conhecimento empírico sobre as formas de uso das plantas com propriedades medicinais na cura das pessoas. Apesar da relevância nas últimas décadas tem sido observado uma redução do número de benzedeiras nessa região, sendo que não foram encontrados estudos que expliquem o motivo do êxodo dessa profissão secular e se as novas tecnologias têm provocado influências nessa profissão. Assim diante de poucas e esparsas informações sobre essa questão este estudo objetivou investigar se se os avanços de novas tecnologias podem ocasionar a perda dos conhecimentos tradicionais das benzedeiras do litoral do Paraná. Neste contexto foi realizado pesquisa exploratória descritiva, junto a seis benzedeiras residentes no litoral do Paraná. O estudo mostrou que as benzedeiras entrevistadas tinham idade média de 77,5 anos (amplitude entre 70 e 85 anos) com tempo de atuação médio de 57 anos de prática, sendo que as mesmas consideram que possuem um dom que se manifestou ainda na juventude entre os 8 e 17 anos de idade. A fonte de aprendizado era pela oralidade e mães em busca de remédios para doenças ou alento espiritual para as crianças correspondem a mais de 80% das ações prestadas. As entrevistadas acreditam que seus conhecimentos já não são tão valorizados como antigamente e que os jovens não se interessam mais pela profissão em especial pela facilidade de acesso as novas tecnologias. Constatou-se também que a discriminação pelas questões místicas pode estar ocasionando a diminuição na procura pelo ofício entre as novas gerações. O presente estudo registrou 50 espécies vegetais e 27 famílias botânicas, revelando um grande conhecimento etnobotânico por parte das benzedeiras no que tange ao uso de ervas medicinais na atenção à saúde humana, este se mostrou vasto e ainda usufruído por aqueles que as procuram.

Palavras-chave: Benzimentos; Comunidades Tradicionais; Conhecimento Tradicional; Plantas Medicinais; Tecnologias.

[1] Acknowledgements to the Academic Writing Center of the State University of Paraná (UNESPAR) for the assistance with the English language translation.

[2] Professor at the State University of Paraná (UNESPAR). PhD in Sciences. E-mail: adilson.anacleto@unespar.edu.br

[3] Professor at the State University of Paraná (UNESPAR). PhD in Zoology. E-mail: cassiana.metri@unespar.edu.br

[4] Bachelor of Biological Sciences at the State University of Paraná (UNESPAR). E-mail: michelle.valerio@unespar.edu.br

INTRODUCTION

The term *benzedeira* refers to women who perform practices of prayers and blessings, services which are often linked to the use of medicinal plants. The *benzedeiras*' practice is based mainly on beliefs and is done through characteristic rituals that vary from each *benzedeira*. Therefore, the same rite of blessing can be performed in different ways. This practice is characterized as a therapeutic activity without medicinal distinction, but it is often curative. Additionally, it is performed through a relationship in which the *benzedeira* exercises a mediator role between sacred and human through prayers and rites.

Additionally, regarding the dialogue with science, *benzedeiras* have always had a relevant role through the orientation of ethnobotanical studies. This field can be understood as interdisciplinary, covering studies and interpretations of knowledge considered empirical and the traditional use of flora and its benefits to human health.

Concerning the applications of plant species, these are recommended by the *benzedeiras* corresponding to the problem people presented. The treatment can be done in different ways, such as teas, baths, and specific rituals. Moreover, *Benzedeiras*' expertise deserves special attention from researchers concerned with harvestable resources' potential and richness since this wisdom carries helpful information for the population and for science.

Specifically with regard to the coast of Paraná, the strong presence of faith healers has occurred since the colonial period. The high number of plant species with medicinal properties, the traditional knowledge of the indigenous people, as well as issues of race, have also mixed with the traditional knowledge of slaves and Europeans and thus the emergence of faith healers in traditional caiçara communities. This knowledge was appropriate to cure the most impoverished people without access to medicine.

In recent decades, the way of life of these caiçara communities on the coast of Paraná has been changing, and as well as the profession of faith healers, and the risk of erosion of knowledge and traditional wisdom must be considered.

Despite its relevance, the craft practiced by *benzedeiras* has become increasingly scarce, to the point that their knowledge is at risk of being lost. Those cultural changes, especially in a more technological world, despite its many benefits, can negatively influence other matters, mainly those related to themes considered to be ancient and secular.

Given this, the present study aimed to assess whether technological advances are influencing the maintenance of the *benzedeiras* profession on the coast of Paraná, imparing the preservation of empirical and traditional knowledge.

This article is divided into four sections. The introductory phase presents the justifications for the study, as well as the objective of the research

The second section, the literature review, addresses the relevance of faith healers not only in the region studied, but in the world. This segment is based on reliable sources, including scientific articles and books, and had the purpose of highlighting the relevance of the theme and thus contribute to the construction of scientific knowledge.

The third section presents the results of the field research and promotes an analysis from an interdisciplinary perspective, focus on the relevance of traditional knowledge and the need to protect the knowledge of this group of people.

The last section summarized the main results in a final consideration, reinforcing the implications of the study, besides presenting limitations and gaps that can be filled with future research.

THEORETICAL FRAMEWORK

Tresina (2023) assert that *benzedeiras* emerged in the Middle Ages and, in many parts of the world, their presence has always been associated with factors such as access to the most distant and remote places. The authors also add that another common feature is the knowledge of medicinal plants in curing people's illnesses.

In Brazil, *benzedeiras* began to gain strength in the 17th century, during the colonial period, due to the precariousness of material resources and the difficulty in accessing essential health goods. Thus, since the beginning, there has been a significant connection between *benzedeiras*, medicinal plants, and the community in which they live. Inside these communities, they are usually recognized for not charging any fee for the blessings (OLIVEIRA, 1985).

Blessing (*Benzedeira*'s craft) is part of popular and religious culture in Brazil. It is mentioned as a learning tradition transmitted within the family or through close relationships through orality. Consisting of prayers and healing knowledge, normally, healers do not know how to justify their practices, claiming that this was how they learned the ways of healing (ASSUNÇÃO *et al*., 2020).

Blessing (*Benzedeira*'s craft) is practiced by both men and women. However, women are the majority, having their wisdom inherited or received as a "divine gift", which tends to be transmitted from generation to generation (HOFFMANN; HOROCHOVSKI, 2012). Hence, while *benzedeiras*,

through medicinal plants, take care of the physical and spiritual harm of those who seek them, they also play an essential role as guardians of memories of a population and the ways of using plant species that date back to Brazilian colonization. Their practice presents traces of Brazilian *pajelança* (a set of practices and rituals usually realized by spiritual leaders of some native tribes of Brazil), African religions, Lusitanian Catholicism, and experiences from daily life, which have been perpetuated orally over the centuries - thus, contributing to traditional knowledge preservation (SILVA *et al*., 2006).

Shuaib *et al*., (2023) define traditional knowledge (popular knowledge) as a set of knowledge and know-how about the natural and supernatural world transmitted orally from generation to generation. This knowledge is transmitted on a daily life basis and not only at a formal level. Also, this oral transmission is one of the differences that separates it from scientific knowledge, which is propagated through writing.

The manipulation of medicinal plants occurs in all parts of the world and are used to prevent or cure various diseases (TAHIR *et al*., 2023). According to the United Nations (2023), 80% of the world's populations depend on plants used in traditional medicine to alleviate a wide range of pain and suffering. Document the traditional knowledge about plants used in traditional medicine is a vital step in obtaining new lead compounds for drug development (ASSUNÇÃO *et al*., 2023; TAHIR *et al*., 2023).

The use of medicinal plants by healers according to Tresina (2023) occurs in different ways, leaves, fruits, bark and roots are prepared in special ways so that from these materials it is possible to prepare medicines with strong active ingredients capable of healing. The use of these plants is always accompanied by prayers, rites and other mystical actions, which invariably benefit people of all ages. The healers do not only work during the blessing process, there are previous stages that require dedication. Shuaib *et al*., (2023) describes that care for the plants used in healing by traditional knowledge occurs long before the medicine is used, and begins in the form of collecting the plants, drying and preparing the infusions and decoction. Traditional knowledge and oral learning not uncommonly preserve native plant species because to facilitate their use. Faith healers have the habit of collecting plant seedlings in the forests for cultivation in their home gardens and to facilitate their work.

Therefore, Anacleto (2007) asserts that community residents, especially *benzedeiras*, can provide broad support to science since ancient and empirical knowledge are of great importance to the society where they are inserted, often representing the only access to health services.

Distant communities often do not have access to transport for urban centers. In those cases, the *benzedeiras* are the only option in absence of a formal health care. Anacleto *et al*., (2007) describe this science as an important role in strengthening knowledge. This cultural and social practices and the

wisdom of available natural resources are a way of increasing the importance and perpetuation of knowledge that could be extinct.

The tradition in remote communities and societies survives of time, being preserved from generation to generation, making it necessary to have historical records. It is important understand how the relationship between this changing world and tradition occurs and perceived, considering good and bad things and their meaning for people. People that living in these places in recent decades have undergone major changes in their living systems, with this situation being more aggravated on the coast of Paraná (ANACLETO *et al*., 2007). The modernity causes the exodus of young people to large centers, and thus there would be no one for these faith healers to perpetuate this practices, and that effectively puts the survival of this secular knowledge at risk (ANACLETO *et al*., 2007).

The traditional knowledge and other kind of knowledge are not immutable, as a community changes according to modernity. The community and the connection with nature comes new knowledge based on what is already known and also on learning from other healers. As a subtle web of knowledge is formed by who know what few know, this revelated the relevance and urgency of preserving the knowledge of healers given. Further the fact that large capitalist companies can take advantage of this traditional knowledge in the search for profitability for the benefit of the capital industry, not attributing to who should actually benefit from these resources (ANACLETO *et al*., 2023).

Shuaib *et al*., (2023) and Tresina (2023) reinforce the value of giving these people a voice to people and carrying out new diagnoses that portray their lives. In these communities and their peculiar forms of life there has always existed some type of natural, social and mystical science. Valuing these cultures is relevant to the process of maintaining or developing of this knowledge, so listening the people involved in this profession can be the basis of hope for the future.

METHODOLOGY

Study nature and inclusion criteria

Exploratory-descriptive qualitative research was performed (GHIGLIONE, 2022). The study's inclusion criteria consisted of *benzedeiras*' voluntary participation (who were over eighteen years old), with no exclusion criteria regarding religion, level of education, socioeconomic attributes, age limit, or whether or not they were still actively practicing.

Similar to that proposed by Anacleto and Scheuer (2023) as said before, participation was voluntary, anonymous, confidential, and free of charge. Data collection took place between July 2021

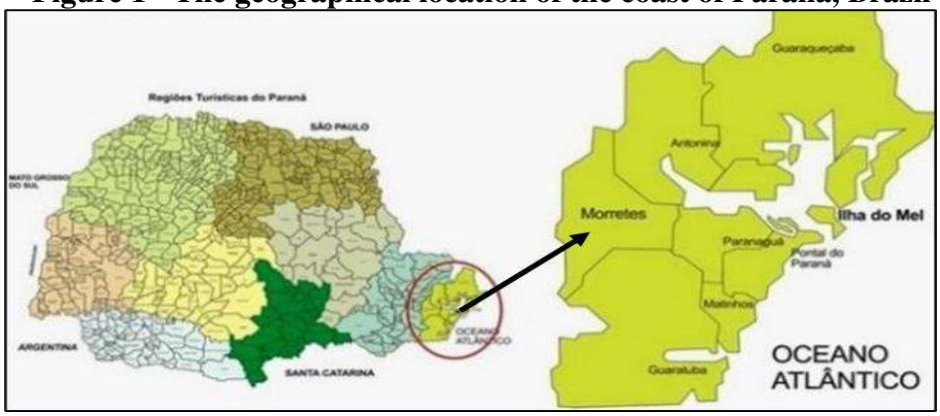
and August 2022. The results were evaluated based on the self-perception of the *benzedeiras* interviewed.

Research geographic region

The coast of the state of Paraná, in southern Brazil, is a region of great contrast. The central city has the state's seventh-highest per capita income, but simultaneously, a significant portion of its citizens live below the poverty line (ANACLETO, 2007). Also, according to Anacleto (2007), many communities after the 1970s had their social life systems modified, mainly due to the tourism growth in the region. In the face of a lack of perception over financial values, many families sold part of their land holdings to the bids received.

This fact created serious social problems since the remaining populations' agricultural areas were reduced, consequently lowering their incomes and forcing them to move to other regions in a short time. As a result, the quality of life declined, the survival of the remaining population became difficult, and often the only healthcare accessibility was through the *benzedeiras*. Thus, this study selected a region where *benzedeiras* have been aiding the population since colonial times, according to records, particularly those who are socially vulnerable.

Figure 1 - The geographical location of the coast of Paraná, Brazil



Source: Own preparation.

Period of visits, data collection, and analysis

Data collection was conducted through interviews using a semi-structured questionnaire. The participants in the research voluntarily agreed to be interviewed and gave their consent for the recording process.

Information on the first interviewee was obtained through referrals from the locals. Afterward, the self-generated sampling technique was adopted, where the research participants indicated other *benzedeiras* for the study. First, we contacted each *benzedeira* and formally invited them to participate in the research voluntarily. Subsequently, the interviews were scheduled fitting each *benzendeira*'s availability and took place in their homes.

At the beginning of the interviews, the "Term of Free and Informed Consent" was read, and any doubts about it were clarified, as it is required by the UNESPAR's Ethics and Research with Human Beings Committee – which approved our study (Opinion: 4.822.131). The interviewees initially answered questions regarding their socioeconomic profile and their stories as *benzedeiras*. After that, they replied to questions about the impacts of modernity on their professions and how they were dealing with this situation. The last phase of the research was related to the survey of medicinal plants and their usage, preparation methods, and for what purposes.

Our research discovered that at the end of the 1950s, thirty *benzedeiras* lived in the municipalities that make up the coast of Paraná, especially in the rural area. However, during our study, only the six women *benzedeiras* interviewed were identified.

After data collection, a case-by-case analysis was performed according to the participants' narratives on the topics. Then, the cases were examined and separated into groups of similar responses. Regarding the identification of the medicinal plants mentioned, recognition was made based on the ethnobotanical literature of Magalhães (MAGALHÃES *et al*., 2022).

RESULTS AND DISCUSSION

Knowledge, technologies, and the impact on the craft of *benzedeiras*

The interviewees' average age of 77.5 years old (between 70 and 85 years old), with an average working time of 57 years. Regarding marital status, all of them were married and had four or five children. For their schooling, one was unlettered. The other participants had incomplete primary education. In terms of the participants' religious affiliation, Catholicism stood out among them. Only one declared herself a Spiritist.

Concerning the craft's learning, the interviewees reported that they had contact with blessing before they started their practices (when they were between 8 and 17 years old). Moreover, only one *benzedeira* declared that she began to bless people after her 40th birthday, as she felt it was her mission.

In the evaluated cases, learning to bless happened through transferring knowledge by oral tradition. In this learning process, a family member, mainly their grandmother, was responsible for teaching. However, all interviewees said their knowledge was expanded by spending time with other *benzedeiras* through accounts of people seeking help, empirical practice, observation, and repetition.

These interviewees' reports coincide with that described by Helman (1994). The author states that the most common way of transmitting knowledge involves family members. Moreover, the same researcher notes that this knowledge is often accompanied by signs, dreams, and revelations of other kinds. Nonetheless, the revelation reported by the interviewees was always associated with a "gift".

> When I started blessing, I was about 17 years old. Because it came from a family gift. My grandmother was a *benzedeira*, she only gave me the beginning... then we learn by ourselves. It's spiritual." (PARTICIPANT C)

The etymology *dom* ("gift") is associated with different attributions and meanings, varying according to the context. Vaz (2006) explains that for *benzedeiras*, the usual use of the term "gift" generally encompasses all their knowledge in the universe of blessing. Additionally, as reported by Oliveira (1985), *benzedeiras* perceive their gift as something natural that can be bestowed upon them by God.

Hoffmann-Horochovski (2012) corroborates this assertion, emphasizing that the gift is always linked to the blessing, which is readily accepted among the *benzedeiras*. Furthermore, the researchers state that this is the reason behind their great dedication to fulfill their mission as *benzedeiras*, which does not always have a schedule and, besides the spiritual, rarely has benefits – except for being recognized as a wise person by part of the community.

> God gave me this gift from birth. I know that. (PARTICIPANT D)

Knowledge exchange among the *benzedeiras* also occurs through copied notes of blessings, usually in notebook sheets containing the step by step descriptions about how to do a specific type of blessing. According to them, information sharing happens guided by the desire to help others. In this context, Marin and Comin (2017) report that it is not uncommon for *benzedeiras* to want to pass on their knowledge to others. In addition, the authors also state that they usually choose someone they trust and who is interested not only in learning the practice but in passing it on in an honorable way – since, along with their knowledge, their own identity and traditional knowledge will be passed on.

> One day I was able to relieve someone's pain like a *benzedeira* relieved my son's pain. (PARTICIPANT A)

The interviewees revealed that mothers seeking medicine for illnesses or spiritual encouragement for their children accounted for more than 80% of the aid provided. The causes for the search vary. However, *quebranto* (a malefic mystical influence over one's life), evil eye, anemia, and thrush (oral candidiasis) are among the most cited in the interviews (Table 1).

Table 1 - The main problems behind people seeking *benzedeiras* on the coast of Paraná, Brazil

Blessing	Iterations
Quebranto	4
Evil eye	4
Anemia	4
Thrush	4
Rupture/sewing	3
Intestinal worms	2
Erysipelas	2
Dermatophytosis	2
Getting a job	2

Source: Own preparation.

The current world provides people with greater access to doctors and pharmaceuticals. At first glance, it might be assumed that there would be no reason for people to seek *benzedeiras*' aid. However, our study shows that advances in healthcare access have not decreased the demand for blessings. Most interviewees (83%) did not notice a drop in the search for their assistant over the years. Although they did not report this reduction, it is believed that the number of people aided has remained, given the significant downsize in the number of active *benzedeiras* in recent decades.

Our study estimates an approximate 72% reduction in the number of *benzedeiras* over the last two decades. According to the interviewees, most of the practitioners they knew stopped working because of illness, death, or not having other people to follow the "mission". In consonance with Marin and Comin (2017) and Caldas *et al*., (2016), which state that age and health complication are common factors that prevent *benzedeiras* from continuing to exercise their roles. The authors add that these aspects are not related to *benzedeiras*' lack of interest but to a physical or biological impediment, conditions also verified in the present study.

While they are highly sought after, the interviewees believe that their knowledge is less valued than it used to be and that young people are no longer interested in the profession.

> Certainly, in the past, they valued *benzedeiras*' knowledge much more... much more. Before, there were many more *benzedeiras*. Today, it is difficult to find a young *benzedeira*. (PARTICIPANT A)

For Ribeiro (1997), factors such as the precariousness of material life, marked by the rarity of doctors, surgeons, pharmaceutical products, and the syncretism of peoples – responsible for the multifaceted formation and used to the magical universe – contributed to the development of *benzedeiras*. Over the years, advances in health and communication technologies have transformed society's reality. These aspects have led to changes in the way we communicate, also increasing access to free healthcare.

In this regard, the interviewees reported that additionally to the ease of access to health care due to development, there is also a greater interest among young people in cell phones and computers. Characteristics that, for them, lead to a lack of interest in blessing. On this, Dias (2017) says that *benzedeiras*' knowledge is not being passed on to young people. Despite that, young people cannot be blamed for the lack of interest since they do not have opportunities to experience and learn this ritual so that they can come to value its importance.

> There are many people who no longer believe in blessing, and no one is obliged to believe. It's just that now things are getting very modern. For example, at the time of the blessings, people didn't even look for a doctor so much. It was more bush medicine. But not now. Now everything is a doctor, or cell phone appointment, computer... so the *benzedeiras* are gradually being pushed aside. (PARTICIPANT B)

The *benzedeiras*' assistance has always been disseminated through word of mouth, also known as viral marketing, that is, transmitted from person to person by the local population's reports and experiences. This form of dissemination has guaranteed them recognition and search from those who need help.

Even with new technologies and different social networks available, the circulation of *benzedeiras*' assistance was never linked to these elements. None of the interviewees use social media to publicize their work or recommend medicinal plants.

Mainly because of the difficulty of using cell phones and computers. Older people who use technology face difficulties. Kachar (2000) points out that everything is very unfamiliar: icons, mouse, speed, difficulty in screen reading, fingers' weight on the keyboard, memory, visual-motor coordination, and weak vision to visualize the small icons.

In contrast, Nunes (2010) states that it is possible to include anyone in the digital world with the help of a qualified individual and appropriate learning methods. Although technology can be an ally in their work dissemination, not all interviewees would like to insert it into their lives. More people than they would be able to assist could appear resulting from this propagation format.

> In my opinion, if I published it on the internet, it would end up in a lot of trouble for me. People would come from many other places, and I wouldn't be able to handle it all... it's already difficult to find a *benzedeira*. Then it's hard for us to take everything in our heads like that. Even if I could, I wouldn't publicize it. (PARTICIPANT B)

Since the interviewees started blessing, there have been several social changes. When analyzing their work, they emphasize that the primarily positive aspect, both in the past and today, is doing good to others while always being connected to God. As negative aspects, they point out the non-compliance with established schedules for the blessing, the possibility of catching a negative charge from a person who does not come looking for them with good intentions and dealing with people who doubt their work. Furthermore, the erroneous and negative terms linked to their image, such as "sorceress", "witch" and "*macumbeira*" (commonly associated with a negative aspect to African and Afro-Brazilian religious practitioners). Still, according to the interviewees, this factor may impede the new generations from becoming more interested in the craft.

> People put us all in a "little box" together with them, these terms... but they have no idea what each one means, we are good people, and we do good. (PARTICIPANT D)

Benzedeiras' popular wisdom and great knowledge regarding natural medicines gained a negative reputation during the Inquisition period. And now, with all the conditions modernity presents, it is urgent to demystify this concept so this ancestral wisdom can be valued not only by people but also by science. And through this manner, create a dialogue involving scientific and traditional knowledge unfolding into new scientific research and, therefore, benefiting the population.

Ethnobotanical knowledge

In the present study, fifty plant species were documented, and categorized according to family, species, part used, form of use, and purpose (Table 2). The preparation methods show a strong tendency towards infusions and tea for almost all respondents (80%). This was followed by decoctions, which accounted for 33% of the volume of recipes issued by the interviewees. Bottles, which are mixtures of many substances, represent 22% of the methods used to prepare the medicine quoted by them. In addition, other forms mentioned were: flour, ointment, juice, and syrup (all in the range of 5% of the percentage of citation).

The most recurrent form of use is oral (n= 70%), followed by application of bandages (10%), ingestion with food (5%), and bath (5%). The most commonly used plant parts are the leaves (n= 86%),

branches and trunks (n= 30%), and the whole plant, root, and seeds, which represent 10% of the recommendations (Table 2).

Table 2 - Medicinal herbs used by *benzedeiras* in the execution of their craft

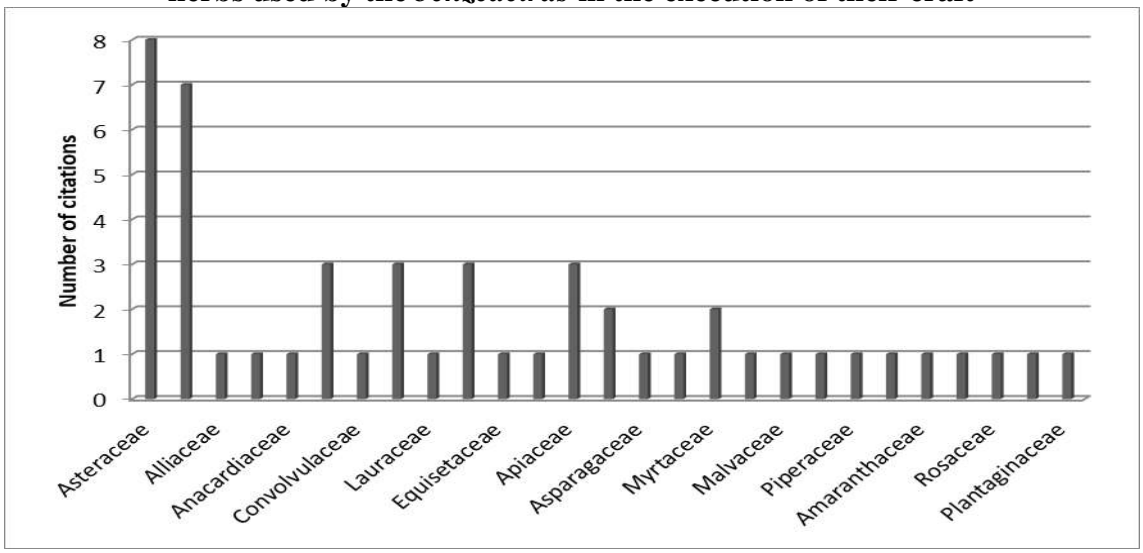
Medicinal plant	Family	Species	Part used	Form of use	Purpose (To improve the function of and/or to treat)
Artichoke	Asteraceae	*Cynara scolymus* L.	Leaves	Tea without sugar or oral use	Cholesterol
Rosemary	Lamiaceae	*Rosmarinus officinalis* L.	Leaves	Tea without sugar or bathing	Headache, Backache, relaxant, digestion, and liver
Lavender	Lamiaceae	*Lavandula angustifolia* Mill.	Leaves	Tea without sugar	Tranquilizer and headache
Garlic	Alliaceae	*Allium sativum* L.	A clove	Tea, garlic water, plaster, or ingestion	Intestinal worms, stomachache, and diarrhea
White mulberry	Moraceae	*Morus alba* L.	Leaves	Tea without sugar	Menopause, poor circulation, and blood pressure
Aroeira (Brazilian peppertree)	Anacardiaceae	*Schinus terebinthifolius* Raddi	Barks	Tea without sugar	Toothache, infections, anti-inflammatory and headache
Rue	Rutaceae	*Ruta graveolens* L.	Leaves	Tea without sugar	Headache and stomachache
Sweet potato	Convolvulaceae	*Ipomoea batatas* Poir.	Leaves	Tea without sugar or ingestion	Anti-inflammatory
Bico de papagaio	Leguminosae	*Erythrina verna* Vell.	Barks	Tea without sugar	Tranquilizer
Vernonia (ironweed)	Asteraceae	*Vernonia condensata* Baker	Leaves	Tea without sugar	Liver, spleen, intestine, intestinal worms, and gout
Chamomile	Asteraceae	*Chamomilla recutita* L.	Dry flowers	Honey sweetened tea	Tranquilizer, headache, and sore throat
Cinnamon	Lauraceae	*Cinnamomum aromaticum* Nees.	Cinnamon sticks	Tea without sugar or ingestion	Blood pressure
Job's tears	Poaceae	*Coix lacryma-jobi* L.	Leaves or seeds	Tea without sugar	Hair loss and kidneys
Lemon grass	Poaceae	*Cymbopogon citratus* (DC.) Stapf.	Root	Tea without sugar	Nerves, digestion, and high blood pressure
Carqueja	Asteraceae	*Baccharis trimera* (Less.) DC.	Stalk	Tea without sugar	To lose weight, the stomach, and liver
Horsetail	Equisetaceae	*Equisetum arvense* L.	Stem	Tea without sugar	Bone pain
Chayote	Cucurbitaceae*	*Sechium edule* Swartz*	Leaves	Tea without sugar or ingestion	High blood pressure and blood-thinner
Citron	Rutaceae	*Citrus medica* L. var. medica	Leaves	Warm tea without sugar	Tranquilizer and relaxant
Sleepy plant	Leguminosae	*Mimosa pudica* L.	Leaves and flowers	Tea without sugar	Anti-inflammatory
Dill	Apiaceae*	*Anethum graveolens* L.*	Leaves	Tea without sugar	Labyrinthitis, migraine, tiredness, and stress
Lemon balm	Lamiaceae	*Melissa officinalis* L.	Leaves	Tea without sugar	High blood pressure, tranquilizer, and stomach
Anise	Apiaceae	*Pimpenella anisum* L.	Leaves or seeds	Honey sweetened tea	Gastritis, nausea, stomach, and dizziness
Honeyweed	Lamiaceae	*Leonurus sibiricus* L.	Dry flowers or leaves	Tea without sugar	Stomach
American black nightshade	Solanaceae	*Solanum americanum* Mill.	Leaves	Tea without sugar	Blood issues and allergies
Snake plant	Asparagaceae*	*Sansevieria trifasciata* Prain*	Leaves	Bathing	*Descarrego* (the act of removing bad energies through a ritual)
Espinheira santa	Celastraceae	*Maytenus ilicifolia* (Schrad.) Planch.	Leaves	Warm tea without sugar or bathing	Gastritis, heartburn, and tiredness
Guava	Myrtaceae	*Psidium guajava* L.	Leaves	Tea without sugar, food, or ingestion	Infections and diarrhea
Guaco	Asteraceae	*Mikania lomerate* Spreng	Leaves	Tea without sugar or plaster	Cold, expectorant, and anemia
Guiné (guinea henweed)	Phytolaccaceae	*Petiveria alliacea* L.	Leaves	Tea without sugar or bathing	Tranquilizer, relaxant, and *descarrego*
Peppermint	Lamiaceae	*Mentha piperita* L.	Leaves	Tea without sugar	Stomachache, toothache, poor circulation, and insomnia
Mandarin orange	Rutaceae*	*Citrus reticulata**	Leaves	Tea without sugar	Allergies
Horse mint	Lamiaceae	*Mentha sylvestris* L.	Leaves	Tea without sugar	Cough and tranquilizer
Common wormwood	Asteraceae	*Artemisia absinthium* L.	Leaves	Tea without sugar or plaster	Liver and spleen
Malva	Malvaceae	*Malva sylvestris* L.	Leaves	Tea without sugar	Expectorant and sore throat
Maize	Poaceae	*Zea mays* L.	Corn silk	Tea without sugar	Bladder infection and kidneys
Barbados Gooseberry	Cactaceae	*Pereskia aculeata* Mill.	Leaves	Salad, juice, or tea	Depression, hair loss, nerves, fat in the liver, and kidneys
Pariparoba	Piperaceae	*Piper regnellii* C. DC.	Leaves or stalk	Tea without sugar	Expectorant
Pata de vaca (Brazilian orchid tree)	Leguminosae	*Bauhinia orficate* Link	Leaves	Tea without sugar	Heart, bladder, and kidneys
Pau tenente	Simaroubaceae*	*Picrasma crenata* (Vell.) Engl.*	Whole herb	Tea without sugar	Diabetes, digestion, and intestinal worms
Penicilina	Amaranthaceae*	*Alternanthera brasiliana* (L.) Kuntze*	Leaves	Tea without sugar	Anti-inflammatory and cough
Pico-Pico (Cobblers pegs)	Asteraceae	*Bidens pilosa* L.	Leaves	Tea without sugar	Bladder infection
Cayenne pepper	Solanaceae	*Capsicum annuum**	The entire pepper	Sweetened tea	Sore throat and cough
Pitanga (Brazilian cherry)	Myrtaceae	*Eugenia uniflora* L.	Leaves	Tea without sugar	Stomachache
Stonebreaker (seed-under-leaf)	Phyllanthaceae	*Phyllanthus niruri* L.	Flowers or leaves	Tea without sugar	Toothache
Cabbage rose	Rosaceae	*Rosa centifolia* L.	Petals	Tea without sugar	Tranquilizer, blood issues, and menopause
Parsley	Apiaceae	*Petroselinum crispum* (Miller) Nyman & A.W. Hill	Root	Tea without sugar	Bladder
Common sage	Lamiaceae	*Salvia officinalis* L.	Leaves	Tea without sugar	Bronchitis, cold, flu, and allergies
Colombian waxweed	Lythraceae	*Cuphea cartagenensis* (Jack) J. F. Macbr.	Leaves	Tea without sugar	Antibiotic
Plantain weed	Plantaginaceae	*Plantago major* L.	Leaves	Tea without sugar	Expectorant
Vassoura-rainha	Asteraceae	*Baccharis sp.* DC	Flowers or leaves	Tea without sugar	Cough

Source: Own preparation.

Among the twenty-seven families of medicinal plants identified, the Asteraceae and Lamiaceae families were the most represented. The predominance of these two families has been evidenced in ethnobotanical studies conducted with *benzedeiras*, as described in the results of Oliveira and Trovão

(2009). Among the medicinal plants documented in our research, rue, penicillin, and mint were the most referred (Graphic 1).

Graphic 1 - Botanical families of medicinal herbs used by the *benzedeiras* in the execution of their craft



Source: Own preparation.

Among these herbs, mint, chamomile, penicillin, and lemongrass are the most typically used. However, other herbs are also utilized sporadically (Table 3).

Table 3 - Main medicinal plants mentioned by the *benzedeiras* on the coast of Paraná, Brazil

Medicinal plants	Usage % by the *benzedeiras*
Rue	50
Penicilina	75
Peppermint	100
Rosemary	50
Chamomile	100
Lemon grass	100
Sleepy plant	25
Anise	100
Lemon balm	100
Espinheira santa	75
Guinea weed	25
Pau tenente	25

Source: Own preparation.

Knowledge about medicinal plants was obtained through books and talks throughout the participants' lives. In one case study, the interviewee declared only using plants for personal purposes.

> Sometimes I can indicate a plant for one thing and end up causing another problem. That's why I don't recommend it... (PARTICIPANT A)

The medicinal plants recommended to those who seek their services are generally obtained from the interviewees' homes. They usually get them from herbal stores or acquaintances' homes when they need the desired plant.

The recommendation of these plants, as well as their blessing, is not charged. This affirmation agrees with the work of Marin and Comin (2017), where the *benzedeiras* report that God conceives the gift of blessing, and it cannot be charged for one's benefit. Although there is no charge, Souza (2021) says that in some cases, one can accept gifts given willingly, such as food, household utensils, and images of saints.

According to Silva *et al*. (2006), traditional knowledge can be understood as the knowledge and know-how about the natural and supernatural world transmitted orally from generation to generation. This knowledge is transmitted through a daily life basis and not only at the formal level. Through oral communication, community residents can provide ample support for science.

Between ethnobotany and modernity

Empirical knowledge is of great importance in society. Despite advances in free healthcare services, this knowledge often represents the only access to this good (ANACLETO *et al*., 2007).

Thus, the tradition and knowledge of the *benzedeiras* of the coast of Paraná are highly relevant. Much of their knowledge, especially about medicinal plants, has yet to be studied for therapeutic efficacy, although traditional knowledge about them has already become an integral part of widespread healthcare practice (SILVA *et al*., 2006; D' ANGELIS; NEGRELLE; 2021).

The imminent risk of the disappearance of this knowledge shows us a reality that requires an increasingly less linear reflection. It is produced by the relationship between collective knowledge and practices that enable the creation of shared identities and values. In addition to solidarity actions aimed at re-appropriating nature, there is a perspective that emphasizes dialogue between various forms of knowledge. That is academic and traditional knowledge working together in search of forms to use nature's resources, respecting its limits and its diversity.

Hence, developing a new way of preserving *benzedeiras*' traditional knowledge is essential, as also pointed out. Leff (2001) states that it is necessary to build a new dialogue that encompasses tradition and modernity, indicating a process of cultural hybridization, where widespread knowledge produced by different cultures is valued, as well as the valorization of science that has the mission of promoting the improvement of people's lives.

Therefore, scientific research may represent the possibility of preserving this knowledge, which is at imminent risk. According to D' Angelis and Negrelle (2021), few ethnobotanical studies on the relationship between natural resources and *benzedeiras* who live in coastal communities have been carried out, and the registration of medicinal plants, or other plants used by the population has been practically neglected.

Thus, the present study notes the prominent and urgent need to perform other and more in-depth research on this matter. This is because plants with possible medicinal properties were documented here with reported use by the interviewees, but their records in the scientific and popular literature are incipient.

Some research participants affirmed that the coast once had more than thirty *benzedeiras* in the late 1950s. However, nowadays, this number is drastically lower. Are modernity and new technologies responsible for this decline? The present study indicates that these factors indirectly affect the transmission of knowledge from participants to possible future practitioners and, consequently, decrease the number of *benzedeiras*.

The likely explanation for this indirect relationship is that technology modifies spaces and drives people's movement. Hence, as technologies advance, the reality of life in rural and urban areas also changes (GONÇALVES; OTTE, 2019). Anacleto *et al*., (2007) add that when analyzing communities on the coast of Paraná, the exodus of the youngest generations is observed in recent decades, who leave the countryside and small towns due to the lack of prospects for obtaining income. This departure to cities with more job opportunities, especially by the younger generations, results in abandoning collective and individual practices present in communities for centuries, putting traditional knowledge at risk.

The disinterest in blessing may also be indirectly influenced by modernity, with globalization intensifying young people's indifference to the community. One of the interviewees in the study is trying to pass on her knowledge to family members, but she affirms that they do not want to continue the craft.

> I tried to get my daughter to bless, but she didn't want to. She says it's too much responsibility... now I'm trying to pass on my knowledge to my granddaughter, but she has no interest, and I also can't force anyone to bless. You have to do it because you want to and with a lot of faith. (PARTICIPANT B)

In this context, it is possible to consider that the advance of technology can indirectly cause the loss of the empirical knowledge of the *benzedeiras* of the coast of Paraná. As a result of the integration of technology into people's lives, there is a noticeable lack of interest in blessing, as well as the

departure of younger people to cities with more job opportunities, thus preventing the transfer of this knowledge.

And yet, despite modernity and technological advances, the craft of *benzedeiras* still survives. However, society's attention is needed to preserve such relevant knowledge and work. In this regard, it is noted that if it is not documented and properly valued, this knowledge may be lost over the years.

As much as technologies can be an ally in disseminating the services of *benzedeiras*, they have difficulty using them. Consequently, their work continues spreading to the local population through viral marketing.

FINAL CONSIDERATIONS

According to all the *benzedeiras* interviewed, learning to bless happened through oral tradition transmitted by family members. However, it was also reported that their knowledge was expanded by spending time with other *benzedeiras* through accounts of people seeking help, empirical practice, observation, and repetition. Mothers seeking medicine for illnesses or spiritual encouragement for their children accounted for more than 80% of the services provided.

The interviewees' average age of 77.5 years old (between 70 and 85 years old), with an average working time of 57 years. They consider that they have a gift that manifested in their youth (when they were between 8 and 17 years old). Most interviewees (83%) did not notice a drop in the search for their assistant over the years. However, the number of people seeking aid may have remained the same given the reduction of approximately 72% in the number of *benzedeiras* in the last two decades.

Although they are highly sought after, the interviewees believe their knowledge is less valued than it used to be. They also think young people are no longer interested in the profession, mainly due to the ease of access to different technologies. In addition, discrimination due to mystical issues may be another factor influencing the decrease in demand for *benzedeiras* among the younger generations.

Finally, the present study documented fifty plant species from twenty-seven botanical families, revealing great ethnobotanical expertise by the *benzedeiras* regarding using medicinal herbs in human healthcare. Their knowledge proved vast and still enjoyed by those who seek them. This reaffirms the importance of this research and the realization of additional research to preserve this valuable ancestral knowledge.

It is recommended that research be carried out with young people from these traditional communities. Identify their perception of the transmission of oral knowledge, as well as how young

people evaluate the importance of the craft of blessing could highlight strategies for the continuity of this noble profession.

REFERENCES

ANACLETO, A. "As relações entre extrativismo, justiça social e desenvolvimento sustentável em remanescentes de comunidades caiçaras inseridas em ambientes florestais no litoral sul do Estado do Paraná". **Anais do Congresso Internacional de Administração**. Ponta Grossa: UTFPR, 2007.

ANACLETO, A. *et al*. "Production and Trade Of Typical Handcrafted Products (PATs) From The Coast Of Paraná". **Journal of Business and Management**, vol. 25, 2023.

ANACLETO, A.; SCHEUER, L. "Between flowers and loves: the profile and behavior of the consumer with the purpose of seduction". **Ornamental Horticulture**, vol. 29, n. 4, 2023.

ASSUNÇÃO, L. M. *et al*. "Healing blessing in territories of the Family Health Strategy: perceptions of workers, users and healers". **Saúde em Debate**, vol. 44, n. 126, 2020.

CALDAS, M. T. *et al*. "Benzeção e busca de sentido: uma reflexão a partir das práticas das benzedeiras". **Revista de Cultura Teológica**, n. 87, 2016.

D'ANGELIS, A.; NEGRELLE, R.R. B. "Ethnobotany of Cataia (Pimenta pseudocaryophyllus(Gomes) Landrum) at National Park of Superagui, Guaraqueçaba/PR/Brazil". **Boletin Latinoamericano y del Caribe de Plantas Medicinales y Aromaticas**, vol. 20, 2021.

GHIGLIONE, F. "Desarrollo rural en Argentina y Latinoamérica: problemáticas y debates actuales". **Revista Americana de Empreendedorismo e Inovação**, vol. 4, n. 2, 2022.

GONÇALVES, A. L.; OTTE, H. "O êxodo rural e urbano por uma visão da inovação tecnológica". **e-Revista LOGO**, vol. 8, n. 3, 2019.

HELMAN, C. G. **Cultura, saúde e doença**. Porto Alegre: Editora Artes Médicas, 1994.

HOFFMANN-HOROCHOVSKI, M. T. "Velhas benzedeiras. Mediações". **Revista de Ciências Sociais**, vol. 17, n. 2, 2012.

KACHAR, V. "A terceira idade e o computador: interação e transformações significativas". **A Terceira Idade**, vol. 11, n. 19, 2000.

LEFF, E. **Ecologia, capital e cultura**: racionalidade ambiental, democracia participativa e desenvolvimento sustentável. Blumenau: Editora da FURB, 2000.

MAGALHÃES, P. K. A. *et al*. "Ethnobotanical and ethnopharmacological study of medicinal plants used by a traditional community in Brazil's northeastern". **Brazilian Journal of Biology**, vol. 82, 2022.

MARIN, C. R; COMIN, S. F. "Desfazendo o "mau-olhado": magia, saúde e desenvolvimento no ofício das benzedeiras". **Psicologia: Ciência e Profissão**, vol. 37, 2017.

NUNES, V. P. C. "Envelhecimento: olhando-se no espelho da vida, através da inclusão digital". *In*:

TERRA, N. L. *et al*. (orgs.). **Envelhecimento e suas Múltiplas áreas do Conhecimento**. Porto Alegre: Editora da PUC-RS, 2010.

OLIVEIRA E. C. S; TROVÃO D. M. B. M. "O uso de plantas em rituais de rezas e benzeduras: um olhar sobre esta prática no estado da Paraíba". **Revista Brasileira de Biociências**, vol. 7, n. 3, 2009.

OLIVEIRA, E. R**. O que é benzeção**. São Paulo: Editora Brasiliense, 1985.

SHUAIB, M. *et al*. "Traditional knowledge about medicinal plant in the remote areas of Wari Tehsil, Dir Upper, Pakistan". **Brazilian Journal of Biology**, vol. 83, 2023.

SILVA, M. S. *et al*. "Plantas medicinais usadas nos distúrbios do trato gastrintestinal no povoado Colônia Treze, Lagarto, SE, Brasil". **Acta Botonica Brasileira**, vol. 20, n. 4, 2006.

SOUZA, M. C. "Cura pela Fé: As Benzedeiras do Cariri Cearense/Healing by Faith: The Benzedeiras of Cariri Cearense". **Revista de Psicologia**, vol. 15, n. 54, 2021.

TAHIR, M. *et al*. "Ethnobotanical study of medicinal plants in Asagirt District, Northeastern Ethiopia". **Tropical Medicine and Health**, vol. 51, n. 1, 2023.

TRESINA, P. S. *et al*. "An Ethnobotanical Study of Medicinal Plants Used by Traditional Healers in Grizzled Squirrel Wildlife Sanctuary (GSWS) Tamil Nadu, India". *In*: ARUNACHALAM, K. *et al*. **Bioprospecting of Tropical Medicinal Plants**. Bern: Springer Nature, 2023.

UNITED NATIONS. "Global demand for medicinal plants can boost green jobs growth". **United Nations** [2023]. Disponível em: <www.un.org>. Acesso em: 23/09/2023.



BOLETIM DE CONJUNTURA (BOCA)

Ano V | Volume 16 | Nº 48| Boa Vista |2023

http://www.ioles.com.br/boca

Editor chefe:

Elói Martins Senhoras

Conselho Editorial

Antonio Ozai da Silva, Universidade Estadual de Maringá

Vitor Stuart Gabriel de Pieri, Universidade do Estado do Rio de Janeiro

Charles Pennaforte, Universidade Federal de Pelotas

Elói Martins Senhoras, Universidade Federal de Roraima

Julio Burdman, Universidad de Buenos Aires, Argentina

Patrícia Nasser de Carvalho, Universidade Federal de Minas Gerais

Conselho Científico

Claudete de Castro Silva Vitte, Universidade Estadual de Campinas

Fabiano de Araújo Moreira, Universidade de São Paulo

Flávia Carolina de Resende Fagundes, Universidade Feevale

Hudson do Vale de Oliveira, Instituto Federal de Roraima

Laodicéia Amorim Weersma, Universidade de Fortaleza

Marcos Antônio Fávaro Martins, Universidade Paulista

Marcos Leandro Mondardo, Universidade Federal da Grande Dourados

Reinaldo Miranda de Sá Teles, Universidade de São Paulo

Rozane Pereira Ignácio, Universidade Estadual de Roraima