saúde EM DEBATE

ORIGINAL ARTICLE

My remedy comes from the forest: Self-care practices among *raizeiros* and *raizeiras* in the Chapada do Araripe as resistance to neo-extractivism

Meu remédio é do mato: a autoatenção de raizeiros e raizeiras da Chapada do Araripe como resistência ao neoextrativismo

Rafaella Miranda Machado[1], René Duarte Martins[2], Islândia Maria Carvalho Sousa[1]

DOI: 10.1590/2358-28982026E210718I

ABSTRACT Self-care corresponds to a set of practices based on popular experiences and the protagonism of individuals in their own care. This dimension safeguards the historicity of communities, elements of identity, and, above all, their ways of life, which also emerge from socio-biodiversity. In the case of *raizeiros*, popular wisdom related to the use of medicinal plants develops through exchanges with the environment and is constructed in a particular way, according to the characteristics of the ecosystem in which they live. This study aimed to analyze the self-care practices of *raizeiros* participating in the Knowledge Exchange of the Caatinga (Encontro de Saberes da Caatinga – ESC), held annually in the Chapada do Araripe region. This is a case study, using the concept of self-care proposed by Menéndez as its analytical framework. Self-care engages with individuals' sociocultural reality and, in this study, expands the spaces for healthcare, disseminating knowledge and practices, and expanding the notion of self-care to that of socio-care, with access to biodiversity being central.

KEYWORDS Plants, medicinal. Popular culture. Anthropology, medical. Public health. Case reports.

RESUMO *A autoatenção à saúde corresponde a um conjunto de práticas baseadas nas experiências populares e no protagonismo dos sujeitos em seu próprio cuidado. Essa dimensão resguarda a historicidade das comunidades, os elementos identitários e, sobretudo, os modos de vida, oriundos também da sociobiodiversidade. No caso dos raizeiros, a sabedoria popular relacionada ao uso de plantas medicinais desenvolve-se nas trocas com o meio ambiente e é construída de maneira particular, conforme as características do ecossistema de convivência. Este estudo teve como objetivo analisar a autoatenção de raizeiros e raizeiras participantes do Encontro de Saberes, realizado anualmente na região da Chapada do Araripe. Trata-se de um estudo de caso, tendo como matriz analítica a concepção de autoatenção proposta por Menéndez. A autoatenção acessa a realidade sociocultural dos indivíduos e, no caso deste estudo, amplia os espaços de cuidado à saúde, disseminando saberes e práticas e expandindo a noção de autoatenção para a de socioatenção, sendo nodal o acesso à biodiversidade.*

PALAVRAS-CHAVE *Plantas medicinais. Cultura popular. Antropologia médica. Saúde pública. Relatos de caso.*

[1] Fundação Oswaldo Cruz (Fiocruz), Instituto Aggeu Magalhães (IAM) – Recife (PE), Brasil.
rafaella.mmachado@gmail.com

[2] Universidade Federal de Pernambuco (UFPE), Centro Acadêmico de Vitória (CAV) – Vitória de Santo Antão (PE), Brasil.

Introduction

The use of plant species in the treatment of diseases has historically been associated with the production of remedies made from whole plants or their parts. *Garrafadas* are part of national culture and are identified in the literature as descendants of *triagas*, herbal preparations consumed by monarchs as treatment for poisons from venomous animals. The use of *garrafadas* is linked to the period of authorization for the preparation of natural remedies outside Jesuit colleges and hospitals[1,2]. This permission resulted in greater autonomy in the practice of popular knowledge, as experienced by *raizeiros* and *raizeiras* (traditional herbal practitioners).

These practitioners use medicinal plants to prepare remedies that treat physical ailments as well as conditions not identified or recognized by biomedicine[3]. This knowledge develops through relational exchanges with the environment and is shaped by the characteristics of the surrounding ecosystem. Access to biodiversity by *raizeiros* and *raizeiras* supports the maintenance of common practices, ensuring the continuity of local worldviews, ways of life, identities, and situated understandings of living, illness, and death.

Their health-related knowledge can be understood as self-care, defined by Menéndez[4] as the actions, knowledge, meanings, and values mobilized from the moment a health problem is identified until the search for a cure is concluded. Such knowledge is commonly transmitted orally and through empirical experience, constructed in a collective manner, and grounded in social reality with strong influence from everyday flows and practices within communities[5]. These practices and forms of knowledge embedded in daily life reveal key elements that constitute health conditions.

Practices and forms of knowledge, including self-care, have nonetheless been violently threatened by the advance of the neoliberal project through neo-extractivism, creating a bleak scenario for socio-biodiversity[6]. The destruction of ecosystems such as the Cerrado and the Caatinga has undermined the future of common goods, ancestral nature-related practices, and the life projects of traditional peoples[7]. This is the case of the Cerrado biome in the Chapada do Araripe, which contains important Cerrado enclaves or islands, ranging from *campo sujo* to *cerradão*, characterized by morphophysiological adaptations to a semi-arid climate. Its rich socio-biodiversity is currently threatened by soybean, maize, and cotton monocultures. The production model replicated by agribusiness in Mato Grosso do Sul is being implemented in the Chapada do Araripe, drastically reducing the region's water recharge capacity, advancing deforestation, and endangering local fauna and flora.

In this context, the knowledge and self-care practices developed by these traditional healers constitute a form of resistance to neo-extractivism, as autonomous and culturally rooted health practices with the potential to strengthen the preservation of socio-biodiversity. Their presence in territories under pressure from the expansion of capital contrasts with approaches that reduce such knowledge to a source of extraction for biotechnological or commercial appropriation. These practices encompass cultural and ecological dimensions that are essential to the reproduction of collective life and to socio-territorial resistance.

Thus, this article aims to analyze the health-related beliefs and practices of *raizeiros* and *raizeiras* in the Chapada do Araripe region from the perspective of critical anthropology, so as to understand how these practices are articulated with the preservation of socio-biodiversity and the provision of care in contexts made vulnerable by historical processes of environmental and cultural dispossession.

Methodological approach

This is a case study conducted at the Knowledge Exchange of the Caatinga (Encontro de Saberes da Caatinga – ESC), held annually in the municipality of Exu, in the state of Pernambuco,

Brazil. Since 2017, the meeting has brought together *raizeiros* and *raizeiras*, benzedeiros and benzedeiras (traditional prayer healers), and midwives from the states of Ceará, Pernambuco, and Piauí, in regions where rural, peasant ways of life predominate within the Caatinga and Cerrado ecosystems.

The event was organized around three daily rounds of dialogue among the main participants, facilitated as spaces for knowledge exchange. This study focuses on the discussion circles led by *raizeiros* and *raizeiras* during the 2019 and 2020 editions, as well as on documents made available by the event's organizers in different years. Accordingly, participant observation (PO) was conducted in January of the aforementioned years during these discussion circles, which involved approximately 50 to 70 *raizeiros* and *raizeiras* in each meeting. Of these, on average, 35% were men and 65% were women. Most of the men were retired farmers; among the women, 30% were under 60 years old, and the remainder were between 60 and 70 years old, all of whom were retired. Only one *raizeiro* made a living from the sale of products.

Participant observation (PO) was also conducted in the event's communal spaces, as it includes areas for dining and interaction between visitors and key participants. In addition, as part of the PO, the authors were involved in organizing the event, particularly by contributing to the systematization of the topics discussed.

The discussion circles were audio-recorded over the three days of the event, with the consent of all participants, covering the entire period of knowledge exchange and totaling approximately 20 hours of recordings per edition. The resulting material was transcribed and organized into a database for this article, and was also shared with the event's organizers for inclusion in their own database.

For data analysis, a combined hermeneutic and dialectical approach was adopted[8], considering the understandings of meaning embedded in the narratives and integrating them with the contradictions and conflicts present in social reality in order to construct interpretive validation. In addition, Menéndez's categories of self-care[4,9] were used as the analytical framework: broad self-care, restricted self-care, and the therapeutic trajectory (*carrera del enfermo*) (*table 1*).

Table 1. Summary of the analytical categories related to self-care employed in the study

Analytical Category	Broad Self-care	Restricted self-care	Pathway to Healing
Definition	A set of practices, representations, values, and forms of knowledge mobilized in everyday life to sustain health, ensure social reproduction, and maintain symbolic and communal balance. It encompasses activities such as food practices, spiritual observances, prayers, symbolic engagements with nature, and the organization of ways of living. This dimension is characterized by the autonomy of social groups and is deeply rooted in culture, family ties, and the collective construction of health as a common good.	It corresponds to actions directly aimed at confronting specific episodes of illness. It includes decisions such as self-medication, the application of home treatments, and the definition of strategies for relief or cure outside the formal health system. This category acknowledges the subject's autonomy in the immediate handling of illness, as well as the constraints imposed by inequalities of access and institutional racism.	This refers to the itinerary followed by the individual or family in the face of an illness process, articulating different systems of care—domestic, traditional, biomedical, spiritual, among others. It is a dynamic trajectory, marked by strategic decisions, attempts at resolution, and ongoing renegotiations, through which subjects combine available forms of knowledge and resources in light of their experience and social context.

Table 1. Summary of the analytical categories related to self-care employed in the study

Analytical Category	Broad Self-care	Restricted self-care	Pathway to Healing
Aplication	The cultivation of traditional subsistence plots, the ritual use of herbs, the oral transmission of knowledge, and care practices grounded in reciprocity.	The preparation of herbal teas, the use of medicinal syrups *(lambedores)*, therapeutic baths, and home-based dietary restrictions to control symptoms.	An individual may begin by using medicinal plants, seek out a traditional healer *(benzedeira)*, and only later turn to the formal healthcare system.

Sources: Compiled by the author based on Menéndez[4,9].

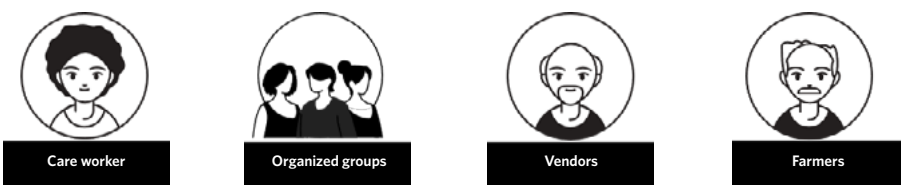
The study complies with the ethical guidelines and principles outlined in Resolution No. 466 of December 12, 2012, as it involves research with human participants[10]. The project used a database from a research project previously approved by a Research Ethics Committee. To ensure the anonymity of the interviewees, participants were identified using the term Raiz.

Results e discussion

Expanded self-care: oral transmission of care-related knowledge and practices based on reciprocity

Participation in organizing the gathering, along with interaction and observation throughout the Caatinga Knowledge Gathering (ESC), helped identify four social segments among the *raizeiros* and *raizeiras*. The classification was based on the life stories shared during the event and on participants' expressed understandings of their work. Identifying these segments aimed to support a better understanding of their expanded self-care practices. The segments identified were: women engaged in unpaid reproductive labor, organized groups, vendors, and farmers (*figure 1*).

Figure 1. Segments of *raizeiros* and *raizeiras* identified at the Caatinga Knowledge Gathering



Responsible for healthcare practices; they acquire their knowledge through the experiences of family members; access to medicinal plants comes from agriculture or nearby forests; and they serve as a reference point for care within their community.

A group composed of women; they are affiliated with a non-governmental organization; they identify as traditional healers *(meizinheiras)*; and they transmit knowledge horizontally through oral tradition.

The internet and other traditional herbalists *(raizeiros)* are sources of knowledge about medicinal plants and natural remedies. They are not tied to open-air markets or public marketplaces in the cities where they live.

Elderly men who carry on a long-standing tradition of farming. Agriculture is their source of knowledge and income, and it also ensures they have privileged access to the plants used in traditional bottled remedies *(garrafadas)*.

Source: Own elaboration.

The group of women engaged in unpaid reproductive labor includes female farmers and retirees who function as community references in healthcare based on medicinal plants. Their experience accompanying earlier generations in health practices, particularly in situations of illness, has equipped them with the responsibility of sustaining this care within the family sphere. This segment reinforces the widely recognized centrality of women in family care practices[11], while also making visible the forms of knowledge and everyday understandings mobilized in the maintenance of health, social reproduction, and socio-community balance.

Although women perform largely invisible labor, they are indispensable to the social reproduction of the family, including household members engaged in wage labor[12]. Another group of *raizeiras* is linked to the Christian Base Association (ACB), a non-governmental organization founded in the Cariri region of Ceará in the early 1980s. The association provides political education for rural communities, contributing to their autonomy and to the sustainability of their activities through technical support[13]. The *raizeiras* in this group spontaneously mentioned their affiliation with this organization as a form of identification. They are female farmers or women engaged primarily in unpaid domestic work, who maintain frequent gatherings among themselves; it is this bond that underpins the construction and sharing of knowledge.

Lopes[14] argues that spaces similar to those provided by the ACB—such as religious groups, pastoral initiatives, and community associations—are particularly conducive to the exchange of experiences and knowledge related to healthcare, the treatment of specific conditions, and changes in everyday habits.

The vendors engage in informal sales or through organizations involved in the commercialization of fruits, therapeutic clays, herbal preparations (garrafadas), syrups (lambedores), teas, and other medicinal plant products. This group shows the greatest tendency to acquire knowledge about the properties of plant materials through books, scientific articles, and online sources. Their participation in the ESC is also motivated by a search for knowledge from *raizeiros* with longer experience:

> *One day, Raiz brought us together there in Chico Gomes'. There, those girls over there, [...] they have an ointment that they make and sell. And they know I'm not lying. I came and bought an ointment [...]. I used it every night. I washed and scrubbed my feet and applied the ointment she made. I got better [...]. Here, look, there's only the mark* (Raiz 1).

The farmers' group is predominantly composed of elderly men who have devoted themselves to land cultivation and to producing food for both commercial sale and family consumption. Their long work experience, proximity to different plant species, family involvement in maintaining this activity, and accumulated knowledge all contribute to learning in this field. Farming thus functions not only as a source of income but also as a site of knowledge production and as a means of obtaining the plants used in their practices.

As observed during the event, each segment of *raizeiros* and *raizeiras* is characterized by distinct practices of self-care shaped by the knowledge they incorporate in healthcare. Women engaged in unpaid reproductive labor display familiar knowledge and behaviors that inform their self-care practices. Farmers follow a similar pattern, also incorporating understandings of natural cycles. Vendors continuously draw on a wide range of knowledge sources and practices, while *raizeiras* affiliated with the ACB see their knowledge strengthened through vertical transmission.

Affective bonds are also fundamental, as they encourage the recognition of individuals as skilled producers of homemade remedies, thereby increasing demand for their health-related services. Similarly, this sociability is also part of the changes suggested by

raizeiros in relation to the everyday habits of people undergoing treatment for certain health conditions:

> *es! You have to give the medicine. You have to prepare the remedy, but first there has to be a lot of love in that family [...]. Never leave them alone, not even once. And also get them to dance a forró pé de serra (northeastern Brazilian folk dance). Dancing is good. We have a coco dance; there are people in our group who are 79 years old, others 89, others 94, you see?! [...] We dance, we play, we are joyful. [...] Yes, taking medicine is important, but you have to have love for that person, patience—lots and lots of it—so that the person can overcome it. They heal. But to heal, my son, you have to show love* (Raiz 3).

Their praxis ensures familiarity with the environment. It also allows for inferences about notions of health constructed through experiences of illness and healing practices. These are mediated by forms of social reproduction oriented toward the preservation of life and produced within and through the territory. This can be particularly observed when they are also engaged in agricultural activities, since a good harvest depends on attentiveness to soil care, irrigation, seasonal cycles, and plant species, as well as on patience to accompany the developmental stages of cultivated species. This dimension indicates a continuous material and symbolic exchange with nature, highlighting the health–illness–collectivity process as an objectively social phenomenon, as discussed by Laurell[15].

According to Menéndez[4,9], this form of self-care is not limited to a direct struggle against disease, but also encompasses ongoing strategies for the preservation of health, linked to processes of social reproduction, territorial belonging, and collective identity.

Care produced through women's everyday practices—which is often invisible yet central to sustaining life processes—alongside plant cultivation, oral knowledge transmission, and collective social practices (such as therapeutic dance, the ritual use of plants, and community recognition of healing skills), reveals a logic that differs from the biomedical one, while remaining effective in its own context. These modes of care depend on affective relations and intergenerational exchanges of knowledge, as well as on a relational understanding of health as a shared good. By recognizing these rationalities, we move beyond the uncritical dismissal of popular knowledge and of the symbolic systems of value that shape forms of care beyond medical-institutional frameworks[4,9].

Expanded self-care brings together domestic representations and practices linked to the maintenance of culture and, fundamentally, to social reproduction[4]. Through this study, we access meanings and understandings of healthcare that, to some extent, are implicated in both cultural continuity and social reproduction. These include forms of community organization in situations of illness, understandings of the body in relation to disease, conceptions of illness, among other aspects.

Thus, for *raizeiros*, the body is a space of communication and mediation with God. Healing takes place in the body as a blessing manifested in response to their religious and ethical commitments. This is why continuous care throughout life becomes necessary, oriented toward the preservation of the body and the slowing of its deterioration. Within this perspective, illness is recognized through bodily language, understood as an internal response to how the body has been treated, particularly in relation to diet. For them, dietary habits marked by processed and industrialized foods appear to be among the main causes of illness today. Food is understood as a form of treatment, just as healthy dietary choices are seen as central to maintaining health and to avoiding the body's distress signals, manifested as illness:

> *Depression is the disease of this century. And it is largely the result of what we eat. [...] All processed*

foods, with preservatives, cause depression. And any food made with wheat flour causes depression. […] You may not believe it, but it's true (Raiz 5).

Within this group, food appears in both restricted and expanded forms of self-care, meaning that it is present both in direct responses to illness and in the broader cultural understandings that shape their practices. A similar dynamic is observed with religiosity: faith appears as an element of treatment, as one of the criteria through which interventions are understood as effective, and even as validation of their practices, corroborating D'Almeida's[3] findings.

Within expanded self-care, religiosity contributes to the initiation of one's work as a *raizeiro* or *raizeira* through a gift or divine grace, as emphasized by Silva[16]. In this sense, the work of the *raizeiro* depends on divine intervention, understood as requiring permission and a consequent expression of gratitude. The relationship and conduct of *raizeiros* toward what they consider divine reinforce the understanding of healing as a sacred event: "*When I'm going to prepare it, I ask God for courage and strength, and I trust in God that the remedy will bring healing. God is the one who heals us. Only through faith in God*" (Raiz 6).

Regarding death, despite differences in how each group identified at the meeting cares for its health, there is a shared fear of dying. From the dialogues exchanged among them, this fear suggests that, just as episodes of illness are frequent, their practices are also commonly shaped by attempts to sustain life.

Experiencing new illnesses—previously unknown as lived experience—contributes to an intensified fear of dying. Their work with people in severe distress is also understood as contributing to the re-emergence of this fear with each new encounter with situations that threaten the continuity of life. Illness is experienced with a strong sense of immediacy, pragmatism, organization, and faith, given the urgency of identifying and treating the problem and avoiding the risk of succumbing to the consequences of disease. The expanded self-care practices of *raizeiros* reflect a serious commitment to alleviating suffering and, above all, preserving life.

Expanded self-care among individuals such as *raizeiros* brings together a repertoire of popular knowledge about health that reflects a form of rationality embedded in ways of life that diverge from biomedical logic. Within these symbolic systems, the body, health, and healing are embedded in community life histories, in relations with the environment and culture, among other relational dimensions[17]. Expanded self-care is grounded in the epistemological diversity of population groups; such understandings contribute to a broader, more ecosystemic conception of health. In this sense, neo-extractivism directly threatens the health practices of this population group.

Expanded self-care practices may represent forms of both practical and symbolic resistance to the persistent structures and relations of domination embedded in the functioning, organization, and modes of operation of the state apparatus (coloniality in health). These practices reaffirm health as a cultural, territorial, and political praxis. Such characteristics are fundamental to the resilience of life in these territories and must be strengthened to ensure intergenerational continuity. What can be observed in the Chapada is a gradual loss of this intergenerational knowledge of coexistence with nature, with the ESC emerging as a space for strengthening knowledge sharing.

Plants and bonds in restricted self-care

Restricted self-care, as described by Menéndez[4], encompasses all decisions made with a relative degree of autonomy, aimed at interrupting, alleviating, or curing suffering caused by illness, including the decision not to act. In the case of *raizeiros* and *raizeiras*, the social dimension of restricted self-care

becomes evident, giving rise to what we call socio-self-care. There is a socialization of ancestral knowledge among other members of their community, which influences ways of thinking about and collectively caring for health, guided by the historicity of life contexts.

Their self-care is intrinsically linked to the care provided to others; reference to one inevitably evokes the other, as observed throughout the conversations. Their individual experiences and ancestral learning mutually inform the self-care practices of other members of their community, as illustrated by a *raizeira* when offering a self-care suggestion:

> *Put it in the ear and leave it for 10 minutes [...] in the ear. Will it smell bad? It will, but it cured an old man over 90 years old. He died with good hearing—it worked. I've done it for my mom, too. I've done it for myself as well, and it worked perfectly* (Raiz 4).

It is well established that the preparation of homemade remedies is an important aspect of *raizeiros*' praxis18. Based on discussions at the ESC, restricted self-care was frequently mentioned in relation to self-medication using plant-based products found in the region where they live (*table 2*).

Table 2. Simplified local glossary of products used by *raizeiros* and *raizeiras* in self-care practices

Production Type	Definition
Clays / therapeutic clay	A poultice of selected herbs: applied locally for pain relief.
Sitz baths	Concentrated, lukewarm infusions: for bathing the lower abdominal region in both women and men.
Herbal baths	Concentrated infusions: full-body baths for spiritual purposes, performed after bodily cleansing.
Seven-herb infusions *(cafézinhos sete ervas)*	A selection of plant parts (leaves, seeds, fruits, and bark): toasted and ground to prepare an infusion from the resulting powder.
Herbal teas	Preparations made by infusion (for more delicate plant parts) or decoction (for more resistant parts), intended for same-day ingestion.
Aqueous bark extracts	Selected plant barks are soaked in water for later ingestion.
Herbal bottled preparations *(garrafadas / raizadas / meizinhas)*	Selected plant parts are simmered over low heat for an extended period.
Hydrolates	A by-product of the essential oils' extraction process during their distillation.
Medicinal syrups *(lambedores)*	Selected plant parts simmered over low heat with sugar or honey.
Dietary changes	Recommendations for adjusting dietary routines based on the specific illness.
Oils	Topical use, primarily for massages to relieve pain. Administered in small amounts for oral ingestion.
Family support reorganization	When illness occurs, the person seeking recovery becomes the focus of family life. The routines and practices of family members are reorganized around their healing process.
Ritual healing practices *(simpatias)*	These practices take the form of staged rituals connecting the material and spiritual realms to heal adverse conditions, with nature acting as a mediating space.

Source: Own elaboration.

The use of allopathic medicines was not mentioned in the discussion circles, although biomedical practical discourse was present in their dosage indications. This occurred mainly in the systematization of steps related to self-medication, such as dosage recommendations

and treatment duration. Homemade preparations using medicinal plants are recommended, in ways that in some respects resemble what can be learned in health service consultations involving pharmacological therapies.

Within self-care, self-medication is an integral part of direct responses to illness. It is understood as the intentional attempt to cure, alleviate, or prevent health-related conditions, and is not restricted to the use of pharmaceutical drugs. In this sense, self-medication also includes the consumption of herbal infusions, receiving massages, or applying therapeutic clay, for example[4].

Self-medication has frequently been confused with self-care, particularly within biomedicine, which narrowly frames self-care in terms of the risks associated with independently taking medications. However, negative outcomes related to self-medication may arise regardless of where the therapeutic intervention[9] originates.

The autonomous use of medicinal plants in the household is a widespread practice and often precedes the use of biomedical care[19]. Rather than being dismissed, these practices can create opportunities for dialogue between health services and local knowledge, strengthening Primary Health Care (PHC) and supporting therapeutic approaches that promote autonomy. In addition, they can foster shared learning around household self-medication, helping to reduce the risk of harmful health outcomes[20].

While self-medication with medicinal plants offers important potential benefits, it also entails risks, particularly in the context of the expanding market for natural products. For this reason, closer integration between traditional knowledge and biomedicine is essential to ensure safer and more appropriate use, especially by minimizing drug interactions and toxic effects. Furthermore, embedding self-medication practices within Primary Health Care (PHC), through initiatives such as Farmácia Viva (a public program using medicinal plants), supports health promotion beyond institutional settings and helps reduce the risks associated with the use of harmful substances at critical stages of the life course.

Investigating self-medication with medicinal plants in the context of group self-care offers access to a repertoire of popular knowledge about these resources—knowledge that is both accumulated over time and actively shared within social networks. It reflects interactions between communities, their symbolic and material environments, and the forms of popular knowledge that emerge from these relationships. Such knowledge is not static; it is continually transformed through exchange, giving rise to new understandings, practices, and behaviors. Recognizing these self-care practices is essential for the effectiveness of Primary Health Care (PHC).

The family and affective bond emerges as another important dimension of self-care practices among *raizeiros* and *raizeiras*. In this form of care, actions are carried out autonomously, but not in isolation. Illness activates a network of relationships through which decisions and positions are collectively shaped, guiding shared efforts toward addressing and resolving the problem.

The treatments carried out by *raizeiros* are organized into a sequence of stages, from the harvesting of plant material and its preparation to the production of the remedy and its subsequent ingestion or use by the person who is ill. The overall process takes on a ritual-like character oriented towards healing, as reflected in the meanings and value attributed to each step. The recommendations often carry a ceremonial tone, in which the ill person is guided and carefully accompanied through the necessary stages to complete the process.

The experience of the *raizeiros* group shows how illness brings about immediate changes in family routines and organization to meet the needs arising from the disease and its treatment. The healthcare provided by these practitioners is highly varied and differs in complexity from case to case. This flexibility is also evident in cases where treatment continues even after the symptoms that first led to care-seeking have subsided.

Sometimes, the transition from treating illness to maintaining health involves a change in the remedy itself—both in its preparation and mode of use—drawing on different plant resources, as well as adjustments in dosage and frequency. In this phase of post-recovery maintenance, the continued use of a specific combination of medicinal plants is encouraged to support full recovery and prevent the return of symptoms. This new prescription thus functions as a preventive measure against the recurrence of the same condition. These features, which can be understood as valuable cultural practices, may also serve as a basis for dialogue in strengthening the effectiveness of health policy interventions.

The paths taken in the search for healing

Through their accounts, it can be seen that *raizeiros* and *raizeiras* establish diverse forms of connection between their self-care practices—drawing on their own methods for addressing illness—and the primary or complementary presence of a healthcare professional, usually a physician. This is also observed among Indigenous ethnic groups that have long maintained close contact with biomedical resources, which facilitates the continuation of their practices alongside medical care within health services, depending on the type of illness the family is able to recognise[22].

In contrast to the work of Menéndez[4], the analysis of self-care among *raizeiros*—as knowledgeable practitioners—was not limited to a single model of care. Rather, it made it possible to observe what the author defines as the *carrera del enfermo*, or illness trajectories in the search for healing, here reflected in the group's engagement with the hegemonic biomedical model. This highlights the diversity of practices and forms of knowledge that can be mobilized in healthcare in a relatively autonomous manner.

Withdrawal from health services was linked to diagnostic uncertainty regarding the health problem experienced. This may result from the standardization commonly applied in disease classification criteria, which are based on specific populations with particular economic, social, and health conditions, and are then broadly and indiscriminately extended to the general population. These criteria are shaped by the assumptions and sociocultural context of the care model to which they belong—the biomedical model. As such, they are rarely able to account for notions of health and illness that fall outside these underlying premises.

It is understood that the forms of suffering addressed by popular knowledge are those that give rise to sociocultural demands, which biomedicine, as a healthcare system, is not fully equipped to manage with the necessary resources[23]. This is primarily due to the fact that certain illnesses evoke forms of reasoning that fall outside the dominant medical rationality, as they diverge from a materialist perspective centered on biological aspects.

Within the country, it is well recognised that diverse sociocultural realities coexist, in which each group holds distinct understandings of health and illness. Conditions perceived as illness by one group may not be easily recognised by others, particularly when viewed through their own frameworks of interpretation. In this context, a practice grounded in local realities—especially within Primary Health Care—gains greater relevance for community-bas ed action, drawing on the sociocultural context itself in the delivery of care[24].

Oliveira[25], in an analysis of febrile cases in a population from Boa Vista (RR), found that self-care practices and the trajectories followed in the search for healing were more closely aligned with sociocultural realities and the needs of addressing the problem than the care pathway defined by the local health system. Nevertheless, despite the health system's limited capacity to resolve such cases, individuals continue to seek its services as one of the main available care options, which nonetheless help alleviate their suffering.

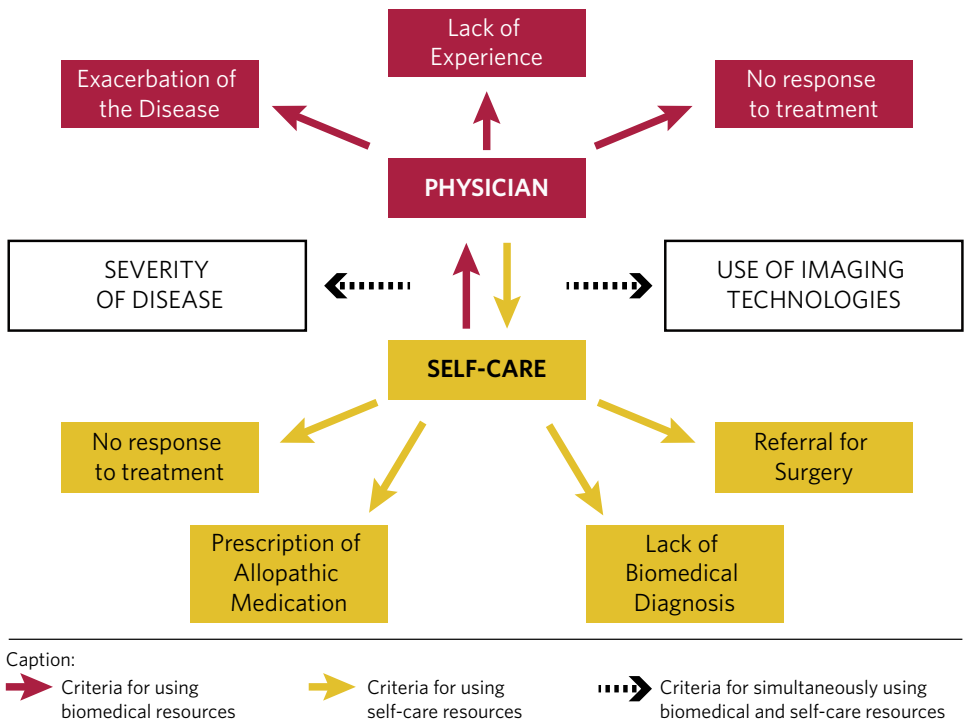
Similarly, *raizeiros* and *raizeiras* grant the biomedical model—through health services—a significant role in their search for healing, even though they are often misunderstood in their illness processes. This study does not identify either a discrediting or an overvaluation of medical practice. Their recourse to it is justified by the need to interrupt the chain of events associated with illness, as well as by the freedom with which *raizeiros* naturally navigate the boundary between their own forms of knowledge and consultation with other available bodies of knowledge.

The search for the cure of an illness and for the restoration of a state considered healthy suggests a path marked by trial and error. This includes both the use of medicinal plants and consultation with, or indirect influence by, a medical professional. In the conversation transcripts, there was no mention of the *raizeiros* attempting to discuss their self-care decisions with healthcare professionals.

Nery and Silva[26], in their study of interactions between *raizeiros* and health professionals, show that while there are reports of cordial exchanges between the two groups, a lack of engagement and interest in the autonomous use of medicinal plants predominates. The dialogues among *raizeiros* in the ESC, by contrast, allow us to observe that the healing practices by which they are identified are also subject to unexpected outcomes, leading them to seek new information and practices, primarily through biomedicine.

The search for health services occurs in situations of acute illness and the intense suffering it entails; in cases where a disease is unfamiliar because it has not been previously experienced and thus has not generated learning about it; and in situations in which treatments carried out during self-care do not produce the expected results in alleviating anguish and pain (*figure 2*).

Figure 2. Healing trajectories of the *raizeiros* and *raizeiras* participating in the study



Source: Own elaboration.

The return to self-care occurs in response to surgical indications within health services; the absence of a biomedical diagnosis for the problem at hand; the recommendation of prolonged use of medications—due to their high cost and concerns regarding their safety and efficacy—as well as interventions, treatments, and therapeutic approaches that fail to produce the desired health outcomes. In such situations, they turn to both biomedicine and popular knowledge applied to self-care, particularly when the illness becomes severe or when diagnostic confirmation is required. The choice of care is not clearly defined, but is shaped by each illness experience.

There is no abandonment of one model of care in favor of another. Rather, they may—and indeed should—take on different roles along the same trajectory in the search for healing. Knowledge related to the use of natural resources in the preparation of home remedies is not questioned in light of other possible forms of knowledge; instead, priority is given to the alleviation of suffering and the restoration of health.

Final considerations

The study found that the use of medicinal plants is the primary self-care strategy employed by *raizeiros* and *raizeiras* to halt illness processes, although representatives of biomedicine regard this practice as a potential cause of adverse health outcomes.

Self-care makes it possible to bring together resources from different models of care. Although these models are shaped by relations of hegemony and subordination, *raizeiros* prioritize meeting their own health needs. Focusing the analysis on the autonomous care practices of a group of healing specialists did not limit the discussion to a single model of care. On the contrary, it highlights the influence of biomedicine in healthcare as one of the available options in the search for healing. At the same time, biomedical discourse also informs the practices of *raizeiros* and *raizeiras*, particularly in their use of medicinal plants for self-medication.

These life stories reveal the different forms of care and understandings of health that people draw on in response to illness. They shed light on the social and cultural frameworks through which communities interpret health problems in each context. The choice of specific healers and care practices reflects the kinds of knowledge and understandings individuals consider meaningful in addressing their health concerns.

Traditional healers, as transmitters of knowledge, conceptions, and ways of caring for health, incorporate into their self-care repertoire an understanding of how the habits and behaviors of individuals in their communities are shaped. Self-care engages with people's sociocultural realities and, in this study, expands the spaces of healthcare by circulating knowledge and practices, broadening the notion of self-care to that of socio-care.

Access to biodiversity by *raizeiros* and *raizeiras* contributes to the maintenance of shared practices, ensuring the continuity of local cosmologies, ways of life, identities, and forms of experiencing life, illness, and death. Given this context, it is urgent to develop policies that promote low-water agroforestry systems and strengthen the agency of local communities to ensure the conservation of the biome and the transmission of traditional knowledge.

Finally, it is reiterated that the findings of this study reflect the context of the Chapada do Araripe and the ways in which knowledge related to self-care is experienced in this territory. Therefore, given the specificity of this context, the results cannot be generalized to other population groups living under different cultural, social, and territorial conditions.

Authorship contributions

Machado RM (0000-0002-0365-9834)*, Martins RD (0000-0002-9444-3501)*, and Sousa IMC (0000-0001-9324-4896)* contributed equally to the preparation of the manuscript. ■

*Orcid (Open Researcher and Contributor ID).

References

1. Camargo MTLA. A garrafada na medicina popular: uma revisão historiográfica. Dominguezia [Internet]. 2011 [acesso em 25 maio 20];27(1):41-49. Disponível em: https://ojs.dominguezia.org/index.php/Dominguezia/article/view/2011%2027%281%29-4

2. Passos MMB, Albino RC, Feitoza-Silva M, et al. A disseminação cultural das garrafadas no Brasil: um paralelo entre medicina popular e legislação sanitária. Saúde Debate. 2018;42(116):248-62. DOI: https://doi.org/10.1590/0103-1104201811620

3. D'Almeida SS. Iniciativas comunitárias para o uso sustentável da biodiversidade: o caso da articulação pacari *raizeiras* do cerrado. Rev Habitus. 2022;20(1):10-27. DOI: https://doi.org/10.18224/hab.v20i1.12383

4. Menéndez EL. Sujeitos, saberes e estruturas: uma introdução ao enfoque relacional no estudo da saúde coletiva. São Paulo: Hucitec; 2011.

5. Navarro LM, Arellano AH, Kleiche MD. Prácticas curativas en las Huertas de Malinalco: los saberes integrados sobre plantas, padecimientos y curación tradicionales. ENGOV Working Paper Ser [Internet]. 2013 [acesso em 2025 maio 20];3(4):1-59. Disponível em: https://biblioteca.clacso.edu.ar/clacso/engov/20140411075525/curanderas_arellano_morales.pdf

6. Svampa M. Neoextrativismo na América Latina: conflitos socioambientais, a virada territorial e novas narrativas políticas. Cambridge: Cambridge University Press; 2019.

7. Egger DS, Rigotto RM, Lima FANS, et al. Ecocídio nos Cerrados: agronegócio, espoliação das águas e contaminação por agrotóxicos. Desenvolv Meio Ambiente. 2021;57:16-54. DOI: https://doi.org/10.5380/dma.v57i0.76212

8. Minayo MCS. Caminhos do pensamento: epistemologia e método. Rio de Janeiro: Fiocruz; 2002.

9. Menéndez EL. Autoatención de los padecimientos y algunos imaginarios antropológicos. Desacatos [Internet]. 2018 [acesso em 2025 maio 20];58:104-13. Disponível em: https://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S1607-050X2018000300104

10. Conselho Nacional de Saúde (BR). Resolução nº 466, de 12 dezembro de 2012. Aprova as diretrizes e normas regulamentadoras de pesquisas envolvendo seres humanos e revoga as Resoluções CNS nºs. 196/96, 303/2000 e 404/2008. Diário Oficial da União, Brasília, DF. 2013 jun 13; Edição 112; Seção I:59-62.

11. Araneda GJ, Retamal N. Prácticas terapéuticas de dueñas de casa en una población de Valdivia, Chile: un aporte para el rescate de saberes en medicina doméstica. Med Soc. 2021;14(1):13-9.

12. Bandeira LM, Preturlan RB. As pesquisas sobre o uso do tempo e a promoção da igualdade de gênero no Brasil. In: Fontoura N, Araújo C, organizadores. Uso do tempo e gênero. Rio de Janeiro: UERJ; 2016. p. 43-59.

13. Lucena MM. Na trilha dos Kariri: implicações dos processos de comunicação na disseminação dos sistemas agroflorestais por camponeses/as cearenses [dissertação]. Fortaleza: Universidade Federal do Ceará; 2012.

14. Lopes CV. O paradigma do dom e o cuidado de saúde com plantas medicinais de informantes folk. Rev Saúde Ciênc. 2019;8(3):54-68. DOI: https://doi.org/10.35572/rsc.v8i3.25

15. Laurell AC. A saúde-doença como processo social. Rev Mex Cienc Pol Soc. 1976;84:131-57.

16. Silva AMS. O emolduramento dos valores religiosos na vida dos *raizeiros* no município de Mirabela-MG. In: 6º Congresso em Desenvolvimento Social; 2018 ago 14; Montes Claros. Minas Gerais: Unimontes; 2018. p. 2304-12.

17. Tesser CD. Social medicalization (II): biomedical limits and proposals for primary care clinics. Interface (Botucatu). 2006;10:347-62. DOI: https://doi.org/10.1590/S1414-32832006000200006

18. Borges DQS, Almeida CKL, Lima KVS, et al. Etnobotânica de plantas medicinais comercializadas por *raizeiros* em uma cidade do sertão da Bahia, Brasil. Braz J Dev. 2021;7(12):61-73. DOI: https://doi.org/10.34117/bjdv7n12-742

19. Tesser CD. Práticas integrativas e complementares e racionalidades médicas no SUS e na atenção primária à saúde: possibilidades estratégicas de expansão. J Manag Prim Health Care. 2017;8(2):216-32. DOI: https://doi.org/10.14295/jmphc.v8i2.528

20. Antonio GD, Tesser CD, Moretti-Pires RO. Contribuições das plantas medicinais para o cuidado e a promoção da saúde na atenção primária. Interface (Botucatu). 2012;17(46):615-33. DOI: https://doi.org/10.1590/S1414-32832013005000014

21. Costa IB, Bonfim FPG, Pasa MC, et al. Estudo etnobotânico da flora medicinal na comunidade rural de Rio dos Couros, estado de Mato Grosso, Brasil. Bol Latinoam Caribe Plantas Med Aromat. 2017;16(1):53-67. DOI: https://doi.org/10.37515/BLACPM.v16n1.299

22. Lima ARA, Dias NS, Lopes LB, et al. Necessidades de saúde da população rural: como os profissionais de saúde podem contribuir? Saúde Debate. 2019;43(122):755-64. DOI: https://doi.org/10.1590/0103-1104201912208

23. Langdon EJ. Os diálogos da antropologia com a saúde: contribuições para as políticas públicas. Ciênc saúde coletiva. 2014;19:1019-29. DOI: https://doi.org/10.1590/1413-81232014194.22302013

24. Souza MLP, Garnelo L. Relativismo cultural e uso de álcool: contribuições a partir do campo da saúde indígena. In: Alarcon S, Jorge MAS, organizadores. Álcool e outras drogas: diálogos sobre um mal-estar contemporâneo. Rio de Janeiro: Editora Fiocruz; 2012. p. 265-84.

25. Oliveira DC. Saúde rural: itinerário terapêutico nas febres como uma construção sociocultural [dissertação]. Manaus: Instituto de Pesquisas Leônidas e Maria Deane, Fundação Oswaldo Cruz; 2020. 83 p.

26. Nery JCS, Silva MC. A territorialização dos *raizeiros* do Mercado Municipal de Araguaína/TO. Confins. 2023;(59). DOI: https://doi.org/10.4000/confins.52106

Received on 05/31/2025
Accepted on 12/05/2025
Conflict of interest: Non-existent
Data availability: The research data is contained within the manuscript itself
Financial support: National Council for Scientific and Technological Development (CNPq)

Editor in charge: Fernanda Savicki de Almeida, Fundação Oswaldo Cruz (Fiocruz), Fortaleza (Ceará/CE), Brasil. Lattes: http://lattes.cnpq.br/6908395306417399, Orcid: https://orcid.org/0000-0003-4784-6540, e-mail: fernanda.savicki@fiocruz.br