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Daniel Scopel

Oswaldo Cruz Foundation of Mato Grosso do Sul and National Institute of Science and Technology: Brazil Plural - Fiocruz, daniel.amazonia@gmail.com

Raquel Dias-Scopel

Oswaldo Cruz Foundation of Mato Grosso do Sul and National Institute of Science and Technology: Brazil Plural - Fiocruz, raquel.scopel@gmail.com

Esther Jean Langdon

National Institute of Science and Technology: Brazil Plural/Federal University of Santa Catarina; CNPq Researcher, estherjeanbr@gmail.com

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Community Health Workers in Central-Southern Amazonia: An Ethnographic Account of the Munduruku People of Kwatá Laranjal Indigenous Land

Daniel Scopel

*Oswaldo Cruz Foundation of Mato Grosso do Sul and
National Institute of Science and Technology: Brazil Plural -
Fiocruz
Brazil*

Raquel Dias-Scopel

*Oswaldo Cruz Foundation of Mato Grosso do Sul and
National Institute of Science and Technology: Brazil Plural -
Fiocruz
Brazil*

Esther Jean Langdon

*National Institute of Science and Technology: Brazil Plural,
Federal University of Santa Catarina and CNPq Researcher
Brazil*

Introduction

This article contributes to the discussion on the role of community health workers (CHW) in the expansion of biomedical services as part of state presence and control in Indigenous territories. It examines the participation and protagonism of CHW that are part of the health teams offering primary services to the Munduruku of the Kwatá Laranjal Indigenous Land (Portuguese: Terra Indígena or TI) located in the municipality of Borba, State of Amazonas, Brazil. Health practices among the Munduruku are diverse, representing a history of interethnic contacts and influences. Daily health practices occur within a context of medical pluralism, as the Munduruku articulate with and choose from a diversity of forms of care perceived as appropriate for their needs, including both medicines and consultations with CHW or other members of the health team. The Munduruku commonly refer to their CHWs according to acronyms for the workers contracted by the Indigenous Health Subsystem (SASI): “AIS” for the health agent, “AISAN” for the sanitary agent, and “AIM” for the microscopist agent. The use and familiarity of these acronyms is evidence of the ongoing medicalization process in the TI, and they constitute a diacritical mark of biomedical discourse and the Subsystem implemented in 1999.

For centuries the Munduruku have developed strategies for confronting their adversaries and promoting collective well-being based on a perspective that relates the health/illness processes with the use of territory and experiences with alterity, including the state. The CHWs role has become part of the collective political project that seeks to maintain and improve Munduruku well-being, a broad notion of health related to territorial occupation and affirmation. Consequently, any evaluation of the CHWs participation in the medicalization process must also consider the historically constructed collective strategies related to social and biological reproduction intimately linked to territoriality and alterity. The TI is a contact

1. Terra Indígena (TI) designates an Indigenous territory legally recognized by the state. SASI's services are limited to populations living within TIs and do not provide for Brazil's urban population that identifies as Indigenous.

zone of intermediality as defined by Greene (1998) and Follér (2004): an encounter between different knowledges and practices as social actors negotiate and appropriate different therapeutic practices to resolve their afflictions. CHWs not only represent the hegemonic medical model, but they are also community members who share similar ideas and practices and are subject to social and political pressures. They are an integral part of the illness/health/care process, intervening in therapeutic itineraries of their families and neighbors, facilitating their access to the variety of alternatives. Relations between the models of healthcare are asymmetric, and state structures support biomedical hegemony in a relational context in which CHWs exhibit agency and protagonism through participation in therapeutic itineraries and social networks. As part of public health services, they contribute to the expansion of biomedical hegemony in the Indigenous territory that is part of the state's territorialization process.

SASI was created in Brazil to deliver primary health services to all TIs.¹ SASI is a subsystem of the Unified Health System (Sistema Único de Saúde / SUS), the national system based on municipal divisions. SASI follows SUS principles, guaranteeing citizen participation in all phases of planning, execution, and evaluation of health services; however it is "differentiated" in the sense that is structured according to Special Indigenous Health Districts (Distritos Sanitários Especiais Indígenas /DSEI) administered from Brasília. SASI is "differentiated" in a second way. Its health teams are mandated to incorporate and to articulate with indigenous knowledge and practices. According to the National Policy of Healthcare for Indigenous Peoples (PNASPI), CHWs play a central role as the link between the health team and community, as well as the principal articulator between biomedical and traditional practices. In Brazil, the CHW role is inspired by the Alma Ata Conference that sought to expand primary attention and by international and national debates that accompanied the return to democracy and defense of Indigenous peoples' rights to their culture and practices.

Lehmann and Sanders's (2007) review of CHW programs in various countries affirms that the notion of CHW is an "umbrella term." As such it encompasses a set of diverse specialists and nomenclatures that vary depending upon context and job demands, such as educational level, sex, age, (non)salary, etc. The term covers a wide range of roles, from midwives or traditional specialists to state-trained workers. In Brazil, the roles of Indigenous CHWs should not be confused with that of the "community health agent" (*agentes comunitários de saúde / ACS*), who are contracted by municipalities to assist in primary health services among nonindigenous communities. In Brazil, the ACS receives specialized technical training and is officially certified as a health professional (Garnelo et al. 2019:17). This is not the case of their Indigenous counterparts. Research has shown that the absence of such certification for Indigenous CHWs has resulted in assigning these workers generalized tasks of low complexity with limited autonomy (Langdon et al. 2014; Garnelo et al. 2019).

Various studies of Indigenous CHWs have been conducted in Brazil from an anthropological perspective describing and analyzing their contribution to health services, autonomy, and articulation between traditional and biomedical practices, as well as their insertion in the new political intercultural spaces created by SASI. In an effort to summarize this research, Diehl and Langdon affirm:

In practice, the role of the Indigenous Health Agents/AISs is one of ambiguity, reflecting the tensions between professionally recognized health team members and the AISs as poorly trained Indigenous assistants with poorly defined qualifications. The ambiguities of their role emerge in part from the tensions between the hierarchical bureaucratic management of the teams' work processes and the social and political practices that orient community processes. However, the biomedical model hegemony fails to value seriously indigenous knowledge or the dynamics of their practices, contradicting the policy of mutual respect. (2018:61)

In their examination of the capacity to articulate between different models of health practices, Langdon and Garnelo (2017) draw a similar conclusion, arguing that the biomedical logic

continues to organize primary health care among Indigenous groups. Despite these findings, most studies show that the participation of Indigenous CHWs in health services has served as an important stimulus to undertake certified health training to fill recognized professional positions such as nurses, nursing assistants, or technicians. More importantly, studies have found that CHWs are emerging as political actors in the new participatory spaces created for Indigenous representation, such as local and district health councils (Diehl and Langdon 2018).

Despite the limitations of the Indigenous CHWs' role, there has been an important rise in the number of CHWs contracted to serve in Indigenous territories since the implantation of SASI. Garnelo et al. (2019:21) estimate there are approximately 6,000 CHWs currently contracted by the SASI, four times more than the 1,400 who worked in 1998. If, on the one hand, the increase of CHWs can be seen as an increase of Indigenous participation in primary services, on the other it contributes to the hegemonic medical model's expansion and presence in Indigenous territories, a process that can be understood as medicalization. According to Lock, the

systematization of the medical domain, in turn, was part of a more general process of modernization to which industrial capitalism and technological production was central, both intimately associated with the bureaucratization and rationalization of everyday life. (2004:117).

Fieldwork and Methodology

Our first contact with the Munduruku occurred during a 2007 meeting of the District Council of Indigenous Health in Manaus (CONDISI-Manaus) when we sought approval for our project on the role of CHWs. District councils, which must have parity between elected Indigenous representatives and health professionals, are charged with planning and evaluating health services and approving expenditures of the Special Indigenous Health Districts (DSEI). The DSEI/Manaus is responsible for primary health services for thirty-five different Indigenous peoples with a total population of 29,500. Primary services are delivered by Multi-professional Indigenous Health Teams (EMSI) that operate out of 17 base poles (*polo base*). The CONDISI-Manaus is an interethnic political arena of discussion and debate that guarantees Indigenous participation; however, operational and management questions of the federal administrators clearly dominate it. District councils have been described as political spaces marked by ambiguous relations that simultaneously promote autonomy and ethno-political movements while reproducing the interests of the bureaucratic administration (Garnelo and Sampaio 2003; Athias 2004; Langdon and Diehl 2007, 2020; Teixeira et al. 2013; Cardoso 2015; Diehl and Langdon 2015, 2018; Teixeira 2017).

During the meeting we met two Munduruku representatives, Levi and Kleuton, who became important collaborators in our research. They were both CHWs as well as district councilors, and their support of our research was an early example of the political protagonism of Munduruku CHWs. Levi and Kleuton were decisive for our acceptance among the Munduruku in obtaining authorization for our field work with the respective *caciques* (leaders) of the villages; they were our first hosts in the field and organized transportation logistics during the first weeks. They also introduced us to many CHWs and were skillful in communicating to their colleagues our purpose for being among them. Because of their support, the residents of TI Kwatá Laranjal showed a strong interest in our anthropological research, facilitating our work in the different villages through generous hospitality. The villagers' receptivity to us, as researchers, and to our subject of research, demonstrated the CHWs' capacity for protagonism in communities. As we demonstrate below, this receptivity showed their interests and strategies in forming *parcerias*, or partnerships, in order to obtain support for actions aimed at improving health conditions.

Through contact with the CHWs, our research developed within a network of relations established around health services. In 2009 we visited several villages, accompanied by the CHWs, observing their work and that of other professionals on the health team. We constructed a profile of the CHWs and conducted dozens of open-ended interviews with them and with the local residents who evaluated them and the other health professionals. From 2010 to 2011 we resided for approximately eight months in Kwatá village, observing healthcare services and practices carried out by domestic groups and healing practitioners. We also accompanied therapeutic itineraries, registered the plurality of forms of attention the Munduruku used, and observed the CHWs' interventions. In 2016 we returned for four months of fieldwork for a specific project on environmental sanitation that included new observations of CHWs' activities.

During the more than twelve months among the Munduruku, we observed and experienced official biomedical services and Indigenous, popular, and self-care practices of the domestic groups. Many of the nonbiomedical practices employed in the TI are part of widespread popular knowledge, although the Munduruku have incorporated them as part of their own tradition.

The Munduruku People and Their Territory

The Munduruku currently inhabit ten TIs located in the states of Pará, Mato Grosso, and Amazonas. Each of TIs is distinguished by a specific sociocultural situation, a result of environmental and historical differences. Despite the diversity, the Munduruku self-identify as part of the same group with origins in the tributaries of the Upper Tapajós and as descendants of the inhabitants of a vast territory that once covered almost the entire region from the Tapajós River basin to that of the Madeira River. The Munduruku language belongs to the Tupi trunk and is widely spoken in the Upper Tapajós villages in Pará. However, in the Lower Madeira region, the site of our research, only the elderly are bilingual, and Portuguese is spoken in daily interaction.

The TI Kwatá Laranjal is located some 150 kilometers from Manaus, the state capital. With a population of 3,667 in 2017 (Ahmadpour et al. 2019), the Munduruku represent a sizable force in municipal elections. Borba, the municipal head town, is several hours distance from their villages, requiring a river trip with several connections to reach it. As a consequence, the Munduruku favor the closer city of Nova Olinda do Norte for commercial activities and other needs, including consultations with popular health practitioners.

The TI covers a region of 11,578 square kilometers of well-preserved dense forest with 33 villages located along two large rivers, the Canumã and Mari-Mari (see Figure 1). Research was conducted primarily among the 21 villages on the Canumã River. Most villages are small, with a population ranging from approximately 50 to 100 people. Each village has a leader, known as the local cacique, a role that men or women can be elected to by the community.

Kwatá, the main village on the Canumã River and principal location of our fieldwork, is much larger, with 600 residents, and reflects a modernization process valued by the Munduruku. Early in 2000, the Munduruku of Kwatá requested that the municipal government in Borba construct a plaza and paved street running along the river for approximately two kilometers. A DSEI base pole is located in front of the plaza next to the Catholic church. The base pole serves as one of the two health posts on the TI. Behind the base pole there is a pavilion with bleachers constructed for festivities. The old school and abandoned National Foundation of the Indian (FUNAI) office are located beside the plaza. This urban scene is completed by public telephone with a parabolic antenna for satellite connection and concrete benches from where one can view the Canumã River. Electricity for the village was installed in 2012 and a large air-conditioned school was built some 300 meters from the plaza, near where the electric transmission line begins. Surrounded by dense forests and small gardens,

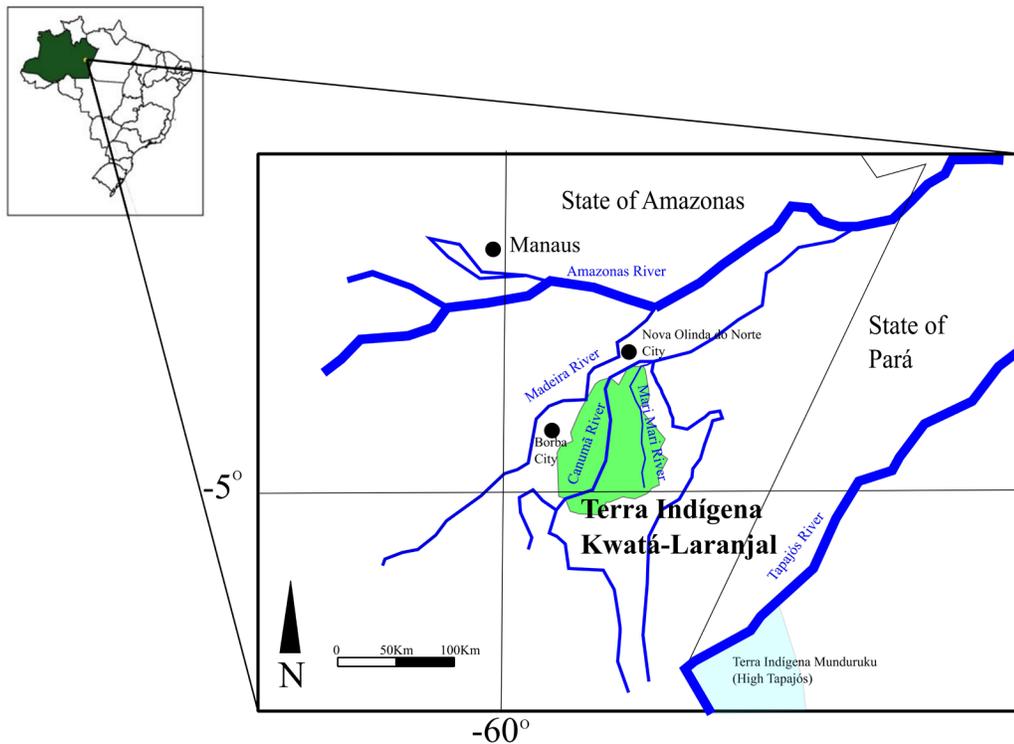


figure 1. Map of TI Kwatá Laranjal, elaborated by the authors based on a map by FUNAI (2020).

Kwatá's urban landscape mirrors that of regional cities and is an expression of a common desire among the local inhabitants that their village will one day become a city. The general cacique Manoel Cardoso Munduruku, upon commenting that his daughter wants to attend medical school at the university, indicated that he hopes that one day Kwatá will even have a hospital with Indigenous doctors.

Leadership for the TI Kwatá Laranjal is divided between two general caciques, each one associated, respectively, with the villages on one of the two rivers that cross the territory. The cacique Manoel indicated that the position is in principle hereditary, passed on from father to son. The cacique is an important person of high status, whose former powers included sending warriors on head-hunting raids. In the 1950s, Murphy (1960) indicated that the caciques had an emergent political role with traders and state representatives. Today, capacity for leadership is expressed through forceful rhetoric and persuasion in meetings that contribute to establishing consensus on community issues, to the organization of collective work groups necessary for the maintenance or improvement of village conditions, and to conflict resolution in which the cacique acts as mediator. Cacique Manoel exhibits this capacity through synthesizing diverse opinions in an organized manner, using an oratory style the Munduruku value that seeks consensus and avoids polemics. He is generally the last to speak, expressing the group's opinion through articulating and juxtaposing the dialogues of the others in such a manner as to construct a convincing and nonauthoritarian argument. As a general cacique, he also plays a central political role in negotiations with outsiders and local and national governmental officials. Although Munduruku caciques are traditional leaders and independent of official state structures, they represent their peoples in negotiations with the different sectors of the state, such as FUNAI.

Most inhabitants on the Canumã River subsist on fishing, hunting, and horticulture; a few families receive income in the form of salary or from governmental social programs.

Most salaries come from governmental agencies, such as FUNAI, and the schools and health services in the villages, including that of the CHWs. Governmental subsidies come from various programs, the most important being that of the Family Grant Program (Programa Bolsa Família). This program subsidizes families with children under the age of five, proof of which is based upon the CHWs' monthly records of the children's growth rates. Given the low value of the subsidies and salaries, as well as the distance to Nova Olinda do Norte for the purchase of food, residents have not abandoned subsistence activities. Food purchased in Nova Olinda do Norte supplements the daily diet, which is based primarily on manioc flour and fish.

Biomedical Services and Intermedicality on TI Kwatá Laranjal

Catholic missions, traders, and governmental workers introduced Western medical practices and pharmaceutical products early in the twentieth century, and the Munduruku have long been accustomed to purchasing medicines in pharmacies in Nova Olinda do Norte and Borba. With establishment of SASI, health professionals have been present in the TI Kwatá Laranjal, and Munduruku individuals participate as councilors on the local and district health councils.

Health services in TI Kwatá Laranjal are organized according to the two rivers that cross the territory, each with a base pole located in two politically central villages: Kwatá on the Canumã River and Laranjal on the Mari-Mari River. The region served by a base pole is divided into "micro-areas," each one under the responsibility of a CHW. Smaller villages constitute a single micro-area, and the larger ones are subdivided into two or more. Kwatá, for example, is subdivided into five micro-areas: Caioé, Emprelinha, Tartaruginha, Cajoal, and Kwatá. The administrative division of Kwatá into separate micro-areas is not recognized by the Munduruku, who affirm that it is a single community.

Base poles are structured for outpatient care, with a laboratory for malaria diagnosis and a residential space for housing the medical team. The medical teams are coordinated by a head nurse and composed of a physician, odontologist, nursing technicians, and CHWs. Members of the EMSIs, excluding the CHWs, live in Nova Olinda do Norte, Manaus, or other urban areas and alternate twenty-day periods on the TI with ten days of leave. Supplies necessary for primary health care on the TI are allocated by the DSEI/Manaus, which determines the quantities according to the characteristics of each micro-area. These supplies are perceived as in frequent short supply by the villagers and are a common subject of discussion at village assemblies.

As the medical teams' only permanent residents of the TI, CHWs are the most active in daily health practices and itineraries. Their responsibilities include maintenance of consultation records, home visits, monthly monitoring of children younger than five years, accompaniment of patients with chronic illnesses, and patient transportation to the base pole or Nova Olinda do Norte. They also assist the EMSI when it visits the villages, organizing medical charts and contacting patients. Two specialized CHWs (AIMs) maintain the laboratories for malaria diagnosis and treatment. Two other CHWs (AISANs) are responsible for maintenance of the water distribution systems. The CHWs are supervised by a head nurse through monthly meetings held at the base pole. During this mandatory meeting they submit records of activities performed, receive instructions and exam schedules for their patients, and get medications and first aid materials for use in their micro-area. Given that the CHWs are in charge of the distribution of medical resources in their micro-area, such as medicines, fuel for electric generators, and boats used for transportation between villages and Nova Olinda do Norte or Borba, they are also under constant surveillance and evaluation by the community as to the proper use of these resources.

Medical pluralism among the Munduruku has origins in the history of ethnic diversity of the Lower Madeira region, which has been subject to an intense flow of people and cultural diversity that includes not only Indigenous groups (Mura, Saterê-Mauê, Apurinã) but also caboclos and migrants, including Portuguese, Italians, Japanese, and Brazilians from the states of Pará, Ceará, Maranhão, and Rio Grande do Sul. From this long history of interethnic contact, the Munduruku have appropriated a diversity of health care practices and medical knowledges. They seek and mix a large variety of therapeutic practices, including those of biomedicine, as they interpret their afflictions according to their own understanding (Young 1976:9). A resort to biomedical practices does not imply the substitution of Indigenous knowledge. Even in institutional situations such as hospital births, traditional therapeutic, preventive, and prophylactic practices, such as diets and reclusion, are modified but never totally replaced (Dias-Scopel and Scopel 2019).

We adopt the concept of “intermedicality” (Greene 1998; Follér 2004) to refer to this context of medical pluralism as a contact zone characterized by the production of “hybrid” or “mixed” medical practices and asymmetrical relations that began with colonialism and continue to the present (Scopel et al. 2012, 2015). In this contact zone, the state promotes biomedicine as the hegemonic model of healthcare, but many other forms are present and intensively used. The concept of intermedicality is useful to highlight not only the presence of a diversity of practices but also that the articulations in this contact zone constitute a political field.

The Munduruku recognize a variety of healing specialists, or *curadores*. They are people who have the gift, or *dom*, for performing specific techniques that heal illnesses with spiritual, environmental, or social causes specific to Munduruku understandings of health and illness. Specialized healing knowledge, as a spiritual gift, is not a natural or spontaneous individual power; it depends on initiation, social legitimation and, primarily, the healer’s ability to enact the expected role. Most people know how to prepare herbal remedies. Fewer know how to massage or arrange bones and muscles in the “right place.” Most elder women assist in births within their extended families, but few are recognized as specialized *parteiros* (experienced midwives). *Benedores* heal through blessings for certain illnesses, among them *quebranto*, a condition of diarrhea in children caused by inadequate adult social behavior. Knowledge about how to massage, reset bones, deliver babies, or bless illness is widespread, and even children can be seen playing at these practices. However, only those recognized as *pajés* have the gift to form *parcerias* (partnerships) with spiritual agents found in the air (*espíritos do ar*) and the underwater world (*espíritos do fundo*). *Pajés* use a special cigar made with forest plants to contact these beings during healing sessions. The most powerful *pajes*, called *sacaca*, know all techniques cited above and travel to the underwater world. We knew and observed practices of six active Munduruku *pajé* healers in TI Kwatá Laranjal, but only one, a very elderly man, was recognized as *pajé sacaca*. *Curadores*, especially powerful *pajés*, can harm through sorcery as well as heal, and consequently few identify themselves as a *curador* to strangers.

The Munduruku are part of a larger therapeutic network that links the different groups in the Lower Madeira region, including the nonindigenous peoples, often called *riberinhos*. A diversity of knowledges, practitioners, and patients circulate within this regional network as people seek solutions for their afflictions. Despite ethnic differences, they share similar notions about the relation of the person and the body to the spiritual world, and this knowledge is not restricted to the healing context but guides everyday activities of interaction with the environment. The Munduruku frequently travel to Nova Olinda do Norte and elsewhere to consult *benedores*, *curadores*, *pajés*, and others known for their capacity to heal certain conditions. The CHWs participate in this network. Sharing similar reasoning as the rest of the Munduruku, they also seek these practitioners to resolve their afflictions. They take part in the daily negotiations and dynamics of therapeutic itineraries following networks of mu-

tual support and reciprocity, and, as we will see later, they also facilitate access of community members to these *curadores* and healing specialists.

Intermediality is evident in everyday practices and in discourse, as illustrated in an interview with Hilda and her husband. Speaking about her condition of hypertension, Hilda told us that the EMSI physician diagnosed hypertension and that she takes the medication distributed by the health post. However, like other Munduruku, she recognizes several corporal and environmental factors and practices a number of preventative measures and treatments the medical team do not recognize. In our conversation, she attributed her condition to a series of causes resulting from her daily activities, such as “strong sun,” without discarding the doctor’s dietary orientations and restrictions necessary for treatment. According to her understanding, her high blood pressure “got much worse after my father died, but that it slowly improved with a home remedy that the *pajé* prepared.” For the Munduruku, the death of a very close kin can be cause of illness, mental health crises, and death, given that they want to carry others with them to the world of the dead. Pharmaceutical medicines are appropriated and evaluated according to experience. Hilda says she takes captopril, but she also drinks several teas to control her hypertension. Her husband added “Captopril and propranolol have side effects.”

Intermediality is even more evident in the case that CHW Edimilson—referred to as “the health kid” (*menino da saúde*) by the residents of Niterói village where he worked—told us. He consulted a popular healer in Nova Olinda do Norte, who diagnosed him with “gastritis in the liver.” He told us about it when speaking about the value of the Munduruku “home remedies”:

Milk of *amapá*, a saint of a remedy. Look, let me see, it was in the beginning of December, to be exact, when I caught gastritis in the liver. I felt really bad; the reason was what I drank . . . cachaça. Oh, I felt bad. But by God, everything I ate bloated my stomach. And then I went to a *curadora* in Nova Olinda whom I discovered there, “Son, you are with this gastritis, buy such and such remedy.” She gave me the prescription, and I said, “Damnit, all remedies are so expensive.” And then . . . Dona Antônia said, “Look, there is a remedy that I think is found there (where you live) for you to take, the bark of the *jatobá* tree. And then I felt very happy to take this remedy. I already knew about how home remedies are, and I said, “You know something, I am going to get this remedy right away to stop it.” And I got the collard greens, bought a *real’s worth* (R\$1,00) of maroon cucumber, a bit green, right?, the milk, and that . . . my God, that which grows a lot in the city straight out of the ground, no . . . I know that there were four (ingredients), sir, I mixed them in the blender until it was all liquified, and potato, that smooth potato . . ., I peeled it, mixed all together and drank. It was my water. And when I arrived here, I was already better, that burning of the stomach was diminishing. Then I threw the bark of the *jatobá* in the water, and it is very strong, isn’t it? And right then, the thing went diminishing. I was prohibited to eat manioc flour, sugar, salt and fat. Ah, how bad it is to eat tasteless food, without salt, isn’t it? Ave Maria! Until completing ninety days. I counted the days, right? I said, “If I feel better, I am going to eat manioc flour and salt again, since for me food without salt is nothing. Food without salt, my God. When the ninety days were over, I went and ate manioc flour. Only drinking *jatobá* water and the milk of *amapá*. I collected them and blended in the morning, that is a sweet milk. I thank my God even today. I drank *cauim* again, beer, I drank alcohol again! The illness disappeared!

As evidenced by Hilda and Edimilson above, the Munduruku articulate biomedical with Indigenous and popular knowledge in daily practices to improve health or to prevent and treat illness. Articulation of practices and specialists begins with the domestic group seeking to understand and resolve the afflictions affecting members of their group. Eduardo Menéndez (2009) refers to these daily practices as *autoatenção* (self-care management)² and defines them as “the practices and representations that a population uses individually or socially to diagnose, explain, attend, control, alleviate, support, cure, resolve or prevent those processes that affect their health in real or imaginary terms without the central, direct and intentional intervention of professional healers, although they may be references for this activity” (2009:48; translation by authors). Such practices are relatively autonomous and include use of plant and animal substances in the form of teas, baths, ointments, fumigations, and amulets, as well as

2. According to Menéndez (2009), the concept *autoatenção* is distinguished from the biomedical notion of “self-care.” The former is ignored or denied by health professionals, while the latter is encouraged, and refers to the individual patient’s compliance with biomedical instructions.

allopathic medicines (for details, see Scopel et al. 2012). Self-care management, as defined by Eduardo Menéndez, is often ignored or discouraged by health professionals.

Besides the important role of self-care management in therapeutic itineraries and the CHWs' participation in the context of intermediality, it is important to recognize that Munduruku conceptions of health and well-being invoke an ample field of practices and preoccupations that are concerned with the quality of life of the collective group. Such activities and preoccupations correspond to what Eduardo Menéndez defines as self-care management at its broadest level: "Forms of self-care that are necessary to assure the *biosocial reproduction* of the subjects and micro-groups, particularly of those at the domestic level" (2009:48; emphasis and translation by authors). The Munduruku intermedical context reveals constant articulation of medical knowledges as part of a broad set of strategies of social and biological reproduction. Biomedicine, in such context, has been appropriated in a collective political project to improve the quality of life that goes beyond a restricted definition of illness and health and concerns activities and knowledges related to territoriality and alterity.

Health within a Cosmographic Perspective

The CHWs, along with the other villagers, are immersed in a relational context that is not only intermedical but also cosmographic (Little 2001). Therapeutic and subsistence activities are tied to knowledge about the territory and its landscape. As recognized by Murphy (1958), the Munduruku consider the natural and spiritual domains to be closely related to the presence of beings associated with animals, plants, and certain places that exhibit intentionality and agency. They are not abstract entities but share territory with Munduruku as potential partners or enemies. The most important of these beings are the spiritual protectors called "spirit mothers" (*espírito mãe*), respected as the generative force of resources in their environment that are important for subsistence activities such as hunting, fishing, and gardening. In an analogy between social production and natural reproduction, animals, plants, and special locations are organized in social groups under spirit mothers that protect and control their children. Thus there is a spirit mother of fish, of manioc, of springs and wells, etc. Their presence "produces" abundance necessary for their well-being, but as in the human domestic group, their generosity requires respect. Abuse of a spirit mother's location or inappropriate exploration of her resources is a potential source of danger in the form of sickness or other misfortune, and it is necessary to perform special rituals to attract and respect her or to avoid revenge.

Knowledge, territory, subsistence activities, and well-being (Scopel et al. 2018) are interrelated as the Munduruku collectively strive "to identify with, occupy, use and establish control over the specific parcel of their biophysical environment that serves as their homeland or territory" (Little 2001:4). The Munduruku's representations and activities to guarantee their biosocial reproduction, as well as their interpretation, evaluation, and action in cases of misfortune, violence, sickness, and death are intrinsically linked to what Little defines as cosmography:

the collective, historically contingent identities, ideologies, and environmental knowledge systems developed by a social group to establish and maintain human territory. Cosmographies encompass the symbolic and affective relationship a group maintains with its biophysical environment, which creates bonds of identity between a social group and a geographical area (Little, 2001:5).

To relate with the multidimensional territory that is the source of their survival and well-being, the Munduruku have developed strategies of "closeness" and "distance." Alterity is experienced: it is not abstract or a set of beliefs. More than a knowledge system, it is experience gained through daily practices in relation to their territory's landscape and perception and response to the potential benefit or danger that alterity represents. Different

beings inhabit the cosmos, each endowed with intention and agency capable of intervening in the lives of the Munduruku. Besides the mothers of different locations, plants, and animals, the Munduruku landscape is associated with other beings with potential for harm or benefit that inhabit the subaquatic realm, forest, and air. Interaction with these forms of alterity can cause illness, misfortune, or death if certain protocols of action are not followed. Illnesses caused by a spirit may begin with a headache, but can evolve into madness, individual death, or epidemics if a *pajé* does not intervene in time. As a result, the Munduruku have developed a body of knowledge and practices that aims to protect themselves from, and prevent, illness, misfortunes, and death (Dias-Scopel 2018; Scopel et al. 2018).

Strategies of closeness and distance characterize social relations with all beings, human or not. Relations of partnership or closeness are constructed among members of the domestic group, are exhibited in the reciprocity between villages, and extend to interactions with the plants, animals, and spirits associated with the landscape. In this relational perspective, quality of life depends upon articulation with the regime of alterity in which strategies of closeness seek to construct “partnerships” (*parcerias*), a metaphor that connotes the reciprocity of mutual support and respect, as well as the consubstantialization of bodies and territory. The strategy of distance implies a separation of bodies and territory, expressed through flight, exile, physical violence, or sorcery causing illness and death.

History has shown the Munduruku that nonindigenous peoples, or *pariwat*, constitute a potentially dangerous and lethal alterity, although *parceria* alliances are more desirable. Their first response to the arrival of Europeans was that of distance. At the time, the Munduruku were expanding into a vast region that spread from the transition forests of the Upper Tapajós River to the dense forests of the Lower Madeira River (M. Menéndez 1992; Murphy 1960), a territory historically known as Mundurucânia, or “Land of the Munduruku” (Casal 1817). Some historical sources report that they even went beyond the Tapajós-Madeira region and made warring expeditions as far as Xingu and Tocantins. They were fierce warriors who severed the heads of their enemies to use as trophies, and despite their efforts, the Portuguese were unsuccessful in dominating them and were forced to reach a peace agreement (Scopel et al. 2018). This alliance gave relative political autonomy to the Munduruku to the extent that head-hunting expeditions continued until the end of the nineteenth century, along with territorial expansion and establishment of villages near Catholic missions (Murphy 1960; Ribeiro 2000:55).

Early in the nineteenth century, the Munduruku began to have an important role in the local market through the production of manioc flour, and this affected the social organization of some villages, particularly those associated with Catholic missions of the Canumã and Cururu Rivers (Wolf 1997). According to Murphy (1960), two Munduruku lifestyles developed in this period, that of the more traditional form in the savannah and the other on the Lower Madeira River that resembled the riverine (*ribeirinho*) lifestyle. The former valued hunting activities, greater sexual division of labor marked by women working as manioc flour producers and by the institution of the men’s house (*eksás*) in the center of the village, and the sacred flute ritual. The latter emphasized fishing and village organization around extended families and the commercial production of manioc flour with greater collaboration between men and women and interest in exchange for *pariwat* merchandize. Later commercial activities extended to fluvial gold mining and extraction of latex, Brazil nut, rosewood, and copaiba. Currently they are involved in açai collecting.

The intensification of relations with *pariwat* through military and commercial alliances created possibilities of partnership. However, the amicable potential of relations with outsiders never was total, and their history of contact is marked by successive episodes of violence and frequent epidemics that are attributed to the *pariwat*. The invaders’ actions increased with the

intensification of Brazil nut and rubber extraction at the beginning of the twentieth century. Epidemics were concomitant with numerous violent confrontations. With the installation of a republican government, disputes over forest resources increased, causing deaths and conflicts between Indigenous and invaders, and on several occasions the federal government also promoted armed expeditions against the Munduruku.

During the twentieth century, the Munduruku of the Lower Madeira experienced situations of armed conflict with invaders and several times suffered violence from the state. The valorization of Brazil nuts on the international market resulted in the invasions of Munduruku territory of the Canumã River. “Violence was a constant element in the disputes for the exploration of Brazil nut forests, that were invaded frequently during the harvest season by armed groups” (Santos 2009:86). Munduruku oral history recalls good relationships with *pariwat* that ended tragically because they became greedy and exploited Indigenous labor. The government’s role in this process was often ambiguous, with local political actors siding against the Indigenous peoples. Persecution and punitive expeditions motivated exclusively by private interests transformed into actions of the state (Santos 2009:244). These persecutions resulted in the dispersion of the Indigenous groups in the jungle. In 1928, the Service for the Protection of Indians and Localization of National Workers created small reserves on the Canumã and Mari-Mari Rivers, and the Munduruku gradually reestablished themselves on the margins of the rivers and streams. These memories are so deeply shared that in many villages the children still run and hide in forest when an unknown boat approaches.

Many narratives recall the epidemics caused by *pariwat* invasions in Munduruku territory. Elders told us of a great epidemic of fevers around 1920, called *sezão*, that caused numerous deaths and village relocations. The epidemic began when *pariwat* intruders irrationally used a location in the forest as target practice, offending its mother spirit. As a consequence of the *pariwat*’s thoughtless aggression, the mother spirit took revenge against the Munduruku. On the Canumã River, many people died; the village of Castanhal Açu was totally decimated and abandoned because of the “strong fever.” Epidemics like this, causing numerous deaths, are an important part of the group’s collective memory, and the Indigenous school teachers have been working to preserve this history through the construction of didactic material (Oliveira 2002).

A new period of more intensive interaction with the state began due to the judicial case the Munduruku brought against a French petroleum company that invaded their lands in 1983. The geological studies provoked deforestation, and the explosives used created panic among the Munduruku of Canumã River. Munduruku leadership appealed to the justice system, with repercussions in France (Dreyfus-Gamelon 1984). The community received compensation in 1989, which enabled them to initiate the self-demarcation process of their territory (CEDI 1983:18; Oliveira 2002). In 1991, in partnership with the Indigenist Missionary Council (CIMI), they organized the Union of the Munduruku and Sateré Mawé Peoples (UPIMS), which represented both Munduruku and Sateré Mawé residents, the latter living in one village within the territory of the proposed TI. Following Indigenous pressure in 1997, FUNAI finally agreed to review the process. In 1999, UPIMS was officially registered, with its headquarters in Nova Olinda do Norte. In 2004 the Kwatá Laranjal Indigenous Land was officially recognized. Demarcation was an important collective process that is called the “reconquest of territory,” successfully obtained because of the partnership with *pariwat* and one that strengthened political strategies with the state. As an important learning experience, it influenced contemporary political organization and styles of the Munduruku in which they negotiate and participate in the new state-created opportunities and spaces.

With the formation of UPIMS, political decisions regarding collective interests and the organization of demands and strategies for pressuring the government became based on general

assemblies with broad participation organized by the general caciques. These assemblies are annual events, and they discuss current issues of concern for the TI, among them questions related to the provision of health services. Hundreds of people gather at these assemblies, and nonindigenous authorities are invited. In addition to the annual assemblies organized by Munduruku leadership, the Local Health Council have more frequent meetings when necessary issues related to the health services arise. Each base pole has a Local Health Council that is composed of representatives from all the villages belonging to the territory. In addition, a general meeting of all Local Health Council representatives should be conducted every three years for the elaboration and evaluation of the district health plan. However, because these planning meetings require financing from the DSEI/Manaus, they do not always occur with this frequency. This three day meeting is held in the TI with broad community participation, including not only the local councilors but also the caciques, CHWs, and interested villagers.

As Murphy (1957, 1960) argues, the Munduruku value the ability to avoid open conflict, and they have developed a series of (cosmo)political strategies to strengthen the internal cohesion of the group. Traditional practices of collective consultation occur frequently in the daily context of the villages through assemblies, although these are not characterized by the formalities of UPIMS or Local Health Council meetings. Village members participate in meetings called by the cacique or others to share information, dialogue, and construct consensus on topics that are of concern to community life, such as communal work groups, organization of celebrations and festivals, reception of visitors such as missionaries and researchers, deliberation on educational issues, and issues related to FUNAI and the health services, including the choice of the CHWs. The frequency and capacity for consensus in these assemblies can be attributed, in part, to Munduruku leadership style, where rhetorical performance aims toward the construction of synthesis and persuasion. It is important to point out, however, that the issues and opinions raised in these meetings have previously circulated through informal gatherings, conversations, and rumors that take place in the network of local reciprocities.

Centuries of collective experience of interethnic encounters with *pariwat* and particularly the “reconquest of the territory” have contributed in various ways to the construction of identities and sentiments of ethnic belonging, as well as to a collective political project of social reproduction and improvement of the quality of village life. The demarcation process and the formation of UPIMS has been accompanied by new political spaces for Indigenous protagonism created by the state after the new 1988 constitution and the creation of SASI in 1999. The experiences of contact and the development of successful strategies for dealing with alterity, including state agents, have mobilized the community around questions that reflect their comprehension of the current situation and future expectations in a collective political project that incorporates their manner of being Munduruku. This emergent cosmography, composed of their understanding, identity, and relations with territorial occupation, has incorporated new partnerships with *pariwat* and forms the basis for the contemporary political culture of the TI Kwatá Laranjal that constitutes an important reference for action of the Munduruku CHWs.

Intermediality and Indigenous Protagonism

The Munduruku have responded positively and proactively to the new opportunities created by the introduction of SASI. Ethnographic studies have pointed out difficulties and ambiguities in the role performance of CHW as defined by PNASPI, indicating that their relations with the rest of the health team members are characterized as asymmetrical and regimented by biomedical hierarchy (Langdon et al. 2014; Pontes and Garnelo 2014). Among the Munduruku of Canumã River, we also observed a relatively marginal status of the CHWs in interactions

with the health team members. However, the Munduruku CHWs occupy a central position in the context of intermedicality, in which they are protagonists in the negotiations that occur while carrying out their responsibilities that are independent of the EMSI. They are simultaneously agents of the state and community.

Our intention is not to analyze whether the CHW role affects the community's epidemiological profile or health situation. Earlier in this article, we examined the insertion of CHWs in the context of intermedicality, a context in which the Indigenous actors exhibit relative autonomy in the collective management and construction of strategies in health care. Although a representative of biomedical hegemony in the TI, CHWs are also subject to community control in both selection and evaluation. Once chosen, CHWs are the focus of constant evaluation by community members and village leadership. This evaluation contributes to the employment stability that Munduruku CHWs enjoy compared to findings of other studies.³ Expectations with regard to CHWs are not only linked with collective demands for maintenance of official health services but also are part of the larger political culture that involves strategies for the creation of partnerships, the acquisition of material goods, and occupation of positions of influence and negotiation created by the state.

More than half of the 31 CHWs working on the TI have over ten years of experience. Twenty-one (68%) have more than thirty years, and 26 (84%) are men (Scopel et al. 2015). The predominance of male CHWs is due in part to the difficult work conditions that they face in the smaller and more isolated villages. Female CHWs are found in communities such as Kwatá, where they have more support from the EMSI.

No one procedure is followed for choosing a CHW. Depending upon the village, he or she may be elected or indicated by the cacique after consultation with community members. Once chosen, they are subject to constant collective evaluation. A CHW should demonstrate the qualities of a *peessoa interessada*, or “interested person,” one who is active in community life, seeks to increase his or her abilities and knowledge, and collaborates in the patients' therapeutic itineraries, including transportation not only to official health services but also to *curadores* when necessary. Although the CHW must be literate and education is considered to be an attribute that contributes to capacity for dialoguing with the world of the *pariwat*, we found that this criterion was not a determinant.

During our 2011 fieldwork, we observed the election process for the position in the village of Kwatá. Two women were candidates with very similar profiles; they were neighbors, close in age, with no small children, and had begun adult education. Although one was the niece of the chief, the other, with no relation to the leadership, was chosen. Commentaries regarding the choice of the best candidate focused on her disposition for work and for learning biomedical techniques. The woman chosen had voluntarily participated in a training program for nutritional monitoring of children offered by the Pastoral of Children, a social action entity sponsored by Catholic church, between 2010 and 2011, and this fact appeared to weigh heavily in the choice. In this case, previous experience seems to have qualified the winner as an “interested person.”

Ideally, the Munduruku require that the new CHWs complete an unpaid probationary period of up to three months. This period is also considered fundamental for beginners to acquire training. As expressed by Núbia, who has worked in Tataraguinha village for ten years, the period is intended to “gain experience” by accompanying an experienced CHW, but it also allows the community to evaluate the candidate's performance and qualities of an “interested person.”

From the Munduruku's perspective, the trial period allows for community evaluation of the commitment, discipline, and desired behavior of the person. As synthesized in the speech of a local health councilor of Kwatá village, the disposition for work expected of an CHW

3. Some ethnographic studies indicate that in contexts of community factionalism, choice of the CHWs depends on internal disputes between kin groups and their alliances with the leaders, resulting in frequent turnover. There are also situations in which municipal political disputes affect permanence in the position (Langdon et al. 2014; Garneleto et al. 2019).

“doesn’t depend on the sun, rain or the hour of the day.” Good role performance is related to socially valued attributes such as personal disposition, initiative, autonomy, collaboration, and ability to dialogue (Dias-Scopel and Scopel 2019).

The CHWs’ salary confers prestige and economic advantage, but it also implies a responsibility of fairness to all village residents, regardless of their kin relation. To maintain the position, it is necessary to participate in daily activities with the residents assigned to their micro-area and to demonstrate the ability to deal with internal conflicts. For example, in the village of As Cobras, the CHW is an elder and respected local leader. Although he has control of basic medicines and transportation for patients referred to health services in the city, health resources are regarded as community property. This CHW is recognized and evaluated positively for distributing these resources fairly among the entire village, and not just to his relatives. The CHW serves the collective, an obligation that should prevail above personal interest. A good performance and insertion in the community are characteristics of an “interested person,” one who seeks to maintain peace and equally distribute materials considered communal property.

Zé Onça, the CHW of Malocão village, was a communicative, spontaneous, and positive person regarded as one of the principal leaders of his village and stepbrother of the general cacique of Canumã River. He indicated that the greatest difficulty in his work was the distance to the base pole in Kwatá, some twelve hours’ travel by river. He travels monthly to the base pole to submit reports and obtain medical supplies. When explaining the importance of dialogue with the other members of the health team, he commented, “I work according to what I understand and always seek orientation from others.” This was a typical attitude of the “interested” Munduruku CHW; one sought orientation from the head nurse and nursing technicians, an attitude that avoided direct conflict with the health team.

Emiliano was also recognized as an “interested” CHW, working during the day and attending the evening course Education for Youth and Adults. A CHW since 1993, he has participated in many training courses. However, he viewed these courses as limiting and told us, “I hope to enter a course for [nursing] technician in order to learn more.” Continuing, he remarked that “education makes a difference for the worker.” One night on his way to school, he passed by our house with a book he had purchased in Nova Olinda do Norte. Entitled *Traditional Medicine from A to Z*, he consulted it for information on medicinal plants, including prescriptions for teas and other remedies. During the home visits that we made with him, we observed him sharing information about forest remedies and teas he had learned from the book with patients while encouraging them to share their knowledge about this subject with him. As an “interested” CHW, Emiliano demonstrated that he was open to learning.

Another criterion for evaluation and legitimization of the CHW role is demonstration of biomedical competency. CHWs should demonstrate mastery of biomedical procedures related to the monitoring of chronic patients and infant health, diagnosis and treatment of malaria, and other first aid activities. However, the role extends beyond biomedical intervention, and CHWs have become important actors in the daily therapeutic itineraries contributing to the appropriation and production of a variety of therapeutic practices. We witnessed several CHWs prescribing the use of preparations from medicinal plants during home visits to monitor conditions such as diabetes or high blood pressure. They participate in discussions as to what actions to take in difficult cases, suggesting appropriate *curadores* or other practitioners. They also are an important part of therapeutic itineraries, and when there is sufficient gasoline, they provide the means of transport for patients to seek specialists. Gasoline is generally extremely scarce and a resource that the EMSI and villagers closely control.

In a conversation with Eunice about the importance of *pajés* in 2012, she recalled a home visit by the CHW Emiliano to treat her oldest son, who was constantly crying “as if frightened by something and complaining of a headache.” Both she and the CHW concluded that it must be a case of “evil-eye (*mau olhado de bicho*) of the river dolphin that attacks children.” The approximation of subaquatic beings to any person is often attributed to be the cause of sickness or death, particularly when it involves a child (Dias-Scopel et al. 2017; Dias-Scopel 2018). Since Eunice had recently given birth and was confined to her residence during the liminal period of postpartum reclusion, Emiliano took the boy to the *pajé*'s house for treatment. He confirmed the diagnosis, indicating that the child had crossed the “path” of a menstruating woman.

CHW Edimilson worked in the village of Niterói, one of the furthest from the base pole in Kwatá. When we conversed with him about his work in a village so distant from the base pole and health team, he stressed that he valued the use of home remedies and that he worked in partnership with his grandfather, a famous *sacaca*. “I have this background, no? I have always worked with my grandfather. We mix our treatments with home remedies, but only for specific illnesses.” Edimilson commented that he informed the EMSI physician about this partnership with his grandfather: “For me he was good, a very good doctor. He always made visits to our community, and I introduced my grandfather as *sacaca*.” In this case, the CHW was evaluated by community as an “interested person” because of his disposition to consult with his grandfather and his political ability to interact with the EMSI.

Another important quality of the successful CHW is participation in negotiations with the state to obtain resources for the community that they must distribute fairly. They are political actors, along with the caciques, in negotiations with governmental authorities for material benefits. For instance, in 2011 the municipal government had unspent funds sent by the DSEI/Manaus designated for Indigenous health services. The caciques, together with the CHWs and Munduruku local health councilors, promoted a series of meetings with the public minister and administrators from the DSEI/Manaus to redirect the balance for the purchase of medical kits for the CHWs and boats for transporting the EMSI members and patients. The kits contained a T-shirt, carrying case, thermometer, blood pressure monitor, weighing scale, tape measure, etc. Beyond their evident utility, these kits are regarded as a CHW political conquest and part of the role's symbolic value.⁴ The capacity to obtain biomedical resources is viewed as evidence of good communicational abilities with the *pariwat*. Biomedical resources are perceived as scarce, and CHWs are seen as responsible for obtaining them. Village residents frequently complain about a lack of equipment and supplies and blame the precarity of the health services on the DSEI/Manaus management, not as a failure of the CHW.

Another interaction with the *pariwat* that is valued is the role that they have assumed on the local and district health councils. Many CHWs participate on the Local Health Council, and two have become members of the District Health Council, as mentioned above. The District Health Council representatives, Kleuton and Levi, had a decisive role in the approval for the construction of the Casa de Saúde Indígena (CASAI) in Nova Olinda do Norte. With the support of the general caciques, Kleuton and Levi sent several letters directly to the Special Secretary of Indigenous Health in Brasília, when the district headquarters in Manaus failed to respond to their demand. “It was a continuing drama because the CASAI wasn't getting approved. The request, the document, was tabled.” Due to direct negotiations with SASI's central office in Brasília and the municipality of Nova Olinda do Norte, the CASAI was finally constructed. Later, Kleuton became president of CONDISI-Manaus, elected by representatives of the thirty-five ethnic groups and by the nonindigenous health professionals and administrators. After serving the legal limit of two consecutive terms between 2014 and 2019, he returned to his position as council member.

Final Considerations

According to Little, territorial disputes in Amazonia constitute fields of power that revolve around “the play for hegemony between competing cosmographies with distinct ideological, social and material bases” (2001:7). We argue that in this “play for hegemony,” cosmographies are not self-contained systems in competition but emergent fields of knowledge and practices in relation; thus the territorialization of the national state, understood as a process of expansion in Indigenous territories, has been incorporated into the dynamics of Munduruku strategies to occupy their territory. The provision of universal health coverage for Brazil’s Indigenous population is part of the recognition of Indigenous rights to full citizenship, granting them health services, providing for their participation, and taking into account cultural diversity through the concept of differentiated attention. However, the expansion of biomedical services in Indigenous territories must also be recognized as a process of territorialization by a nation-state whose colonial history is characterized by domination and ambiguous relations with its Indigenous peoples.

In the Munduruku context, medicalization emerges as official/legal knowledge representing state power and control in Indigenous territories by which the process of territorialization continues through public policies. Biomedical/State expansion is represented by division of the TI into administrative micro-areas, each under the responsibility of a CHW. The micro-area is the most basic record-keeping geographical space in a hierarchical chain of territorial transposition in which the state imposes its divisions upon Indigenous landscapes. Micro-areas constitute the basic element of governmental data collection for official records. The CHWs send micro-area records to the base-unit for consolidation; demographic and epidemiological data go to district headquarters and then are incorporated into national statistics on Brazil’s Indigenous population compiled in Brasília.⁵ Local censuses and vaccination maps are the basis of the allocation of financial and medical resources and determine the circulation of health teams in Munduruku territory. Clinical registers of birth and health data officialize and fix names and ages to Munduruku identity and constitute required traits of citizens and clients of state public services.

State provision of primary health services is a demand of the Munduruku, despite the criticisms regarding the quality of services offered and complaints of the lack of supplies and dedicated professionals. The role played by CHWs develops within the context of scarcity of health resources and provisions. And the community surveils and assesses their capacity to employ their political endowment to navigate the relational field of demands and negotiations with alterity represented by *pariwat*.

The Munduruku community values agency and proactivity of the CHWs. In contrast with results of other studies, in our view the ability of some CHWs to articulate different forms of care and their interaction with the *curadores* and families demonstrate that they are not mere agents of the biomedical model in the villages and that their performance reflects more than that of an undervalued assistant in a biomedical team. They are part of a social network exchange of mutual aid and knowledge, negotiating the therapeutic itinerary and, at times, evaluating the diagnosis, prognosis, or treatment others suggest, including health team members. These self-care practices and illness management in the villagers’ daily life are invisible to the health professionals. They constitute the social and cultural construction of illness, and in this respect, CHWs play a far more central role in this collective experience than professional representatives of official health services.

The CHWs among the Munduruku have an active role in the collective Indigenous appropriation of biomedical knowledge. The appropriation process has a double effect. On one side, the role of CHWs became part of the operationalization of public health policies, and therefore part of the expansion of biomedical hegemony in the Munduruku territory. On the

other side, the enactments of Munduruku CHWs became part of Indigenous political strategies to manage alterity relationships and develop their own movement of territorialization, both aiming social reproduction and well-being in accordance with Munduruku cosmographic knowledge for living.

The Munduruku have never seen themselves as submissive people; instead, they view themselves as warriors. Despite the evident clash between the hegemony of biomedicine and Munduruku cosmographical perspectives, the Munduruku continue to expand the partnerships and participate in new spaces provided by the state, and deal with the ambiguity that this new alterity presents.

As other studies have shown, asymmetry, instituted by biomedical institutional hegemony, characterizes the hierarchical relations among the EMSI's members and has relegated CHWs to marginal status as uncertified health workers. However, the context of intermedicity involves practices and interactions that are invisible to rest of the team members. CHWs are protagonists and important actors in the negotiations and appropriations that occur in the contact zone of medical pluralism. Within the intermedical context, during a specific historical conjuncture, CHWs emerge as local leaders, collaborating with village caciques in health service issues and dialoging with and supporting families in therapeutic itineraries. The Munduruku case shows that the choice of "interested" people to occupy these positions is an intentional political strategy to increase health conditions of the Munduruku people.

The CHWs' role involves certain community expectations such as initiative, autonomy, and equilibrium in the distribution of biomedical resources, as well as discourse and oratory abilities—all constantly evaluated by community. These are valued attributes in leaders, who are seen as necessary in dealing with the *pariwat*. At the same time, their knowledge of the cosmological aspects of the sickness experience is also evaluated by the community, not as traditional specialists, but as people who can positively influence therapeutic itineraries and in the negotiation of conflicts between biomedical and Indigenous practices.

Our study points to a shift in focus in examining the role of CHWs. It suggests the need for more ethnographic research that recognizes autonomy and agency in the context of medical plurality and self-care practices and health management. The Indigenous CHWs' positions in Brazil have become more stable and consolidated over the years, presenting new possibilities for the empowerment of Indigenous people in a complex network of interactions with state agents. Effective social participation in health/illness/care processes is an essential characteristic in contexts of intermedicity characterized by negotiations and appropriations invisible to official health services, but in which Munduruku CHWs operate as community members and actors in the collective political project that aims for biosocial reproduction.

References

- Ahmadpour, Bahiyeh; Andrew Georg Wischneski; Raquel Dias-Scopel; Luigi Bruno Peruzo Iacono; Daniel Scopel. 2019. “Doenças diarreicas entre índios Munduruku do Rio Canumã: desafios para a Atenção Básica à Saúde”. In Júlio Cesar Schweickardt; Michele Rocha El Kadri; Rodrigo Tobias de Sousa (orgs), *Atenção Básica na Região Amazônica: saberes e práticas para o fortalecimento do SUS*. Porto Alegre: Editora REDE Unida, p. 126–139. <http://editora.redeunida.org.br/wp-content/uploads/2018/11/ED.08-S%C3%89RIE-SA%C3%9ADE-E-AMAZ%C3%94NIA.pdf>.
- Athias, Renato. 2004. “Índios, Antropólogos e Gestores de Saúde no Âmbito dos Distritos Sanitários Especiais Indígenas”. In E. Jean Langdon, Luiza Garnelo, (orgs), *Saúde dos Povos Indígenas: Reflexões sobre Antropologia Participativa*. Rio de Janeiro: Ed. Contracapa, p. 217–232.
- Cardoso, Marina D. 2015. “Políticas de Saúde Indígena no Brasil: Do Modelo Assistencial à Representação Política”. In E. Jean Langdon; Marina D. Cardoso (orgs), *Saúde Indígena: Políticas Comparadas na América Latina*. Florianópolis: Ed. da UFSC, p. 83–6.
- Casal, Manuel Aires de. 1817. *Corografia Brasílica ou Relação Histórico-Geográfica do Reino do Brasil*. 2 vol. (Facsimile da primeira edição), p. 313. <https://books.google.com.br/books?id=AJoXAAAIAAJ&ots=CIOIticbQz&dq=ayres%20de%20casal&hl=pt-BR&pg=PA1#v=onepage&q=ayres%20de%20casal&f=false>.
- Dias-Scopel, Raquel; Scopel, Daniel. 2019. “Promoção da saúde da mulher indígena: contribuição da etnografia das práticas de autoatenção entre os Munduruku do Estado do Amazonas, Brasil”. *Cadernos de Saúde Pública* [online] 35(suppl.3): e00085918. <https://dx.doi.org/10.1590/0102-311x00085918>.
- Dias-Scopel, Raquel. 2018. *A Cosmopolítica da Gestaç o, do Parto e do P s-Parto: Autoatenç o e Medicalizaç o entre os  ndios Munduruku*. Rio de Janeiro: FIOCRUZ. 2^a. Ediç o. <http://books.scielo.org/id/ngbrd/02> <https://doi.org/10.7476/9786557080146>
- Dias-Scopel, Raquel; Scopel, Daniel; Langdon, E. Jean. 2017. “Gestaç o, Parto e p s-parto entre os Munduruku do Amazonas: Confrontos e Articulaç es entre o Modelo M dico Hegem nico e Pr ticas Ind genas de Autoatenç o”. *Ilha Revista de Antropologia* 19(1): 183–216. <https://doi.org/10.5007/2175-8034.2017v19n1p183>.
- Diehl, Eliana E.; Langdon E. Jean. 2015. “Transforma es na Atenç o   Sa de Ind gena: Tens es e Negocia es em um Contexto Ind gena Brasileiro”. *Universitas Humanistica* 80: 213–236. <https://doi.org/10.11144/Javeriana.UH80.tasi>.
- Diehl, Eliana E.; Langdon, E. Jean. 2018. “Indigenous Participation in Primary Care Services in Brazil: Autonomy or Bureaucratization?”. *Regions and Cohesion* 8(1): 54–76. <https://doi.org/10.3167/reco.2018.080104>.
- CEDI Centro Ecum nico de documenta o e Informa o. 1983. Povos Ind genas no Brasil 1982. Munduruku. *Aconteceu*, especial 12. p.18. <http://pt.scribd.com/doc/38255011/Aconteceu-Especial-numero-12-Povos-Indigenas-no-Brasil-1982>.
- Dreyfus-Gamelon, Simone. 1984. “Les Sater -Maw  et les Mundurucu : l’affaire Elf-Aquitaine”. *Journal de la Soci t  des Am ricanistes* 70(1): 181–185.
- Ferreira, Luciane O. 2013. *Medicinas Ind genas e as Pol ticas da Tradi o: entre discursos oficiais e vozes ind genas*. Rio de Janeiro: Editora Fiocruz, (Sa de dos Povos Ind genas), 202p.
- Foll r, Maj-Lis. 2004. “Intermedicalidade: a zona de contato criada por povos ind genas e profissionais de sa de”. In E. Jean Langdon; Luiza Garnelo (orgs), *Sa de dos Povos Ind genas: Reflex es sobre Antropologia Participativa*. Rio de Janeiro: Contra Capa/Associa o Brasileira de Antropologia, p. 129–147.

FUNAI, Fundação Nacional do Índio. 2020. Map. *Terras Indígenas: Situação Fundiária*. <http://www.funai.gov.br/index.php/servicos/geoprocessamento>; scale 1:5.000.000

Garnelo, Luiza; Sampaio, Sully. 2003. “Bases Sócio-Culturais do Controle Social em Saúde Indígena: Problemas e Questões na Região Norte do Brasil”. *Cadernos de Saúde Pública* 19(1): 311–317. <https://doi.org/10.1590/S0102-311X2003000100035>.

Garnelo, Luiza; Sampaio, Sully; Pontes, Ana Lucia. 2019. *Atenção Diferenciada: A Formação Técnica de Agentes Indígenas de Saúde do Alto Rio Negro*. Rio de Janeiro: Editora FIOCRUZ. <https://doi.org/10.7476/9786557080115>.

Greene, Shane. 1998. “The Shaman’s Needle: Development, Shamanic Agency and Intermediality in Aguaruna Lands, Peru”. *American Ethnologist* 25 (4): 634–658. <http://dx.doi.org/10.1525/ae.1998.25.4.634>.

Langdon, E. Jean ; Diehl Eliana E. 2007. “Participação e Autonomia nos Espaços Interculturais de Saúde Indígena: Reflexões a Partir do Sul do Brasil”. *Saúde e Sociedade* 16: 19–36. <http://dx.doi.org/10.1590/S0104-12902007000200004>.

Langdon, E. Jean; Diehl, Eliana E. 2020. “Anthropological Engagement and Interdisciplinary Research: The Critical Approach to Indigenous Health in Brazil”. In Jennie Gamlin; Saha Gibbon; Sesia Paola and Lina Berrio (orgs), *Critical Medical Anthropology: Perspectives in and from Latin America*. London: UCL Press. <https://discovery.ucl.ac.uk/id/eprint/10093082/1/Critical-Medical-Anthropology.pdf>

Langdon, E. Jean; Diehl, Eliana E.; Dias-Scopel, Raquel. 2014. “O papel e a formação dos agentes indígenas de saúde na atenção diferenciada à saúde dos povos indígenas brasileiros”. In Carla Costa Teixeira; Luiza Garnelo (orgs), *Saúde Indígena em Perspectiva: Explorando suas Matrizes Históricas e Ideológicas*. Rio de Janeiro: Editora Fiocruz, p. 213–39. <https://doi.org/10.7476/9788575415825>

Langdon, E. Jean; Garnelo, Luiza. 2017. “Articulación entre servicios de salud y ‘medicina indígena’: reflexiones antropológicas sobre política y realidad en Brasil”. *Salud colectiva* 13: 457–470. <https://doi.org/10.18294/sc.2017.111>

Lehmann, Uta; Sanders, David. 2007. *Community Health Workers: What Do We Know About Them. The State of The Evidence on Programmes, Activities, Costs and Impact on Health Outcomes of Using Community Health Workers*. Geneva: World Health Organization pp. 1–42. Available from https://www.who.int/hrh/documents/community_health_workers.pdf

Little, Paul Elliott. 2001. *Amazonia: Territorial Struggles on Perennial Frontiers*. Baltimore: Johns Hopkins University Press.

Lock, Margaret. 2004. “Medicalization and the naturalization of social control”. In: Carol R. Ember; Melvin Ember (Ed.), *Encyclopedia of Medical Anthropology*. New York: Kluwer Academic, Plenum Publishers, pp. 116-125.

Menéndez, Eduardo L. 2009. *Sujeitos, Saberes e Estruturas: Uma Introdução ao Enfoque Relacional no Estudo da Saúde Coletiva*. São Paulo: Hucitec.

Menéndez, Miguel. 1992. “A Área Madeira-Tapajós: Situação de Contato e Relações entre Colonizador e Indígenas”. In Manuela Carneiro da Cunha (org), *História dos Índios no Brasil*. São Paulo: Companhia das Letras, p. 281–296.

Murphy, Robert Francis. 1960. *Headhunter’s Heritage*. Berkeley: University of California Press.

_____. 1958. *Mundurucu Religion*. Berkeley: University of California Press.

_____. 1957. “Intergroup Hostility and Social Cohesion”. *American Anthropologist* 59(6): 1018–1035.

Oliveira, Clovis Fernando Palmeira (org). 2002. *Kwata-Laranjal, História e Reconquista da Terra*. Manaus: SEDUC-AM.

- Pontes, Ana Lucia; Garnelo, Luiza. 2014. La formación y el trabajo del agente indígena de salud en el Subsistema de Salud Indígena en Brasil. *Salud Pública de México* 56(4): 386–392. <https://doi.org/10.21149/spm.v56i4.7359>
- Ribeiro, Darcy. 2000. *Os Índios e a Civilização: A Integração das Populações Indígenas no Brasil Moderno*. São Paulo: Cia das Letras.
- Santos, Ana Flávia Moreira. 2009. *Conflitos Fundiários, Territorialização e Disputas Classificatórias. Autazes (AM), Primeiras Décadas do Séc XX*. Ph.D. dissertation, Universidade Federal do Rio de Janeiro, Museu Nacional.
- Scopel, Daniel; Dias-Scopel, Raquel; Wiik, Flávio Braune. 2012. “Cosmologia e Intermedicalidade: O Campo Religioso e a Autoatenção às Enfermidades entre os Índios Munduruku do Amazonas, Brasil”. *Tempus Actas de Saúde Coletiva* 6(1): 173–190. <https://www.tempusactas.unb.br/index.php/tempus/article/view/1141/1046>
- Scopel, Daniel; Dias-Scopel, Raquel; Langdon, E. Jean. 2015. “Intermedicalidade e Protagonismo: A Atuação dos Agentes Indígenas de Saúde Munduruku da Terra Indígena Kwatá-Laranjal, Amazonas, Brasil”. *Cadernos de Saúde Pública* 31: 2559–2568. <https://doi.org/10.1590/0102-311X00139014>
- Scopel, Daniel; Dias-Scopel, Raquel; Langdon, E. Jean. 2018. “Munduruku Cosmography in Movement: Health, Territory and Survival Strategies in the Brazilian Amazon”. *Boletim do Museu Paraense Emílio Goeldi. Ciências Humanas* 13(1): 89–108. <https://doi.org/10.1590/1981.81222018000100005>.
- Teixeira, Carla Costa; Da Hora Simas, Diego; De Costa; Nilton Miguel Aguilar. 2013. “Controle Social na Saúde Indígena: Limites e Possibilidades da Democracia Direta”. *Tempus Actas de Saúde Coletiva* 7(4): 97–115. <https://tempusactas.unb.br/index.php/tempus/article/view/1420/1197>
- Teixeira, Carla Costa. 2017. “Participação Social na Saúde Indígena: A Aposta Contra a Assimetria no Brasil?”. *Amazônica - Revista de Antropologia* 9(2): 716–733. <http://dx.doi.org/10.18542/amazonica.v9i2.5672>
- Wolf, Eric R. 1997. “Rubber Gathers: Mundurucú”. In Eric Wolf. *Europe and the People Without History*. Berkeley: University of California Press, p. 326–329.
- Young, Allan. 1976. Some Implications of Medical Beliefs and Practices for Social Anthropology. *American Anthropologist* 78(1): 5–24.