

Case Report Article

Ethnographic profile and difficulties in accessing oral health care in Amazon region – an experience report

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Abstract

Introduction: The Indigenous People living in the surrounding areas of the lower course of the Amazon River have little and outdated epidemiological information on oral health. The access to oral health is a distant reality for this population and the precariousness of primary health care in these regions is alarming, thus access to oral health care becomes an unmet need. **Objective:** This experience report aims to contribute to a critical reflection on the barriers to access to oral health for the Sateré-Mawé Indigenous People of the Andirá-Marau Indigenous Reserve (Amazonas, Brazil). **Case report:** Traditional medicine practiced by healers proved to be active in the region, nevertheless, the precariousness of access to institutionalized health in Indigenous Health Districts is also part of the reality of these peoples, being justified by the difficulty of traveling to the regions with professionals and specialists. This situation reflects on the sparse results of the available health surveys, which show they have worse oral health conditions compared to the non-indigenous population. **Conclusion:** After daily experience, it was possible to register that more adequate sanitary approaches are needed that meet real needs of this community.

Introduction

The scarcity of epidemiological information on indigenous oral health in the Amazon region is distressing in Brazil. Available studies indicate that indigenous groups interacting with the non-indigenous population, primarily in urban areas but also in rural settings, have epidemiological profiles associated with factors such as economic scarcity, low education, and lack of basic sanitation. These factors contribute to their susceptibility to infectious diseases and endemic parasites [25, 35].

In Brazil, the oral health care of Indigenous Peoples is marked by conflicts and discontinuities of public policies that have historically been created known as indigenist policies. There were several difficulties to effectively implement indigenous healthcare, especially the logistic for access to communities, heterogeneity of ethnic groups, organizational structure and participatory management [33]. The promotion of indigenous health requires knowledge of socio-cultural aspects present in villages or communities, considering that these factors interfere in the health-disease process [31].

Since the colonial and imperial period in Brazil, they have suffered the consequences of indigenous policies under the oppression of white, occidental colonizing state power [1]. Dominant tendencies in policies that were based on a discriminatory perspective neglect the basic social rights perpetrating ethnic exclusion of original peoples. After the creation of the Serviço de Proteção aos Índios (Indian Protection Service) [5], a process of seeking pacification and protection for them began [18].

The Fundação Nacional do Índio (National Indian Foundation - Funai) in the country is associated with the Ministry of Justice [4], which became public representative coordinator and chief performer of indigenous policy in the country. Later, in 1988, with the advent of a new version of Brazilian Federal Constitution, an exclusive chapter was dedicated to Indigenous communities in recognition and protection of their rights and assets before the State, with a view to granting these population conditions for their full development. After the declaration of health as a fundamental right in the 1988 Constitution, the inclusion of Indigenous Peoples in the planning of the national Sistema Único de Saúde (Unified Health System - SUS) has been accomplished through its inclusion in The Health Organic Law [7], and Arouca Law. Hence, it is a chapter of the Subsistema de Atenção à Saúde Indígena (Indigenous Health Subsystem -

SASI), managed by Fundação Nacional de Saúde (Brazilian National Health Foundation - Funasa). Funasa's objective was to establish primary health care and continuity of care at different levels, in line with the needs of each indigenous territorial context. Based on the premises of SASI, the Política Nacional de Atenção à Saúde dos Povos Indígenas (National Policy Attention to Indigenous Peoples - PNASPI) was elaborated [22], constituting an important hallmark in the organization and responsibility for the health care of the indigenous population [24].

Accordingly, this policy upheld by SUS principles must be implemented in a multidisciplinary manner, including the Indigenous Peoples' own medical methods [36]. Unfortunately, recent data on indigenous health are not satisfactory, either due to the lack of execution of the ideas proposed by PNASPI, or to deficiencies in the planning, programming, and interventions for the prevention and health promotion of these persons.

Afflicted by health-disease processes determined by social inequities and ethnic-racial prejudices, these minorities in Brazil experience situations of marginality, exclusion, and discrimination that define greater vulnerability [16]. The lack of professionals and the discontinuity of actions led many indigenous communities to mobilize, mainly through their legally constituted organizations, with the objective of gaining the capacity and autonomy to face diseases and health problems with the greatest impact on health. From this, the local and regional processes for training indigenous health agents and valuing traditional indigenous medicine emerged, with the participation of institutions involved with assistance to indigenous health. However, in the Amazon region, most initiatives came from indigenous and non-governmental organizations [22].

Given these considerations, this experience report aims to describe the involvement of graduate students, through voluntary activity in the Amazon region, in the context of actions aimed at indigenous health, allowing exposing critical perceptions and reflections on the impact of the lack of promotion and prevention of oral health among these persons.

The experience: methodological notes

By the requirements for joining in the project volunteer, undergraduate and graduate students needed to deliver a letter signed by the representative of the institution they were enrolled in authorizing

them to enter the project at the given location. In addition, participants are requested to obtain vaccination certificates as a preventive measure against potential disease contagions.

The non-governmental organization (NGO) called Associação Humanitária: Universitários em Defesa da Vida (Humanitarian Organization: University in Defense of Life - UNIVIDA) has a long-established history of engaging in volunteer work with Indigenous communities in Brazil.

Context: Andirá-marau Indigenous Land - São Simão, Molongotuba and Ponta Alegre villages

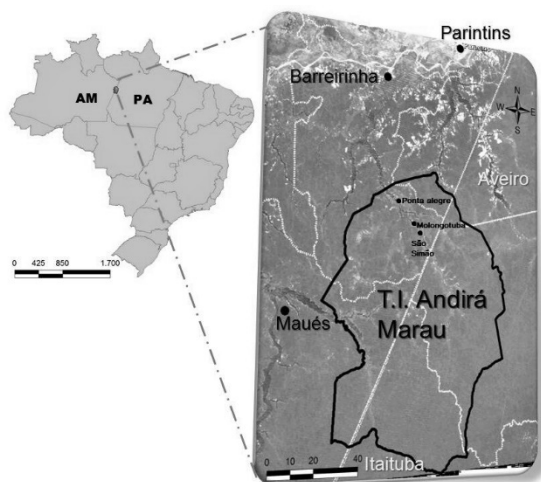


Figure 1 - Map with location of Andirá-Marau Indigenous Land, with delimitations of the villages visited: Ponta Alegre, Molongotuba e São Simão in Amazonas/Brazil. [<http://www.nusoken.com>, with modifications]

The Sateré-Mawé Indigenous People are among a few groups living in the surrounding areas of the lower course of the Amazon River. Located in the State of Amazonas (AM), close to the State of Pará (PA), they live in the village Andirá Marau located close to the municipalities of Parintins, Barreirinha, and Maués. They have intercultural experience as well as other Indigenous communities who have suffered over the last century the process of contact with different cultural matrices [29]. Here, the use of the anthropological term *acculturation* will be avoided, as in its usual colonial semantics it is problematic, translating *culture* as a closed system, and often covering up power relations and imposing violence in various ways on colonized peoples, especially in the tradition of western culture. Besides, it ignores the possibilities of

transformation and enhancement of new realities for Indigenous Peoples, with innovation, exchange, and resistance to allow their survival.

The entry into Indigenous Lands was conducted by NGO Univida in the period of 5 to 15 January 2020. Access was by river, leaving the Port of Manaus / AM, by hiring an appropriate boat. Two village leaders, along with their families guided the team's journey. It took two days of travel, navigating the Amazon River, entering its affluent Rio Andirá until reaching the first region of the lower Amazon planned for the volunteers to act.

The team consisted of 93 persons, including university students, professionals, and teachers from different occupations. Volunteers in health actions who did not provide assistance helped with the infrastructure and organization of spaces where activities were promoted, while university volunteers and health professionals contributed mainly to the level of primary care, with the work of nurses, doctors, psychologists, and dentists.

Sateré is the most widely spoken language among communities, causing a complicating linguistic factor for the teams of volunteers, especially health professionals who depend on communication between professional and patient, and this impasse was resolved through local interpreters.

Thus, a connection was established with one of the Distritos Sanitários Especiais Indígenas (Special Indigenous Sanitary Districts - DSEI), among the 34 existing in Brazil, in the area of influence of the municipality of Barreirinha (AM). A DSEI sets up a territorial and ethnocultural space in which Indigenous Peoples live, to provide primary health care services in the respective groups. Its conception aims to respect Traditional Indigenous Health Practices, through the organization of the comprehensive care network, articulated and hierarchical with SUS. They have base poles for the organization of these services. These are considered as an instance of care and are the first reference for Indigenous Health Agents who work in the villages. On the other hand, the Indigenous primary health care service are considered as establishments destined to the direct execution of the health care and sanitation services performed by the Multidisciplinary Care Teams [9].

According to the information contained in the National Register of Health Facilities in the municipality of Barreirinha, the following establishments with public administration are

registered: five base centres, including the Municipal Health Department, Health Surveillance Department; twenty-eight primary health care service; a health centre and a hospital unit [14]. The first village served is the village of São Simão, then the Molongotuba community and finally the village Ponta Alegre.

In the community of São Simão, we identified the construction of a Primary Health Care Unit, which was unfinished and therefore inactive. In the second group, Molongotuba, there is no primary care services, there are no primary care services or electricity distribution, similar São Simão. In both, the care provided in our intervention revealed a high rate of caries disease and the respective complications resulting from this condition, such as the complete destruction of dental elements. This generated, in most cases, tooth extractions mainly in children and adolescents.

In Ponta Alegre, there is a polo-base unit in operation; however, one doctor was responsible for all the care provided for the local community. A dental office with an inactive dental chair remained in place for the eventual care of a dentist, although this professional did not work in the region and the equipment and medicines were unusable. For appointments with the dentist and other professionals, the nearest municipality is Barreirinha, which is approximately six hours away from the village and 512 kilometres from Manaus, a route only carried out by boat. As this is the closest village to the municipality, it has better infrastructure, such as small grocery market, sidewalks of main streets, public telephones, electric generators, collective space for cultural events, school and church. Even with better infrastructure, the reality of oral health in the community of Ponta Alegre was similar to that of the communities attended previously.

The reality of traditional practices, like practices in vegetable production, has been transmuted and industrialized products are present in daily meals. In addition, due to the prominence of the first Brazilian Indigenous Peoples with their product sold nationally and internationally, guaraná represents an ethnic symbol of the Sateré-Mawé. Though, the persons in that region do not seem to enjoy the prestige or the financial return of the guaraná trade, corroborating with the literature that cites their disregard for their agricultural knowledge [20].

It is worth mentioning that many Indigenous

Peoples are undergoing significant changes that can be justified by globalization, which will eventually affect people of different ethnicities and significantly alter their eating habits. The consequence of these new habits is already observed, with an increase in sugar consumption that favours the development of caries disease, in addition to edible abrasives and acids that can predispose to other oral complications such as periodontitis and edentulism – not to mention metabolic diseases [23].

Estimate population and worked out sample

Globally, Brazil has a wide ethnic diversity of native peoples, with near 896,000 individuals and 305 ethnic groups according to the Population Census conducted in 2010 [28]. The Andirá-Marau indigenous territory was demarcated in 1982 and approved in 1986 [6]. In 2011, 397 inhabitants were counted in Ponta Alegre village, 287 in Simão village, and 281 in Molongotuba village, with approximately 9,000 people living in the region as a whole [38]. On the other hand, the General Council of the Sateré-Mawé Tribe registered a total number of 13,350 inhabitants in that territory in 2014 [12]. Overall, approximately 200 individuals were assisted in the voluntary project.

The interdisciplinary collaborative action

The information described was obtained through the authors' field diaries. In the context analysed, there was no treatment or prevention with fluoridation of water used for consumption, aggravating the problem of caries disease. Besides, reports on the precariousness of health services in Indigenous communities related to the demands for preventive and curative dental care are commonly described [17]. Also, none of the three villages visited had basic sanitation, which is essential for the quality of life of the inhabitants.

Traditional medicine practiced by healers proved to be active in the region. However, the precariousness of access to institutionalized health in Indigenous Health Districts is also part of the reality of these peoples, being justified by the difficulty of traveling to the regions with professionals and specialists. Further, there was

a lack of access to information, as well as high numbers of diagnoses of worms, caries, abscesses, and tooth loss.

To optimize the flow of persons and the effectiveness of care, a circuit of care stations was organized, in which patients went through all areas and were accompanied by university students and professionals, according to their needs. First, the members of the nursing area welcomed patients, followed by checking vital signs, checking blood pressure, checking heart rate, body temperature, and blood oxygen saturation. Classification of patients with pain symptoms was used, with an appropriate and validated scale and, when necessary, dressings were applied. After this stage, a referral was made to the medical area, which carried out anamnesis, physical examination and, if they needed medication interventions, the professionals performed the administration of drugs that were donated to the NGO Univida. At that point, the patients went through the area of psychology, which welcomed them followed by anamnesis for psychodiagnostic purposes, and an active listening process based on projective tests. The last stage of the circuit consisted of dentistry students who performed an integrated set of procedure. For instance, oral hygiene guidance, playful activities with the children of the village (with oral health literacy), instructed dental brushing techniques, applied fluoride to prevent caries disease, performed dental treatments such as composite resin restorations, atraumatic restorative treatment, and extractions – as a last resort, when nothing more could be done to save the tooth.

Discussion

Confrontations, disputes and obstacles stand out in the search for oral health of Brazilian indigenous people. In the past, assistance to indigenous health was conducted almost exclusively through religious missions. However, currently, this population have legal support in the Federal Constitution of Brazil to guarantee access to health, despite these rights being forgotten with the discontinuity of public health policies [33]. Thus, the complexities and misunderstandings in the attention to indigenous health perpetuate a health policy that in theory recognizes the needs, mainly regarding the oral health of the Indigenous inhabitants [19], but in practice, they have shown to be non-existent in the villages in that voluntary actions were carried out.

Between 1970 and 1980, the National

Development Plan was established in Brazil, which envisaged, in its course, the productive occupation of the Amazon, a fact that generated many impacts on Indigenous Peoples and complaints around the world. At that time, Indigenous communities, anthropologists, and missionaries joined social movements in defense of indigenous rights. Thus, the Indigenous NGO that promoted the creation of important scenarios of discussion and visibility of relevant issues, formalizing assistance participation, criticisms and suggestions to optimize Indigenous public policies, gained prominence [37].

In the mid-20th century, many Indigenous groups reported difficulties with the bureaucracies of public administration and received support from national and international entities, which contributed still unsatisfactorily to the insertion of indigenous causes in the decision agendas of the political sphere. At that time, the damage caused by the divergent and fragmentary support received was reflected in the stagnation of demands proposed by Indigenous Peoples, since they were legally unable to position themselves politically. Instead of promoting autonomy for this population, this support ended up making them dependent on governmental and non-governmental entities. Consequently, NGO progressively lead the execution of health policies for Indigenous Peoples, a task that is primarily a duty of the Brazilian Federal Government [37].

The Special Secretariat of Indigenous Health (SESAI), created by Decree No. 7336 of on 19 October, 2010, is the entity belonging to the Federal sphere, responsible exclusively for the management and execution of the health policies of the Indigenous in Brazil [8]. However, after a decade of creating SESAI, poor sanitary conditions, and high rates of infectious and parasitic diseases in childhood, as well as communicable diseases, general mortality, and the number of hospitalizations and deaths from respiratory diseases, are still significantly alarming.

This deficiency is confirmed in the National Health Survey of Indigenous Peoples, which is the only national health indicator carried out among these peoples [15, 26]. The financial resources available does not seem to have been a factor that prevented the implementation of indigenous health policies, since the data on the financing of SESAI and Funai point to a significant increase in resources since its inception, except for this government inducted in 2019 [10, 39].

Several studies report a high prevalence of development of caries disease among Indigenous inhabitants in Brazil [2, 17, 34]. Caries disease affects Sateré-Mawé communities, and this disease

is reported with a high number of cases also in studies with Brazilian peoples such as Xavante [3], Guarani [21], Baniwa [13], Mehinako, Aweti, Kamaiurá, and Yawalapiti [32]. The epidemiological analysis with the Satere-Mawé showed a higher prevalence of the need for endodontic treatment (of pulp and dental canals), compared to another Indigenous ethnic group in the region [11].

The prevalence of dental caries and its consequences is explained by many factors, in view of being a multifactorial disease/sequel, but with emphasis on the carbohydrate-rich diet, reflecting changes in eating practices associated with increased consumption of processed foods, concomitant with the absence of water fluoridation and lack of access to dental care. The intake of sweets, instant noodles, bread, and others treats comes from purchases made in the surrounding villages. Furthermore, the genetic components associated with susceptibility or resistance to the development of caries in populations that are under the same environmental factors also are considered [40]. In any case, according to Moimaz *et al.* [30], after applying a questionnaire on the perception of oral health in a Brazilian Indigenous community, it was observed that respondents interpret there is a direct relationship between oral health and the ability to perform tasks (biting, chewing), and not only the absence of dental pain.

A limitation of this experience report stems from the lack of integrated and updated epidemiological information about these people, which would allow for better planning of actions. However, this limitation is justified here by bureaucratic obstacles and the disintegration of the agencies responsible for supporting authorized actions in indigenous territories. There is a bioethical discussion about the mistaken adoption of a bureaucratic labyrinthine process in conducting scientific research aimed at Indigenous Peoples [27].

Another limitation of this case report is the fact of the short time spent on the visited communities, but this was offset by the intense degree of immersion and dialogue that was established.

Conclusion

In this field experience report, it was possible to observe unsettling aspects at the individual and collective level concerning quality of life of Indigenous communities. Environmental factors,

such as socioeconomic, behavioral, ethnic and psychological indicators, are important aspects due to the specificities of the epidemiological conditions of each ethnic group. Due to the scarcity of health professionals and geographical constraints that hinder their work in these areas, Indigenous Peoples needed to leave their lands in search of health treatments.

The possibilities of immersion in Indigenous territories and the resulting critical reflections on the living conditions of these families bring the merit of illustrating with concrete examples the living conditions, and openings for future, culturally competent interventions that can mitigate the health problems of these individuals.

Apparently, indigenous rights have stagnated in the realm of planning and established legislation, unfortunately, not translating into practical implementation. As an example, it was possible to experience the bureaucracy of the process of carrying out scientific research involving this population, since ethical aspects make procedures difficult, even when dealing with Non-isolated Indigenous Peoples. Another important issue is the absence of activities aimed at this population, in health courses at universities, as possible immersion activities or continuing education in Indigenous communities, for the students' experience and understanding of aspects of local culture, traditional medicine and training of future professionals with a broader vision for the various branches of activity. It was observed that the interest in volunteering is growing in Brazil, which can be extremely important in the incorporation of new curriculum by universities and/or linking with NGO to carry out volunteer projects.

The experience in the Andirá-Marau Indigenous Land was limited, mainly due to difficulties such as the impossibility of incorporating materials for more comprehensive health interventions. Such complexities make us think of the impact of only one action, although voluntary and in good faith, but isolated; rather than an integrated and continuous action over time aiming at sustainable and lasting improvements. The reported experience highlights the need of public policies that can take out the ethical barriers exposed in this experience, as well as policies that facilitate the entry of trained professionals and students in these difficult-to-access regions, which have populations that lack overall health care and are at the mercy of the absent government.

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