

SURGICAL PROCEDURES PERFORMED ON INDIGENOUS PEOPLES, FROM THE LEGAL AMAZON IN HEALTH CARE

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ABSTRACT

Introduction: The research carried out in the Gavião and Arara indigenous villages aimed to identify the most recurrent surgical procedures among the indigenous people of these communities, focusing on gender differences and the difficulties faced to carry out the research, duly authorized by the CEP and FUNAI. Methodology: Data collection in indigenous peoples, through forms with closed questions about procedures performed on the interviewed population. Results and Discussion: In the village of Gavião, 30 women and 20 men were interviewed, and in the village of Arara, 17 women and 10 men. The data show that 15 men from the Gavião village had never undergone any surgical procedure, while 5 had already undergone surgeries. Among the women, 16 had never undergone surgery, and 14 reported having already undergone some procedure. In the Arara village, 7 men had not undergone surgeries and 3 said they had already had them. Among the women, 4 had not undergone surgery and 13 had already undergone surgical procedures. The research also showed a strong context of machismo in the Gavião village, which represses women in several aspects, especially in access to health care. These cultural issues can impact the way women seek medical care and accept surgical treatments, something that aligns with what is observed in other Indigenous communities in Brazil. where cultural barriers and machismo play a significant role in health inequalities. In addition, researchers faced significant challenges, such as difficulty in obtaining the

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necessary permits and complicated access to villages. This scenario is common in studies with indigenous populations, as reported by Pedrana et al. (2022), who highlight the importance of intercultural health that integrates traditional knowledge and the formal health system, recognizing the specific cultural needs of indigenous peoples. Similarly, Jardim et al. (2023) emphasize that the creation of health programs that respect the culture and barriers to access to indigenous communities is essential to overcome the historical inequalities faced by these groups. Conclusion: It is concluded that the research brings to light the need for public policies that consider the cultural and geographical specificities of Indigenous communities, providing a more inclusive and accessible health system.

Keywords: Indigenous Peoples. Indigenous Health. Surgeries. Indigenous Care.



INTRODUCTION

Since ancient times, when the first contact of the white man with Indigenous people was established, it was marked by events in which Indigenous peoples were strongly impacted by infectious and parasitic diseases. Epidemics of diseases such as measles and influenza were responsible for the majority of deaths among Indigenous people in a short period (Pereira *et al*, 2014).

Given these episodes, there was a need to develop a healthcare system for Indigenous peoples. Thus, Law 9.836 of September 23, 1999, was enacted, which established the Indigenous Health Care subsystem (SASI), becoming a complementary and differentiated model for the organization of primary care services within the Unified Health System (SUS) (BRASIL, 1999).

In the most complex cases that require more specialized medical care, the Indigenous Health Support Houses (CASAIs) were created to assist and attend to Indigenous peoples, and in most cases, CASAIs should be established in locations close to Indigenous territories or in large centers that have specialized health services for exclusive understanding (Pereira; Biruel; Olive tree; Rodrigues, 2014).

In the State of Rondônia, the indigenous lands under study in this work are inserted in the Tupi-Mondé Ethno-Environmental Corridor, distributed in seven Indigenous Lands (TIs) among them: Igarapé Lourdes (RO), Roosevelt (RO), Sete de Setembro (MT-RO), Zoró (MT), Serra Morena (MT), Aripuanã (MT) and Aripuanã Indigenous Park (MT). Approximately 4,000 indigenous people live in an area of 3,522,754 hectares (Santos and Mendonça, 2016).

The Igarapé Lourdes Indigenous Land is divided into two ethnic groups, Arara (Karo) and Gavião (Ikolen) located in the vicinity of the Lourdes Stream, approximately fifty kilometers from the municipality of Jí Paraná/RO, in the central region of the state. On the other hand, because it is located in the Amazon region, during some periods of the year access to the villages makes it difficult to access these Indigenous Lands, corroborating the low demand for medical care, especially in surgical procedures, by indigenous peoples.

The Ministry of Health designates bodies responsible for indigenous peoples in Brazil and these perform functions such as assistance, protection, prevention, and recovery of the individual's health. The National Foundation of Indigenous Peoples - FUNAI is the federal agency responsible for the protection and promotion of the rights of Indigenous peoples throughout the national extension, later the Special Indigenous



Sanitary District - DSEI, which has the function of planning the primary care network in Indigenous lands in an integral and structured format with gradual complexity and linked to the SUS and the Indigenous Health House is assigned the function of coordinating and guaranteeing the rights to health of peoples considered vulnerable. (BRAZIL, 2023).

The main objective of this study was to describe the data collected related to surgical procedures in the indigenous population, listing the most recurrent procedures and factors correlated with these high rates of surgeries in this population. The results obtained will serve as a mechanism for the creation of actions aimed at reducing resistance to adherence, especially in attending to the necessary surgical procedures, to improve indigenous health services.

METHODOLOGY

FIELD OF STUDY

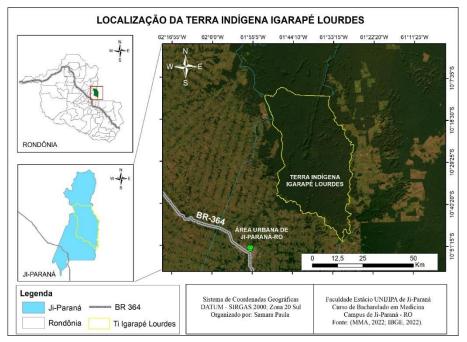
The work began with the submission of a request for authorization and technical opinion to the Research Ethics Committee, through Plataforma Brasil, receiving a favorable opinion under number 6.305.309/2023. CNPq opinion attesting to the scientific character for submission to FANAI, which was authorized.

The research began, starting with a bibliographic survey in academic journals, of a scientific nature such as Lilacs, Webofscience, Pubmed, and Scielo, using as descriptor surgery in Indigenous peoples, which then established a comparison with data collected through forms, applied to the ethnic group "Gavião" and "Araras" of the Igarapé Lourdes Indigenous land in the Legal Amazon, located 61.9 km from the Municipality of Ji-Paraná/RO. Reports of care provided in hospital units were also observed, including the referral of Primary Health Care, in the health care of the indigenous population.

The project will be carried out with the Gavião (Ikolen) and Araras (Karo) ethnic groups, which are inserted and located in the Igarapé Lourdes Indigenous Land, which is located in the state of Rondônia, on the border with Mato Grosso between the parallels 10°10′07" to 10°12′19" and 10° 32′52" at 10° 50′44" south latitude and the meridians 61°47′02" to 61°27′54" and 61°51′47" to 61° 31′19" west longitude - Greenwich. 185.533,5768 hectares (one hundred and eighty-five thousand, five hundred and thirty-three hectares, fifty-seven areas and sixty-eight centiares) and the perimeter is 270.583 km as shown in Figure 1 (CARDOZO; VALE JUNIOR, 2012).



Figure 1: Location of the Gavião and Arara Ethnic Group in the Igarapé Lourdes Indigenous Land (IBGE, 2022)



DATA COLLECTION

Contact was established with the ethnic groups, Gavião and Araras, to schedule the application of the forms, and data were collected on how the referral of the population that needs treatment or surgical or drug intervention is carried out in the health units for proper treatment. The forms contain closed questions that cover everything from referral, treatment, acceptance, and satisfaction with the service.

Thus, research was carried out in the database of renowned institutions, such as the Brazilian Institute of Geography and Statistics (IBGE), the Indigenous Memories Project of the Federal University of Rondônia – UNIR, in addition to the Special Secretariat for Indigenous Health (SESAI), being analyzed together with the National Policy for Health Care for Indigenous Peoples (PNASPI) and the management process of the Indigenous Health Care Subsystem (SasiSUS) within the scope of the Unified Health System (SUS).

RESULTS AND DISCUSSION

According to the data obtained with the application of the forms, some pathologies were verified, which were mentioned during the collection, such as cholelithiasis, better known as gallstone, which has a high prevalence in Brazil, especially in women at the end of childbearing age due to endocrine alterations, as these alterations tend to increase cholesterol levels, which plays a significant role in the development of stones, and



presents signs and symptoms such as abdominal pain, emesis, nausea and, in more severe cases, jaundice and obstruction of the common bile duct, according to Gomes, Andrade, Oliveira, Amaral and Dornelas (2024). Early diagnosis is the best way to ensure a quality of life for the patient, whether conservative or surgical treatment aims to reduce biliary colic, the investigation is done through laboratory tests such as ultrasound of the upper abdomen, computed tomography of the total abdomen, and magnetic resonance imaging. Cholelithiasis has a high incidence in the indigenous peoples of the Amazon region, in the Araras and Gavião villages, who through the data obtained in the forms, presented the highest surgical rates in these peoples.

The risks and benefits of any surgical procedure are complex and should be taken with caution, carefully weighing the risks and benefits involved. Each procedure has its particularities, but some general points can be considered, such as improving the individual's quality of life, solving the problem, and avoiding complications related to diseases. Among the indigenous communities, it is worth mentioning the respect for the patient's decision and cultural habits, but currently, the people have great acceptance for medical treatments.

The Gavião Indigenous Land, which in the original language is called Ikolen, is inserted in the Tupi-Mondé Ethno-environmental Corridor, making up the Igarapé Lourdes Indigenous Land, which covers several ethnic groups that are part of the Lourdes Creek basin, in addition to other tributaries of the Machado River, also known as Ji-Paraná, located in the state of Rondônia, near the border with Mato Grosso. This population is distributed in a complex of six villages and is also shared with the Arara people (KARO), which is another group in the region (Santos; Mendoça, 2016).

According to Paula (2008), the insertion of non-indigenous people to raise land for cattle ranching and planting in Indigenous lands, was responsible for causing several changes in the culture and way of life of this population, being marked by interethnic marriages and integration into the regional economy, alternating with moments of tension and conflicts, however, the predominant factor that marked this interaction was due to the high mortality rates due to influenza epidemics, measles, pneumonia, and malaria, introduced by non-indigenous people.

Thus, the research was based on data collection through the application of a form to acquire pertinent information related to surgical procedures and adherence of indigenous peoples to local treatments or non-indigenous treatments such as prescribed medication or



white man medication. It is worth noting that the percentages presented in this study are based on the population interviewed.

The number of participants surveyed in the Gavião and Araras villages was distributed as follows: In the Gavião peoples, there were 20 Indigenous males, with ages ranging from 18 to 85 years, most of whom were aged between 21 and 37 years. Among the Gavião women, about 30 indigenous people participated, with ages ranging from 19 to 75 years.

In the Araras peoples, the participation in the research took place in: 10 male indigenous people, with ages ranging from 19 to 50 years, most were between 21 and 40 years old. In the Araras ethnic women, there were 17 participants, with ages ranging from 21 to 69 years, most of whom were represented by indigenous people aged between 21 and 38 years.

Regarding the level of education among the male interviewees of the Gavião people, 8 reported having attended elementary school, however, 6 of them did not complete their studies in the elementary cycle, another 6 said they had completed high school and 1 had completed higher education. In women of the same ethnicity, it was observed that 9 attended elementary school and 4 of them did not complete it, in high school, there were 5, however, 2 did not complete it, but in higher education, there was a higher number among women, with 4 completing higher education.

Among the Araras people, there was slightly lower participation, and among the men, 2 attended elementary school and one of them completed it, in high school, there were 3 graduates, and for higher education, 3 were registered, with only 1 graduate. In the women of this ethnicity, it was observed that 4 attended elementary school, of these, 2 did not finish, 3 attended high school and 1 of them did not complete it, and in higher education, 2 attended and did not finish.

The great difficulty encountered during the research was the dialogue, especially among the women, because most of the time the men were the ones who answered and the women remained silent. Thus, they were unable to obtain information about why they did not complete the studies, however, at times they alleged difficulties in transportation and displacement, and the Igarapé Lourdes Indigenous Lands are far from the municipality of Ji-Paraná-RO.

The surgical interventions with the highest incidence among men from the Gavião indigenous community are fractures with an incidence of 4%, with a man with an arm



fracture and a woman with a hip fracture, which required surgical procedures. This type of fracture may be related to the **vulnerability** of these indigenous people to **trauma**, this index, although low, may be related to several factors, such as **work accidents, violence**, or even **cultural practices** that expose the indigenous people to risk. Another procedure that drew attention among the Gavião indigenous population was cholecystectomy (removal of the gallbladder), which had an incidence of 8% of the total number of indigenous people, but only one man and 3 women, suggesting greater **problems among women**. The same indigenous man who underwent a surgical procedure to remove the gallbladder was the only one who also underwent surgery for appendicitis. Factors such as **inadequate** diet, **genetic predisposition**, and changes in **lifestyle habits** can contribute to the development of biliary diseases that require surgical intervention.

In the Araras peoples, the rates were: in the male population, it was observed that cholecystectomy was performed in 5 women of ethnicity and no men and one of these women also underwent appendicitis surgery. In the Araras ethnicity, among men and women, there were no reports of fractures that required surgical intervention, however, cases related to eating habits such as cholecystectomy and appendicitis, and changes in eating habits, i.e., the insertion of processed foods and the high consumption of foods rich in saturated fats, may be related to this higher incidence. Considering that the native food was presented by its aspect rich in proteins, and healthy carbohydrates, considering that the food used and consumed came from the local land without the interference of pesticides and other artifices used in agriculture and cultivation.

Through the insertion of industrialized foods, the rates of metabolic diseases have also become common, leading to questioning about the changes of a culture previously intact in its values, being forced to non-beneficial changes of a people and their customs. It was also perceived that these changes employed in the region took place through the method of refusing dialogue, conviviality, and the existence of the "other". In which the practice of change, of the usurpation of cultural imposition, concluded in such a critical situation that it reached the near extinction of these peoples.

Wound debridement was a procedure that was only reported in the Gavião men, being only one report. Among women of the Gavião ethnic group and men and women of the Araras ethnic group, there were no reports that evidenced the procedure. Even with a high rate of traumas caused, especially in men of the Gavião and Araras ethnic groups, it did not represent a significant rate.



Projectile removals by firearm were low, both in the population of the Gavião and Araras peoples, with only one of the Gavião men and one of the Araras men being evidenced. Even with the invasions of Indigenous Lands, putting men of the two ethnic groups in exposure to armed violence, given the great territorial conflicts existing by farmers cattle ranchers, and loggers in access to these lands, the rates were low.

Among the most performed surgical procedures in women of the Gavião and Araras ethnic groups, according to data collected in the survey, reveal that 12 women of the Gavião ethnic group underwent surgical procedures, cesarean section, and in the Araras ethnic group and the number of women who reported having had a cesarean section, there were 6. Thus, this procedure has become the most prevalent in the indigenous female population.

Figure 2 shows the surgical procedures performed on the Indigenous peoples of the Gavião and Araras ethnic groups, with which it is possible to observe that cesarean section was the most prevalent procedure among Indigenous women, totaling 38% of the total number of Indigenous women of the Gavião and Araras ethnic groups. This statistic refers to the need for surgical intervention in a significant number of births and may be related to complications or preference for cesarean section, which may be because these people have access to doctors and professionals who do not know the culture and customs of this people, the treatment in the same way as non-indigenous women, that is, not providing an individualized treatment, but a standardized treatment. To this end, it is worth mentioning that changes in habits and customs may be related to the high rates of cesarean deliveries among Indigenous women, assuming that access to Primary Health Care of the Unified Health System (SUS) is not personalized or prepared for care, respecting Indigenous customs and habits, and faster delivery is probably encouraged and not ideal.

Limited access to prenatal care and lack of adequate medical follow-up during pregnancy can lead to complications in childbirth, resulting in a higher number of cesarean sections. In addition, cultural preferences and medical practices in Brazil may influence this trend. A survey by Fiocruz (2022) highlighted that inequalities in access to prenatal care for Indigenous women in Mato Grosso do Sul are evident, contributing to the high rate of cesarean sections among these populations.

According to data from the research demonstrating the precariousness of health in the villages, due to the lack of professionals, physical structure, and prepared staff, they



were asked about the possibility of creating a specific hospital center for the care of indigenous peoples, and prepared to receive each ethnic group, highlighting the cultural diversity existing in our state, which respects the customs and habits of these peoples. Many Indigenous people, both Gavião and Araras, report the need for local Primary Care, which in some cases exists precariously, and does not meet the needs of the local indigenous population.

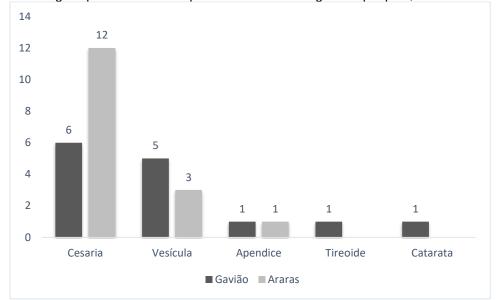
The improvement of health care in the villages, which can be justified by the percentage of fractures, about 80%, which do not require surgical procedures, but directly involve special care, can be related to the traditional practices of these peoples, in which women carry heavy loads on their heads or backs, such as firewood and harvesting of the plantations carried out in these localities, which corresponds to the primary factor in the high rates of spinal injuries and fractures osteoporotic.

The research carried out in the villages, of Gavião and Araras, on the Lourdes Creek, aimed to identify the most prevalent surgeries in these indigenous communities. A predominance of surgeries was observed among Indigenous males, with the occurrence of the following types of surgical procedures in the community studied here.

When it comes to violence within communities, one can also make a connection with alcoholism. Historically, alcoholism in Indigenous populations is considered a serious problem, rooted in social and cultural factors, in addition to being exacerbated by prolonged contact with outside society. The effects of prolonged contact in changing ritualistic drinking patterns, as well as its meaning, affect Indigenous peoples in general. (Guimarães, Grubits; 2007).



Figure 2. Surgical procedures were performed on the indigenous peoples, Gavião and Arara.



Source: Dos Santos, Souza (2024).

Reaching the second place in the number of surgical procedures performed in the Gavião and Araras indigenous peoples, gallbladder surgeries appear with a total of 10.5% of the total in the two ethnic groups, of this number, 10% are attributed to the Gavião people and 11% to the Araras population. This index may indicate a possible high consumption of fat in the diet of this population, which may be contributing to health problems related to the gallbladder.

It is also important to mention that these peoples produce a typical alcoholic beverage called "Macaloba", produced from the fermentation and distillation of corn or cassava, with the addition of leaves and herbs. As it is known, alcohol can affect the contraction of the gallbladder, which can prevent the proper release of bile and lead to a buildup of fluid in the gallbladder, further increasing the risk of stone formation.

Excessive alcohol consumption can also lead to inflammation of alcohol, known as cholecystitis In addition, during the collection, it was possible to observe that the lifestyle with traditional diets rich in fats and carbohydrates is common in some indigenous communities, which may be related to the increased risk of gallstone formation, leading to a greater need for gallbladder surgeries.

Genetic factors may be linked to certain indigenous populations, which may predispose them to gallbladder diseases. As access to preventive care is lacking in indigenous villages, it is another factor that can result in late diagnoses of gallbladder problems, requiring emergency or scheduled surgeries.



And yet, regarding cholecystectomy, the annual growth in mortality rates from cholecystitis and cholelithiasis in the northern region of Brazil is a worrying indicator, requiring urgent measures to improve access to health and the quality of care. According to Gomes (2024), the prevalence of cholecystitis in Indigenous women in the North region may be related to biological and physiological factors, such as increased body fat, advanced age, and high serum triglyceride levels. The increase in mortality from cholecystitis and cholelithiasis in the North, Northeast, and South of Brazil, and in some states, highlights the need for public policies aimed at early diagnosis and appropriate treatment, especially for indigenous populations.

Nevertheless, in contrast to this hypothesis, it is possible to relate the prevalence of cholecystectomy among the Indigenous people in the villages studied with the denial of Indigenous culture by health professionals, which leads them to consider Indigenous people as homogeneous beings and to disregard their cultural particularities and health needs. According to Ribeiro (2017), the asymmetry of power between non-indigenous and indigenous health professionals in the villages can contribute to the performance of unnecessary cholecystectomies, since professionals may have difficulty understanding the symptoms and demands of indigenous people.

The aging of the population and the incidence of exposure to the sun contribute to the development of diseases, one of these causes can be cataracts, but in the research carried out, the percentage reached for this cause reached 1.3%. However, this value was attributed only to the Gavião people, who observing the age group would be the oldest. In this way, prolonged exposure to UV rays can accelerate the appearance of cataracts. As well as the aging of the population, after all, there has been an increase in life expectancy, and more Indigenous people are reaching advanced ages, where cataracts are a common condition related to aging.

Appendix and thyroid surgeries together obtained the same percentage, reflecting 10% of each of the surgical procedures, thus demonstrating the presence of several conditions that require surgical intervention. The variation in eating habits among different indigenous communities may explain the occurrence of appendicitis.

Regarding the prevalence of thyroid surgical procedures, it is possible to draw a parallel with a study carried out in the municipality of Cabaceiras, PB. In this study, there was a predominance of females and white racial groups among individuals with thyroid dysfunctions, reflecting the higher incidence of these pathologies in women and



Caucasians. This pattern is repeated indirectly in the indigenous population studied, where thyroid surgery is one of the most commonly performed. The presence of thyroid changes often culminates in the need for surgical intervention, especially as the pathology progresses. As in the study by Pontes (2002) in which the highest occurrence of thyroid pathologies is more frequent in women, this study also shows that thyroid surgeries appear in fourth place, predominantly in the same gender, indicating that this type of alteration is more common in women in both populations.

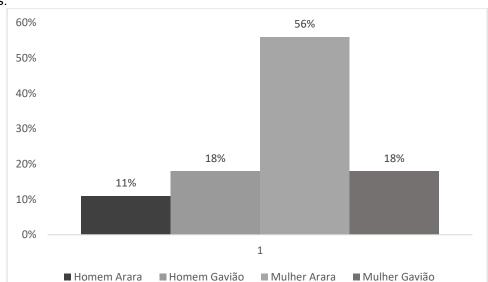
Another important point that can be mentioned is nutritional deficiencies: A lack of iodine, an essential nutrient for thyroid health, can be a problem in some indigenous communities, leading to thyroid disorders that require surgical intervention. Petroianu (2004) stated that despite controversies in the literature about the influence of diet on appendicitis, studies suggest that a diet rich in fiber, common among Brazilians, regardless of social class or skin color, does not explain the variable incidence of appendicitis. In an analogous, i.e., proportional manner, in the indigenous community studied, the high frequency of appendectomies in women may be more related to genetic and familial factors than to eating habits, reflecting patterns similar to those observed by the author in other melanoderma populations.

When asked about how referral to the health system occurs, of the total population surveyed, Gavião and Araras, 47% were referred by CASAI (Indigenous Health Support House), being distributed in, 3 (11%) Araras men, 9 (18%) Gavião men and among women there is a higher number of referrals by CASAI in the Araras population 15 (56%), while in the Gavião population, 9 (18%) of the women were referred, Figure 3.



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Figure 3. Percentage of CASAI referral to health care, among men and women of the Gavião and Araras ethnic groups.



Source: authors

A very important factor for the successful monitoring of Indigenous health is communication, because, for Oliveira (2024), several factors influence communication between nurses, for example, and Indigenous patients, such as language, culture, beliefs, and knowledge. Even the presence of a family mediator can present difficulties. Therefore, the figure of the intercultural mediator in the hospital context is essential, in addition to the use of non-verbal, gestural, and cultural resources specific to the ethnicity, as well as the interpretation of the silence of the indigenous patient as a response or sign of respect. This highlights the importance of investing in strategies that facilitate communication in the hospital environment, allowing nurses to offer effective and comprehensive care, as established by public policies for Indigenous health.

Regarding the question of accepting the treatment proposed by the doctor, among the men Gavião and Araras, the acceptance was unanimous, however, it was observed that among the Gavião women, there were 4 (13%) who answered that they did not agree with the proposed treatment and among the Araras women, 1 (6%) of the total number of women of the ethnic group, answered that they did not accept the treatment. This factor can be attributed to the customs, beliefs, and forms of treatment of indigenous peoples.

In the forms, they sought to know about the satisfaction of the consultation, and if it met the expectations of each one, thus, it was found that 21 (27%) Indigenous people answered that the consultation was bad, being attributed in 4 (20%) to the Gavião men, however, among women of the same ethnicity a total of 8 (27%) were observed, while



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among the Araras there were 9 (33%) negative answers about the consultation, 2 (20%) were men and 7 (41%) were women of the ethnic group. The justification for these answers certainly involves emotional and psychological issues and the doctor's mood, but it is also relevant to emphasize communication.

Thus, it is essential to recognize that communication is one of the pillars of proper diagnosis and treatment. And the language barrier, present in the interactions between health professionals and Indigenous people, makes it difficult not only to understand the symptoms reported but also to express the concerns and expectations of the patients.

As well observed in the data collection, language is a barrier that needs to be circumvented to forge a relationship or bond with the indigenous people. Given this reality, the lack of intercultural dialogue between health professionals and indigenous people in the villages can lead to incorrect diagnoses and the indication of cholecystectomies as the only solution to health problems that could be treated in other ways (Ribeiro, 2017).

According to the determination of the World Health Organization, followed by the Brazilian Constitution, health is a right of all and a duty of the State, for this, it is necessary to periodically monitor consultations. Thus, it was observed in the collected data that, of the total population studied in the two ethnic groups, Gavião and Araras 16 (21%) of the respondents answered to have periodic consultations, which 11 (37%) of the Gavião women, against 5 (25%) of the men, while in the population of the Araras they were 5 (18.5%) of the total, however, it is observed that there is greater participation in periodic consultations among men, which were 4 (40%) and in women it was only 1 (6%).

As for the use of natural treatments, according to customs that are passed down from generations, the impact of living with the non-indigenous population has led to the abandonment of the traditions of indigenous peoples. In the total of the indigenous people surveyed, it was observed that 36 (47%) of the total 77 participants answered that they use natural treatments, and 6 (30%) of the Gavião men and 15 (50%) of the women use natural treatments. Among the Araras people, 15 (55.5%) of the total 27 participants in the village answered that they used natural treatments, distributed among 4 (40%) of the men and 11 (65%) of the women of this ethnic group.

It was also observed that among the indigenous people surveyed, some answered that they adhered to both the natural treatment and the one prescribed by the doctor. Thus, it was attributed to 3 (50%) of the total of the 6 Gavião men, who answered that they used natural treatment, and adhered to the two treatments, and 7 (47%) of the women of the



same ethnicity, among the Araras, only 1 (9%) of the total of women who answered yes, who stated that they used both treatments.

CONCLUSION

Thus, in consideration of the entire context in which the process of occupation and conflicts occurred, it was identified that the Arara and Gavião indigenous peoples have their peculiarities and distinctions and that they once occupied a vast region along the Machado River in Rondônia and the Branco River in Mato Grosso, and currently share the Igarapé Lourdes Indigenous Land in the municipality of Ji-Paraná/RO.

Subject to these changes, indigenous peoples have had to reformulate and reinvent their physical and cultural subsistence strategies, through the inclusion of new habits, values, language, and way of life. Therefore, by carrying out this survey on the data and rates of surgeries performed by each indigenous person, we can understand the negative impact that this interference had when it comes to customs, life habits, diseases, and various metabolic alterations previously unknown to these people.

In addition to understanding how scarce and limited the access of these people to the unified health system – SUS has been, leading to numerous questions related to treatment and humanized and respectful care that must be provided to the Indigenous people. Indigenous health contemplates great complexity and challenges involved mainly in surgical care for these indigenous populations, both from the Gavião and Arara ethnic groups in the Igarapé Lourdes Indigenous Land, located in the Amazon. The analysis of the most prevalent surgical procedures among these peoples were cholecystectomies, cesarean sections, and fracture surgeries, highlighting the influence of changes in eating and cultural habits introduced by contact with non-indigenous people, resulting in a higher incidence of metabolic diseases and other health conditions.

Difficulties in communication between health professionals and Indigenous patients, exacerbated by language and cultural barriers, were identified as critical factors that can lead to incorrect diagnoses and the indication of inappropriate treatments. The lack of intercultural mediators and strategies that respect and integrate the traditional knowledge and practices of indigenous peoples has contributed to this problem, as evidenced by Ribeiro (2017) and Oliveira (2024).

The research emphasized the urgent need for investments in public policies that promote the training of health professionals to deal with the cultural and linguistic diversity



of indigenous communities. This includes the implementation of intercultural mediators and the development of resources and communication methods that address the cultural specificities of different ethnic groups.

Valuing traditional knowledge and respecting the decisions of Indigenous patients are essential to ensure effective and comprehensive health care, as recommended by public policies on Indigenous health. The study suggests that the creation of specific hospital centers for the care of indigenous populations, prepared to receive each ethnic group with its particularities, can be a solution to improve the quality of health services offered to these communities.

This research contributed to the understanding of the health needs of the Gavião and Arara indigenous peoples, pointing out ways for a more humanized and culturally appropriate care, which respects the diversity and rights of these populations. The promotion of an effective intercultural dialogue between health professionals and Indigenous patients is essential to overcome the challenges identified and ensure quality care, in line with the principles of the Unified Health System (SUS) and the guidelines of the National Policy for Health Care for Indigenous Peoples (PNASPI).



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