

Access and retention policies for indigenous people in Brazilian federal medical schools: mapping and experiences

Mapeamento e experiências de indígenas nas escolas médicas federais brasileiras: acesso e políticas de permanência (resumo: p. 19)

Mapeo y experiencias de indígenas en las escuelas médicas federales brasileñas: acceso y políticas de permanencia (resumen: p. 19)

Willian Fernandes Luna^(a)

<willianluna@gmail.com> 

Karla Caroline Teixeira^(b)

<kcarolinet@gmail.com> 

Giovana Kharfan de Lima^(c)

<giovanakharfan@gmail.com> 

^(a) Departamento de Medicina, Universidade Federal de São Carlos (Ufscar). Rodovia Washington Luis, km 235. São Carlos, SP, Brasil. 13565-905.

^(b, c) Graduanda do curso de Medicina, Departamento de Medicina, Ufscar. São Carlos, SP, Brasil.

Higher education in Brazil is known by being restricted to a privileged group, excluding the indigenous people. In the two last decades, affirmative action policies were developed to allow members of indigenous peoples access to Medical courses. In order to scan the students' experience at Federal Universities, the study developed a quantitative and qualitative exploratory research. A group of 192 indigenous students were identified in 43 medical schools during 2019. Fourteen schools were visited, and 24 indigenous medical students held narrative interviews. The thematic subject analyses, showed two categories: Access to medical school; Policies of retention in the institutions. The students' experiences at the campuses may contribute to their permanence in the courses, overcoming the invisibility and providing opportunities to reach the indigenous people expectations regarding the medical career.

Keywords: Affirmative actions. Indigenous population. Education in medical courses. Higher education institutions. Higher education policy.



Introduction

Access for indigenous people to higher education as university students in Brazil has been historically in short supply, making it almost impossible to train health professionals from these communities. The 1988 Constitution marked an official departure regarding the tutelage and integration policies, guaranteeing bilingual and differentiated school education, with achievements in terms of elementary and high schools in indigenous communities^{1,2}.

However, it was during the first two decades of the 21st century that policies further favored the presence of indigenous people in higher education, provoked mainly by the demands of the indigenous movement, despite the contradictions in the historical process of schooling of indigenous people, marked by domination and colonization¹⁻³.

In this way, some strategies have been crafted both locally and nationally in order to guarantee the right of access to higher education to indigenous people, such as inclusion and affirmative action programs, in regular courses or intercultural training^{4,5}. Thus, the concept of affirmative action implies the deconstruction of historically built asymmetries, which in the context of public universities has meant, mainly, strategies for access⁶. Therefore, it is about promoting the inclusion of socially vulnerable groups in order to promote the overcoming of social inequalities and injustices^{7,8}.

Three key arguments justify affirmative action policies (AAPs): reparation, distributive justice, and diversity⁷. Therefore, the AAPs related to access to universities seek to make them more plural, in an attempt to correct inequalities and overcome criteria based on a meritocracy that privileges the dominant elite⁹.

The first experiences of affirmative action involving indigenous students in Brazil date back to the early 1990s, through agreements between the National Indigenous Foundation (FUNAI) and some public and private universities^{2,3}. However, was just in the 21st century that policies of differentiated admission were more broadly proposed, with initial experiences in state universities, followed by higher education federal institutions (IFES), with very different organizational forms and criteria^{5,7}.

The 2012 federal law 12.711, called the quota law, guaranteed a 50% of seats per course in IFES to students from public high schools, with quotas for black, brown, and indigenous students (PPI)¹⁰. It was in this AAP context that a larger number of indigenous people accessed higher education.

Regarding the international experience, Canada stands out, with the reserve of places for indigenous people in all medical schools¹¹. Under this framework the University of Northern Ontario has assumed, since 2002, the social responsibility of training doctors for local needs, building AAPs for students from the region and native peoples¹².

Brazilian medical courses have been geared towards an elite since their creation, and they can be considered as destined to a privileged group of the population, with little democratic access¹³. According to the 2010 demographic census, whites represented 48% of the population, and from the analysis of data from the 2019 National Student Performance Exam (ENADE), it was found that 67% of medical school graduates were white^{14,15}. Indigenous people, a 0.4% of the Brazilian population, accounted for 0.3% of the graduates^{14,15}.

In addition to these imbalances, most medical students had household incomes above the average of the Brazilian population^{15,16}. To compound this picture, there is a great demand of indigenous people for health courses, especially for Medicine, as evidenced by the number of candidates in the indigenous entrance exam of the Federal University of São Carlos (UFSCar) for admission in 2018, which had 235 candidates per seat in Medical School¹⁷. It is worth noting that the landscape is still represented by these data even after a series of public policies that have partially transformed it¹⁶.

Against the backdrop of the historical exclusion of indigenous people in medical courses and the development of actions to include them in these educational processes, this research was conducted to understand this scenario. The material in this manuscript is a part of a larger project called “The experiences of indigenous students in public medical courses in Brazil”, developed between 2018 and 2021, and is part of the first author’s doctoral thesis^(d).

The research presented in this article had the objectives of: mapping the medical courses in federal universities with presence of indigenous students in the year 2019; getting to know the experiences of indigenous people regarding access to medical schools and retention policies in these institutions.

^(d) Luna WF. *Indígenas na Escola Médica no Brasil: trajetórias e experiências nas universidades federais [tese]*. Botucatu (SP): Faculdade de Medicina de Botucatu; 2021.

Methods

In order to understand this empirical field, a quantitative and qualitative exploratory study was conducted. The settings of research comprised the set of medical schools with presence of indigenous students in Brazilian federal universities, an option defined due to the following characteristics: these institutions are subject to a common set of federal regulations; several of them have AAPs¹⁸; and because the researchers work in one of these institutions.

Data building process took place from July 2018 to March 2020, using two strategies: identification of medical schools and profile of indigenous people; face-to-face meetings. In order to facilitate readers’ understanding, the data construction techniques are presented sequentially, although the development was dynamic, with interrelated moments.

a) Identification of medical schools and profile of indigenous people

The quantitative data survey aimed to map the presence of indigenous people in medical schools at federal universities, describing the group studied and favoring a general understanding of the research universe^{19,20}. This strategy was needed due to the fact that information about courses that had indigenous students, and how many of them were, was not available in the Ministry of Education databases.

To identify the medical schools, we used a snowball technique, in a reference chain, starting with contact with key informants, mainly indigenous students at the Federal University of São Carlos and professors from other institutions. In this strategy, each key-informant or research participant identified other people with the necessary profile, allowing researchers to locate them²¹. Concomitantly with this technique, we also searched institutional documents related to the presence and profile of indigenous people in these medical schools.

Through this procedure we found a total of 43 federal medical schools with the presence of 192 indigenous students.

b) Face-to-face meetings

We chose qualitative research because it allows a glance on the reality of social relations and daily life in which researchers and subjects were inserted, which allowed us to advance in the understanding of phenomena and processes, with specificity and differentiation^{22,23}.

The face-to-face meetings with the indigenous students took place in parallel to the survey of the institutions. The participants were intentionally selected, seeking diversity of gender, age, course years, geographic regions of the country, realities of the institutions, and different indigenous peoples. The objective with this group of participants was to bring homogeneity and differentiation, richness and volume of data, with coverage of the multiple dimensions of the phenomenon²⁰.

Of the 43 medical schools identified, 14 were visited. At each visit, up to three indigenous people were invited for an individual interview. Inclusion criteria were: self-declared from an indigenous people; being in any medical school. Exclusion criteria were: age under 18 years; being away from the course at the time of the visit. All participants agreed and signed the Informed Consent Form.

To meet the participants, we cared about planning the best way to reach these interlocutors, with special attention to the first remote contacts, which occurred before the face-to-face meetings²². In this sense, a network of relationships was initiated with indigenous people in the institutions, including local leaders, technicians, and teachers who worked closely with indigenous students. This movement was favored by the characteristics of the researchers, authors of this article: one works in indigenous health, one is an indigenous university student, and the other is a participant in the national movement of medical students.

Most of the invitees agreed to participate in the research. Just one of the medical schools had a case of an individual interview not carried out, since there were few students and they were not available. Thus, in the face-to-face meetings, we chose to value orality, recognizing that the different indigenous cultures are based mainly on oral tradition, with ways of organizing life, knowledge, and values transmitted from parents to children³.

The research chose to conduct narrative interviews, characterized as a non-structured tool, aiming at the depth of specific aspects, from which life stories emerge, both from the interviewee and the ones intertwined in the situational context²⁴. This type of interview aimed to encourage and incentivize the interviewees to narrate, freely, from a single trigger that asked the participant to narrate how was the experience in her/his medical school. Each participant was interviewed only once, individually and in a place chosen by him/her.

In the context of this research, the experience was understood as what transforms the person who lives it, not only what happened, but what touched and changed him/her²⁵. Narrative, on the other hand, was conceived from a relationship between experience, time, and memory, in an act of narration that does not seek to be a novel, nor a report, but a story woven from one's own reminiscence²⁶.



The main researcher carried out the whole twenty-four interviews, with a minimum duration of 16min and a maximum of 1h56min; however, most of them lasted from 35min to 45min. The interviews were processed through audio recording and naturalistic transcription²⁷. To ensure the confidentiality of the information, the names of the interviewees and their institutions were not revealed, having been replaced by names chosen by the participants.

In order to analyze and interpret the interview material, we used the guidelines of thematic content analysis^{22,23}. The materials from the interviews were sorted and organized, in a movement of impregnating the narratives²⁸. The procedures of categorization, inference, description, and interpretation did not happen in a sequential manner, and were carried out in handcrafted and non-linear movements^{20,23}. Throughout this process, as oriented by Minayo, it was not sought to analyze the frequency of the speeches and words as criteria of objectivity and scientificity²². The option was to seek the understanding of the meanings in the context of the speeches^{20,28}.

Data were organized and systematized in Microsoft Word® and Excel®. The results and discussions in this article encompass a descriptive analysis of the quantitative data, using frequency and proportion measures, besides the thematic categories that emerged from the narratives about the participants' experiences. We sought approximation with theoretical references related to the discussion of the themes, bringing dialogues with research on indigenous people in higher education.

The National Research Ethics Committee, under CAAE 01510018.4.0000.5411, approved this research.

Results and discussions

Mapping out medical schools and students' profiles [subtítulo]

There were 69 federal universities in 2019, located in all Brazilian states and the federal district, with 80 medical courses. Of these 80 courses, 43 (53.75%) had at least one indigenous person present in 2019. Table 1 presents the list of these courses.

Frame 1. Medical courses in Federal Universities with presence of indigenous students, Brazil, 2019.

Geographical Region	State	Institution	City
NORTH	Pará	Universidade Federal do Pará (Federal University of Para) (UFPA) (*)	Altamira
			Belém
	Rondônia	Universidade Federal de Rondônia (Federal University of Rondonia) (UNIR) (*)	Porto Velho
	Roraima	Universidade Federal de Roraima (Federal University of Roraima) (UFRR) (*)	Boa Vista
	Tocantins	Universidade Federal do Tocantins (Federal University of Tocantins) (UFT) (*)	Palmas
Araguaína			
Acre	Universidade Federal do Acre (Federal University of Acre) (UFAC)	Rio Branco	

Continua.



Geographical Region	State	Institution	City
NORTHEAST	Alagoas	Universidade Federal de Alagoas (Federal University of Alagoas) (UFAL)	Maceió
	Bahia	Universidade Federal da Bahia (Federal University of Bahia) (UFBA) (*)	Salvador
		Universidade Federal do Sul da Bahia (Federal University of Southern Bahia) (UFSB) (*)	Vitória da Conquista
		Universidade Federal do Recôncavo da Bahia (Federal University of Recôncavo of Bahia) (UFRB) (*)	Teixeira de Freitas
		Universidade Federal do Vale do São Francisco (Federal University of San Francisco Valley) (UNIVASF)	Santo Antônio de Jesus
		Universidade Federal do Vale do São Francisco (Federal University of San Francisco Valley) (UNIVASF)	Paulo Afonso
	Pernambuco	Universidade Federal de Pernambuco (Federal University of Pernambuco) (UFPE)	Petrolina
	Pernambuco	Universidade Federal de Pernambuco (Federal University of Pernambuco) (UFPE)	Caruaru
	Maranhão	Universidade Federal do Maranhão (Federal University of Maranhao) (UFMA) (*)	Imperatriz
			Pinheiro
São Luiz			
Paraíba	Universidade Federal da Paraíba (Federal University of Paraíba) (UFPB)	João Pessoa	
CENTER - WEST	Distrito Federal	Universidade de Brasília (Brasilia University) (UnB) (*)	Brasília
	Goiás	Universidade Federal de Goiás (Federal University of Goias) (UFG) (*)	Goiânia
		Universidade Federal de Catalão (Federal University of Catalao) (UFCAT) (*)	Catalão
		Universidade Federal de Jataí (Federal University of Jatai) (UFJ) (*)	Jataí
	Mato Grosso	Universidade Federal de Rondonópolis (Federal University of Rondonopolis) (UFR) (*)	Rondonópolis
		Universidade Federal de Mato Grosso (Federal University of Mato Grosso) (UFMT) (*)	Cuiabá
	Mato Grosso do Sul	Universidade Federal da Grande Dourados (Federal University of Dourados) (UFGD) (*)	Dourados
		Universidade Federal de Mato Grosso do Sul (Federal University of Mato Grosso do Sul) (UFMS) (*)	Campo Grande
Três Lagoas			
SOUTHEAST	São Paulo	Universidade Federal de São Carlos (Federal University of Sao Carlos) (UFSCar) (*)	São Carlos
	Minas Gerais	Universidade Federal de Minas Gerais (Federal University of Minas Gerais) (UFMG) (*)	Belo Horizonte

Continua.



Geographical Region	State	Institution	City
SOUTH	Paraná	Universidade Federal da Integração Latino-Americana (Federal University for Latin America Integration) (UNILA) (*)	Foz do Iguaçu
		Universidade Federal do Paraná (Federal University of Parana) (UFPR) (*)	Curitiba
			Toledo
	Rio Grande do Sul	Universidade Federal da Fronteira Sul (Federal University of the Southern Border) (UFRS) (*)	Passo Fundo
		Universidade Federal de Pelotas (Federal University of Pelotas) (UFPeL) (*)	Pelotas
		Universidade Federal do Pampa (Federal University of the Pampa) (UNIPAMPA) (*)	Uruguaiana
		Universidade Federal do Rio Grande (Federal University of Rio Grande) (FURG) (*)	Rio Grande
		Universidade Federal do Rio Grande do Sul (Federal University of Rio Grande do Sul) (UFRGS) (*)	Porto Alegre
		Universidade Federal de Santa Maria (Federal University of Santa Maria) (UFSM) (*)	Santa Maria
		Universidade Federal da Fronteira Sul (Federal University of the Southern Border) (UFFS) (*)	Passo Fundo
	Santa Catarina	Universidade Federal da Fronteira Sul (Federal University of the Southern Border) (UFFS) (*)	Chapecó
			Araranguá
Universidade Federal de Santa Catarina (Federal University of Santa Catarina) (UFSC) (*)		Florianópolis	

Source: Authors, 2021.

* Notes: Institution that has Affirmative Action Policy, with specific reserved seats for indigenous people.

In all the IFES the selection processes take into consideration the quota law, with vacancies for the PPI group. However, we found that compliance with the law did not guarantee the presence of indigenous people in most medical courses, since black, brown, and indigenous people compete among themselves. Of the 43 courses identified as having indigenous people, 36 (83.72%) had AAPs with specific openings for indigenous people. In the seven medical courses without vacancies reserved for indigenous people, these students entered through other means.

Regarding the format of the AAPs geared towards the opening of specific seats for indigenous people, there were two modalities: by a percentage reserved in existing places or by the creation of supplementary new ones.

Additionally, the presence of indigenous people was identified in old and new universities and courses. In most cases, the choice to reserve seats in the AAPs was made by the IFES and not specifically by the medical schools. It is also noteworthy that among the courses with the presence of indigenous people, 17 (39.53%) were created as a result of the policy of expanding medical courses in federal universities, with the incentive of the Mais Médicos Program started in 2013, implemented in regions with absence of public medical schools and low density of physicians²⁹, revealing that these IFES seem to have opened interesting options for the construction of inclusion and access strategies.

The research was able to estimate the number of indigenous people undergoing the medical courses in 2019. For this purpose we used the data on the distribution of bursaries paid by the MEC's *Bolsa Permanência* Program³⁰, which totaled 192 beneficiaries in the medical courses. The distribution of this program may be evaluated in figure 1. In this context, it should be noted that not all indigenous people studying Medicine are bursary recipients of the Program; however, the vast majority are enrolled, which allows us to deduce that this was close to the total.

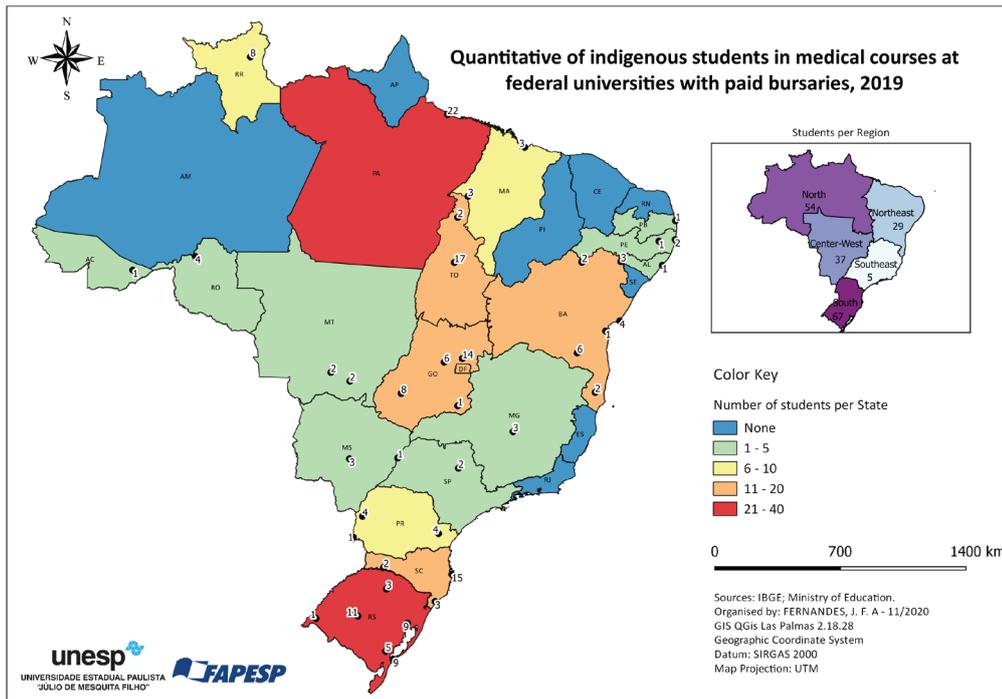


Figure 1. Quantitative of indigenous students in medical courses at federal universities with paid retention bursaries, Brazil, 2019.

It can be seen that the Southeast region had only five bursary holders that year, while the Southern region had the highest number in the country, with 67. Two states stood out in terms of bursary holders: Pará and Rio Grande do Sul. In each of these states, there were more than 20 indigenous people, which can be explained by the AAPs implemented in these places about ten years ago. It is worth mentioning the limited number of bursaries paid in several states in the North, Northeast and Southeast regions. It is also noteworthy that some states had no bursary holders at all, which was the case in Amazonas, Amapá, Ceará, Espírito Santo, and Rio de Janeiro.

In any case, it is evident the contradiction between the fact that states with large indigenous populations, nevertheless presented medical courses in their respective IFES without any indigenous students. It is believed that this result has as its main cause the lack of AAPs for access of indigenous people in these institutions. Therefore, there was a mismatch between the distribution of the indigenous population throughout the national territory and the AAP initiatives for access to higher education. Therefore there are evidences of the need of further progress in this sense in many IFES and federal states, as indicated in other studies^{31,32}.



Regarding the profile of the indigenous students who received bursaries in the Medicine course, it was possible to observe that there was a slight predominance of the male gender, with 53.64%, and the age range of higher frequency was between 20 and 25 years, adding up to almost half of the bursary recipients. Table 1 shows these data.

Table 1. Profile of indigenous bursaries recipients of the medical course, from the Retention Bursary Program, of the Ministry of Education. Brazil, 2019

Characteristic	Description	Frequency	Percentage (%)
Gender	Masculino	103	53,64
	Feminino	89	46,36
	Total	192	100
Age Range	Less than 20 years	14	7,29
	Between 20 and 25 years	89	46,35
	Between 26 and 30 years	49	25,52
	Between 31 and 35 years	22	11,46
	More than 35 years	18	9,38
	Total	192	100

Source: Author, 2021.

Experiences with access and retention policies

The 14 medical schools visited belong to the five Brazilian geographic regions; they are located at the headquarters and in other campuses of the IFES; some of them are recent and others are old medical schools; they are located in capital cities and in the countryside. There were 78 indigenous students in these medical schools.

Among the 24 interviewees, there were students of all levels of the medical course; 15 men and 9 women; aged between 18 and 44 years; from the five Brazilian geographic regions; a total of 22 different indigenous peoples.

The experiences of indigenous people in medical schools were analyzed in two categories: Access to medical school and Retention policies at the University.

Category 1: Access to medical school

Students highlighted in their narratives the justifications for indigenous people to become university students, emphasizing the possibility of apprehending new knowledge, which can bring direct impacts to individuals and communities^{1,2,4}:

[...] the importance that I see is this: it is to have people with knowledge that can help those who may not have it, because their knowledge is for something else. Not that they don't have knowledge; they have it to work in the field, to pray, for the rituals, for other things. (ARAPUÁ)



And it has a very big burden because, in my indigenous family, I am the first one to enter higher education. In fact I am the only one, until then. So imagine the difference it can make for everyone. (R.ATRICKSIÊ)

Of the 24 interviewees individually in this study, none had entered through open competition; two were approved by the quota law¹⁰ and 22 in specific vacancies for indigenous people. In this sense, they reported that it is difficult for an indigenous person to enter a Medicine course through the PPI quotas, which reinforces the insufficiency of the law for the access of this group in highly competitive courses²:

So, I think that, for the time being, we need to reserve spaces to be able to enter medical school. We can't be in wide competition with other people, it is unequal, it is unfair. [...] But after we are here what I realize is that we can handle it! (ARAPUÁ)

Comparing this situation to what happens in Canada, in that country it was perceived that AAPs were necessary for indigenous people to enter medical school, and they were implemented in all medical schools¹¹.

Regarding the specific admission processes for indigenous people, they emphasized that the publicity did not always reach potential candidates who lived in places farther away from urban centers. In addition, they emphasized the need for support related to transportation, accommodation, and food so that they could take the selections, as in other investigations^{33,34}:

As I always stayed in the village I didn't know how this question of getting into the university worked. [...] I don't know if this information is still enough... it doesn't get there. In my case, I even sold some things from my house to be able to take the exams, because otherwise I wouldn't have made it. (KHANTE)

Well, I came here to take the entrance selection and my difficulty was accommodation because I didn't know anyone here, so it's hard for people to move from the community to be able to take the exam. (TYPA)

Similar to what was analyzed in the experience of the indigenous people at UFSCar^{1,34}, some narrators in the present research highlighted that it was possible to make the selection for admission because it took place relatively close to their community, in decentralized processes, which made it possible for other indigenous people from distant locations from the university to also participate:

I went to do it because the test was done in my state, as it is a decentralized test. So I saved money here and there, and encouraged other young people from the village. (TAUÁ)



In addition to institutional policies for access, they emphasized that the characteristics of their personal experiences enabled their admission, which seems to be more decisive than in other undergraduate courses³³. Among the characteristics, they highlighted: the presence of family members who had already attended higher education; experience in the city; relationship with other university students; part of their studies in private schools; having attended preparatory courses for selection processes:

What helped me was that I already had a notion of what a university was. I already had this previous access; I was raised in a family that already had this culture of university. (XINÁ BENÁ)

Just having a place is not enough, because as I said, in the case of my history, what was very important for me was that I had taken prep courses. (WEI)

A previous experience highlighted by most of the interviewees was the beginning or conclusion of another course in the health area, either at the higher or technical level. Sometimes, the intention was already to graduate in Medicine, but they needed more preparation to enter. Other times, they were motivated to study Medicine while taking another course, deciding to try a new selection process:

I started working and began to take a nursing course, because I didn't know about the specific selection processes, right? I didn't know, I had no idea, and then a friend told me about it. [...] And I stayed for three years, even because of the difficulty I had, especially with Portuguese, with other subjects too, I had a lot of difficulty, so I started to study more. (FATHOA)

Then I went and started to study dentistry. In the beginning I liked it very much, I couldn't even imagine doing another course. [...] Then I started to get more attached to the clinic, then I saw that this was not what I wanted to do for the rest of my life. (CUMARU)

I graduated in the city near the village; I did technical nursing. I finished it and I liked it. I am a technician, then I saw the experience... the difficulty of the care provided by doctors from my people. (KEKARYEHTOTHO KOMO)

In addition to the health courses, another part studied or worked in other areas, which was also evidenced with indigenous university students from courses in general^{33,34}. The interviewees worked mainly in the area of education and related these experiences to the maturation and new understandings about their identity and their role in indigenous communities, because they were areas that dialog directly with indigenous policies¹⁸:



[...] I did two years of pedagogy there. And I even worked in an indigenous school as a teacher. It was not really my call, but it was important. And then I decided to open myself to a new career again. (MAYÁ)

It was a time when I was very involved in the indigenous movement, involved in indigenous education, I was at that time a bilingual teacher, teaching not only Portuguese, but also teaching the indigenous language, the language of my people. So I felt that I should go into medicine. (TOTEEM)

Thus, through a diversity of experiences, trajectories, and processes of dedication to study, they managed to access the medical course at a federal university, which is highly competitive, by overcoming the institutional barriers that remained even with the differentiated processes for the admission of indigenous people.

Category 2. Policies for Retention in the Institution

The arrival at the university after being approved in the selection process was highlighted as a remarkable moment in their experiences, characterized by ruptures, changes, encounters and mismatches in this new place where they would study medicine, generating concerns about who they would be in this new environment³⁴. They emphasized that, despite the existence of access policies, there were not always institutional policies helping the retention of indigenous people, as already pointed out in other studies^{18,31}:

Suddenly, you come out of a village where there is only the sound of wind, children running from one place to another, [...] How would I insert myself in this environment? (FOCAJ)

I did not know the city, I did not know anyone. So I think what really marked me was being there in the university corridor with nowhere to go, you know? I was like, "And now I'm in college, but what am I going to do? With my little suitcase and everything. [...] They didn't know what to do with me. (KHANTE)

They discussed the benefits and difficulties of getting to the course by being identified as an indigenous person who underwent a differentiated process for admission. Some understood that the acceptance in the institutions was good, due to the AAPs. However, others, especially the pioneers in the IFES, reported resistance in their acceptance and the lack of policies for their arrival:

I ended up choosing to go through the Indigenous people selection process because you end up being seen by the university in a different way. You belong to that group and you already have more support from the institution. [...] Going through the indigenous entrance exam helped me to also have this accompaniment after I entered. (MAYÁ)



When I got here it was a very hostile environment for affirmative action students [...] and it was a very complicated period. [...] The University didn't know what to do with us. (ARAGUACI)

The initial difficulties most frequently mentioned were financial and those related to housing, because the costs for the displacement had already been incurred and the IFES did not always offer lodging upon the arrival of the students. Some of the universities guaranteed room and board from the beginning of the admission of the indigenous students, while others began to offer them only after some time had passed^{18,33,34}. In addition, it was highlighted that it was not possible for them to have any paid work concomitantly with the course, due to the need for full dedication to Medicine:

[...] we moved out to live together in a boarding house somewhere. But still, without receiving a scholarship, we were fully dependent on family and friends. And then I think we spent a whole semester running after assistance [...] there was this big burden of thinking: "how am I going to pay the rent?", "where will I get the money from?" (TAUÁ)

If you don't have any structure here, it's truly difficult. And in a medical course that... they are full-time courses, you have to be exclusively dedicated to the course, on a daily basis. (NENXAH)

Some financial support was achieved by indigenous people until 2013, one of them being financial support from FUNAI for indigenous students; however, according to the interviewees, it was irregular and the amount was insufficient. Another strategy that brought support to some institutions, starting in 2010, was the Tutorial Education Program (PET) *Conexão de Saberes* (Connecting Lores) that are specific for indigenous people, with the development of innovative actions for the construction of knowledge between the popular communities and the university, awarding a bursary to the participants³⁵:

At that time I had FUNAI assistance, even scarce existed...but it was irregular... And then I managed to get into the Indigenous PET program. PET started in 2010 and in 2011 I managed to get into PET, and the financial issue also helped me because at that time it was very difficult. (XINÁ BENÁ)

In terms of financial support, the institution of the Retaining Bursary Program funded by the MEC since 2013³⁰ was highlighted. It is a public policy aimed at granting financial aid to students in a situation of socioeconomic vulnerability - especially quilombolas (marooned people) and indigenous people - enrolled in IFES, contributing to the retention and graduation of the beneficiaries^{30,33}. In the narratives, they reiterated the importance of these bursaries, as well as the delays for enrollment of university students entering from 2018:



[...] and I think that the MEC bursary has helped a lot for indigenous people to stay in the universities. And this is a very serious problem at the moment. I am currently receiving it, but the new students of this year haven't received it yet, and we are already in October. (XINÁ BENÁ)

Similar to Bergamaschi, Doebber, and Brito's study with indigenous students from regular courses at the Federal University of Rio Grande do Sul¹⁸, the interviewees in this research highlighted pedagogical advisory and tutoring services as powerful collaborators in the teaching-learning processes, which were presented with different characteristics in each IFES, with the participation of technicians, teachers, and/or other students:

Here we have a pedagogical support teacher [...]. She calls the attention of those who need it, she supports those who need support, if you are doing badly in a subject, she calls you, talks to you... So, having this pedagogical support service helps a lot. It is a reference. (ARAPUÁ)

Thus, they reinforced that the institutional support was fundamental to overcome the difficulties; however, most of them recognize that these processes still need to be expanded, similar to what has been suggested in other experiences^{18,32}:

So we have to better welcome the indigenous people because it is "catching on" [...] I hope it gets better, that the institution is more prepared. [...] It is important that we are able to graduate, to leave college. It is important that more and more Indigenous people graduate. (FOCAJ)

In this sense, the interviewees reported that their presence in the medical school favored the establishment of a multicultural environment and the construction of new knowledge, both for indigenous people and for the national society^{1,2,4}:

I think that affirmative action is important precisely in this issue of trying to make it clear that the space is not only for those people who have the privilege of having a quality education. [...] You bring different people together and this meeting can bring other learning experiences. (KARI'OCA)

Therefore the presence of indigenous people in medical schools may be an additional opportunity to expand discussions about the themes related to indigenous health, presently invisible in undergraduate medical courses³⁶.

Final considerations

Based on the research, it was possible to map out the presence of indigenous people in medical schools in Brazilian federal universities, learning about their experiences regarding access and retention policies.



It can be noticed that the AAPs made possible an initial inclusion of indigenous people in part of these medical schools, in an attempt to overcome the exclusion of these populations in the educational processes. However, access to the medical course depends on a series of other personal and collective characteristics in order to overcome the institutional barriers, which seems to be more evident when compared to other undergraduate courses.

There is great heterogeneity among these medical schools regarding the presence of indigenous people, with situations of evident institutional commitment for the AAPs; and others in which there are no students from these groups, including in states with large indigenous populations. Thus, the maintenance and expansion of the AAPs is recommended, especially with specific seats for the access of indigenous people in medical courses, since the PPI quotas have been insufficient for the access of these students.

The presence of indigenous people can bring diversity to the universe of medical schools, which are traditionally composed of students from a privileged group of the population. This process may bring together other ways of thinking about the health-disease process, and future research in this regard is interesting. The experiences related to socio-cultural difficulties and the suffering caused by the experience in medical school can also be the focus of other studies.

The narratives reveal the experiences of indigenous people related to their presence in medical schools, making it possible to contribute to their retention by valuing their potentialities, recognizing their weaknesses, and enabling ways to overcome difficulties. In this sense, institutional support geared towards retention demands further improvement allowing the academic trajectories of these students to overcome their invisibility in medical education and correspond to the expectations of indigenous peoples about the training of their ones in undergraduate medical education.

Authors' contributions

Willian Fernandes Luna participated in the conception, design, and data collection. All the authors participated in the analysis and discussion of the results, writing and approval of the final version of the manuscript.

Funding

Research funded by the São Paulo State Research Support Foundation (FAPESP), regular research assistance 2019/09426-7; scientific research 2019/24876-9 and 2019/24863-4. And by the Pan American Health Organization in partnership with the Ministry of Health, through the Letter of Agreement SCON 2017 – 02638.

Acknowledgments

To Botucatu Medical School, Universidade Estadual Paulista, for the structural support for the development of the research. To Prof. Dr. Eliana Goldfarb Cyrino who affectionately guided the development of the Project that embraces among others, the research of this article. To the indigenous students of the various medical courses, who trusted in the commitment of this research and narrated their experiences in such a vivid and affectionate way. To all the interlocutors in the federal universities, for their availability and welcoming attitude in face-to-face and distance meetings. To the indigenous peoples, for their resistance and diversity, that inspired the construction of intercultural knowledge.

Conflict of interest

The authors have no conflict of interest to declare.

Copyright

This article is distributed under the terms of the Creative Commons Attribution 4.0 International License, BY type (<https://creativecommons.org/licenses/by/4.0/deed.en>).



Editor

Antonio Pithon Cyrino

Associated editor

Rosana Monteiro

Translator

Félix Héctor Rígoli

Submitted on

08/31/20

Approved on

04/12/21

References

1. Mello RR, Souza MM, Palomino TJ. Indigenous school education in Brazil. Oxford: Oxford Research Encyclopedia of Education; 2018.
2. Baniwa G. Educação escolar indígena no século XXI: encantos e desencantos. Rio de Janeiro: Mórula; 2019.
3. Luciano GJS. O índio brasileiro: o que você precisa saber sobre os povos indígenas no Brasil de hoje. Brasília: Coleção Educação para Todos; 2006.
4. Paladino M, Almeida NP. Entre a diversidade e a desigualdade: uma análise das políticas públicas para a educação escolar indígena no Brasil dos governos Lula. Rio de Janeiro: Contra Capa Livraria, LACED/Museu Nacional/UFRJ; 2012.
5. Lima ACS. Ações afirmativas no ensino superior e povos indígenas no Brasil: uma trajetória de trabalho. *Horiz Antropol.* 2018; 24(50):377-448.



6. Universidade Federal de São Carlos. Política de ações afirmativas, diversidade e equidade da Universidade Federal de São Carlos. São Carlos: Secretaria Geral de Ações Afirmativas, Diversidade e Equidade; 2016.
7. Feres Júnior J, Campos LA, Daflon VT, Venturini AC. Ação afirmativa: conceito, história e debates. São Paulo: Eduerj; 2018.
8. Fraser N. Da redistribuição ao reconhecimento? Dilemas da justiça numa era “pós-socialista”. *Cad Campo*. 2006; 15(14-15):231-9.
9. Gonçalves e Silva PB, Morais DS. Ações afirmativas: um caminho para a equidade. In: Gonçalves e Silva PB, Morais DS, organizadores. *Ações afirmativas: perspectivas de pesquisas de estudantes de reserva de vagas*. São Carlos: Edufscar; 2015.
10. Brasil. Lei nº 12.711, de 29 de Agosto de 2012. Dispõe sobre o ingresso nas universidades federais e nas instituições federais de ensino técnico de nível médio e dá outras providências. *Diário Oficial da República Federativa do Brasil*. 30 Ago 2012.
11. Hanson MD, Moineau G, Kulasegaram KM, Hammond R. Is Canada ready for nationwide collaboration on medical school admissions practices and policies? *Acad Med*. 2016; 91(1):1501-8.
12. Strasser RP, Lanphear JH, McCready WG, Topps MH, Hunt DD, Matte MC. Canada's new medical school: The Northern Ontario School of Medicine: social accountability through distributed community engaged learning. *Acad Med*. 2009; 84(10):1459-64.
13. Vargas HM. Sem perder a majestade: “profissões imperiais” no Brasil. *Estud Sociol*. 2010; 15(28):107-31.
14. Instituto Brasileiro de Geografia e Estatística. Censo Demográfico 2010 [Internet]. Brasília: IBGE; 2010 [citado 16 Feb 2020]. Disponível em: <https://censo2010.ibge.gov.br/>
15. Brasil. Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira (INEP). Relatório de curso: Medicina. Universidade Federal do Mato Grosso [Internet]. Brasília: INEP; 2019 [citado 20 Dez 2020]. Disponível em: https://download.inep.gov.br/educacao_superior/enade/relatorio_sintese/2019/Enade_2019_Relatorios_Sintese_Area_Medicina.pdf
16. Ristoff D. O novo perfil do campus brasileiro. *Rev Aval Educ Super (Campinas)*. 2014; 19(3):723-47.
17. Universidade Federal de São Carlos. Ingresso de estudantes Indígenas [Internet]. São Carlos: Ufscar; 2008 [citado 25 Maio 2019]. Disponível em: <http://www.prograd.ufscar.br/cursos/ingresso-na-graduacao/indigenas-1/indigenas>
18. Bergamaschi MA, Doebber MB, Brito PO. Estudantes indígenas em universidades brasileiras: um estudo das políticas de acesso e permanência. *Rev Bras Estud Pedagog*. 2018; 99(251):37-53.
19. Flick U. Introdução à pesquisa qualitativa. 3a ed. Porto Alegre: Artmed; 2009.
20. Minayo MCS. Amostragem e saturação em pesquisa qualitativa: consensos e controvérsias. *Rev Pesqui Qual*. 2017; 5(7):1-12.
21. Biernacki P, Waldorf D. Snowball sampling: problems and techniques of chain referral sampling. *Sociol Methods Res*. 1981; 10(2):141-63.
22. Minayo MCS. O desafio do conhecimento: pesquisa qualitativa em saúde. 14a ed. São Paulo: Hucitec; 2014.
23. Deslandes S, Gomes R, Minayo MCS, organizadores. *Pesquisa social: teoria, método e criatividade*. 31a ed. Petrópolis: Vozes; 2013.



24. Jovchelovitch S, Bauer MW. Entrevista narrativa. In: Bauer MW, Gaskell G. Pesquisa qualitativa com texto, imagem e som: um manual prático. Petrópolis: Vozes; 2015. p. 90-113.
25. Bondía JL. Notas sobre a experiência e o saber de experiência. *Rev Bras Educ.* 2002; (19):20-8.
26. Benjamin W. O narrador: considerações sobre a obra de Nikolai Leskov. In: Benjamin W. *Magia e técnica, arte e política: ensaios sobre literatura e história da cultura.* 8a ed. São Paulo: Brasiliense; 2012. p. 213-40.
27. Azevedo V, Carvalho M, Fernandes-Costa F, Mesquita S, Soares J, Teixeira F, et al. Transcrever entrevistas: questões conceituais, orientações práticas e desafios. *Rev Enferm Ref.* 2017; 4(14):159-68.
28. Minayo MCS. Análise qualitativa: teoria, passos e fidedignidade. *Cienc Saude Colet.* 2012; 17(3):621-6.
29. Cyrino EG, Sordi MRL, Mendes GSCV, Luna WF, Mendonça CS, Alexandre FLF, et al. Mapeamento das características da implantação de novos cursos de Medicina em universidades federais brasileiras. *Rev Panam Salud Publica.* 2020; 44:117.
30. Brasil. Ministério da Educação. Portaria nº 389, de 9 de Maio de 2013. Cria o Programa de Bolsa Permanência e dá outras providências. *Diário Oficial da União.* 13 Maio 2013; Sec. 1.
31. Centro Indígena de Estudos e Pesquisas. Esboço de um perfil do estudante indígena no ensino superior. In: Luciano GJS, Oliveira JC, Hoffmann MB. *Olhares indígenas contemporâneos.* Brasília: Centro Indígena de Estudos e Pesquisas; 2010.
32. Paladino M. Algumas notas para a discussão sobre a situação de acesso e permanência dos povos indígenas na educação superior. *Praxis Educ.* 2012; 7(esp):175-95.
33. Silva LG. Povos Indígenas no contexto do ensino superior: os desafios do acesso e da permanência na UFPR. *Campos Rev Antropol.* 2018; 17(2):1-12. Doi: <http://dx.doi.org/10.5380/cra.v17i2.54275>.
34. Cohn C. Uma década de presença indígena na UFSCar. *Campos Rev Antropol.* 2018; 17(2):1-20. Doi: <http://dx.doi.org/10.5380/cra.v17i2.57360>.
35. Freitas AEC. *Intelectuais indígenas e a construção da universidade pluriétnica no Brasil—povos indígenas e os novos contornos do programa de educação tutorial/conexões de saberes.* Rio de Janeiro: E-papers; 2015.
36. Luna WF, Malvezzi C, Teixeira KC, Almeida DT, Bezerra VP. Identidade, cuidado e direitos: a experiência das rodas de conversa sobre a saúde dos Povos Indígenas. *Rev Bras Educ Med.* 2020; 44(2):e067. Doi: <https://doi.org/10.1590/1981-5271v44.2-20190309>.



A trajetória do ensino superior no Brasil é marcada pela restrição ao grupo privilegiado da população, com exclusão de pessoas indígenas. Nas últimas duas décadas, ações afirmativas foram desenvolvidas e possibilitaram o acesso de alguns indígenas às graduações de Medicina. Objetivando-se mapear e conhecer as experiências desses estudantes nas universidades federais brasileiras, desenvolveu-se uma pesquisa exploratória, quanti-qualitativa. Foram identificados 192 estudantes indígenas em 43 escolas médicas no ano de 2019. Dessas, 14 foram visitadas, realizando-se entrevistas narrativas com 24 indígenas estudantes de Medicina. Na análise temática de conteúdo emergiram experiências narradas pelos estudantes com foco em duas categorias: acesso à escola médica e políticas de permanência nas instituições. Ao conhecer as experiências desses estudantes no meio universitário, torna-se possível contribuir para sua permanência nos cursos, superando a invisibilidade e oportunizando trajetórias que correspondam às expectativas dos povos indígenas na formação médica.

Palavras-chave: Ações afirmativas. População indígena. Educação de graduação em Medicina. Instituições de ensino superior. Política de educação superior.

La trayectoria de la enseñanza superior en Brasil está marcada por su restricción al grupo privilegiado de la población, con exclusión de personas indígenas. En las últimas dos décadas se desarrollaron acciones afirmativas que posibilitaron el acceso de algunos indígenas a los cursos de graduación de medicina. Con el objetivo de mapear y conocer las experiencias de esos estudiantes en las universidades federales brasileñas, se desarrolló una investigación exploratoria cuanti-cualitativa. Se identificaron 192 estudiantes indígenas en 43 escuelas médicas, en el año 2019. Entre ellas, se visitaron 14, realizándose entrevistas narrativas con 24 indígenas estudiantes de Medicina. En el análisis temático de contenido surgieron experiencias narradas por los estudiantes, enfocadas en dos categorías: Acceso a la escuela médica; Políticas de permanencia en las instituciones. Al conocer las experiencias de estos estudiantes en el medio universitario resulta posible contribuir a su permanencia en los cursos, superando la invisibilidad y dando oportunidad a trayectorias que correspondan a las expectativas de los pueblos indígenas en la formación médica.

Palabras clave: Acciones afirmativas. Población indígena. Educación de graduación en medicina. Instituciones de enseñanza superior. Política de educación superior.