

Relationships between scientific production and public policies: the case of indigenous people's health in the field of collective health

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Abstract *This paper analyses the relationship between studies on the health of indigenous people in public health and public policies aimed at reducing ethnic-racial inequalities. This selection assumes that scientific production on the subject is part of the societal effort to confront health inequities and guarantee the rights and public policies of indigenous people. In total, 3,417 papers were found between 1956 and 2018, and 418 were selected for analysis from systematic literature mapping in the PubMed/Medline, Scopus, Lilacs, Sociological Abstract, and Web of Science databases. Initially, the literature is marked by the biomedical benchmark. After 1990, publications and dialogue with the human and social sciences are expanded, including the analysis of the implementation of indigenous health policy. We identified that the knowledge produced is associated with the political, social, and scientific transformations of the health reform and the indigenous agenda. Scientific production increased in 2010. We can conclude that the knowledge guiding the scientific production on indigenous health was established from a horizon politically implicated with the studied populations and improved Indigenous Health Subsystem.*

Key words *Indigenous health, Collective health, Health inequities, Systematic mapping, Brazil*

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Introduction

The theme of indigenous people's health became part of the agenda of concerns of different Brazilian institutions and social actors, more systematically and continuously four decades ago, namely: on the State's agenda, because the Government is responsible for public health care policies for indigenous people; in the academic field, for the production of scientific knowledge in several areas of knowledge; and in the legal arena and fight for rights, led by indigenous movements and the third sector, with a claim of rights to comprehensive and public health care, among other aspects. In this post-1988 Constitution setting, the indigenous health agenda is fundamental for the consolidation of citizenship and the rights of these native people in Brazilian society.

In total, 305 indigenous ethnic groups are spread in the Brazilian territory, with a population of approximately 900,000 people, according to the last Population Census carried out in 2010¹. While it quantitatively consists of 0.43% of the Brazilian population as a whole, it represents significant sociocultural diversity². Consequently, there are countless challenges to address the inequalities and vulnerabilities of these populations, such as the consolidation of citizenship, equity, and constitutionally guaranteed rights³⁻⁶.

We should mention that the 1988 Constitution increased the State's responsibility for public health in the general population with the establishment of the Unified Health System (SUS)⁷ in order to understand the initiatives focused on the health of indigenous people. The SUS aims to universalize health care in an equitable, public, and free manner at the primary, secondary, and tertiary levels to all citizens of the Brazilian territory, and in line with the other areas of activity of the State^{8,9}. From the articulation of indigenous and indigenist movements, the sanitary movement, researchers and public agents, throughout the 1980s and 1990s¹⁰, the Indigenous People Care Subsystem was established in 1999, incorporated into SUS, through Law N° 9836.

The Subsystem primarily aims to offer primary health care in indigenous territories, based on their socio-cultural, linguistic and geographical specificities, as well as to provide indigenous people with access to the secondary and tertiary levels of the public health system¹¹. The health care network is regulated by the National Health Care Policy for Indigenous People and is organized through 34 Special Indigenous Health Districts, with differentiated care as a guideline.

Although the advances in this model are recognized to guarantee the universality of access by indigenous people to official health services, studies point out the recurring difficulties in the implementation of differentiated care and effective indigenous participation in the elaboration, implementation, and evaluation of the subsystem^{12,13}. In this sense, it should be noted that, concurrent with the organization of the Subsystem, the health of indigenous people has been institutionalized in Brazil as a scientific production theme, with increasing national and international visibility¹⁴.

It is noteworthy that the organization of the field of knowledge of collective health in Brazil, due to its epistemological, pragmatic and political characteristics¹⁵, in line with the claims of the sanitary movement and the consolidation of the SUS, enabled a favorable space for scientific development on ethnic-racial health inequalities^{16,17} and, primarily, on the health of indigenous people^{18,19}. Paim²⁰ mentions that collective health is a field of knowledge constituted to enlighten the intricate health-disease process, considering its different dimensions and implications in the social reality, from the criticism to a reductionist perspective of health.

It is understood that scientific production is one of the necessary elements for the characterization of a scientific field, and this dynamic involves the participation of different social actors and several epistemological, political, and pragmatic compositions. Bourdieu²¹ defines science as a field of constructions, alignments, and conflicts in symbolic, epistemological and ideological aspects, mediated by scientific capital, articulated by the actors that are part of and act in this structure²². Such a structure is marked by heterogeneous and asymmetric dynamics, between central and peripheral areas, concerning the power of influence and impact on the scientific field and other fields (political, economic, cultural, among others)²³. Thus, the articulation of researchers and their research networks enables the development and increase of the scope and circulation of scientific knowledge, not only in the scientific arena but for other sectors of society²⁴.

Following this axis of analysis, this paper was guided by the prerogative that the analysis of the path of production on indigenous health allows revisiting paradigms, concepts, and actions that support both scientific activity and public policies. Because of the current attacks and setbacks on indigenous rights²⁵, the systematic mapping of national and international literature on the sub-

ject provides us with elements to reflect on the production of scientific knowledge and its relationship with the broader social and political context. In this way, it aims to illuminate ethnic-racial inequities and inequalities in health and broaden the scope of action and dialogue between the sciences concerning vulnerable social realities.

Methods

A systematic mapping of the scientific literature on the health of Brazilian indigenous people was carried out in national and international journals from May to August 2018. The particular choice of papers aims to understand the circulation of ideas disseminated and used as a primary tool for communicating scientific evidence globally²⁶, although it is not the only element defining scientific production. Through the survey of publications, we aim to characterize the dynamics of production behavior in a given field of knowledge²⁷.

The search was carried out in five databases considered strategic in the storage and dissemination of papers the field of health, humanities and social sciences, namely: “PubMed/Medline”, “SCOPUS”, “Lilacs”, “Sociological Abstract” and “Web of Science”, with broad search and no definition of period. The search strategies were guided by the Health Sciences Descriptors (DeCS) adapted to the criteria of each database, around the terms *Health indigenous peoples*, *Indigenous population* and *Brazil*. English terminology was chosen, as it is the standard base search language. Except for the PubMed/Medline database, we used a combination of predefined descriptors from the database itself, called Medical Subject Headings (MeSH), which includes: *Indians*, *South American (MESH) AND Brazil (all terms)*.

The search strategies returned 3,417 scientific papers. The selection criteria were applied after reading of the title, abstract and keywords, evaluating whether the papers (1) addressed indigenous populations located in Brazil and (2) or they worked with themes associated with the analysis of living conditions and health of indigenous people and indigenous health public policies. Thus, we excluded 1,210 duplicate papers, 853 papers that did not refer to the Brazilian context, and 936 papers that did not refer to the health of indigenous people. Finally, 418 papers were selected for analysis of the following variables: year, journals, author, title, keywords, and abstract.

Results

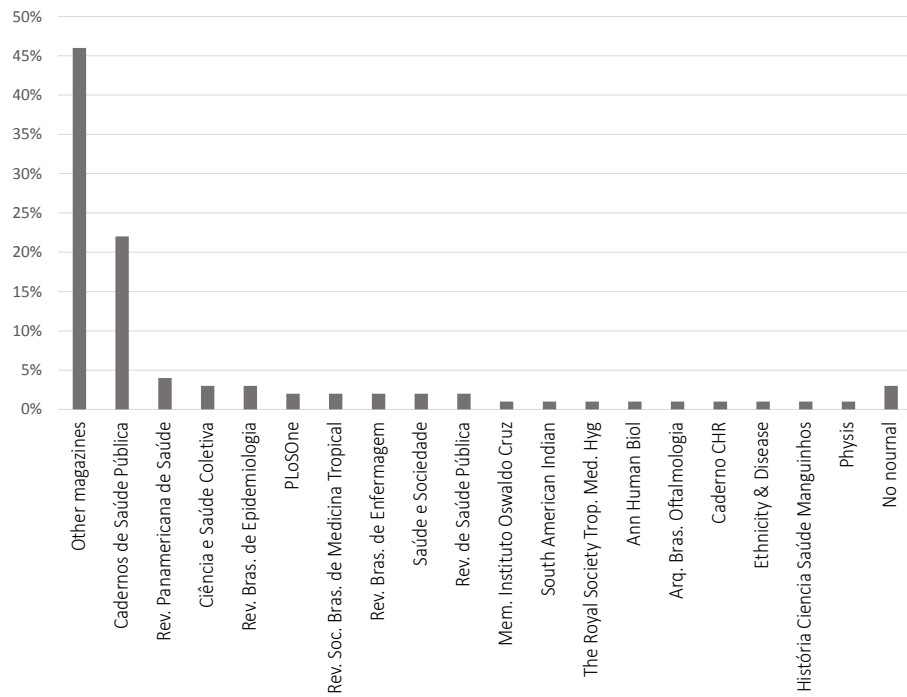
The 418 papers were published in 173 Brazilian and foreign journals, from 1956 to 2018. Only 13 publications failed to mention the journal. The highest concentration of works is linked to the journal *Cadernos de Saúde Pública*, with 22%, followed by the journal of the Pan American Health Organization (PAHO) with 4%. The other papers are distributed in different journals, ranging from 1% to 3% of the total, and 35% is distributed among 148 journals, often with only one work each, as shown in Graph 1.

Observing the time distribution of the number of publications, an increase is noted after the 1990s, with an exponential jump in the 2000-2009 and 2010-2018 periods (N = 211). This last period emerges with the most significant number of scientific papers, as shown in Graph 2.

Graph 2 draws attention to the fact that few records of scientific papers are observed until the 1970s. However, this does not mean the absence of scientific production in previous periods, as suggested by the study by Buchillet²⁸. This work consists of the most extensive bibliographic review on the subject, gathering 3,222 titles of studies on indigenous people in Brazil and neighboring countries, from abstracts in scientific events, scientific papers, booklets, theses, dissertations, books and book chapters, in different thematic axes.

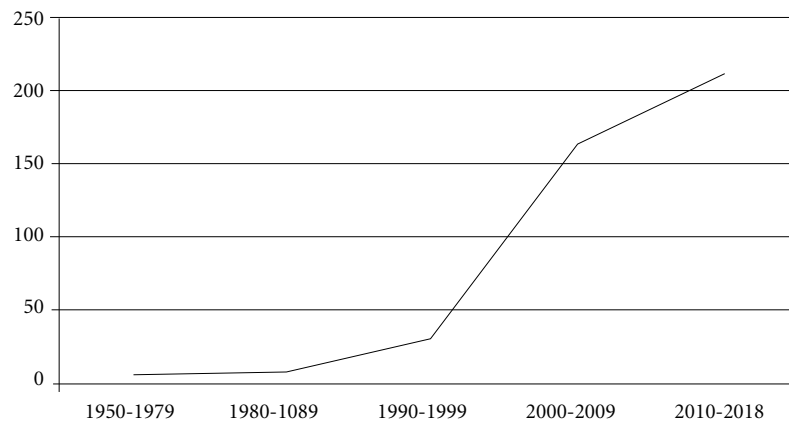
In this survey, the oldest paper was published in 1956 in the journal *Sociologia*. Entitled “Coexistence and contamination. Dissociative effects of the population caused by epidemics in indigenous groups” (*free translation*), it addresses the problem of contamination of diseases that threatened the survival of populations and is one of the first studies in the area of indigenous demography. Its author, Darcy Ribeiro, was one of the great anthropologists and public representative in the National Congress to claim for the rights of indigenous peoples in the country²⁹.

In the 1950s and 1960s, a period when “evolutionary” ideas still influenced biological research, there was an interest in research with indigenous peoples around the world²⁸ centered on understanding and facing the great epidemics that plagued these populations. However, few records of scientific papers are observed, as it is a modality that has become more disseminated by scientific journals more recently. Also, in this period, the focus on verifying the level of specificity or generality of indigenous people against other populations is noted. Souza et al.³⁰ affirm that



Graph 1. Distribution (N = 418) of scientific production from 1956 to 2018 by scientific journal.

Source: Own elaboration.



Graph 2. Time distribution of publications by decades, since 1950.

Source: Own elaboration.

scholars, forerunners in the genetics of indigenous populations, were concerned with building knowledge that could explain the genetic char-

acteristics of human populations. The choice for indigenous peoples occurred because they were identified as “pure” people from the biological

viewpoint. Thus, geneticists did not have a priority concern with the disease, which appeared as a selective factor for the condition of genetic survival³⁰.

From the 1970s onwards, studies in the area of tropical medicine on the etiological agents that caused morbid diseases in tropical climate regions are more present, and this area is still developing. It is worth mentioning that the emergence of this theme occurs amid developmental actions in the Amazon region during the period of the Brazilian military dictatorship, which generated several negative impacts on indigenous peoples, such as deaths, epidemics, and the despoiling of their territories³¹.

In the 1980s, with the emergence of collective health, several topics of knowledge started to appear, such as the access of indigenous populations to public health services, marked by the First National Conference on the Indigenous Health Protection in 1986. In the 1990s, publications in scientific journals increased by approximately 20% compared to the previous decade. This growth coincides with an intense period of debates on the inclusion of indigenous people in the SUS and the emergence of the first research groups in the country studying the health of indigenous people. In 1990-1999 period, publications addressed varying subjects, mainly focused on the epidemiological conditions of indigenous populations.

In the 2000-2009 decade, the period of implementation of the Indigenous Health Subsystem in the SUS, a substantial increase in the number of publications is observed, equivalent to 38% of the total of this review. These findings corroborate Teixeira & Silva's³² results on the production of theses and dissertations focused on indigenous health. The authors identified a fourfold leap in academic production compared to the 1990s, although works focused on the field of anthropology in Brazil. From the first keyword of the article, the themes prevalent in this decade are nutrition, child mortality, tuberculosis, national health policy, traditional medical systems, mental health, social participation, oral health, interculturality, among others.

Regarding journals, the trend of the 2000s follows that of the review as a whole, referred to in Graph 1, with the highest concentration (30%) in the *Cadernos de Saúde Pública*. The quantitative leap in the 2000s can be explained by the special edition of the *Cadernos de Saúde Pública* on the theme, in 2001, consisting of 16 papers, which is 41% of what was produced by

the same magazine in the decade, and 13% of the total of journals in that period. For a more contextual analysis, it is worth mentioning the editorial of this issue, which takes place in the context of the debates around the 500 years of Portuguese colonization, as an illustrator of the scientific and pragmatic concerns on the theme of indigenous health amid the structuring of the Subsystem within the SUS from 1999:

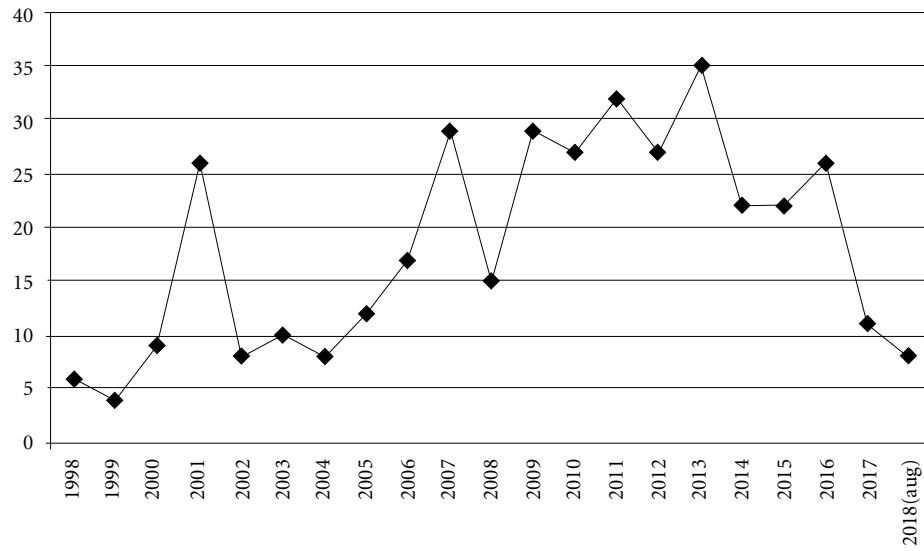
Even if evidence overflows concerning the socioeconomic marginalization conditions, with broad impacts on the health/disease profile, very little is known about the health of indigenous people in Brazil, more so if we consider the enormous socio-cultural diversity and historical experiences of interaction with national society³².

This expansion chart shows a growing and prominent trend, given that the 2010-2018 period represents the most significant number of publications in the review (N = 211). The consolidation of the field of knowledge production in indigenous health over the last 20 years (Graph 3) can be observed through this mapping:

Thirty-five themes were found (Graph 4) as per the first keywords of the papers in the total of the review: infectious-parasitic diseases; nutrition; demography; oral health; mental health; traditional indigenous medicines; population genetics; chronic and non-communicable diseases; health care, indigenous health public policy, and indigenous participation. Different themes appear with less than three papers, such as women's health, sexuality, cancer, ophthalmology, neurology, cardiology, pharmacology, among others.

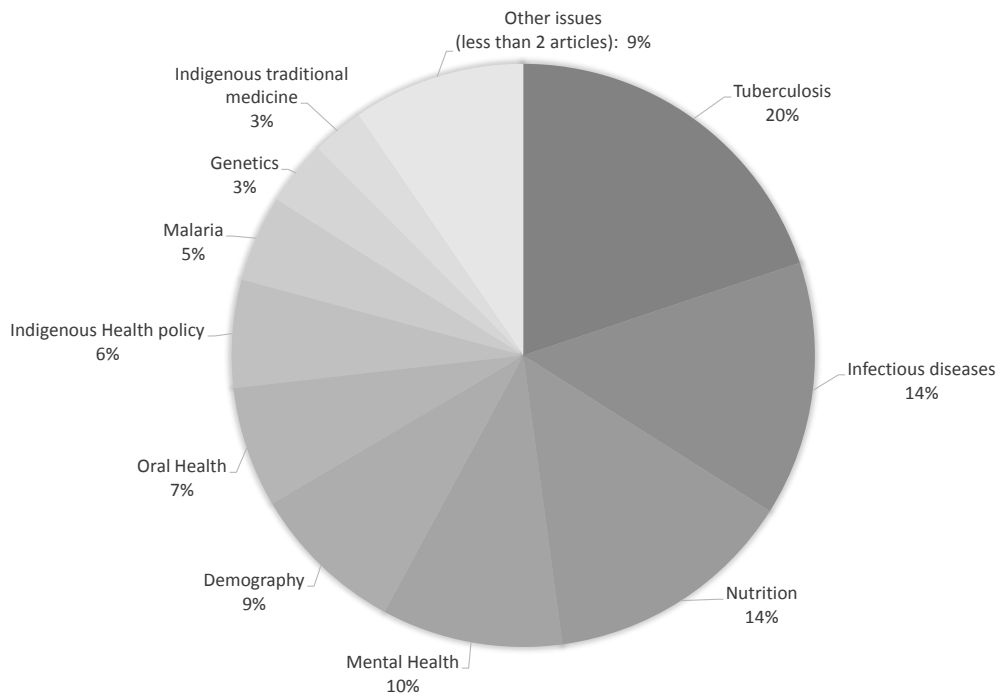
The themes are diverse and correspond to different disciplinary aspects, with the most significant number of publications on infectious diseases (N = 142) coming from the broad areas of tropical medicine and epidemiology, areas that intertwine in public health, given that epidemiology is one of its pillars³³. Nutrition emerges as a frequent and relevant theme, especially in studies about the eating habits of indigenous people and assessing the conditions for population growth and development³⁴. Researchers from Fiocruz and universities, mainly from Mato Grosso do Sul, and Rio de Janeiro conducted the first studies on nutrition and indigenous people. Furthermore, they were responsible for the training of professional staff in postgraduate studies in public health. All 58 nutrition papers are from researchers linked to groups and lines of indigenous people's health research.

The studies on tuberculosis were separated from the set of infectious and parasitic diseases



Graph 3. Distribution (%) of scientific production from 1998 to 2018 (N = 384).

Source: Own elaboration.



Graph 4. Distribution of papers in the indigenous health area (N = 418) by themes and keywords throughout the analyzed period.

Source: Own elaboration.

because of the emergence of the issue, since 1952, with the precursor actions of Noel Nutels³⁵. Of the 83 papers found, 15 were from journals on tropical medicine and the others from the field of public health, with emphasis on a group from Fiocruz. It is noteworthy that other research groups are explicitly studying the theme currently, due to its high prevalence in indigenous people.

Concerning demography, 36 publications were found, with the highest concentration in 2009 and the *Revista Brasileira de Estudos Populacionais*. This theme is highlighted in the area's production after the implementation of the Indigenous Health Care Subsystem and the principle of organizing the information system with a demographic module. This subject gained momentum after 2010 when the IBGE Census introduced the identification by ethnicity/skin color, but the reflection of this collection of information in scientific publications remains a challenge.

Other themes show the extraordinary convergences of the indigenous health area with anthropology, such as mental health and traditional indigenous medicines, carried out by health anthropologists. Such research is interested both in habits considered problematic from the viewpoint of public health, such as alcohol and drug abuse, as well as in the perceptions and self-care practices of indigenous peoples. Twenty-seven papers were found in the area of anthropology and social sciences on various topics, such as health policy evaluation, traditional medical systems, and indigenous participation.

Discussion

The Brazilian indigenous people are in a situation of significant socioeconomic and health vulnerability, which puts them at a disadvantage of opportunities and access to rights compared to other citizens. While this condition remains a research theme, indigenous role in the fight for their rights grows in this debate, even in the academic environment³⁶. The scientific production analyzed shows that academia collaborated by giving visibility to these health inequalities and the specificities of this population in access to the right to health. These data allow us to start a debate on the place of academia for a broader political agenda of the re-democratization of Brazil³⁷.

Daniel Mundukuru, one of the greatest indigenous intellectuals today, highlights the role of indigenous movements and contextualizes

the support of academic entities, researchers and intellectuals in the process of transforming indigenous laws in the 1970s and in the development of this debate, which resulted in the 1988 Federal Constitution and the rights currently enshrined³⁸. The relationship between indigenous people and researchers is the object of interest in studies that seek to decolonize science and the power relationship established with subordinate groups³⁹.

In line with other studies^{40,41}, the findings indicate the considerable expansion of health research among indigenous peoples in Brazil in recent decades, following the development of the field of public health, albeit with its dynamics. Such growth is accompanied by the dissemination and distribution in several disciplinary fields, given that indigenous health involves a multiplicity of disciplinary domains underlying its *modus operandi*. In other words, it is characterized both as a field and by spraying in different fields. Furthermore, it encompasses an intense sociodiversity that is expressed in the sociocultural and linguistic specificities of each population and the differences within each ethnic group.

Looking at this area of knowledge in collective health reveals different disciplinary fields, which dialogue around the health of indigenous peoples. If the lenses were directed to each field – medicine, nutrition, tropical medicine, anthropology, and health policies – we would see that research with indigenous peoples appears as sub-themes of the different fields of collective health. However, it appears that about 40% of the publications are in the area of Public Health. That is, the amount of academic production on indigenous health is incorporated mainly into this scientific field^{7,8,40}. Such data reveal that indigenous health production reflects debates specific to the field of collective health in Brazil and its subareas such as epidemiology, health social and human sciences, and health policy and planning.

Another aspect revealed by the systematic mapping concerns the transformations in the development of themes and concerns regarding the health of indigenous people over the decades. These data show that the indigenous health research agenda dialogues with the social, political, and scientific concerns of each period. The timeline below (Figure 1) describes these changes:

The timeline shows a consolidation of themes and accumulation of knowledge produced, with the last decade concentrating themes associated directly with the implementation of the Indigenous Health Care Subsystem, such as:

“Differentiated Care and Articulation of Medical Systems”; “Indigenous Health Workers”; “Social participation”; “Epidemiological and demographic transition”; “Nutritional transition”; “Child mortality”; “Chronic-degenerative diseases”; “Infectious-parasitic diseases”, among others. This evidence suggests that researchers and knowledge producers in the area are actors involved, directly or indirectly, with public policies aimed at indigenous people and changes in the epidemiological and nutritional profile of this population.

As for the specificities of knowledge production in the area of indigenous health, from the 1990s onwards, we note that its existence is mediated by relationships between different knowledge and practices in the same field of action, either from the viewpoint of public policies, or from the epistemological perspective. Foller named such characteristic as the “contact zone”⁴², meaning that it contains an asymmetry that involves intense processes of negotiation and power relations between biomedicine – represented by the normativity of health policies and the presence of health professionals in indigenous territories – and the cosmological concepts and sociocultural and political relationships within the community life of indigenous people and the surrounding society⁴³.

Biomedicine is understood as a resource of colonizing knowledge-power and brought into this context. It is revealed in the relationship between State, science, and indigenous people. That is to say, even with the change in the constitutional perspective regarding indigenous people – by transforming the tutelary conception through the recognition and autonomy of ethnic diversity, with the inclusion of the differentiated care directive in the subsystem – colonial knowledge can be present through the care format and healthcare, where we identified the full exercise of biopower⁴⁴. In *the colonial management of inequalities*, Souza-Lima¹⁰ identifies the movement of perpetuation and modernization of the tutelary logic through organisms and practices that circumscribe and subdue populations, albeit under the salvationist ideology and life value of the biomedical discourse. The author argues that the core of the colonial powers and knowledge that have condensed around the indigenous practice has distinct historical origins. However, they focus on conquering territorial spaces as ideological, socio-cultural, and symbolic.

Garnelo¹⁸ states that the colonial and integrationist logic stigmatizes the population as a

way of maintaining state protection and tutelary power, and still underlies the promotion of citizenship rights. In his words:

*In the case of ethnic minorities, although citizenship represents a right and a type of social protection, it can also mean a way to homogenize the indigenous world to the ways of life of the national society, and may also induce the adoption of values and behaviors of the hegemonic social group to the detriment of ethnic differentiation*¹⁸.

By understanding the area of health studies for indigenous people as production in a “contact zone”, we recognize their ability to cross borders and dialogue with different disciplinary perspectives, which designates its maintenance and growth within the field of Collective Health and other fields of knowledge, such as Anthropology. As Teixeira & Silva’s analysis of anthropology theses and dissertations on indigenous health reveals, these studies are located on the borders between well-established disciplinary fields³¹. The area of medical anthropology and health has a fundamental role, as it seeks to understand and explain the interethnic relationships that permeate the health context, as well as the construction, interpretation, and intervention in the bodies and the health-disease process¹¹.

Langdon & Follér⁴⁵ describe the concerns around the health and illness conditions of the populations through a strictly anthropological approach, from the creation of disciplines in postgraduate courses, scientific meetings, and study groups on the subject. Follér⁴² also points out the importance of the role of social scientists and anthropologists in health actions and services as a way to relax epistemological boundaries and medical practices in an intercultural context, in which biomedicine and traditional knowledge and practices in the health of indigenous peoples relate.

Another aspect of the Collective Health field appears as an enhancer for the indigenous health area, and is the formulation and implementation of public health policies aimed at protecting specific groups. According to Garnelo¹⁹, targeting is built to reach a specific population, and universalization provides for the entire national population indiscriminately. Both approaches are not necessarily mutually exclusive and live in disputes and tension, and can be complementary, as in the case of indigenous health policies. The area of indigenous health, thus, contributed to debates on targeting versus universalizing social policies, according to the conceptual framework of equity and one of the pillars of the SUS.

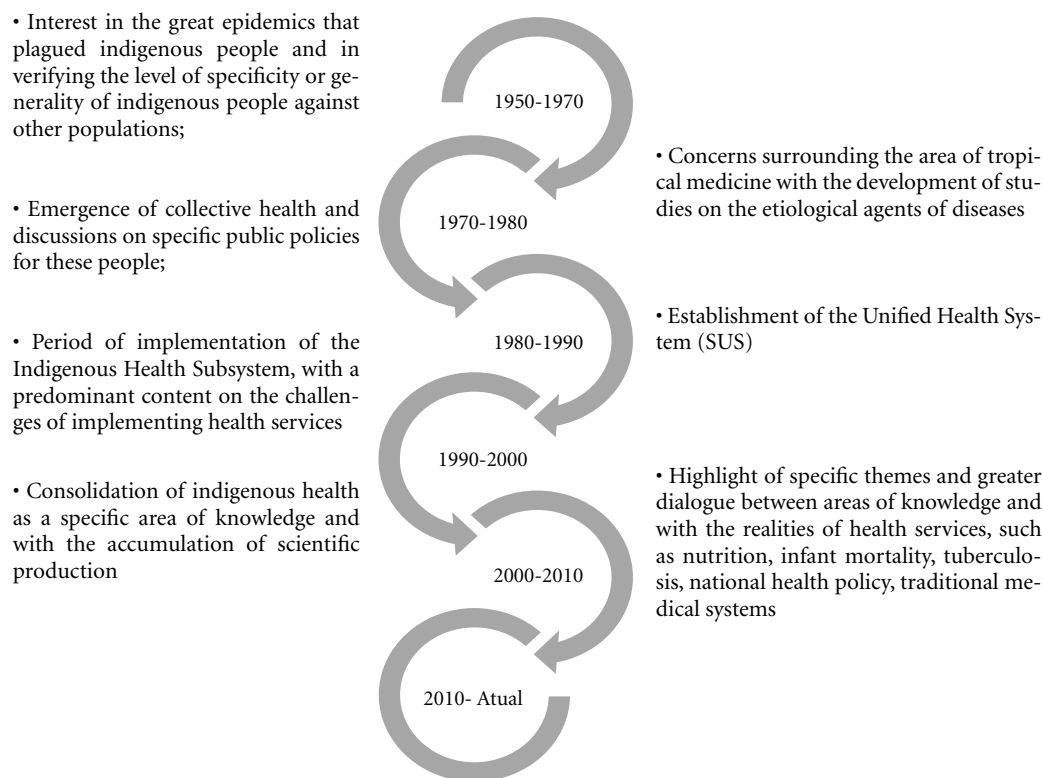


Figure 1. Timeline on the predominant themes per decade on the health of indigenous people, from 1950 to 2018.

Source: Own elaboration.

The concept of equity in the light of the Brazilian State means treating the different differently in search of equal rights from the perspective of social justice⁴⁶. Vieira-da-Silva & Almeida Filho⁴⁷ discuss the different concepts of equity and terminologies used as synonyms, such as inequity, inequality, among others, throughout history and its introduction in the field of health.

In this way, equity becomes an expensive concept for differentiated public policies, as it brings to the field of public health the need for specific care to diverse populations, concerning ethnic, socio-cultural, and regional diversity. As it is a legal and moral prerogative, it is a concept that has an essential impact on the scientific dimension, as it directs qualified treatment in the face of ethnic diversity in the universe of health sciences and analyses of the SUS⁴⁷.

The results of this mapping reveal that the implementation of public policies and public services for indigenous health contributed to the emergence of the studied themes, showing how the scientific field is in constant interface with the political field. At the same time, it is affected by the broader relationships, and it is necessary to point out the existing inequalities within the scientific field itself concerning prioritizing development policies.

In the path indicated by Bourdieu, it is worth highlighting scientific evidence's influential power on political and political decisions of the State²¹, or even evaluating whether the conduct of policies can dialogue with the production of indigenous people's health knowledge. While this mapping does not intend to solve this problem, from an investigative viewpoint, this association appears as a gap to be developed by future studies.

Final considerations

We verified that the topic of indigenous health had been consolidated in academic circles and public policies in the last decades, reflecting the new situation of relationships between the Brazilian State and indigenous people. A relevant part of this production is in the field of Collective Health, involved with the political project of the Health Reform and the establishment of the SUS. The diversity of themes addressed in the papers and their presence in several journals reveal how much this area of knowledge is consolidated in Collective Health. However, it is also spread across different disciplinary fields and is extremely powerful for complex and interdisciplinary approaches.

Through the description of the main topics and approaches of scientific production on indigenous health, we found that the growth of this production is directly related to its incorporation into the sociocultural, political, and operational scenario of public health policies in Brazil. Such insertion reflects the dialogues of this production with the setting of innumerable challenges experienced by the implementation of the indigenous health subsystem, by the health inequalities that affect indigenous people and the essential demographical, epidemiological and nutritional transformations of this population. Despite the specificities of these populations, the production of knowledge in this area can contribute to addressing inequalities that affect the health and living conditions of the Brazilian population.

We understand that the knowledge guiding scientific production on indigenous health is intrinsically committed with horizons politically involved in the studied realities and with the visibility of marginalized populations. This can generally occur in tensions with government agendas. We can, therefore, affirm that the emergence and establishment of the area of health studies of indigenous people allow the coexistence in the scientific environment of both a hegemonic model of construction of knowledge about health and disease, and of an arena that allows the counter flow and criticism of this hegemony.

We observe that the concerns raised by the publications are close to the demands of organized civil society, from the indigenous movement to the sanitary movement and, consequently, are aligned with the path of democratizing the rights of disadvantaged populations by the State, which favors the appropriation of scientific knowledge by civil society by making it not only

public but also prone to be submitted to processes to improve the living conditions of indigenous populations.

From a historical perspective, just as the health reform movement brought this mark to SUS, which materialized in a health system resulting from organized civil society, the indigenous movement in articulation with different subjects, including researchers, forged the creation of an indigenous health care subsystem. We know, however, that publicizing scientific knowledge is not enough for its proper transposition beyond the walls of academia.

The historical process of extermination, violence, and resistance of indigenous peoples in Brazil and the consequent epidemics, deaths, territorial invasions and changes in their ways of life lead us to point out the relevance of discussions about the role of the State and the production of knowledge in the construction of public policies in the most different areas aimed at these people, a role that is both necessary and problematic, especially when thought and implemented in a way that is hardly shared with the populations they assist. Several aspects are inserted in this issue, and the discussion about policies and other interventionist projects in indigenous lands are extensive, which often do not correspond to the real needs of indigenous people. Countless studies even attest to the challenges surrounding the difficulty of dialogue between researchers, managers, health professionals, and indigenous people.

There are constant criticisms from indigenous people regarding the practices of researchers who study in their areas and who do not return the knowledge produced to the populations. However, we see indigenous health efforts to create close links between researchers and people, whether with the political counterpart in the provision of health actions or research-extension activities in indigenous areas. Moreover, at the present moment, with the development of affirmative action policies, the implementation of specific selection processes and quotas for indigenous people in higher education and postgraduate courses, the training of indigenous researchers in the field of health and the like begins. As a perspective of the future of the indigenous health area, we imagine that these indigenous researchers will bring about new transformations and changes in the field.

Although it is a small population contingent when compared to the national population as a whole, the ethnic diversity of indigenous people reveals to us the challenges concerning equity, social justice, and human rights. Countless

problems are surrounding the living and survival conditions of indigenous people, especially in the field of health. In this sense, diversity can be seen as an opportunity to cover theoretical and methodological horizons. In agreement with the statement by Boaventura de Souza Santos⁴⁸, *All scientific knowledge aims to represent common sense*, we found that in indigenous health. In contrast, the dominant common sense of national society is prejudice and discrimination towards indigenous people, the scientific knowledge that emerges in the academic production of indigenous health seeks to show another valid viewpoint to differentiate itself from this social body.

In this sense, this paper aimed to understand the panorama on the production of scientific knowledge about the health of indigenous people and its interface with the guarantee of rights and

reduction of health inequities. As a limitation, we understand that a more in-depth analysis of the papers' content and their epistemological, theoretical, and methodological perspectives can advance the debate, and consideration of other publications such as books, book papers, theses, dissertations and complete works of scientific events. While previous analyses and surveys are available, and aimed to address this gap, the main contribution of this paper is bringing evidence about the incorporation of the field of indigenous health studies into the field of Public Health in Brazil, as signaled by the field researchers themselves. Moreover, as part of it, we are interested in advancing the understanding of how much indigenous health reflects changes in the broader field and focuses on it in constant movement and scientific and political innovations.

Collaborations

JF Kabad: Responsible for research, conception and design of the paper, and drafting and revising the text. ALM Pontes: Co-supervisor of research, conception, and design of the paper, drafting and revising the text. S Monteiro: Research supervisor, adapting the study design, and drafting and revising the text.

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