Social inequality and vulnerability of Indigenous peoples facing COVID-19: a perspective by stakeholders in the lives

Desigualdade social e vulnerabilidade dos povos indígenas no enfrentamento da Covid-19: um olhar dos atores nas lives

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DOI: 10.1590/0103-11042021E2021

ABSTRACT The COVID-19 pandemic has highlighted the deep inequalities of Brazilian society to address this health-related catastrophe. This study aimed to understand the repercussions of COVID-19 on Brazilian Indigenous peoples and how they organize in the context of social inequalities and vulnerabilities. Qualitative research was conducted based on the analysis of ‘lives’. The search was performed on YouTube using descriptors “coronavirus and Indigenous” and “COVID and Indigenous population”, totaling 56 live events, which allowed us to analyze different perspectives on the fight against the pandemic showing that the starting point for COVID-19 prevention, surveillance, health care, and communication among Indigenous peoples is different from the rest of the population. The leading role of the Indigenous civil society is highly relevant to the fight against the pandemic. The profound inequality and the multiple vulnerabilities of Indigenous peoples are realities that must be understood to overcome the enormous challenges produced not only by COVID-19 and, fundamentally, the current context of invisibility, ignorance, and attack on Brazilian Indigenous societies. Social control has been weakened, and its strengthening is urgent to create a differentiated health model that considers these people’s interests and ways of life.


RESUMO A pandemia da Covid-19 tem evidenciado as profundas desigualdades da sociedade brasileira para o enfrentamento adequado dessa catástrofe sanitária. Este estudo buscou compreender as repercussões da Covid-19 nos povos indígenas brasileiros e a sua forma de organização no contexto de desigualdade social e vulnerabilidade. Realizou-se uma pesquisa qualitativa a partir da análise de ‘lives’. A busca foi feita via plataforma YouTube usando como descritores “coronavírus e indígena” e “covid e população indígena”, totalizando 56 lives – que permitiram analisar diversos olhares para o enfrentamento da pandemia, sendo evidente que o ponto de partida para prevenção, vigilância, atenção em saúde e comunicação da Covid-19 entre os povos indígenas é totalmente diferente do resto da população. O protagonismo da sociedade civil indígena está sendo extremamente relevante para o enfrentamento da pandemia. A profunda desigualdade social e as múltiplas vulnerabilidades dos povos indígenas são realidades que devem ser entendidas para superar os enormes desafios produzidos, não somente pela Covid-19, mas fundamentalmente pelo atual contexto de invisibilização, desconhecimento e ataque às sociedades indígenas brasileiras. O controle social ficou muito fragilizado, e urge seu fortalecimento para criar um modelo de saúde diferenciado que realmente contemple os interesses e modos de vida desses povos.

Introduction

The COVID-19 pandemic has shown the profound inequalities of Brazilian society in dealing with this disease, and Indigenous populations are the most affected given their structural vulnerability, which is not always evident in aggregated data at the national level\cite{1,2}. The production of knowledge about social inequalities associated with health conditions often adopts the perspective of socioeconomic determinants and rarely addresses ethnic-racial dimensions, which denotes the historical process of invisibility of minority groups\cite{3-7}. The recommended measures to contain the spread of the SARS-CoV-2 virus, such as social distancing, is new sociability with varying difficulty levels in different social contexts\cite{5,6}.

Given the restrictions and the wide distancing in this context, advances were observed in communication, which allowed more significant interaction between people and groups, a socio-technical phenomenon, however diverse and geographically distant they were\cite{8}. Different communication strategies relieved the effects of distancing while giving visibility to the different experiences about the pandemic and its impacts. In this sense, the internet has opened new channels of communication and dissemination of opinions and information from the most diverse sources and social groups, allowing the expression of a multiplicity of voices and achieving more capillarity in the public sphere.

In this setting, lives have been a new and vital arena for debates between stakeholders about the effects of the COVID-19 pandemic on society. A live event is characterized by the live transmission through the internet on digital platforms such as YouTube, Facebook, and Instagram, disseminating information and knowledge remotely and being a space to voice demands and complaints\cite{8}.

In the context of Indigenous peoples, the statements of leaders, academics, activists, and managers, through lives and webinars, have become an essential source of study by contrasting different perspectives on the impacts of the pandemic on the way of life and the response capacity of surveillance, prevention, and health care strategies.

This study aimed to understand the repercussions of COVID-19 on Indigenous peoples and how they organize themselves to address the pandemic, highlighting situations of inequalities and vulnerabilities experienced by different ethnicities. The questions asked were, ‘How is the COVID-19 pandemic affecting the various Indigenous peoples?’; ‘What surveillance, prevention, care, and communication strategies have been developed to face the pandemic?’; ‘How are Indigenous people organizing themselves?’; ‘Do social inequalities exacerbate the challenges of the Indigenous population in the face of COVID-19?’.

Material and methods

Qualitative research focused on the impacts of COVID-19 on Indigenous people and its relationship with the contexts of social inequalities and vulnerabilities based on the analysis of lives broadcast on internet platforms in 2020 and 2021. We conducted a bibliographic review and document analysis, resorting to data triangulation to reduce the research boundaries. We should point out that document analysis explores a universe of documents (printed, manuscripts, audiovisual records, sound, and image) to describe and explain their content differently from the original from an analysis framework, giving a convenient form and representing otherwise, through transformation procedures\cite{9}. Flick\cite{10} argues that documents should be understood as a “means of communication”, contextualizing information, analyzed as “communicative devices methodologically developed in producing versions of events”.

Research in digital environments, which are represented here by the content of the lives, reveals a vast field by

exploring how this sociality produces identity narratives and performances, associations for different purposes, and many other possibilities.¹

Given the above, we should mention that this paper is nested in the results of the research ‘Pandemic and Indigenous Health: strategies, lessons, and learning in the surveillance, prevention, and control of COVID-19’ (our translation from Portuguese). The project was approved by the Research Ethics Committee of ENSP/FIOCRUZ and the National Research Ethics Committee, per CNS Resolution No. 510, of 2016, Opinion 4.645.163.

Data selection, collection, and analysis

The content of the lives was searched via the YouTube platform using the words “coronavirus and Indigenous” and “COVID and Indigenous population”. The inclusion criteria for selecting the lives were: a) content that addressed the situation of COVID-19 in Brazilian Indigenous people; b) lives with the participation of Indigenous people, representatives of Indigenous organizations and associations, organized civil society, collective health associations, and health councils, those responsible for public bodies and powers, researchers, or students from higher education institutions or research; and c) lives performed during 2020 until May 2021. Videos with fewer than 10 minutes were excluded from the sample universe, totaling 56 live events.

A tabulation system was created after data collection. The lives were listed and detailed as to the title, electronic address, posting date (realization and availability on YouTube), duration, number of views, participants and institutions, collection date, and researcher responsible for the collection.

Then, the tabulation system was expanded to record textual information from the lives and, thus, provide elements that facilitated a coding system to categorize them according to the characteristics used in the analysis. Thus, the lives were organized with the following aspects: summary or main statements; location, Indigenous people/ethnicity to which the content refers; description of actions in the field of public health (surveillance, prevention, and control) and outside the health sector; mapping of governmental and non-governmental actors (Indigenous and non-Indigenous associations, communities, and others); context; COVID-19 impact; observations and responsible researcher. After delimiting the content covered in each live and its context, 31 lives covering the theme ‘social inequality and vulnerable population’ were selected for data analysis. The stages of this work, from data collection to data analysis, were conducted by the team of researchers underpinning the authorship of this paper.

The theoretical frameworks of vulnerability and social inequality, the principal axes of analysis, were used to analyze lives, as shown in table 1.
Table 1. Theoretical framework for the concepts of vulnerability and inequality

<table>
<thead>
<tr>
<th>Concept</th>
<th>Author</th>
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Vulnerability is related to the individual’s context (producer of greater or lesser susceptibility to infection and illness) and the collective context that defines the greater or lesser availability of resources of all kinds for the protection of people against diseases. It is necessary to identify the conditions that can leave people or social groups in a situation of fragility and expose them to illness to understand the vulnerabilities of each person.

According to Ayres (2009), vulnerability must be analyzed in its three components: individual, social and programmatic.

The individual component refers to the degree and quality of information that people have about the condition in question, their ability to elaborate information and apply it in their practical life. The social component is responsible for a set of social factors that determine access to information, services, cultural goods, restrictions on the exercise of citizenship, exposure to violence, degree of political priority or investments given to health, housing, education, and work.

The programmatic component concerns the actions that the government, the private sector and civil society organizations undertake, or not, to curb the likelihood of diseases, and the degree and quality of commitment of the institutions, the resources, management, and monitoring of programs at different care levels.

Thus, the assessment of vulnerabilities must consider the dimensions related to individuals and their social place.


The discussion on health inequalities is quite complex, as its terminology refers to issues related to differences, diversity, equity, and inequality and inequity. All these terms are sometimes used synonymously or have different connotations in different languages.

According to Barreto (2017), differences between social groups often turn into inequalities and, very often, into inequities, insofar as, essentially, through power relationships, access to and ownership of goods, services, and wealth, the result of collective work and accumulated through generations, are unevenly distributed.

These inequalities are often transferred to health, becoming visible, whether in the unequal health conditions of diverse groups, in the levels of health risks, or in the different access to available resources in the health system. It is not by chance that most inequalities observed in health are related to those observed in other spheres of social life.

Health inequalities generate unequal possibilities of enjoying the scientific and technological advances in this area and different likelihoods of exposure to factors that determine health and disease and, finally, the different likelihoods of illness and death.

Inequalities within a country concern the distribution of wealth accumulated by a society and how it is organized, and the social and power relationships established between its various strata.

In this sense, one can speak of structural inequality which, in the case of Indigenous populations, is the result of the historical process of the 'meeting' of European conquerors and colonizers and indigenous peoples in the lands of the New World.

Source: Own elaboration.
At this stage, the lives were grouped under social inequality and vulnerability, considering the following guiding categories for the analysis: health prevention; health surveillance; care and health care; communication, and information. The content was analyzed by successive visualizations of the material, focusing on the themes foreseen in the analysis categories. Data analysis was organized into the following stages: 1) watching the lives; 2) selecting the critical events of the lives; 3) describing notable events; 4) transcribing the major events; 5) discussing the data found. The lives were watched again with a closer look to select the notable events – unlike stage 1) – searching for moments/excerpts that could answer the study questions. Once the notable events of each live were identified in the process of coding and categorization of the material, the data were discussed and analyzed, seeking articulations with the theoretical references of the research.

Table 2 presents the primary descriptive information of the lives that make up the material of this work.

<table>
<thead>
<tr>
<th>Live</th>
<th>Live title</th>
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<th>Dissemination channel and Stakeholders</th>
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<tbody>
<tr>
<td>1</td>
<td>Webinário: Indígenas, Covid-19 e Amazônia</td>
<td><a href="https://www.youtube.com/watch?v=fr21QaQleM4">https://www.youtube.com/watch?v=fr21QaQleM4</a></td>
<td>15/07/2020</td>
<td>01:29:00</td>
<td>Conectas Direitos Humanos. Julia Neiva (Mediator). Juliana de Souza Batista (ISA’s lawyer), Luiz Eloy Terena (APIB’s lawyer), Daniel Sarmento (Full Professor of Constitutional Law at UERJ; Coordinator, UERJ Human Rights Clinic)</td>
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<td>3</td>
<td>Sonia Guajajara</td>
<td>A luta indígena contra a covid e o governo</td>
<td><a href="https://www.youtube.com/watch?v=OZORUHjmufc">https://www.youtube.com/watch?v=OZORUHjmufc</a></td>
<td>07/08/2020</td>
<td>01:14:51</td>
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<tr>
<td>5</td>
<td>Debate online – Covid-19 e os povos indígenas: vulnerabilidades e desafios diante da pandemia</td>
<td><a href="https://www.youtube.com/watch?v=SBojmaOymK">https://www.youtube.com/watch?v=SBojmaOymK</a></td>
<td>02/06/2020</td>
<td>01:15:53</td>
<td>Curitiba’s Holocaust Museum. Francisco Mallmann (Artist, interdisciplinary researcher, Department Coordinator. Temporary and Itinerant Exhibitions of Curitiba’s Holocaust Museum, master’s in Philosophy, Researcher, Decolonial Aesthetics) (facilitator). Tiago Moreira (Anthropologist, Researcher at ISA’s Protected Areas Monitoring Program; Content Editor at terraindigenas.org). Mariana Rocha (Independent indigenist, Replicator of decolonial knowledge, Member of the Global Strategy Institute, Coordinator of the Pensando na Fronteira channel)</td>
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<td>6</td>
<td>CN-COVID-19 Remota - Ações do governo para proteger indígenas na pandemia</td>
<td><a href="https://www.youtube.com/watch?v=QmffdvOPOos">https://www.youtube.com/watch?v=QmffdvOPOos</a></td>
<td>06/08/2020</td>
<td>02:47:45</td>
<td>TV Senado. Confúcio Moura (Senator, MDB-RO, President of the CN-COVID-19 Commission), Mario José das Neves (Director, Department of Social and Special Area Programs SOF), Fernanda C. Bernardes (General Coordinator for Monitoring SOF Special Area Programs), Gustavo Ferreira Fialho (General Coordinator for Monitoring Cross-Sectional Programs in the SOF Special Area), Robson Santos (SESAI/MS), Siderval M. Santos (Chief of Staff, SESAI), João Rosa (Director, Promotion of Sustainable Development, FUNAI), Conrado A. Flores (General Coordinator, Budget and Finance), Frederico C. Oliveira (Risk Prevention Coordinator, Territory Protection Directorate, FUNAI)</td>
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<td>7</td>
<td>Frentes Indígenas de Enfrentamento da Covid-19</td>
<td><a href="https://www.youtube.com/watch?v=YOypf1lxvIM">https://www.youtube.com/watch?v=YOypf1lxvIM</a></td>
<td>28/04/2020</td>
<td>01:56:38</td>
<td>TV Abrasco. Coordinator Nayara Scalco (SES/SP Health Institute and Indigenous Health/ABRASCO WG), Jozileia Kaingang (UFSC and Indigenous Health/ABRASCO WG), Kauti Kuikuro (SPDM- DSEI Xingu), Glicéria Tupinambá (AISTP and IFBA), Larissa Ye’padiho Mota Duarte (Women’s Department, FORIN), Sofia Mendonça (Projeto Xingu/UNIFESP and Indigenous Health/ABRASCO WG)</td>
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<td>8</td>
<td>Realidade Brasileira e Universidade: povos indígenas na Paraíba contra o Covid-19</td>
<td><a href="https://www.youtube.com/watch?v=RB10kgurxlI">https://www.youtube.com/watch?v=RB10kgurxlI</a></td>
<td>05/08/2020</td>
<td>01:49:15</td>
<td>ADUEFPB. Estevão Palitot (Professor, Center for Sciences Applied to Education CC/UFPB; Coordinator, Indigenous Education Program) (Mediator). Jaci Tabajara (AMIP), Poran Potiguara (Indigenous leadership of the Potiguara people in Paraíba)</td>
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<td>9</td>
<td>Comissão Externa de Enfrentamento à Covid – Situação dos Povos Indígenas</td>
<td><a href="https://www.youtube.com/watch?v=i2M4e8F2ktnk">https://www.youtube.com/watch?v=i2M4e8F2ktnk</a></td>
<td>15/07/20</td>
<td>05:05:05</td>
<td>House of Representatives. Robson S. da Silva (SESAI), Marcelo Augusto Xavier da Silva (FUNAI President), Sandra Terena (National Secretariat for Racial Equality Promotion Policies), Leila Saraiva (INESC political advisor), Erick Jennings (Neurologist, Povo Zoé Health Coordinator), Douglas Rodrigues and Sofia Mendonça (Coordination, Projeto Xingu, UNIFESP), Sônia Guajajara (ABIP Executive Coordinator), Biko Rodrigues (National Coordinator, CONAQ)</td>
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<td>10</td>
<td>A Pandemia da Covid-19 entre os Povos Indígenas</td>
<td><a href="https://www.youtube.com/watch?v=p1EYcIN2bmA">https://www.youtube.com/watch?v=p1EYcIN2bmA</a></td>
<td>23/09/2020</td>
<td>01:54:30</td>
<td>Indígenas UnB. Stephen Grant Baines (Mediator). Graduate students of the Department of Anthropology at PPGAs/DAN/UnB: Braulina Baniwa (Master’s student), Daniel Iberê (Iberê Guaraní M’byá) (PhD student), Franklin Baniwa (PhD student)</td>
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<td>11</td>
<td>Impactos da pandemia do Covid-19 sobre as populações indígenas</td>
<td><a href="https://www.youtube.com/watch?v=JqJ5GT1hA">https://www.youtube.com/watch?v=JqJ5GT1hA</a></td>
<td>27/08/2020</td>
<td>01:17:10</td>
<td>ICED/UFOPA. Rui M. Karayama (Professor, UFOPA), Leonardo Moura (ISA), João Kaiuri Wai (Calha Norte region, Graduate student of Biological Sciences/UFOPA, President, Association of Indigenous Peoples of Mapuera), Taianara Kirixi Munduruku (Alto Tapajós region, Graduate, Regional Development Public Management UFOPA course), Alessandra Korap Munduruku (Medio Tapajós region), Ednai Arapiun (Baixo Tapajós region, student of the Atmospheric Sciences course, CITA members)</td>
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<td>12</td>
<td>Ágora Abrasco- Painel: Invisibilidades e iniquidades na Amazônia: povos indígenas e a Covid-19</td>
<td><a href="https://www.youtube.com/watch?v=YmuOTgdRxJ8">https://www.youtube.com/watch?v=YmuOTgdRxJ8</a></td>
<td>21/05/2020</td>
<td>02:21:50</td>
<td>TV Abrasco. Luiza Garneido (CD/ABRASCO, FIOCRUZ/AM) (Coordinator/Mediator). Inara do Nascimento Tavares (Indigenous Health/ABRASCO, Insikiran Institute/UFRR), Alcida Rita Ramos (UnB), Pedro Rapoza (UEA), Valéria Paye Tiriyo-Kaxuyana (COIAB)</td>
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<td>13</td>
<td>A pandemia de COVID-19 e os povos indígenas de Alagoas</td>
<td><a href="https://www.youtube.com/watch?v=6AqRFaFQ0uQ">https://www.youtube.com/watch?v=6AqRFaFQ0uQ</a></td>
<td>28/07/2020</td>
<td>02:19:42</td>
<td>A voz do povo. Osvaldo Maciel. Jairã (Tinguí-Botó), Suzana Libardi (professor, UFAL), Wyraktã (Genpankotã), Adelson Lopes (professor, UNEAL)</td>
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<td>14</td>
<td>Vulnerabilidades, impactos e o enfrentamento à COVID-19 no contexto dos povos indígenas</td>
<td><a href="https://www.youtube.com/watch?v=b3lJkMawClQ">https://www.youtube.com/watch?v=b3lJkMawClQ</a></td>
<td>28/04/2020</td>
<td>02:11:50</td>
<td>Fiocruz. Andrey Cardoso (ENSP), Antonio Oviedo (ISA), Elaine Moreira (ELA), Mart Azevedo (UNICAMP), Sonia Guajajara (APIB)</td>
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<td>15</td>
<td>CEENSP – Corona vírus e povos indígenas: vulnerabilidade ambiental e territorial</td>
<td><a href="https://www.youtube.com/watch?v=C8xtqge9rFk&amp;t=17s">https://www.youtube.com/watch?v=C8xtqge9rFk&amp;t=17s</a></td>
<td>29/06/2020</td>
<td>02:23:00</td>
<td>Ensp Fiocruz. Paulo Basta (Ensp/Fiocruz) (Coordinator). Dário Kopenawa Yanomami (Hutukara Yanomami Association), Edson Farias Mello (Geology Department/UFRJ), Sandra Hacon (ENSP/FIOCruz)</td>
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Table 2. (cont.)

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<td>22</td>
<td>Atenção à Saúde da População Indígena no Enfrentamento da Covid-19</td>
<td><a href="https://www.youtube.com/watch?v=qkV9peTydS">link</a></td>
<td>28/08/2020</td>
<td></td>
<td>CONASS oficial. Rita Catanelli (CONASS), Carlos Lula (CONASS President), Robson dos Santos (SESAI), Danielle Cavalcante (CONASS consultant for indigenous health), Kedima Maiuluguedo Xerente (AIS do Polo Base Pakuera), Giselly Patrícia de Paula (Nurse, DIASI/DSEI Cuiabá/MT), Charles Tocantin (CONASEMS Vice-President)</td>
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<td>23</td>
<td>Os povos indígenas e a Covid-19 na Amazônia: impactos e enfrentamentos</td>
<td><a href="https://www.youtube.com/watch?v=h5bZ9OQOIXQ">link</a></td>
<td>27/08/2020</td>
<td>01:07:30</td>
<td>Ciências Sociais em Diálogo. Edmundo Peggion (Professor, Social Sciences Department/FCLar, Coordinator CEIAMAM-FCLar/UNESP/Araraquara), Kretã Kaingang (Executive Coordinator ApIB, leadership of the Wapichana people of the Terra Indígena Manoã-Pium/RR, Master’s in Sustainable Development with traditional people and lands MESP/UNB, COIAB Vice-coordinator)</td>
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<td>26</td>
<td>Pueblos indígenas y el Covid-19 en América Latina: vulnerabilidades y resistencia</td>
<td><a href="https://www.youtube.com/watch?v=65Q-D3S5x1s&amp;tl=104s">link</a></td>
<td>09/06/2020</td>
<td>01:16:30</td>
<td>Fiocruz. Ana Lucia Pontes (ENSP/FIOCRUZ, ABRASCO Indigenous Health WG) (Coordinator). Speakers: Mário Nicácio (COAIR/APIB Brazil), Joenia Wapichana (Rep./Brazil), Gregório Mirabal (Coordinator of Indigenous Organizations of the Amazon River Basin-COICA), Sebastiana Vázquez – Saki Nichim Antsetik – Mexico</td>
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<tr>
<td>27</td>
<td>COVID19 e saúde dos povos indígenas: as emergências na saúde indígena as comunidades na Bahia</td>
<td><a href="https://www.youtube.com/watch?v=ZLwZ5E15xrw">link</a></td>
<td>25/05/2020</td>
<td>01:03:35</td>
<td>TV UFBA. Leo Pedrana (Researcher FA-SA Research Institute, ISC/UFBA) (Mediator), Ubiraci Pataxó (Master in traditional knowledge), Dinamam Tuxú (PhD student in Law at UND, APIB Coordinator), Luzia Pataxó (Coordinator, DSEI Bahia)</td>
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Results and discussion

Overview of the situation of Indigenous peoples in the COVID-19 context

The Special Secretariat for Indigenous Health (SESAI), Ministry of Health (MS), is responsible for the health care of Brazilian Indigenous peoples. The provision of services occurs through decentralized management structures called Special Indigenous Health Districts (DSEI), responsible for primary care actions and articulation with the Unified Health System (SUS). Each DSEI has a District Council for Indigenous Health (CONDISI), a formal body of Indigenous participation in the planning, implementation, and evaluation of health actions\textsuperscript{12}.

Despite the creation of the SUS Indigenous Health Care Subsystem (SasiSUS) in 2002 and the National Health Care Policy for Indigenous People (PNASPI), three years later, the health protection devices of this population were already weakened when the COVID-19 pandemic hit Brazil, which was decisive for the deteriorated situation among Indigenous peoples.

The silencing of Indigenous participation has escalated in the current political context. Presidential Decree nº 9.759/2019\textsuperscript{13}, which extinguished and established guidelines, rules, and limitations for collegiate bodies within the federal public administration\textsuperscript{14}, was published in April 2019. At the
end of last year, after almost two years of extinction of social participation and due to the intense action of the indigenous movement, the MS reestablished social control within the SasiSUS through the enactment of Ordinance nº 3021 of November 4, 2020, that recreates the bodies participating in the construction of public policies regarding Indigenous Health, which are the Local Indigenous Health Councils (CLISI), the CONDISI, and the Forum of Presidents of District Councils of Indigenous Health (FPCondisi).

The first COVID-19 case in Indigenous people was reported in March 2020, in a 20-year-old woman of the Kokama people, infected by a health professional. Since then, the SARS-CoV-2 has spread among other peoples and ethnicities so that, by June 26, 2021, there were 50,382 confirmed cases and 728 deaths from COVID-19. In the Indigenous Health Care Subsystem, from the first notification on March 13, 2020 (SE 11/2020) to June 26, 2021 (SE 25/2021), the incidence and mortality rate for this period was 6,665.2/100,000 and 96.5/100,000 mortality, respectively, according to data from SESAI.

The lethality rate was also expressive. According to the epidemiological bulletin presented by the MS, from February 26, 2020, to June 26, 2021, the accumulated incidence rate in Brazil was 8,683.1/100,000, and mortality of 242.1/100,000. According to Pontes et al., the Government has pointed out that these rates would be lower than those of the general population, but Indigenous organizations and researchers have raised questions about this point, highlighting the need for analyses beyond those reported by SESAI.

Added to this setting is that Indigenous peoples are even more vulnerable to infection by SARS-CoV-2 due to their immunological, political, and community way of life.

The socioeconomic and health vulnerability of Indigenous people has also affected the fight against COVID-19. In countries with a history of colonization, such as Brazil, the social markers of differences are anchored in racial identification, and the dynamics and political-social processes occur based on this structural racism.

Although the 1988 Federal Constitution was a significant advance in recognizing the rights of Indigenous people, we have observed setbacks regarding land protection and demarcation by the Federal Government in the last five years, besides threats to their ways of living by loggers, prospectors, and land grabbers who dispute the possession of their territories and existing material goods.

In partnership with civil society organizations, the Articulation of Brazilian Indigenous People (APIB) has denounced the severe violations perpetrated against the rights of Indigenous people and the environment in Brazil, which have been systematically occurring since the inauguration of President Jair Bolsonaro. The vulnerability of Indigenous people has been exacerbated. Isolated peoples are among the most fragile, with a real risk of extinction, and not yet demarcated territories are the most threatened. We observe a correlation between these processes and a ‘predatory political-economic system’ that disregards environmental guidelines and traditional peoples’ ways of living and inhabiting.

The ecological guidelines and well-being of ‘native peoples’ are supplanted in favor of ‘growth’ and ‘development’, escalating social and environmental vulnerability, affecting the health of Indigenous people. Protection and control bodies were weakened with the appointment of people whose performance seems dissonant with the presuppositions of respect for Indigenous issues and demands. The National Indigenous Foundation (FUNAI), for example, is currently coordinated by a Federal Police officer, who intimidates...
Indigenous people instead of promoting their protection (lives 2-3). The area of coordination of Indigenous people in voluntary isolation is headed by an evangelical pastor who, contrary to his attribution, leads missionaries into the villages, forcing unwanted contact by these people (live 3).

The setting highlighted by the lives shows the political, social, and epidemiological instability (escalated by COVID-19) of the Indigenous population, aggravated by the current political context, which has required actions to overcome or minimize these challenges. Thus, some strategies will be highlighted below in table 3, along with obstacles in coping with the pandemic regarding the inequalities and vulnerabilities of Indigenous people.

Table 3. Narratives of the participants of the lives by dimension of analysis

<table>
<thead>
<tr>
<th>Inequalities</th>
<th>Vulnerabilities</th>
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</thead>
<tbody>
<tr>
<td><strong>Category: Health prevention</strong></td>
<td></td>
</tr>
<tr>
<td>“The Indigenous people know how to take care of the epidemic because they have been facing epidemics for 500 years. The struggle is to advance in recognizing Brazilian multinationality”.</td>
<td>Renato Athias (Live 20)</td>
</tr>
<tr>
<td>“Time is our enemy. We need to act immediately and in an integrated way because children are the future. Articulation with Indigenous associations from other countries, as the disease has no borders. Work with women (preparing homemade medicines, leadership, and the like). Public bodies must dialogue with Indigenous peoples”</td>
<td>Mario Nicácio (Vice-coordinator of Brazilian Amazon Indigenous associations (COIAB) (Live 23))</td>
</tr>
<tr>
<td>“The relationship between the state and Indigenous peoples is incredibly old and continues with guardianship irregularities, assistance, paternalism, and social integration that do not match reality. Spiritual protection (prayers, tea), not only for the entire Pankararu people but for all peoples and for the entire world. Emergency aid spreads the disease. Everyone must go to the city to get this aid”.</td>
<td>Julião Pankararu (Live 20)</td>
</tr>
<tr>
<td><strong>Category: Health surveillance and COVID-19</strong></td>
<td></td>
</tr>
<tr>
<td>“We realized that while the virus was already spreading in the villages, health teams, especially SESAI, still could not send the rapid tests, mainly. When the rapid tests reached a village with 30 families and 150 people, SESAI and the municipal secretariat would only take the tests to 7-10 people only. So, there is no way to put this number in the statistics of the municipality and we know that many of our relatives from the villages died with the COVID-19 virus symptoms, but we did not have the time to run the test before burying the relative to insert them in the municipality’s statistics. So, we know that the municipality of Santarém has more COVID-19 cases and deaths. Above all, much more people who recovered. Relatives of the villages often felt a symptom, a small symptom. They made a traditional remedy, the home remedy, that strong medicine, taught by the elders. The symptoms would go away the next day and people were already getting better...”.</td>
<td>Ednei Costa Arapiun, Coordination of the Tapajós-Arapuins Indigenous council, UFOPA student (Live 11)</td>
</tr>
<tr>
<td>“The Indigenous peoples have always warned of the problems of this economic model that contributed to the faster spread of this virus. Concern about the presence of evangelical missionaries in indigenous areas and their flexibility in the territories of isolated peoples. The Indigenous people started negotiating with governors through COIAB and APIB (ES, MG, and the Northeast). There was no return from everyone... Nondemarcated territories are even more vulnerable than demarcated ones. Political instability also produces legal insecurity. The entire state structure is dissolving through necropolitics”.</td>
<td>Dinamá Tuxá. (APIB) (Live 29)</td>
</tr>
<tr>
<td>“We have many emergency plans accumulated all over Brazil and around the world. However, much more than thinking about the emergency plan, we also urgently need to resort to our ancestral plan, our spiritual plan, because many people were already isolated from humanity even before social distancing, distancing meaning parted from the principle of human being, humanity, and solidarity”.</td>
<td>Célia Xakriabá, Indigenous leadership, professor and Indigenous activist of the Xakriabá people (Live 3D)</td>
</tr>
<tr>
<td>“The virus... “comes fast, spreads fast, kills fast and passes quickly. It is impossible to do health without territorial protection”.</td>
<td>Erick Jennings, Health Coordinator, Zoé people (Pará) (Live 9)</td>
</tr>
<tr>
<td>“It brings a dramatic situation in MA. APIB data do not lie [as the President of SESAI said, who downgraded the severe situation of Indigenous peoples. SESAI shows the official numbers. APIB shows the numbers closest to the reality”.</td>
<td>Sonia Guajajara, APIB Coordinator (Live 9)</td>
</tr>
<tr>
<td>“The Indigenous people are making efforts to make their own contingency plans. CONDISI have lost their strength. SESAI has become very fragile. COVID-19 monitoring has been weakened. They proposed that each DSEI have their monitoring committee. The pandemic has stopped essential services, but has not stopped actions that violate rights”.</td>
<td>Weibe Tapeba (Live 2)</td>
</tr>
</tbody>
</table>
There is currently no social rule of law for Indigenous peoples. The current state does not know how to deal with cultural differences or indigenous policies. There is a difference between indigenist policy and indigenous policy. The model used to combat COVID-19 among Indigenous peoples is the same as the one used in all urban contexts. 

Xucuru Kariri (Maynamy) (Live 2)

“We built the bill there in the House of Representatives and together with representative Joana Wapixana, the first Indigenous woman to be elected federal representative. We built a bill to guarantee this emergency plan, to protect Indigenous peoples. This bill was passed in the House and the Senate and sent for presidential sanction. What happened was that Bolsonaro simply vetoed 16 other of the 21 articles of this bill and some points that were vetoed. It is worth mentioning here that it was access to potable water. In other words, the veto means that he denied the right to access to potable water for Indigenous peoples, he denied the availability of ICU beds for treatments, for care in COVID-19 contamination cases, and the distribution of information materials that would guide Indigenous peoples on protection measures.”

Sônia Guajajara, APIB Coordinator (Live 3)

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Sônia Guajajara, APIB Coordinator (Live 3)

“Although many people do not believe in what has remained for us Indigenous peoples alive, it has been the force of the song in many moments that the active principle of science has not been able to cure humanity. It was through singing; it was through the strength of ancestry that we also continue to heal this humanity that is not only sick with COVID-19. That is why I will keep on singing”.

Célia Xakriabá, Indigenous leadership, professor, Indigenous activist of the Xakriabá people (Live 30)

Category: Communication and information

“...we have 274 different languages, thus 274 ways to talk about COVID. That has a lot to do with cosmology and cosmogony, with the type of realities of these people and how they see our reality, which is not the same national reality or global reality”

Daniel Munduruku, Indigenous writer, KUA Institute (Live 31)

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Daniel Munduruku, Indigenous writer, KUA Institute (Live 31)

“How can we deal with this, with this new situation? The difference, for us as Indigenous peoples, from other diseases that have already killed many people, our grandparents and our aunts, other diseases, is that we now use technological tools in our favor, which is to take this information, what this disease represents, which we consider as enemy number one. We run the risk of losing many people like us as we have already been losing with the disease in our country and spreading and reaching Indigenous communities... There is no internet there, the communities are extremely far from each other. So, our means of transmitting information is via radio broadcast. We have an indigenous institution that has faced all this together with the communities in a way that, how can I say it, enhanced this information that there is a need for preventive care”.

Braulina Baniwa, Içana river region, Master’s student, UnB Anthropology Department (Live 10)

“The disease came at an unexpected speed. Immediately, those of us who are outside the territory organized ourselves through the collaborators, researchers who work in the Baniwa territory, to find a way to bring correct information to the Indigenous communities. This information strategy generated some works that were translated into the Baniwa language. The other was using audio recordings with the explanation of doctors, nurses, researchers from various institutions that work there in the Baniwa territory. These were some of the precautions taken to send this information to the Indigenous communities. The first situation is that social distancing is not part of our daily lives. We are collective peoples and share our things and homes...”

Braulina Baniwa, Içana river region, Master’s student, UnB Anthropology Department (Live 10)

... “But we also see the resistance of not understanding what this disease represents for Indigenous peoples. While you manage to sensitize a family into prevention, other people will listen to information (that is fake news) saying that this disease does not kill. So, when I talk about this complexity of information reaching the communities, we face these two things: the life advocacy group that will pass on information saying that this disease is strong and can kill, and that group denying this information. So, it is overly complicated. Twenty-three peoples in Rio Negro have faced this”.

Braulina Baniwa, Içana river region, Master’s student, UnB Anthropology Department (Live 10)
COVID-19 infection prevention

In 2020, at the onset of the COVID-19 pandemic, little was known about disease prevention. While a vaccine was not developed, non-pharmacological interventions were vital to preventing the spread of the virus. Some guidelines were social distancing, respiratory etiquette, hand hygiene, mask use, cleaning and disinfection of environments, isolation of suspected and confirmed cases, and quarantine of contacts of COVID-19 cases.21

Social distancing, one of the measures to face the pandemic, has been a challenge for Indigenous people due to cultural aspects and the need to commute to cities to obtain financial and material resources, such as family allowance, emergency aid, and pensions (live 11), or even the pressure of invaders of Indigenous lands, who can carry the virus to the territories. The alternatives for getting the necessary aid or materials to the Indigenous people in the villages should have been thought of in conjunction with the Indigenous population (live 14).

In times of ‘normality’, Indigenous people who live close to urban areas often travel to sell products obtained in the countryside or handicrafts. They purchase supplies necessary to complete their food with the money they make.22 The quarantine forced food security actions, especially for Indigenous people who depend on these economic activities to ensure food for these families, requiring donations (live 7).

However, the living conditions of Indigenous populations have hindered the implementation of such measures. Hand hygiene, with frequent use of soap and water or gel alcohol, becomes a difficult-to-adhere measure due to the low coverage of sanitation in villages, including those located along rivers, especially the Xavante peoples, eastern Roraima, Mato Grosso, and Mato Grosso do Sul. SESAI claims that it was impossible to enter the area due to the pandemic to conduct the necessary works and installations, which should have been completed in the past (lives 6-7).

In July 2020, President Bolsonaro approved the Emergency Plan enacted in Law No. 14.021/2020 that intended to protect, in an emergency, Indigenous peoples, quilombo, and traditional communities during the pandemic. However, the President vetoed 22 measures that provided villages with access to drinking water and hygiene and cleaning materials, hospital beds, and mechanical fans (lives 1,3,8). After mobilizing segments and representations of Indigenous people and Indigenous movements, the National Congress overturned 16 of the 22 presidential vetoes (live 9).

Despite the deleterious effects of the pandemic on Indigenous peoples, their ability to articulate and sociopolitical organization to protect themselves from COVID-19 in the face of denialism, neglect, and minimization of the effects of the disease by the Federal Government stood out. At the outset of the pandemic, indigenous leaders requested the return of individuals residing in the cities to the territory (lives 10-11). For example, APIB suspended the Terra Livre Camp and gave the guidance “nobody enters, nobody leaves” so that the Indigenous people remain in the villages and avoid the entry of non-Indigenous people (live 4). These guidelines were supported by the DSEI (lives 11-13). Furthermore, health barriers were implemented in Indigenous areas in some locations with the support of municipalities, states, civil society, and the Indigenous front, FUNAI, and DSEI (lives 6-7).

Among the actions conducted by federal institutions, the Contingency Plan for traditional communities was mentioned and launched on April 13, 2020, to meet immunological and epidemiological specificities and curb negative economic impacts. This plan had three pillars, namely, Health Protection, Social Protection, and Economic Protection, with the involvement of 15 agencies. FUNAI reported that it worked on food security by distributing staple food baskets with its resources to ensure that...
the Indigenous people had the minimum food necessary for this pandemic period. Even with suspended classes, schools continued the distribution of school lunches. Other bodies of the Federal Government, such as the Ministry of Women, Family, and Human Rights, joined forces to distribute and supply staple food baskets to all Brazilian Indigenous people; and, until July 2020, they reported having distributed 383 thousand staple food baskets and 62 thousand cleaning and hygiene kits (live 9).

While the government still has a stance of ‘guarding’ the care of Indigenous peoples, sending staple food baskets, hygiene kits, and the like, the Indigenous organizations demand food sovereignty actions. The Indigenous people proposed the promotion of productive activities with the promotion of agricultural and family animal production, the simultaneous purchase and donation of food to the Indigenous people, the elaboration and community distribution of Personal Protective Equipment (PPE) made by them to strengthen the income of the communities and land investment (lives 2,9,15,29).

Protection in the face of rampant COVID-19: Indigenous lives matter

Indigenous Health Workers (AIS) were instructed to make home visits using PPE to protect against the COVID-19 advance. Although it was challenging to conduct in the villages, they had to distribute masks, alcohol gel, bleach, and social distancing guidance. The anticipation of vaccination against influenza was a measure adopted by several DSEIs (lives 6-9), which, besides protecting the most vulnerable, also alleviates the saturation of health services by reducing severe respiratory diseases and death cases (lives 16-17). One DSEI postponed the campaign for three months to prepare teams for the pandemic and avoid entering the area (live 17).

As reported in some lives, there is a lack of concern for Indigenous lives on the part of the current President, which has led to adopting the term ‘genocide policy’ or ‘necropolitics’ to characterize the Federal Government’s stance toward vulnerable peoples (lives 12,17,18). Several voices agree that the current management is the spokesperson for mining companies, artisanal mining, agribusiness, and the timber industry that deforest Indigenous territories and take away human and environmental rights (live 2).

The enactment of Ordinance nº 135/2020 increased the vulnerability of Indigenous people by converting ore exploration into an essential activity while quarantining inspection entities, as it encourages explorers to enter the territory (live 2), leaving them most exposed to invaders (live 12). There is also neglect in the fight against fires, mining, and invasions (live 19), and illegal mining is an essential source of contamination (live 4). At the same time, the Federal Government adopted a discourse of criminalization of actors such as the Missionary Indigenous Center (CIMI), the World Wildlife Fund for Nature (WWF), Human Rights, former partners in the struggle of Indigenous people (live 20).

One aspect of rethinking health services is the cultural vulnerability of Indigenous peoples. Several statements show that, in the case of COVID-19, traditional knowledge helps in mild cases, from medicinal plants and other healing therapies. Besides the sick individual’s healing process, traditional practices were also used in group disease prevention and health promotion actions with world ‘healing’ ceremonies (lives 8,9,30).

One of the challenges of the pandemic was precisely the handling of corpses that exposed several social problems that plague Indigenous communities, as public institutions deny the ethnic identity of Indigenous peoples in a racist way (live 18). Mothers
had no information and could not bury their children following their burial rituals, referring to the structural racism that Indigenous people are subjected to\textsuperscript{25} (lives 1,26).

The death of the elders, holders of traditional knowledge, and guardians of ancient knowledge passed on through oral tradition revealed the tragedy of the disease to preserve the peoples’ culture, rites, and practices. The elders are living libraries that pass on to the youngest the entire history and culture of these peoples (lives 9,21)\textsuperscript{17}. There is apprehension about the death of young people, future leaders of each ethnic group, and who will continue with the struggle for rights and self-recognition (lives 9-20)\textsuperscript{26}. The discourse shows that, in the case of Indigenous people, genocide is followed by ethnocide because the extermination of life entails the risk of exterminating cultures (live 18).

**COVID-19 epidemiological surveillance**

Adequate surveillance of cases and deaths by COVID-19 is essential to assist decision-making in addressing the pandemic\textsuperscript{27}. The implementation of communication networks, team training, laboratories, situation rooms, and monitoring of COVID-19 with the participation of Indigenous representatives was proposed (lives 1,15,18).

SESAI created a specific environment for the publication of Official Notes (Press Releases) produced by the Communication Center (NUCOM/SESAI) and daily bulletins. However, several leaders reported a lack of clarity regarding the protocols issued by the MS. The planned actions go against Indigenous traditions: ‘However, one can perceive the absence of intercultural dialogue and the epistemic and ontological violence implemented by the Brazilian State’\textsuperscript{7}.

Some managers and SESAI referred to the implementation of ‘Crisis Committees’ with the municipalities, DSEIs, and SESAI to evaluate the actions for monitoring the cases (live 22). According to the SESAI Secretary, Indigenous people have always participated in the Central and District Crisis Committee and have never been excluded (live 6). However, this is not the view of all stakeholders. What is seen is a social control that can only act and accompany the teams within the villages (live 23). Several leaders and members of the academy indicate underreported COVID-19 cases, and this is partly due to the registration of Indigenous people as browns, as some managers are reportedly requesting the Indigenous Birth Administrative Registration (RANI) so that they can be registered as Indigenous (live 12), that is, the right to self-declaration of race is not being respected, showing the State’s institutional racism. At the same time, SESAI’s data lack transparency, which prevents identifying several cities where the deaths occurred. Data with the acronym SI (No Information) represent several of these cases. SESAI also does not account for Indigenous people who live in urban contexts or territories not yet approved (live 9.28).

A study by the Federal University of Pelotas revealed that the prevalence of COVID-19 among the urban Indigenous population is equivalent to five times that found in the white population, which shows the challenging situation of vulnerability of Brazilian Indigenous people (live 23)\textsuperscript{28}. There are controversies around SESAI’s responsibilities towards Indigenous people who do not live in villages. Indigenous organizations advocate that all Indigenous people should be served by SESAI, regardless of their dwelling (live 6).

**Healthcare of Indigenous peoples affected by COVID-19**

Actions to face the pandemic are specific in each context, especially when deep-rooted inequalities make the starting point of care different\textsuperscript{29,30}. A recurring statement in the lives was the lack of actual planning by the Federal Government. Leaders and associations
suited the delay in helping the villages, needing to mobilize to produce and distribute combat and prevention resources.

**CONTINGENCY PLAN AND CARE LEVELS IN THE FACE OF COVID-19**

The Contingency Plan made by the government is a preliminary, undetailed plan. With some exceptions, Districts are replicates of the Federal plan. Silva et al. analyzed the measures of the contingency plans and results presented in the epidemiological reports, noting that all point to the active transmission of COVID-19 in the DSEIs and suggest an increase, concomitant with the application of the measures of the Contingency Plan, by which it is plausible to assume a low efficiency in the implementation of the proposed measures.

COVID-19 obliges us to rethink actions at all levels of health care. The challenge is achieving differentiated health from Primary Health Care to the most complex levels (live). We also observed a further fragmentation of health care that had already existed before the pandemic (live). This fragility has expanded during the COVID-19 emergency (live).

Although all actions should be agreed upon in advance, this does not always happen in periods of alleged normality, much less in times of health crisis. Indigenous leaders believe that, somehow, the ‘westerners’ renounced the right to breathe with a respirator. The Government’s and the media’s narratives in the first months of the pandemic were to be able to implement, in a brief time, Intensive Care Units (ICU) and procure respirators. The Indigenous people acted differently (live).

At the very outset of the pandemic, the Coordination of Indigenous Organizations of the Brazilian Amazon (COIAB) discussed with SESAI the establishment and installation of PHC units in the villages to diagnose people with fever and secure the local care structure and, thus, curb the risk of infection outside the locations (live). In this sense, the AIS are fundamental articulators with the Multidisciplinary Indigenous Health Teams (EMSI) of the DSEIs and assist in identifying patients with COVID-19 with symptoms in the villages (live).

Hospital units should be equipped with specific wards to care for patients with COVID-19. Many villages do not have Primary Indigenous Health Units (UBSI), and those that do, are usually in small spaces that do not allow isolation of infected patients. New UBSIs were built as part of the plan to fight the disease, many of which have not yet been furnished (lives-).

In some places, the Indigenous people adapted treatment and isolation units in the schools, as there was no health structure with minimum conditions for the necessary isolation (live). These units were fundamental to shelter the infected and care for the sick. As Indigenous lands are in territories with fewer beds and greater distance and commuting time to reference centers, they are at greater risk. Thus, given the backdrop of disease dispersion, measures such as the implementation of new beds and relocation to the ICU should be prioritized, with specific urgency in those regions and Indigenous lands that combine a relatively small number of beds per inhabitant.

SUCCESSFUL ACTIONS AGAINST COVID-19 AMONG INDIGENOUS PEOPLE

We should highlight some positive actions despite gaps in the federal support for the Indigenous population. Institutions from the three Government spheres supported the construction of individual or collective shelters in some places for people with suspected or COVID-19 positive tests and the isolation of returning Indigenous people (live). FUNAI opened a credit line to build isolation spaces in the Indigenous area (live).
Essential care items, such as oximeters, oxygen concentrators, diagnostic tests, and materials that were not routine in the PHC units were acquired at the Health Base Pole. Even though masks and gloves were used daily in the care of patients, the amount sent to pre-pandemic villages was much lower than necessary to secure the teams’ protection. Burrows and hygiene kits were not supplied. Statements showed that tests were not provided quickly and that there were no medicines. There was also a delay in providing PPE to health teams, which is of fundamental importance for patient management (lives 2, 23).

In the first emergency, several stakeholders committed to supplying the villages with essential supplies for the management of COVID-19. One of the initiatives was ‘Todos pela Saúde’ (All for Health), an alliance of entrepreneurs and partners who bought 105,000 oximeters for Brazilian indigenous health teams (lives 16, 17). Several ministries and municipalities, such as the Ministry of Women, Family, and Human Rights, also aided (live 9). A deadlock was the weak functioning of what was left of the ‘Mais Médicos’ program established in 2013, which allowed the presence of professionals in all DSEIs to provide differentiated care. These professionals left Brazil in the second half of 2018, and even though recruitments were made, there has been no adequate replacement for this program so far (lives 16-17). Several ministries and municipalities, such as the Ministry of Women, Family, and Human Rights, also aided (live 9). A deadlock was the weak functioning of what was left of the ‘Mais Médicos’ program established in 2013, which allowed the presence of professionals in all DSEIs to provide differentiated care. These professionals left Brazil in the second half of 2018, and even though recruitments were made, there has been no adequate replacement for this program so far (lives 16-17). Several ministries and municipalities, such as the Ministry of Women, Family, and Human Rights, also aided (live 9). A deadlock was the weak functioning of what was left of the ‘Mais Médicos’ program established in 2013, which allowed the presence of professionals in all DSEIs to provide differentiated care. These professionals left Brazil in the second half of 2018, and even though recruitments were made, there has been no adequate replacement for this program so far (lives 16-17).

Another proposed action implemented was the setting up of Indigenous Primary Care Units (UAPI), which are advanced health units providing differentiated care in places with a minimum structure (such as Health Base Pole) for the management of patients (live 9). Each UAPI was equipped with a diesel generator, inflatable mattress for pronation, and PPE. However, these UAPIs created by SESAI were insufficient (lives 16-17). Some were mobilized with resources provided by partners such as NGOs and companies with the articulation of APIB, COIAB, and the DSEIs. COIAB and its partners implemented 64 UAPIs in its area of operation to achieve a prospective total of 124. Also, to support EMSIs, Federal Universities and NGOs organized online consultations through telemedicine with São Paulo and Rio de Janeiro experts (live 9).

With the need to expand the workforce in indigenous health to act in emergencies, SESAI authorized the hiring of a Rapid Response Team by DSEI consisting of a doctor, two nurses, and four nursing technicians, which would initially work for three months, with possible extension. These teams would remain in social distancing at the Municipal seat and enter the area in case of emergency to support EMSIs and with confirmed severe acute respiratory syndrome (SARS) outbreaks. Although the initial Ordinance allowed hiring a single team per DSEI (Ordinance No. 55, of April 13, 2020), SESAI Secretary referred to recruiting two teams per DSEIs, informing that there were also resources to expand these teams (lives 16-17).

An recurrent aspect in different lives was the need to distinguish between PHC actions in urban areas and Indigenous areas; this model should be reworked in a differentiated health context and adequate to the real needs of these people (live 9). Referrals to other SUS care levels are articulated by the DSEIs (live 20). Before the pandemic, there was still a need to improve the municipal emergency network for the referral of Indigenous patients. Transporting patients is not within the scope of the municipality (live 9). SESAI asked the DSEI to verify at the municipalities some isolation spaces in the cities when the Indigenous people were sent from the villages; the municipality should formalize the request to SESAI to provide these spaces (live 27). In the case of COVID-19, referrals to more complex care levels were also a challenge. A total of 280 exclusive beds were made available for the Indigenous population when referred to hospitals that serve patients with COVID-19 in Amazonas, Amapá, and Roraima (live 17).

We should highlight successful experiences, such as the Xingu project, which supported the organization of the work of the EMSIs, based
on the principle of valuing the teams facing the disease in the village without receiving much support. A management course with the guidelines of the MS, medical associations, and other entities, was offered in the villages, dialoguing with materials produced in specific situations in Indigenous territories, as all intervention models to address the pandemic were urban. There were discussions about the use of internet technologies, such as telemedicine and other options, which could help the field teams in their daily lives, also including the emotional support of facing the pandemic in forest areas, with minimum working conditions and away from their own families (live 17).

The ‘Protocol for Accessing the Zoé Indigenous Land’ was another interesting experience. The EMSI’s entry into indigenous areas was performed after testing, and the teams were strictly isolated before entering the area. The EMSIs had to use all PPE in the service with constant cleaning of radio, medicines, and transport means. In the first ten days of entering the territory, they were instructed to circulate little and deliver supplies, such as hygiene materials, masks, and medicines, while on their way to the Indigenous huts while they were quarantined. The Zoé people have been self-isolating within the forests since March 15. There have been no reported cases as of the live date in July 2020 (live 17).

**COVID-19 communication strategies**

Given the pandemic’s severity and rapid technological changes in communication and contextual influences, enormous challenges related to the abundant information emerge and hinder people’s access to reliable sources and guidelines for the prevention and control of COVID-19.

A call center was installed within FUNAI to improve COVID-19 communication and receive questions, information, and complaints. Such information is processed and returned to the applicant (live 6). The Mídia Índia Network, the primary means of communication for Indigenous peoples, produces information and videos on prevention and care (live 2).

One aspect that exposes the new vulnerabilities is the presence of missionaries in villages with the dissemination of fake news through local radios or WhatsApp groups, where communication is possible. Leaders are overly concerned, as many of these missionaries are spreading untruths about vaccination against COVID-19, leading to non-adherence to the immunizations available in the villages. Thus, there is a need for qualified information against fake news to improve intercultural communication. The Indigenous Rights Monitoring Network in Pernambuco (REMDIPE) created specific content, situation maps, geo-referenced information, and adequate data distribution. Once again, the organizations could translate informational materials about COVID-19 into several Indigenous languages (lives 2,7,10,31). The ability of many people to organize in networks of support, solidarity, and dissemination of information to protect and combat the pandemic in Indigenous languages through booklets, bilingual audiovisuals, lives, and radio programs was remarkable.

**Final considerations**

This analysis identified several perspectives for confronting the COVID-19 pandemic in the Brazilian Indigenous peoples. The profound social inequality and the multiple vulnerabilities of Indigenous peoples are realities that must be understood in the face of the enormous challenges generated by COVID-19, deepening the current context of invisibility, ignorance, and attack on Indigenous societies in the country. These vulnerabilities also function as vectors for the spread of the virus.

Adopting solutions that consider ethnic, cultural, and socio-environmental specificities is essential to revert this situation and realize...
the citizenship rights of Indigenous peoples. In this context, the strengthening of SasiSUS, the protection legislation, the leading role of Indigenous leaders and organizations, and participation through the CONDISI, reversing the recent weakening of these bodies, are essential for the prevention, surveillance, and healthcare, which considers their interests and ways of life.

Finally, it is fundamental, above all, to value the creation of channels for the dissemination and spread of strategies and actions created by the Indigenous peoples themselves, denoting their governance capacity. This path seems quite effective in a context of a health crisis such as the one experienced by the COVID-19 pandemic.

Collaborators

Suárez-Mutis MC (0000-0003-2809-6799)*, Gomes MF (0000-0002-5468-0094)*, and Marchon-Silva V (0000-0002-8267-0096)* contributed to the conception and design of the research, acquisition, analysis, and interpretation of data, elaboration of the first version and approval of the last version of the manuscript. Cunha MLS (0000-0001-7565-7996)*, Peiter PC (0000-0001-8383-4542)*, Cruz MM (0000-0002-4061-474X)*, Souza MS (0000-0002-8014-8528)*, and Casanova AO (0000-0002-7888-9490)* contributed to the conception and design of the research, critical review of the content and approval of the last version of the manuscript.

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