Articles

Vulnerability and social response to the Covid-19 pandemic in metropolitan territories of São Paulo and Baixada Santista, State of São Paulo, Brazil

Vulnerabilidade e resposta social à pandemia de Covid-19 em territórios metropolitanos de São Paulo e da Baixada Santista, SP, Brasil (resumo: p. 18)

Vulnerabilidad y respuesta social a la pandemia de Covid-19 en territorios metropolitanos de São Paulo y de la Región de la Baixada Santista, Estado de São Paulo, Brasil (resumen: p. 18)

Mariana Arantes Nasser[a]
<manasser@unifesp.br> (iD)

Marília Oliveira Calazans[b]
<mocalazans@unifesp.br> (iD)

Claudia Fegadolli[c]
<cfegadolli@unifesp.br> (iD)

Sandro Barbosa de Oliveira[d]
<ontologicosan@hotmail.com> (iD)

Joana de Fátima Rodrigues[e]
<rodrigues.joana@unifesp.br> (iD)

[a, i] Departamento de Medicina Preventiva, Escola Paulista de Medicina, Universidade Federal de São Paulo (Unifesp). Rua Botucatu, 740, Vila Clementino. São Paulo, SP, Brasil. 04023-062.
[b] Centro de Antropologia e Arqueologia Forense, Unifesp. São Paulo, SP, Brasil.
[c] Departamento de Ciências Farmacêuticas, Instituto de Ciências Ambientais, Químicas e Farmacêuticas, Unifesp. Diadema, SP, Brasil.
[d] Centro de Estudos Periféricos, Instituto das Cidades, Unifesp. São Paulo, SP, Brasil.

This paper analyzes vulnerability and the tackling of the Covid-19 pandemic in 16 metropolitan territories of São Paulo and Baixada Santista (State of São Paulo, Brazil), objects of a participatory research developed in 2020 through a multiple-case study, in light of the theoretical framework of vulnerability and human rights. Socioeconomic conditions are different between territories. Vulnerability to coronavirus infection and disease is related to individual, social and programmatic factors: information, perceptions and possibilities of protection; family/interpersonal coexistence, housing, work and violence; and access to healthcare and social programs. Solidarity networks, formed mainly by community associations and social movements, focus on overcoming hunger, generating income and accessing rights. For the social response, it is essential to recognize specific needs, powerful experiences and the centrality of the joint walk of individuals and collectives in each territory.

Keywords: Coronavirus infections. Health vulnerability. Social inequality. Cities. Community participation.

Introduction

The Covid-19 pandemic exposes to the world and to Brazil social inequities and public health problems - a common feature of sanitary crises caused by epidemics in history[1]. It was predictable that the impact of coronavirus would be different between countries, cities and territories, as they have not only distinct, but unequal living conditions. Socioeconomic inequalities are not natural. Furthermore, they cannot be blamed on individuals or collectives, in a process of production of stigmas[1,2] and denial of the State's responsibility. Vulnerability is related to inequalities but not only to them, and regards an individual's chances of getting ill or of getting protected[3].

Urban inequalities in the tackling of Covid-19 have revealed the living conditions of individuals in territories with lack of resources, compared to territories with adequate housing and infrastructure, like hospitals, commerce, jobs, and transportation[4,5]. Segregation in urban spaces, a political-economic sovereignty project in the modern era, in which it is decided who can live or who will die[6], is an explanatory factor for the denialism, arbitrariness and negligence that manage the pandemic in Brazil.

The country has been the target of a federal institutional policy for the dissemination of the virus, driven by economic recovery, with executive orders, obstruction to the responses of state and municipal governments, and propaganda against the Brazilian National Health System (SUS)[7], exemplified by the spread of fake news[8]. The temporary suspension of the need to register deaths[9], for example, shows how the interface between the sanitary conditions caused by the pandemic and the disrespect for human rights has hidden deaths.

The infection and disease caused by the new coronavirus are a challenge, given the incipience of specific protection measures, represented by vaccines, and the relevance of population-based strategies of isolation and social distancing, as well as general prevention strategies based on barriers and hygiene. There is not a specific and efficient therapy either; at the moment, care is limited to mitigating symptoms and providing life support.

This article aims to analyze vulnerability and ways of tackling the Covid-19 pandemic in metropolitan territories of São Paulo and Baixada Santista, objects of the research Inequalities and vulnerabilities in the Covid-19 epidemic: monitoring, analysis and recommendations[10], in light of the theoretical framework of vulnerability and human rights[3,11-19] due to its contribution to the understanding and transformation of social reality. By mediating the knowledge about the situation and the social response experiences of the participant populations in the context of this crisis, our study can be of interest to researchers and other urban peripheries.

Vulnerabilities and human rights

The idea that vulnerability should be considered in health was presented by Mann, Tarantola and Netter in 1992, for work with the AIDS epidemic. Relying on the relationship with social movements, they proposed a shift from the identification of risk groups and risk behavior to the identification of risk situation, contributing to combat the prejudice related to the disease of "the other", the attribution of guilt on individuals, and the lack of preventive measures targeted at collectives[11]. In 1996, human rights were incorporated into this notion[12].

In Brazil, vulnerability and human rights have been analyzed mainly by Ayres and collaborators[3,13] and their findings have informed health policies and practices, including, for example, treatment of infectious diseases[14] and training of professionals and activists to deal with different vulnerabilities and rights violations[15]. The strong development of this framework in Brazil has possibly derived from factors related to social movements, collective health and social psychology, under constructionist perspectives[16].

Vulnerability amplifies the understanding beyond the traditional approaches of the natural history of a disease[3], which expresses the agent-host-environment triad and deals with the notion of risk – an epidemiology construction about the chance of infection by means of causal associations that uses the analytical method and accurately relates dependent and independent variables[3]. Vulnerability searches for synthesis: instead of isolating elements, it approaches factors that influence experiences, considering their non-binary, non-unitary or non-stable character. Consequently, "vulnerability is not a characteristic of people; they are always vulnerable to something, in some degree and form, and at a certain point of time and space"[3] (p. 134). Another aspect that pervades vulnerability is the relational condition, avoiding victimization and raising bilateral responsibility for a transformative action. Knowledge of vulnerability aims at a pragmatic action, coherent to public health practices like health promotion and disease prevention. The expected result is social response[3].

Vulnerability has three interrelated components: individual - the subject's information and values; social - living conditions and social relations; and programmatic - access to programs, services and inputs[3,11-13]. They are different dimensions of one single reality: in the same context, people and groups can invent different strategies of living[17].

Working with vulnerability in practice demands a universal commitment and specific proposals to each population, respecting the principles of effectivity, operability, progressiveness, and, mainly, the democratization of projects[3,13].

To achieve this, human rights are a positive milestone[13], contributing to public health[18] and to the construction of the social response[3]. Human rights - laws that regulate duties and attributions of the State and its citizens, and also claims of specific social groups[18] - contribute to analyses of vulnerability that, instead of employing prescription, moralism and relativization, guide individual or collective actions in vulnerability situations[13].

However, the complex and controversial structure imposed by the Western society on the periphery of capitalism offers allegedly noble parameters for the understanding of individual and collective rights and, at the same time, fosters the production and maintenance of inequities[19]. Thus, inequality in access to human rights – specifically, the fundamental rights to life, health and physical integrity - is a presupposition of the present study, which aims to investigate the struggle of the participant populations to find ways to survive the pandemic threat and the privations of the cities.

Methodology

The research Inequalities and vulnerabilities in the Covid-19 epidemic: monitoring, analysis and recommendations[10], carried out between April and December 2020, aimed to analyze processes and impacts of the Covid-19 pandemic and the operationalization of solidarity networks, considering inequalities and vulnerabilities.

It is a participatory research[20] constructed through a multiple-case study[21] in 16 urban metropolitan territories of São Paulo (cities of São Paulo, Diadema, Guarulhos, Osasco) and of Baixada Santista (city of Santos), state of São Paulo, Brazil. Box 1 presents the participant territories and social movements. The multiple-case study was chosen because it provides in-depth knowledge of these populations' experiences of the pandemic, a characteristic that can contribute to the analysis of other urban peripheries[20,21].

Frame 1. Characterization of the territories

City	Territory		Social Movement
São Paulo	Heliópolis		*União de Núcleos, Associações dos Moradores de Heliópolis e Região* (Residents' association of Heliópolis and Region) (UNAS)
	Vila Mariana	Middle-class (MCVM)	*Associação Vila Mariana* (Vila Mariana Association)
		Communities	*Fórum de Comunidades Vila Clementino* (Vila Clementino Communities Forum)
	Vila São José		*Programa Comunitário da Reconciliação* (Reconciliação Community Program)
	Luz		*A Craco Resiste* (Cracolândia Resists)
			É de Lei
			Fórum Mundaréu da Luz (Mundaréu da Luz Forum)
	Jardim Helian		Residents' association
	Vila Miguel Ignácio Curi		Leaderships
	Vila da Paz		Leaderships

Osasco	Portal D'Oeste	*Associação de Apoio ao Adolescente e à Família – Mundo Novo* (Mundo Novo Adolescent and Family Support Association)
	Quitaúna	*Associação Viva Quitaúna* (Viva Quitaúna Association)
		Residents' association
	Bandeira	*Universidade Aberta à Economia Solidária* (Open University to Solidarity Economy)
	Morro do Socó	*Rede Integração* (Integration Network)
Guarulhos	Esplanada	*Associação Elisabeth Bruyère* (Elisabeth Bruyère Association)
	Núcleo Mabel Assis	*União de Núcleos de Educação Popular para Negras/os e Classe Trabalhadora* (Movement for the Popular Education of Blacks and the Working Class)
Santos	Alemoa	*Go Alemoa Go*
		Rede Jovem Anne Frank (Anne Frank Youth Network)
	Saboó	*Movimento por moradia V. Pantanal* (Vila Pantanal Housing Movement)
		Associação Melhoramentos V. Pantanal (Association for Improvements in the Vila Pantanal)
		Instituto Elos (Elos Institute)
Diadema	Eldorado	*Movimento de Mulheres Olga Benário* (Olga Benário Women's Movement)
		Movimento de Luta nos Bairros, Vilas e Favelas (Struggle Movement in Neighborhoods and Slums)

Source: The authors.

The territory is a geopolitical space where material and immaterial living conditions are concretized[22]. It is not homogeneous due to the unequal distribution of information, technique and science: there are dense, bright areas, and others that are almost empty, opaque[22].

Of the studied territories, 14 have housing conditions technically classified as subnormal clusters[23] - the Communities, as the inhabitants call them. Vila Mariana, recognized as a middle-class neighborhood in the city of São Paulo, is also composed of small communities in vulnerable conditions. The name Luz was preferred by the researchers of the territory instead of Cracolândia (Crackland), a pejorative expression that justifies hygienist and authoritarian actions, although the study focuses on a part of Luz: the "flow" (the setting of drug use and exchange) and its borders. Thus, in this manuscript, the different territories are called Communities, Middle-Class Vila Mariana (MCVM) and Luz, respectively.

The research team was composed of 108 members, including 48 researchers of different disciplines from six campuses of the Federal University of São Paulo (Unifesp) and 60 scholarship holders (undergraduate and high school students and leaderships/inhabitants of the territories). Concerning participant research, we believe that the possibility of knowledge production in the relationship with others and their ways of life occurs "in act, in event, in the encounter"[24] (p. 20). Due to this, we constituted research monitoring commissions (RMC) formed by university researchers, scholarship holders and representatives of local movements[20].

Due to the pandemic, the research meetings were online. The methodology demanded that the team be prepared to value different knowledges and forms of expression, to enter the territories guided by the RMC, respecting the local contexts, and to adopt personal protective equipment against Covid-19.

The field research had the outstanding participation of researchers who lived in the territories. Undergraduate and High School students and Unifesp researchers also participated in the field research, and were present in those spaces exclusively when the research instruments were administered and during feedback meetings.

For us to acquire in-depth knowledge of each case, the data production instruments included structured questionnaires with 80 questions, non-structured individual and collective in-depth interviews, participant observation of the empirical procedures, recorded in a field diary, a Covid-19 seroprevalence survey, and a nutritional survey. Box 2 presents a synthesis of the research instruments.

Frame 2. Vulnerability research instruments

Instrument	Data	Characterization
Structured questionnaires	Individual and sociodemographic characteristics, housing, work, income, unemployment, access to health and public policies, solidarity networks, food security, information and perceptions on Covid-19, protection, living together, leisure, education, use of substances, mental health.	Communities: 469 MCVM[i]: 39 Luz[a]: 193
Non-structured interviews	Experiences and perceptions of risk, precaution, benefits, solidarity networks, mental health, use of substances, gender, domestic violence, income, food insecurity.	Individual interviews: 78 Collective interviews: 5
Participant observation	Dynamics of the territories; activities of the social movements.	Field diaries of 48 researchers
Seroprevalence survey	Prevalence of positive results for Covid-19. Stages: 1st (Jul 13-18, 2020); 2nd (Aug 17-21, 2020).	Communities[b]: random sample 1st stage: 212 2nd stage: 243 Luz: Convenience sample 1st stage: 64 2nd stage: 80
Nutritional survey	Foods (access, worry about food shortage, food shortage); meals (reduction in number, worsening of quality).[c]	Vila São José: 329

Notes: [a]Adaptation in size and form to Luz. [b]Santos and MCVM did not participate in this survey. [c]EBIA (Brazilian Food Insecurity Scale)[25].
Source: The authors.

The data were analyzed by the set of researchers in different arrangements: RMC of the territories, collectives of each campus, thematic groups, and encounters of the social movements. In this manuscript, we present the qualitative analysis[26], performed in thematic axes[10]: violence, mental suffering, intensive use of substances, access to benefits, solidarity networks, vulnerability, risk, housing, income, meaning of prevention, and food insecurity.

Our commitment to the subjects who participated in data construction[26] guided the interlocution about knowledge, products to tackle vulnerability, and recommendations of public policies[15,18], aiming at the synergy of the social response[3,13]. The encounter of the social movements and solidarity networks of the different territories enabled the (re)cognition and potentialization of transformation actions[15-19], as well as moments of intersubjectivity and reflection, mediated by literature, music and audiovisual art, contributing to the analysis.

The study[10] was approved by the Research Ethics Committee of Unifesp, process 31165120.7.0000.5505. The social movements expressed their consent to participate in the research.

Results and discussion

The results will be reported and analyzed based on vulnerability to the Covid-19 pandemic and its tackling in the territories.

"The world is different on this side of the bridge"[27]

The living conditions of the populations are different in the three types of territories[22].

The questionnaire data for the sociodemographic characterization of the individuals from MCVM show a higher proportion of whites and Asians compared to the Communities and also to Luz, which have a higher number of black and brown individuals (self-identified skin color, according to the Brazilian Institute of Geography and Statistics for demographic census categories). In Luz, we observed the frequent presence of indigenous Latin American immigrants who worked at garment sweatshops and presented a higher number of positive tests for Covid-19. In the research, we investigated the population structure of each territory and found a higher age average at MCVM compared to the Communities and mainly to Luz. The number of women is a little higher than the number of men in MCVM and in the Communities. In Luz, cisgender men predominated and we observed a significant presence of transsexual women. The highest level of schooling was found among the respondents from MCVM, followed by the Communities and then by Luz. Concerning work, moving from MCVM to the Communities and then to Luz, we found a progressive increase in informal employment and, notably, in unemployment. As for use of the government's emergency financial help and food programs, it was rare in MCVM compared to the Communities and to Luz; in the latter, there were more difficulties to access the benefits. Therefore, we found more favorable living conditions in MCVM compared to the Communities and, mainly, to Luz[4,5,27].

In the Communities, precarious housing, informal work, unemployment and lack of transportation characterize the living conditions, aggravated by the Covid-19 pandemic, with income loss for 87.3% of the 450 people who mentioned changes in their income. This situation expresses the perverse inclusion[2] in this society, ruled by free market economics and lacking public policies articulated by the State to meet popular demands.

Historically, workers build their houses by their own means and organization and seek to fulfil their right to infrastructure, health and education, securing subsistence conditions on their own[28] in the midst of social and urban inequalities[2,4,5,19,27], with consequences for health[3,13,14]. The concentration of a large number of people, for example, hinders social distancing in cases of Covid-19 infection.

In the East Zone of the city of São Paulo, Jardim Helian is currently a consolidated and urbanized neighborhood, but it has problems that are typical of peripheries, like lack of a sewage system or waste collection in some areas. The presence of "bridge houses", built over rivers[28], represents a risk situation for the territory, which, however, has an active residents' association that fights for the maintenance of the Primary Care Unit. Vila Miguel Ignácio Curi, divided into lots in the 1980s, with 450 houses and 2,000 inhabitants, and its neighbor Vila da Paz, divided into lots in the 1990s, with 350 houses and 1,500 people, approximately, were self-built[28] near the Itaquera subway station due to the availability of rail transport and, before that, road transport.

In the city of Santos, Alemoa, a neighborhood created in the 1860s in the Northwestern Zone, over an extensive mangrove, currently houses an industrial complex with yards and warehouses for containers used in cargo transportation in the Port of Santos. In one area of Vila Alemoa, there are 2,382 inhabitants and 793 families, including the occurrence of "bridge houses"[28], with 88 mud/wooden houses and 337 houses with open-air sewage. The Saboó neighborhood is located at the entrance to the city of Santos, on the margins of the Anchieta highway. In the center of Saboó lies Vila Pantanal, a slum where settlements began in the 1980s, without water and sewage system. The neighborhood is also affected by floods that take away the few possessions the families have[2].

Heliópolis, the largest community of the city of São Paulo, has an internal diversity[22], with distinct living conditions and exposures to risk situations[3]. For this reason, UNAS divided the area in seven zones to provide support during the pandemic. The field diaries of the researchers show that, in the central zones, the constructions were larger and consolidated, the streets were wider and there was circulation of cars and many services. In contrast, in one of the more vulnerable zones, small brick houses neighbored others in narrow alleys, hindering even the passage of sunlight.

According to the questionnaires, during the pandemic, hunger increased in the Communities, with 79% in situation of food insecurity. In Vila São José, the nutritional survey[25] showed that 5% of the 329 families faced hunger, 79% worried that they might face lack of food, 62% reported having eaten less than they would like to, 47% faced moderate and severe food and nutritional insecurity, and there was lack of food in 18% of the households.

The role of women in the social reproduction of life[29] was important in all the Communities. Questionnaires and interviews showed a more unequal labor division due to the pandemic, regarding care of the children, including schooling, home maintenance, organization of the family's food, and work outside the home.

In Osasco, the territories can be divided[22] into Morro do Socó, with more vulnerable conditions, followed by Jardim Bandeiras, Portal do Oeste and Quitaúna. The first two are non-regulated invaded areas with precarious housing, without waste collection, sewage treatment or drinking water. In Socó there is severe risk of landslides when it rains - two children were buried in a landslide and died two years ago. Urban violence and violence against women and children were more noticed at Socó and Bandeiras. The predominance of female family heads[29], with low employability among men due to criminal records and reports of children with nothing to eat, were more marked at Socó. In Portal do Oeste and Quitaúna, social housing was provided by a partnership with an international non-governmental organization and through the governmental program Minha Casa Minha Vida; therefore, the families have houses and more infrastructure, despite their low income.

Of the two territories of Guarulhos, Residencial Esplanada (Minha Casa Minha Vida), with approximately 3,000 inhabitants, is more vulnerable. There, domestic violence and gender violence emerged only when women were actively asked about these issues. We believe that this silence derives from different factors, mainly the fact that many families are headed by women[29], with a significant number of lone mothers and women whose partners are in prison.

In the Communities, the support networks were headed mainly by black women[29]. In Eldorado, located in the city of Diadema, female members of social movements had an outstanding participation in the tackling of the Covid-19 pandemic. When they realized that families were facing difficulties deriving from unemployment, healthcare expenses, local absence of the government and because they were not receiving the emergency financial help, they organized actions and articulated solidarity networks to provide basic food and hygiene baskets, as well as information on how to avoid the coronavirus.

The analysis of Vila Mariana shows the heterogeneity within the neighborhood[22]. The participant Communities - Mário Cardim, Mangueira, Souza Ramos 1 and 2 and Madre Cabrini – are small, hidden among middle-class houses and buildings. A community leader that we interviewed mentioned that the communities resemble "Big Brother", as everybody knows and takes care of everybody's business, providing support during the pandemic, for example, but also controlling habits, aiming to avoid police violence. In MCVM there is no homogeneity, with different implications for possibilities of protection during the pandemic: most of the interviewees could adopt telework, but many had their income reduced or lost their jobs. The size of the homes is not an impediment to isolation, but loneliness emerged in a painful way, as well as difficulties in sharing the space with family members. Contents like violence or alcohol and drug use were veiled.

Luz is a "transitory" territory, according to the field diary of a local researcher. There are those who are in the "flow" and many people who are temporarily in the area for different jobs and services. The analysis of another diary reveals that the social distancing in the pandemic limited the possibility of asking for and performing informal jobs, which reduced incomes that were already insufficient. Paradoxically, during the first months of the pandemic, the emergency financial help represented, to some people, a higher income than the one they had before. The same occurred with food due to the distribution of basic baskets. However, as the pandemic progressed, the financial help and donations became rare[17]. During the study, some research participants were sleeping on the street and others at shelters and hostels. Violence at Luz is significant, both violence against women, meaning an exchange for protection on the streets, and police/State violence, also intense, through gentrification in "*Cracolândia*".

Thus, the analysis about opaque and bright spaces[22] contributes to our study of similarities and differences between the areas, identifying everyday life, the situation of people and populations, and the possibilities of protection, care and solidarity.

"We want life as life wants it"[30]

The meanings and possibilities of coronavirus prevention for people's lives and experiences[3,17,30] are also different between territories[22].

To begin with, access to information and, particularly, the understanding of such information and the chance of application are unequal, contributing to individual vulnerability. In MCVM, only 2.7% do not understand or cannot apply the prevention information and measures, compared to 29% in Luz and 30.2% in the Communities, according to the questionnaires. However, the observation showed that there was a greater distance between the protection practices that were mentioned and the ones that were performed, like the use of masks, in MCVM than in the Communities and in Luz. Concerning source of information, we found that the interviewees from the three groups trusted much more the health professionals and distrusted authorities, religious leaders, the media and the social networks.

Social and institutional relations - like marriage, family, domestic life and house maintenance, interactions with friends, boyfriends and girlfriends, studies, work, leisure, participation in neighborhood associations, and adherence to religions and churches - were varied. However, it was possible to notice a greater stimulus to leave the house, mainly in connection with work, in the Communities than in MCVM, where, on the other hand, more people mentioned performing leisure activities by themselves, displaying feelings of loneliness. We also noticed that activities considered essential but which required leaving the house, like going to the bank or accompanying a relative to a medical appointment, were not viewed by many interviewees as contrary to the isolation measures. The social relations were gradually adapted, with less restrictive habits in relation to the quarantine[30]. In Luz, we identified proximity relationships between partners and friends from the "flow", as well as the search for supporting points, but also difficulties in leaving the territory and staying in isolation, in case of Covid-19, considering that the initial offer - hostels - was viewed as a risk[17], due to the number of people in the same room.

Access to health services and programs decreases when we go from MCVM to the Communities and Luz, although the population of the latter mentioned they attend a Primary Care Unit. During the survey, we observed a demand for serological tests incompatible with the purpose of studying seroprevalence, both in the Communities and in Luz, motivated by the individuals' concern with their health. On these occasions, the participants defended that testing should be extended, as they consider it the population's right. Even so, with the pandemic, care experiences (of the individuals themselves, of acquaintances or reported by the media) increased the positive perception about the SUS in all the groups, corroborating a research carried out by Rede Nossa São Paulo[31].

Thus, programmatic vulnerability[3,11-13] to Covid-19 infection[14], conditioned by access to services, protection materials and hospitalization, when necessary, was much lower in Vila Mariana, higher in the Communities and, mainly, in Luz.

Social vulnerability[3,11-13], in turn, is harder to compare between the types of territories: on the one hand, the Communities experience relations of greater proximity and control, compared to the isolation experienced in MCVM. On the other hand, work relations are more precarious in the Communities than in MCVM. In Luz, violence in interpersonal and institutional relationships is significant, including violation of human rights[18] by government forces, like the removal of documents and belongings, which produces impacts on protection against the coronavirus and also on access to benefits[17], among others.

The analysis of the individual component of vulnerability[3,11-13] showed that people from the different territories have similar perceptions regarding lack of trust in the information sources related to the government - perhaps a protective attitude in view of the risks represented by the propaganda against public health[7] and by the systematic and institutional fake news[8]. The greatest difference between the territories lies in accessing and being able to apply the information, in relation to the limits of meaning to their lives[3,11-13,17,30]. It was possible to see that, in MCVM, the respondents filtered more the answers they gave to the researchers, compared to the Communities and especially to Luz, where, as they gradually became less concerned about what the researcher would think, the bond and exchange between the participants and team members increased[24].

"All we have is us"[32]

The research occurred jointly with the studied populations; it did not merely investigated them[16,24].

The urgent needs amplified in the pandemic, like income loss and food insecurity, demanded the immediate organization of support networks, with the relevant participation of organized social movements and community leaderships with previous action in the territories. In addition, new initiatives and partnerships were developed, motivated by the economic-sanitary crisis.

Three types of solidarity networks emerged: primary, constituted by the family and by friendship and neighborhood relationships; socio-community, integrated by multiple organizations in the territory; and public sectoral, formed by specialized services resulting from the State's action through public policies[33]. In the Communities and in Luz, the primary and socio-community networks predominated. In the networks, enabling access to food was the most common objective; in some territories, there was the specificity of the search for income generation. This is the case of Osasco, in which the university was involved in this objective. In Luz, social movements and churches had an active participation. In MCVM, some interviewees participated in support actions, mainly individual donations, or in actions promoted by entities.

To the researchers who lived in the territories, the experience of the study enabled to unveil unequal vulnerability situations present in the same space, producing a shift in the focus, a factor relevant to the attitude of anyone who conducts research[24]. The invisibility of these situations was perceived by them as a factor for vulnerability[3,11-13], and the production of networks[32,33] as a way of enabling transformations[3,13,15-19].

The networks focused on guaranteeing survival and rights[18,19,28,30,32], and few presented long-term projects. Lack of public support led to a progressive reduction of their actions during the pandemic, increasing fear and insecurity, aggravated by the end of the federal financial help, a concern that was emphasized by the participants.

Three encounters were held between the territories from September to November 2020, with the purpose of presenting and discussing problems and actions to tackle vulnerabilities[13], analyzing difficulties and strengths, and searching for thematic and strategic convergences[15]. Approximately 35 people participated in each encounter, including representatives of social movements and Unifesp students and professors.

Among the resulting exchanges, we highlight: guidance to access the emergency financial help; sale of works of art to pay the rent; distribution of basic food baskets, masks and provision of information on Covid-19 prevention; support to the construction of community projects for participation in public notices; mobilization to press local authorities to reduce electricity rates; popular organization to struggle for housing; production and dissemination of local data about the pandemic; union and strengthening of solidarity networks in neighborhoods; assistance to female victims of violence; free psychological support and social work.

In addition, elements of individual and collective vulnerability[3,11-14] to Covid-19 infection were identified, related to housing, employment and income, lack of leisure and public policies for youths, limited access to the Internet, and the different faces of violence. Approaching these issues through the voice of those who experience them[15,16,19,24,32] constituted a path to enhance the understanding and the conditions to tackle the pandemic, aiming at support or resources to face vulnerabilities[13,15,18]. We sought to strengthen a solidarity network between the territories and the continuity of its articulation[13,18,19,32].

The effort undertaken in order to shorten the distance between the different actors of the research[34] does not derive only from the engagement of people who make science in a socially committed way, but also from the need to understand what cannot be analyzed only in cabinets. Therefore, the encounter between knowledges originated from scientific practice and from ways of struggling for life fosters intersectional spaces that conjugate social and cognitive values[34], contributing to the construction of problems and of knowledge[35].

One of the challenges of the research, motivated by the social commitment[26] to the participants, was the collective creation of a set of products[10] with informative and educational contents[15,16] to be distributed and shared in the territories: a) a leaflet about the use of masks in establishments that sell food and beverages; b) four editions of wheatpaste posters about the theme domestic violence; c) a video entitled Studying in the pandemic, based on a virtual conversation between High School students from different territories about the experience of online classes in public schools; e) a MegaZine entitled Territories - eyes open against inequalities, which exemplifies the consideration of themes chosen in the encounters of the support networks[13,15,18,19,32]. In 12 pages measuring 15 cm x 10.5 cm that mix texts and comic strips, MegaZine approaches available benefits, the reopening of shops and bars, return to the workplace and use of public transport, procedures in cases of domestic violence, pandemic statistics, and sources of information on recovery of possession and State violence. Figure 1 presents a photograph of the cover.

Figure 1. Photograph of the cover of MegaZine.
Source: Furtado, 2021[10]

Finally, the study produced collective formulations[35] about public policies in the worked themes[10], in relation to human rights[18,19], targeted at the tackling[3,11-13,15,18,19] of the Covid-19 pandemic and directed at the government. Such recommendations are being disseminated by the research group and developed in each territory jointly with the social movements[19], as a product of the research.

Evaluating the effectiveness of the developed actions is not the objective of the present manuscript. However, the adoption of the principles of democratization and operationality[3,13] during the development of the research enables us to consider that its encounters, knowledge and products allowed us to analyze vulnerability situations in the territories and, also, to identify and plan ways to tackle them, grounded on human rights, thus contributing to the social response[3,12,13,15,18,19].

Conclusions

The Covid-19 pandemic brings situations of exposure to the populations that inhabit the urban metropolitan territories of São Paulo and Santos, articulating the axes of vulnerability - individual, social and programmatic -, revealing and aggravating inequality. The solidarity networks developed by the social movements and other actors of each territory are very powerful due to the formulation of proposals and actions, as well as to the strengthening of bonds. However, this action depends not only on engagement, but also on support, mainly from the State, which is decreasing as the pandemic advances. The action of these networks does not mean that it is possible to exempt the State from its responsibility.

In fact, the knowledge that emerges from the articulation of communities to tackle the pandemic is central to understand how survival is possible despite the (dis) articulation of the State, in which the main victim is the peripheral population, be it in distant areas of the country or in the downtown zones of large cities. The action requires social mobilization and construction of public policies that interact with this reality.

In the midst of the serious sanitary, political, socioeconomic and humanitarian crisis that we are undergoing, the path is crooked. It requires the identification of trails, the recognition of specific needs for the route, and the joint walk of subjects and collectives. Our study can benefit not only the participant populations, but also other metropolitan territories, in the present time and in future moments of history, as it amplifies the understanding of vulnerabilities to the Covid-19 pandemic and enables possibilities of transformation of the reality, by means of the sharing and analysis of social response experiences.

Authors

Rosangela Calado da Costa[f]

<rosangela.costa@unifesp.br>

Eduardo Henrique Moraes Santos[g]

<ehm.santos@unifesp.br>

Giovanna Moreira Zanchetta(h)

<giovanna.zanc@gmail.com>

Lumena Almeida Castro Furtado[i]

<lumena.furtado@unifesp.br>

Affiliation

[e] Departamento de Letras, Escola de Filosofia, Letras e Ciências Humanas, Unifesp. Guarulhos, SP, Brasil.

[f] Departamento de Ciências Ambientais, Instituto de Ciências Ambientais, Químicas e Farmacêuticas, Unifesp. Diadema, SP, Brasil.

[g] Pós-graduando do Programa de Serviço Social (Doutorado), Pontifícia Universidade Católica de São Paulo. São Paulo, SP, Brasil.

[h] Graduanda do Curso de Educação Física, Instituto Saúde e Sociedade, Unifesp. Santos, SP, Brasil.

Authors' contribution

All the authors participated actively in all the stages of the preparation of the manuscript.

Conflict of interest

The authors have no conflict of interest to declare.

References

1. Schwarcz LM, Starling HM. A Bailarina da morte: a gripe espanhola no Brasil. São Paulo: Companhia das Letras; 2020.

2. Martins JS. A sociedade vista do abismo: novos estudos sobre exclusão, pobreza e classes sociais. 2a ed. Petrópolis: Vozes; 2002.

3. Ayres JRCM, França Junior I, Calazans GJ, Saletti Filho HC. O conceito de vulnerabilidade e as práticas de saúde: novas perspectivas e desafios. In: Czeresnia D, Freitas CM, organizadores. Promoção em saúde: conceitos, reflexões e tendências. Rio de Janeiro: Fiocruz; 2003. p. 117-40.

4. Villaça F. Reflexões sobre as cidades brasileiras. São Paulo: Studio Nobel; 2012.

5. Nakano AK. Elementos demográficos sobre a densidade urbana da produção imobiliária [tese]. Campinas (SP): Universidade Estadual de Campinas; 2015.

6. Mbembe A. Necropolitics. Durham: Duke University Press; 2019.

7. Rosa AV, Farias AS, Valentim GDS, Herzog LB. Direitos na pandemia: mapeamento e análise das normas jurídicas de resposta à Covid-19 [Internet]. São Paulo: Conectas; 2020 [citado 2 Fev 2020]. Disponível em: https://www.conectas.org/publicacoes/download/boletim-direitos-na-pandemia-no-2

8. Damasceno L, Dal'Evedove RP. Fake news [Internet]. São Carlos: Informasus; 2020 [citado 2 Fev 2020]. Disponível em: https://www.informasus.ufscar.br/fake-news/

9. Vendramini E. Os mortos da Covid-19 que a omissão do Estado pode vir a fazer desaparecer. In: Unifesp. Mortos e mortes da Covid-19: saberes, instituições e regulações (São Paulo). Bol CAAF. 2020; 1(1):4-6.

10. Furtado LAC. Pesquisa desigualdades e vulnerabilidades na epidemia de Covid-19: monitoramento, análise e recomendações. São Paulo: Unifesp, Fundação Tide Setubal; 2021. E-book. Disponível em: https://repositorio.unifesp.br/handle/11600/61363

11. Mann J, Tarantola DJM, Netter T. AIDS in the World. Cambridge: Harvard University Press; 1992.

12. Mann J, Tarantola DJM. AIDS in the World II: global dimensions, social roots, and responses: the global AIDS policy. 2a ed. Oxford: Oxford University Press; 2000.

13. Ayres JRCM, Paiva V, Buchalla CM. Direitos humanos e vulnerabilidade na prevenção e promoção da saúde: uma introdução. In: Paiva V, Ayres JRCM, Buchalla CM, organizadores. Vulnerabilidade e direitos humanos – prevenção e promoção da saúde. Curitiba: Juruá; 2012. p. 9-22.

14. Nichiata LYI, Bertolozzi MR, Gryschek ALPL, Araújo NVDL, Padoveze MC, Ciosak SI, et al. Potencialidade do conceito de vulnerabilidade para a compreensão das doenças transmissíveis. Rev Esc Enferm USP. 2011; 45(2):1769-73.

15. Paiva V, Buchalla CM, Ayres JRCM, Hearst N. Capacitando profissionais e ativistas para avaliar projetos de prevenção do HIV e de Aids. Rev Saude Publica. 2002; 36(4):4-11.

16. Freire P. Educadores de rua: uma abordagem crítica. Bogotá: UNICEF; 1989.

17. Albuquerque SC. Cuidado em saúde frente às vulnerabilidades: práticas do consultório na rua [tese]. São Paulo: Pontifícia Universidade Católica de São Paulo; 2014.

18. Gruskin S, Tarantola D. Um panorama sobre saúde e direitos humanos. In: Paiva V, Ayres JRCM, Buchalla CM. Vulnerabilidade e direitos humanos. Curitiba: Juruá; 2012. p. 23-42.

19. Santos B, Martins BS. O pluriverso dos Direitos Humanos: a diversidade das lutas pela dignidade. Belo Horizonte: Autêntica Editora; 2019.

20. Furtado LAC, Fegadolli C, Chioro A, Nakano AK, Silva CG, Paula L, et al. Caminhos metodológicos de pesquisa participativa que analisa vivências na pandemia de COVID-19 em populações vulneráveis. Saude Debate. 2020; 44(4):306-18.

21. Yin RK. Estudo de caso: planejamento e métodos. 2a ed. Porto Alegre: Bookman; 2001.

22. Santos M. A natureza do espaço: técnica e tempo, razão e emoção. 4a ed. São Paulo: Editora da Universidade de São Paulo; 2006.

23. Governo de Minas Gerais. Fundação João Pinheiro [Internet]. Belo Horizonte: FJP; 2021 [citado 27 Fev 2021]. Disponível em: http:// fjp.mg.gov.br/

24. Lima F, Merhy EE. Produção de conhecimento, ciência nômade e máquinas de guerra: devires ambulantes em uma investigação no campo da Saúde Coletiva. In: Merhy EE, Baduy RS, Seixas CT, Almeida DESA, Slomp Júnior H. Avaliação compartilhada do cuidado em saúde: surpreendendo o instituído nas redes. Rio de Janeiro: Hexis; 2016. v. 1, p. 18-21.

25. Santos LP, Lindemann IL, Motta JVS, Mintem G, Bender E, Gigante DP. Proposta de versão curta da Escala Brasileira de Insegurança Alimentar. Rev Saude Publica: 2014; 48(5):783-9.

26. Martins HHTS. Metodologia qualitativa de pesquisa. Educ Pesqui. 2004; 30(2):289-300.

27. Brown M. Da ponte pra cá. Brasil: Zimbabwe Records; 2002.

28. Sousa RA. A produção do espaço urbano-periférico: barracos, ocupações e puxadinhos [Internet]. Le Monde Diplomatique. 2020 [citado 27 Fev 2021]. Disponível em: https://diplomatique.org.br/a-producao-do-espaco-urbano-periferico-barracos-ocupacoes-e-puxadinhos/

29. Brah A. Diferença, diversidade, diferenciação. Cad Pagu. 2006; (26):329-76.

30. Antunes A, Fromer M, Britto S. Comida. São Paulo: WEA; 1987.

31. Rede Nossa São Paulo. Viver em São Paulo: especial pandemia [Internet]. São Paulo; 2020 [citado 27 Fev 2021]. Disponível em: https://www.nossasaopaulo.org.br/2020/05/05/o-que-pensam-os-internautas-paulistanos-sobre-os-impactos-do-coronavirus/

32. Emicida, Ouro Preto F, Fióti E. AmarElo: é tudo pra ontem. Brasil: Netflix, Laboratório Fantasma; 2020.

33. Gonçalves AS, Guará IMRF. Rede de proteção social na comunidade. São Paulo: NECA; 2010.

34. Lacey H. Existe uma distinção relevante entre valores cognitivos e sociais? Sci Stud. 2003; 1(2):121-49.

35. Stengers I. A proposição cosmopolítica. Rev Inst Estud Bras. 2018; (69):442-64.

Este artigo analisa a vulnerabilidade e o enfrentamento à pandemia de Covid-19 em 16 territórios metropolitanos de São Paulo e da Baixada Santista (São Paulo, Brasil), objetos de pesquisa participante desenvolvida por estudo de casos múltiplos, sob o referencial teórico da vulnerabilidade e dos direitos humanos, em 2020. As condições socioeconômicas são distintas entre os territórios. A vulnerabilidade à infecção e à doença pelo coronavírus é relacionada a fatores individuais, sociais e programáticos: informações, percepções e possibilidades de proteção; convivência familiar/interpessoal, moradia, trabalho e violência; e acesso a cuidados de saúde e programas sociais. As redes de solidariedade, formadas principalmente por associações comunitárias e movimentos sociais, enfocam superar a fome, gerar renda e acessar direitos. Para a resposta social, é fundamental reconhecer as necessidades específicas, as experiências potentes e a centralidade do caminhar conjunto de sujeitos e coletivos em cada território.

Palavras-chave: Infecções por coronavírus. Vulnerabilidade e saúde. Desigualdade social. Metrópoles. Participação da comunidade.

Este artículo analiza la vulnerabilidad y el enfrentamiento a la pandemia de Covid-19 en 16 territorios metropolitanos de São Paulo y de la Región de la Baixada Santista (São Paulo, Brasil), objetos de investigación participante, desarrollada por estudio de casos múltiples, bajo el referencial teórico de la vulnerabilidad y de los derechos humanos, en 2020. Las condiciones socioeconómicas son distintas entre los territorios. La vulnerabilidad a la infección y enfermedad por el coronavirus se relaciona a factores individuales, sociales y programáticos: informaciones, percepciones y posibilidades de protección; convivencia familiar/interpersonal, vivienda, trabajo y violencia; y acceso a cuidados de salud y programas sociales. Las redes de solidaridad, formadas principalmente por asociaciones comunitarias y movimientos sociales, se enfocan en superar el hambre, generar renta y tener acceso a derechos. Para la respuesta social, es fundamental reconocer las necesidades específicas, las experiencias potentes y la centralidad del caminar conjunto de sujetos y colectivos en cada territorio.

Palabras clave: Infecciones por coronavírus. Vulnerabilidad y salud. Desigualdad social. Metrópolis. Participación de la comunidad.