Throughout the country it had been identified diverse initiatives of popular protagonism in the perspective of promotion and protection of life, in search of healthy and sustainable territories. This text aims at describing the experience of a historical, dynamic and permanent process of struggle and social mobilization against the violation of fundamental rights for health and environmental sustainability in the Settlement Santa Rita de Cássia II, in Nova Santa Rita, Rio Grande do Sul, Brazil. This experience can be considered as an action of strengthening and reinvention of health surveillance by the population, therefore a Popular Health Surveillance, trespassing the fragmenting frontiers of knowledge hegemony, going through paths that prioritize and face the problems of its living territory, a territory that pulsates and struggles since its resumption.

**Keywords:** Movement. Environmental health surveillance. Health. Pesticides.
Introduction

Against the backdrop of a pandemic or syndemic\(^{(f)}\), such as the present, boosted by neoliberal capitalism, hegemonic health practices gain more strength and legitimacy. However, they also need to be reflected over and then rethought. In this sense, dialoguing with the experiences of social movements in the territories is necessary in order to articulate the plurality of knowledge, populations, cultures, epistemologies and rationalities. In the midst of confronting the current challenges of this pandemic context with communities, in which a set of survival needs are placed on the same level as demands and risks to people’s health and lives, it has been possible to identify numerous popular and community initiatives that bring other approaches to care and that can characterize other possibilities for surveillance, from the perspective of promoting and protecting life, in search of healthy and sustainable territories. In response to these conflicts, as well as to the Covid-19 pandemic, experiences have been developed in popular surveillance, which include initiatives of knowledge and practices that are born out of the territories and popular organizations defending the right to health and life, but which are often still disregarded, silenced and erased by the institutional conceptions and actions of surveillance in the state health field\(^1-3\).

There can be found powerful, participatory and collectively-built experiences of Popular Health Surveillance in different small areas of Brazil, developed especially during the pandemic. They emerge from the knowledge of experience or the “knowledge of experiences made”, as Paulo Freire used to say, keeping the territory and dialog pulsating during the construction of knowledge. Practices that mobilize other ideas and creative approaches to this debate on surveillance from the territories. Experiences that have been built on the concept and pedagogical strategies of Popular Health Education. In this way, the text reports on the experience of a historical, dynamic and permanent process of struggle and social mobilization against the violation of fundamental rights for health and environmental sustainability, in the Santa Rita de Cássia II Settlement, in Nova Santa Rita, Rio Grande do Sul, Brazil.

The Territory

The municipality of Nova Santa Rita has four settlements organized through the struggle of landless peasants. The first was set up in 1994. In the following years, two more were organized and, finally, in 2005, the most recent settlement in the municipality was achieved: the Santa Rita de Cássia II Settlement (SRC II). The decree creating the settlement was issued on October 20, 2005, and possession was handed over on December 14, 2005, after a long period of local disputes and collective mobilization of the peasants for the right to the land.

\(^{(f)}\) According to Richard Horton\(^4\), syndemics are various conditions and personal states derived from biological issues, such as pre-existing or acute diseases, and social interactions, increasing the vulnerability and risk of death of each individual at an epidemic moment.
The legal reserve of the SRC II Settlement is 1,780 hectares, of which 380 hectares are Permanent Preservation Areas. Each settled family has 12 hectares divided into a 4-hectare living area and another 8-hectare area, considered lowlands (floodplains) used for production. The settlement has five dams - three considered large and two considered small - which need restoration projects, with irrigation value and lifting for pumping and a systematized area, i.e., for preparing the land with machinery, levelling it for planting rice (600 hectares), and when the settlement project was set up there were already around 250 systematized hectares.

Currently, the settlement is home to around 3,000 people, according to a visit to the local area, who originate from the grassroots work of militants from the Landless Rural Workers’ Movement (MST in the Portuguese acronym), who organize themselves in the form of a peasantry for the Good Life(4), in opposition to the neoliberal capitalist model of production. Most of the settlers are young men. All the families living in the settlement produce some kind of food for daily consumption and 95% of the families take part in activities and say they are part of the MST and the settlement(5).

The collective organization of the settlement is linked to the MST and the families are organized through five vegetable and rice production groups, as well as the Organic Participation and Compliance Body (OPAC in the Portuguese acronym) groups, whose purpose is to regulate organic certification in Brazil(5). In the case of the Santa Rita de Cásia II settlement, the certification body is the Central Cooperative of Settlements of Rio Grande do Sul (COCEARGS in the Portuguese acronym), which is recognized by the Ministry of Agriculture, Livestock and Supply (MAPA in the Portuguese acronym). The certification complies with the technical standards established by MAPA and with organic compliance regulations. This certification is granted and renewed annually. It is important to understand the peasantry as a way of life, a way of organizing social relations, food production and consumption, in other words, political, social and economic relations, and therefore all the dimensions that involve life. The peasantry is at the forefront of the struggle for a fairer society, with quality food, based on the right to life in all its fullness(5). The peasantry has the rebellion spirit in its soul and hands, but it also has the patience to wait for each thing to happen. And even though it has a lot of patience to wait, it doesn’t stop, because it is constantly on the move and is therefore a social movement fighting for the fundamental right to land(4), guaranteed in the Federal Constitution.

Since the settlement’s creation, food production has been organized for internal consumption and its surplus for sale in urban centers close to the settlement, such as fairs in Nova Santa Rita, Canoas, São Leopoldo and Porto Alegre. The main crops grown are organic rice, milk and vegetables, which account for 80% of the area and income, as well as corn, medicinal plants, cassava, sweet potatoes, peanuts, sunflowers, watermelons, pumpkins, beans, melons, strawberries, sugar cane, among others. There is also small-scale fruit-growing, the rearing of small (poultry and pigs) and large animals (dairy and beef cattle) and, in some areas, fish farming and beekeeping for subsistence consumption and to sell the surplus.

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(4) Ways of living with deep respect for nature, in connection with the Earth, in direct relation to its cycles and with an understanding of collectivity in which no being has superiority, in other words, we form a unity
In 2008, the collective organization of ten families in the settlement began producing organic rice, which was done entirely by hand, with the families sowing the seeds by hand, using biofertilizers and backpacking machines. The produce was cut and harvested with a sickle by each settler. Today, they stand out for being the largest ecological rice producer in the country, and their agro-ecological work is recognized.

The Santa Rita de Cássia II settlement is located at km 431, on the banks of the BR 386 highway, on the urban perimeter of the municipality of Nova Santa Rita (figure 1), close to the Jacuí River, in the state of Rio Grande do Sul. It is approximately five hundred meters away from the municipal seat of Nova Santa Rita. The BR 386 highway is the main access to the municipality, located about 27 km from Porto Alegre, in the east of Rio Grande do Sul, in the capital’s Metropolitan Region.

**Figure 1.** Map of the city of Nova Santa Rita, RS.
Pulses in defense of life

The Santa Rita de Cássia II Settlement has been suffering from drifts of aerial pesticide spraying, practiced by neighboring crops since 2017. In November 2020, more specifically on November 30, another spraying of conventional rice crops took place next to the settlement, for about uninterrupted three hours. At this point, the damage caused by the drift to the vegetables, fruit orchards and even the native vegetation was devastating, with burnt leaves and some plants and varieties dying.

It was observed that the drift of pesticides from conventional farms caused financial losses, compromising the production, work and income of the settlers who were unable to sell their products and lost their certification to sell organic products, deprived of the authorization to sell, since the properties are regularized and certified as organic producers.

As an expression of this violence, resulting from the model adopted by neighboring farms, the settlers’ health is also directly affected. In 2020, several people living in the settlement showed symptoms related to acute pesticide poisoning, such as headaches, nausea, dizziness, burning eyes and diarrhea. It is worth noting that, during this period, a worldwide alert began regarding the Covid-19 pandemic, a disease that has several symptoms similar to exogenous poisoning, making it difficult for the health team that provided the first care to make an immediate differential diagnosis, as well as an increase in the demand for care from those affected.

In this context, an organization was formed to stop the aerial spraying of pesticides in the municipality and in the Metropolitan Region of Porto Alegre. The first complaints made by settled families, organic producers and victims of pesticide drift, were made to the State Public Prosecutor’s Office (MPE) in 2017, and have continued to this day with complaints to the Civil Police and the Nova Santa Rita City Hall.

Based on these complaints, in March 2021, one of the local tenants suspended the use of agrochemicals, with a fine if he failed to comply. In July 2021, there was a strong mobilization of the settlers, who produce agroecologically, with the support of environmental organizations, social movements and universities. The result of this mobilization was the approval of Municipal Law No. 1,680/21 in the city of Nova Santa Rita, which aims to set limits on this type of spraying. Despite this progress, the law is insufficient because it does not ban the practice in the terms demanded by the families affected.

Faced with these challenges, with the emergence of the environmental issue in recent decades and its complex interface with health, boosted by neoliberalism, the plundering and commodification of nature’s goods is growing as part of the general process of capital accumulation. This consequently leads to the expansion of capitalist relations of production into new territories. The identification that the outbreak of countless territorial conflicts interferes unequally with the social determinants of the population’s health-disease process therefore particularly affects historically vulnerable populations.
In the areas of health, environment and work, the Brazilian National Health System (SUS) has a chronic difficulty in notifying and investigating illnesses and diseases, as well as identifying the environmental impacts resulting from production processes such as agribusiness, which affect health, and therefore in making data and information visible at all three levels of management. In addition, various practices are disregarded by the conceptions and surveillance actions of the state’s institutional health field\(^3\,7\). However, there are popular movements and initiatives to prevent illnesses, monitor risks and uncompromisingly defend the environment, born in the territories and organized in a grassroots manner in defense of the fundamental rights to health and life which, if strengthened and systematized, could make the instituted actions of the health services and their training processes reflect in the direction of a less authoritarian surveillance, based on horizontal dialogue and in accordance with each reality and, therefore, be more effective.

In Nova Santa Rita, faced with the effects of unlawful aerial spraying of pesticides, the settlers and all those involved in confronting the multiple violations of rights in the territory began to organize themselves into a network and, boosted by the caravan of the Participatory Action-Research Project in Health of the Oswaldo Cruz Foundation (Fiocruz)\(^h\), began a process of drawing up a health surveillance plan in which the people who took part in this process found themselves committed to drawing it up and making it effective. This project stimulated the construction of a Popular Surveillance Action Plan with all the people involved (public officials, researchers, affected residents and the rural health team). The main objective is the comprehensive protection of people and the environment from pesticide drift in the region and the immediate treatment of signs and symptoms of exogenous poisoning by the Nova Santa Rita Rural Family Health Strategy (FHS).

In order to assert themselves socially, environmental problems need to be constructed and disseminated, symbolically or materially, in the daily lives of the various social actors, until they are collectively recognized. In the same way, in order to tackle exposure to pesticides, it is necessary for the population - both the population directly exposed and the health workers - to understand how exposure occurs and what the risks are within their context. This also serves to consolidate new alternatives and concepts, such as the agroecological issue and Popular Health Surveillance.

It should also be noted that the health team at the Rural FHS was unable to effectively monitor exposure to pesticides in the area. There was only compulsory notification of suspected cases and no timely continuation of the investigation. With regard to the care provided by the FHS, we understand that it is not a question of unwillingness on the part of health workers to develop actions that can strengthen agroecology, but rather a lack of information to understand what it means to produce in a different way. After all, you can’t defend what you don’t know. In addition, the transformations that the state is facing and the weakening of public policies may be a conditioning factor for the difficulty of using technical and theoretical tools and human, physical and financial resources to promote policies other than those focused on disease-centred care and the medicalization of life. Political will and solid institutions would be needed to combat vertically instituted, technicist, chemical-dependent and medical-centered care and institute new ways of caring for life.

\(^h\) A Fiocruz project in the state of Ceará that aims to develop Popular Surveillance of Health, Environment and Work (VPSAT) with a focus on vulnerable populations, based on a “participatory” approach that links community organizations with public health services and research institutions at a national level.
Thus, the implementation of Popular Health Surveillance in relation to pesticides needs to be built from each territory, according to its singularities, in addition to social participation, from the understanding of the people involved, that is, from the perspective of those who are exposed, so that there is problematization and clues for the formulation of local policies. Furthermore, much more than informing or educating, it is necessary to collectively build knowledge about the risks of pesticides, as well as the urgency of thinking about alternatives that are environmentally sustainable and economically viable, generating autonomy for the people involved. To this end, the political and problematizing concept of Popular Health Education becomes fundamental in strengthening people’s autonomy and in the incessant search for the realization of human rights, especially the right to a dignified life. Thus, for there to be a sustainable and autonomous environment, it also needs to be a promoter of health and socio-environmental justice.

The daily realities, perceived and experienced, when reflected in health, pose various problems, which are, above all, the expression of the systematic loss of rights as a result of exclusionary policies, strengthened by neoliberalism. Health practices form part of the “landscape” in which populations are affected by environmental degradation, air pollution, waste, intense noise, soil and food contamination by pesticides, flooding, the presence of disease vectors, cultural losses and various representations that indicate the presence of environmental injustices.

Socio-spatial practices make it possible to perceive the social inequalities to which significant portions of the Brazilian population are subjected. The bonds of sociability allow for the introduction of new cultural patterns and habits, which directly interfere in the dimensions of access to environmental sanitation, changes in dietary patterns, housing and lifestyle. When the uses that different social groups try to establish in a given area do not converge, conflicts can arise. The idea of overlapping territories allows us to contemplate territorial conflicts more effectively, where social inequalities become evident and living conditions between residents of the same city are differentiated, with different ways of living in the city. In primary health care, the discussion on the processes of territorialization of health points to the relationship between collective health and territory and, from a historical perspective, seeks to analyze, on the one hand, how the links between human beings and territories have been influenced by representations of the phenomena of health and disease and, on the other, how the organization and management of Public Health have conditioned territorial configurations and have been conditioned by them.

The construction and viability of health promotion spaces and practices need to be geared towards increasing and maintaining dialogue, interculturality, mutual respect between academic and regulatory visions and the context and aspirations of the population of each territory, and not only telling but also constructing their stories in a meaningful way, together with other communities in processes of emancipation of society as a whole. Therefore, the health model is thought out from each territory, based on a strategic and dialogical relationship between different people, be they health workers and/or researchers, and the population, governed by mutual recognition and
respect, based on equal rights and recognition of social characteristics and socially organized strategic goals. In this sense, Popular Surveillance involves participatory monitoring based on the people’s recognition of their territory, i.e., the people’s view, carried out by the community on the processes they experience on a daily basis, on which their well-being, their democratic functioning and the reproduction of their material, cultural and human achievements depend.12

Marcelo Firpo de Souza Porto7 reflections on whether surveillance can be emancipatory, give examples of innovative experiences that mainly include the articulation of social movements and populations who think about the health model from their territories of life. The author also points out that in the 2010s, during the President Lula administration, there were financial incentives from the Ministry of Health to develop a surveillance proposal in specific territories, in which a debate was held via Popular Surveillance, reflecting on and analyzing living conditions, health and its socio-environmental determinants.7 It should also be pointed out that, despite the strategies for participation and democratic management of the SUS, Collective Health has, until recently, kept the discussion of knowledge production and surveillance actions as attributes of specialist professionals.

The process as a result: What are we reaping from the struggles?

The meetings held with municipal managers throughout the process of struggling and confronting aerial spraying have materialized a stage in the implementation of the Surveillance Plan, as it strengthens collective action and communication between state agents, researchers and settlers. The work process set up represents a stage in the implementation of the Plan in collaboration with social agents in struggle. Representatives of local social movements, state managers, researchers, the media and supporters were present during the construction of the Plan. The aim of the agendas was to present the National Policy for the Population of the Countryside, Forests and Waters, expose the problem related to the use of pesticides and the need for assertive decision-making about them. The needs of local communities identified in the workshops were pointed out, such as: the need for ongoing training for municipal SUS workers to act in situations of exposure to pesticides and the creation of a protocol for the care of exposed people. They also reaffirmed the need for intersectoral coordination to deal with the demands presented. This subsequently triggered a dialog between managers from different departments in the municipality (Environment Department, Agriculture Department, Education Department).

On the basis of the demands presented, the Rio Grande do Sul State Health Department (SES-RS), at an opportune moment when new employees were coming on board, allocated a professional from the Equity Promotion Policies Division of the Primary Health Care Department to start working with rural, forest and water populations. The initial focus of the professional’s work will be to reactivate the State Technical Committee
for the Health of the Rural, Forest and Water Population, a participatory management body, and to define, together with the State Center for Health Surveillance (CEVS), also part of the SES-RS, strategies for surveillance and training of the health network. In the municipality, an initial proposal for a protocol was presented, based on existing protocols at national level, demonstrating the recognition of the need for a specific health care model for this population on the municipal agenda.

The toiling of the agroecological producer families in Nova Santa Rita and the people who support them is for the urgent and effective implementation of the Aerial Spraying Exclusion Zone in the buffer area of the Jacuí River Delta State Park. The measure guarantees the poison-free production of settled people in the region’s towns and the quality of life of the urban population, as well as protecting the environment, especially the water resources that supply the residents and are used for agriculture. These families are demanding that the competent bodies draw up a new proposal that includes an effective protection polygon, establishing a zone free of aerial pesticide spraying in the region. Park buffer zones should have compatible activities, such as agroecology and organic production, guaranteeing human, animal and environmental health, which has not been the case.

Further considerations

The experience that based the present report was built on the struggle for life in the Nova Santa Rita territory, based on the development of integrated prevention and promotion actions, based on the territory’s conception of health, with the people who live there, together with researchers and human rights activists, organizing an Action Plan to tackle the health problems listed as priorities by the community. This experience can be considered as an action to strengthen and reinvent health surveillance by the population, therefore Popular Health Surveillance, transgressing the fragmented boundaries of the hegemony of knowledge, following paths that prioritize and tackle the problems of their living territory, a territory that has been pulsating and struggling since it was taken over.

Farmers in Nova Santa Rita aim for the security of producing food without poison and living without the risk of contamination from the pesticides that are dropped by the planes that fly over their heads. Agroecology is an alternative to the risks posed by pesticides, and the role of the health sector in the agroecological movement is to strengthen and resist the harmful effects of pesticides. It reinforces the need to structure new conceptual and methodological bases for health surveillance that enable territorialized strategies and participatory methods in the territories, which imply the autonomy of the population and avoid segregation and exclusion in the processes, incorporating the plurality of knowledge, as well as the economic, social, cultural and spiritual dimensions.

The current world scenario, in which the neoliberal productivist model promotes attitudes and behaviors on the part of governments and markets that are not compatible with the urgent need to preserve life, is a challenge that seems unsolvable. Ensuring that reflection produces effective action is extremely urgent when it comes to preserving the
environment, its beings and the earth. Understanding that we are nature is fundamental
to a radicalization that involves spreading the creative power of life, of enchantment, of
building ways of living, of good living, in a collective way, where all people, their knowledge
and cultures are valued. A transgression that is guided by the healthy and sustainable
territories that pulsate and produce tools for the continuity of life on this planet.

In this sense, the experience of this settlement, which makes popular power
pulsate and is guided by solidarity, strengthens the recognition of the potential
of territories to deal with attacks on life, through collective action, practices in
dialogue with biodiversity and the accumulation of popular learning and experiences.
It demonstrates resistance to the domination of the neoliberal capitalist logic of
production and life. At the same time, it opens up gaps in this society in crisis,
constituting a territory of (re)existence in the present deep crisis of civilization.
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Em todo o território nacional tem sido possível identificar variadas iniciativas de protagonismo popular na perspectiva da promoção e da proteção da vida, em busca de territórios saudáveis e sustentáveis. Este texto objetiva descrever a experiência de um processo histórico, dinâmico e permanente de luta e mobilização social contra a violação de direitos fundamentais por saúde e sustentabilidade ambiental, no Assentamento Santa Rita de Cásia II, em Nova Santa Rita, Rio Grande do Sul, Brasil. Essa experiência pode ser considerada como uma ação de fortalecimento e reinvenção da vigilância em saúde pela população, portanto uma Vigilância Popular em Saúde, transgredindo fronteiras fragmentadoras da hegemonia dos saberes, percorrendo caminhos que priorizam e enfrentam os problemas do seu território vivo, território que pulsa e luta desde sua retomada.


En todo el territorio nacional ha sido posible identificar variadas iniciativas de protagonismo popular desde la perspectiva de la promoción y protección de la vida, buscando territorios saludables y sostenibles. El objetivo de este texto es describir la experiencia de un proceso histórico, dinámico y permanente de lucha y movilización social contra la violación de derechos fundamentales de salud y sostenibilidad ambiental, en el Asentamiento Santa Rita de Cásia II, en Nova Santa Rita, Río Grande do Sul, Brasil. Esa experiencia puede considerarse como acción de fortalecimiento y reinvenición de la vigilancia en salud por parte de la población; por lo tanto, una Vigilancia Popular en Salud, transgrediendo fronteras de fragmentación de la hegemonía de los saberes, recorriendo caminos que priorizan y enfrentan los problemas de su territorio vivo, territorio que pulsa y lucha desde su retomada.