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REVIEW

Popular health surveillance practices in Brazil: scoping review

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Abstract *This study aims to identify the Popular Health Surveillance practices in Brazil, described in the scientific literature. A scoping review was carried out in the LILACS, MEDLINE, MEDCARIB, PAHO-IRIS, WHOLIS, and Scopus databases from the CAPES Periodical Portal in May 2022. Studies that clearly addressed community/population protagonism in a health surveillance experience were included in the review, with a total of 6 studies. Three categories resulted from the analysis: 1. Cues for Popular Surveillance in Health; 2. Fundamental principles of Popular Surveillance; and, 3. Pandemic and Popular Protagonism. The studies address experiences of Popular Surveillance with different actions of population groups for the production of health that experience the different risks and impacts of the productive processes in the environment, in health and in their ways of life. It highlights the importance of strengthening the Popular Surveillance representation based on the articulation of knowledge of the actors involved with data production, health promotion and health care in the territories.*

Key words *Community Participation, Health Surveillance, Collective Health, Popular Health Surveillance*

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Introduction

The National Health Surveillance Policy (PNVS, *Política Nacional de Vigilância em Saúde*) was instituted after the 1st National Health Surveillance Conference, in 2018, when guidelines and proposals for its consolidation were incorporated[1]. This conference took place 30 years after the inception of the Brazilian Unified Health System (SUS, *Sistema Único de Saúde*), which may indicate how this area used to be – or still is – little permeable to popular participation, even anchored in democracy. The consolidation of the Health Surveillance (HS) concept is the result of a non-linear history, with different conceptions, full of theoretical and political disputes, historical and social relations of forces, with their multiple determined processes[2-5]. Its implementation in the SUS also shows several challenges, from operational, financial, to political ones[2-5]. Also, the obstacles to the implementation of the PNVS remain a constant challenge, especially in relation to the transfer of financial resources to the local level, which influences even the performance of its actions and the integrality of health care[3,5].

HS encompasses several areas of knowledge and addresses different topics, such as politics, planning, territorialization, epidemiology, health-disease process, living conditions, health status of populations, environment and work process[1-5]. The carrying out of Health Surveillance is a continuous process, systematized from the collection, consolidation and analysis of data that aim at constant planning and the implementation of actions that guide the life of society[5]. In Brazil, Health Surveillance has been distributed among epidemiological, environmental, sanitary and worker's health[1,3,4].

Over time, HS has evolved from its perspective of centralization on people to the diseases and, lately, to health risks[2]; however, even with several advances and changes in its trajectory, it still has limits regarding an integrated Surveillance to the territories that promotes and/or encourages encounters with different realities and enhances local health practices. The perpetuated model of HS practices in Brazil keeps on appropriating people's knowledge, bodies and lives, often disregarding ancestral traditions, practices and experiences of the territories. It determines social processes and relations, prescribes pathways, and normalizes bodies, turning them into mere numbers to indicate general actions without understanding everyday relationships. It very often circulates between authoritarianism and paternalism. Vulnerable populations, especially traditional peoples (indigenous peoples, *quilombolas*, artisanal fishermen, agricultural workers and family farmers), have diverse knowledges and countless practices that are disregarded by the conceptions and actions of health surveillance and promotion[6]. At the same time, Popular Health Surveillance comprises the articulation of knowledges and practices, the power of territories, the processes experienced in people's lives and the understanding of the experience of other practices and ways of caring, healing, and existing. From this perspective, it is aligned with another set of potentially revolutionary principles, but still little explored within the scope of the SUS, such as those of Popular Education in Health.

Popular Health Surveillance practices are about the construction of science, whether in the identification of conditions and the social determination of health in the territory and environment, or in the acceptance of opinions, thoughts, belongings, memories of different existences, or in the event of relationships between people, populations and cultures. Exactly for this reason, other HS configurations need to be considered. Perhaps another way of producing health centered on popular protagonism can be constructed, based on practices experienced collectively in the territories. In this sense, the HS perspective has focused on a policy of developmental modernization of the production process and the popular alternatives are in line with a reterritorialization of Surveillance, therefore, a Popular Surveillance in Health.

Pablo Alves[7] (p.88), when coining the term "Popular Health Surveillance", states that it promotes dialogical and relational actions that have "the liberating potential from the ideological oppression of the civilization of capital", in such a way that allows challenging the actions of a Government that makes subjects vulnerable. He points out that Popular Surveillance is about Social Determination, anchored as a "socio-historical condition, enhanced by cultural, gender, ethnic and subjectivity theories"[7](p.190).

It is noteworthy that the perspectives of Health Surveillance practices are placed in such a way that they become polarized. On the one hand, they start from the operationalization of a hegemonic model of health and disease centered on vertical actions of disease control; on the other hand, they are based on the principles of Collective Health, conceiving HS as a promoter of social transformation and fighting social

Ciência & Saúde Coletiva, 28(9):2553-2564, 2023

inequalities, intervening on the social determinants of health, prioritizing action in territories and delimited populations, with emphasis on intersectoral actions of health promotion, prevention of risks and injuries in articulation with the population's health needs[6-8].

Therefore, Popular Health Surveillance has been translated into surveillance practices that privilege the protagonism of communities and social movements in the field of public health, which may involve different degrees of action by the Government, academia and health workers, provided that they recognize popular actors and knowledge and become involved in the participatory processes of a dialogical nature[6,8].

Popular Health Surveillance brings the challenge of looking at the space where we live, collectively, considering different ways of promoting health, producing care and carrying out surveillance. It also goes in the direction of shared and horizontalized dialogue, which respects knowledges arising from experiences. It appears as a strategy of immersion in territories to act on social determination in favor of life promotion, in a participatory and engaged manner[8,9], in addition to being an instrument for the production of knowledge and emancipatory health promotion[10]. It consists in collective and popular actions, aiming to promote health in the territory through surveillance practices that favor the protagonism of communities, organizations and social movements[6,9]. Therefore, it constitutes one or more ways for the community to take care of the health of the community itself, within its territory, thus strengthening local health institutions and contributing to the defense of its knowledges, its means and ways of life.

Aiming to reflect on the conception of Popular Health Surveillance, one must consider the meeting of technical-scientific knowledges with popular ones regarding issues related to health risks[11], as well as the knowledges, actions and health care to carry out the surveillance. Hence, when using the expression Popular Surveillance in/of Health, emphasizing that there is yet no concept formed in the literature about this terminology, we come across some inspiring principles that are identified in several experiences carried out in Brazil, mainly in dialogue and construction of knowledges collectively, together with the communities, considering the territories, their needs and possibilities to solve the encountered problems, in a horizontal, participatory, technical, democratic and scientifically qualified way[6,7,9-11]. Therefore, the aim of this scoping review is to identify the practices of Popular Health Surveillance in Brazil, described in the scientific literature.

Method

A scoping review study was carried out, whose research protocol was registered in the Open Science Framework (https://osf.io/yf8nv/), under DOI: 10.17605/OSF.IO/YF8NV, developed and structured based on the recommendations of the PRISMA ScR10 International Guide and the PRISMA[12] Checklist.

The research question was constructed using the Population, Concept and Context (PCC) strategy, as suggested by the Joanna Briggs Institute[13] protocol: P - population (community); C - concept (popular health surveillance practice); C - context (Brazil). Thus, the following research question was created: What are the practices of popular health surveillance of the territories, in Brazil, described in the scientific literature?

Data collection was carried out in May 2022. Searches were carried out in the following databases: Latin American and Caribbean Literature in Health Sciences (LILACS), MEDLINE, MEDCARIB, PAHO-IRIS, WHOLIS, Scopus and the CAPES Journal Portal, with open access peer-reviewed journals, DOAJ, ROAD, Latindex, SciELO Brasil, Academic Search Premier.

The following language filters were used: articles in Portuguese, English or Spanish – and in the case of BVS and EBSCOhost, a full text filter was also used. With the exception of the BVS, the databases were accessed through the Journal Portal of the Coordination for the Improvement of Higher Education Personnel (CAPES), based on identification through the Federated Academic Community (CAFe, *Comunidade Acadêmica Federada*). The choice of databases was made to ensure a greater range of indexed journals in the health area.

Two alternative terms of Health Sciences Descriptors (DeCS) were selected: surveillance in Health, Health surveillance and DeCS "community participation". All these terms were searched for the equivalent ones in English and Spanish. The search strategy followed the definition of each corresponding database. The Boolean operator "AND" and "OR" were used with the following combination: "surveillance in Health" OR "Health surveillance" AND "community participation".

The five mandatory methodological steps of the scoping review were followed: (1) identification of the research question; (2) identification of

relevant studies; (3) selection of studies; (4) data mapping; (5) collection, summary and reporting of results; and, (6) consultation with specialists. The identified studies, after the language and full text filters were applied, were exported, organized and stored in Excel spreadsheets for the identification of duplicates, study selection, inclusion or exclusion.

During the search strategies, the articles were first selected by title by a single researcher experienced in reviews. Subsequently, a selection was independently carried out through the analysis of the titles and abstracts, by two researchers. After that, a consensus was reached on the articles with potential relevance and the evaluation of the full-text articles was performed by the researchers for eligibility.

The pre-established inclusion criteria comprised: studies that clearly addressed community/population protagonism in a health surveillance experience, primary studies and experience reports on the topic, carried out in Brazil and published in scientific journals in Portuguese, Spanish or English, with a full text. No time limits were established. Duplicate studies, theses, dissertations, monographic works, reports from symposiums or conferences, technical manuals and books were excluded.

Initially considering the search by title, abstract and descriptors, 1,448 and 810 publications were found in the BVS and CAPES databases, respectively, totaling 2,258 articles. Of these, 268 were excluded because they were duplicates, resulting in 1,990 articles. After reading the titles and abstracts, 1,964 articles were excluded, as they were not related to the topic of interest, as they did not address discussions on HS or Popular Health Surveillance. Subsequently, the 33 pre-selected studies were read in full, after which 27 were excluded because they did not fall within the scope of the study, that is, because they did not show discussions related to popular surveillance in health with approaches that did not contemplate the community/population protagonism in a Health Surveillance experience. Therefore, six articles remained, which were included in the review, as they met the eligibility criteria and answered the research question, as shown in Figure 1.

It is noteworthy that, in each publication, the relevant data were initially identified and extracted, such as: authors, title, year of publication, journal, database, status of the experience, access link, abstract, type of study, objectives, methodology, main results, study considerations and HS concept. This instrument allowed data to be analyzed using descriptive statistics.

For the compilation and communication of the results, a table with the main characteristics of the studies was prepared, aiming to present an overview of all the material. In addition to a numerical description of the results (with data quantifying the studies per database, number of articles according to the status of the experience and methodology), a thematic description was carried out based on the creation of three categories, which were organized according to the nature of the studies.

Results and discussion

After careful and in-depth reading of the full texts, the final sample consisted of six articles, included in the discussion of this review, four from the LILACS and MEDLINE databases[14,17-19], one from SciELO Brazil[16] and one from LILACS[15]. Of these articles, all studies were published in Portuguese, with the first one being published in 1998[12] and the last ones in 2021[11,14,15].

As this is an inclusion criterion, all studies were carried out in Brazil. Therefore, there was a predominance of experiences in the northeast (Ceará, Rio Grande do Norte, Maranhão)[14,17,18] and southeast regions of the country (São Paulo, Minas Gerais and Rio de Janeiro)[16,18,19] and one article that addressed different regions of Brazil[19].

Among the selected articles, all used a qualitative methodology, with a predominance of four participant research studies[14,15,18,19] and two participatory action-research ones[16,17]. The characteristics of the studies are depicted in Chart 1. Chart 2, available at https://osf.io/yf8nv/, details the objectives of the studies, the used methodologies, the main results and the addressed surveillance concept.

After the reading of the selected articles, literature mapping and identifying Popular Surveillance experiences within the scope of scientific production, the findings will be presented as three categories: 1. Cues for Popular Surveillance in Health[14-19]; 2. Fundamental principles of Popular Surveillance[14-19]; and, 3. Pandemic and Popular Protagonism[15,19].

Cues for Popular Surveillance in Health

Among the strategies reported in the studies aimed at inspiring the perspective of Popular Surveillance in Health, individual and collective

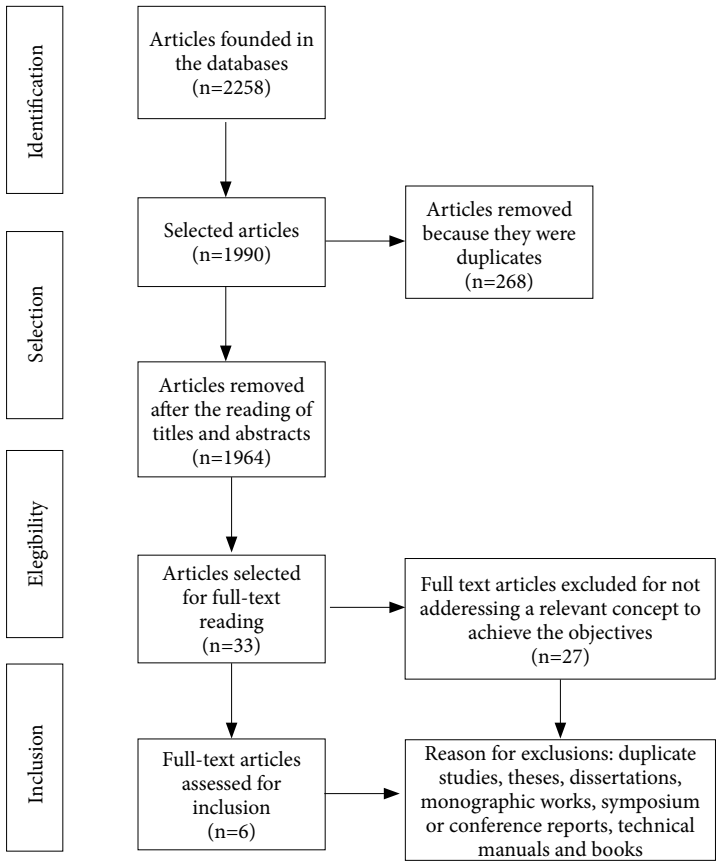

Figure 1. Flowchart, according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR) criteria.

Source: Authors (2022).

initiatives were identified to strengthen solidarity networks[14-19]; coping community actions with articulated or independent partnerships between residents, social organizations, with the public and/or private sector[14-19]; diagnosis of/with the territory[14-19]; popular monitoring and data production by the population[14-19]; recognition of practices and dialogue with popular knowledges[14-19], and listening process together with the territory[14-19]. The construction of the Popular Surveillance concept, like the conception of Health Surveillance in Brazil, permeates theoretical, political and tension conflicts, as well as a construction through multiple paths[2-6].

The shared production of knowledge with residents and community organizations about the realities of their territories demanded dialogic methodologies[6,8]. Popular Surveillance is in line with the idea created by Victor Vincent Valla, in the 1990s, of a "civil health surveillance"[20]. The discussions of HS vertical practices[5,8,21], building reflections for actions that dialogue with the populations, have been part of this historical trajectory. In this sense, it is possible to consider the concept of Popular Surveillance as a kind of "civil ombudsman" for health[20], in which, based on the population's experience, professional and popular knowledge are united, problematized in the light of living conditions and the social conflicts of that community[22]. Therefore, the solidarity networks (community and institutional), by proposing collective actions to face the health needs in the context of each territory, while recognizing the complexity of the social, historical, economic, cultural and environmental dimensions contribute to the processes of territorialization in health[14-19]. It is

Chart 1. Characteristics of the selected studies, according to title, year, database and journal of publication and status of the study (n=6).

Title	Year	Database	Journal	Study location
Enfrentamento de problemas que impactam na saúde de uma comunidade socialmente vulnerável sob a ótica dos moradores[14]	2019	LILACS and MEDLINE	Ciência e Saúde Coletiva	Ceará
Vulnerabilidade e resposta social à pandemia de Covid-19 em territórios metropolitanos de São Paulo e da Baixada Santista, SP, Brasil[15]	2021	LILACS	Interface (Botucatu)	São Paulo
Eu? Eu estou aí, compondo o mundo. Uma experiência de controle de endemia, pesquisa e participação popular vivida em Cansanção, Minas Gerais, Brasil[16]	1998	SciELO Brazil	Cadernos de Saúde Pública	Minas Gerais
Necessidades de saúde de camponeses em conflito ambiental frente à instalação de Perímetros Irrigados[17]	2018	LILACS and MEDLINE	Ciência e Saúde Coletiva	Rio Grande do Norte
Vigilância popular ambiental e siderurgia: as experiências de Piquiá de Baixo (MA) e Santa Cruz (RJ), Brasil[18]	2021	LILACS and MEDLINE	Ciência e Saúde Coletiva	Maranhão and Rio de Janeiro
Vigilância popular da saúde nas comunidades pesqueiras tradicionais e ecologia dos saberes no enfrentamento à COVID-19[19]	2021	LILACS and MEDLINE	Ciência e Saúde Coletiva	Different regions of Brazil

Source: Authors (2022).

highlighted that territorialization in health is "the starting point for the triggering of the health surveillance planning process"[2](p.20).

It is reiterated that one of the central pillars of the Brazilian health reform is popular participation, understanding that without participation there is no transformation of health conditions[23]. Thus, Popular Surveillance in Health counts on the proposal of looking at and intervening with the Government, promoting the participation of the population as well as the appropriation of technical-scientific knowledge in the dialogue with popular knowledges and perceptions[6,7,15,16]. Several popular and ancestral knowledges that are imbued in other conceptions, philosophies, relationships with nature and the cosmos need a space for listening, dialogue and valorization and can be strengthened from Popular Surveillance processes that involve the territories, their populations, in fact with the participation and protagonism of their potentialities and difficulties. In line with Firpo[8], in which it is necessary to overcome such limits and understand that this "does not imply, as many can imagine, an abandonment of the achievements of science, of many of its technologies, a kind of return to primitive barbarism feared by modern rationality"(p.3157). It is, therefore, about decolonizing surveillance in health and radically promoting horizontal dialogues, especially with other social relations, "other economies, other ways of knowing, feeling, working and producing"[8](p.3158).

The practice of Popular Surveillance in Health is organized based on a methodology that allows the organization of the needs of what is important for each territory, mainly with the creation of the Participatory Diagnosis, which is a diagnosis of the experienced reality aiming at proposing strategies to improve living conditions[14-19]. It should be noted that, in the study by Izautina de Souza *et al.*[14], the residents participating in the Participatory Diagnosis were indicated by the Community Health Agents (CHAs) of the neighborhood. Rosinha Borges Dias[16] points out that the residents' participation in the data survey from their reality is essential. This process – of the shared construction of knowledge – is debated by Paulo Freire in the popular education approach, which collects resources from practices in favor of transformative social mobilization[21,24]. This movement also implies respect for the population's right to choose and decide on their care needs and priorities, challenging a participatory-propositional and not simply an executive role in health actions[25], which was identified in all selected studies.

The health needs arising from the territories, as well as the responses to these needs, is where

the dialogue about Popular Surveillance should permeate, according to studies[14-19]. For them, the dialogue between the subjects, in the group discussions, promoted the sharing of experiences that contributed to the collective construction of a critical look at the context of the work-environment-health production relations and the health needs in the assessed territory. That said, to meet the users' demands, envisioning the guarantee of comprehensive actions, it was necessary to overcome the valorization of the creation of procedures and norms to advance a reflective, continuous and effective approach, which allows helping to build more directed strategies[9], often not contemplated in vertically established programs, as it disregards that the object of attention must understand the subject and their life context[25]. It is also noteworthy that the set of communication devices identified in a territory opens up possibilities to build different types of mobilization and to enhance the local capacity to collectively promote improvements in their living conditions and health status [23].

Fundamental principles of Popular Surveillance

Aiming to build the principles for Popular Surveillance, it becomes crucial to outline ways of understanding, from this perspective what stresses the conformation of institutionalized Surveillance, which on several occasions is conditioned to norms and does not follow the procedures of the populations' territories. In this sense, it is necessary to recognize and reinforce the contributions of HS to the SUS, but also to seek alternatives, mainly popular and community-based ones, that can represent alternatives to the continuous challenges that the populations' health needs demand[5].

All the analyzed articles show the people's mobilization to concrete events, as a kind of "ethics of the present time", arising from the sense of reality and the concreteness of the experience[14-19]. Corroborating some notes inspired by the work of Jorge Larrosa[26], therefore, it is important to see territorial experiences as an emotional event, which affects that community, with the people of that place, something different from everyday life, to identify the events that modify the way of walking, the way of following and seeing certain situations. In this sense, Larrosa[26] states that "the experience is increasingly rare, due to lack of time. Everything that happens, happens too quickly, increasingly faster"(p.23). Perhaps, in this sense, going against the usual rush and velocity, it is important to hear and see community struggle practices in a collective perspective, in a journey of care produced together with those who live in that place due to the time-space-time that circulates in relation to daily life. Here, the importance of local actions built during life events is emphasized and not just with information coming from distant sectors of people's lives, as in the case of prescriptive information from Health Surveillance or even that of the suppression of life by the indicators arising from commonly used epidemiological models.

The hegemonic model of Health Surveillance disregards popular knowledge as legitimate knowledge useful to health. Going in the opposite direction, all studies bring participatory, dialogic and knowledge-sharing actions[14-19]. They also indicate that a democratic HS program is one that carefully listens to, correctly informs, actively consults, and makes joint decisions with the population, that is, effectively establishes the incorporation of popular participation and triggers emancipatory processes[8,16,18,19,21,27].

Popular Health Surveillance practices in Brazil, motivated by popular knowledge and practices, demonstrate the capacity of communities to rethink and reinvent health care strategies, towards the collective management of disease prevention and identification of risks in their territories. Practices with different forms of popular protagonism for the production of health in different locations in Brazil were identified in all selected articles[14-19]. It is noteworthy that, in the absence of public power, territories and social movements are concerned with strategies to reduce risks and fight against diseases, such as the COVID-19 pandemic[6,15,19,21]. These strategies aim at providing support or resources to face vulnerabilities, through knowledge of the reality, where understanding is achieved not only with facts and data "taken by themselves", but based on the perception and sensitivity of the population about the context in which one lives[19,21,28].

The studies also point out that popular protagonism becomes effective with the understanding of people as their multiplier role, as agents of change and multipliers of knowledge, influencing their territories and beyond, capable of participating in a more qualified way, from the technical point of view, in public decision-making processes[14-19]. Considering this perspective, in an approach by Fernandes *et al.*[23], which proposes examining health practices from some communication processes, we portray the importance

of empowering populations regarding decisions taken in the Health Surveillance field, potentiating responses, therefore, not treating people as spectators of a narrative constructed by science[8], by governments and the media, but rather providing the identification and inclusion of these actors, whose power to do and act socially yield mobilization practices in the territory[21]. Therefore, as a fundamental principle, Popular Surveillance seeks to enhance the autonomous processes that occur in the territories.

Pandemic and Popular Protagonism

The COVID-19 pandemic could not fail to be present in Popular Health Surveillance practices in Brazil, mainly due to the lack of a guiding national policy, which would allow adequate prevention, with equitable conditions of social distancing for the entire population; therefore, the different populations, especially the most vulnerable ones, needed self-organization for the prevention and control of disease transmissibility in their territories. Two studies[15,19] analyzed vulnerabilities and coping methods regarding the pandemic in territories in Brazil. Studies have shown the protagonism of historically invisible populations, such as fishermen/fisherwomen[19] and black women[15]. In one of the territories, upon realizing that families were facing difficulties due to unemployment, a group of women organized themselves for actions in solidarity networks, articulating the supply of basic food and hygiene baskets, in addition to information on coronavirus prevention[15].

Also noteworthy is the protagonism seen in the study on fishing communities[19], which analyzed the experience of Popular Surveillance among fishermen and fisherwomen, in the face of the Public Health Emergency of International Importance, caused by COVID-19. Artisanal fishing workers, while dialoguing with Brazilian leaders and academics, created an observatory on the impacts of the pandemic on fishing communities, through the production of newsletters and daily sharing in a group using an instant messaging application. In Popular Surveillance, the community can generate and analyze its own data and thus play a leading role through social technologies and community monitoring[6,7,10,21]. It is an experience that used popular knowledge, as well as involving different actors involved in the dialogical, participatory and decision-making processes when facing the challenges caused by the pandemic[19]. The dialogue between technical, scientific and popular knowledges materialized in the production of Popular Surveillance reports on COVID-19[6,19].

The Observatory established itself as a space for articulating, monitoring and denouncing, including fake news that caused misinformation, also contributing to the mobilization of traditional peoples and fishing territories[19]. Also, the Surveillance carried out by the protagonism of communities when living with COVID-19 denounced inequities in health, socio-environmental conflicts and institutional racism; demonstrated how to face the health crisis based on knowledge produced during political and social struggles; triggered emancipatory processes through community initiatives and collective and solidary actions; potentiated the individuals' protagonism and social participation; as well as favoring political organization, strengthening communities and their territories[15,19]. Corroborating the strength of the communities' actions through the collectivity in actions, Paulo Freire stresses that individual autonomy is not enough for the radical political transformations necessary for the Brazilian society[24]. Dialoguing with this perspective, Popular Surveillance presents itself as an opportune method to strengthen the population's autonomy, aiming at exercising citizenship, supporting and demanding from the governments the identification of diseases, based on a process of community self-awareness and the diagnosis of the health situation in a territory[15,19,21,29].

Popular Surveillance in Health is a subject still little explored in research and practices focused on health in Brazil. Fewer than a dozen studies can be found in a quick search at the databases. This is a topic under construction whose theoretical development is still incipient. Thus, Popular Surveillance in Health is not organized with a well-defined concept, but as a social need that emerges from the criticism of formal models of Health Surveillance[6,11,21]. Hence, either by expanding the possibilities of Health Surveillance beyond traditional work, or by the popular protagonism in the production of information and decision-making, Popular Surveillance is configured more as a social desire, as well as a complementary proposal to Health Surveillance, aiming at becoming a collective, emancipatory practice that meets the realities experienced in the territories where the populations' life takes place. Studies are necessary that can contribute to the structure of this practice, which, in addition to being infrequently reported in scientific articles, can be in line with what is traditionally performed. It is

Ciência & Saúde Coletiva, 28(9):2553-2564, 2023

a counter-hegemonic epistemological approach, which adds to the scientific repertoire with experiences that are different from those already commonly explored, expanding the spectrum and spaces of production, training and action in health.

It should also be noted that there is no pre-established standard for Health Surveillance activities, as the organization strategies must occur according to the evidenced health situation, as well as the context of the identified community, therefore assuming different configurations[4-6,21]. It should also be noted that community participation already occurs in Surveillance, as described in the National Policy on Health Surveillance[1]; however, there is a longing for popular protagonism, as experiences show that health services, especially those in the field of Surveillance, have difficulties in valuing democratic processes[2,21,30]. Therefore, what is important is that health actions have as reference the interests of users and populations in their realities, not in a fragmented manner, but rather resulting from a local listening with active participation, considering social, political, cultural, and environmental determinations, among others[2,3,5,6,21]. In relation to this, Franco Netto *et al.*[4] point out that it is necessary to radicalize the integration of HS actions, overcoming their divisions, seeking an integrated action among themselves, together with the assistance network and in accordance with popular participation, their desires and problems for the production of healthy and sustainable territories.

Additionally, Jorge *et al.*[21] state that Popular Surveillance in Health is not linear and "points directly to immediate and urgent needs; it is spontaneous and horizontal, and challenges the institutional, centralized, hierarchical, and vertical surveillance"[21](p.400). It is reiterated that Popular Surveillance in Health does not aim at replacing the role of the Government, but rather, stressing it, so that it performs its role in an articulated manner with the populations, especially the vulnerable ones in contexts of socio-environmental conflicts, so that access to more reliable, sensitive and contextualized information is viable, which may favor and expand dialogue with different groups[6,21,28,29]. Additionally, and from the perspective of building a rationality that goes beyond the traditional Health Surveillance[8,21], it is understood that the surveillance carried out from the territories announces and denounces possible health risks, as it guides towards knowledges, actions and care in health, based on the protagonism of the communities.

Final considerations

This review provides an overview of what has been published to date on the subject of Popular Surveillance in Health in Brazil. Six studies were identified and selected, which show experiences of Popular Surveillance in Health in different contexts and based on initiatives that involve different actors and territories and privilege the protagonism of communities, organizations and social movements. The studies bring experiences with different population groups and vulnerable populations, such as fishing communities, black and rural women, and peripheral groups, who experience the many risks and impacts of production processes on the environment, health and their way of life, driven mainly by economic, sociopolitical and cultural aspects in which they are inserted. There are significant strategy approaches aimed at meeting the needs of populations and the COVID-19 pandemic, such as data control, production and monitoring of risks and diseases in the territories, using tools to understand health and disease processes and act in prevention. The collective networks of solidarity and popular self-organization were the drivers of surveillance actions on health and the environment in different contexts, from atmospheric pollution, vector control, to the current syndemic. It is important to emphasize that, although the results observed in the selected articles are relevant, especially to better understand and know the trajectory of Popular Surveillance in Health in Brazil, such results do not show robust evidence regarding the described practices.

At the same time, this study shows that dialogue is essential, both with the different knowledge of the populations and with the territory, because that is where life happens and where the realities and difficulties are known. The popular protagonism evidenced in all studies indicates that it is in the self-managed organizations coming from the populations that extended care and prevention are promoted, which include all dimensions of life and are in harmony with nature. In this sense, it is the role of health services to strengthen participatory relationships that are oriented towards working together with the territory, with dialogic articulation and pedagogical principles of learning that permeate sensitive and attentive listening.

Based on the results of this study, it is possible to indicate that Popular Surveillance in Health needs to be substantially a pedagogical exercise in building citizenship for all people involved

in the work, health and their territory, favoring the discovery of collective actions that can bring potential contributions to the detection and prevention of diseases and injuries, to life promotion and the construction of Good Living. Given the epistemological value and the political and social dimension of the topic, the importance of strengthening actions in Collective Health and Popular Surveillance in Health is highlighted, as well as the very concept of Popular Surveillance, based on the articulation of different knowledges and practices with health production, promotion and care in the territories. In this sense, it is expected that the present research can contribute to a greater understanding of what Popular Surveillance in Health is in Brazil, its possibilities and current weaknesses.

It is worth mentioning that collective and integrated actions allow monitoring health problems and their determinants, organize interventions to cope with them and evaluate the achieved results. Therefore, Popular Surveillance in Health presents itself as a movement, a practice and a popular knowledge under the process of construction. As a movement, it constitutes a continuous and organized collective effort that focuses on some aspect of social change based on the mobilization of actors with different political forces. As a practice, it announces itself through participatory actions that highlight what it promotes and what threatens life in the territories, indicating new spaces, collective struggles and perspectives to transform health conditions. As a knowledge, it develops through the dialogues and experiences of the population, producing knowledges and important information that enable the decision-making processes, the direction of actions and the process of territorialization of health.

The biggest limitation of this study concerns, as it is a scoping review, the number of identified articles, demonstrating the scarcity of texts on the topic of Popular Health Surveillance with an emphasis on community/popular protagonism from the perspective of Surveillance in Health, in addition to the fact that all studies were carried out in Brazil, which may have limited the sample. About this fact, a reflection that should be made is the lack of descriptors such as "Popular Surveillance in/of Health" and "Popular Surveillance". This finding allows us to suggest that, perhaps, such expressions should be included in health descriptors, particularly in Brazil, considering the participatory trajectory of the organization of our national health system and also the fact that social participation is one of the SUS guidelines.

Collaborations

MN Meneses contributed with the conception of the manuscript theme, the delineation, analysis, data interpretation, writing, critical review and approval of the version to be published. JD Quadros contributed to the methodological route, collection, analysis and interpretation of data, writing and approval of the version to be published. GP Marques contributed to the analysis and interpretation of the findings, writing of the article, critical review, and approval of the version to be published. CRD Nora contributed to the methodological path, writing of the article, critical review, and approval of the version to be published. FF Carneiro contributed to the writing of the article and its critical review; and to the final approval of the version to be published. CMF Rocha contributed to the idealization of the theme and writing guidance, writing and review of the final text; and in the final approval of the version to be published.

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