Chapter 5
Denaturalizing "Long-Lasting Endemic Diseases": Social Mobilization in the Context of Arboviral Diseases in Brazil

Valcler Rangel Fernandes, Maurício Monken, Grácia Maria M. Gondin, Zélia M. Profeta da Luz, Ana Beatriz A. Slaibi Lopes, Márcia Correa e Castro, Emanoel Campos Filho, André Luiz da Silva Lima, José Paulo Vicente da Silva, and Annibal Coelho de Amorim

V.R. Fernandes • M. Correa e Castro
Oswaldo Cruz Foundation (FIOCRUZ), Rio de Janeiro, Brazil

M. Monken • G.M.M. Gondin
Laboratory of Professional Education in Health Surveillance, Joaquim Venâncio Polytechnic School of Health (EPSJV), Oswaldo Cruz Foundation (FIOCRUZ), Rio de Janeiro, Brazil

Z.M.P. da Luz
René Rachou Research Center, Oswaldo Cruz Foundation (FIOCRUZ), Belo Horizonte, Brazil

A.B.A. Slaibi Lopes
Education, Information and Communication, Oswaldo Cruz Foundation (FIOCRUZ), Rio de Janeiro, Brazil

E.C. Filho
History Department, Federal University of Rio de Janeiro (UFRJ), Rio de Janeiro, Brazil

Communities of Practices in Health and Environment Project (IdeiaSUS), Oswaldo Cruz Foundation (FIOCRUZ), Rio de Janeiro, Brazil

A.L. da Silva Lima
Sergio Arouca National School of Public Health (ENSP), Oswaldo Cruz Foundation (FIOCRUZ), Rio de Janeiro, Brazil

J.P.V. da Silva
Communities of Practices in Health and Environment Project (IdeiaSUS), Oswaldo Cruz Foundation (FIOCRUZ), Rio de Janeiro, Brazil

A.C. de Amorim (✉)
Communities of Practices in Health and Environment Project (IdeiaSUS), Oswaldo Cruz Foundation (FIOCRUZ), Rio de Janeiro, Brazil

School of Medicine, Serra dos Órgãos University Center (UNIFESO), Teresópolis, Brazil
e-mail: annibal.amorim@fiocruz.br

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Context

Since the 1980s, the Brazilian population has been facing successive dengue epidemics. The disease is caused by a virus transmitted by the *Aedes aegypti* mosquito, a vector that disseminates other infections that have appeared in recent years in the national context, such as zika, chikungunya, and urban yellow fever (the latter reemerging in the country). Aggravating the situation, epidemiological studies have shown an association between zika virus infection and congenital malformation causing microcephaly in newborns.

In 2015, this scenario led the World Health Organization (WHO) to declare a Public Health Emergency of International Concern (PHEIC) owing to the dispersion of the zika virus and its consequences with autochthonous transmission in 24 countries. In Brazil, this epidemic has the potential to lead to tragedy, given the socio-environmental and sanitary conditions favorable to the dissemination of the disease in regions where there is the predominance of extreme social inequity and precarious living conditions.

It is important to stress that the alarming number of cases of arboviral diseases are concentrated in the same regions where dengue has been occurring for 30 years. Considering this panorama, two issues should be discussed: first, current strategies adopted by different governmental spheres to tackle arboviral diseases may fail; second, the origins of the problem are not merely in the vector's dispersion also associated with the social determinants of health.

In the Brazilian context, in recent history, the health sector has been marked by the organization of an assistential and clinic-centered model, resulting in the expansion of a globalized health industry complex dominated by large corporations. This model has not effectively responded to the population's health problems in countries with demographic, epidemiological, and sanitation characteristics like those of Brazil, marked by inequities in social and healthcare access (Gondim 2011).

Therefore, it is necessary to create a health surveillance system to counteract the medical-assistential and sanitarian-campaigning model, one that will include health, disease, and care as manifestations resulting from historical and cultural processes (MENDES 1993). This article draws on the perspective that health surveillance should be territorially and community based, simultaneously incorporating the social determination of the health–disease process of epidemics and the promotion of health as a guiding axis of processes and interventions.

The Territory as Locus of Social Mobilization

We are living in a historic period of profound transformation in people's lifestyles and in society, resulting from the process of economic globalization with the expansion and massive incorporation of technical processes in networks of finance and productive chains around the planet, with the appropriation of local resources and intensification of circulation flows and exchange of information, material resources, and people (Gondim et al. 2008).

The space-time speed of events produces local changes with consequences in the environment, social life, culture, and politics requiring immediate responses from governmental sectors—like health—to be vigilant, prevent problems, and give assistance to the populations in cities, rural areas, and forests. In this process, as a counterpoint to globalization (Santos 1999), the issue of the local and the lived territory emerges. These areas should be seen not only as loci of dwelling but also as sites of production, symbolic exchanges, and coexistence between people.

The central characteristic of the globalization process is the transposition of any forms of physical or symbolic boundaries in the individual and collective sphere. All sorts of problems circumscribe complex and multidimensional challenges. Economic globalization and the intensity of flows homogenize resources and exchanges, subtracting from territories their particularities and singularities and allowing rapid and significant changes in the propagation of diseases and pathogens (viruses and bacteria) throughout the planet.

In contrast, health surveillance—the idea proposed and disseminated in Brazil since the 1980s—rests on the idea of the *territory*, understood as the place where social life is produced and where health potentialities, necessities, and problems are highlighted. The understanding of the specific and local reality enables technical structuring of interventions to improve the life and health conditions of the population. In this sense, the territory is the central category for the operationalization of different forms of intervention with the aim of tackling multiple and singular health situations. In Brazil, the proposal of territory-based health surveillance (Teixeira et al. 1998; Mendes 1993; Monken and Barcellos 2005) emerges as a technological model for the organization of work process and health care based on the observation and contextualization of social determinants of health and on the concreteness of social processes occurring in the territory, which help to organize sanitary practices by means of social participation and intersectorality.

To understand each socio-sanitary context, territory-based health surveillance makes use of various areas of knowledge—epidemiological, geographic, sociological, educational—that are essential for strategic action. Furthermore, by micro-territorializing problem situations, this perspective materializes and highlights the populations' needs and, counting on community participation for problem solution, seeks to ensure access to health services and actions in an integral, effective, and fair way (Mendes 1993).

Territory and Social Participation in Facing Health Problems

Territory is a concept that helps to describe and understand ways of living on the planet. It enables social analysis of populations in general, particular, and singular realms (Castellanos 1990; Monken and Barcellos 2005; GONDIM 2011) contributing to the knowledge of people's and groups' lifestyles: their culture and traditions, traditional knowledge, ideas, sentiments, projects, and various interests that are materialized in the appropriation of and control over spaces. The territory also

expresses various dimensions of human existence (physical, political, economic, social, environmental, epidemiological, sanitarian, subjective) that may serve as the structural base for social mobilization and intersectoral intervention to tackle arboviral diseases and other health problems.

Getting to know a territory contributes to an understanding of the health–disease–care process and to identifying forms of use that may potentiate the operational capacity of the local health system in order to organize actions and services to tackle a population's problems and needs. Analyzing the territory makes it possible to identify spatial singularities and social, economic, and political dynamics and to decode the multitude forms of knowledge (popular, technical, technological) that confer meaning and significance to them. It also enables health professionals to understand the social production of health, thereby contributing to the implementation of effective health care practices with respect to the various population groups (Monken and Gondim 2016).

Power is the key concept to understand the meaning of territory. It expresses the possibility to exert command, domination, or imposition of will or a particular project on other people, groups, or institutions. It has been practiced, beyond its contribution in the definition of the state, as a singular characteristic of all social players who use and dispute ideas, intentions, and desires in a collective or private space. Populations, firms, public power, social groups, and the various social, cultural, religious, and other organizations have power and exert it according to their plans and projects and based on their capability to have those plans and projects materialized. Community networks also exert power in the appropriation of territory. They are structured in daily life, strengthening neighborhood processes, community relationships, and relationships of diverse coexistence among people and groups.

These relationships build social support processes by means of local players who serve in traditional roles such as herbal medicine practitioners, midwives, healers, and informal caretakers of elderly and children, among others. It is traditional knowledge that strengthens links, bonds, and territorial identities in tackling problems and seeking fulfillment of local needs and it is crucial for a population's mobilization. This dynamic is strongly present on the local level, in territories with low-income populations, where there is extreme social exclusion and where an active search for support networks as a survival strategy can be observed (Monken and Gondim 2016).

When producing and appropriating territory, society creates rules of use and power. Those power relations dictate social rules or specific laws, which may be created by the state (formal) or by society (informal). Formal laws are written, not all people know them, but all must submit to them. Informal laws are not written; everyone recognizes and follows them if they are collectively agreed upon. Rules, laws, and lifestyles are codes, values, and meanings that permeate daily life and affect people's conduct, creating behavioral cultures. Recognizing these rules is essential for the organization of whatever kind of social mobilization is used to tackle local problems.

Territorial dynamics create different territorialities that express power relations, which in turn affect singular spatial delimitations. Thus, territorialities are strategies that social players, individuals or collectives, public or private, use to influence or

control people, resources, phenomena, and relations, delimiting and making effective the control over an area, community, district, municipality, state, and even a country (Sack 1986).

Currently, there is intensification in the production of multiple territorialities because of an increasing diversity of players in various projects, engendering a constant transformation process. This means there is an overlap of several intentions of use and control over territories by different players at the same time. Each territory may contain various forms of use that delimit distinct objectives. These include residents living in the area, firms that use the territory to produce and commercialize their goods, or associations of all sorts that operate locally. There are also social groups that operate illegally, such as gangs and criminal bands that impose their rules by appropriating the territory. Public authority also creates territorialities when performing in a specific way. This is the case, for example, with health and education services, with their specific work processes structured according to the characteristics of each local context. This movement of many interests under dispute in the same territory engenders conflicts that should be identified, understood, and resolved. Recognizing those processes and their multiple players will contribute to the mobilization of populations (Haesbaert 2004).

To understand multiterritoriality, one can compare this process to what happens in a "multisport court." There are delimitations on the court—the territory—for different sports to be played: football, basketball, volleyball, and handball, among others. Each modality has its own rules. Similarly, multiterritoriality translates different ways of appropriating and using a territory by individuals and groups that occur simultaneously and overlap, some with more and others with less potency (Moreira 1987; Monken and Gondim 2016).

We live daily in a permanent process of territorialization, i.e., seeking to be fixed to territories—places that enable the construction of identity, rules, and bonds. However, especially in capitalism, we also suffer or are submitted to processes of loss of territory, referred to as deterritorialization. It is characterized by social dynamics whereby population groups are denied access to a territory in the most basic and material sense of existence, as are the landless, *quilombolas* (descendants of runaway African slaves in Brazil, living in isolated communities), peasant fishermen, indigenous groups, and those socially excluded from the benefits of material progress (Haesbaert 2004).

Economic systems based on income concentration promote not only deterritorialization but also precariousness of the population's living conditions. Vulnerable territories are characterized by irregular delivery of essential services such as sewage system, clean water supply, rainwater drainage, and garbage collection, which potentiates the occurrence of certain groups of diseases, like arboviral diseases, whose social determination is associated with low levels of environmental sanitation and hygienic living conditions. Such places suffer recurring problems connected with urban mobility, food security, and, in most cases, fragile social cohesion and community strength, whose participation in mobilization processes becomes another challenge for disease control.

There are many exclusion and exception territories within cities. Often with high demographic density, they are sites with strong neighborhood impacts (e.g., violence, traffic, pollution) and peculiar geography owing to the proximity/agglomeration of the territory's objects—public ways, rivers, dwellings, production facilities (small industry and commerce). Furthermore, access to people and goods is precarious and occurs via narrow streets, alleys and pathways, with the intensification of flows, contacts, and interrelations with the environment (Monken and Gondim 2016). These socially excluded and deterritorialized groups are simultaneously potential victims of arboviral diseases and crucial players in tackling the problem.

Social Identity and Territory: Structuring Elements in Social Mobilization

Territories differ, presenting great spatial heterogeneity and great internal homogeneity. They are shaped by the interests of people, groups, and institutions that produce them to fulfill specific objectives and purposes according to their own projects. Some territories present singular profiles, such as those of fishermen communities, family agriculture, industrial workers, and those where abundance and wealth predominate. The identity that a population superimposes on a territory is often a result of long-term processes of social relations marked in space-time, connecting issues of people's belongingness and bonds to places of life. These are processes that incorporate cultural practices, habits, and behaviors entangled in social relations. These are, therefore, territory-structuring factors and are fundamental for actions of community mobilization and organization.

The social, cultural, environmental, and sanitary characteristics involving territorial identities and representations conferred by the population, turning them into reality, affect the health practices in the territory, especially those that incorporate the population in health actions. Community participation in health practices is vital to broaden action and bring community near to health teams and services in the control and surveillance of health problems, thus enabling the construction of communication and participation pacts.

Mobilizing a population as a central player in actions related to care with the population's territory of life means bringing people together to act; this requires the creation of a structure to establish cooperative relations and the use of resources to achieve the goals of mobilization. In this sense, territory-based health surveillance grounded on an information–decision–action strategic practice may bring greater efficiency and sustainability to social mobilization structured by situational strategic planning (STP) (Teixeira et al. 1998; Mendes 1993).

The situational strategic approach originally proposed by Carlos Matus (1993) indicates a possibility of subsidizing concrete practices in any dimension of social and historical reality, simultaneously contemplating the formulation of health

policies, planning, and programs. Founded on the social production theory, it sees reality as indivisible and understands that all that exists in society is created by humans (Teixeira et al. 1998; Mendes 1993). It is thus an indispensable tool for the support of health surveillance actions that presuppose health promotion and intersectorality.

To understand the effectiveness of territory-based health surveillance practices incorporating social mobilization at tackling health problems, one should know the various territorial dimensions (political, economic, environmental, sanitary, cultural, and others) since they exert a direct influence on people’s life story and determine ways of perceiving, experiencing, and living with health and disease. The political dimension is also vital to any form of social mobilization in a territory. The recognition of social players, their capabilities and power for local action, and their resources are essential for the effectiveness of the process. The identification of the projects of each social player in a territory and the material and symbolic resources that can be put into action locally for the implementation of interventions will indicate which of them are essential for the effective mobilization of the population.

The cultural dimension also stands out because through it people become organized and legitimate their group in society, producing elements for their social, political, and economic organization. It includes knowledge, beliefs, art, morality, laws, and habits that people acquire and develop in places and social contexts throughout life, influencing behaviors, perceptions, emotions, language, religion, rituals, family structure, diet, clothing, body image, time and space concepts, and attitudes in the face of disease, pain, and other types of misfortune (Dias and Dias 2010).

Social mobilization processes should incorporate theoretical and practical elements of territorial politics and culture, recognizing them as devices for their effectiveness/potentiation. The knowledge of rules, norms, and laws that give structure to local power are often materialized in the local culture, allowing for the understanding of health problems and needs, both individual and collective, besides imprinting specific meanings on social life that favor community mobilization, emancipation, and empowerment.

The set of devices identified in a territory opens up possibilities for cooperative encounters between people, strengthened by the identity vector to build various forms of mobilization, potentiating the local capability to collectively promote improvements in living conditions and health situation and perform specific actions in accordance with the local identity.

Health Territorialization for Social Mobilization

To intervene in a specific health situation having social mobilization as the intervention strategy, it is essential to analyze the living conditions in the territory, identifying players, resources, and social rules of coexistence that translate into, in the

dynamics of local daily life, and determine, to a greater or lesser extent, the population's health conditions and quality of life. The process of health territorialization enables the analysis of the health conditions of a given population; thus, population groups and public agents, in particular health agents, may recognize the local health situation and make the key decisions and formulate the appropriate strategies. The recognition of the territory for public health interventions (health territorialization) is achieved by the identification of social players, local potentialities, threats to health, vulnerabilities, public facilities, leadership, and recovery of the territory's occupation history, its traditions, and cultural manifestations.

This process is made viable when carrying out systematic field observations, with primary and secondary data collection, achieved by a health team working together with the population, associating objects identified on the site with actions promoted by each social player (individual or collective, public or private) in the context of life. The aim is to identify territorialities structured by local players and their distinct sociocultural characteristics. It also presupposes the analysis of local contexts based on social production theory, which spearheads the development of investigation strategies and the elaboration of data collection tools for the achievement of diagnosis, planning, and sanitary interventions aimed at the improvement of the population's life and health conditions (Monken 2008).

Qualitative and quantitative methods are used in the process of territorialization to identity, acquire knowledge of, analyze, and intervene on health problems and needs. Innumerable tools can be used, and some are indispensable (Monken et al. 2016):

Primary data fall into the following categories: (a) recognition and mapping of a territory: data collection on risks, vulnerabilities (e.g., pollution, solid waste, openly discharged untreated sewage, violence), diseases, and injuries; families, social groups, and institutions (e.g., social support networks, churches, temples, schools, health services); means of communication (neighborhood newspapers, community radio, social networks); physical-spatial boundaries; physical geography and built objects (e.g., buildings, roads, schools, commerce, streets, bridges, public facilities); (b) interview: listening to territorial players to learn about the history of the occupation of the territory; the perceived problems and needs and potentialities that can be set in motion for problem solving; identifying organizations and their action capabilities—public administration, especially the health sector, civic entities (NGOs, churches, associations, and informal care networks); social movements (pop music groups, homeless people, drug users, women) and community leaderships; (c) field observations: notes and photographs for the recognition of local singularities, such as popular meeting places and communicative actions (e.g., squares, churches, residents' associations, sports areas, football fields, bars).

Secondary data fall into the following categories: (a) demographic: absolute population, age groups, gender, education level and literacy rates among adults); (b) geomorphological: climate, temperature, relief, hydrography; (c) sanitary and productive structures: distribution of water, sewage, garbage collection and disposal; housing; services for health, transportation, security, finances, communications; public and private education facilities; production facilities (industries, commerce, and services).

The analysis of groupings and associations between primary and secondary data will serve as a basis for the production of a diagnosis of living conditions and health situations in territories, in order to reach a consensual agreement between health teams and community leaders, thus enabling processes of social mobilization between the population and public agents (of health, sanitation, social assistance, urban and rural development, for example) aiming at the organization of cooperative and participative interventions. In the case of arboviral diseases, the dynamic territorialization/recognition/learning/mobilization/intervention may simultaneously constitute collective learning about living conditions and health situations in territories and a mechanism for social integration and mobilization in search of solutions to tackle health problems.

In this sense, community insertion in the process of health territorialization is strategic for social mobilization. The central axis of this pedagogic method of knowledge and recognition of the territory consists of structuring commitments and solidarity between community and local public agents, especially of the health sector, with the capacity to build the basis for cooperation and co-responsibility for the planning, definition, and development of appropriate sanitary practices and for tackling health problems.

Communication for Social Mobilization

Regarding social mobilization around arboviral diseases (and other health problems), the strategies used during the last three decades by different spheres of the Brazilian government have been mainly related to communication actions. Since the early dengue epidemics in the 1980s, publicity campaigns have occurred based on material and speeches mostly centrally produced (in general by publicity agencies hired by the Ministry of Health) reflecting the traditional communication concept of "information transfer" (Araújo and Miranda 2007).

The speeches publicized, with slogans like "Dengue, Zika and Chikungunya: If You Act We Can Avoid[1]" or "Combating Dengue Is in Your Hands," tend to make citizens responsible for overcoming epidemics.[2] Radio and TV spots, pamphlets, and posters make strong appeals for people to participate by eliminating mosquito-breeding places inside their homes, which, though crucial, is not sufficient, considering that the social determinants of arboviral diseases are beyond the individual habits of every citizen. For instance, it will be totally inefficacious to make a continuous effort to eliminate mosquito-breeding places in a residence situated in a neighborhood without sanitation and garbage collection.

Anyway, the aggravation of the sanitation situation suggests that those communication strategies have been inefficacious even regarding social mobilization.

[1] Campaign developed by the Brazilian Minist ry of Health in 2017.

[2] Campaign developed by the Brazilian Ministry of Health in 2015.

When considering the results of the adopted model it is possible to question the idea of a causal relation between a "good communication" and a "behavioral change." In an article published in 2009, Miranda and Lerner oppose this concept and as an alternative they defend communication actions that take into consideration the different contexts (local, existential, and situational) in which are inserted people and groups with whom one intends to dialogue (instead of "those to be informed"). The point is not talk about dengue, zika, and chikungunya but rather talk about dengue, zika, and chikungunya in the community.

Taking as a reference the document "Social Mobilization: A Way to Build Democracy and Participation" ("*Mobilização social: um modo de construir a democracia e participação*") by José Toro and Nísia Werneck, social mobilization occurs when a group of people, a community or a society, "decides and acts with a common goal, daily seeking results that are decided and desired by everyone" (1999). This collective construction presupposes exchange, production, dispute, and the agency of ideas and meanings, a process that materializes precisely by means of social communication in the sphere of each specific space-time. Therefore, communication that makes community mobilization feasible is that which is processed in the context of a territory. In the words of Orozco (1993), it is understood as a process that is multimediational, multidimensional, and multidirectional where everyone talks, although notably from distinct places of speech and levels of empowerment.

Mobilization, thus, cannot be mistaken for propaganda or publicity; it requires a process of sharing speeches, visions, and information. It presupposes including the other in decision making rather than vertically transmitting what must be done, especially when referring to social determinants (proximal or distal) of health, which equally require tackling sanitation problems.

Social Mobilization and Vulnerable Territories in Contexts of Zika and Other Diseases: Experience Reports

In 2015, Gonçalves and collaborators published an article on an integrative review of works on the knowledge, attitudes, and practices of the Brazilian population concerning dengue. In the articles analyzed, the authors observed that a gap remains to be filled regarding the empowerment of people as active participants in the process, rather than being mere spectators of official policy decisions. They highlight the need to carry out work in the community, taking into consideration the territory's particularities. They stress the importance of the development of the sense of responsibility and nonculpability of citizens and the promotion of dialogue between science and common sense. In this perspective, the approaches taken can contribute to strengthening the population's engagement with the prevention and control of *Aedes aegypti*. Experiences carried out in the cities of Belo Horizonte and Rio de Janeiro that may indicate the way are described next.

Community Surveillance to Strengthen Social Mobilization to Tackle the Triple Epidemics of Dengue, Zika, and Chikungunya: An Ongoing Proposal in the State of Minas Gerais

The proposal described here stems from an action of the René Rachou Research Center (*Centro de Pesquisa René Rachou*), a unity of the Oswaldo Cruz Foundation (Fiocruz), in the state of Minas Gerais. The activities were initiated and will be organized along three axes: (1) creation of community committees; (2) definition of social technologies based on solidarity networks aimed at women of fertile age, pregnant women diagnosed with zika virus infection, and babies with microcephaly or disorders of the central nervous system related to the zika virus; and (3) elaboration of proposals for public policies.

The community committees are in place in schools of the Public State Network (*Rede Pública Estadual*—RPE) and will carry out community surveillance in the territory. They will be spaces for action and reflection. The RPE of Minas Gerais has 47 Regional Education Superintendencies (*Superintendências Regionais de Ensino*—SRE) comprising 3665 schools throughout the state. The idea is that the committees are composed of students, parents, teachers, other residents, and members of the school community. Together with the local population, each committee shall define and implement participative strategies for the recognition, analysis, and discussion of the territory, aiming for the elaboration of a diagnosis of the health situation and living conditions in the locality, so as to be able to plan social mobilization proposals to form environments that are conducive to health.

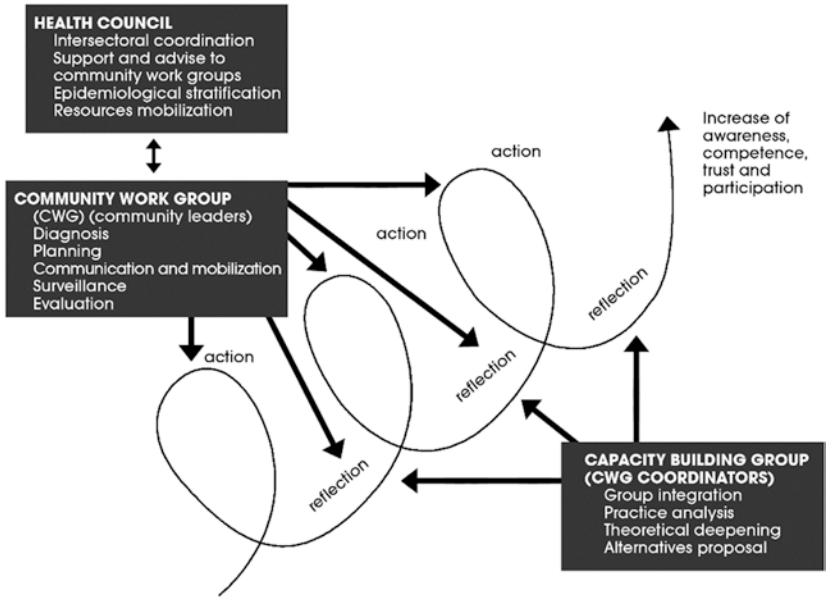
The work is conceived as a form of community education, and all activities will be developed by means of research action techniques. For the implementation of the proposal, an intersectoral network was created that is composed of professionals from the Oswaldo Cruz Foundation (Unities of Rio de Janeiro and Minas Gerais), from the State Secretariat of Education, State Secretariat of Health, Public Health School of Minas Gerais, and Association of Parents and Friends of People with Disabilities (*Associação de Pais e Amigos dos Excepcionais*—APAE). The committees are being gradually phased in, and by February 2017 16 SREs, from the total of 46, had been invited to join.

Each school that agreed to take part selected a representative to coordinate the work in the territory in which the school is located. The capacity building of the committee members has the support of an online platform with the intermediation of tutors. The themes studied include the disease, the vector and favorable conditions for its proliferation, the concepts of territory and territorialization, the method for establishing a local diagnosis, community participation, and communication processes.

In February 2017, the coordinators of the 214 schools that had agreed to participate in the process were already in contact with the tutors via the digital platform and were preparing to create committees and start their members' capacity building.

Following the capacity building, and with the tutors' support, the committees will organize workshops in their communities and carry out the local diagnosis and planning of actions in each territory. The project includes the development of communication strategies to broaden the debate on the social determination of epidemics. Communication processes and tools will also be used to resolve local problems and perform risk assessment. The creation of solidarity networks to give support to mothers and babies victimized by the sequelae of the zika virus (such as microcephaly) is under discussion, and a pilot proposal is in progress.

The entire proposal will be assessed by an evaluation study that will analyze the implementation of the proposal by studying the relations between the intervention and its context during implementation. For this purpose, case studies will be develop to deepen the analysis of the implementation of the methodology in each local organization context. Indicators will be elaborated to evaluate adhesion to the proposal, adequacy of the online platform, tutors' work, conditions conducive to the vector's proliferation, and solidarity networks. Data collection will be carried out through questionnaires, interviews, focus groups, and surveys. This is an innovative proposal that may contribute to social mobilization and the empowerment of population groups to tackle arboviral diseases (Fig. 5.1).



Source: Adapted from Shrestha [17].

Fig. 5.1 Network for the control of *Aedes aegypti*. Illustration/logic model 1—Capacity building model for tutors and community committees for social mobilization to tackle arboviral diseases in Brazil—experience reported by René Rachou Research Center/Fiocruz—MG/based on article by Sanchéz et al. (p. 64) cited in consulted works

Manguinhos is a district that has a century-long occupation history. It is situated in the Northern region of the city of Rio de Janeiro and its spatial boundaries go beyond the limits officially established by the municipal administration. Its occupation presents a mosaic of distinct socio-historical movements, with the characteristics of having been the target of various unconcluded urban projects.

The name *Manguinhos* originates from the word "mangue," the Portuguese word for swamp, and this is because before human intervention, it actually was swampland. The rivers that intersect the region had their course altered and receive most of the untreated sewage from the 10,000 dwellings currently in the district. On rainy days many of these rivers overflow in a setting of self-built housing, with no formal/legal regulations regarding either land use (ownership regularity) or construction process (e.g., unapproved height, mixed materials, improvised sewage systems).

Despite having a history that adds clientelist and paternalistic policies carried out by state representatives to the limitations (often violent) imposed by the police and by drug-trafficking gangs, that history has also known several movements and insurgencies in favor of the rights and life of its population on issues such as housing, health, sanitation, peace, and security, among others.

Located in Manguinhos district, the main campus of the Oswaldo Cruz Foundation keeps a historical relationship with the surrounding population, especially with the delivery of health services since 1967, with the inauguration of the currently named Health Center School Germano Sinval Faria (*Centro de Saúde Escola Germano Sinval Faria*). More recently, the relationship between Fiocruz and the populations that live in Manguinhos are based on the logic of "cooperation" with the local collectives and organizations, which is a concept present in the modern perspective of Health Promotion.

It is in this context that the Network for the Control of *Aedes aegypti* emerged in Manguinhos. In the face of divergent announcements on possible outbreaks of epidemics of dengue, zika, or chikungunya, all of them transmitted by the mosquito *Aedes aegypti*, the office of the president of Social Cooperation of Fiocruz received notification on the concerns of various local social activists. The entire Fiocruz scientific community was then convened for a meeting with representatives of the Local Residents Associations (*Associações de Moradores Locais*), the Community Council of Manguinhos (*Conselho Comunitário de Manguinhos*), and the Intersectoral Management Council of TEIAS (*Conselho Gestor Intersetorial do Teias Escola Manguinhos*—CGI-TEIAS)[3] to formulate action strategies.

The meeting took place in December 2015. Many proposals were put forth, and previous experiences with dengue control in Manguinhos were reported. At this meeting, an appointment was made for January 2016, and a plan was prepared for a *mutirão* (an action carried out simultaneously by many people and covering a large area) to inspect houses in the community, with the participation of community health

[3] CGI-TEIAS is a health council composed of representatives of users, health workers, and management workers. It has a deliberative character and has user representatives from various segments of the public health system (e.g., afro-descendants, women, youth).

workers, epidemic control personnel, Fiocruz workers, social activists, and representatives of the municipal administration.

This first *mutirão* raised various questions, taking into account the memory of events that had taken place in previous years in various contexts. These reflections gave origin to the "Plan for the Control of Territorial Aedes" ("*Plano de Controle ao Aedes Territorial*") that was structured based on the following premises: (a) comprehensive understanding of Manguinhos territory, (b) presence of total territorial coverage of Family Health Strategy (*Estratégia de Saúde da Família*—ESF), (c) community participation in decision making in all stages of plan, (d) vector control drawing on ecosystemic approach and adoption of integrated management, and (e) use of various technologies validated by Fiocruz researchers for the control of *Aedes aegypti.*

Besides these premises, four axes of action were defined: (1) *Mutirões*: appoint public agents and organize civic society in the territory for education actions on health, collection, and destination of large unserviceable objects and home visits; (2) training: of health and environment community workers; youth in the community may be contacted and trained for permanent monitoring of possible mosquito breeding sites; (3) community communication and health: use local newspapers and other alternative media present in the territory of Manguinhos; (4) monitoring: establish a nucleus to centralize data resulting from the actions.

The second and fourth axes did not advance owing to a lack of funding. On the communication front, the newspaper *Fala Manguinhos* ("Speak Manguinhos") is worth highlighting; it was printed and was published on Facebook by community residents, who approached the issue of confronting the epidemics in a sustained way. The *mutirões* were carried out with great energy until the end of the first half of 2016, guaranteeing that actions would be taken in each sublocality in Manguinhos.

The experience of the *mutirões* highlighted the precarious and inefficacious nature of garbage collection in the territory and the scarce clean water supply furnished by the state administration. Regarding health services, it was verified that the actions performed by community health workers and epidemics control assistants were not governed by the same territorial delimitation and so did not enable the planning of an effective home visit. This aspect motivated the collective to seek a meeting with the Municipal Secretariat of Health, which did not happen.

Another obstacle was the amount of hours the epidemic control assistants were allowed to work; until the end of 2016 they were not permitted by the central management of the municipality to work on Saturdays, Sundays, and holidays, which are precisely the best days to make home visits in the territory (on weekdays during work hours, most residences are closed because the dwellers are at work).

Final Considerations

The experiences reported and the reflections on the outlook on arboviral diseases in Brazil point to a series of obstacles that hinder the process of social mobilization necessary to tackle not only arboviral diseases but health problems in general. Table 5.1 shows a synthesis of the challenges:

Table 5.1 Obstacles in facing arboviral diseases

Absence of a plan to confront social determinants in health in vulnerable territories
Centralization of government interventions with low integration of states and municipalities
Vertical communication model, centralized and based on citizen culpability
Absence of territorialization and social mobilization, in which coping with "long-lasting" endemic diseases/epidemics results from the permanent triplet "action–reflection–reflective action"

To overcome such obstacles, our reflection suggests the creation of information networks for decision making, horizontally constituted and incorporating the democratic engagement of different social players in each territory. These networks may enable the development of alternative ways to tackle health problems. Drawing on minimal combined methodological elements, both distance and presential, it is possible to facilitate exchanges and interchange of local and regional responses, extending/replicating them, whenever possible, to other vulnerable territories with similar socio-environmental characteristics.

It is crucial to "move in the direction" of vulnerable territories, getting to know their realities "from the inside." This assessment serves as a starting point for the postulated social mobilization process. To begin with, it is vital to work from the premises of empowerment, equity, and sustainability, taking into account locally based diagnosis made by health teams and community, taking into consideration categories such as gender, ethnicity, race, culture, and the traditional knowledge that emerges from each social group in the mobilization process.

Therefore, it is also important to bring to the table reflections on the proposed social mobilization in which the people affected by the sanitary crisis should be actors. The participation in decision making for the development of public policies, the inclusion of community health surveillance actions, capacity building, and popularization of science, combined with the maintenance of research and assistance, potentiate other types of responses to arboviral diseases and other health problems.

People can be invited to participate in mobilization, but ultimately it is an individual decision whether or not to participate. The decision depends on people's perceptions about being part of the entire process and, above all, as being capable of enacting changes; this presupposes "a collective belief in relevance, a public sense of what suits everyone" (Toro and Werneck 1999).

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