Participatory diagnosis to identify health problems in a socially vulnerable community

Abstract  The Health Promotion paradigm led to the acknowledgment of health due to factors linked to the social, political and economic contexts. In Brazil, health inequities are one of the most striking features of the health situation, challenging the effectiveness of intersectoral policies. This study aimed to understand the perception of socially vulnerable community dwellers of the problems that interfere with the health conditions and the coping strategies used. The methodology consisted of a participatory research based on the participatory diagnosis conducted with 31 key informants from the community studied in Fortaleza, Ceará, Brazil. As a result, participants evidenced that the community has health issues due to weak intersectoral actions (infrastructure, public safety, basic sanitation, garbage collection, among others) and that they seek to address them through social mobilization actions and institutional support. Thus, Participatory Diagnosis is thought to increase social involvement with health promotion and problem solving and contributes to ensuring the right to the city to all its residents.

Key words  Health inequities, Social vulnerability, Health promotion, Community participation
Introduction

When the subject is Health Promotion, the challenge arises to understand it from its subjective meaning. Thus, giving voice and expression opportunities to dwellers of contemporary city territories facilitates the understanding of the sociological web, of which individuals and communities are part. Health promotion raises the need to develop strategies that ensure at least social justice, which is closely related to the principle of equity.

Among these strategies, we emphasize Participatory Diagnosis (PD) – a listening method for the acquisition and collective construction of data on certain realities. According to Castro and Abramovay, PD involves social stakeholders living in the community and is used to survey the local reality, including identifying the main problems in the health, social, economic, cultural, environmental, physical-territorial and political-institutional areas.

In the relationship between PD and reduced inequities in health, practices of empowerment of social and health conditions are sought, enabling the distribution of rights and duties between State and society. Social participation is understood as an institutional and political prerequisite for health conceptualization and is an indispensable condition for the feasibility and effectiveness of public policies.

In 1986, the definition of Health Promotion emerges as a “process of empowering the community to act towards improving own life and health through effective participation”, and should be considered because of intersectoral actions that ensure good life conditions to people.

Since then, health has been recognized due to factors cross-linked with the social, political and economic context, eliciting the link between health promotion and equity. In this context, a set of values that contribute to improved quality of life and health of individuals and the community were considered, highlighting: peace, housing, education, food, income, healthy ecosystem, solidarity, democracy, citizenship, participation and joint action, social justice and equity.

Equity shows the idea of non-discrimination, in an attempt to reduce avoidable disparities between groups of different socioeconomic levels. In the field of health, this idea turns to reduced inequities in health services, which in turn, are associated with the implementation of actions that ensure social rights. Equity is also the result of the forms of social organization of production that can generate inequalities in living conditions.

Healthy Cities Movement is a health promotion strategy and aims to improve people’s quality of life and local community development. The importance of planning and implementing local plans for health promotion actions focused on healthy territories permeates intersectoral policies and the expanded conception of health. However, increased public policies with a loco-territorial approach is still considered a challenge in Brazil, which has weakened the fight against health inequities.

Health inequities are one of the most striking features of the health situation in Brazil, and scientific community discussions evidence the need to include equal access to health at the core of the national policy in an attempt to minimize inequalities between groups. In the Brazilian context, many studies have shown social disparities between population groups in the various realms, in which women, black and the homeless or residing in suburbs make up the greater part of this representativeness.

This research contextualizes a socially vulnerable community, in Fortaleza, Ceará, which is similar to other vulnerable groups in Brazil, which reinforces the need for an expanded look at social inequalities, in order to understand how these communities mobilize before situations of exclusion and inequity. In this setting, it is believed that PD allows for a community articulation and promotes greater validity to the identification of issues faced by this population.

This study is justified by the need to identify issues that affect the health of this population, favoring dwellers’ right to express themselves and the planning of intersectoral actions to improve the mentioned conditions. We believe that this work contributes to the improvement of the participatory PD methodology and can be used in other urban settings. Thus, we asked: What problems identified by residents of the community under study affect health conditions? What strategies are used to address identified issues and produce health?

Thus, we aimed to understand dwellers’ perceptions of the existing problems that interfere in the health of a socially vulnerable community and strategies used to solve them.
Methodology

This paper underpins the project entitled “Participation and community mapping to promote quality of life and social inclusion of Dendê dwellers”, which built on Participatory Diagnosis. A participatory research was conducted with the construction of community partnerships with a view to ensuring sustainable and effective future interventions. Study participants were dwellers of the Dendê Community located in the Edson Queiroz district, in Fortaleza, Ceará, Brazil. The capital has approximately 2,551,805 inhabitants and ranks fifth in the world among cities with the highest social inequality index. The community studied is part of this setting, which includes a marked scenario of contrasts and inequalities.

Data from the Brazilian Institute of Geography and Statistics show that the Edson Queiroz district has approximately 22,110 inhabitants. The average number of dwellers per household is approximately 3.76 people. According to the Human Development Index (HDI) 2010, of the 119 districts of Fortaleza, the Edson Queiroz district ranks 57th, with 0.350 HDI, which is a very low score.

The first settlers who lived in the study community were relocated from other favelas in Fortaleza. A group of nuns carried out catechesis and fought for the rights of the community. In the 1980s, the Residents’ Association was founded and the local population established leaderships, seeking better living conditions.

Thirty-one key informants (KIs) who had been living in the community for more than five years and were aged 18-80 years were enrolled in the study, with 24 women and 7 men who were able to respond to the survey and agreed to participate of the three stages of the study. KIs are individuals actively involved in the community or individuals who have broad and deep information about the system or subject of interest of the researcher. KIs were identified through nine Community Health Workers (ACS), with which we discussed the feasibility of data collection techniques and strategies to access residents. Letters “KI” (key informant) followed by numbers from 1 to 31 were used to protect participants’ identities.

Data was collected from January to July 2016, using participatory tools: interview (first stage), street walking (second stage) and focus groups (third stage). Interviews were held at the KIs’ households guided by the following question: “In your opinion, what community problems lead to a poor health condition?”

We emphasize that KIs were individually visited by researchers, who recorded the interviews and applied a questionnaire with socioeconomic data to characterize the participants.

At the end of the interview, each KI performed a street walk with the researcher, with an average duration of 40 minutes, starting from his home and walking down the street where he lives and surroundings, pointing out community problems that interfere with health conditions, which were photographed and recorded in writing in a specific form by the researchers.

Thirty-one KIs participated in the interviews and the street walk. Regarding focus groups (FG), KIs were invited to participate, but only 14 accepted. Two FGs were set at a university near the community and were filmed and each consisted of seven KIs. Thus, a script was used with guiding questions about community issues that interfered in the health conditions, propitiating an in-depth discussion on the proposed theme.

Data were transcribed in full and read in depth by researchers; they were then analyzed according to the stages of the Content Analysis method in the Thematic Modality, namely: pre-review, material exploration and management of results (inference and interpretation).

The Ethics Committee of the University of Fortaleza approved the project, and we followed the ethical principles of Resolution No. 466, of December 12, 2012 of the National Health Council (CNS).

Results and discussion

The results stem from the interview, the street walk and the two focus groups, and statements are pointed out as representing all the participants. It is noteworthy that, through the PD, the local community expressed the main problems experienced, whose analysis resulted in two themes: 1) Weak intersectoriality in the management of community problems; and 2) problems’ coping strategies.

Weak intersectoriality in the management of community problems

The health problems pointed out by KIs refer to weak intersectoral actions that affect health,
which underpin the axes of safety, public lighting, occupation and basic sanitation. Statements revealed insecurity issues arising from the violence associated with the power of militias in the community and the use of drugs, lack of cultural and sporting activities for children and young people, poor basic sanitation, inefficient public lighting and insufficient garbage collection.

Insecurity is seen as a “disease” and is reflected in the reports about the daily experience of fear. The following statement shows the relationship between poor safety and health, which should be considered as a challenge to vulnerable territories:

_The health condition is poor ... I mean insecurity ... I believe that the great disease of our population, our district stems from very idle children. When they have no occupation, they just go out in the streets and do what they should not._ (K128)

Lima et al\(^\text{26}\) point out that Art. 23 of the Federal Constitution addresses public safety and sets forth the attributions of the institutions in charge of providing it (federated entities). However, functions and the relationship of the federal and state police are not yet regulated. In Brazil, this situation entails hardships to the solution of safety and violence issues, since there is a lack of governance projects and alignment of public safety policies that ensure democracy and human rights.

_They said there was an order [from traffic bosses] that one can no longer steal in the district and there were people stealing, but they were not from this district... They affixed on the post a paper saying that whoever steals in this district is going to be killed. Then, I was saying, in a few days we will not obey the police anymore, because we will have to obey traffickers._ (K114)

K114’s statement expresses a legitimate concern that is aligned with the study by Santos\(^\text{27}\), which shows all deaths due to violence in the territories and highlights the significant number of homicides of young black residents of favela and suburban regions of the city, as well as rural and forest regions. Homicides in vulnerable areas are directly or indirectly related to strategies and actions of Public Safety policies, especially those to combat drug trafficking.

KIs understand that public power is invisible in the face of this serious community problem:

_There are no police booths, just a few police officers for a large population, for the large, populous district, which leads to burglaries, robberies and thefts, and this brings risks to the health of the population. The citizen develops some mental disorder, such as depression, after burglary or a robbery... this leads to problems in the health of the population, harming the municipality and the state._ (K18)

Several studies show that violence in cities has increased and has repercussions on the lives of the population, spreading fear and insecurity. The International Labor Organization\(^\text{28}\) relates unemployment and low employability of young people to increased violence, prostitution and drug use, which predisposes to social vulnerability.

Another problem refers to the use of drugs by young people, which is repeatedly considered by participants as an aspect that generates serious impacts on the health conditions in the district and is associated to the lack of employment, leisure, sports practice, which is also explicit in the K128’s statement.

In order to avoid drug use, it is necessary to act intensively in prevention with health promotion strategies, considering some variables: the society people live in; cultural identities; power relations; social, political, economic, historical and cultural aspects; besides local reality and knowledge about drugs\(^\text{29}\). KIs reveal that recreation spaces, such as sports courts, have become depredated and propitious for criminal activities, which deprives the population from leisure and hinders the fight against drugs.

The lack of basic sanitation is another matter that gains urgency in the community’s agenda, since, when attempting to minimize the problem, they try to solve it regardless of public power intervention:

_There is no basic sanitation here and, in my street, everything was also covered with mud. [...] And diseases that come out from that sewage... There are lots of “Guabiru” [big rat], “Catita” [small mouse] too... and much more._ (K12)

The health promotion concept proposed by the World Health Organization (1986) focuses on health actions worldwide. Thus, environmental conditions are an important determinant of health\(^\text{30}\). Thus, Art. 2 of Law No. 10.257/2001 brings as an Urban Policy guideline the assurance of the right to sanitation. K12’s statement describes a setting with a community exposed to disease risks due to lack of basic sanitation, which is very clear, with children exposed to infections due to contact with soil contaminated by solid and liquid waste. Better socioeconomic conditions associated with basic sanitation\(^\text{31}\) are required to eradicate this problem.

The problem described in the previous paragraph is exacerbated by poor waste collection in the Community:
I have been living here for forty years... This garbage stuff, a lot of trash on sidewalks, on the streets... we have a lot of holes here... streets are in bad shape and there’s no sanitation. (K16)

According to Paim35, the health sector must seek solutions to its issues through intersectoriality, which is a channel that could possibly solve vulnerabilities that influence the people’s illness process. Thus, addressing problems related to the district’s infrastructure (pavement, sewage and garbage collection) will improve community health. We note that dwellers realize that living close to garbage makes children sicker and lament the fact that there are tons of garbage everywhere. K12’s statement reinforces the need for inter-sectoral actions to promote a healthy environment:

Garbage was on the side [of the house] and was harming children. People are dumping garbage where I live and the mountain is there. ... They should help us remove the garbage from here, because it brings diseases and animals that are dangerous to health... We lift manholes [sewage openings] with our bare hands and kids take the ball inside! (K12)

Negative environmental impacts caused by litter increase the spread of rodents and venomous animals in the community, especially in the rainy season. Barbosa et al.33 point out that accidents with venomous animals such as scorpions in some Brazilian cities are a public health problem due to their frequency and/or severity.

Another demand pointed out by participants was the need to construct places for the practice of sports, cultural and leisure activities. Dwellers believe that this would be a strategy to ensure a more promising future, with better living standards, as an option for the before/after school periods for children and young people, avoiding entry into crime and drug trafficking.

This concern is reinforced by Oliveira et al.34, who believe that the effective presence of the family in drug use prevention is necessary and stresses the importance of the support of public policies that allow sports and cultural practice for children and young people, especially in the neediest communities.

The participation of children and young people, who are the main victims of poverty, violence, inequality and social exclusion, in leisure and entertainment activities provides benefits to social integration, combating violence, removing them from the streets, combating drug and crime involvement and favoring health promotion35,36.

In the PD, the KIs have the opportunity to express themselves and are challenged to point out local problems, in the perspective of transformation and the emergence of strategies that allow the right to freedom, citizenship, equality, participation, democracy and everything that influences health conditions37.

Issues coping strategies

When mentioning community problems, dwellers also point out coping strategies, which were grouped into two sub-themes: “social mobilization actions” and “support from institutions in the territory”.

Social mobilization actions

Social mobilization actions are shown as a sum of efforts that can involve a greater number of people and institutions with a view to solving problems of collective interest37.

The alternatives pointed out by KIs to solve the issue of basic sanitation correspond to what is financially possible. Thus, dwellers perform works without the support of specialists, which are unsuitable for the total resolution of the problem. However, they try to minimize disruptions caused by direct coexistence with sewage.

We made a kitty [a quota among the residents to raise money] ... we had concrete laid over [on the street], but only up to my home. From my home onwards, there’s no more concrete, everything is mud... (K12).

Even with these actions, we can see that the vulnerable condition of dwellers is maintained in the face of poor environmental conditions.

Community engagement in collective well-being actions is also adopted. Many of them stem from the creativity and entrepreneurship of some dwellers and are inspired by family culture and relationships. Thus, participants celebrating holidays favors the establishment of cooperation and partnerships:

[...] I celebrate Mother’s Day... My celebration joins the celebration of other dwellers... Thus, mothers get together, although some do not talk to others. I say, “People, but you’re just going to have a snack...” That is just to see if I can get people together. For children’s day, we’re collecting [food, toys, clothes, etc.] ... to give gifts. I celebrate children’s day every year... Then, I’m part of the Bank... from where I get money for the party... We buy gifts and people donate candies, lollipops, etc... We’ve been doing this for five years, but there are still people who speak ill of this... (K12)
According to KI2 statement, dwellers’ efforts show coping strategies to alleviate stressful situations common to suburban districts experiencing similar problems, such as the often conflicting social relationships. KIs believe that the promotion of social actions with the involvement of the community stimulates socialization, which is seen as a citizen’s right and an initiative that brings moments of joy and well-being, affecting the good coexistence and the health of individuals.

Antonowisk38 points out that cooperation is an appropriate strategy to respond and manage the resources accessible in the social environment, generating satisfaction, well-being and regulation of the negative effects of stressors. Another strategy adopted in the community due to the lack of nurseries and nurseries accessible to this population is volunteer work of dwellers who take in children of working women in their homes:

*I really like helping people. Most of my neighbors work and I like to stay with their children and they tell me that I should be a nanny.* (IC14)

Volunteer work refers to solidarity with others. The fact that neighbors take care of the children of those who work outside their homes ensures access to employment and income for the survival of some families. In addition, workers pay, albeit poorly, the neighboring caretakers of their children, in addition to leaving children’s food at their homes, so that this does not generate expenses for the friend who provides this service.

Another related issue was religion as a promoter of social welfare prominence:

*I do evangelization work at home. During this period [in May], we prayed the rosary for thirty days and concluded with the coronation [of Our Lady]. I gather thirty or forty people every day in my house to pray... everything I want, I can count on this group. They are very friendly people, they are great people to work with and to get to know...* (K110)

Religion / religiosity is important and strengthens social mobilization. Faria and Seidl39 say that religiosity plays a relevant role in health care contexts, acting in the face of illness or vulnerability processes.

Community work was another outstanding aspect and is a gateway to becoming an active member of the community:

*I was part of a team that built a church... I do not know if you ever had the chance to see it [the church]... I became an active member of the community with that construction because I visited the whole community, all the apartments, all the houses and we managed to get this church up...* (K110)

Volunteer work in the various Brazilian communities has been growing over time as a form of cooperation and social participation. This type of action broadens the empowerment and generates a sense of belonging and co-responsibility with regard to the resolution of the problems of the place they live in. In Brazil, voluntary work is recognized by Art. 1 of Law Nº 9.608, of February 18, 199840 that defines it as unremunerated activity, made by a natural person, a public entity or private non-profit institution that carries out civic, cultural, educational, social welfare actions, among others40.

**Support from institutions in the territory**

In addition to the actions of small groups of dwellers, the partnerships established between them and some social organizations in search of solutions to community problems form larger movements, meeting diverse and broader needs:

*From Tuesday onwards, NGOs [Non-Governmental Organizations] help children. If you need a medicine, they go there and look. You just bring the prescription with you in the morning... Depending on the NGO member’s money, he already brings it [the drug] in the afternoon or else the next day.* (K12)

*My little girl had an allergy and no one knew what it was. Every day they got a medicine for her... Thank God, thanks to the NGO, my girl got well, because I went to all the pharmacies and nothing seemed to be working for her.* (K16)

The report shows that residents are aware of the importance of social engagement, social networks and support at the places they live in, and this is a way of addressing problems and an individual and collective empowerment, strengthening their struggles for better living and health conditions.

A private university located in the surroundings of the study community was mentioned because it provided sporting practices aimed at children and young people, performing intersectoral actions to promote health:

*I always enjoyed the University. There was a time when I was a pupil [referring to the free basic school maintained by the University]. I practiced all kinds of sports... but my passion has always been basketball and futsal. Then, a passion of studying here [at the University] aroused in me and I am studying now... This University does ev-
erything... I think this is a great contribution to the whole district, because I think it took many people out of the streets and criminal activities. I have a friend who is a Brazilian athlete and has already competed in other countries ... he excelled and won a scholarship because of that. I think sport overly contributes to health. (KI12)

Coleman and Eso-Ahola\(^{41}\) state that leisure and sports can generate coping mechanisms that make it easier to address stress-triggering problems. Leisure-derived coping conceptions have a positive meaning for health, resulting in reduced levels of depression, stress and anxiety.

The University school clinic near the community is also seen by study participants as a place where they can turn to to seek free health care:

I really like and I am very thankful to the school clinic, because my husband had a stroke thirteen years ago; he did all the treatment there. It has been five years since he stopped doing physiotherapy, speech therapy and occupational therapy because he does not want them anymore, but he continues to do pool therapy with a teacher and, thank God, he has a cardiologist, a neurologist... (K16)

K16's statement shows the dweller’s recognition of a private segment that provides free services and community support, providing specialized services close to home. Coping mode use will depend on the available resources and the forces restraining its use\(^{45}\). The actions promoted by several institutions located in the same territory collaborate with health promotion and addressing problems arising from the weak intersectoral actions in the community.

It should be noted that, in this study, based on Monken et al.\(^{42}\), the territory is understood as a space marked by disputes, power relationships and production methods that are not in a place of social isolation, but of health production or vulnerabilities.

Thus, it is important to emphasize that the situational context of the studied Community shows a weakened territory with regard to health promotion. It is worth reminding that the Sustainable Development Goals (SDGs), which include health,were stepped up after Rio+20 in 2012\(^{43}\). These goals reveal the need to build sustainable and healthy territories, understood as result of the confrontation of different visions of the social production of space and territorialisations\(^{44}\).

Health must be understood from a public and sustainable agenda of intersectoral (beyond health) and interscaled (from local to global) character, capable of driving the confrontation of its social determinants, communicating closely with sustainable development and building on the ecology of the knowledge of voices that stem from the territories\(^{45}\). These aspects interact with the health promotion paradigm, which divides health into four main structuring axes: human biology (genetics and human function); the environment (natural and social), lifestyle (health-affecting individual behavior) and organization of health services\(^{46}\).

One of the great challenges of health promotion in the Latin American setting is the adoption of strategies that ensure equity and improved quality of life of the populations, and should materialize in the process of formulating health and intersectoral policies\(^{47}\).

Conclusions

The community studied shows problems related to basic health needs, where it is necessary to convey the behavioral vision and emphasis of individual action to a collective vision. We note that dwellers’ reports show the political and social neglect that affects this population, since many of the problems are beyond their governability, showing characteristics of inequity in health and social vulnerability. Living with lack of sanitation, public lighting, non-collection of garbage and public insecurity results from a condition of social and health disparities. Hence, the importance of carrying out actions that ensure equity, reducing or eliminating avoidable differences and promoting health.

Even with so many problems outside their capacity for governance, the community shows a strong internal articulation in the pursuit of social well-being and solving problems identified. In addition, it counts on the partnership with private institutions and NGOs that are placed in its surroundings to expand the scope of its actions.

In the field of coping strategies, the relationship between public power and the community under study was weak, since no partnership with public agencies was mentioned, which reveals the urgent need for governmental actions to return to the elaboration of intersectoral and popular participation policies based on an expanded health concept.

It appears that knowledge of the living and health conditions of this community through participatory diagnosis favors reflection on the territory and health, recognizing residents’ vi-
sion, which facilitates the search for changes of the current model, the confrontation of inequities and the implementation of improvements. In this context, the importance of continuous participation of each community member and partner institutions in the elaboration of a local development plan and increased public policies stands out.

Given the results, participatory diagnosis is an important path for collective listening and health production in vulnerable communities. This study inspires new research in partnership with this and other communities, where debates and actions will be developed, which may increase social participation in health promotion and in coping with problems, as well as contributing to the assurance of all dwellers’ right to the city.

Collaborations

IV Sousa, CCP Brasil and DP Vasconcelos participated in all phases of the research and the elaboration of the paper; RM Silva participated in the elaboration of the paper, the critical review and approval of the version to be published; KA Silva participated in data analysis and interpretation and writing of the paper; IN Bezerra participated in the design, outline, analysis and interpretation of data; TJ Finan participated in the design, outline and data analysis and interpretation.
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