Coping with problems that impact on the health of a socially vulnerable community from the residents' perspective

Izautina Vasconcelos de Sousa (https://orcid.org/0000-0002-1418-8492) [1]
Christina César Praça Brasil (https://orcid.org/0000-0002-7741-5349) [1]
Raimunda Magalhães da Silva (https://orcid.org/0000-0001-5353-7520) [1]
Dayse Paixão e Vasconcelos (https://orcid.org/0000-0002-8709-4147) [1]
José Eurico de Vasconcelos Filho (https://orcid.org/0000-0002-6881-0814) [1]
Timoty Joseph Finan (https://orcid.org/0000-0003-0172-6607) [2]
Ilana Nogueira Bezerra (https://orcid.org/0000-0002-2072-0123) [3]
Cleoneide Paulo Oliveira Pinheiro (https://orcid.org/0000-0003-1784-7446) [4]

Abstract *This research aims to identify the strategies adopted by dwellers of a socially vulnerable community, characterized by social and economic inequality, to address the problems that interfere in the health conditions. A participant investigation anchored in hermeneutics was conducted through participatory diagnosis, with 31 residents of the Dendê community, who were called vital informants. Data were collected from semi-structured interviews, street walking and focus groups. WebQDA software was adopted to support data analysis, based on content analysis in the thematic modality, which resulted in the following categories: "individual or small group actions", "partnerships between residents and social organizations" and "partnerships with public and private sectors". We considered that the condition of vulnerability motivated by a diversity of social determinants generates negative impacts on health, requiring planning and implementation of policies and actions geared to people's well-being. This reflects the relevance of the participatory diagnosis, which can be supported by people and Information and Communication Technologies to increase community participation in health promotion actions.*

Key words *Social participation, Health status, Social vulnerability, Coping*

[1] Programa de Pós-Graduação em Saúde Coletiva, Universidade de Fortaleza. Av. Washington Soares, 1321, sala S01, Bairro Edson Queiroz. 60.811-905 Fortaleza CE Brasil. izasousa222@gmail.com
[2] Universidade do Arizona, Estados Unidos. Arizona Estados Unidos.
[3] Universidade Estadual do Ceará. Fortaleza CE Brasil.
[4] Centro Universitário Estácio de Sá. Fortaleza CE Brasil.

Introduction

The Unified Health System (SUS) was the first in the field of Brazilian public policies to adopt popular participation as a principle, reiterating the importance of social control under health practices and highlighting the possibility of establishing institutionalized spaces of popular voicing to include all the pluralities of the various actors of society[1]. To this end, citizens must be aware of their rights to play their part in participation for social change[2].

Thus, social participation becomes an essential tactic in coping with social inequities in health, in which political and social movements show greater power, contributing to the quality of life of the population[3].

In the context of social policies, the participation of the community in the processes of diagnosis and decision-making is shown as a structuring element, since this brings information to face social inequalities, not limited to the health sector[4]. Thus, participatory diagnosis consists of a method for the joint acquisition and construction of data on a given reality; it is participatory because the information gathering process is performed with the involvement of people, who, in partnership with mediators, produce data for change[5].

Participatory Diagnosis is a methodology that allows the organization of social needs, through the elaboration of the diagnosis of the reality lived by people, in order to improve the living conditions, since transformation begins with the awakening of the desire for change and planning of intervention actions[6].

Before a scenario of change, the identification of problems emerges from the different views of people who experience them, which can lead to (re) signification of policies, strategies and coping measures, benefiting the conception of more effective actions to address problems and achieve resolutivity[7].

Coping consists of using diverse strategies for the resolution of specific events arising from unfavorable situations that may affect people or population groups. In the community context, coping strategies can be implemented at various levels: personal, family, friends or specific and institutional groups[8].

According to the same authors[8], coping's line adopts two central understandings. The first consists of threat, which results from a stressor event to which the problem is related and that needs to be minimized or solved. The second understanding concerns the control required in the face of the threat of the stressor when the subject seeks strategies to control the situation and the feelings they cause in people affected.

Therefore, one questions: what are the coping strategies adopted by dwellers of the Dendê community in the face of the problems that they experience and affect their health conditions? This study aimed to identify the coping strategies of the issues that interfere in the health conditions employed by residents of a socially vulnerable community.

Methods

Participant research was carried out in a community located in Fortaleza, Ceará, Brazil, from January to July 2016, part of the project "Participation and community mapping to promote quality of life and social inclusion of Dendê dwellers", developed by a research group from the University of Fortaleza.

The sample consisted of 31 community dwellers, named key informants (KI), aged 18 to 80 years, indicated by the Community Health Workers (ACS) of the neighborhood. Of the KIs, 24 were women and seven men, all with more than five years of residence in that location, who contributed with their lenses and perceptions aimed at solving the problems they identified in the first stage of this investigation[9]. KIs are residents who actively participate in the life of the community, exercise leadership in several segments or have reliable and in-depth information on the topic under study[10].

Research is participant because it gathers people and institutions, enabling an epistemological, ethical and political reflection on the setting. This type of research takes into account interpersonal and group relationships, favoring a contextualized look at the issues that are intended to be clarified, which favors the establishment of partnerships to address the evidenced problems[11,12].

Social contrasts and inequalities[13] mark the Dendê community, originating from community struggles for the search of land in the 1970s, when families relocated from other poor regions of the city of Fortaleza started to occupy that area[14]. Over the years, the community has organized itself politically, forming leaderships and establishing the Residents' Association in the 1980s. These actions led to the establishment of partnerships with public and private initiatives in

an attempt to seek better living conditions for the residents.

It is worth noting that the community is located in the Edson Queiroz district, with approximately 22,110 inhabitants, with a mean of 3.76 people per household, which is a high population density. Regarding the Human Development Index (HDI), in 2010, the district was ranked 57th among the 119 districts of Fortaleza, with an HDI of 0.350[15]. It is estimated that the city of Fortaleza has more than 2,600,000 inhabitants and ranks 5th in the world ranking among the cities with the highest level of social inequality.

In an earlier study[9], community problems that interfere with the health conditions of the population were identified. To this end, strategies were used to collect participative data, such as street walking, semi-structured individual interviews and two focus groups with the 31 KIs, at pre-scheduled dates and times. From the identification of the problems, issues emerged that, from the perspective of participants, had to be dealt with, which are addressed in this study.

Fourteen KIs participated in the focal groups (FG), using a script with guiding questions about coping strategies of community issues that interfere with health conditions. Each group had a mean length of two hours and occurred in a room with audio and video equipment at a university near the community. Data collection was terminated using the saturation principle when new information no longer emerged with the continuing debates[16].

The FGs were conducted by the same researchers of the previous study – a facilitator and a moderator, who recorded the observations that they deemed pertinent to complete the recordings, which facilitated understanding, analysis, inter-coding and interpretation of data.

The letters "IC" – key informants – followed by numbers from 1 to 14 were adopted to preserve the identities of the participants. Thus, participants in the focus groups were IC1 to IC14 and those who participated only in the interview and street walking were IC15 to IC31.

Data transcription was based on recordings of the interviews and focus groups, as well as the field notes of the researchers, who accompanied all the research moments in partnership. Then, the material was submitted to float reading for the appropriation of the obtained information. The next step consisted of coding. With the support of the WebQDA software, analysis codes were set after in-depth reading of the data obtained, which was also supported by hermeneutics and by the theoretical approaches of participative diagnosis[7,17].

It is noteworthy that, despite the use of the indicated *Qualitative Data Analysis Software* (QDAS), the researchers followed the steps of the Content Analysis in the thematic modality[18], which are pre-analysis, material exploration and treatment of results.

In the categorization stage, the continuing debate between the researchers favored a greater alignment of information and analysis methodology[19]. Thus, intra- and inter-coder fidelity analyses were implemented to obtain coding quality.

Again, based on a study by Sarmento[19], the level of intra-coder fidelity was obtained through the interviewer's coding of the two interviews held with a 15-day interval between the two codifications, which facilitated the assessment of coherence in the coding process. The researchers established a continuous and calibrated communication to achieve inter-coder fidelity, since they were responsible for the development of all stages of the research and established among them standardized codification procedures, which was consistent with the objectives, methodology and theoretical-methodological reference of the study, besides the codes and the rules of codification.

The association between hermeneutics and the theoretical approaches to participatory diagnosis[7,17] supported the interpretation of the results since these theoretical references broaden the view on community knowledge and its role in identifying problems and implementing coping strategies.

The study of understanding from hermeneutics supports the search for the meanings of human facts, facilitating the understanding of the relevance of dwellers' engagement in the participatory diagnosis subjectively and intersubjectively[20]. The hermeneutic perspective establishes harmony between health and disease, pointing to the social actor the need to participate in the process of gathering the issues that lead to poor health conditions. In this context, social participation gives rise to new technical and practical knowledge, a knowledge focused on the importance of the subjects' engagement in search of better health conditions for themselves and the community[21].

This study is a selection of a research, whose project was approved by the Ethics Committee of the University of Fortaleza under Opinion Nº 1.146837, with the consideration of human research[22] ethical precepts.

Results and discussion

Different methods of coping with the health threats identified by dwellers were obtained from the semantic and ideological convergence of testimonials[23]. Thus, problem-solving is based on "individual actions or actions from small groups of people", "partnerships between dwellers and social organizations" and "partnerships with public and private segments".

Sousa et al.[23] highlight the various community issues affecting health conditions, such as lack of leisure activities, sports and culture for youth and children; low number of police officers; insecurity; local violence; use of illicit drugs in public spaces; lack of basic sanitation; unfavorable environmental conditions that pose health risks; poor public infrastructure; imbalanced interpersonal and intergroup relations.

All this causes dwellers to express the feeling of "sickness" and try to solve or minimize the problems, seeking different ways of coping. Thus, community empowerment becomes a process whereby individuals (individually or collectively) in a community develop actions to achieve their goals through active participation in problem-solving[24].

Individual actions or actions from small groups of people

Individual actions or actions small groups start from one person or small group and are inspired by culture and family relationships. Thus, for the participants, community mobilizations to celebrate festive dates, besides establishing cooperation and partnerships among people, are strategies that enable social actions, better social integration and improved quality of life, resulting in community health promotion, as shown below:

I organize and pay for [parties in the community] *without any help from anyone... but, it's like my mother says: you do things for the others and get nothing in return. Mom, I'm just telling you one thing: I'm not going to do something for people expecting them to thank me. God is going to thank me.* (IC2)

IC2's statement reflects the efforts of community residents, showing coping strategies in search of mitigating stressful situations, such as the often conflictual social relationships. The residents believe that the promotion of social actions with the participation of the community itself stimulates socialization and is seen as a pos-

itive initiative, since it brings moments of joy and emotional well-being, affecting good interaction, mental health of individuals and proximity to religion.

Social actions are essential support to poor households because they reinforce the perceptions about appreciation and respect, necessary to face the problems experienced. Thus, individual leadership strengthens the motivation of the individuals and groups of a community and can generate incentives to people's potential to improve their living conditions, aiming at the community "empowerment", triggering self-sustainable development processes[25].

The actions that involve the community bazaar (option of access of the residents to material goods at affordable prices) and reading incentive (loan of books between the inhabitants as an investment to enrich the knowledge), were also mentioned, which are evidenced in the following account:

My aunts always organize a bazaar, they hold a June celebration party and my cousin holds a Christmas party for children ... Even my aunt, who is now a health worker, has a "frozen library" in the street. A frozen library is an old refrigerator full of books that people can take to read and then return ... It is better than kids only playing or running... (IC8)

The initiatives mentioned by IC8 are two creative strategies of community unity, favoring social equity, and supporting coping with adverse community conditions. Besides generating income and increasing buying opportunities facilitated by the bazaar, it is worth mentioning that this also leads to the reuse and recycling of products that would otherwise be discarded in the trash. The frozen library stimulates the habit of reading, meeting and interaction among residents, as well as increasing the cultural level.

The actions as mentioned earlier facilitate the gathering and increase of human resources and material, backing and social support, and is of great relevance for the reduction of inequalities[26], as they lead to improved interpersonal relationships, reduced stress, access to reading and individual and community development. The growing civil society organization capacity is associated with higher levels of education, per capita income and democratic stability, leading to increased associations and voluntary groups.

It is also vital to understand reading and education as liberating acts of the problems faced by the community. Reading plays the role of recreation, leisure and empowerment, enhancing peo-

ple's ability to understand the world and themselves in the process of awareness.

Empowerment promotes awareness, that is, the transformation of naive thinking into a critical consciousness, producing a "process of knowing" that takes place in the dialectical human-world relationship of reflexive action. Thus, empowering is becoming aware, and becoming aware is not manipulating, but leading the other to think of reality more critically[27].

An alternative evidenced by the participants to remedy the lack of daycare centers and nurseries in the region concerns the volunteering of some residents of the community, who receive the children of their working neighbors in their homes. In this setting, the religious institutions of the territory are also mentioned because they provide shelter services to the residents.

[...] *This week a young man from the evangelical church came down there, had a haircut; many things were going on there.* (IC14)

I did some work in the community where I was part of a team that built a Catholic church [...] *and with the construction of the church, I became an active member of the community because I visited the whole community, all the apartments, all the houses and we erected this church...* (IC10)

Voluntary work is not related to someone's financial condition, but solidarity with one's neighbor. The care that some residents provide to the children of those who work outside enables them to stay in the labor market and contribute to the household's income. In many Brazilian municipalities, in regions of greater social vulnerability, this practice is common because of a lack of daycare centers or schools. It is also worth noting that the remuneration of these caregivers is very low, leading the workers to provide food for their children, avoiding extra expenses to neighbors who are helping them.

Religious practices also are coping strategies for the problems of the territory, since they are related to the improvement of socialization, social support and mental health. These actions promote collaboration among community dwellers, the formation of support groups for residents and prayer groups. This increases the psychological well-being of the participants by reducing the prevalence of depression, drug use, and suicidal behavior[28].

Sports practice was pointed out as a strong ally to improved life and health conditions of the young, reflecting in the daily living of the community, mainly when they are realized in schools, University and municipal equipment.

There are no more sports projects ... there is a judo project at school ... some boys got interested and even won a championship ... There was an initiative in this block that I mentioned, where there were specific teachers for each sport, they had a space that was just for fighting, basketball, beach volleyball and stuff. This was great for the young. (IC12)

Encouraging the involvement of children and adolescents from socially vulnerable territories with sports activities helps to cope with existing problems, promotes behavioral improvements and facilitates the fight against violence.

The study by Silva et al.[29] on strategies for coping with chronic diseases points to the relevance of good community experiences in establishing more effective policies, which is in line with the results of the present study. According to the participants, the actions that the community has developed foster partnerships, cooperation, happiness, better quality of life and health, as well as resources for coping with difficulties.

Partnerships between dwellers and social organizations

The formation of more extensive and cohesive groups, based on partnerships between dwellers and social organizations to solve community problems allow the resolution of problems of various natures, including health needs related to socioeconomic aspects:

[...] *as of Tuesday NGOs help children. If you need one medicine, and if it is costly, they go there and look.* [...] *So, you go there with the prescription ... depending on the money of the NGO member, they bring it* [the drug] *in the afternoon or the next day.* (IC2)

IC2's account shows the residents' awareness of the relevance of social involvement, social and support networks in their dwelling places, as possibilities to address the problems identified. Dwellers' articulation movements enable individual and collective construction and empowerment, strengthening their struggles for better living and health conditions.

The lack of community social support structures and coping strategies reflects negatively on the social, economic and health aspects of this population[28]. In this study, it should be highlighted that holding events with the participation of residents leads to better knowledge of the territory, helping them to highlight their viewpoints, prioritize problems and discuss solutions.

Social organizations facilitate the improvement of the quality of life of individuals and

households, especially from the evidence of their role as social stakeholders capable of changing their reality, reviving practices of solidarity, citizenship and social innovation[30]. In this context, participants consider community work as the gateway to social leadership:

[…] *I was part of a team that built a Catholic church* […] *and with the construction of the church, I became an active member of the community because I visited the whole community, all the apartments, all the houses and we erected this church...* (IC10)

Voluntary work in Brazilian communities has increased over the years, promoting cooperation and participation of society; the empowerment of participants; the feeling of belonging and shared responsibility in the search for solutions to the problems of the territory. This action modality supports the construction of the collective good, in the ethical motivation that brings people back to social work, in active participation and the effective democratization of the State, in social, political and economic aspects[31].

Also, the religious spaces of the community are conducive environments for the dwellers to carry out actions that keep them active and provide them with emotional balance, diverting them from risk behaviors and situations:

The church is now embracing many good things and collecting many young people as well. I had a rebellious nephew and now he's in church. He plays drums. The boys keep calling him to do other things, but he says he won't because he'd instead go to church. (IC14)

In this case, religion brings well-being, helping in overcoming individual and collective problems. The church is an institution trusted by society, making it exercise a power stemming from an ideological and historical process[32]. That is why residents must become aware of the contributions of religiosity to community pacification since this allows the implementation of local practices that curb violence and conflicts.

Before joining this district business, a pastor arrived there... He gathered all the people who were gang members and made a walk for them to be in peace ... When they crossed the streets, the pastor asked for help to do something to occupy them in the church. People of the neighborhood did not quite understand this pastor's attitude... (IC14)

The role of the religious leader highlighted by IC14 draws attention to the importance of people in the community who can motivate local people to do local development work. These initiatives of positive attitudes give rise to environ-

ments that favor the creation of policies aimed at improving living and health conditions. The pastor's initiative enables the union of the residents to promote improvements in the lives of socially excluded people. However, some members of the community lack an understanding of the motivations that lead the church to make efforts to avoid social risk situations.

Social support generates information, in which the material help provided by groups or people with regular contact with an individual affects the emotional and behavioral aspect, benefiting both sides[33].

Partnerships with public and private segments

Many public and private institutions within the community investigated enable the establishment of partnerships for site development and coping with problems. An example of this is the free health service, maintained by a private university and covenanted to the Unified Health System (SUS), located near the Dendê. In this unit, education and health care are associated and provide the residents with comprehensive care:

The University helps from small children to the oldest ones, because some teachers work with the rehabilitation part, a part that I like very much and I believe that contribution is invaluable for every neighborhood. (IC6)

In her testimony, the participant acknowledges the importance of services provided to the community by a private institution in the area of rehabilitation, providing access to specialized treatment near homes. In the case at hand, the private university, through its financing and associations with municipal and state health management, helps in reducing the difficulties of access of the population to health services, a recurrent subject in the residents' statements.

The participants consider that the leisure derived from the practice of sports favors the health conditions of children and adolescents, encouraging the study and the pursuit of professional career:

I always enjoyed UNIFOR; there was a time at school when I practiced all kinds of sports. However, my passion has always been basketball and futsal. Then, the passion for studying here [at the University] *awoke and now I study ... and the sport contributes a lot to health.* (IC12)

The university pointed out by IC12 provides many options for leisure and facilitates improved living conditions of the population. Thus, it al-

lows the community to have access to sports practice, and educational and cultural actions. We also found that residents of the Dendê dwellers realize that this institution prioritizes healthcare and leisure as the main actions for the community's benefit:

Without the University, it would not have health, nor dental care or leisure. (IC12)

The private university has a primary education school that provides free education to the children of the community, which is seen by dwellers as support and social responsibility equipment. However, despite the recognition and relevance of this initiative, dwellers value the benefits of health and leisure actions. This shows that the residents must discuss and be knowledgeable about the value of each of the actions by the university and other partners since health, education and leisure are a tripod highly relevant to the quality of life.

The generation of direct and indirect jobs by the private university is another institutional initiative valued by the participants and recognized as a strategy of social and economic support to the community:

The university is our father and mother, everything that we look for is there... sport, leisure, health. Most of the staff here [of the community] *is employed there ...* (IC14)

The community's relationship with the local public and private institutions is reflected in the participants' statements, which refer to the contributions of providing quality services and comfort that these actions provided the residents. For them, the improvement of health conditions, access to leisure and job generation are activating aspects of economic activity. In this context, the KI emphasizes the actions provided by private entities compared to public entities, since the contributions are focused on social dynamics.

Most KIs did not mention any partnership with public institutions close to the community, evidencing the need for the public sector to become more present and active in this community. However, two KIs referred to a research that is being conducted in the community, which encourages residents to use the "*Fortaleza Participa*" portal, a technological tool managed by the Science, Technology and Innovation Foundation (Citinova) of the Municipality of Fortaleza, as an essential channel for the residents' dialogue with the public sector.

The *Fortaleza Participa* portal is a space created with the aim of enhancing popular participation in the collective conception, debate and development of ideas, actions and projects of social interest, spurring the local articulation of people and groups. The portal facilitates a collective, intelligent discussion, systematizing the debate of topics of common interest and its deliberation. Thus, citizens can participate in their management and managerial planning, in order to build solutions and actions shared with society[33].

In this context, one can find in Information and Communication Technologies (ICTs), more specifically in the tools of deliberative digital democracy (e-democracy)[34], the possibility of expanding the scope of popular participation and coping strategies, giving voice and accessible space to a more significant number of people and facilitating the processes inherent to these initiatives. Thus, the existence of some types of technology (software, digital platforms and applications) support the processes of coping with social vulnerability-related problems.

The partnerships of residents of the community studied with public and private agencies favor the development of intersectoral actions, contributing to improved community living conditions since stand-alone interventions have low effectiveness to promote quality of life, foster development and overcome social exclusion. Intersectoriality should be understood as a strategy to solve problems that exceed the scope of sectoral action and is referred to as a policy proposed to guide and organize health promotion in municipalities[35].

Final considerations

Knowledge of the strategies to cope with the problems that interfere in the health conditions, which are adopted by dwellers of the Dendê community facilitates interventions in what is essential for the territory and in a contextualized way. The participants involved with the context investigated indicated the risk factors and their fragile environment, evidencing the health priorities and suggesting resolutive measures.

The participatory diagnosis contributed to a reflective discussion by participants about what is required to improve health conditions; and to point out necessary actions, both public and through self-sustaining strategies in broad segments: education, income generation, social equity, a culture of peace and a healthy environment. It is known that the points identified by the participants are closely related to social well-being and, thus, to individual and community health,

which can contribute to the practical application, giving continuity to coping with problems in the community studied and other settings.

The knowledge of the problems pointed out by the dwellers of the Dendê community and their impacts on their living conditions associated with the meanings attributed to health, feelings about these problems and the knowledge of the coping strategies adopted contribute to the elaboration of public policies and the realization of existing ones, where the priority of the agenda is the improvement of the living and health conditions of this population, which also contributes to guiding the actions of this nature.

The lenses of dwellers provided further in-depth to the diagnosis, supporting the proposal of more directives and resolutive strategies. The coping methods used by the community show an internal movement backed by social mobilization, and individual and community empowerment.

Digital technologies, through the negligible accounts about the "Fortaleza Participa" portal, are seen as a supporting tool that can expand popular participation in the daily making, both in the diagnosis and seeking solutions and management of the processes involved in this context. Thus, the use of this technology should be analyzed in the community studied.

One of the limitations of the study was the difficulty of expanding the KI sample, due to the time restriction of some residents who were not able to participate throughout data collection. Thus, the 31 participants mentioned in the methodology remained. Another limitation concerns violence experienced in the neighborhood, which prevented the visit of researchers and KIs to some regions of the community.

It should be emphasized that the strategy adopted in this study provides significant practical contributions since it can be replicable for many other realities, favoring the search for more effective resolutive alternatives based on the appreciation of the viewpoint of individuals who experience certain situations.

Collaborations

IV Sousa, CCP Brasil and RM Silva participated in all stages of this research, through the collection, analysis and interpretation of data up to the drafting of this manuscript. DP Vasconcelos, CPO Pinheiro, JE Vasconcelos Filho, TJ Finan and IN Bezerra participated in the analysis of data, interpretation, drafting and critical review of the manuscript.

References

1. Rolim LB, Cruz RSBLC, Sampaio KJAJ. Participação popular e o controle social como diretriz do SUS: uma revisão narrativa. *Saúde Debate* 2013; 96(37):139-147.

2. Morais JA, Callou ABF. Metodologias participativas e desenvolvimento local: a experiência do Projeto Dom Hélder Câmara no assentamento Moacir Lucena. *Interações (Campo Grande)* 2017; 18(1):165-177.

3. Freitas LN, Micheleti VCD. Desafios da atenção básica frente às iniquidades em saúde. *Rev Opinião Filosófica* 2017; 3(1):51-59.

4. Costa AM, Vieira ANA. Participação e controle social em saúde. In: Fundação Oswaldo Cruz. *A saúde no Brasil em 2030 - prospecção estratégica do sistema de saúde brasileiro: organização e gestão do sistema de saúde.* Rio de Janeiro: Fiocruz; 2013. p. 237-271.

5. Freitas AF, Freitas AF, Dias MM. O uso do diagnóstico rápido participativo (DRP) como metodologia de projetos de extensão universitária. *Em Extensão* 2012; 11(2):69-81.

6. Lamim-Guedes V, Monteiro RAA. Diagnóstico participativo: uso da metodologia Biomapa para o Bairro do Gonzaga de Santos/SP. *Rev Educação Ambiental Ação* 2014; 50(0):1-8.

7. Nelson DR, Folhes MT, Finan TJ. Mapping the road to development: a methodology for scaling up participation in policy processes. *Develop Practice* 2009; 111(3):302-316.

8. Lazarus RS, Folkman S. *Stress, appraisal, and coping.* Nova Iorque: Springer Publishing Company; 1984.

9. Sousa IV, Brasil CCP, Vasconcelos DP, Silva KA, Bezerra IN, Finan TJ, Silva RM. diagnóstico participativo para identificação de problemas de saúde em comunidade em situação de vulnerabilidade social. *Cien Saude Colet* 2017; 22(12):3945-3954.

10. McKenna SA, Main DS. The role and influence of key informants in community-engaged research: a critical perspective. *Action Res* 2013; 11(2):113–124.

11. Moraes RCP, Anhas DM, Mendes R, Frutuoso MFP, Rosa KRM, Silva CRC. Pesquisa participante na estratégia saúde da família em territórios vulneráveis: a formação coletiva no diálogo pesquisador e colaborador. *Trab Educ Saúde* 2017; 15(1):205-222.

12. Faermam LA. A pesquisa participante: suas contribuições no âmbito das ciências sociais. *Rev Ciências Humanas UNITAU* 2014; 7(1):41-56.

13. Instituto de Pesquisa e Estratégia Econômica do Ceará (IPECE). *Perfil municipal de Fortaleza: tema VII – distribuição espacial da renda pessoal.* Fortaleza: Prefeitura Municipal de Fortaleza; 2012. (Informe nº 42.).

14. Eufrásio CAF, Alves NFT, Magalhães AL. Aonde os sonhos podem chegar: estudo de caso do polo de produção de vassouras de garrafas "pet" da Comunidade do Dendê. Blog Responsabilidade Social [Internet]. 2015. [acessado 2015 mar 02]. Disponível em: https://blogresponsabilidadesocial.wordpress.com/2015/07/22/aonde-os-sonhos-podem-chegar-estudo-de-caso-do-polo-de-producao-de-vassouras-de-garrafas-pet-da-comunidade-do-dende/

15. Instituto Brasileiro de Geografia e Estatística (IBGE). *Anuário estatístico do Brasil.* Rio de Janeiro: IBGE; 2010.

16. Salgado CM. El muestro en investigación cualitativa: principios básicos y algunas controversias. *Cien Saude Colet* 2012; 17(3):613-619.

17. Chambers R. The origins and practice of participatory rural appraisal. *World Dev* 1994; 22(7):953-969.

18. Minayo MCS, Deslandes SF, Gomes R. *Pesquisa social*: teoria, método e criatividade. Petrópolis: Vozes; 2013.

19. Sarmento H. *Análise do jogo de futebol – Padrões de jogo ofensivo em equipas de alto rendimento: uma abordagem qualitativa* [tese]. Vila Real: Universidade de Trás-os-Montes e Alto Douro; 2013.

20. Giacoia Júnior O. *Heidegger urgente: introdução a um novo pensar.* São Paulo: Três Estrelas; 2013.

21. Araújo JL, Paz EPA, Moreira TMM. Hermenêutica e saúde: reflexões sobre o pensamento de Hans-Georg Gadamer. *Rev Esc Enferm USP*. 2012; 46(1):200-207.

22. Brasil. Conselho Nacional de Saúde. Resolução nº 466, de 12 de dezembro de 2012. Aprova as diretrizes e normas regulamentadoras de pesquisas envolvendo seres humanos. *Diário Oficial da União* 2013; 13 dez.

23. Sousa IV, Brasil CCP, Carlos DAO, Batista MH, Silva RM, Finan TJ, Bezerra IN. Estratégias de enfrentamento dos problemas que interferem na saúde de uma comunidade socialmente vulnerável. In: *Anais do 6º Congresso Ibero-Americano em Investigação Qualitativa*; 2017 Jul 12-14; Salamanca, Espanha. Espanha: CIAIQ; 2017.

24. Baquero RVA. Empoderamento: instrumento de emancipação social? – uma discussão conceitual. *Rev Debates* 2012; 6(1):173-187.

25. Pinto ACB. Desenvolvimento local: a comunidade como coparticipante. *Rev Bras Planej Desenv* 2014; 3(1):165-175.

26. Martins H. *Classes, status e poder.* Lisboa: Imprensa de Ciências Sociais; 2006.

27. Freire P. *Conscientização.* São Paulo: Editora Cortez; 2016.

28. Sousa IV. *Diagnóstico participativo dos problemas que interferem na saúde de uma comunidade de baixo nível socioeconômico* [tese]. Fortaleza: Universidade de Fortaleza; 2016.

29. Silva LS, Cotta RMM, Rosa COB. Estratégias de promoção da saúde e prevenção primária para enfrentamento das doenças crônicas: revisão sistemática. *Rev Panam Salud Publica* 2013; 34(5):343-350.

30. Campos JDC. O papel das organizações sociais para convivência com o Semiárido. *Centro de Educação Popular e Formação Social (CEPFS)* 2014 Jul 18; Sect A:1 (col. 1).

31. Salazar KA, Silva ARL, Fantinel LD. As relações simbólicas e a motivação no trabalho voluntário. *Rev Adm Mackenzie* 2015; 16(3):171-200.

32. Silva JA, Santos RC. Bem-estar subjetivo, educação, inteligência e religião. *Temas Psicol* 2013; 21(2):519-523.

33. Fundação Cearense de Apoio ao Desenvolvimento Científico e Tecnológico. Fortaleza Inteligente. 2014 [acessado 2017 Jul 13]. Disponível em: http://www.funcap.ce.gov.br/index.php/component/content/article/3-lista-de-noticias/44955-prefeitura-de-fortaleza-lanca-programa-fortaleza-inteligente.

34. Farias MGG, Varela AV, Freire IM. Empoderamento para o desenvolvimento social comunitário mediante tecnologias intelectuais digitais. *Rev Int Ciencias Sociales* 2015; 4(2):219-231.

35. Silva KL, Roseni RS, Akerman M, Belga SMM, Rodrigues AT. Intersetorialidade, determinantes socioambientais e promoção da saúde. *Cien Saude Colet* 2014; 19(11):4361-4370.