

Planning in four areas of the Vila Viva Program in the city of Belo Horizonte, Brazil: a documentary analysis

Danielle Costa Silveira ¹
Rose Ferraz Carmo ²
Zélia Maria Profeta da Luz ¹

Abstract *The Vila Viva Program (PVV), a social policy integrated by activities of urbanization, social development and land regularization of Belo Horizonte in Minas Gerais (BH), has its shares planned through the Specific Global Plan (PGE), instrument of local diagnosis and definition of interventions. The aim of the study was the analysis of PGE of four localities in BH occupied in a disorderly manner by low-income population. The PGE were submitted to documental analysis, consisting of preliminary analysis and documents and content analysis, with evaluation of theoretical dimensions: physical environment, social, housing, community and public facilities, which refer to the conceptual model of the Urban Health and Installment Law, Occupation and use of BH soil. All localities were similar in theoretical dimensions analyzed. The participation of the population was provided in all stages of PGE and the major claims in the four locations were: health environment, opening and street paving, expansion of public transport, improvement of health and education equipment and land regularization. The proposal planning of PGE line is consistent with the theoretical reference of Urban Health and, above all, with the inclusive and integrative character of the PVV.*

Key words *Areas of poverty, Planning, Public policies, Urban health*

¹ Centro de Pesquisas René Rachou, Fiocruz Minas. Av. Augusto de Lima 1715, Barro Preto. 30190-002 Belo Horizonte MG Brasil. danielle.costasilveira@hotmail.com

² Superintendência de Pesquisa, Escola de Saúde Pública do Estado de Minas Gerais. Belo Horizonte MG Brasil.

Introduction

The increase in Brazil's urban population in recent decades makes debate on the effects of urbanization on people's lives an important item for the agenda. In Brazil, urbanization has been a challenge. While it demonstrates the process of the country's modernization, it also presents a strong model of exclusion, above all of the low-income population, that results from social inequality, population growth without urban planning, and low-quality living conditions – with effects on health levels¹⁻³.

A possibility of bringing the living conditions of these groups to a level equal to that of the rest of the city would call for policies and programs of urban planning able not only to promote development but to overcome the unjust and avoidable inequalities of life in the cities^{4,5}. With a view to confronting these questions, specific legislations and programs were put into effect in Belo Horizonte (BH) starting in the 1970s.

Among the legislation formulated, BH's Housing Policy, established in the municipality's Master Plan of 1996, was an important advance in the debate on urban space and adaptation of land use to the social function of ownership, with actions aiming to control increase in population density, taking into account the geological conditions and the infrastructure installed; regularization of land ownership; and actions for urbanization of public spaces⁶.

To conduct the Housing Policy of the municipality, Belo Horizonte's Urbanization and Housing Company (*Companhia Urbanizadora e de Habitação de Belo Horizonte* or URBEL) was created in 1983. It assumed the coordination of various programs aiming at recovery and urbanization of shantytowns and disorganized, vulnerable settlements, seeking to guarantee people access to urban goods, services and structure⁷.

One of the programs coordinated by Urbel is the *Vila Viva* program (PVV) created in 2005. This incorporated the characteristics of a new social inclusion policy of integrated actions of urbanization, social development and regularization of land ownership in settlements, with actions in water and sewerage, construction of houses, eradication of risk areas, removal of families at risk, restructuring of the road system, and creation of parks and sports and leisure equipment. The program also includes social interventions in the fields of health, education, social assistance and productive inclusion, community development, health and environmental education and generation of work and income⁸.

In 2007 it was possible to expand the PVV using funds passed through from the Accelerated Growth Program (*Programa de Aceleração do Crescimento* – PAC), which aimed, among other objectives, to improve the infrastructure of housing, water services and public lighting in ZEIS regions⁹.

The planning of actions in PVV is oriented by the Specific Global Plan (PGE), which is the official model for an urbanization and planning study used by Urbel for urban interventions in the municipality^{8,10}.

Considering the importance and the centrality of PGE for the conduct of PVV and, consequently, for giving reality to a new format of urban policy the objective of this study was to analyze the PGE of four locations in the municipality of BH, which had been occupied in a disorganized fashion by a low-income population, through the technique of documentary analysis.

The study was oriented by the theoretical reference of Urban Health, understood as a branch of Public Health, which works with a broadened vision of interdependence between the individual and the context in which the individual exists. Thus, it assumes that the characteristics of the place of residence, its surroundings, and also the way in which these are transformed and at what speed have an implication in the processes of health and illness of their residents¹¹⁻¹³.

Methods

The study was carried out in 2014 in four locations of BH, referred to as the Zones of Special Social Interest (*Zonas Especiais de Interesse Social*, or ZEISs) – spaces that have been occupied in a disorganized fashion, by a low-income population, in which the public authority has an interest in bringing order to the process of occupation, through housing programs, urbanization interventions and actions to regularize land ownership, improving the quality of life and integrating these areas into the city⁶.

According to Urbel, BH has 209 ZEISs, with 366,000 inhabitants, or 15% of the city's population, and occupying 5% of its land area¹⁴.

Four ZEISs were included in the study. Two are located in the Center-South Region of the city, and for the purposes of codification they are referred to in this study as ZEISs A and B. The other two were identified as ZEISs C and D, and are located respectively in the West and North Regions of the municipality. The choice of these ZEISs was based on the fact that they are occu-

pations that took place between 1920 and 1960, and are long-established presences in the municipality.

The theoretical reference frame orienting our analysis of the data was the Urban Health concept^{11,12,13}.

The PGE

The PGE presents a detailed and integrated diagnosis of the town planning, environmental, socioeconomic and legal aspects of the location, with proposals for interventions for risks and problems raised.¹⁰ From this it is possible to make an analysis of standard's construction homes, characteristics of the road system and the local sewerage/water system, access and quality of public services offered, geological/geotechnical consolidation's area and legal and land-ownership analysis of occupations and local social context^{8,10}.

All phases of PGE include community's participation with the objective of giving transparency in a democratic manner to the process of discussion, analysis, decision on interventions and global evaluation's of the action. The participation of the population takes place through the Reference Group's (GR) formation which is made up of community leaders and other residents. The GR aims to accompany the funding application for each intervention represent the community in communications and discussions with public authority, and publish to other members of community all information relating to PGE and PVV^{8,10}.

For maximum actions' efficiency and resources' optimization of PGE resources it places the interventions in a hierarchy, based on their importance, feasibility and structural and social impact⁸.

Documentary analysis

The PGEs analyzed were made available by Urbel, and for the analysis of documents the plans were initially classified by year of publication and source. Later, the preliminary analysis proposed by Cellard¹⁵ was carried out, based on evaluation of five dimensions: (1) the context – this refers to the global social context of the document, of the author and of those to whom it was addressed, considering aspects of the political, economic, social and cultural context; (2) the author(s) – the person or persons who are expressing themselves, and their interests and motivations, also

indicating whether they speak in their own name, or in the name of a third party (a group, or institution); (3) authenticity – seeking to analyze the quality of the information transmitted, based on a verification of the source of the document; (4) nature of the text – considering the presentation of the document and the author's manner of expression; (5) key concept and internal logic of the text – seeking the meaning of words and concepts used, identification of the principal parties, and the development of the argument.

After the preliminary analysis the documents were treated by content analysis, a means of apprehending the content of a message by revealing what is not yet clear, going beyond the manifest content in a search for a deeper understanding^{16,17}.

To orient the content analysis a theoretical systematization was carried out, adopting five dimensions: Physical environment, Social environment, Housing quality, Community equipment, and Public equipment. These dimensions relate to the conceptual model of Urban Health adopted by Caiaffa et al.¹¹, for whom the physical and social environment, and physical housing are closely determinant factors for health. Reference was also made to Belo Horizonte's Municipal Law on Division, Occupation and Use of Land of the city (*Lei de Parcelamento, Ocupação e Uso do Solo de Belo Horizonte*, or LPOUS) – in which education, health and leisure correspond to the concept of community equipment. Supply of water, sewerage service, electricity and rainwater collection are defined as public equipment⁶.

Results and discussion

Preliminary analysis of the PGEs

The PGEs of the four ZEISs were prepared between 2000 and 2004¹⁸⁻²¹, coinciding with the phase in which the PVV was planned and brought into being also coincided with Housing Policy of BH, the scope of which included strategies for intervention in occupied areas by low-income population⁶.

Authorship: the PGEs were prepared by companies contracted by Urbel which, as well as monitoring/inspecting their execution, took responsibility for the conduct and finalization of the document in two areas (ZEISs A and C)^{18,19}.

All documents analyzed were made available directly by Urbel, which thus guarantees their authenticity. The approach used varied between

companies but without a negative effect on quality of information or internal logic of the text: in all documents the town planning and environmental, socioeconomic and legal data were present; the integrated diagnosis of error had been made; and the proposals for intervention had been put in hierarchical order¹⁸⁻²¹.

In general, the town-planning/environmental diagnosis included the items: region's cartographic updating and geomorphological study.

The latter covered: type of soil, steep slope and risk's areas. Within the ZEISs, areas with no need for intervention were categorized as 'established'. Those which should be subject to intervention were categorized as 'non-established'; and those where physical and geographical characteristics made impossible interventions were categorized as 'unable to be established' – where the proposal was their expropriation and allocation to creation of green spaces. Also included in the town-planning/environmental diagnosis were: the road system; spaces for coexistence/leisure; and existing public services such as water/sewerage, electricity, health, education, security, and others¹⁸⁻²¹.

The socioeconomic diagnosis provided a historical summary of the area that was in the process of occupation; the origin of the initial residents and the present situation and listing of household family data: number of residents in the household, schooling levels of family members, family income, per capita income, employment situation and type of occupation. Another item identified the forms adopted by residents for organization in relation to local community issues. The juridical diagnosis pointed to legal and land evaluation regarding to conditions and restrictions occupation of the existing lands and real estate¹⁸⁻²¹.

The integrated diagnosis put forward by PGE presented progress in planning and implementation of public programs, since, by comprehending the general aspects of life and physical homes of the population, it became possible for the characteristics and specificities to be considered when deciding the interventions proposed for ZEISs^{8,10}.

The principal key-concept identified, in all the PGEs, was that of community participation. This participation is understood to be a fundamental element in all phases of PGE and in the PVV through the activity of GRs of ZEISs, but was effective only at the stage of ascertaining the demands of community; its effectiveness was low in the other phases¹⁸⁻²¹.

Descriptions of the ZEISs

ZEISs A and B, located in the Center-South Region of BH, contributed to the Region having the largest proportion of population living in ZEISs in the whole of municipality. ZEIS A was characterized as one of the largest areas of poverty in the municipality, and ZEIS B was the largest area of social interest of Metropolitan Region of BH, with more than 46,000 residents^{19,20}.

Occupation of ZEIS C, in the West Region of BH, also began in the 1920s, by people expelled from an occupation area for development of two districts of the capital. People from state's interior (Minas Gerais – MG), and from Brazil's Northeast, also took part in the initial formation of its population.¹⁸ ZEIS D, in the Northern Region of the municipality emerged at the beginning of 1960s and was populated by people from the interior of Minas Gerais State²¹.

The distribution between genders was similar in populations of all four ZEISs, and the predominant age group was 19 to 39 years old¹⁸⁻²¹.

Overall, the number of people without formal education was high. Among those with schooling study was only predominantly up to the fourth grade. Per capita income was up to one minimum wage and the main employers were in the surroundings' areas, in districts with higher purchasing power. Also, the infrastructure found in four ZEISs had similar characteristics, including situations of precarious functionality¹⁸⁻²¹.

The process of ZEISs occupation of and the general characteristics of the population are examples of how the social and economic vulnerability of a location can impact life conditions – reaffirming the basic suppositions of Urban Health¹¹⁻¹³.

Demands of the ZEISs, and interventions proposed by the PGE

The main demands of the population, common to all the four ZEISs, related to unhealthy environments – in terms of: availability and/or increase of coverage of services such as water supply, sewerage network, and collection of solid waste including installation of waste bins; and also elimination of undesirable animals and rats, whose presence is to some extent related to the absence of universal basic water treatment services¹⁸⁻²¹.

The population's demands also included opening and paving of the streets, and expansion of public transport. It is clear that an action

demanded by the population and/or identified by the technical team, when included in the PGE and duly executed, can have a positive and wide-ranging effect on the living conditions of the population, and not only on one aspect in particular. The population's also included improvements in education, day-care centers and schools up to technical training and qualification levels, strongly linked as they are to generation of employment and income¹⁸⁻²¹.

Regularization of land ownership, an important concern of the population, was demanded in all ZEISs¹⁸⁻²¹.

This is a specified aim in the PVV, and if executed in practice, puts into concrete form the objective of the City's Law, a benchmark in Brazilian urban policy regulation. This law is based on full development on the social function of land and urban property, through regularization of ownership and urbanization of areas occupied by the low-income population, with establishment of special rules for town planning, use and occupation of land and building in these areas²².

Among the common claims of ZEISs, widely included in the PGEs were mainly, those related to structural issues such as the road system, leisure and sports areas, treatment of areas at risk, and water/sewerage services¹⁸⁻²¹.

In some locations, some interventions not demanded by the population were included in the PGE. Examples are action for improvements in education (ZEISs C and D), public lighting (ZEISs B and D), treatment of areas at risk (ZEISs C and D), actions to combat violence and drug trafficking (ZEISs B and D), generation of employment and income (ZEISs B and D), and environmental recuperation (ZEISs A and C). All the Plans also included actions for removal and resettlement of residents, which were not demanded by the population, but presented as necessary for works execution and control of new occupations¹⁸⁻²¹.

In ZEIS B all population's demands the PGE were included²⁰. On the other hand, in other areas some demands of population were not included in the PGEs, such as construction of new day-care centers (ZEIS A); improvements in local retail trade (ZEISs A, C and D); and expansion of public transport (ZEISs A and D)^{18,19,21}.

We believe that the principal way of avoiding possible conflicts between the community and public authority at this stage of decision on interventions, which could even enable the emergence and discussion of new alternatives, is related to the conduct of integrated work between

the technical team of PGE and population, such as would guarantee effective participation of various players in planning, decision, monitoring and action's evaluation. Integrated work could favor expanded dialogue on reasons and/or justifications for inclusion, or otherwise, interventions demanded by population or identified as essential by technical group preparing the plan and ensure that the reality experienced by the individuals in their life environment, housing and work would orient collective discussion in the decision-making space⁸.

Analysis of content of the PGEs

For each of theoretical dimensions adopted, empirical categories were identified: Within the community equipment dimension, the categories of health, education and leisure were specified; within public equipment, categories of water/sewerage services, and electricity; within the housing dimension, standards of construction and the legal situation of households; within the social environment dimension, violence; and within the physical environment dimension, the road system, and risk areas. Figure 1 presents the theoretical dimensions and the empirical categories identified based on the content analysis, highlighting that demands of population and the proposed actions by PGEs run through both.

The theoretical dimensions, anchored on the concept of Urban Health, are in agreement with indications of their conceptual model, in which distal factors – physical, social, economic and overall political features – and proximal factors – urban living and working conditions – can lead to inequities in health. The proximal factors are influenced by distal factors and should be understood as pre-existing characteristics of the daily life of individuals, in which public health can intervene in a direct manner to reduce disparities of social determinacy and improve the population's processes of health¹¹.

Dimension: Community equipment

The analysis of the category *health* made it possible to identify that the Unified Health System (SUS) was the main type of service used by the population of the ZEISs, but presented many problems, such as precarious facilities, insufficient physical and human resources, and difficulties of access due to geographical location. In all the areas, the demand for curative healthcare was greater than the demand for health promotion

activities¹⁸⁻²¹. For the residents of ZEIS B²⁰, the basic healthcare in the location was not capable, by itself, of solving the health problems, which demanded implementation of services of greater complexity, in spite of their being made available in other areas of the municipality. According to residents of ZEISs D²¹:

The problems related to health go beyond the capacity and competence of the Health Center. The community points to the need to have the health facilities installed within the limits of the Villa, but recognizes that this measure is not sufficient for the final solution of the deficiencies in this area. [...] Basic water and sewerage services, and the unhealthy conditions of a large part of the homes, are the factors that are most prejudicial to the population's health [...]

This type of vision made it possible to comprehend that interventions in other public sectors were equally necessary for improvement of the health of a population.

In the *education* category, in general the residents of the ZEISs had access to primary education; but for preschool education there was an insufficiency of places. There were also shortages in the supply of secondary education and adult education¹⁸⁻²¹. Other issues related to violence and poverty as barriers were reported as preventing young people and teenagers from going to school:

What was found out was that the issue of education in the area depends on an economic issue, that is to say children who enter the labor market early, either due to violence – in which young people and adolescents enter the world of crime at an

early age, or live in the streets, without access to formal education¹⁹.

In the category of leisure, there was no infrastructure or equipment in the ZEIS, and the practice of sports was limited to games of football in vacant lots¹⁸⁻²¹. In many people's opinion, leisure spaces should be only for children and adolescents. Other residents when talking about this category said that leisure should not be a priority question for the community:

[...] there seems to be, clearly, a certain type of prejudice against the subject, considering it in principle as irrelevant in light of the serious socioeconomic problems faced by the communities²⁰.

The analysis of the *community equipment* dimension corroborates the statement that, although the supply of these services varies considerably within the urban environment, the socially and economically vulnerable groups who should be the focus for these services are usually the least favored. This finding means there is a need for action to overcome these differences, since the insufficiency and precarious nature of these services provided by the public authority makes it non-feasible for the low-income population to acquire them, due to the cost they represent when offered by the private sector. Thus, the impact on the quality of life of these groups tends to be even more forceful^{2,4}.

The public equipment dimension

In the *water and sewerage* category, the analysis showed that, in general the supply of water in the ZEISs was broadly available, though some

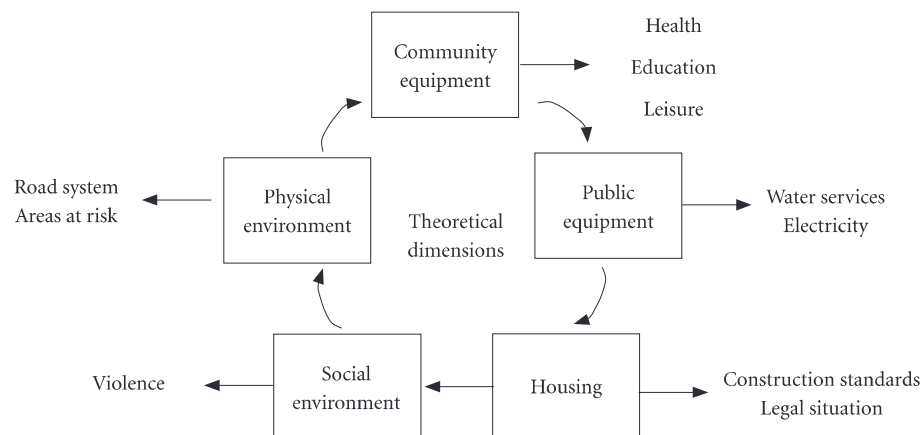


Figure 1. Theoretical dimensions, and empirical categories, identified in the PGEs analyzed.

clandestine connections still existed. The coverage by the official sewerage network was insufficient and precarious, generating blockages and leaks in various stretches in the areas. Open sewers were a common problem in the localities. The rain drainage networks were insufficient to receive the whole of the flow of the ZEISs, also because they were the destination of clandestine sewerage networks and trash tipping, increasing the risk of floods in rainy periods¹⁸⁻²¹. The garbage collection service did not succeed in serving all the areas of the ZEISs, mainly due to the restriction on road access in certain areas:

In some very narrow streets, the precarious nature of the water/sewerage situation, where open sewer flows and large piles of garbage, is a preponderant factor for appearance and propagation of various diseases. One of the major problems of accumulated garbage is that it provides propitious conditions for proliferation of insects and rodents, which transmit various diseases²⁰.

These issues revealed situations of environmental risk and risk of diseases for the residents of these areas.

In the category *electricity* in spite of the wide coverage of electricity supply in the ZEISs, many families still lived without electricity supply, sometimes obtaining it by clandestine links to the network¹⁸⁻²¹.

As to *public equipment*, even after the formulation of public policies for expansion of access and coverage, such as, for example the Communities Development Program (PRODECOM), created in 1979, aiming to deal with water/sewerage, electricity and public lighting in the poor areas and shantytowns of the municipality¹⁰, there was still a lot of progress to be made, principally in relation to the water/sewerage services.

It is a worldwide characteristic that provision of assistance to areas irregularly occupied is differentiated in relation to the type of assistance provided to the formal city. This largely explains the absence, or precariousness, of the services in ZEISs that were researched, generating unhealthy environments, with risks to health and quality of life^{1,2}.

The housing quality dimension

Within the category *construction standard*, in all the ZEISs there were precarious and unhealthy housing constructions, concentrated in specific areas¹⁸⁻²¹. Households with lack of ventilation or sunlight, and excess humidity, were not problems exclusive to one single ZEIS:

[...] when you look at the environmental conditions, it comes down to a situation of habitability. A significant percentage of homes in the shantytown agglomeration do not have windows in the room, which makes them unhealthy, with effects on the population's health, principally the children²⁰.

In the *legal situation* category, in all the ZEISs, the greater part of the homes were classified as irregular occupation, since the residents did not have title of ownership to the site¹⁸⁻²¹.

In analyzing the *housing* dimension, in the ZEISs studied, this is a problem of considerable scale, with impacts on the individuals' wellbeing, in spite of the actions that have been taken for increased access to safe and appropriate housing conditions – such as the Municipal Favelas Program (Profavela), which set the parameters necessary for regularization of the town and legal structure of the municipality's shantytowns and poor districts²³, and BH Housing Policy⁶.

Regularization of land ownership stood out as the principal problem in this dimension.

It can be highlighted that such action would provide residents with the security of possession of their homes, and recognition of their addresses, and would complete the process of urbanization, recognizing the people as residents of the area²⁴.

The social environment dimension

In the category *violence*, the main problems identified in the ZEISs were: violence caused by drug trafficking; violence resulting from police abuse of force; and violence related to prejudice, discrimination and social exclusion of the residents. Drug trafficking was the main factor of concern¹⁸⁻²¹. Situations of deprivation, prejudice and discrimination were perceived as: *[...] issues related to the adverse social conditions that lead to an increase in violence [...]*²¹. Some residents said that the situations of insecurity, fear and violence that they live through could not be resolved only by activity of the police. For a portion of the population, the role of the police in the location: *[...] is seen as one more of the factors that generate violence, and not the solution for it¹⁹. The population recognizes that Police action is necessary, and indeed important, and argues for it, but at the same time there is a lot of complaint about abusive authority by some policemen, always related to the question of prejudice related to social condition, and often to color prejudice²⁰.*

Actions to prevent and confront violence need to involve debate with the population about

social problems such as poverty, unemployment, prejudice, and others, seeking joint strategies between residents, the public authority and the private sector for preparation and development of effective and lasting measures that overcome gaps in the public safety policies^{25,26}.

Urbanization, allied to permanent social action that is adequate to the local reality, could be a mechanism capable of reducing local violence – increasing the level of security, based on opening up of dead-end streets and improvements in public illumination and cleanliness²⁴.

In relation to socio-spatial violence, the place where one lives can shape the form of treatment and approach of residents, usually characterized by mistrust and discrimination in shantytowns and similar areas. The action of police in these areas, for example, although indispensable, should be guided by relationship of respect, solidarity and partnership with the community²⁷.

The physical environment dimension

Analysis of the *road system* category showed the presence of common problems in the four ZEISs where, in spite of a good connection with the surroundings, the conditions for traffic inside the areas were precarious:

[...] *tiny streets varying in scale, some of them not even wide enough for a handcart, with precarious sidewalks, often consisting only of earth, with discontinuities caused by unorganized occupation, getting thinner at various points. There are situations in which little streets cross private properties (verandas, or under overhangs or buildings)*²¹.

In this situation, the road system of the ZEISs: *... does not do what the community needs in relation to public transport (most of the bus lines are unable to enter the shantytown districts), nor garbage collection, public safety, transport of cargo (mainly building materials), or any emergencies*²⁰.

In the category *areas at risk*, in all the ZEISs there were situations with characteristics such as:

[...] *regions with accentuated slopes, which when there is disorganized occupation causes a predisposition to instability in the terrain, causing landslides and erosion*²⁰.

The existence of areas incompatible with homes, such as the banks of streams, electricity transmission lines, and steep slopes, also contributes to increasing situations of risk. Finally, deposits of garbage in the wrong places, by the residents themselves, caused:

... damage to drainage lines and networks, mainly due to accumulation of solid wastes (gar-

*bage and rubble), generating serious problems of floods in this area, causing serious risks to the community [...]*¹⁹.

The data surveyed in the PGEs on the physical environment led to the perception that the problem of road systems and risk areas had been little modified by previous initiatives. A plausible justification is that the real estate sector does not have any interest in areas occupied by low-income groups, even temporarily, to generate investments transforming these areas into adequate areas for housing – which would in this case mostly be for people with greater purchasing power^{1,28}.

Looking at this from the point of view of the Urban Health concept, actions specified by public policy can produce changes in the population's levels of health, since the environment and its context – and relations, culture, economics and social organization – are capable of directly influencing people's health¹¹⁻¹³.

Widening of a thin street, or extension of a road, for example, favors access to essential services, as well as reducing the risk of accidents. Interventions in the road system contribute to reorganization of space, enabling implementation and expansion of coverage of basic services such as water and electricity. A new local configuration can also make a particular location more propitious for construction of health centers, day-care centers, and schools, and creation of spaces for leisure and co-existence.

The treatment of areas at risk is another fundamental factor, since many accidents caused by flooding, landslide, etc., can destroy all the property assets built up by a low-income population – when they do not also cause deaths.

A large proportion of the problems discovered in the ZEISs were shown to be capable of transformation based on a deeper and broader local change, in the direction of what is proposed by the PVV.

Public participation, specified in the *Vila Viva* and in the PGE itself, was reported to be low in the ZEISs that were studied. Issues such as lack of belief in the public authority; desire to leave the area; inconsistency in provision of information; and the feeling that the residents' participation was not valued, were the main barriers indicated in the PGEs¹⁸⁻²¹.

Thus, there is a need to highlight the importance of involvement, participation and support by the population in the interventions carried out by the public authority. Even the vast experience and technical capacity of the teams respon-

sible for preparation of the PGE will always depend on knowledge related to day-to-day living in the environment.

As a basis for this question, we have recourse to the concept of the *ecology of knowledges* proposed by Boaventura Santos²⁹, who said that understanding and intervening in the life/territory of a given group requires working together with the group and analyzing, based on the different knowledge stores involved, the relationships established between individuals and the environment – for interventions to be able to originate successfully from a collective. In this collective, there may be superimposition of ideas and stores of knowledge, justified by the choice of certain interventions capable of being much better formulated and executed on the basis of a given type of knowledge. In this logic, for conception, execution and control of programs and actions to be widely participative, involvement of the various types of stores of knowledge becomes fundamental.

The documentary analysis carried out in this study enabled us to recognize that the PVV and the PGE are important strategies of intervention in Urban Health, based on the consideration that public policies, not necessarily in the area of health, can contribute to reduction of socioeconomic inequities and disparities, based on actions to improve the living conditions of vulnerable urban groups¹¹⁻¹³.

Final considerations

The analysis of the PGEs enabled us to identify their singular role in proposing an integrated diagnosis that takes into account the living location not only as a physical space but as a socially organized space – in the words of Milton Santos³⁰ – where historic, social and cultural components operate: a hybrid result of specific and complex articulations in which convergence of multiple factors gives rise to determinants that act in a concrete manner on people's conditions of health.

The approach used by Urban Health, by highlighting the importance of elements such as water/sewerage, housing, diet, safety, education, health, social assistance, transport and leisure, underlines the importance of this social organization of space.

Thus public programs such as the PAC, centered on improvements in living conditions of vulnerable groups are a concrete possibility for

reducing inequalities and inequities that are socially produced.

We highlight the fact that this study is part of a wider survey which taking comparative studies in BH and Rio de Janeiro as a starting point, aimed to look at the impacts of social and urban intervention, in the context of actions under the PAC.

We consider that a limitation of this survey is the number of PGEs analyzed in that it could have left out important aspects of different realities experienced in other locations and/or approached in a different way by different companies.

The methodological option in favor of documentary analysis of the instrument of planning of a program with the magnitude and complexity of the PVV should also be pointed out. We believe that this type of analysis makes a valuable contribution in complementing information obtained by other techniques, and also in revealing new aspects of a theme or subject of study, and we can report that this has become very clear during our work with various methodological areas.

Collaborations

DC Silveira worked on data analysis and interpretation and article writing. RF Carmo and ZMP Luz worked on project design, data analysis and interpretation, critical review and final approval of the version to be published.

Acknowledgments

The authors thank the Graduate Program in Collective Health of the Research Center René Rachou. To the School of Public Health of the State of Minas Gerais. To Lúcia Maria Lopes Formoso and Nina Nascimento Bitencourt, for the contributions during the survey of documents and discussions. To the Presidency and the staff of URBEL. To the team of the UFMG Urban Health Observatory. To the Vice Presidency of Environment, Attention and Health Promotion of the Oswaldo Cruz Foundation for funding and collaboration. This work is part of the Fiocruz - UFMG partnership project titled: "A saúde dos moradores em zonas e áreas especiais de interesse social".

References

1. Fundo de População das Nações Unidas (UNFPA). *Situação da população mundial 2007. Desencadeando o potencial do crescimento urbano*. Nova York: UNFPA; 2007.
2. United Nations Human Settlements Programme (UN-HABITAT). *State of the world's cities 2006-2007. The millennium development goals and urban sustainability: 30 years of shaping the Habitat Agenda*. Nairobi: UN-HABITAT; 2006.
3. Maricato E. Urbanismo na periferia do mundo globalizado: metrópoles brasileiras. *São Paulo perspec* 2000; 14(4):21-33.
4. World Health Organization (WHO). *Our cities, our health, our future. Acting on social determinants for health equity in urban settings*. Geneva: WHO; 2008.
5. Rydin Y, Bleahu A, Davies M, Dávila JD, Friel S, De Grandis G, Groce N, Hallal PC, Hamilton I, Howden-Chapman P, Lai KM, Lim CJ, Martins J, Osrin D, Ridley I, Scott I, Taylor M, Wilkinson P, Wilson J. Shaping cities for health: complexity and the planning of urban environments in the 21st century. *Lancet* 2012; 379(9831):2079-2108.
6. Belo Horizonte. Lei nº 7.166, de 27 de agosto de 1996. Estabelece normas e condições para parcelamento, ocupação e uso do solo urbano no município. *Diário Oficial do Município* 1996; 28 ago.
7. Pinto MLC, Veríssimo P. As cidades, as favelas e a URBEL. *Rev UH* 2014; 1(1):3-12.
8. Afonso AS, Magalhães MCF. Programa Vila Viva: intervenção estrutural em assentamentos precários. Belo Horizonte: Companhia Urbanizadora e de Habitação de Belo Horizonte (URBEL); 2008.
9. Brasil. Ministério do Planejamento (MP). PAC [acessado 2017 Maio 02]. Disponível em: <http://www.pac.gov.br/infraestrutura-social-e-urbana/urbanizacao-de-assentamentos-precarios>
10. Conti A. A política de intervenção nos assentamentos informais de Belo Horizonte nas décadas de 1980 e 1990 e o “Plano Global Específico”. *Cadernos de Arquitetura e Urbanismo* 2004; 11(12):189-216.
11. Caiaffa WT, Ferreira FR, Ferreira AD, Oliveira CDL, Camargos VP, Proietti FA. Saúde urbana: “a cidade é uma estranha senhora, que hoje sorri e amanhã te devora”. *Cien Saude Colet* 2008; 13(6):1785-1796.
12. Diez Roux AV, Mair C. Neighborhoods and health. *Ann NY Acad Sci* 2010; 1186:125-145.
13. Galea S, Vlahov D. Urban health: evidence, challenges, and directions. *Annu Rev Public Health* 2005; 26:341-365.
14. Belo Horizonte. Prefeitura Municipal. *URBEL: áreas de atuação* [acessado 2016 Jan 15]. Disponível em: <http://portalpbh.pbh.gov.br/pbh/ecp/contents.do?evento=conteudo&idConteudo=32775&chPlc=32775&pIdPlc=&app=salanoticias>,
15. Cellard A. A análise documental. In: Poupart J, Deslauriers JB, Groulx LH, Laperrrière A, Mayer T, Pires AP, Jaccoud M, Cellard A, Houle G, Giorgi A. *A pesquisa qualitativa: enfoques epistemológicos e metodológicos*. Petrópolis: Vozes; 2008. p. 295-316.
16. Bardin L. *Análise de Conteúdo*. Lisboa: Edições 70; 2010.
17. Minayo MCS. *O desafio do conhecimento: pesquisa qualitativa em saúde*. 12ª ed. São Paulo: Hucitec; 2010.
18. Casa do Movimento Popular (CMP), Companhia Urbanizadora e de Habitação de Belo Horizonte (CUHBH). Plano Global Específico Aglomerado Morro das Pedras [CD-ROM]. Belo Horizonte: CMP, CUHBH; 2004.
19. CLAM Engenharia e Meio Ambiente; Companhia Urbanizadora e de Habitação de Belo Horizonte (CUHBH). Plano Global Específico Aglomerado da Barragem Santa Lúcia [CD-ROM]. Belo Horizonte: CLAM, CUHBH; 2001.
20. DAM Projetos de Engenharia. *Plano Global Específico Aglomerado da Serra* [CD-ROM]. Belo Horizonte: DAM; 2001.
21. DAM Projetos de Engenharia. *Plano Global Específico Vila São Tomás* [CD-ROM]. Belo Horizonte: DAM; 2001.
22. Brasil. Lei nº 10.257, de 10 de julho de 2001. Regulamenta os arts. 182 e 183 da Constituição Federal, estabelece diretrizes gerais da política urbana e dá outras providências. *Diário Oficial da União* 2001; 17 jul.
23. Belo Horizonte. Lei nº 3.995, de 16 de janeiro de 1985. Introduce dispositivos na Lei 3.532, de 06 de janeiro de 1983 – cria o Programa Municipal de Regularização de Favelas – PROFAVELA – e dá outras providências. *Diário Oficial do Município* 1985; 17 jan.
24. Maricato E. Conhecer para resolver a cidade ilegal. In: Castriota LB, organizadores. *Urbanização brasileira: redescobertas*. Belo Horizonte: C/Arte; 2003. p. 78-96.
25. International Institute for Environment and Development (IIED). Environment and Urbanization. *Towards action on social determinants for health equity in urban settings* 2008; 25p.
26. Meirelles R, Athayde C. *Um país chamado favela: a maior pesquisa já feita sobre a favela brasileira*. São Paulo: Gente; 2014.
27. Silva LAM, Leite MP. Violência, crime e polícia: o que os favelados dizem quando falam desses temas? *Revista Sociedade e Estado* 2007; 22(3):545-591.
28. Tonucci Filho JBM, Ávila JLT. *Urbanização da pobreza e regularização de favelas em Belo Horizonte*. Belo Horizonte: CEDEPLAR; 2008.
29. Santos BS. Para além do pensamento abissal: das linhas globais a uma ecologia de saberes. *Revista Crítica de Ciências Sociais* 2007; 78:3-46.
30. Santos M. *Por uma geografia nova*. São Paulo: Hucitec, Edusp; 1978.

Article submitted 07/11/2016

Approved 14/06/2017

Final version submitted 16/06/2017

