



COLLECTIVE HEALTH AND URBAN ENVIRONMENTS: REFLECTIONS FOR PUBLIC HEALTH SURVEILLANCE THE LOCAL POPULATIONS OF THE AMAZON

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ABSTRACT

Objective: To reflect on health surveillance practices in urban environments. **Methods:** Qualitative, descriptive and exploratory research, carried out by means of a case study in the municipality of Oriximiná, State of Pará, Brazil. As a segment of the study, the spaces of the municipal slaughterhouse and its surroundings, as well as public official documents, were delimited. **Results:** It was identified that in the last decade the municipal health surveillance had several problems regarding infrastructure, inspection and maintenance. **Conclusion:** It is necessary to adapt spaces, implement health policies and monitor services in order to avoid health problems.

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INTRODUCTION

Health surveillance in Brazil proposes specific attributions and responsibilities according to each technical area, and has been a challenge for the Brazilian Unified Health System (Sistema Único de Saúde - SUS) (OLIVEIRA and CRUZ, 2015). In this context, health surveillance, which is an indispensable regulatory practice, is therefore a necessity surrounded by its key concepts that are sometimes conditioned by economic issues (GARRAFA *et al.*, 2017). Therefore, there is a need to know the reality of the scenarios that involve health surveillance, its regional contexts in order to implement actions in the political and social spheres. In this sense, to evaluate the hygienic sanitary conditions of spaces of food manipulation becomes a target to identify the health risks involved by this establishment, as well as of the parallel and

indirect conditions that can be the result of deficit actions of these spaces. Locations where there is food exposed to manipulation need professional qualification, which may have to be regular in order to promote safety in foods or products supplied to the community (LOPES *et al.*, 2015). However, bovine meat is one of the most consumed proteins and, therefore, its management requires care, since there are possibilities of finding different types of bacteria when handling hygienic sanitary deficiencies of meat and carcasses (CHAGAS *et al.* 2017). The measures that should be adopted in slaughterhouses should be based on protocols that prevent possible infections by *Staphylococcus* spp., cysticercosis, *Salmonella* spp., brucellosis, tuberculosis and other toxicological and chemical diseases (GOMIDE *et al.*, 2014). It is precisely in situations of precariousness of the facilities and of hygiene that are contrary to the current legislation, that people who consume it should be at greater risk of harm (MORAIS *et al.*, 2017). In addition, one cannot fail to observe that there are other aggravating factors such as solid waste

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from the entire production chain of this service, which can sometimes be causing contamination around the service. Certainly, such conditions are also results of management and the various parallel mechanisms such as technical information, supervision, use of protective equipment and management concerned with environmental conditions (SILVA, 2017). Therefore, the sanitary and environmental situation of the theme is perceived. Considering all these facts, the objective of this work is to reflect on health surveillance practices in a municipal slaughterhouse by means of a qualitative, descriptive and exploratory research, carried out by means of a case study in the municipality of Oriximiná, in the State of Pará, Brazil, and based on official documents.

MATERIALS AND METHODS

Qualitative, descriptive and exploratory research, carried out through a case study (YIN, 2015). The research scenario was the municipal slaughterhouse of Oriximiná and its surroundings. Oriximiná is a municipality in the state of Pará, located in the lower Amazon region, being a major supplier of bauxite through a capitalist mineral exploration project and its population is estimated at 70 thousand inhabitants by 2020.

The method of data collection occurred through documentary research and non-participant observation. As a criterion for inclusion of the documents referring to the proposed theme, the following descriptors were used: slaughterhouse, slaughterhouse of Oriximiná, health surveillance, and health surveillance in academic databases and public prosecutor sites. The analysis of the data was done through the analysis of content according to Bardin (2016) because it allows to analyze several types of content, among them photographs, speeches, messages among others. In addition, it is important to point out that this research is based on ethical precepts and, therefore, assumes the current norms regarding the conduction of research with humans according to Resolution 466 of December 12, 2012 of the National Health Council (Conselho Nacional de Saúde - CNS), even though use documentary data and territory analysis.

RESULTS AND DISCUSSIONS

Scenario Context: Sanitary surveillance in Brazil has been envisaged since the promulgation of the 1988 Constitution. Through this was ensured several actions that would enable the intervention of the State in spaces whose destinies of its products and services were the collective. In these terms, its activities had the purpose of supervising, controlling and inspecting procedures, services, products and substances that had a direct relation to health, and could also generate damages to the collective (BRASIL, 1988). In this way, a whole national network was organized for such actions to be carried out, which includes municipal strategies through continuous actions. Certainly, municipal representations must align with the objectives of the national agency:

In the field of health surveillance, there are regulatory services. As any process in this sense can be understood as the state intervention mode, which aims to prevent possible damages or risks to the health of the population. This field acts in order to regulate and control the relations of production and consumption of goods and services that may be related to health. In addition, health regulation has contributed to economic issues by addressing its shortcomings, as it allows

for predictability, transparency and process stability through continuous regulation (ANVISA, 2016). In this context, local health surveillance should punctuate its actions in the same follow-up and, therefore, regulate the services offered within the municipality. The national network, represented by the Brazilian Agency of Sanitary Surveillance (Agência Nacional de Vigilância Sanitária - ANVISA) in the municipalities, has within their health secretariats a local coordination with the purpose of preventing that diseases are generated by the deficits of the local production systems. However, in the municipality of Oriximiná, there are some problems related to health surveillance that have been discussed in the last decade, mainly regarding the disposal of solid waste and the municipal slaughterhouse. The exponential growth of the city, especially in the urban area, has certainly presented disturbing characteristics, including the facts listed. There is a lot of talk about the irregular garbage dump that is one kilometer from the urban area and has proximity to PA-254. However, it is even more worrying how this has been happening, since, besides solid waste, there is also evidence of hospital waste (G1, 2015). It is a matter of concern since there are negative consequences, since it is an operant mode of reception of household and hospital waste that is out of technical standards. The legislation on disposal and transportation is ANVISA, but its implementation is mandatory for representative units at the municipal and state levels, depending on the service. "The external collection and transport of health care waste must be carried out in accordance with the standards NBR 12.810 and NBR 14652 of ABNT" (BRAZIL, 2016). It is intended that all waste in these terms have their transportation and storage within the standard established by the national agency. No doubt this condition exposes the population to biological materials that may be contaminated, which puts the population at risk of accidents and contamination.

Understanding this initial context is important to understand the scenario. But above all, it identifies the various aspects that are part of a chain of control of health problems within the municipality. One of the scenarios is this and it represents part of the organization that has been presented in recent years on health issues. In these terms, some training instruments have been used to solve this problem, such as the city master plan, which presented a discussion in this regard. At the time of its constitution, the plans presented to the other spheres of government were rejected, and related to the construction of a sanitary landfill carried out through the municipal plan. It was a plan of broader characteristics, since, from the process of collecting waste to disposal, including selective collection and proper disposal of hospital waste (G1, 2015). Unfortunately in the initial process of this context some obstacles were perceived, and the directives punctuated in the municipal directorial plan were to be implemented at most in 360 days were not successful (PAULINO and JUSTINA, 2013). After a decade from the initial discussion of the master plan in 2006 to the present, it is perceived that this context was not a priority of the municipal management, although it has been discussed and looked for changes regarding the location to the final destination of the discard.

It is noticeable how sanitary surveillance in this space is necessary, since it implies rigid control of the practices of manipulation and hygiene (FABRICIO, 2015). In addition, through inspection it is possible to identify contamination states by microorganisms in the various phases of product manipulation, which include procedures from the production

until transportation (OLIVEIRA *et al.*, 2015). It is necessary for this to happen that its facilities follow standard parameters so that the quality of the product is achieved (FERREIRA, 2015). The location of the municipal slaughterhouse is very worrying due to the possible contamination of the river Trombetas, and for that reason in 2006, in compliance with the judicial determinations, three reservoir tanks were built in the municipal slaughterhouse. It was a punctual action to limit problems of inadequate disposal, since it eliminated the possibility of liquid slurries from the slaughterhouse reaching the Trombetas River (URUÁ-TAPERÁ, 2006). Unfortunately, this fact persisted and new reports were made regarding the risk of contamination of beef and the degradation of the Trombetas River, which led to new processes of site inspection resulting in notification (SANTOS, 2013). The slaughterhouse has been causing pollution and environmental problems due to its location at the head of the city, due to its bad smell (G1, 2015, SANTOS, 2013) and the manure that was initially dumped in the river Trombetas (SANTOS, 2013). Obviously, this scenario will not only interfere with the river, but especially in the landscape aspects because it is ahead of the city. Silva *et al.*, (2012), discusses the risks that slaughterhouses cause both the natural environment and the health of workers and consequently consumers of these products. However, its focus is precisely on the water resources, considering that inadequate slaughterhouses dump their waste in the near mediations, especially the rivers.

Conservation of collective health through health law

So that problems such as these do not persist causing health risks to the population, the Agency of Farming Defense of Pará State (Agência de Defesa Agropecuária do Estado do Pará - ADEPARÁ) is responsible for supervising slaughterhouses in a continuous manner and based on environmental and sanitary regulations. However, there have been situations that due to the absence of Animal Transit Guide (GTA) due to the strike of the organ, the municipality almost ran out of this supply. A fact that did not happen, therefore, the activities remained even without this authorization (SILVA, 2008), apparently in the illegality. This only shows how oversight bodies have limitations. Recently the service of slaughterhouse was suspended in the municipality by the public Ministry of the State of Pará (Ministério Público - MP). The decision was made because of the numerous irregularities already pointed out by the health surveillance services. These irregularities included inadequate facilities for cattle, as well as direct coexistence with other diseased cattle (MAIA, 2016). At the time the municipality of Oriximiná was left without supply of beef for 15 days. The possibility of accidents occurring in these spaces is real. They are environments that have machines for cutting and exposure to biological materials and most often have inadequate facilities exposing workers to occupational diseases (MARRA, 2014). This situation becomes of importance public health (MACIEL, PAIM, 1966). All these facts reveal how the relation man and nature is present in all these scenarios. Although a relation of production and consumption, the slaughterhouse also interferes in the daily life of this population, since it can bring risk to health, the environment and social relations as in the case of public policy discourses. Situations like these seem to break spatial continuity through development. In this understanding they should be systematized in order to requalify the public space.

In addition, the need to study the Amazonian environments and their realities (COSTA *et al.*, 2015), as well as to bring the universities closer to the contexts of the populations and peoples of the Amazon through their disciplines (DE CASTRO *et al.*, 2017). Certainly, this will bring more reflections on services and their public health implications.

Conclusion

Health surveillance services should be implemented in all municipalities in Brazil regardless of the regional condition. Obviously, given the Amazonian regions, they have singularities that go beyond national guidelines and therefore involve several aspects, mainly environmental ones. In this sense, when looking at these realities, it is necessary to evaluate the environmental and health aspects together, but especially in cases of slaughterhouses that still present irregularities that put collective health at risk. Such evidence should always be discussed in teaching and services involving collective health in order to broaden the focus on health surveillance. Due to the observed scenario, it is necessary to carry out microbiological and parasitic surveys in the service environment, as well as the survey of the effectiveness of the labor safety regulatory standards. Due to the observed scenario, it is necessary to carry out microbiological and parasitic surveys in the service environment, as well as the survey of the effectiveness of the labor safety regulatory standards. It is also recommended to hold discussion in the universities about the public spaces, environment and their relations with the realities of the Amazon and its populations. Certainly, when these initiatives are possible to make reflections and constructive criticisms to instrumentalize the public health services.

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