



Quality of basic sanitation in the municipality of Teotônio Vilela, Alagoas, Brazil

Qualidade do saneamento básico do município Teotônio Vilela, Alagoas, Brasil

Thamyres Valeriano Teixeira⁽¹⁾, Arrysson Cardoso da Silva⁽²⁾;
Jailza Maria dos Santos⁽³⁾; Maria José de Holanda Leite⁽⁴⁾

⁽¹⁾ORCID: <https://orcid.org/0000-0002-0257-5102>, Universidade Federal de Alagoas, Estudante, BRAZIL, E-mail: Thamyres.valeriano@hotmail.com

⁽²⁾ORCID: <https://orcid.org/0000-0003-4160-5252>, Universidade Federal de Alagoas, Estudante, BRAZIL, E-mail: arryssoncardoso@gmail.com

⁽³⁾ORCID: <https://orcid.org/0000-0001-9189-2507>, Universidade Estadual de Alagoas, Estudante, BRAZIL, E-mail: jailza30@hotmail.com

⁽⁴⁾ORCID: <https://orcid.org/0000-0003-4154-3901>, Universidade Federal de Alagoas, Professor, BRAZIL, E-mail: maryholanda@gmail.com

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Recebido em: 20 de agosto de 2019; Aceito em: 18 de abril de 2020; publicado em 10 de 07 de 2020. Copyright© Autor, 2020.

ABSTRACT: Most health problems affecting the world's population are intrinsically related to the environment. Basic sanitation can be considered as an instrument for the prevention of diseases caused by the environment through human action. Thus, the objective of the present study was to survey the perception of the residents about the conditions of basic sanitation in the municipality of Teotônio Vilela/AL, Brazil. Twenty-five semi-structured questionnaires were applied, addressing Basic sanitation issues. After the analyses we found the need to implement a basic sanitation network, so as to avoid diseases that are transmitted through the use of non-drinking water, the irregular destination of sewage and solid urban waste, which affect the quality of life.

KEYWORDS: environmental impacts. Condition of life. Environment.

RESUMO: A maioria dos problemas de saúde que afetam a população mundial está intrinsecamente relacionada ao meio ambiente. O saneamento básico pode ser considerado como um instrumento para a prevenção de doenças causadas pelo meio ambiente por meio da ação humana. Assim, o objetivo do presente estudo foi levantar a percepção dos moradores sobre as condições de saneamento básico no município de Teotônio Vilela/AL, Brasil. Foram aplicados 25 questionários semiestruturados, abordando questões de saneamento básico. Após as análises, constatamos a necessidade de implantar uma rede de saneamento básico, a fim de evitar doenças transmitidas pelo uso de água não potável, destino irregular de esgotos e resíduos urbanos sólidos, que afetam a qualidade de vida.

PALAVRAS-CHAVE: impactos ambientais. Condição de vida. Meio Ambiente.

INTRODUCTION

Basic sanitation can be defined as a set of services, infrastructures and operational facilities among which, one can cite: drinking water supply, sanitary sewage, urban cleaning and solid waste management, drainage and water management Urban Pluvial (RUSCHEL; MILK, 2002). The maintenance and quality of life, the supply of drinking water and the promotion of sanitary sewage solutions are considered paramount through the collection and proper treatment (OLIVEIRA, 2005). According to the Brazilian Constitution of 1988, this is a right of all citizens.

It is worth noting that sanitation can be portrayed as one of the most important aspects of global public Health (ANTUNES, 1996). It also states that 80% of the diseases and more than 1/3 of the mortality rate worldwide are due to the poor quality of the water used by the population or the lack of adequate sanitary exhaustion. Pathologies such as hepatitis A, dengue, cholera, diarrhea, leptospirosis, typhoid and parathyroid fever, schistosomiasis, intestinal infections, among others, which particularly affect children up to five years old (FRANCEYS, 1994), which are known by such as "poor diseases" or "diseases of underdevelopment" (SÁ, 1996).

In the viewpoint of Cavinatto (1992) "Avoiding the spread of diseases conveyed by debris in the form of sewage and waste is one of the main functions of basic sanitation. The professionals who work in this area are also responsible for the supply and quality of the waters that supply the populations." Among the main activities related to sanitation is the collection of garbage and sewage (solid and liquid waste), originating from human activities, which most often have incorrect disposal, being directed to the rivers and lakes (ANDRADE; JERÔNIMO, 2004). These authors also believe that the correct collection of these residues will prevent the pollution of water sources such as rivers and seas for example. However, such actions ensure that the water used by the individuals for consumption is of quality, as well as its supply, besides the drainage of rainwater, as well as care for groundwater and flood prevention (BORTOLETO, 2007).

As previously mentioned, sanitation is essential to preventive public health, because through this it is possible to reduce the demand for hospitals and health clinics, by eliminating part of the chances of contagion for various diseases (GUIMARÃES et al., 2007). Thus, it is believed that, where there is sanitation, greater are the possibilities of a healthier life and lower mortality rates, especially children who remain in the lowest

levels. Thus, the aim of this research was to survey the perception of the residents about the conditions of basic sanitation, in the municipality of Teotônio Vilela-AL.

MATERIAL AND METHODS

Place of study

Teotônio Vilela is a municipality in the state of Alagoas, located in the eastern mesoregion of Alagoas, 156 meters above sea level and 101 km² away from the state capital. According to IBGE (2010), its population is estimated at 44,666 inhabitants, and it presents 47.1% of households with adequate sewage

Data collection

The research consisted in the application of semi-structured questionnaires, carried out in the municipality of Teotônio Vilela-AL, in order to verify the importance of basic sanitation and its possible contributions to guarantee the quality of life.

This study sought to verify new perceptions from the data collected, since Martins and Bógus (2004) point out that "qualitative research seeks a particular understanding of what it studies, not worrying about population generalizations, Principles and laws. The focus of their attention is centered on the specific, in the peculiar, seeking more understanding than the explanation of the phenomena studied".

To answer our objective, 25 questionnaires were filled out, with objective questions and without the identification of the interviewees, addressing issues such as: if the residence has sewage? If the resident knows where he's going? If the world has water treatment? If there's a stench of sewage? If the clogging of the mouths of wolves? Among other inquiries. Demographic data were also collected in relation to gender and age.

To obtain the results, we used the program Excel (2010), using standard counting and applying the percentage of the qualitative data acquired in the research.

RESULTS AND DISCUSSIONS

Salzano (2013) highlights that quality of life should be analyzed in multiple dimensions, since it encompasses several aspects and fields of knowledge. It also emphasizes that it can be understood as the satisfactions of human needs, and that these needs are quantified in basic items, for example, sanitation

Regarding the age group, the majority of respondents (60%) Were between 18 and 35 years old, being (68%) of the female sex. When questioned about the source of water supply in households, 72% claimed to be from the public network (Figure 1). According to Barros et al. (1995), the water supply system represents the "set of works, equipment and services intended for the supply of drinking water of a community for the purpose of domestic consumption, public services, industrial consumption Among other uses. "

In pronouncing the satisfaction with the quality of water, it is perceived that the residents are more aware of the flavor and odor of the water, where (64%) Complains of Taste and (36%) They complain about the color of the water that arrives for consumption (Figure 2). In this sense, Silva et al (2009) warns that when consumers detect the presence of flavor in the water, they can believe that it is not safe. However, Cavinatto (1992) reports that since antiquity the man has learned intuitively that water polluted by manure and waste could transmit diseases and affirms that there is still an example of civilizations, such as Greek and Roman, who developed advanced techniques For the time, treatment and distribution of water.

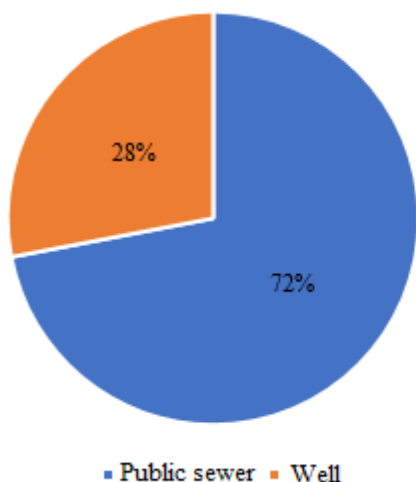


Figure 1. Source of supply

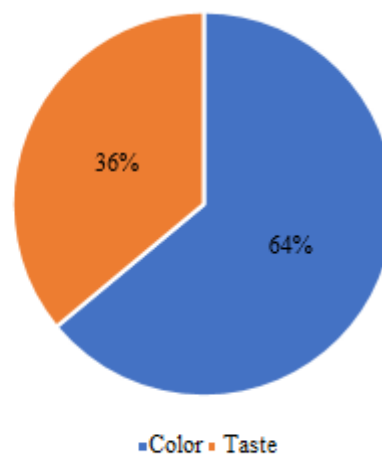


Figure 2. Probles presented in the water.

At the time they were questioned by the lack of water, 60% said that there was a lack of water at least twice a week (Figure 3). In this perspective, the UN (United Nations Organization, 2010) released a note with a prediction that up to 2050, at least one in four people will live in a country where the lack of drinking water is chronic or recurrent. In addition to the immediate implications on health and quality of life of the population living in degraded areas, the lack of treated water, collection and proper sewage treatment represents a direct impact on the labor market, as well as in the activities That depend on good environmental conditions for their full exercise (BNDES, 2017).

In the question related to the diseases contracted in the last six months (Figure 4), which affected someone from the residence, related to water, sewage and garbage, 48% of the interviewees said they already contracted schistosomiasis, 60% diarrhea, and 15% responded that they had cases in Hepatitis Family and 3% leptospirosis. To Santana; Luvizotto Cuba (2012) basic sanitation is taken as a set of procedures through which the Government is used to provide the population, both urban and rural, a hygienic and healthy situation, seeking to guarantee the quality of life and the promotion of health, and Also avoiding the proliferation of diseases.

It is known that the majority of health problems affecting the world population are intrinsically related to the environment, as an example, diarrhea that affects more than four billion cases per year, a disease that most afflicts mankind, causing Average of 30% of the deaths of children under one year of age (BOFF, 2004). Among the causes of this disease stand out inadequate sanitation conditions (GUIMARÃES et al. 2007). As we have seen, sanitation is a basic condition for human dignity, that is, the greater the access to sanitation, the lower the infant mortality.

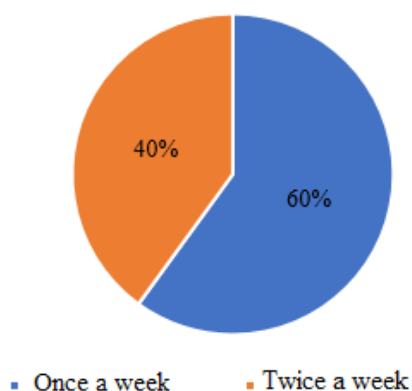


Figure 3. Lack of water.

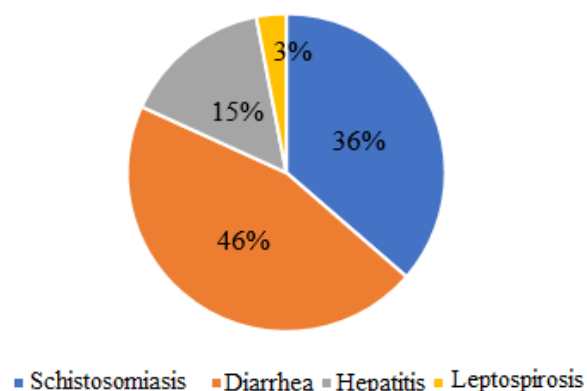


Figure 4. Lack of water.

When they were questioned if there was a sewer network in the residences, 100% answered yes. According to IBGE Data (2010), basic sanitation has improved in recent years, but one in four households still has no sewage system. On the other hand, when asked about the fate of residential sewage, more than (21%) Of the interviewees did not know how to respond to where the sewage goes and those who responded was uncertain (19%), reporting belief that it can go to sewage treatment station. Inadequate ways of forwarding sanitary sewage can bring serious consequences for the environment and public health, polluting water sources and contaminating natural waters, which do not always go through efficient treatment plants before Public supply (GIESTA et al., 2005).

Residents who were asked about bad smell coming from sewage (75%) They responded that time or another, they feel bad smell coming from the sewer, but they are accustomed to living with this situation (Figure 5). According to Monico (2001) Although there is some perception of environmental problems, they generally accept the coexistence with these diseases, often assuming a passive attitude in the face of the existence of the problem. Regarding the presence of garbage in the drainage grids or in the Mouths of wolves, (76%) They said yes, after complementing that some streets suffer from floods in rainy weather (Figure 6).

Second Rabbit (2009) garbage can be defined as any and all solid or semi-solid material, undesirable that needs to be removed because it has been deemed useless by those who disposes it, that is, any material that remains of human activities, or from the Nature, as an example, leaves, lands, sand, tree twigs.

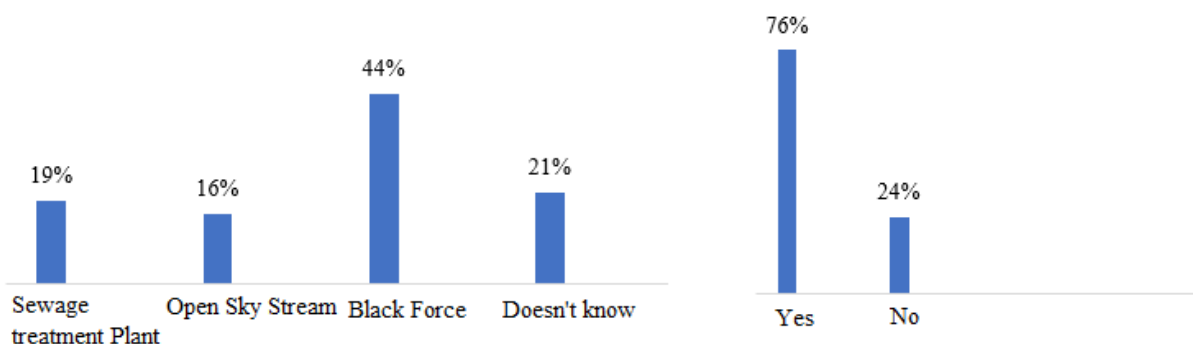


Figure 5. Destination of the sewer of the residences.

Figure 6. Destination of the sewer of the residences.

The emergence of new individual and collective behaviors will only be possible with programs of training and environmental awareness of the populations involved,

because "just as the modern man acquired postures with regard to self-care (bathing, Food, clean clothes, etc.) It is now necessary to create habits aimed at preserving the environment in which it is inserted ". (LERNER, 2004.)

Unfortunately, the citizen often has a large accumulation of residues in the mouths of wolves, some of which could be recyclable, such as: paper, plastic, PET bottles, tires, metals, aluminum, are among the recyclable materials (COELHO, 2009) (Figure 7). In this context, we understand by recycling the process of reuse of solid waste, in which its components are separated, transformed and recovered, involving economy of raw materials and energy, combating waste, reducing Environmental pollution and the valuation of waste, with a change of conception in relation to them (UNDP, 1998).



Figure 7. Residues in Wolf's mouth.

Guimarães et al. (2007) Explains that investing in sanitation is one of the ways to reverse the existing situation. Moreover, the preservation of the cleanliness of the environments, avoiding solid residues in inadequate locations, also avoids the proliferation of vectors of diseases such as rats and insects that are responsible for the dissemination of some illnesses.

According to Greek mythology, the god of Sculpappian Medicine had two daughters: Higea and Panacéa. The first of them was the prevention of diseases, teaching cleaning measures to the population. The habits disseminated by Higea gave rise to the term: || hygiene, which means a clean and healthy environment. The second daughter, Panacéa, healed the sick people. This gave rise to the || panacea expression,

used today when some discovery serves to solve many problems or cure many diseases (CAVINATTO, 1992).

Thus, sanitation is distinguished by the essentiality attributed to the services necessary to guarantee environmental health and human dignity. In such a way that such services provide significant benefits to the population in various fields, such as health, environmental preservation and development of economic activities, such as tourism, for example (MOTA, 2005). Still in the view of the same author, the situation of sanitation is still precarious in Brazil, especially with regard to sanitary sewage.

CONCLUSIONS

In this way we can conclude that offering favorable conditions of basic sanitation is essential to improve the quality of life and the environment. For this to happen, it is important that the authorities are attentive to the sanitation needs and make available to the population.

Therefore it is important to improve mainly in the supply of drinking water and sewage treatment, as well as to carry out workshops on environmental education for the population with the purpose of working environmental awareness and providing all information necessary for achieving the correct destination of municipal solid waste, as this is the only way to reverse the existing framework and provide the population with a healthier environment.

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