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Articles

Health communication in campaigns to prevent human leptospirosis in Maceió, Alagoas, Brazil

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Health communication actions in campaigns to prevent leptospirosis in Maceió are discussed. The method consisted of a multimodal analysis of five posters, two folders and one pamphlet used in leptospirosis campaigns between 1996 and 2017 and a content analysis of two interviews with users who were affected by the disease. Results show that: the original purpose of the materials alters its discursive effect but in terms of main visual effects it focuses mainly on the rat; campaigns use a unilateral, directive and potentially low impact communication model, confirming previous findings; there is a lack of correspondence between the proposed actions and the living conditions of the users. Based on these results, we discuss how responsibility for prevention is attributed mainly to the population in a vulnerability situation, exempting the State from actions that foster dialogue, and its potential psychosocial implications.

Keywords: Health communication. Primary prevention. Leptospirosis.

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Introduction

The 10th National Health Conference has acknowledged the limits for different segments of society to participate in the Brazilian Unified Health System (SUS in Portuguese) achievements. It has also acknowledged the need to implement managerial, operational and resource assurance structures to foster this participation through actions focused on health information, education and communication. While health information was associated with the organization of data systems to support decision-making, health education and communication were gradually integrated, from the association of health education to propaganda techniques[1].

These actions aim at equitably distributing information on the health/ disease process in order to promote the adoption of health care practices and guarantee the maintenance and improvement of life quality. The strategy is fundamental because SUS can only be effective when its principles and practices circulate, are made visible and appropriated by the groups for which it is intended, which places communication as one of the main instruments for its implementation and improvement[2].

In this context, preventive strategies based on campaigns take a prominent place. Unlike interventions in individual bodies, prioritized by the biomedical model, the campaign model focuses on the population as its target and object of public intervention. To achieve this purpose, it aims at organizing and sanitazing public spaces based on epidemiological and public health paradigms, either through compulsory vaccination programs, disinfection of public and domiciliary spaces or dissemination of relevant information to disease management[3].

In the specific scope of these practices, printed materials (posters, pamphlets and folders) are part of a line of action that presses for the democratization of communication through expanded and facilitated access to information, which is necessary for the exercise of social control. Unlike other medias, printed public materials offer the opportunity to access pieces of information without paying for it. In addition, they are materials that are easy to use and available in public spaces such as hospitals, health centers and schools[4].

These printed materials are crucial to health communication and education, but are also been poorly used and/or have limited scope and effectiveness. This strategy of intervention has been based on na one-way model of communication, whose goal is solely and exclusively to transmite information, focusing on a fictional and homogeneous, whether not stereotyped, target audience[5]. Because of that, it is necessary to invest in its improvement. Such investment in actions to increase information flow but do not burden the target audience are fundamental in a society in which knowledge about certain diseases relates to their social visibility and the creation of circles of social attention in which diseases or conditions of lesser political and mediatic appeal, usually related to conditions of poverty and inequity, are neglected[6].

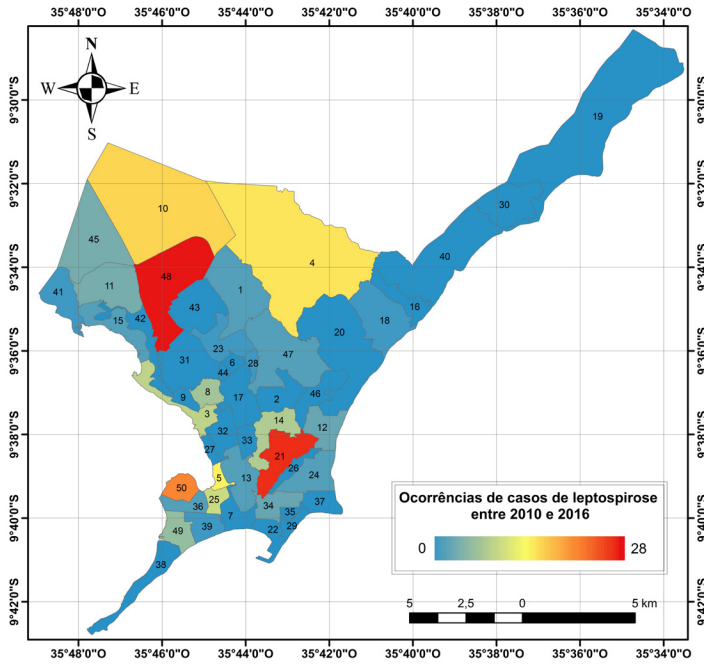
Most studies focusing on printed materials in preventive campaigns are about diseases such as schistosomiasis[7,8], dengue fever[9] and AIDS[4]. Our goal in this paper is to broaden this field by exploring a disease with low visibility: human leptospirosis. Studies focusing on leptospirosis campaigns are still scarce and are mainly associated

with environmental education[10], which highlights the importance to understand how this issue has been approached within the health sector.

The relevance of studying this disease bases on the fact that it is potentially lethal and its pathogenesis and impact on the population's health are still poorly understood[11]. Leptospirosis is influenced by behavioral conditions[12] and socioenvironmental conditions[13] and outbreaks have occurred in developed countries like France[14] and developing countries with high levels of social inequality such as the Philippines[15], Guyana[16] and Brazil[17]. Regarding the Brazilian context, it is important to highlight that although leptospirosis has the characteristics of a Neglected Tropical Disease (NTD)[18], it has not been taken as a priority in research agendas neither in government interventions for NTDs, which, according to recent studies, caracterizes it as a doubly neglected tropical disease[19]. It is more recurrent in poor urban areas of the country[18] and is related to environmental insalubrity due to lack of basic sanitation in several capitals, such as Belém[20], Rio de Janeiro[21] and Maceió[22].

The problem of leptospirosis requires special attention in Maceió, capital of Alagoas, due to the social determinants of the city. Only 47.1% of the households have adequate sanitary sewage in the city[23] and only 32.7% of it have adequate urbanization of public roads[24]. These factors are directly related to the high incidence and lethality of leptospirosis in the city, as well as its unequal distribution in the territory.

This unequal distribution can be seen in Figure 1, which presents the neighborhoods of Maceió with the highest number of cases of leptospirosis between 2010 and 2016. These neighborhoods are precisely those with a massive presence of precarious settlements, where there are rats and other vectors of human leptospirosis, and where the population has low income and educational level. People also do not have conditions to cope with leptospirosis individually. Regarding this situation, it is important to understand how actions to prevent leptospirosis have been developed in this municipality.



Bairros

1 Antares
2 Barro Duro
3 Bebedouro
4 Benedito Bentes
5 Bom parto
6 Canaã
7 Centro
8 Chã da Jaqueira
9 Chã de Bebedouro
10 Cidade Universitária
11 Clima Bom
12 Cruz das Almas
13 Farol
14 Feitosa
15 Fernão Velho
16 Garça Torta
17 Gruta de Lourdes
18 Guaxuma
19 Ipioca
20 Jacarecica
21 Jacintinho
22 Jaraguá
23 Jardim Petrópolis
24 Jatiúca
25 Levada
26 Mangabeiras
27 Mutange
28 Ouro Preto
29 Pajuçara
30 Pescaria
31 Petrópolis
32 Pinheiro
33 Pitanguinha
34 Poço
35 Ponta da Terra
36 Ponta Grossa
37 Ponta Verde
38 Pontal da Barra
39 Prado
40 Riacho Doce
41 Rio Novo
42 Santa Amélia
43 Santa Lúcia
44 Santo Amaro
45 Santos Dumont
46 São Jorge
47 Serraria
48 Tabuleiro dos Martins
49 Trapiche da Barra
50 Vergel do Lago

Figure 1. Incidence of leptospirosis cases in Maceió.

Considering this scenario, our main goal in this article is to discuss models of health communication adopted by campaigns to prevent human leptospirosis in Maceió, Alagoas, Brazil. It is expected that the present study contributes to improve the discursive contents of the campaign materials and to make them circulate in the citiy spaces.

Theory and method

Types of material

The present study analyzes two types of materials: a) the printed materials used in campaigns to prevent human leptospirosis in Maceió and b) transcripts of two semi-structured interviews with users who had leptospirosis and were attended by the health services in Maceió.

Selection of printed material

The selected printed material consists of five posters, two folders and a single pamphlet used in the campaigns to prevent leptospirosis in Maceió between 1996 and 2017. The specific date on which each printed material was produced does not appear in the records of the Municipal Health Department of the city. The only material dated was the pamphlet (1996). We considered the period from 1996 to 2017 because it is the year in which the first material came to be used in campaings and the last year of our field research. Throughout this period, printed materials were used concomitantly; there was no substitution of one material for another. This article analyzes all printed materials provided by the Municipal Health Department of Maceió.

It is important to note that one poster, one folder, and the pamphlet were not originally produced for leptospirosis preventive campaigns but rather for rodent control campaigns. However, they were also used in leptospirosis campaigns, that is the reason why they were included in our analysis. The pamphlet, the oldest material, was used in both campaigns in the same year of its manufacture.

Selection of participants

The selection of the health users to be interviewed occurred after six months following-up Municipal Health Department staff responsible for preventive actions and a month following-up the health team at the reference hospital for the treatment of leptospirosis in the municipality. During the follow-up of activities in these institutions, we dialogued with different users about their experiences with human leptospirosis and with the campaign materials used. In addition, we also talked with the health team that reported different perspectives on the role of education and communication in health in the prevention of human leptospirosis.

These dialogues were important for us to establish the criteria to include participants in our research. The two participants were selected because they were key informants who: a) had passed the whole system of leptospirosis care in the health network, having contact with the basic and specialized care network; b) received

from the technical team information about the disease, its causes and treatments; c) synthesized arguments and experiences of other users also affected by the disease who were followed up during the observations in the referral hospital; d) were + 18 years old; e) showed interest in participating and narrating their experiences.

Analysis procedures

The printed material and interview transcripts have undergone different analysis procedures. The first set of procedures was applied to the printed material and consists of the use of three types of analysis: the multimodal discourse analysis[25], the analysis of linguistic repertoires[26-28] and the analysis of illocutionary acts[29-31]. The second set of analysis procedures was used in the interviews and consisted of transcription and an analysis of the content expressed by the users of the health system[32].

Analysis of printed material

The multimodal discourse analysis considers that the different semiotic systems complement one another in the production of shared meanings. In this text, we chose to focus specifically on *framing*: what determines the blocks of information to be analyzed. The framing was initially approached as a way of connecting and disconnecting the visual composition that is marked by different lines, such as voids between elements, color discontinuities and continuities or boundaries formed by the edges of composition elements[25]. In this work, we will focus on the relationship between visual language and the use of written language, to identify the main framing element in the campaigns.

The analysis of repertoires in turn refers to the selection, typification, classification and attribution of functions to words or sets of words that delimit the conditions and possibilities of action in a given field of human activity[27]. The first type of repertoire we analyze are the verbs, which summarize the action of the phrase. We look for their conjugation, flexion in number, person, mode and verbal tense. The second type of repertoire analyzed were the characteristics, words that express attributes, particularities and words equivalent to the analyzed object. Finally, we also analyze attributions that can be classified as causes (nouns to which a causal relation, liability or even guilt) is established; effects or affected (people, things, animals, institutions or bodies affected by an action); places (adverbial attachments that indicate the space in which the action is being narrated) and; times (terms that mark the historical moments in which the action happens). In the repertoire analysis, the verbs were underlined and the verbal ellipses were marked by the symbol (_). The characteristics were marked in bold while attributions (cause, effects/affected, places and times) were marked with italics. The objective is to identify the main discursive elements that compose the campaign materials and the relationships between them.

The third procedure was the identification of illocutionary acts, which relate to the action potential of a sentence[29-31]. According to Searle's[20] classification, there are five types of illocutionary acts: the representative ones, which compromise the speaker with the truth of a proposition; the directive ones, who engage the listener with a future course of action; the commissives, who commit the speaker with a future course of action; the expressives, which expresses psychological stages; the declarations, that

change the reality from its enunciation and; the representative statements, which compromise the speaker with a statement of truth and change reality concomitantly. The selected sentences were classified by this typification to understand which actions are targeted to which target audience in the campaigns.

Analysis of interview transcripts

The interviews addressed the daily life of two users and the information they had about leptospirosis before, during and after infection. The interview script consisted of the following questions: "Have you ever heard of leptospirosis? If so, what did you hear about the disease?" "How did you know you had leptospirosis?" "Have you been told about the disease while you were being treated?" "How do you think you were infected?" "Which impacts the disease has produced in your life?"

Therefore, an analysis of the content of these interviews was made based on an open codification of the information presented[32]. This coding focused on sentences related to the daily life of the interviewees, when the interviewees learned what leptospirosis was and about the influence of information on leptospirosis in their life.

Ethical procedures

Due to the fact that this research has human participants, the present study was submitted to the ethics committee under the number CAEE 37203114.8.0000.5482 and approved.

Results

From the adopted procedures, we were able to identify four main results: the original purpose of some materials changes the discursive effect and, consequently, the rat becomes the main agent faced by the campaigns; the adopted communication model is unilateral and makes use of directive illocutionary acts; there is a lack of correspondence between the proposed actions and the living conditions of the users affected by the disease; the responsibility for prevention is attributed to the population at risk, exempting the State from any compromises, which raises a discussion about attributions of responsibility and guilt.

Framing

The posters, folders and pamphlet of human leptospirosis presented three types of framing in relation to the message. The first frame focuses on the image and consists of four blocks of information: information about the vector (rat), the vector image, information about the reader's action and data from the institution responsible for the document. This type of framing was identified on one of the posters (Figure 2) and on the cover of a folder (Figure 3).

Figure 2. The rat kills, kill the rat.

Figure 3. Beware of the rat.

The framing lines of both images are marked by the color contrast between the background of the materials (red and brown), the color of the font that displays the message content (white) and the color of the vector image, a mouse (black). The blocks of information are divided by spaces in which the background color predominates. Vector images are the central elements and, except for the background, are the elements that occupy most space in these materials.

The other form of framing seeks to balance the written contents of the material and the different images that compose it. In this case, there are more than one image that are arranged in different places of the material and that eventually compete with the written content of the message. This type of framework has different compositions, and the following information blocks are identified: title with name of the disease, definition of the disease, images of the main vector (rat), sewage and garbage, main symptoms, forms of prevention, referrals and data of the institution responsible. Four posters, the cover of a folder and the contents of two folders, follow this structure. The posters in Figure 4 and Figure 5 illustrate this model.

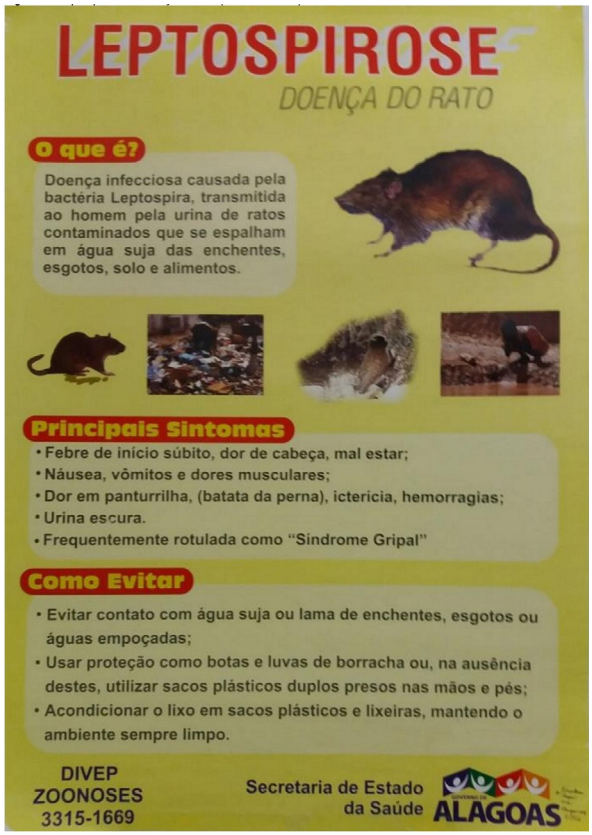


Figure 4. Leptospirosis, rat disease. Yellow background.

Figure 5. Leptospirosis, rat disease. Blue background.

In this case, framing lines are produced by empty spaces in which the background color predominates, distinct color frames delimiting the information blocks (definition of disease, symptoms, modes of transmission and prevention) and color contrast of the content written (red and yellow highlighted letters, black or just red) with the background color of the posters. The images are used in an illustrative way, to represent the vector and sources of infection, or are self-explanatory, as is the case of the rat marked by the symbol of forbidden.

The last type of framing occurs in only one material, the pamphlet depicted in Figure 6, in which emphasis is placed on contents rather than images. This pamphlet was printed on sulphite paper and has only black, white and gray colors. The framework provides the following information: information on the responsible institution, indicator of those responsible for rodent control, images associated with the table with control measures, recommendations for internal and external control, closing sentence.

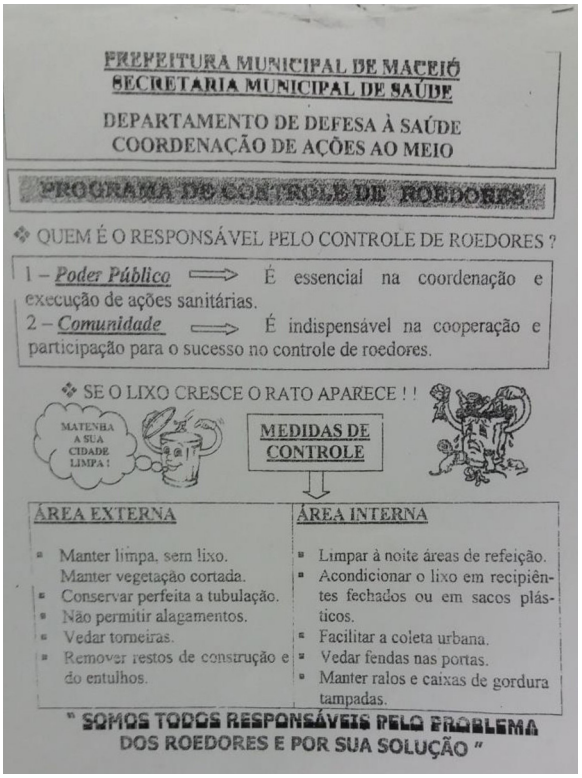


Figure 6. Who is responsible for rodent control.

It is important to note that the poster of Figure 2 and the poster of Figure 3, both with frames that focused on the image, and the pamphlet in Figure 6, whose framing focus was the content of the message, were originally produced for rodent control, while the other posters and folders, which alternated written and visual language, were produced specifically for campaigns to prevent leptospirosis. The appropriation of these materials produced for rodent control campaigns in leptospirosis campaigns alters the type of communication practiced: while those responsible for the rodent program make use of the visual language to attract attention and the written language to inform, those responsible for the elaboration of the materials prints produced specifically for the leptospirosis prevention campaigns use the two languages together to achieve these goals.

This incorporation of rodent control materials also has an effect on the focus of the leptospirosis prevention campaign because the predominant setting becomes the rat. The blocks of information used to refer to the image or name of the disease related to the vector (Rat Disease) are predominant in relation to other frameworks such as the physical signs and symptoms of leptospirosis and risk factors. This vector focus obliterates the other risk factors in the images and may contribute to reduce the disease to a causal element: eliminate / avoid the rat, eliminate / avoid risks.

Analysis of repertoires and illocutionary acts

From the identification of the information blocks, we analysed repertoires and illocutionary acts present in the textual blocks. The sentences extracted from the pamphlets and posters were organized in Figure 7. The verbs used in the materials vary, but they are conjugated in the infinitive or in the imperative. These formats are associated with directive illocutionary acts, which provoke the interlocutor to take a certain course of action. In these cases, the infinitive mode is more subtle, being characterized by a recommendation, while the use of the imperative expresses direct orders[31].

Materiais	Sentenças
Cartaz 1 (Figura 2)	Mate **o rato**
Folder 1 - Capa (Figura 3)	__ (tome) **Cuidado** com as **companhias [ratos]**
Cartaz 2 (Figura 4)	Evitar contato com **água suja** ou **lama de enchentes**, **esgotos** ou **águas empoçadas**. Usar **proteção** como **botas e luvas de borracha** ou, na ausência destes, utilizar **sacos plásticos duplos presos nas mãos e pés**. Acondicionar o **lixo** em **sacos plásticos e lixeiras**, mantendo o **ambiente** sempre **limpo**.
Cartaz 3 (Figura 5)	Se você teve contato com **água ou lama contaminada**, **esgoto**, **fossa**, **lixo** ou se há presença de **ratos** *nos locais que você frequenta*, procure uma **unidade de saúde**.
Panfleto 1 (Figura 6)	*Poder público* é essencial na *coordenação e execução* de **obras sanitárias** *Comunidade* é indispensável na *cooperação e participação* para *o* sucesso do **controle de roedores** Manter **limpa**, sem **lixo**. Manter **vegetação cortada**. Conservar **perfeita** a **tubulação** Não permitir **alagamentos** Vedar torneiras Remover **restos de construção e entulhos** Limpar *à noite áreas de refeição* Acondicionar o **lixo** em *recipientes fechados* ou em *sacos plásticos* Facilitar a **coleta urbana** Vedar **fendas** *nas portas* Manter **ralos** e **caixas de gordura tampadas**.
Cartaz 4	Coloque **lixo** somente em *sacos fechados* e de preferência, em *lugares altos*. Nunca jogue **lixo** *nas ruas ou em terrenos baldios*. Sempre guarde os **alimentos** em *recipientes fechados*. Não deixe **o mato alto** *em jardins e quintais*, nem acumule **lixo** e **entulhos**. Mantenha tudo muito **limpo**, **rato** que se preza odeia **limpeza**.
Cartaz 5	Andar **calçado** *sempre que possível* Se entrar em contato com **água** ou **lama**, usar **luvas e botas de borracha**, ou **sacos plásticos presos às mãos e aos pés** Após o contato com **água** ou **lama**, lavar bem a **pele** com **água limpa e sabão** Manter o **lixo** *da sua casa sempre fechado em sacos plásticos* ou **enterrados** para evitar a presença de **ratos**. Apresentando estes **sintomas**, procurar um **serviço de saúde** *mais próximo da sua residência.*
Folder 1 – Contracapa (Figura 3)	Se você teve contato com **água ou lama contaminada**, **esgoto, fossa, lixo** ou se há presença de **ratos** *nos locais que você frequenta*, procure uma **unidade de saúde**.
Folder 2	Remova *do solo* **as fezes dos animais**. Limpe *os locais de criação* com água sanitária; proteja-se com **botas e luvas de borracha**. Mantenha *a casa e o quintal limpos*. Capriche na limpeza da cozinha, principalmente depois das refeições. Não acumule objetos em desuso ou entulho em garagens e porões. Evite enchentes Não jogue **lixo** *em quintais e terrenos baldios, córregos, rios e esgotos*. Coloque l**ixo orgânico em saco plástico**, feche e encaminhe para a coleta, *perto do horário de passagem do lixeiro.* Feche todos os lugares por onde o **rato** possa entrar: *lixeiras, buracos, vãos, rachaduras.* Feche bem a **caixa d'água**, **ralos fossa, entrada de fios, elétricos e de telefone**. Guarde os **alimentos** em *vasilhas bem fechadas* e *afastadas do chão.* Mantenha **o pote de alimentação dos animais** *sempre limpo.* Deixe vazio *à noite* Evite entrar em lagos, córregos e cavas de rios. Nunca tome **banho** *nesses locais.* Se-pa-re o **lixo** e encaminhe *para a coleta seletiva* **o que puder ser reaproveitado ou reciclado**. Caso apresente estes **sintomas** procure a **Unidade de Saúde mais próxima**

Figure 7. Analysis of repertoires aimed at the prevention of leptospirosis.

This highlights the fact that the population is responsible for avoiding infection by taking a set of measures ordered by the state. From this perspective, the subject is able to manage risks to which he/she is subjected. According to Spink, this is because "from the enlightened assumption that we are rational decision-makers, the availability of information would make each of us risk management partners[33] (p. 225)." As a consequence, printed materials foster a model of health care in which the presentation of procedures are enough to people to engage in preventive measures, so the population will automatically seek means to prevent.

These procedures relate to the main characteristics we identified: the vector (rat), factors that attract rats (food, garbage and debris) and factors that allow contact with the animal's urine (garbage, mud or contaminated water). It should be noted that the rat appears in two ways: as an agent that should be killed, therefore, the individual who integrates the target audience of the message should seek and kill it, and other times it is shaped as an agent that should be avoided by means of a set of measures that distances its presence. The materials previously shown in Figure 2 and Figure 3 express this ambiguous relationship with the animal.

Prevention actions are mostly related to these characteristics, since they deal with negative sentences. Cleanliness of the environment, adequate storage of food, proper disposal of garbage and the use of protective equipment are the main prevention actions and all are aimed at the population. With the exception of the pamphlet in Figure 6, which points out that public power must carry out sanitary works, all other sentences selected on posters are aimed at the population or community, reinforcing our argument these materials atribute to the population the responsibility for health.

Place attributions also point to this responsibility of individuals in a population group for the infection, since they refer to situations in which leptospirosis is related to the places that the target audience attends or to the home environment, such as "their home", "Meal areas" and "backyard". These environments need to be always clean.

In addition, four specific sentences also draw attention these attributions of responsibility, but for different reasons. Two of them trigger the precarious situation in which the target public of the leptospirosis prevention campaigns live. The first "Use protection like rubber boots and gloves or, in the absenceof those, use double plastic bags attached to hands and feet" proposes the use of protective equipment and at the same time recognizes that this is not na easy material for the target audience of the campaign to have and, therefore, proposes an improvisation with the use of plastic bags. In turn, the sentence "Walking shoes whenever possible" is used as a recommendation, recognizing by means of a time marker that it is not always possible for this public to walk with suitable footwear.

On the other hand, two other sentences, identified in folder 23 (figure 7), presuppose an audience that does not correspond to the profile of the population with leptospirosis. The sentences "Put organic garbage in a plastic bag, close it and send it to the collection, near the trashman's timetable" and "S-e-p-a-r-e-t-e the trash and send what can be reused or recycled to the selective collection", presuppose that people know how to separate organic garbage from other types of garbage, that they participate in selective garbage collection even in a city where this collection is not encouraged, that the person has garbage collection in his/her neighborhood and that he/she has time and is available to dispose garbage at the same time people responsible

for garbage collection is passing by. At the same time, the campaign tries to fit the limitations of the target audience, or it presupposes that it is the target audience that must be adapted to other health needs.

Interviews with health users

Considering that the campaigns for the prevention of leptospirosis sometimes disregard and sometimes recognize the precarious condition in which people living in situations of vulnerability to the disease live, it is questionable whether these interpretations are related to the daily life of these people. According to our interviewees, eventually, the reality of people who have had leptospirosis can be much more difficult than what is presupposed by the campaigns. This reality is presented in the report of Health User 1.

> User 1 - At the time I worked in the supermarket, I was cashier at the time I fell ill. So ... it was more or less a winter time, you know? And the surrounding area where I worked was very flooded and when I needed to work I always entered this street that was always flooded with rain water. So I believe that was why I fell ill. And there they found a lot of rats and even the company I worked for had a lot of rats too.
> Researcher - Even inside the company?
> User 1 - Even within the company. There were more of them in the warehouse where they put the goods, they had rats a lot of time.
> Researcher - It's ... But ... Why did you decide to cross? Because it's all flooded, right?
> User 1 - It's because otherwise we got caught up in it, right? *Somehow we have to get to work*. It was necessary to go through this, because there was no alternative. So ... the street that connected the bus stop to where I worked... I had no alternative, so I had to go through that street [Authors Highlight].

As explained, there is no alternative to getting to work: either the health user crosses the flood or miss a workday and, consequently, loses part of his salary. When he arrives at work, however, he is not yet free from these risk factors because there are rats in the company too. The only reason to face such situations on a daily basis is his job. That is not to say, however, that he did not know the risks of coming in contact with water from floods or even with rats.

> User 1 - Maybe even at the time I even knew that I could get sick from childhood we end up ... Parents end up guiding: "Look, do not step there because you can get some disease!" But we do not know the gravity of our situation, *we end up not taking care of ourselves* and we do not know the severity of the disease that we are subject to, it is only through this experience that we end up taking more care [Authors Highlight].

The user had been previously informed by his family of the dangers related to contact with rainwater and floods, although the risk of contracting a serious illness

such as leptospirosis was not clear to him at the time. In this section, we highlight the phrase "we end up not takingcare of ourselves", which expresses individual responsibility for health and one of the potential effects of promotional and preventive discourse: guilt. According to Spink[33] (p. 24) in her essay on healthy lifestyles, this expression stems from an internalization of responsibility and is "due to the causal nexus resulting from the association between our actions and health events (or, more precisely, illness). If there is guilt it is because these healthy lifestyles have become a duty to oneself, to our loved ones and to the collective."

This information that atributes responsibility and blames the user comes to him, but not directly from the printed materials. The course of information may originally come from school or everyday life, without being appropriated as knowledge, according to the following reports:

> User 1 - Already! Already! I've heard more on school activities, right? When we end up having to do some research on epidemiology, tropical diseases, things like that, we ended up researching, but no ... I did not know it was caused by the urine of the rat, right?
>
> User 2 - Leptospirosis I just heard the name, you know? I could see the people talking, but I did not know that it could be so dangerous, not to rush urgently to be treated, no.
> Researcher - You came to see, you know some poster, pamphlet, have you received any of these things, do you remember?
> User - No.

Information from printed materials used in leptospirosis prevention campaigns does not always reflect the realities of people at risk, can promote feelings of guilt by attributing individual responsibility for healthcare, and it does not necessarily reach the people to whom it should have been projected. This demands a discussion on the production of the campaign material, its distribution and placement in the municipality, as well as its psychosocial impact. Although the information arrived via other means (school, hospital care) neither of the two interviewees reported having had contact with these materials, a common reality to other health users with whom we talked in our field research. In order to produce effects, these materials need to be produced and strategically spread to the very people who are target audience in the campaigns. The unilateral relationship of production of these materials ends up obliterating the subject of public policy, attributing responsibilities exclusively to the population and promoting guilt feeilings, maintaining the assumptions of a directive model of communication, merely informative. Is this the psychosocial impact needed from a health communication policy?

Conclusion

In this article, we discussed communication in campaigns to prevent human leptospirosis in the city of Maceió. Regarding the framing of materials, it is important

to highlight that the use of visual language had two main goals: to illustrate the contents and to pass messages of preventive actions. Visually, the rat is a central figure in the materials and discursively it is characterized as an agent to be killed or avoided. This way of referring to the disease and the ways to prevent it can imply a set of actions restricted to the elimination of the rat, reducing the problem to the existence of its vector.

With regard to repertoire analysis, we have identified that the verbs used in the materials are varied, but they are conjugated in the infinitive or in the imperative. In these cases, the infinitive mode is more subtle, characterizing itself as a recommendation, while the use of the imperative expresses direct orders. These formats are associated with directive illocutionary acts which points to the fact that the population is responsible for avoiding infection by taking a set of measures ordered by the State. These measures, in turn, are rather ambiguous. In our analysis, we identify sentences that propose preventive actions, but recognize the precariousness of the target audience of the campaigns and others that presuppose an audience that does not correspond to the profile of the population with leptospirosis.

Interviews with users who had leptospirosis, in turn, show that the reality of the target audience may be even worse than predicted by the campaigns and attribution of responsability to individuals may produce guilt as an effect. Eventually, knowing the risks, knowing something about the disease or its consequences does not mean taking preventive measures because these measures are not always appropriate, but users may feel guilty for their own illness by not following them. Therefore, these materials need to be produced and spread with community participation, paying attention to the responsibilities and attributions of guilt generally associated with preventive and promotional health models.

The present research ratifies the main results obtained in the literature of the area and brings to the discussion the question of attribution of responsibility and the production of guilt in the preventive campaigns, that appropriate a promotional model without evaluating its potential psychosocial impacts. Due to the number of interviews we did not seek to set up a representative corpus, but to confront points of view. Further studies may address the issue from other methodological strategies not adopted here. We also hope to contribute, based on local demand, to promote practices of evaluation and improvement of communication strategies in the campaigns for the prevention of leptospirosis.

Contribution of the authors

All authors participated actively in all stages of the paper preparation

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