Knowledge of the population of the northern state of Espírito Santo and Northeast of the state of Minas Gerais on Herpes Viruses and Perspectives of Care of Dentistry

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SUMMARY

This study aimed to measure the level of knowledge of HZV in northern municipalities in the state of Espirito Santo and Northeast of Minas Gerais in order to analyze and compare the variables investigated on the herpes virus. Specifically aims to understand the perception of this population about the forms of contagion, activating factors of the virus and the mechanism of access to information. Therefore, we carried out a literature review and research linked to it through the study method of approach to the case. In selected areas, individuals from 10 cities in the North of the Holy Spirit and Northeast of Minas Gerais, participated answering structured questionnaire. The results showed that a significant percentage have little information or complete ignorance about the disease, modes of transmission and its consequences for health. Much of the sample is unaware of the importance of the dentist to provide information and to treat cold sores, in addition to a lack of health services have been observed to provide information about the disease, its clinical signs and prevention, through educational activities for the population and 19% of the population has herpes labialis. Thus, it is concluded that most educational measures should be carried out, understanding that the greater the knowledge, the lower the infection rates, leading individuals to prevent and to treat when detected the expression of pathogenic signals. in addition to a lack of health services have been observed to provide information about the disease, its clinical signs and prevention, through educational activities for the population and 19% of the population has herpes labialis. Thus, it is concluded that most educational measures should be carried out, understanding that the greater the knowledge, the lower the infection rates, leading individuals to prevent and to treat when detected the expression of pathogenic signals. in addition to a lack of health services have been observed to provide information about the disease, its clinical signs and prevention, through educational activities for the population and 19% of the population has herpes labialis. Thus, it is concluded that most educational measures should be carried out, understanding that the greater the knowledge, the lower the infection rates, leading individuals to prevent and to treat when detected the expression of pathogenic signals.

Key words: Herpes virus. Health Education. Care. Dentistry

INTRODUCTION

The herpes zoster is a highly prevalent viral infection in the orofacial region, mainly caused by herpes simplex type 1 (HSV-1), a global public health problem that affects about 20-40% of the general population, with the highest prevalence between the lowest socioeconomic groups (aL-MAWERI et al., 2014).

The lip and perioral areas are the most common sites of infection, although the lesions may also appear elsewhere. Transmission of the disease occurs through direct contact with an infected individual and the primary infection is usually acquired in early childhood, with the virus latent remaining in the nerve ganglia, usually in the trigeminal ganglia (ARDUINO; 2008).

internal or external stimuli, such as immunosuppression, stress, menstruation, fever and prolonged exposure to sunlight, cause the reactivation of viruses and their migration to the skin and mucosa, resulting in a secondary clinical episode or recurrent herpes infection, especially in areas perioral (ARDUINO; 2008).

The transmission of the virus infection depends on the intimate and personal contact of a susceptible individual with someone excreting the HZV. The six people infected, one no symptoms, but have the active virus and can infect others through secretions. The problem lies in the fact of ignorance of the disease and complications caused by it are proliferation factors, and important health education actions in order to clarify about the disease, symptoms and prevention, especially among populations with less access to services health and information.

The growing number of people with herpes justifies the preparation of this study as well as the quantity of active cases due to non correct control of the carriers of this disease. It is known that the complications of this critical illness interfere deeply with the well-being and quality of life of patients.

In this, the relevance of this article is to gather statistical samples in order to raise indicators for the development of strategies of health services, and the performance of paramount dental professional to strengthen health promotion and contribute to proposals aimed at preventing the adjustment of existing interventions making it possible, interfere with more efficiency in the promotion, protection, dispensing care to existing cases and prevent new cases.

Given the above, the objective of this bibliographic research and case study were to measure the level of knowledge of HZV in northern municipalities in the state of Espirito Santo and Northeast of Minas Gerais in order to analyze and compare the variables investigated about herpes virus. Such knowledge is of vital importance for the strengthening of educational, preventive and curative actions excelling in the contribution of dental professionals.

RESULTS AND DISCUSSION

The study sample was made up of people from 10 municipalities in the North of the Holy Spirit (Ecoporanga, Mucurici, Mountain, Point Belo and Pedro Canary) and in the Mucuri Valley, in Minas Gerais (Ataléia, Carlos Chagas, Nanuque and Serra of Aimores). The choice of regions took place due to the socioeconomic and cultural characteristics, which are factors directly related to the care and directly interfere with the outcome of the treatment.

Municipalities analyzed add up to a total population of 191 913 inhabitants, 107 865 and 84 048 miners Espirito Santo. Of this group, there was selection of 200 residents of the municipalities in the state of Espírito Santo and 200 residents of the municipalities of Minas Gerais, for a total of 400 respondents.

For the case study, structured questionnaires were distributed, containing 33 objective questions, applied by resident researchers in the 10 municipalities that were part of the scope of this study. According to Yin (2015, p. 32), this method of approach constitutes an "empirical research that investigates a contemporary phenomenon within its real life context, especially when the boundaries between phenomenon and context are not clearly defined" .

This instrument first analyzed the sociodemographic characteristics and subsequently of respondents knowledge about the disease, transmission and self-care mode and the information obtained about the herpes virus in health care and dentists. Note that all respondents were informed about the purpose of the research and, upon acceptance to participate, they signed an Informed Consent.

The process of data analysis was supported on the concept of content Bardin (2009), which operates in three main poles: the pre-analysis, exploration of the material and results, based on inference, and interpretation. It is noted that the organization holding the material and coding categories, filtered over that found meanings parallel literature on the subject of this study.

Subsequently, they were tabulated and analyzed by descriptive statistical variables in order to identify the profile of the sample. Detailed examination proceeded through absolute and percentage frequency in the variables.

Table 1 - Social Variables

Variable	Minas Gerais		Holy Spirit		Total	
	n	%	n	%	N	%
Genre						
Male	96	48	87	43	183	46
Female	104	52	113	57	217	54
Age						
<17 years	2	1	0	0	2	1
17 and 20 years	41	20	51	25	92	23
21 and 25 years	34	17	38	19	72	18
26 to 35	48	24	49	24	97	24
36 to 40	28	14	13	7	41	10
41 years or more	47	24	49	25	96	24
Education						
Illiterate	0	0	0	0	0	0
Incomplete Elementary School	7	3	14	7	21	5
Complete primary education	17	8	16	8	33	8
Complete high school	51	26	93	46	144	36

Incomplete higher	74	37	44	22	118	30
Graduated	51	26	33	17	84	21
Marital Status						
with fellow	102	51	91	45	193	48
No companion	98	49	109	55	207	52
Total	200	50	200	50	400	100

When analyzing social variables of the sample with respect to gender, the female population made up a greater percentage in the two regions, a total of 54% (n = 217). As to the age of the sample, a higher number of respondents in age from 17 to 20 years (n = 92; 23%), 26 to 35 years (n = 97; 24%) and above 41 years (n = 96; 24%). As for education, 36% of the sample had complete and incomplete higher Secondary (n = 1182; 30%). Regarding marital status, respondents predominated without partners (n = 207; 52%).

When comparing the two regions, it is observed that the Holy Spirit there was a greater number of female respondents. Regarding age, except for the age group 17-20 years with a higher percentage in the Holy Spirit, and between 36 and 40 years, with the largest number of respondents in Minas Gerais, the percentages of the two regions were very close.

As for education, you can see that in the Espirito Santo region most of the sample has completed high school, while in Minas Gerais has the highest percentage complete higher education. No interviewed declared illiterate. Regarding marital status, there was no significant difference between the two regions, though, in the Holy Spirit have been a slightly higher number of people without a partner.

In a second step, the questionnaire is returned to the knowledge of the studied population about the cold sores. Regarding the knowledge of the disease, the percentages are contained in the table below.

Table 2 - Knowledge transfer and self-care

Variable	Minas Gerais		Holy Spirit		Total	
	n	%	n	%	N	%
Know the mode of transmission of cold sores?						
Yes	143	71	152	76	295	74
Not	57	29	48	24	105	26
Do you know what the necessary care for a person with cold sores?						
Yes	65	32	107	53	172	43
Not	135	68	93	47	228	57
You know that the manifestation of herpes labialis is related to stress?						
Yes	74	37	44	22	118	30
Not	51	26	33	17	84	21
You know what the correlation of cold sores with the patient's immunity?						

Yes	64	31	95	47	159	39
Not	136	69	105	53	241	61
The virus can be transmitted by kissing?						
Yes	177	88	123	61	300	75
Not	23	12	77	39	100	25
You know that frequent exposure to sunlight can turn cold sores?						
Yes	96	48	112	56	208	52
Not	104	52	88	44	192	48
The herpes virus can be transmitted sexually?						
Yes	133	66	131	65	264	66
Not	67	34	69	35	136	34
Total	200	50	200	50	400	100

When they asked about the knowledge they possess the form of transmission of herpes labialis, 74% (n = 295) of the total sample responded affirmatively. Of these, 75% (n = 300) are aware that herpes can be transmitted by kissing and 66% (n = 264) stated that the virus can be transmitted sexually.

Comparing the two areas surveyed, one can observe that the sample from the Espirito Santo region had a higher percentage of knowledge about the mode of transmission of herpes labialis and the necessary care.

As for herpes relation to stress and immunity, the Espirito Santo population showed greater insight into the region of Minas Gerais. However, when asked about the transmission of the virus through kissing, the mining region had the highest percentage of knowledge.

With regard to the relationship of the sun's rays with the reactivation of the virus and the sexual transmission, the two regions showed similar knowledge, with a significant percentage of ignorance.

In the total sample, when asked if they know what the necessary care for a person who has cold sores, 43% (n = 172) answered yes; while 57% (n = 208) knows that frequent exposure to solar rays can activate the virus.

When asked if they know that the manifestation of herpes labialis is associated with stress, 43% (n = 172) claimed to know this information, with 39% (n = 228) of respondents who have knowledge about the correlation of the disease with immunity of the patient.

While herpes is highly contagious, the virus is also very sensitive to the use of soap and water. Thus, frequent and thorough hand washing helps to mitigate the risk, if you have been in contact with the virus and it is present on the intact skin of the hands (BROWNING, McCarthy, 2012).

Generally, transmission occurs through direct contact with an injury or infected body fluids such as exudate active lesions or saliva or through infected objects such as towels, razors, forks and consumer goods. Individuals who have immature immune systems or who are low immunity are more likely to severe complications due to infection with herpes virus, so it affects more often in children aged between six months and five years and older (NÚÑEZet al., 2013).

Some conditions such as exposure to ultraviolet light, old age, trauma, allergy, strong emotions,

systemic diseases, pregnancy and immunosuppression are directly related to reactivation of the virus (and GARCEZ, 2012).

In due course, the questionnaire is returned to the knowledge of the studied population about cold sores, to outline the symptoms, how it manifests itself, diagnosis, treatments and other relevant variables to awaken the population's interest in seeking further clarification, particularly in discovery signs that require investigation.

Table 3 - Knowledge of the disease

Variable	Minas Gerais		Holy Spirit		Total	
	n	%	n	%	N	%
You have cold sores?						
Yes	18	9	59	29	77	19
Not	182	91	141	71	323	81
Have you heard of cold sores?						
Yes	185	92	142	71	327	82
Not	15	8	58	29	73	18
You know what are the symptoms?						
Yes	99	49	111	55	210	52
Not	101	51	89	45	190	48
You know how the disease manifests itself?						
Yes	84	42	83	41	167	42
Not	116	58	117	59	233	58
Know how to treat?						
Yes	67	33	83	41	150	37
Not	133	67	117	59	250	63
You know how long the demonstration phase?						
Yes	26	13	42	21	68	17
Not	174	87	158	79	332	83
The disease has no cure?						
Yes	95	47	98	49	193	48
Not	105	53	102	51	207	52
Knows the complications that the disease can bring to the oral health?						
Yes	48	21	68	34	116	29
Not	152	79	132	66	284	71
You know what triggers?						

Yes	42	21	73	36	115	29
Not	158	79	127	64	285	71
You know the diagnosis?						
Yes	34	17	69	34	103	26
Not	166	83	131	66	297	74
You have someone in the family with cold sores?						
Yes	38	19	89	44	127	32
Not	162	81	111	56	273	68
Total	200	50	200	50	400	100

When the results obtained in the two regions are compared, it is observed that in Minas Gerais, although a smaller number of respondents claim to have cold sores, most have heard of the disease, with superior knowledge to the Espirito Santo region.

With regard to knowledge of the symptoms and how the disease manifests itself, it was observed that there is a lack of information in the two regions where a considerable portion of said ignorant of them.

Regarding the form of treatment and the duration of the demonstration phase, residents in the Espirito Santo region showed greater knowledge. This result can be considered contradictory, given the higher percentage that claimed to know the symptoms and manifestations or have heard of the disease. Even comparing the two regions showed similar results where less than half of the sample in both regions tell if the disease is curable. On the implications of the disease to oral health and the factors that trigger the disease, affirmative responses capixaba sample were slightly larger, however, the percentage was very low in both regions.

There was less knowledge of the inhabitants of the region of Minas Gerais on how the diagnosis is made, with only 26% responding affirmatively. This may be due to 32% of this same population claim to have someone in the family with cold sores.

In the total sample, 19% (n = 77) having said cold sores, results slightly superior to Variani et al. (2017), who found a prevalence of 10 to 15% in the adult population. Of the sample, 82% (n = 327) said they had heard of herpes labialis, where 52% (n = 210) respondents know what the symptoms are.

It is observed in this last question that almost half of the sample is unaware of the symptoms of herpes labialis, including prodromal symptoms, a burning sensation, tingling and swelling in the injured area, developing vesicles subsequently to develop and progress to ulceration and crusting within 72-96 hours (aL-MAWERI et al., 2018).

When asked about the symptoms of the disease, only 42% (n = 167) answered affirmatively. It is vitally important knowledge of the clinical manifestations, as well as can prevent the emergence of major injuries and minimize discomfort. According Consolaro and Consolaro (2009), one can predict in advance up to 24 hours the appearance of vesicles and blisters, noting the symptoms at the site that first gets sore, making it about 12 hours later, slightly swollen, with burning and itching. Generally the place becomes warm, erythematous and the next day are the first bubbles and blisters.

Only 37% (n = 150) knew how to treatment, according to Silva (2018), based on the use of antiviral ointment or gel, may be used local anesthetics for relieving pain or systemic antiviral drugs, some for immunocompromised patients.

Only 17% (n = 68) of the sample said how long last the manifestations of herpes labialis that, according to Trinity et al. (2007), extends for five to seven days in mild cases, reaching up to two weeks in severe cases, but generally the episodes heal completely within 21 days, even without intervention.

When asked if the disease is curable, 48% (n = 193) answered yes, indicating that a significant portion of the sample is known that herpes a disease with onset and recurrence periods, with no cure for the same.

When asked if they have knowledge of the complications that the disease can bring to the oral health, only 29% (n = 116) answered yes, with a large portion of the sample (81%; n = 284) knowing that cold sores can cause latent infections. avers Bilderet al (2013) leakage may occur, especially in the oral cavity and regions, besides causing chronic periodontitis, aggressive periodontitis and gingivitis.

When asked if they know the triggers of herpes labialis, 29% (n = 115) answered yes, while 26% (n = 103) of the sample claimed to know how the diagnosis is made. Regarding cases in the family, 32% (n = 127) of respondents reported having someone with herpes in the family environment. The disease, although not hereditary, is highly contagious, which may explain the occurrence of several cases in the same household.

The survey also sought to detect information on the labial herpes transmitted to the population by the health services and the dentists and the results shown below.

Table 4 - Knowledge acquired in health / dental services

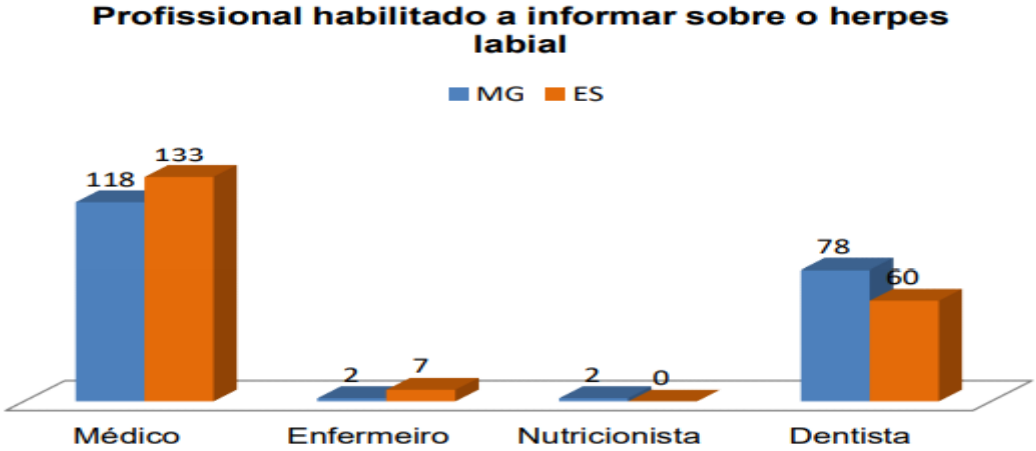
	Minas Gerais		**Holy Spirit**		**Total**	
Variable	n	%	n	%	N	%
Your dentist has advised on cold sores?						
Yes	9	4	31	15	40	10
Not	191	96	169	85	360	90
She has participated in some lecture awareness of cold sores?						
Yes	14	7	28	14	42	10
Not	186	93	172	86	358	90
You know you can get cold sores in the dental office, if the equipment is not properly sterilized?						
Yes	144	57	96	48	210	52
Not	86	43	104	52	190	48
Total	200	50	200	50	400	100

When analyzing the above results are possible to note that a very low percentage of dentists advise patients about cold sores, more significant results in Minas Gerais, where only 4% of the sample claimed to have been guided by this professional.

Also in relation to participation in a lecture on the topic, in Minas Gerais the percentage was lower than the Holy Spirit. As for the contagion in dental offices, although the results were similar, the Espirito Santo region showed less knowledge.

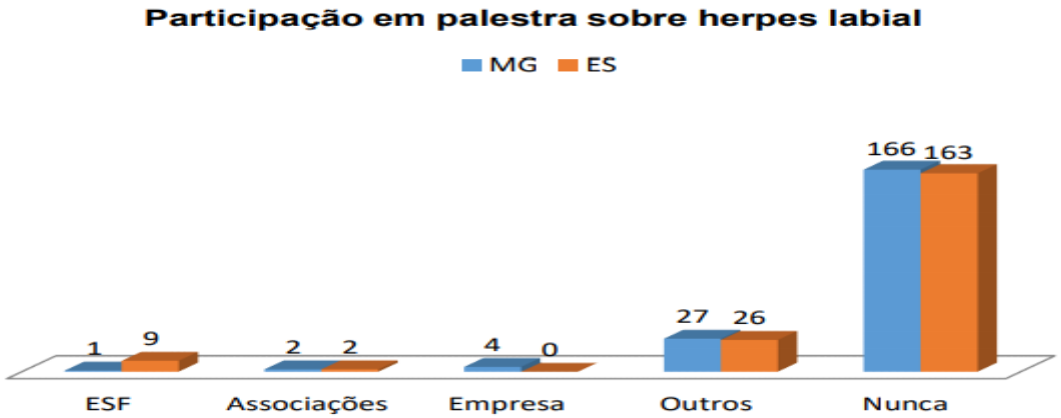
Finally, they were asked which professional feel more prepared to clarify herpes labialis, where 70% (n = 351) of the total sample cited the doctor; 4% (n = 9) nurses; 1% (n = 2) nutritionist; and 25% (n = 138) dentist. By observing the two regions separately, while in Minas Gerais, there were less respondents who consider the most prepared doctor to provide information about herpes in the Holy Spirit, although most have quoted the doctor, fewer people also mentioned the dentist.

Figure 1 - Professional qualified to report on herpes labialis



The doctor is a qualified professional to provide information, diagnose and treat cold sores, however, such as herpes infections commonly affect the anatomical area of responsibility of the practitioner, diagnosis and treatment of these infections end up being performed by these professionals, who are responsible the care of oral health, should understand the disease, its treatment, the impact of the disease or its treatment can have on the patient in order to provide qualified service (MOHAN et al., 2013). Now asked participated in educational activities on cold sores and, if so, where this occurred, 3% (n = 10) said they took part in the Family Health Strategy (ESF); 1% (N = 4) in different groups; 1% (n = 4) No company he works; 13% (n = 53) elsewhere; and a significant majority, 82% (n = 329) have never participated in educational activities on the subject.

Figure 2 - Location of participating in lecture on herpes labialis



Health education enables individuals to inform and develop skills to make healthy choices about their life by increasing their awareness of environmental and policy changes needed to improve their health (Cervera et al., 2012).

According to Duarte et al. (2012, 278 p.):
Health education is defined as a set of knowledge and guided practices for disease prevention and health promotion. It is a resource through which knowledge scientifically produced in the health field, brokered by health professionals, affects the daily lives of individuals, since the understanding of the determinants of the health-disease process provides subsidies for the adoption of new habits and health behaviors.

For Santos and Penna (2009), health education involves a combination of opportunities that may favor the promotion and maintenance of health, can not be understood only as a transmission behavior, content, and environmental hygiene and body, but primarily as the adoption of educational practices that aim the autonomy of individuals in their behavior, which may occur individually or in group form promoting the exchange of people who go through similar experiences, usually a rewarding and fruitful action.

Recommended by the Humanization Policy of the Ministry of Health (BRAZIL, 2008) and the inter-professional dialogue / user needs to be expanded. In this proposal all spheres of activity are sensitized; health projects are made suitable to the reality of the population served - including, in this sense, it is very important that the career choice a theoretical framework for use in healthcare practice. promotional health practices are encouraged; forms are established host and inclusion of the user; this tends to commit more and involve the responsibility.

In this context, the ESF constitutes a privileged space for the development of educational activities in health, which is one of the functions of the professionals of multidisciplinary teams working in these units (FIGUEIREDO et al., 2012).

Unable to discuss the results with other studies due to lack of studies aimed to assess the knowledge of people about the disease and the relationship of this knowledge with geographic, socioeconomic and age variables.

The limitations of this study should be considered in light of some, because of the particular regional aspects as well as the sample does not have dominance in all municipalities. Thus the discussion although

connotates widespread content actually emphasizes the participating public, considering it is a study with primary data, addressing a large and representative sample of the population studied in small and medium-sized cities.

Remaining gaps in knowledge of the studied population, however, the study made clear the low knowledge of a substantial portion of the population on the labial herpes and should be considered a planning more effective promotion and prevention strategies on the part of health services with the collaboration civil society, ensuring a better understanding of these communities in order to promote self-care.

From the perspective of primary care, para improve health is to think about your current lifestyle and take healthy habits. Self-care is therefore a process of maturing. For if self-care is care that you yourself are due to seek what are the needs of the body and mind, improving lifestyle, avoid bad habits, develop a healthy diet, know and control the risk factors that lead to disease and take steps to prevent these, according Orquiza (2011).

Knowledge is one of the self-care of the pillars, so it is relevant in this context, the dental team participate in adding to usual care, a space for the transmission of information to the patient, whose approach to the demand for health services, culminating in strengthening Primary role in promoting the prevention, considering the dental office is the propagation environment contamination.

On this, asserts Mohan et al. (2013), the herpes infections commonly affect the anatomical area of the dentist responsibility and the diagnosis and treatment of such infections fall often under the responsibility of the providers of oral health care. To manage competent care to patients with herpes, dentists should understand the disease, its treatment and the impact they can have on the patient and on the professionals themselves in the clinical care process.

It is important that prevention and guidance campaigns are carried out in order to reduce the number of contaminations, taking into account that the greater the knowledge, the lower the chances of contamination and, consequently, the health system spending.

It is suggested that more research is designed to detect the number of infected individuals and covering all municipalities in the regions, understanding that this study meant to be a contribution to the knowledge of the problem, more research is needed, continuing the investigation into the theme.

CONCLUSION

A significant portion of the world population carries the herpes simplex virus, and herpes labialis a common and recurrent manifestation. Treatment for herpes labialis aims regression of active lesions and decreased viral load, prolonging the complication period, being carried out with antiviral drugs, aiming at relieving the symptoms presented by the patient. It is well known in this area, the dentist's contribution as a skilled professional to diagnose early and properly treat cold sores frame, providing less discomfort and treatment time for the patient.

This study aimed to evaluate the knowledge of the population in the Northeast of Minas Gerais and northern Espírito Santo on cold sores, signs of the disease, self-care and information obtained by professionals of health services on the problem.

The sample was similar with respect to age, gender, marital status, with no statistically significant difference. As for education, while the Holy Spirit was prevalence of individuals with a high school degree, in Minas Gerais, most have higher education.

A greater number of respondents capixaba region claimed to have herpes or have a sick in the family, which may explain the superiority of these in relation to knowledge about the disease, care, transmission and self-care, as well as a greater number of dentists offering information about the problem.

However, despite these differences in the percentages of the two regions, overall results showed that a significant portion of the total sample, despite claiming to know what is the disease, unaware of its signs and symptoms, treatment and prevention, as well as ways of streaming. It was also noted that only a small percentage had access to educational activities in health units, associations or company.

Thus, it is concluded that most educational measures should be carried out, informing the population about herpes, understanding that the greater the knowledge, the lower the infection rates, leading individuals to prevent and to treat when they detect signs of the disease, whose dental service has effective powers in this proposed strengthening of health education which until then does not come with proper applicability in primary care.

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