# Perception of the risk factors for oral cancer and access to preventive actions in the perspective of the population in street situation and health professionals Rio Branco, Acre, Brazil.

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# Abstract

**Backgroung:** in Brazil, the homeless population is a phenomenon that involves a variety of factors that, among the most frequent, are: the rupture of family bonds, the inexistence of work and the absence or insufficiency of income and frequent use of alcohol and other drugs.

**Objective:** to analyze the perception of oral cancer, its risk factors and preventive actions from the perspective of the homeless population and health professionals from the team Clinic on the Street in the city of Rio Branco, Acre, Brazil.

**Methods:** a qualitative study, developed through Content Analysis, carried out from January to April 2018, with the homeless population and health professionals' team of Clinic on the Street in Rio Branco, Acre, Brazil.

**Results:** it was evidenced that the homeless population' situation and the health professionals of Clinic on the Street have perception about the risk factors related to this aggravation, however the users are not concerned with preventive actions. The professionals of the team do not develop actions aimed at the prevention of the disease. From the perspective of the team and the users, preventive actions can be developed, however what is predominant is the accomplishment of punctual actions with emphasis on changing harmful habits.

**Conclusion:** the homeless population and the professionals from Clinic on the Street are aware of the main risk factors for oral cancer. The team does not develop specific actions to prevent this disease and users understand the need for prevention. The difficulty of access and the period of return to the dental surgeon are factors that make prevention difficult.

Descriptors: oral cancer, prevention, homeless.

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#### Authors summary

#### Why was this study done?

Understand the perspective of homeless people in the municipality of Rio Branco, capital of the state of Acre, located in the Western Amazon of Brazil, in relation to oral cancer, its risk factors and prevention actions and the singularities involved in the different perceptions.

#### What did the researchers do and find?

A qualitative research was conducted, involving 34 participants among these, 30 homeless people and 4 health professionals who work in the street office. For data analysis, Bardin's Content Analysis technique was used, considering its 3 stages: stage of pre-analysis (I), from a first reading of the transcribed material and the constitution of the CORPUS of the study; the stage of exploration of the material (II), with the definition of the rules of codification, decomposition and enumeration by thematic category defined from the objectives of the study; and the stage of treatment and interpretation of the results (III), with the presentation of the evidence.

The study categories included: I - Perception of risk factors for oral cancer; II - Actions for the prevention and control of oral cancer; and III - Factors that influence the development of prevention actions.

The main findings show that the study participants perceive the risk factors for the disease, with an expanded conception, the health actions offered to this population are still greatly influenced by the biomedical model and the homeless population still has restricted access to health services and professionals in the area, as well as difficulty in welcoming the service.

#### What do these findings mean?

The homeless population can be considered as a vulnerable group to oral cancer, requiring a more effective action by the government in order to guarantee the right to health, recognizing the weaknesses evidenced in the study, thus promoting prevention actions to control this disease and strengthening the link between the service and user in order to facilitate access to health promotion and disease prevention with collective or individual educational practices that enhance the understanding of the need for self-care and periodic control.

#### INTRODUCTION

In Brazil, the homeless population is a phenomenon that involves a variety of factors that, among the most frequent, are: the rupture of family bonds, the inexistence of work and the absence or insufficiency of income and frequent use of alcohol and other drugs<sup>1</sup>. In the city of Rio Branco, capital of the state of Acre, located in the area of Western Amazon of Brazil, 368 people are estimated to be living on the streets, assisted, in the public health service, by the team of Clinic on the Street, a device that makes up the primary health care department of the Unified Health System (SUS), which has, as one of its attributes, the longitudinality of care<sup>2, 3, 4</sup>.

Oral cancer is a malignant tumor resulting from atypical, incessant and uncontrolled cell proliferation, prone to metastasis. Its etiology is related to a sum of factors that are inherent to the host or the environment and, due to its lethality and the possibility of early identification, it is a priority problem in public health<sup>5, 6, 7</sup>. In the world, it is the fifth type of cancer according to incidence, most frequently in Asia (India, Singapore and other regions) with more than 50% of all cancer diagnoses and annual incidence greater than 300,000 cases, with a higher incidence and mortality occurring in developing countries, when compared to developed countries<sup>8</sup>.

The control of this aggravation in the homeless population pass through the need to know the universe and the singularities that surround this population, aiming at the adoption of care practices for its prevention. Thus, the objective of this study was to analyze the perception of oral cancer, risk factors and oral cancer prevention actions from the perspective of the homeless population and health professionals in the city of Rio Branco, Acre, Brazil, in the year of 2018, understanding the values attributed to this aggravation and the actions that influence the development of actions of prevention of oral cancer.

#### METHODS

Qualitative research carried out with the homeless population and health professionals from the team Clinic on the Street in Rio Branco, Acre, Brazil, from January to April 2018. The research scenario involved the locations of these users' concentration on the streets or public services, with interviews guided by an unstructured script. Inclusion criteria were people older than 18 years, of both sexes, with more than six months in homeless situation and apparently lucid, totalizing 30 users randomly selected. The interviews with the health professionals were carried out at the Municipal Health Department. 100% of the team members were included, totalizing four people, considering the process of saturation in data collection.

The interviews were conducted in a reserved space with each participant, with an average duration of 30 to 60 minutes, using voice equipment to record the speeches and the field journal for records during and after the interview.

For the data interpretation, the Bardin Content Analysis was chosen, following the pre-analysis step (I), from a first reading of the transcribed material and the formation of the CORPUS of study (table 1); the stage of material exploration (II), with the definition of the rules of codification, decomposition and enumeration by thematic category defined by the objectives of the study; and the stage of treatment and interpretation of the results (III), with the exhibition of the evidence<sup>9, 10</sup>.

After the first reading and the formation of the Corpus, considering the aims of the study, the material was organized in thematic categories I – Perception of risk factors for oral cancer; II - Actions for the prevention and control of oral cancer; and III - Factors that influence the development of preventive actions, and the study rules are defined in the Flowchart of the study pre-analysis (Figure 1).

**Table 1:** Partial corpus of the study: fragments of the statements of the research participants, related to the thematic categories. Rio Branco, Acre, Brazil, 2018.

Corpus of the study, regarding the objective: To describe the perception of health professionals and the population in Homeless population on Oral Cancer	Corpus of the study regarding the objective: To describe the preventive and control actions that can be developed by health professionals and population.	Corpus of the study regarding the objective: To identify factors that influence preventive actions.
"I think it's due to smoking, poor diet, due (long pause) I do not know, it's genetic too, due to a predisposition of the body to develop cancer" (U 01)	"It is possible. Programs, projects, social programs to prevent oral cancer like several others that already exist, just develop another one. Yes, it's possible, all they have to do is want it. "(U 09)	"The last time I went I was 13 years old. I have but I am not able to restore my teeth anymore. "(U 15)
"[] smoking cigarettes, drugs, marijuana and cocaine, all contribute to laryngeal cancer. []. If it is genetic, it may be due to that, if it is from your family, you live with a family, there is a chance of developing cancer of 50% positive, negative, but it might not develop as well "(U 04)	"Yes, by not using alcohol or tobacco, having a good diet, brushing your teeth. Some periodic examination, to check how the situation is in the mouth, in the teeth. "(U 14)	"[] I went in October of the year before last, 2016. I went to private care because I tried to access the public service and I was not able. I went to several places and still was not able, [] there were people that even said to me: - Oh, we can schedule, but it takes a while, if you can save some money and get it done. That's when I found a woman that charged me \$ 400.00, [] "(U20)
"[] a broken tooth, and we start to put food in our mouths and it gets in our teeth []and we poke it and it starts to become [] and we do not notice the wound, and keep drinking and using drugs that contain chemical substances, []. (U 19)	"No, only God can help. Not actually, only God can help. Advice is no use, beating is no use, killing is no use. [] ". (U16)	"It was yesterday, the day before yesterday. Oh, but I went there, I arrived at the health center, then I went in there, by the time I got there they took the pliers and already started pulling out my teeth, everything was soft. "(U 24)
Bardin, 1977, chronological poles for content analysis. Material organizacion	eading + of interviews Definition of thematic categories Categories: 1 - Perception of risk factors for oral cancer; 2 - Actions for the prevention and control of oral cancer; 3 - Factors that influence the development of preventive actions.	Definition of the rules for codification of the Registration Units (RU) and Context Units (CU) <b>Rules:</b> 1 - Definition of color for each category; 2 - To cut the Reference Unit (RU) by marking the color of the representative category; 3 - To use the simple frequency and weighted frequency method to analyze the representativeness of the subjects' speeches;

Figure 1: Pre-analysis flowchart of the research. Rio Branco, Acre, Brazil, 2018.

Objectives:

1 - To describe the perception of professionals

from Clinic on the Street

and Homeless about oral

preventionn and the control

of the disease; 3 - To identify factors that influence the development

of preventive actions.

cancer risk factors; 2 - To describe actions for

1 - Pre-analysis 2 - Material

scanning 3 - Treatment of

results, inference

and interpretation

4 - To evaluate the RUs

using the rule of direction with the bipolar scale os

Context Units (CU) from the RUs and make

seven points;

inferences.

Colors:

1 = green 2 = red 3 = blue

5 - To construct the

Table 2: Bardin enumeration rules and criteria used in the research. Rio Branco, Acre, Brazil, 2018.

Categories	Simple Frequency and Weighted Frequency	Direction
Perception of risk factors for oral cancer	The criteria defined in the simple frequency followed the number of occurrences of words understood as risk factors with scientific evidence or not. In the weighted frequency, more weight was attributed to factors with greater scientific evidence.	The criteria used in the analysis of the direction went from the poles (-3) for the appearance of more than three or more risk factors not scientifically proven to (+3) when three or more scientifically proven risk factors appeared.
Actions for the prevention and control of oral cancer	The number of occurrences in the testimonies of words related to preventive actions were considered in the simple frequency. In the weighted frequency, it was considered the most effective or most worrying action for their ignorance, in the context of PSS.	In the criteria used in the analysis of the direction in the preventive actions, it was considered as the most extreme negative pole (-3) the appearance of actions that have no relation with the aggravation to the statements that include actions of greater importance, (+3) considering the specificities of this population.
Factors that influence the development of preventive actions	For analysis of the simple and weighted frequency rules, it was considered access to health service by the user and health professional; the time of access to the dental consultation for the user and the factors for not performing preventive actions by the professional.	The analyzed criterion of direction was between the positive and negative poles to those factors that favored the preventive actions like pole (+3) and the ones that less favored like negative pole (-3).

As the rules were defined, the Simple Frequencies and Weighted Frequency were counted, establishing the order of priority of the Registration Units (RU), considering the importance of the words and the direction, followed by the definition of the RUs and their respective Context Units.

In the Thematic Category I - Perception of risk factors for Oral Cancer, the order of words or ideas defined by the simple frequency analysis were: (1) smoking cigarette, (2) drinking alcohol, (3) poor oral hygiene, 4)

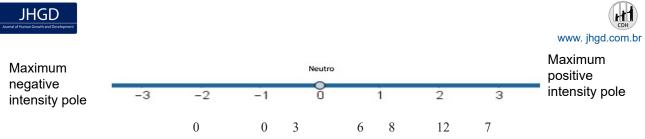
using drugs, (5) heredity and poor diet. The absence of statements related to risk factors was in position 4.

The Weighted Frequency analysis brings a new order in the initial results regarding the perception of the risk factors. In this second analysis, the first three risk factors "smoking cigarette ", "drinking alcohol" and "poor oral hygiene", remained in the same order, 1, 2 and 3 respectively, changing from position 4 on, as demonstrated in table 3.

Table 3: Weighted Frequency	of the perception of the risk factors for	r Oral Cancer. Rio Branco, Acre, Brazil,
2018.		

Enumeration and weight	Risk factors	Value	Prioritization
(a) 3	Smoke cigarette	51	1°
(b) 3	Drink alcohol	27	2°
(e) 2	Poor oral hygiene	16	3°
(c) 3	Hereditary	15	4°

The rules used in the study, until then, allowed the assessment of the representative words presented by the interviewees in their testimonies regarding the related risk factors. Thus, when the Direction rule was placed, using as a parameter what is scientifically recognized as a risk factor such as "positive pole" and what is not recognized as a risk factor, such as "negative pole", it was possible to deepen the analysis of the statements, getting closer to what is or is not proved in the literature, as shown in figure 2.



**Figure 2:** Seven-point bipolar scale. Direction Category Thematic I - Perception of the risk factors for Oral Cancer. Rio Branco, Acre, Brazil, 2018.

Criteria used: 03 or more risk factors not scientifically proven (-3); 02 Risk factors not scientifically proven (-2); 01 Risk factor not scientifically proven (-1); Could not report (0); 01 Proven risk factor (+1); 02 proven risk factors (+2); 03 or more scientifically proven risk factors (+3). Source: Image adapted from https://escolakids.uol.com.br/reta-numerica.htm (2018).

In the Thematic Category II - Actions for the prevention and control of oral cancer, the statements that demonstrated specific actions for prevention and control of oral cancer were analyzed, which presented the statements in the following order: (1) there is no way/does not know/ it is not realized; (2) quitting smoking and drinking or avoiding them; (3) periodic control and oral hygiene/self-

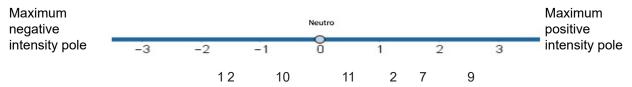
care; (4) lectures, information, talking; (5) adequate diet and avoiding the use of drugs.

With the application of the Weighted Frequency rule, the order of priority of the ideas or keywords, from the statements of the testimonies, was not changed in priority 1, 2 and 3 until periodic control, with a new order from priority 3 on, in speeches related to oral hygiene/selfcare, that go from position 3 to 4 (table 4).

**Table 4:** Weighted Frequency of actions of control and prevention of Oral Cancer. Rio Branco, Acre, Brazil, 2018.

Enumeration and weight	Units	Value	Prioritization
(e) 3	No way/Do not know/Not done	33	1°
(c) 3	Quitting smoking and drinking or avoiding	24	2°
(b) 3	Periodic control	18	3°
(g) 2	Oral hygiene/self-care	16	4°

The third rule of Direction allowed the analysis of the ideas about the proximity or not of the speeches in what can be considered as an effective measure for prevention and control of this aggravation, considering the singularities of the study population, according to the criteria shown in figure 3.



**Figure 3:** Seven-point bipolar scale. Direction Category Thematic II - Actions for prevention of Oral Cancer. Rio Branco, Acre, Brazil, 2018.

Criteria used: Do not use contaminated objects (-3); Stop using illicit drugs (-2); Quit or avoid tobacco, alcohol (-1); Did not know, does not exist, there is no way (0); Speeches that include lectures, information (+1); Speeches that include oral hygiene and adequate diet (+2); speeches that include Bond and Periodic Control (+3).

Source: Image adapted from https://escolakids.uol.com.br/reta-numerica.htm (2018).

In the Thematic Category III - Factors that influence the development of preventive actions, access to the public health service and the period since the last consultation with the dental surgeon, as well as the factors that are contributing to the non-development of preventive actions in the perspective of the health team were considered.

As for the time of access to the dentistry service, in the SF rule the periods identified were: (1) above five years; (2) up to one year; (3) three to five years and one to two years; (4) does not remember. Regarding the place of access in the last medical appointment, access to the private service (1) and the public service (2) were considered. Regarding the factors that influence the development of preventive actions, the following ideas were considered: (1) lack of professionals in the area; (2) unstable public; (2) non-prioritization by the service.

In WF analysis, in relation to time of access, periods greater than five years remain as priority 1, followed by three to five years with priority 2, and one to two years with priority 3. In the analysis of the access location, because the public service is given greater value by the interpretation that the public service is the locus of health care as an universal right, the public service is priority 1 and the private service is priority 2. It should be noted that in the WF analysis for this criteria, the assigned value did not consider the place of access, but the need to guarantee access in the public service. As for the factors that influence the development of preventive actions, the lack of professionals in the area remains as priority 1, followed by non-prioritization by the service and the unstable public. The applied rules are presented in Tables 5, 6 and 7.



**Table 5:** Weighted Frequency of the time of the last visit to the Dental Surgeon of the users in homeless, Acre, Brazil, 2018.

Enumeration and weight	Last visit to DS	Value	Prioritization
(a) 3	Over 05 y	27	1°
(b) 2	From 03 to 05 y	10	2°
(c) 1	From 01 to 02 y	6	3°
(d) 0	Up to 01 y	0	4°
(e) 0	Does not remember	0	4°

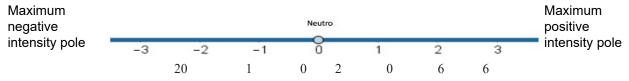
**Table 6:** Weighted Frequency of the place of access to the dental consultation of the users in homeless, Acre, Brazil, 2018.

Enumeration and weight	Place of access	Value	Prioritization
(a) 3	Public Service	108	1°
(b) 1	Private Service	18	2°

**Table 7:** Weighted frequency of the factors that influence the development of preventive actions from the perspective of the professionals of the health team, Acre, Brazil, 2018.

Weight	Factors that influence the development of preventive actions	Value	Prioritization
(a) 3	Lack of specialized professional	12	1°
(b) 2	Unstable public	2	3°
(c) 3	Priority	3	2°

In the Direction analysis, the rule considered, as a negative pole, the factors that influence the development of actions of prevention and control of Oral Cancer, as the predominant pole was the 3, considering that the statements indicated that the difficulty of annual access to the public service disfavored the early identification of this aggravation, in addition to the inexistence of a professional of the area to contribute with the health team of Clinical on the Street in the development of preventive actions, as shown in figure 4.



**Figure 4:** Bipolar seven-point scale. Direction Category Thematic III - Factors that influence the development of preventive actions for Oral Cancer. Rio Branco, Acre, Brazil, 2018.

In this category, the direction criterion analyzed was between the positive and negative poles, the ones that favor the preventive actions as positive poles and the ones that disfavor as negative poles.

Rules Applied: difficulty in accessing the public service; lack of priority for action; lack of specialized professional (-3); unstable public (-2); not applicable (-1); does not remember (0); not applicable (+1); access between 01 to 02 years (+2); annual access to the service (+3). Source: Image adapted from https://escolakids.uol.com.br/reta-numerica.htm (2018).

After the application of the rules of the study, it was possible to identify the Registry Units (RUs) present in the statements, which were improved, giving them meaning and, consequently, assigning the best direction for the construction of the Context Units (CUs) drawn up for each thematic category. In these, the comprehension according to the size of each unit is presented, from the reading of the world of the people in the homeless and of the health professionals who form the Consultation on the Street (Table 8).

**Table 8:** Registration units, context units and analytical categories according to Bardin's technique. Rio Branco, Acre, Brazil, 2018.

Registration Units (RU)	Context Units (CU)	Thematic Categories
Smoke cigarette; drink alcohol; poor oral hygiene;	Oral Cancer is related to factors of the individual like inheritance and external factors	Perception of risk factors for Oral Cancer.
hereditary; wound; use drugs; bad diet; sexual	such as the use of cigarettes, alcoholic beverages and other drugs, poor oral hygiene,	
relation; broken tooth; use of prosthesis; herpes.	prosthesis use, sexual transmission, Herpes virus, bad diet, and dental caries.	



**Table 8:** Registration units, context units and analytical categories according to Bardin's technique. Rio Branco, Acre, Brazil, 2018.

Registration Units (RU)	Context Units (CU)	Thematic Categories
Only God may help; it is not realized; quitting smoking, drinking; contact with the service; oral hygiene; programs and projects; good diet; lecture; stop using drugs; bond; use your own glass.	Preventive actions for the prevention of oral cancer specifically are not carried out, some users believe that such prevention is not possible to be accomplished, while professionals and some users believe change of habits may contribute, being prioritized the oral hygiene guidance by the health team.	Actions of prevention and control.
About 20 years ago; last year; I do not remember; the drinking and the drugs did not let me; public service does not do it; in the UPA; in the health center; we do it, we try to use the service; we distributed some hygiene kits; the service does not have dental surgeon professionals in this specialty; could be a priority issue, right?	Access to health services ranges from 1 year to more than 20 years, in the private or public service, the team of Clinical on the Street does not have a specialized professional and preventive actions are not prioritized.	Factors that influence the development of preventive actions.

The last phase corresponding to the method of the study was the treatment of the results already categorized and organized in the RUs and CUs, for the elaboration of the evidence and the construction of the table with them, by thematic category. For each thematic category, the evidence of the study that guided the discussions were described, which are presented in the results chapter, seeking to understand the meanings of social representations in the light of scientific evidence that corroborates or not with the ideas presented by people living in the streets and health professionals from the Clinical on the Street.

The research was submitted to the Research Ethics Committee of UNINORTE, approved on November 1, 2017, legal opinion no. 2.361.711, and was financed, partially, with public resources from the Federal University of Acre (UFAC) and with resources from the researcher.

The research was carried out following the international guidelines according to the consolidated criteria for qualitative research reporting (COREQ), considering the 32 items of the checklist<sup>12</sup>.

### RESULTS

#### **Characterization of participants**

100% of the team members of Clinical on the Street were interviewed, totalizing four people. In this universe, three female and one male professionals were identified, the team is multiprofessional and follows the Ministry of Health guidelines, with regard to composition, being framed in modality I, with two nurses, a social educator and a psychologist. By analyzing the time of performance in the device of the Clinical on the Street, it was possible to perceive that one health professional is performing for four years, one for one year and two for less than one year, in the team. In regard to the homeless, among the 30 users that participated in the research, it was possible to characterize the demographic profile and the correlation of individual habits related to the risk factors for oral cancer.

In the demographic profile, with regard to sex, this population is composed of 26 men and 4 women, and with regard to age, eight are between 30 and 39 years old, nine are between 20 and 29 years old, seven are between 40 and 49 years old, three are between 50 and 59 years old and three are between 60 and 69 years of age. Considering their educational background, incomplete primary education predominates (16 of the participants), four have completed primary education, three have no schooling and three have not completed secondary education, two have completed higher education, one has completed secondary education and one has completed higher education. With regard to the period they have been living in a homeless, the majority is from one and two years with eight of the participants, followed by the period of seven to eight years with six participants, three are up to eleven months and three are between nine and ten years, two participants are between three to four years, two are between five and six years, two are between twenty-one and twenty-five years, and two are living in the streets for more than twenty-six years, one is between eleven and fifteen years and one is between sixteen and twenty years. Relating some social habits, there were 28 smokers, 27 illicit drug users and 24 alcohol users.

Among the factors that may influence the appearance of oral cancer, it was identified that nine people have already had an injury in the oral cavity, six use a dental prosthesis and four have a fractured tooth in their mouth, which may be a chronic aggravation factor.

### Analysis of categories

The results of the study were identified from the evidence, considering the rules of enumeration, with the treatment of the data categorized in the RUs and CUs and organized in table 9. In the Category I - Perception of the risk factors for Oral Cancer, the evidence on the comprehension of these factors from the perspective of the subjects of the research is presented. In category II - Actions for the prevention and control of Oral Cancer, the evidence of actions developed by the team of Clinical

on the Street and preventive actions that could be carried out by them, from the user's perspective, is presented. In category III - Factors that influence the development of preventive actions, the evidence of access to health service is presented, considering the time of the last appointment with a dental surgeon and the place of access, as well as the factors that are influencing the offer of these preventive actions, from the perspective of the professionals of the team.

Table 9: Description of the study evidence related to the thematic categories. Rio Branco, Acre, Brazil, 2018.

Thematic Categories	Identified Evidence
Perception of risk factors for Oral Cancer.	Understanding risk factors: knowledge about some risk factors related to the individual, environmental factors and social factors. Evidence: Perception about risk factors with a broad view of the health concept.
Actions of prevention and control.	Actions developed by the Clinical on the street team: actions with an emphasis on prevention through oral hygiene with little or no moment of health promotion. Preventive actions from the perspective of users: punctual actions, with a focus on prevention or cure; emphasis on changing harmful habits. Evidence: actions with curativist focus with little or no action to promote health.
Factors that influence the development of preventive actions.	Access to health services: difficulty in accessing public health services. Average time of consultation to the Dental Surgeon: return time higher than expected. Factors that disfavor preventive actions: absence of a dental health professional in the Clinicalon the Street team and the non- prioritization of these actions. Evidence: Restricted access to health services and professionals in the area; difficulty in receiving the service.

# DISCUSSION

#### Characterization of participants

The demographic profile corroborated the idea that street users may be recognized as a risk group for oral cancer, not only due to habits such as smoking, alcoholism and poor oral hygiene, but also because they are mostly male and their age group, considering that the condition is more common in men over 50 years of age. A study carried out in Brazil showed that the relationship between gender was 7,4:1, with 88.14% of the cases occurring in males and the average age range of 59.3 years<sup>13</sup>. Similar results were found in a study conducted between 2011 and 2012 in Cuba, with 60.6% of cases in adult males over 60 years old (Elva 2014). In India, the prevalence was 94.9% in the urban population and 71.9% in the rural population, considered low income population, and the illiteracy rate among them was 55.8% in the urban population and 21.9% in the rural population, indicating that social inequality is a factor of vulnerability<sup>14</sup>.

Thematic category I - Perception of risk factors for oral cancer

The risk factors are mostly known to users and health professionals, however, some of these are still being better studied for greater scientific evidence, such as sexual transmission. Oral sex is an important marker, but its association has not yet been well understood even though Human Papillomavirus (HPV) and other Sexually Transmitted Infections (STIs) contribute significantly to the increased risk and that 30% of oral cancers and pharyngeal cancers were related to HPV<sup>15, 16</sup>. In Poland, a study found that 25.37% of the women and 38.46% of the men referred to oral sex practice with multiple partners and among them, 2.98% of the women and 2.56% of the men reported the presence of carcinoma<sup>17</sup>.

The use of tobacco and alcohol represents an important risk factor when isolated, with a significant relative risk increase when the two factors are present concurrently, and poor hygiene is also related because it contributes to the increase of pathogenic strains that may contribute to the epithelial dysplasia associated with other factors<sup>18, 19, 20, 21</sup>.

The relationship between illicit drug use and oral cancer is still unknown, but a study confirms that people who use these substances have a significant increase in lesions in the oral cavity. Crack users had a higher occurrence of fundamental lesions, with a 2.02 higher rate and marijuana, cocaine and crack users, a larger number of lesions were confirmed in the oral cavity<sup>22, 23</sup>.

One aspect that drew attention in the study was the absence of risk factors in some testimonials. Although,



through common sense, understanding the risk factors for cancer is present in the perception of the population that today has access to information, through various formal and informal means of communication, it was possible to perceive that not everyone knows the risk factors related to the disease, neither users nor health professionals.

Thematic category II - Prevention and control actions

In its daily practice, the health team of Clinical on the Street emphasizes oral hygiene for the prevention of oral health, without, however, promoting health with an improvement in the quality of life of the people, in the context of what Primary Care in Health and the Promotion of Health advocates as practice conceptions and model change. For users, the idea that changes in harmful habits are necessary and the development of specific actions such as campaigns, lectures and others that guide the preventive actions for the disease is superimposed.

The oral hygiene instruction can be considered as a specific protection measure for the prevention of dental caries and periodontal disease, also contributing to the prevention of Oral Cancer, considering that poor oral hygiene and periodontal diseases contribute to the increase of the microbiome in the oral cavity, representing another risk factor for oral cancer<sup>24</sup>.

Regarding the change in harmful habits, it is necessary to consider that in most situations, risk behaviors are involuntary or autonomous and these people would like to change their behavior, but this goes through the empowerment, understood in a context where the individual can develop the ability to self-control their life, with autonomy, self-confidence and self-esteem<sup>25</sup>. The behavior-change approach, when health professionals think that the risk behaviors are adopted by the own person's will, increases the risk of blame of the victim or stigmatization<sup>25</sup>.

In order to meet the specific needs of this population, personalized care is needed, characterized by organizing services such as location, daily supply and integration of primary health care with health services, factors that are preponderant to improve organizations, which may be to offer actions and services with greater flexibility of choice by homeless<sup>26</sup>.

An important strategy for health promotion in Primary Care is Health Education, understood as an educational strategy with specific methods and technologies, recognizing the multiplicity of factors involved in the process of illness, aiming to contribute to the development of habits and lifestyles and the active participation of the people involved in the construction of knowledge<sup>27</sup>. In this context, Freirian ideas are used in the light of Popular Education, which presupposes the educational act developed in order to value dialogue, horizontality, , the problematization and the construction of shared knowledge, with a stimulus to protagonism, valuing the stories and life experiences of the people<sup>28</sup>.

The comprehension that respect for the autonomy and dignity of people is not a favor but an ethical imperative, and that teaching is not transmitting knowledge, but creating possibilities for its construction, enables the development of educational practices where the health professional is a facilitator in the process of recognizing habits and lifestyles that can compromise their health status and from this recognition, strategies to change habits or reduce damage can be determined, without judging what is right or wrong<sup>29</sup>.

Although specific actions for the prevention of oral cancer are not developed, the users perceive its importance, emphasizing specific actions and the necessity of changing habits as a condition for disease prevention. Thus, it is necessary to consider that the educational activities to be developed by the health team with the population living on the streets should be consonant with Paulo Freire's ideas, promoting autonomy and dignity, developed in a loving way for the establishment of a bond between professionals and users, stimulating their protagonism in health practices.

Thematic Category III - Factors that influence the development of preventive actions

With the results of the raised evidence, the factors that may interfere in the development of preventive actions were analyzed, considering the access to the service and the periodic consultations of the users, as well as the factors that influence the prevention of oral cancer from the perspective of the health professional.

In Brazil, the universalization of the right to health occurred in 1988, with the creation of the Unified Health System, but the constitutional law does not always translate into the guarantee of access, and institutional arrangements with the provision of services are necessary to facilitate such access, considering the specificities of population groups<sup>30</sup>.

In regard to access to public health services, in European countries with social welfare systems, it was shown that 54.5% of men and 45.5% of women do not have access to dental services and that the factors for non-access are related to the patient's perception of the need for regular treatment and the inexistence of services close to home<sup>31</sup>.

For the homeless, the difficulty of accessing health services may also be related to the perception of the need for regular care, as well as to the institutional arrangements of the health service for oral health care, which in Brazil is represented by the Family Health Teams and the Center of Dental Specialties<sup>32, 3</sup>. In the city of Rio Branco, the team does not have an Oral Health Technician in the Clinical on the Street team, which may hinder the development of preventive actions.

One of the assumptions for the attention to Oral Health in Brazil is the networking, with a focus on health surveillance in the territory and one of the strategies is the provision of opportunities to identify oral lesions, active search, home visits or in specific campaigns such as vaccination of the elderly<sup>32</sup>. This strategy does not dialogue with the specificities of the homeless, since these people are not found in a home and do not attend the campaigns offered in the health units. In this context, it is necessary to think of strategies to reach this specific population group, which can be planned together with the Clinical on the Street team, oral health managers and oral health professionals who work in other points of attention of this network.

In Canada, a strategy created to increase homeless access to oral health care has been the School Dental Clinics, as oral health care in the country is conditional on care insurance, for those who are employed<sup>33</sup>. Considering the existence of educational institutions in the area of dentistry in the city of Rio Branco and that one of the policies of the Unified Health System is the teaching-service-community integration, this can be a local strategy to expand not only curative actions, but mainly preventive actions.

Another important aspect to be considered is the periodicity of consultations in the dental service, to ensure follow-up and care, over time. The assistance parameter for outpatient coverage with regard to oral health, recommends 0.5 to 2 consultations per inhabitant per year<sup>34</sup>. From this parameter, the study confirmed that in addition to the difficulty of access, periodic consultations are also not being satisfactorily guaranteed, which, for this population, may imply a decrease in the survival rate since the prognosis of oral cancer is more favorable when detected in the early stage. With regard to survival, socioeconomic and behavioral factors have a negative influence on it<sup>35, 36</sup>.

The absence of a dental surgeon in the team, as evidenced by some participants of the research, may be detrimental to the performance of actions to prevent oral cancer. It is necessary to consider that educational actions can be developed by any health professional, as long as there is a qualification for such activity. Based on this view, the DS of the city department can work together with Clinical on the Street, using the Matrix Support as work technology, acting as a facilitator in the team qualification process, understanding that this assistance involves work dimensions that comprise the caregiving dimension and permeates the actions of all professionals and centered work, which involves specific work dimensions of each professional category<sup>37</sup>.

Early identification of oral lesions requires specific dental surgeon knowledge. Thus, considering the inexistence of a professional in the area, it would be necessary to articulate Clinical on the Street's work with the oral health team from the department, for periodic referral of these users. Along with strategies of scheduling and monitoring these users to the consultation, as well as an open-door service, with free demand for homeless.

The lack of prioritization of preventive actions for oral cancer was also one of the factors related as unfavorable to the development of these actions. In the City Health Plan of Rio Branco 2018-2021 and Health Programming 2018, tools that guide the priorities of the political agenda, specific actions to prevent this aggravation are not found in the actions directed at the homeless<sup>38</sup>. However, these tools express the need to expand access to dental care, with the development of actions to promote, prevent and control oral diseases, which indicates the need to organize the team to identify population groups at risk and vulnerability, inserting, in the local planning agenda, actions to prevent this aggravation.

The instability of the public was related as an unfavorable factor to the preventive actions, due to the uncertain location of the homeless, since the halt places change constantly. Added to this, being a population that uses licit and illicit drugs, it is common, during the approach of the team, that they are not lucid to receive information.

It is necessary to understand that on the homeless create bonds and establish relationships to compensate for family losses, creating resources for survival. Among these resources is drug abuse, which for the team implies giving a new meaning to strategies of approaching, potentializing the meetings for care practices, notwithstanding that when there is a meeting between two people, one acts on the other, with expectations that are translated in the subjective relations, felt in the moments of speech, listening and interpretations, and in that encounter there may or may not be the reception, the bond and the acceptance of the other<sup>39, 37</sup>.

A comparative study of mobile units implemented in Portugal, the United States and Brazil with the aim of facilitating the access and active search of the homeless identified this strategy as being potential for reducing access time and ensuring care with reduction of damage in loco, however it is necessary not to generate a segregating circuit by offering all possible assistance in the street, without articulating this attention with the local department in the territories<sup>40</sup>.

It is inferred, therefore, that the restricted access of this population to the health services are among the factors that influence the development of actions for prevention and control of the disease. A study corroborates the idea that access has a central dimension in the public service, as a barrier to care, and considering the homeless, it is necessary to guarantee fairness in the organization of actions and services, since access barriers are still a reality<sup>41</sup>. In addition to the physical access barriers, barriers in the reception and linkage of this population by health professionals are still encountered, where some still produce stigmatizing and discriminatory practices, along with prejudiced attitudes<sup>41, 42</sup>.

Damage Reduction is a strategy from public policies in Brazil for homeless health care, acknowledging that these users are, often, unable or unwilling to stop using drugs. The strategy gained strength in the 1980s with the Acquired Immune Deficiency Syndrome (AIDS) epidemic in the world and in 2005 it was recognized in the public agenda with a focus on prevention, guaranteeing user's autonomy and freedom of choice<sup>43, 44</sup>.

For oral cancer prevention, it is necessary to notice the value of the Damage Reduction Policy, to minimize damages to oral health, resulting from the use of tobacco and alcohol, offering the conditions of access to services for periodic control. For this population, harmful habits such as alcoholism and smoking, besides the use of drugs, are means of escape from reality and the option to stop abusing these substances is not a choice between right and wrong, there is a whole context that requires a confrontation and joint effort of public power, the user and the family

Finally, the evidence from the study corroborates that the homeless can be considered as a vulnerable group to oral cancer, with identification of risk factors by both users and health professionals. Currently, in the city of Rio Branco, there is a care service and a referenced health team for this population and, despite the weaknesses evidenced in the study for the development of preventive actions to control this aggravation, the Clinical on the Street is referenced as a space for health care, since it enables the creation of a link between health services and this population. However, it is necessary to strengthen strategies that facilitate access in order to promote health and prevent the disease with collective or individual educational practices that enhance the understanding of the need for self-care and periodic control.

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The homeless and the health professionals who work in the Clinical on the Street's team are aware of the main risk factors related to oral cancer, both environmental and social factors.

The team does not develop specific actions focused on this issue, however, guidelines for oral hygiene are developed. Homeless users understand the need for prevention but believe that this control will only be possible with a change in harmful habits.

The factors that influence the development of oral cancer prevention and control actions are related to the difficulty of access to the public service, the time of return of more than one year, as recommended for periodic control, and the absence of a professional in the area of oral health in the team of Clinical on the Street, for the development of specific actions for the prevention and control of oral cancer.

## **Conflict of interest**

The authors declare that there is no conflict of interest.

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### Resumo

**Introdução:** no Brasil, a População em Situação de Rua (PSR) é um fenômeno que envolve uma multiplicidade de fatores, dentre os mais frequentes se encontram: as rupturas dos vínculos familiares, a inexistência de trabalho e a ausência ou insuficiência de renda e o uso frequente de álcool e outras drogas.

**Objetivo:** analisar a percepção sobre o câncer bucal, seus fatores de risco e ações de prevenção na perspectiva dos população em situação de rua e profissionais de saúde da equipe do Consultório na Rua no município de Rio Branco – Acre.

**Método:** estudo de abordagem qualitativa, desenvolvida por meio da Análise de Conteúdo, realizada no período de janeiro a abril de 2018 com a população em situação de rua e a equipe de saúde do Consultório na Rua em Rio Branco – Acre.

**Resultados:** evidenciou-se que as pessoas em situação de rua e a equipe de saúde do consultório na rua têm percepção sobre os fatores de risco relacionados a este agravo, porém não se tem uma preocupação com a prevenção pelos usuários. Os profissionais da equipe não desenvolvem ações voltadas para prevenção da doença e na perspectiva da equipe e dos usuários, podem ser desenvolvidas ações preventivas, entretanto predomina o olhar para a realização de ações pontuais com ênfase na mudança de hábitos nocivos.

**Conclusão:** a população em situação de rua e profissionais da equipe do consultório na rua têm conhecimento dos principais fatores de risco do câncer bucal. A equipe não desenvolve ações específicas para prevenção deste agravo e os usuários compreendem a necessidade de prevenção. A dificuldade de acesso e o tempo de retorno ao cirurgião dentista são fatores que dificultam a prevenção.

Descritores: câncer bucal, prevenção, população em situação de rua.

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