

Malignant Neoplasms of The Head And Neck: Aspects Associated With Mortality

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Abstract: The aim of this research was to describe some aspects of mortality from head and neck cancer patients treated at the University Hospital in the city of Maceió, Alagoas, Brazil. A cross-sectional study was conducted, describing the characteristics of the deaths from cancer of the head and neck, between 2010 and 2014, using secondary data from the Ministry of Health of Brazil. In the period of data collection, there were 370 deaths caused by head and neck cancer, mainly located in the mouth and tongue area. The highest incidence was male (69.5 %), over 50 years old (85.4%), with no education (27.3%), living in the capital of Alagoas (41.6%), principal place of death the hospital (56.2%). Given these data, it is clear that health services should be prepared for early diagnosis of the disease to mitigate damage and reduce mortality rates. One approach to diagnosis in the initial phase of the disease should be taken for health services in order to decrease the damage and improves the prognosis of the patient, thus avoiding premature mortality.

Keywords: head and neck cancer, mortality, incidence.

I. Introduction

The head and neck cancer (CCP) is considered one of the malignant tumors, due to its high incidence, prevalence and mortality, and the fifth most common cancer worldwide, with an overall incidence of 780,000 new cases per year [1]. Approximately 40% of the oral cavity, 15% in the pharynx, 25% in the larynx and 20% in the salivary glands and thyroid, the incidence is higher in men than in women in the ratio of 5:1, aged over 40 years [2]. Among the most common types of cancer worldwide, the CCP occupies the sixth position in relation to mortality, accounting for about 3% of all cancers [3].

The CCP manifests in several areas of the head, scalp, skin face and neck such as lips, nasal passages, sinuses, mouth, throat, larynx, pharynx, lymph nodes, salivary glands, and the thyroid gland [4].

In Brazil, where the cancer is the second cause of death, the CCP has shown considerable growth in its prevalence. It is estimated that there are 13 million new cases annually and over 3,000 deaths resulting from it. These data are the largest in Latin America, and the diagnosis is often delayed compared to developed countries [5].

The risk factors most associated with tumors of the head and neck are the consumption of tobacco and alcohol, both together cause a synergistic effect by frequent use, control of these factors is essential in reducing the incidence of these tumors [2,4]. There is also the relationship between infections caused by HPV (Human Papilloma Virus) sexually transmitted and the occurrence of cases of oral and oropharyngeal cancer [6]. In addition, the power restriction in intake of vegetables and fruits, occupational factors such as sun exposure and chemicals such as asbestos, are associated with cancer of the head and neck [2].

Moreover, constant diagnosis CCP is carried out in advanced clinical stages of the disease, which usually generates a greater number of cases with poor prognosis and increases the rate of sequel and deformities. These factors characterize this type of cancer as a major public health issue [7].

The aim of the research was to describe some aspects of mortality from head and neck cancer in a sample of patients who were treated at the University Hospital in the city of Maceió, Alagoas, Brazil.

II. Materials and Method

This is an epidemiological and descriptive study, with a scope of a group of cancer patients, in which the occurrence of death from head and neck cancer was analyzed. This cross-sectional study, using secondary data, deaths registered in the Mortality Information System (SIM) of the Ministry of Health database (DATASUS / MS) obtained from completing the Death Certificate (DO).

Alagoas is located in Brazil's Northeast region, has 102 cities, with an estimated population in 2015 of 1,013,773 habitants, with the capital city of Maceió with 932,748 habitants [8].

Data were collected by addressing the following variables: gender, age, educational level, category ICD-10, place of occurrence, area. The research presented minimal risk to the population studied, considering it was made from secondary data, which eliminates authorization by the Ethics in Research Committee. It was waived signing the consent form clarified, since the data were collected from the SIM / DATASUS / MS.

After collecting data, descriptive statistics for all variables in the sample were made using Microsoft Excel version 2010 program, the same as for tabular and graphical presentation.

III. Results and Discussion

370 deaths were registered from malignant neoplasms located in the head and neck in the state of Alagoas, Brazil. The incidence of deaths caused by CCP was higher among men, 69.5% as shown in Table 1. These data corroborate other studies [1,10,11] which studied patients with head and neck cancer and also found mostly men. However, the mortality rate for CCP among women is increasing alarmingly [10], which can be seen in this study in which the number of women in cases gradually increased from 17.1% in 2010 to 37.1% in 2014. This can be attributed to female habit changes such as increased alcohol consumption and smoking.

According to age group, the largest number of deaths concentrated in over 50 years (85.4%) described in Table 1. In accordance with the research on the epidemiology of head and neck cancer in Brazil had the concentration of cases in the age groups 50-69 years [12].

Table 1. Mortality from malignant neoplasms of the head and neck according to sex and age. Alagoas, Brazil. 2010-2014.

Agea	Male		Female		Total	
	N	%	N	%	N	%
10 a 14 years	-		2	1,8	2	0,5
20 a 29 years	4	1,6	2	1,8	6	1,6
30 a 39 years	11	4,3	2	1,8	13	3,5
40 a 49 years	25	9,7	8	7,1	33	8,9
50 a 59 years	78	30,4	6	5,3	84	22,7
60 a 69 years	58	22,6	25	22,1	83	22,4
70 a 79 years	51	19,8	30	26,5	81	21,9
80 years and more	30	11,7	38	33,6	68	18,4
Total	257	100,0	113	100,0	370	100,0

Source: SIM/DATASUS/MS

Most patients showed no level of education (27.3%), followed by who have studied 1-3 years (15.9%) as described in Table 2. The information produced from Hospital Cancer Registry (RHC) may occasionally present weaknesses due to the incompleteness of data [13]. This was also observed in this study, resulting in the deletion of 37.8% of database records. This loss of information is considered a limiting factor studies with secondary data.

In a survey of patients with no education, the disease has been described as one of the most cause fear in society. But despite the campaigns on the mouth self-examination, it was found that there was a lack of knowledge on the subject. This is worrying given, since the most time is the delay in diagnosis is the patient, which detects the injury, but delay to seek care [14].

Table 2. Mortality from malignant neoplasms of the head and neck to schooling. Alagoas, Brazil. 2010-2014.

Schooling	2010		2011		2012		2013		2014		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
None	18	25,7	16	29,1	20	29,4	26	29,5	21	23,6	101	27,3
1 a 3 years	13	18,6	9	16,4	12	17,6	13	14,8	12	13,5	59	15,9
4 a 7 years	14	20,0	6	10,9	7	10,3	5	5,7	8	9,0	40	10,8
8 a 11 years	2	2,9	4	7,3	5	7,4	9	10,2	2	2,2	22	5,9
12 years and more	1	1,4	1	1,8	1	1,5	3	3,4	2	2,2	8	2,2
Unknown	22	31,4	19	34,5	23	33,8	32	36,4	44	49,4	140	37,8
Total	70	100,0	55	100,0	68	100,0	88	100,0	89	100,0	370	100,0

Source: SIM/DATASUS/MS

Residence locations of people who died were divided according to the metropolitan area. In Maceió, the state capital, there were 41.6% of deaths, probably because fit the largest polo medical status. The Agreste region and other regions outside the metropolitan area recorded together 24.1%.

The main place where people died was the hospital (56.2%), then the home (40.8%). Regarding the high percentage of deaths in the household, are considered the wear physical, emotional and psychological that the terminally ill patient and family carry, so it is necessary to adopt therapeutic approaches that respect the limits of the patient facing own your situation of incurability, causing the patient and family prefer to go through this process at his residence. [15]

As for mortality data were described average of 74 deaths per year. The locations of the cancers are described in figure 1, according to the category CID-10 C00 to C14 DATASUS / MS. The highest incidence was found in the soft parts and non-specific parts (NE) of the mouth 22.4%, followed by 19.5% language. Local fewer incidents of disease were Glands salivary and Gums, with a percentage of 0.8% each. Malignant neoplasm of hypopharynx did not registered any case in the years studied. These results follow the national data from the National Cancer Institute (INCA) which confirm the CID most prevalent mortality 2009-2013 (C10, C06 and C14) [9].

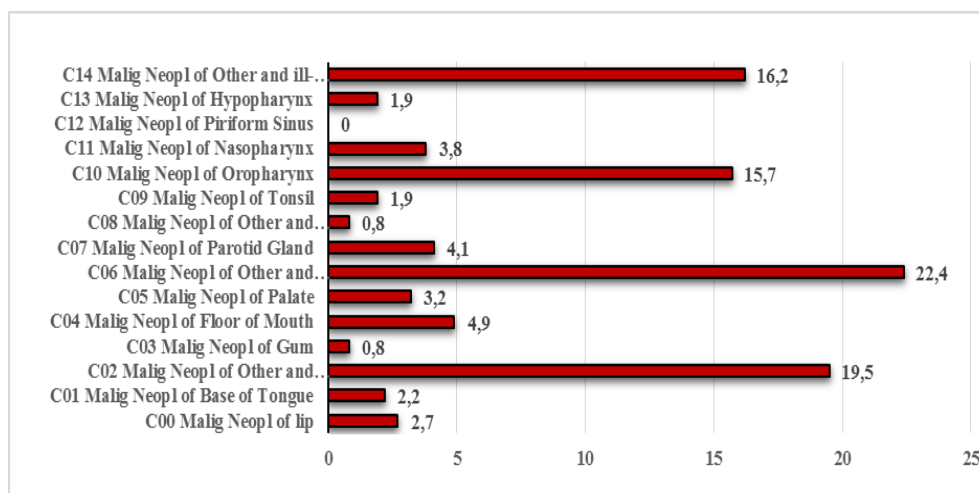


Chart 1. Mortality from malignant neoplasms of the head and neck second Category CID-10. Alagoas, Brazil, 2010-2014.

The knowledge of risk factors enhances the effective prevention of cancer [16] and, given the comorbidities and low survival rate at 5 years (30 to 40%) in the last 40 years [17].

Moreover, the results of this study aims to identify key components for decision making in prevention of lip cancer and oral cavity, guiding it is possible that a prevention directed to the factors thought to be associated is likely to contribute to reducing the incidence this cancer.

Some studies in oncology have evaluated the predisposition of individuals to cancer onset [18,19], which may predispose even the recurrence of the same, before a treatment or not. In the literature, they are not well observed cases of genetic predisposition to cancer in the regions of head and neck, but cases of genetic changes acquired by the association of behavioral habits, such as smoking [18,20], alcoholism [18,20] viruses such as HPV [21] and even the consumption of red meat [22]. These findings suggest that prevention of this cancer becomes more feasible to combat and control factors related to the associated habits and factors amenable to intervention

IV. Conclusion

In the years 2010-2014 there were 370 deaths caused by CCP, located mainly in the area of the mouth and tongue, mostly men, over 50 years, with low education levels. The region homes of patients who died was the state capital of Alagoas, the main place of death the hospital.

This type of cancer is concerned that involve patients who most often is still active physically and economically, bringing various disorders to life of the individual. In addition, the mortality rate has increased, the late diagnosis of cases and the risk factors that are directly related to the CCP, such as smoking.

Awareness campaigns are needed for the consumption of tobacco and alcohol, linked to therapies that help the individual to quit, aimed at preventing the CPP. In addition, education about oral hygiene from childhood is a factor that positively influences in later years, because it makes the individual has a better

understanding of any changes that occur in the head and neck, as well as the rest of the body .

The results of this study aims to identify key components for decision-making in the prevention of head and neck cancer, guiding it is possible that a prevention directed to the factors thought to be associated is likely to contribute to reducing the incidence and mortality of this type of cancer.

One approach to diagnosis in the initial phase of the disease shall be taken for health services in order to decrease the damage and improves the prognosis of the patient, thus avoiding premature mortality.

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