ORIGINAL ARTICLE

CLINICAL AND SOCIODEMOGRAPHIC MANIFESTATIONS IN WORKERS WITH ORAL CANCER

MANIFESTAÇÕES CLÍNICAS E SOCIODEMOGRÁFICAS EM TRABALHADORES COM CÂNCER BUCAL

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ABSTRACT

Objective: to describe the profile of clinical and sociodemographic manifestations correlated to Nursing diagnoses according to the North American Nursing Diagnosis Association (NANDA), in workers exposed to carcinogenic substances, who were assisted in outpatient nursing consultation, based on the Expanded Clinical Philosophy, in the Outpatient Section of Head and Neck Surgery. Method: this is a quantitative, descriptive, sectional study using secondary data from a data collection instrument, with statistical analysis. Results were presented in figures and tables. Results: 36 cases were analyzed, most of them male, aged between 41 and 89 years, whites, married, primary education, smokers, advanced stage, treated with exclusive radiotherapy or surgery with radiotherapy, majority with family providers, with a social security bond autonomy and family income up to two minimum wages. Conclusion: the importance of the Expanded Clinic for the production of client/worker care in the early detection of the disease with preventive care actions in the workplace of the companies in general and dealing with the effects caused by the disease, has been demonstrated the advancement of scientific knowledge. Descriptors: Ambulatory Care; Oral Cancer; Nursing care; Nursing diagnosis; Environment; Health.

RESUMO

Objetivo: descrever o perfil das manifestações clínicas e sociodemográficas correlacionadas aos diagnósticos de Enfermagem segundo a North American Nursing Diagnosis Association (NANDA), em trabalhadores expostos a substâncias carcinogênicas, que foram assistidos na consulta de Enfermagem ambulatorial, com base na Filosofia de Clínica Ampliada, no ambulatório da Seção de Cirurgia de Cabeça e Pescoço. Método: trata-se de estudo quantitativo, descritivo, seccional utilizando dados secundários de um instrumento de coleta de dados, com análise estatística. Apresentaram-se os resultados em figura e tabelas. Resultados: analisaram-se 36 casos, a maioria masculina, idade entre 41 e 89 anos, brancos, casados, educação fundamental, tabagistas etilistas, estágio avançado, tratados com radioterapia exclusiva ou cirurgia com radioterapia, maioria com provedores da família, com vínculo previdenciário autônomo e renda familiar até dois salários mínimos. Conclusão: demonstrou-se a importância da Clínica Ampliada para a produção do cuidado centrado no cliente/trabalhador na detecção precoce da doença com ações de cuidados preventivos no próprio ambiente laboral das empresas de modo geral e lidar com os efeitos causados pela doença, contribuirá para o avanço do conhecimento científico. Descriptors: Ambulatório; Câncer Buccal; Cuidados de Enfermagem; Diagnóstico de Enfermagem; Meio Ambiente; Saúde.

RESUMEN

Objetivo: describir el perfil de las manifestaciones clínicas y sociodemográficas correlacionadas a los diagnósticos de Enfermería según la North American Nursing Diagnosis Association (NANDA), en trabajadores expuestos a sustancias carcinogénicas, que fueron asistidos en la consulta de Enfermería ambulatoria, con base en la Filosofía de Clínica Ampliada, en el ambulatorio de la Sección de Cirugía de Cabeza y Cuello. Método: se trata de estudio cuantitativo, descriptivo, seccional utilizando datos secundarios de un instrumento de recolección de datos, con análisis estadístico. Se presentaron los resultados en figura y tablas. Resultados: se analizaron 36 casos, la mayoría masculina, edad entre 41 y 89 años, blancos, casados, educación fundamental, tabaquistas etilistas, etapa avanzada, tratados con radioterapia exclusiva o cirugía con radioterapia, mayoría con proveedores de la familia, con vínculo previdenciario autónomo y renda familiar hasta dos salarios mínimos. Conclusión: se demostró la importancia de la Clínica Ampliada para la producción del cuidado centrado en el cliente/trabajador en la detección precoz de la enfermedad con acciones de atención preventiva en el propio ambiente laboral de las empresas de modo general y hacer frente a los efectos causados por la enfermedad, contribuirá al avance del conocimiento científico. Descriptores: Asistencia Ambulatorial; Cáncer Buccal; Cuidados de Enfermería; Diagnóstico de Enfermería; Medio ambiente; Salud.

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INTRODUCTION

It is known that oral cavity cancer is a highly aggressive neoplasm, being considered the fifth cause of cancer death in the world. There is a high incidence rate in populations of Melanesia, Central-South Asia, Eastern and Central Europe, Africa and Central America. The disease is found in Brazil among the ten most incidents, and by 2018, about 14,700 new cases of oral cavity cancer were expected, of which 11,200 in men and 3,500 in women. These values correspond to an approximate risk of ten new cases per 100,000 men and four cases per 100,000 women. It is estimated that the majority of cases occurred in the South (12/100 thousand) and Southeast (15/100 thousand), and in the year 2018, about 264 thousand new cases and 128 thousand deaths were to occur.\(^1\)\(^2\)

An interaction of several risk factors (RF), such as: age, family history and genetic association, alcohol ingestion, smoking, use of nitrosamines and aflatoxins, local fungal infections are involved in the etiology of oral cavity cancer, riboflavin and vitamin A deficiency and HPV infections.\(^2\)\(^3\)

It was identified that, during the XX and XXI centuries, numerous carcinogenic substances were present in different work environments; annually, about 19% of all estimated cancers are attributed to the environment, including in the workplace, resulting in 1.3 million deaths.\(^4\) It is noteworthy that oral cancer mortality rates have presented a slight decline in prevalence in the male population in most developed countries and this fact has also been portrayed in some developing countries, however, in women, this behavior still can not be observed, since the use of tobacco by women was later than men's.\(^5\)

It is added that, in the case of women, the greatest challenge to be faced in developing countries is the evident increase in smoking initiation, the main source of risk for developing oral cavity cancer and consequent increase in prevalence in this population group.\(^6\) However, incidence rates for oral cavity cancer related to HPV infection, such as amygdala, tongue base and oropharynx, are increasing among young men and women, and some of this increase can be attributed to changes in sexual behavior.\(^7\)

It is noted that the diagnosis of cancer of the oral cavity is often late, since the main symptoms, pain and dysphagia, do not occur until the tumor has grown enough to cause painful and obstructive symptoms or to be confused with other disorders. Workers are adjusted to their greatest difficulty, dysphagia, progressively altering their diet from solid foods to liquids, and with the progression of obstruction, pain, odor and excessive salivation usually occur along with progressive weight loss, bleeding and vomiting.\(^7\)\(^8\)

It is inferred that, at this stage of treatment, it is increasingly difficult to reconcile work with treatment. On the other hand, the worker and his family are allowed to initiate strategies to deal with the effects caused by the disease and its treatment.\(^6\)

It has long been understood that work, when performed under adverse conditions, could cause illness that would lead workers to disability or death.\(^9\) Thus, the study of the risks caused by an organic disease such as cancer and the fulfillment of the determination of resolution No. 272/02 of the Federal Council of Nursing,\(^10\) comprehensible fact, since the clinical category is linked to the description of the psychological suffering as object that it aims to describe. It is believed that the reflection is capable of producing a significant level of reorientation of actions and behaviors, be they conscious or involuntary, which characterizes the cancer patient of oral cavity in the modality of social pathology.\(^13\)

It is required, because it is a disease that requires long-term treatment, multiprofessional care, however, in the research scenario, in addition to medical care, there is also the Nursing care in its own ambulatory, which gives it autonomy and integrates "totally "Nurses and clients during the Nursing consultation. In this space, the nurses, clients / workers in all phases of oncological assistance, that is, in the confirmation or elucidation of the diagnosis, staging of the disease, clinical (chemotherapy and radiotherapy) or surgical treatment, rehabilitation of the worker in their place work environment and the family environment. The visits are subdivided into first-time consultations and subsequent consultations, where interviews, physical examination for the assessment of the affected needs and any other procedures necessary for the recovery or maintenance of clients' health are carried out, aggregating the educational actions directed at workers exposed to agents and mixtures in your work environment, as well as your informal caregivers such as family members, employees or friends.
OBJECTIVE

To describe the profile of the clinical and sociodemographic manifestations correlated to the Nursing diagnoses according to the North American Nursing Diagnosis Association (NANDA), in workers exposed to carcinogenic substances, who were assisted in the outpatient nursing consultation, based on the philosophy of Expanded Clinic, of the Head and Neck Surgery Section.

METHOD

It is a study that is a cut of the ongoing project whose objectives regarding the performance of nurses and their team were to demonstrate the importance of the expanded clinical design in the health-disease process, based on the experience of the nursing professional with patients of cancer in the head and neck and to raise the Nursing interventions carried out with a view to the integrity of health care. The results and the technologies used with the Nursing Process are presented, however, in the educational actions directed at workers exposed to potentially carcinogenic agents and mixtures in their work environment.

It is reported that this is a retrospective and analytical study, which provided observation, description and classification of phenomena. A study sample of 36 cases of client clients with cancer of the oral cavity, attended at the Nursing Outpatient Section of Head and Neck Surgery, from a public reference hospital in Oncology, from July to December 2017.

Secondary data were obtained from the Nursing Record Books of the Nursing Outpatient Clinic of the Head and Neck Surgery Section, where all the attendances, affected needs, identified Nursing diagnoses and prescribed and / or implemented conduits for clients are recorded.

A data collection instrument, attached to 150 study files (presented at a commemorative event of the 120th anniversary of the Alfredo Pinto Nursing School - EEAP / UNIRIO and published in the Revista de Pesquisa: care is fundamental online) was created, to collect information about the variables studied, namely: age, sex, life habits (whether alcoholic, smoker and / or drug use), household (urban or rural), educational level, topographical location of the disease in the oral cavity, complaints presented by clients, oncological treatment performed, of the selected cases, which are demonstrated in the results. The statistical analysis was described where the categorical data were calculated by absolute values and percentage, while the continuous data, by mean and standard deviation.

The ethical aspects were collected and analyzed in a confidential way and the results were presented in a grouped form, not allowing the identification of the individuals, in order to maintain the confidentiality of the data referring to the elements of the sample. Due to this peculiarity, the exemption of the Free and Informed Consent Term (FICT) was requested for the components of the sample of this study, as provided for in Resolution 466/12 of the National Health Council. A research project was developed under the heading “Assistance to head and neck cancer patients under the perspective of integrity”, approved by the INCA Research Ethics Committee under Opinion n. 314.937 and CAEE: 17952413.4.0000.5274, in continuity to the present day.

It is believed that population studies are important sources of detection in changes related to the exposure of environmental factors in the work environment, where several carcinogens are found in great concentration when compared to extra-labor environments.

There is a risk assessment of carcinogens related to environmental and occupational agents as public health measures that allow the reduction / elimination of risks to individuals.

RESULTS

The oral cavity cancer sample corresponded to 24% (n = 36) of the total clients followed by the Nursing Outpatient Unit of the Head and Neck Surgery Section (N = 150), from July to December 2017.

It can be observed that, of the 36 clients, the mean age was 65 years, with a minimum of 41 and a maximum of 89 years; the majority of clients (n = 31) were male (83.3%) and only 16.7% were female (n = 5), according to table 1.
Eleven clients with tongue cancer (30.6%) and 25 clients (69.4%) with cancer in other parts of the mouth (except tongue) such as palate and lip were found.

The majority were between the first and the thirtieth day of admission to treatment at the institution, all of whom were non-cancer patients, and of the 36 clients, 16 (44.4%) already had treatment for the pre-defined disease (PDD): surgery; radiotherapy; surgery + radiation therapy; radiotherapy + chemotherapy + surgery and palliative care. The remaining 20 clients were still expected by definition of the therapeutic proposal due to the examinations required for decision-making.

The other variables on sociodemographic data, such as schooling, lifestyle related to alcoholism, smoking and drug use, and domicile (rural or urban) are shown in Table 2.

<table>
<thead>
<tr>
<th>Variables</th>
<th>n</th>
<th>%</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drinking</td>
<td>25</td>
<td>69.4</td>
<td>3</td>
<td>22</td>
</tr>
<tr>
<td>Smoking</td>
<td>29</td>
<td>80.6</td>
<td>2</td>
<td>27</td>
</tr>
<tr>
<td>Never used tobacco and alcohol</td>
<td>7</td>
<td>19.4</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Lives in an urban zone</td>
<td>34</td>
<td>94.4</td>
<td>5</td>
<td>28</td>
</tr>
<tr>
<td>Lives in an rural zone</td>
<td>2</td>
<td>5.6</td>
<td>6</td>
<td>2</td>
</tr>
</tbody>
</table>

It is described that the main unidentified nursing diagnoses identified were impaired swallowing, pain and impaired verbal communication, related to the presence of the tumor in the region; the dysfunctional family process due to alcohol and tobacco use, the role of the caregiver role, the risk of low self-esteem, and the Emotional Lips Control, related to tumor-triggering factors, intensive care at home, fear of autonomy control, and dependence on others to take care of them. 

The most frequent symptoms were dysphagia, reported by 69.4% of clients (n = 25), followed by 58.3% with dyslalia (n = 21) and 50% with weight loss (n = 18). The reported weight loss varied from five to 10 kg in 18 clients (50%), only after the onset of the first symptom, and during the course of the disease, 15 clients (41.7%) complained of sialorrhea, 13 clients presented bleeding (36.1%) and 11 clients (30.6%) reported local pain (Figure 1).
Radiotherapy was performed in 44.4% of the clients evaluated (n = 16). Chemotherapy was administered in 7.2% of the clients (n = 7) and only 8.3% underwent surgery (n = 3). Tumor persistence was observed in 91.7% of the treated clients (n = 33). In the operated clients, recurrence was found in all cases (n = 3), which led to the transfer to the palliative care unit.

In the period from July to December 2017, 55.6% of clients (n = 20) had no chance of curative cancer treatment because of the advanced stage of the tumor and the poor general condition of the clients.

**DISCUSSION**

It is understood that the early detection of cancer is a determinant factor of the prognosis of cancer of the oral cavity. Thus, the affirmations that access to health services in primary care should optimize the actions of health professionals and the resources of the health units, working for the early detection and organizing the demand for the other levels of attention. It was observed that it is not possible to perform early detection by simple visual inspection of the oral cavity, either by the individual worker or by a health professional, which may have contributed to the early death of 13 (36.1%) of the 36 clients, because when diagnosed early, this type of cancer presents a good prognosis.1,19

In Brazil, most of the malignant tumors are present in the advanced stages, leading to the need for aggressive treatments, as well as high mortality rates. It is recalled that the cost of treatment of an advanced cancer to the Unified Health System (UHS) is significantly higher when compared to a cancer diagnosed early.6

In the analysis of the results, it was observed that cancer of the oral cavity was predominant in clients over 51 years of age and male, which is described in the literature.1

It is noteworthy that routine examination of the mouth by visual inspection, performed by a health professional, can diagnose lesions in the beginning, before they become cancerous. People over 40 who smoke and drink should be advised to be more attentive, to practice self-examination and to have their mouth examined by a health professional (dentist or doctor) at least once a year; (69.4%), smoking (80.6%), and only seven clients never had direct contact with these risk factors.

It can be seen that the diagnosis of oral cavity cancer was predominant in urban workers (94.4%), which is also compatible with the information available in the literature, revealing a high incidence of this type of malignancy in clients living in industrialized areas and a lower rate of incidence in rural workers, but this finding may also mean that in rural areas the disease is not diagnosed and is therefore underreported.20

It is analyzed, however, that dysphagia and dyslalia were the most frequent clinical manifestations in this study, reinforcing the clinical course of the disease in which the tumor makes it difficult for the client to speak, chew and swallow, as well as severe weight loss, pain and presence of cervical lymphadenomegaly, which are signs of an advanced stage of the disease.1

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**Figure 1.** Clinical manifestations presented by clients during the treatment of cancer of the oral cavity in Rio de Janeiro (RJ), 2017.
However, the treatment to be given to this client, in these cases, will no longer be curative, so palliative treatment will be adopted because of the advanced stage in which this cancer is found. This will directly affect the quality of life of these people, and in this context, despite the technological advances, it is not possible to guarantee the ethical commitment to provide decent living conditions and the right to health and the environment achieved within the constitutional norms of our country. 21

Mortality rates for oral cavity cancer present a decline in the male population in most developed countries. It can be observed that, in women, this behavior can not yet be observed, since the onset of smoking by women was later than that of men. 1 There is an increase in the incidence rates for cancer of the oral cavity related to HPV infection, such as amygdales, tongue base and oropharynx, among young adults in both sexes, and some of this increase may be attributed to changes in sexual behavior. Thus, it is important to think about the importance of the nurses of the basic health units and the specialized attention in Rio de Janeiro, and the understanding of societies that are based on a complex process of production and management of pathologies. 13,18

In this study, the low percentage of clients with a history of surgical treatment (8.3%) was also present, however, approximately half of the patients were submitted to radiotherapy (44.4%) and one fifth (7.2%) submitted to chemotherapy and, although it did not achieve a statistically significant sample, the percentage of clients (91.7%) who evolved with the persistence and / or relapse of the disease after radiotherapy and chemotherapy were high, which led some clients to be transferred to follow-up in the palliative care unit of the same hospital network, confirming that the best treatment of oral cavity cancer occurs with the early prevention and detection of the disease.1,2,12,18,9

CONCLUSION

Based on these results, it is concluded that prevention is worth highlighting and that early detection will modify the disease curve in the country. The primary care nursing professional has the important role of modifying the current situation of the disease in the country through simple and sometimes forgotten measures: visual inspection of the oral cavity and guidance on hygiene and self-examination of the mouth.

Clinical and sociodemographic manifestations...

During the treatment of a large part of the clients, the improvement of their complaints through the implemented Nursing interventions was enjoyed, although the disease persisted and / or relapsed in a part of them, which corroborates the therapeutic potential of the nurses, despite the highly aggressive behavior of this neoplasm.

In the oral cavity client, it is accepted that curative treatment is a major determinant for the maintenance of the quality of life of these individuals. It is known, however, that the emotional repercussions due to malignant disease can even exceed physical suffering and the visual image is a kind of detonator of the emotions, being that these emotions are singular in each, mainly, in this disease. Therefore, by faithfully recording information on clinical evolution, the difference in care for the cancer patient, and another important factor is the monitoring of the signs and symptoms that cancer causes and the side effects of cancer treatment, something that can be carried out by nurses trained in preventive care actions in the working environment of the companies, in general.

This is reflected in care actions related to occupational cancer, and although these are concentrated in the area of environmental health and worker health, they have become a focus in the Nursing clinic and for public health.

With regard to the attributable risk and the strength of association with the main carcinogens arising from the work environment, a brief overview of the occupation and cancer was obtained, through the Nursing Care Systemization (NCS) and use of the Nursing diagnoses.

It is therefore of fundamental importance the use of a system of disease surveillance in the hospital environment that identifies and controls work environments with potential exposure to carcinogenic agents. This article is guided, through this vision of work as a social determinant of health and disease, to present elements to recognize and deal with work-related illnesses.

It is estimated, by the population attributable fraction, the proportion of health-related events in the population that would be prevented if the risk factor were eliminated. There is an underestimation of the carcinogenic agents present in the workplace due to the extreme difficulty of measuring in loco. It is recognized that in situations of precarious linkage, for those with greater social vulnerability and in circumstances not foreseen by law, that exposure may be greater and making
epidemiological evidence inadequate due to the scarcity of quantitative exposure data.

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