

SCIENTIFIC EVIDENCE OF NURSING CARE FOR THE PATIENT WITH ORAL CARCINOMA

EVIDÊNCIA CIENTÍFICA DOS CUIDADOS DE ENFERMAGEM FRENTE AO PACIENTE COM CARCINOMA ORAL

EVIDENCIA CIENTIFICA DE LOS CUIDADOS DE ENFERMATE FRENTE AL PACIENTE CON CARCINOMA ORAL

Erlivânia Aparecida de Lucena¹, Vanessa Mandu Pereira², Kazia Lena Martinele Lopes da Silva Rodrigues³, Jackson Jhonatan Vieira do Nascimento⁴, Natália Fonseca de Araújo⁵, Luiza de Marilac Alves da Fonsêca⁶, Vinicius Lino de Souza Neto⁷

ABSTRACT

Objective: To identify the scientific evidences of the nursing care in front of the patient with oral carcinoma. **Methods:** This is a Systematic review, where studies were conducted in the Pubmed, Scopus, Cinahl, Web of Science, and Cochrane databases for primary care research to prevent oral carcinoma. The studies were analyzed in paired form and classified their best scientific evidence. **Results:** Based on the analysis of the 10 studies, it was evidenced that some nursing care presents significant results, in view of pain, infection prevention and self-care, such as the self-examination of the oropharyngeal and adjacent ones, which must be performed continuously, oral hygiene with serum physiological and chlorhexidine, cryotherapy and the use of chamomile tea. **Conclusion:** Nursing care based on scientific studies contributes to further improvement of the work process, reducing risks, and stimulating clinical and academic skills.

Descriptors: Carcinoma; Evidence-based nursing; Nursing care.

¹ Discente, Graduação em Enfermagem, Faculdade Natalense de Ensino e Cultura de Natal/ FANEC. Natal, Rio Grande do Norte (RN), Brasil. Ciências da Saúde/Enfermagem baseado em evidência

² Discente, Graduação em Enfermagem, Faculdade Natalense de Ensino e Cultura de Natal/ FANEC. Natal, Rio Grande do Norte (RN), Brasil. Ciências da Saúde/Enfermagem baseado em evidência

³ Discente, Graduação em Enfermagem, Faculdade Natalense de Ensino e Cultura de Natal/ FANEC. Natal, Rio Grande do Norte (RN), Brasil. Ciências da Saúde/Enfermagem baseado em evidência

⁴ Discente, Graduação em Enfermagem, Universidade Potiguar, UNP, Natal, Rio Grande do Norte (RN), Brasil. Ciências da Saúde/Enfermagem baseado em evidência

⁵ Enfermeira, graduada pela Universidade Estadual da Paraíba. Especialista em Saúde da Família pela Faculdade Integrada de Patos (FIP). Ciências da Saúde/Enfermagem baseado em evidência

⁶ Enfermeira, Graduada em Enfermagem pela Universidade Estadual do Rio Grande do Norte- UERN; Mestre em Saúde Coletiva pela Universidade Federal do Rio Grande do Norte – UFRN, Natal, Brasil.

⁷ Enfermeiro, Graduado pela Universidade Federal de Campina Grande/ UFCG Campina Grande (PB), Mestre pelo Programa de Pós-Graduação em Enfermagem da Universidade federal do Rio Grande do Norte- UFRN.

RESUMO

Objetivo: Identificar as evidências científicas dos cuidados de enfermagem frente ao paciente com carcinoma oral. **Método:** Trata-se de uma revisão sistemática, em que se buscou por estudos nas bases de dados Pubmed, Scopus, Cinahl, Web of Science, e The Cochrane Data Base, sobre pesquisas voltadas aos cuidados primários para prevenção do carcinoma oral. Os estudos foram analisados de forma pareada e classificada a sua melhor evidência científica. **Resultados:** A partir da análise dos 10 estudos foi evidenciado que alguns cuidados de enfermagem apresentam resultados significativos, diante do quadro de dor, prevenção de infecção, e o autocuidado, como o autoexame da orofaríngea e adjacências, que deve ser realizado continuamente, higiene oral com soro fisiológico e clorexidina, a Crioterapia e o uso do chá de camomila. **Conclusão:** Os cuidados de enfermagem baseados em estudos científicos contribuem para um maior aprimoramento do processo do trabalho, diminuindo riscos e estimulando habilidades clínicas e acadêmicas. **Descritores:** Carcinoma; Enfermagem baseada em evidências; Cuidados de Enfermagem.

RESUMEM

Objetivo: Identificar las evidencias científicas de los cuidados de enfermería frente al paciente con carcinoma oral. **El método** consiste en una revisión sistemática, en la que se buscó estudios en las bases de datos Pubmed, Scopus, Cinahl, Web of Science, y Cochrane, por investigaciones dirigidas a los cuidados primarios para la prevención del carcinoma oral. Los estudios se analizaron de forma pareada y clasificaron su mejor evidencia científica. **Resultados:** A partir del análisis de los 10 estudios se evidenció que algunos cuidados de enfermería presentan resultados significativos, frente al cuadro de dolor, prevención de infección y el autocuidado, como el autoexamen de la orofaríngea y adyacencias, que debe ser realizada continuamente, Higiene oral con suero fisiológico y clorexidina, la crioterapia y el uso del té de manzanilla. **Conclusión:** Los cuidados de enfermería basados en estudios científicos contribuyen a un mayor perfeccionamiento del proceso del trabajo, disminuyendo riesgos, y estimulando habilidades clínicas y académicas. **Descriptores:** El carcinoma; Enfermería basada en evidencias; Cuidados de Enfermería

INTRODUCTION

Oral cancer is a neoplastic condition that can be classified as epidermoid carcinoma, and squamous cell carcinoma, malignant lesions in the tongue region or posterior aspects of the lateral border of the tongue. It is a typically aggressive cancer with high rates of local invasion and high metastatic potential.¹

The main risk factors include tobacco use, poor hygiene, and the Human

Papilloma Virus (HPV), which is an etiological agent present in anatomical-pathological analyses. It is believed that cancer patients require multidimensional health care, with emphasis on their priority needs, thus requiring certain skills and competencies from health professionals.²

Nursing practice has changed over time, with insertion of new devices and deconstruction of its increasingly scientific empirical model, towards care based on the

best scientific evidence, which requires decision-making by the healthcare team. It is a fact that evidence-based assistance for oral cancer patients contributes to a more qualified and accurate care.³

Scientific evidence represents a set of elements used to support a scientific theory, which may vary according to its field of research. Thus, evidence is usually based on an analytical result and scientific control, which thus encourages practitioners to think critically and avoid empiricism.⁴

Given this, based on this alternative model of health care of health surveillance, Nurses must plan and estimate the possible needs of such population through systematic and scientific methods.⁵ This actions make care more evident and less empirical, corroborating the construct of art and its advance.

In this sense, the development of the present study had the goal to show evidence through the analysis of studies of the most appropriate nursing care measures for oral cancer patients. Thus, the study aimed to: identify evidence of the nursing care provided for oral cancer patients.

METHOD

This is a systematic literature review that followed the protocol proposed by the

Cochrane Center of Brazil, which consists of the following steps: formulation of the research question, which used the PICO strategy; identification and selection of studies; critical evaluation of studies; data collection; data analysis and presentation; and interpretation of results. The steps recommended by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses – PRISMA were followed.⁶

The PICO strategy was adopted to formulate the research question. This strategy is characterized by four important components for the formulation of the research question: P: participant (patient); I: intervention; C: comparison; and O: outcome.⁷

Thus the question that guided the systematic review study was: What nursing care measures for people with oral cancer can be evidenced in the respective studies?

Data were collected in the second half of 2018 by two researchers[,] in a paired way. For the Pubmed, Scopus, Cinahl, Web of Science and The Cochrane databases, the following descriptors, selected from Medical Subject Headings (MeSH), in English, were used: mouth carcinoma, evidence-based nursing, Nursing care. Boolean operators AND were used in the search strategy in each database, as shown in Chart 1.

Chart 1- Distribution of crossings between health science descriptors using Boolean operators, Natal/RN, 2018

P	“HPV” AND “Genital Warts” AND “Papilloma Virus Infections” AND “Carcinoma” AND “Oral Neoplasia” AND “STD-HPV” AND “Vaccine” AND “Tumor Virus Infections” AND “Oral Cavity” AND “Man Health” AND “Immunity” AND “Student Health” AND “Age and Sex Distribution” AND “Carcinoma In Situ” AND “Descriptive Epidemiology” AND “Emotion”.
I	“Therapeutic Index” AND “Population Health” AND “Sexual Health” AND “Single Health” AND “Vaccination Coverage” AND “Nursing Care” AND “Early Cancer Detection” AND “Family Strategy” AND “Access to Information” AND “Cooperation and Treatment Adherence” AND “Sexual Behavior” AND “Male Homosexuality”.
C	“Characteristics of Epidemiological Studies” AND “Nursing Consultation” AND “Family Strategy” AND “Differential Diagnosis” AND “Sensitivity and Specificity” AND “Health Promotion” AND “Primary Health Care” AND “Time Series Studies” AND “Health Education” AND “Epidemiological Studies” AND “Community Health Nursing” AND “Nursing Strategy” AND “Masculinity” AND “Oncological Nursing”.
O	“Data Accuracy” AND “Equity in Access to Health Services” AND “Disparity in Health Levels” AND “Treatment Outcome” AND “Self-Care” AND “Mortality Record” AND “Risk Factors” AND “Patient Participation” AND “Social Support” AND “Disease Free Survival” AND “Health Knowledge, Attitudes, Practice” AND “Quality of Life” AND “Patient Care Team” AND “Perception”.

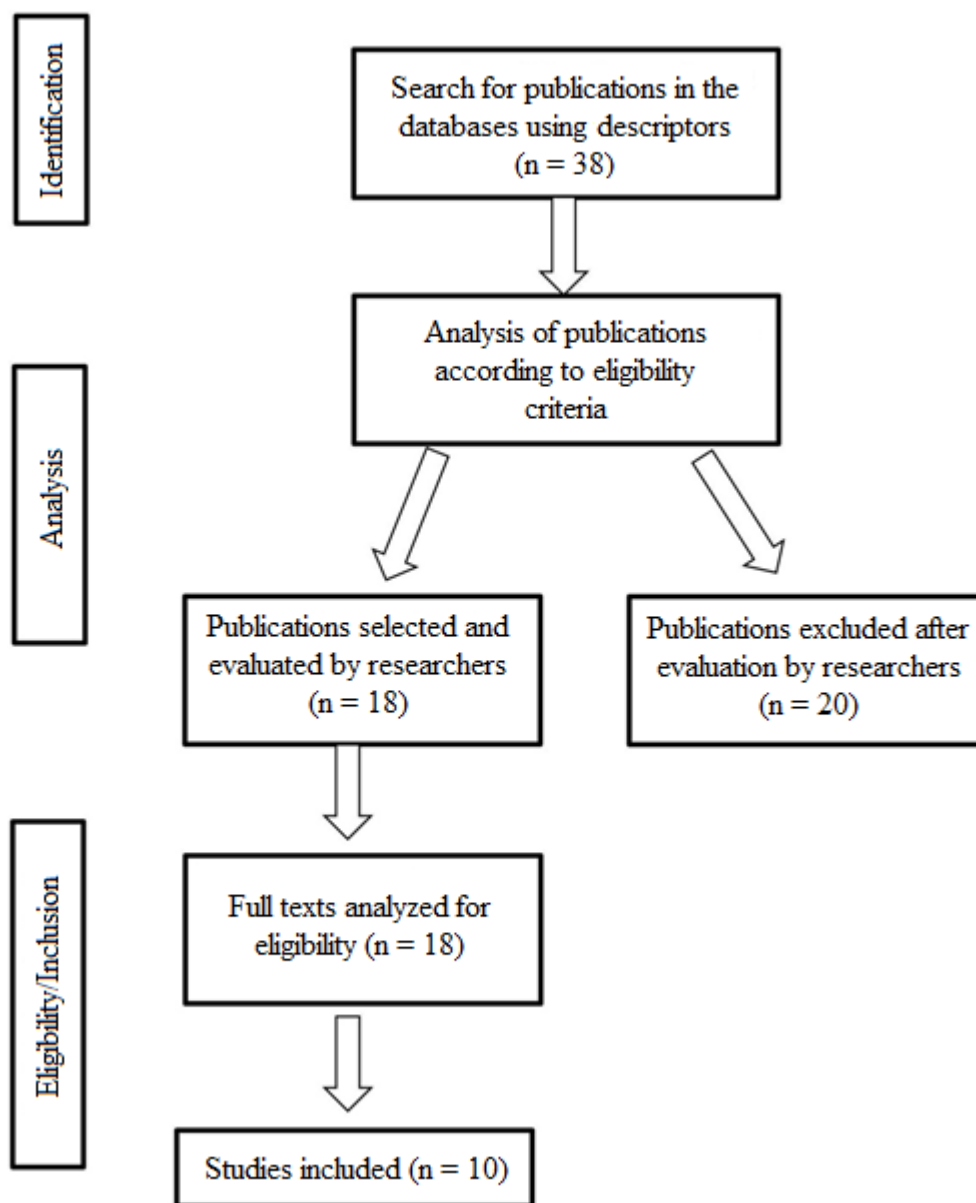
Source: Pubmed, Scopus, Cinahl, Web of Science, and Cochrane

For the selection and inclusion of articles in the systematic review, the following eligibility criteria were adopted: original research articles published in full length in national and international databases, without language restriction. The exclusion criteria were: articles focusing on a population other than adults; not involving research; and dealing with other types of conditions. The absence of time restriction is justified by the fact that the approach of this theme is limited and is less frequently present in the works.

Thus, 38 articles were identified in the databases using this search strategy. After selection guided by the above criteria, two researchers analyzed the titles and abstracts with the intention of filtering the articles that did not contribute to the objective of the present study; only 10 articles composed the final sample. In the database of the pre-selected articles, an instrument was used to collect the following information: author, type of method applied, level of evidence, result and

conclusion/final considerations, as shown in Figure 1.

Figure 1 - Study selection process, Natal/RN, 2018



After cataloging, the studies underwent an evaluative and qualitative analysis through the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) for observational

researches, and the Consolidated Standards of Reporting Trials (CONSORT) for Clinical Trials. The level of evidence was analyzed by The Joanna Briggs Institute classification.

Regarding the analysis by STROBE, each of the 22 criteria obtained could receive a score of 0 - described and 1 - not described. For the CONSORT, which consists of 22 items, the score was 0 - not described, 1 - partially described and adequate, and 2 - adequate⁸. Thus, the score generated per article was transformed into a percentage, and those with a percentage higher than 60% or which presented relevant characteristics in this evaluation process were considered as articles of

quality. To assess the level of evidence, the Joanna Briggs Institute was used for classification.⁸⁻⁹

RESULTS

In this stage, from the sample of selected articles, one article was published in the year 2008, one in 2011, one in 2013, two in 2014, three in 2015, and two in 2016. Chart 2 summarizes the information provided by the articles included in the systematic review.

Chart 2 - List of articles presenting therapeutic actions for oral cancer patients, Natal/RN, 2018

Source	Method/LE*	Results	Considerations/Conclusion
Nascimento DM, Nóbrega MML, Carvalho MWC, Norat EM	Exploratory-descriptive/III	Ninety-seven statements of nursing diagnoses/outcomes were elaborated and submitted to the validation process by nurses, resulting in 38 statements with CI \geq 0.80 (39.2%).	It is believed that nursing diagnoses portray the real needs of hospitalized patients, and provide the nurses with subsidies to identify the nursing interventions needed to assist this clientele.
02-Araújo SNM, Luz MHBA, Silva GRF, Andrade EMLR, Nunes LCC, Moura RO.	Cross sectional and quantitative/IV	From this, a PE was delimited, listing the diagnoses, interventions and expected results, in order to establish an ideal but individualizing nursing care standard for these patients.	Knowing the condition of oral mucositis is essential for the planning of a nursing care that envisions prevention based on the establishment of an oral care plan.
03-Santos NAR,	Qualitative/III	Three major impressions were found: initial	Among other contributions, the identification and understanding of coping

Santos ATC, Silva RP		strangeness and complexity; a threshold between strangeness and coping; and image.	strategies can contribute to better qualify nursing education and care.
04-Chedid HM, Franzi SA, Amar A, Rapoport A, Dedivitis RA, Carvalho MB.	Retrospective/III	In the assessment of one-year disease free survival of patients undergoing rescue chemoradiotherapy, 16.7% were alive and without disease, while in the group of patients undergoing palliation, the median survival was 3.9 months	The rescue chemoradiotherapy treatment in loco-regional relapses presents poor results in relation to disease-free survival, however promising results when compared to patients with palliative care indication.
05-Santos MCM, Raimundo DD, Soares E, Guedes MTS	Data Analysis/IV	It showed the importance of the records to prove the work of the nursing team and the importance of the Extended Clinic as a philosophy and tool for the health work processes to focus on the production of client-centered care and the contradictions in the attempt to inter-relationship with health services outside the institution.	The empathic, planned and coordinated care aimed at the client's recovery and adaptation proved to be essential and resulted in a flexible care plan developed for each person, containing educational and therapeutic nursing measures and referral of interdisciplinary problems, respecting individuality, and prioritizing the problems of the patient.
06-Guimarães RCR, Fonseca Gonçalves RPF, Lima CA, Rocha Torres M, Silva CSO.	Integrative/V	Nausea and vomiting were the main chemotherapy reactions described.	The need to improve nursing records, and the implementation of the evaluation process in the construction of indicators to evaluate specific behaviors and/or interventions were identified.
07- Araújo SN, et al.	Exploratory-descriptive/IV	The findings pointed to the prevalence of oral mucositis in males and	It is concluded that there is a need for nursing insertion in the promotion of preventive and control actions of oral mucositis, with a view to

		in the age groups under 17 and over 60 years.	maintaining well-being, optimizing the therapeutic response and improving the quality of life of cancer patients.
08-Moura LKB	Integrative review/V	Oral cancer screening for decreased prevalence.	Oral cancer is a serious public health problem in Brazil and worldwide.
09-Raimundo DD et al.	Retrospective-analytical/IV	The main NDs identified were impaired swallowing, pain, impaired verbal communication related to the tumor; dysfunctional family process due to alcohol and tobacco, caregiver role tension, risk of low self-esteem [,] among others.	Accurate record about patient and caregiver can minimize suffering.
10- Ribeiro JP	Quantitative/IV	The identified diagnosis focuses on the domains of Self-perception, roles and relationship, total stress confrontation, comfort and life Principles.	It is essential to understand the impact caused by cancer, as such understanding enables the establishment of diagnoses, as well as appropriate nursing interventions in the moment experienced..

Source: Pubmed, Scopus, Cinahl, Web of Science, and Cochrane; EL* - level of evidence.

The studies showed that the best nursing care measures for oral cancer patients were: self-examination of the oropharynge and surroundings, which should be performed continuously, oral hygiene with saline and chlorhexidine, cryotherapy, and the use of chamomile tea.

DISCUSSION

The health care of these patients should be holistic and multidisciplinary, requiring certain skills and competences from professionals.¹⁰⁻¹² However, despite the increase in scientific knowledge about oral cancer, Nursing presents weaknesses in this area, such as the communication of prevention, promotion, protection, healing and rehabilitation actions of these patients.

Among the various therapeutic alternatives, studies with levels of evidence III and IV showed that the practice of oral self-examination, either visually or tactually, aims to identify abnormalities in the oral cavity, such as persistent lesions, gum bleeding, and hardening in the tongue. In addition, complementary examinations such as submandibular, submentonian and cervical palpation should be performed, through which enlarged lymph nodes may be noticed.¹³⁻¹⁵

In other studies with evidence level II and III, the alternative implemented was preventive oral hygiene by 0.12% chlorhexidine digluconate, since the product has enzymatic actions and prevent cells from proliferating the disease.¹⁶⁻¹⁹ Still, studies showed that prolonged use of 0.12% chlorhexidine digluconate results in adverse effects, with possible tooth changes, increased calcification of the upper gums, because 0.12% chlorhexidine does not prevent mucositis, but provides comfort to patients.

In addition to 0.12% chlorhexidine, the use of 0.9% saline or 3% bicarbonated solution does not irritate the oral mucosa and has the action of salivary pH modification, according to a study developed in Mexico City. Daily mouthwash of chlorhexidine digluconate

was compared with the use of the solution and benefits on both sides were observed, and both substances caused discomfort to patients, such as change in taste. Another point highlighted in the study was the frequency of use, which should be six times a day.¹⁸

Another therapeutic modality that showed prominence was the use of laser and cryotherapy. Studies with evidence levels III and IV showed that cryotherapy has been implemented as a therapeutic measure, either to relieve pain or to reduce the infectious process of oral cancer. Cryotherapy is characterized by lowering the temperature, providing activation of adrenergic receptors and thus leading to vasoconstriction and decreased release of cytokines, substances that increase the proliferation process.¹⁹⁻²⁰

Cryotherapy has also been widely used in other therapeutic approaches, as pointed out by the Multinational Association of Supportive Care in Cancer and the International Society of Oral Oncology, which puts in its guidelines the use of cryotherapy at least two to three times a day, according to the patient's needs and accessibility of use. Another therapy evidenced by the study with level of evidence II, which is still searching for broad results, is the use of chamomile tea,

which provides a reduction in the neoplastic cell catabolism process, inhibiting certain types of oncogenic enzymes that lead to a decrease in odor-causing substances.²⁰

CONCLUSION

Nursing care that has been implemented along with systematic strategies, based on scientific studies, contributes to a greater improvement of the work process, optimizing time, reducing risks and encouraging reflections, and stimulating clinical and academic skills of the nursing staff.

In the present study, the most evident nursing care measures for oral cancer patients were: self-examination of the oropharynge and adjacent tissues - which should be performed continuously, oral hygiene with saline and chlorhexidine, cryotherapy and the use of chamomile tea.

The limitations of the study are related to the larger dimension of nursing researchers with the theme, because it is still little explored, either by national or international researchers. However, it is believed that this study promotes new ways in relation to the theme and that such care can be instituted in the work process.

REFERENCES

1. Nicolatou-Galitis O, Sarri T, Bowen J, Di Palma M, Kouloulis VE, Niscola P, et al. Systematic review of anti-inflammatory agents for the management of oral mucositis in cancer patients. *Support Care Cancer*. 2013; 21(11):3179-89.
2. Lalla RV, Saunders DP, Peterson DE. Chemotherapy or radiation-induced oral mucositis. *Dent Clin North Am*. 2014; 58(2):341-9.
3. Assis YMS, Alves KYA, Santos VEP. Evidências científicas do cuidado de enfermagem e segurança do paciente em unidade de internação oncológica. *Rev Cuba Enferm*. 2016; 32(3):442-58.
4. McCrae N. Whither nursing models? The value of nursing theory in the context of evidence-based practice and multidisciplinary health care. *J Adv Nurs*. 2012; 68(1):222-9.
5. Beyea SC, Slattery MJ. Historical perspectives on evidence-based nursing. *Nurs Sci Q*. 2013; 26(2):152-5.
6. Moher D, Liberati A, Tetzlaff J, Altman DG. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *PloS Med*. [Internet]. 2009 [citado em 24 jan 2019]; 6(7):e1000097. Disponível em: <https://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1000097> 1599
7. Spolarich AE. Risk management strategies for reducing oral adverse drug events. *J Evid Based Dent Pract*. 2014; 14(Suppl):87-94.
8. Lopes LD, Rodrigues AB, Brasil DRM, Moreira MMC, Amaral JG, Oliveira PP. Prevenção e tratamento da mucosite em ambulatório de oncologia: uma construção coletiva. *Texto & Contexto Enferm*. 2016; 25(1):45-9.
9. Peterson DE, Ohrn K, Bowen J, Flidner M, Lees J, Loprinzi C, et al. Systematic review of oral cryotherapy for management of oral mucositis caused by cancer therapy. *Support Care Cancer*. 2013; 21(1):327-32

10. Brito CA, Araújo DS, Granja JG, Souza SM, Lima MAG, Oliveira MC. Efeito da clorexidina e do laser de baixa potência na prevenção e no tratamento da mucosite oral. *Rev Odontol UNESP*. 2012; 41(4):236-41
11. Nascimento DM, Nóbrega MML, Carvalho MWA, Norat EM. Diagnósticos, resultados e intervenções de enfermagem para clientes hospitalizados submetidos à prostatectomia. *Rev Eletrônica Enferm*. [Internet]. 2011 [citado em 24 jan 2019]; 13(2):165-73. Disponível em: <https://www.revistas.ufg.br/fen/article/view/11117>
12. Araújo SNM, Luz MHBA, Silva GRF, Andrade EMLR, Nunes LCC, Moura RO. O paciente oncológico com mucosite oral: desafios para o cuidado de enfermagem. *Rev Latinoam Enferm*. 2015; 23(2):267-74
13. Santos NAR, Santos ATC, Silva RP. Coping strategies of nurses in the care of patients with head and neck neoplasms. *Rev Esc Enferm USP*. 2016; 50(4):569-78.
14. Chedid HM, Franzi AS, Amar A, Rapoport A, Dedivitis RA, de Carvalho MB. Mudança do paradigma no carcinoma espinocelular recidivado de boca e orofaringe: palição versus quimioradioterapia. *Rev Bras Cir Cabeça Pescoço*. 2008; 37(1):32-6.
15. Santos MCM, Raimundo DD, Soares E, Santos Guedes MT. Assistência aos portadores de câncer de laringe sob a perspectiva da integralidade: abordagem do enfermeiro no Inca. *Rev Pesqui Cuid Fundam*. [Internet]. 2015 [citado em 24 jan 2019]; 7(3):2649-658. Disponível em: http://www.seer.unirio.br/index.php/cuidadofundamental/article/view/3639/pdf_1599
16. Guimarães RCR, Gonçalves RPF, Lima CA, Torres MR, Oliveira e Silva CS. Ações de enfermagem frente às reações a quimioterápicos em pacientes oncológicos. *Rev Pesqui Cuid Fundam*. [Internet]. 2015 [citado em 24 jan 2019]; 7(2):2440-452. Disponível em: http://www.seer.unirio.br/index.php/cuidadofundamental/article/view/3589/pdf_1559
17. Araújo SN, Luz MHBA, de Almeida LHRB, Silva GRF, Neto JMM, Costa ACMMA. Oncological patients and the nursing field: ration between the oral mucositis grade and the implemented therapeutic. *Rev Pesqui Cuid Fundam*. [Internet]. 2013 [citado em 24 jan 2019]; 5(4):386-95. Disponível em: http://www.seer.unirio.br/index.php/cuidadofundamental/article/view/2624/pdf_891
18. Moura LKB, Marcaccini AM, Matos FTC, de Sousa ÁFL, Nascimento GC, Moura MEB. Revisão integrativa sobre o câncer bucal. *Rev Pesqui Cuid Fundam*. [Internet]. 2014 [citado em 24 jan 2019]; 6(5):164-75. Disponível em: http://www.seer.unirio.br/index.php/cuidadofundamental/article/view/4516/pdf_1511
19. Raimundo DD, Guedes MTS, Luzial NS, Peixoto MGS, Santos MCM, Silva CC. Assistência de enfermagem a clientes com câncer na cabeça e no pescoço com ênfase nos tumores de cavidade oral no estado do Rio de Janeiro. *Rev Pesqui Cuid Fundam*. [Internet]. 2014 [citado em 24 jan 2019]; 6(4):1496-504. Disponível em: http://www.seer.unirio.br/index.php/cuidadofundamental/article/view/2088/pdf_979
20. Ribeiro JP, Cardoso LS, Pereira CMS, Silva BT, Bubolz BK, Castro CK. Assistência de enfermagem ao paciente oncológico hospitalizado: diagnósticos e intervenções relacionadas às necessidades psicossociais e psicoespirituais. *Rev Pesqui Cuid Fundam*. [Internet]. 2016 [citado em 24 jan 2019]; 8(4):5136-142. Disponível em: http://www.seer.unirio.br/index.php/cuidadofundamental/article/view/4016/pdf_1

RECEIVED: 17/01/2019
 APPROVED: 11/07/2019
 PUBLISHED: 12/2019