

Nurses' role in the non-pharmacological pain treatment in cancer patients

O papel da enfermagem no tratamento não farmacológico da dor de pacientes oncológicos

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ABSTRACT

BACKGROUND AND OBJECTIVES: Non-pharmacological therapy is important and complements the pharmacological treatment to relieve the pain and anxiety in many patients, and it is also classified as complementary and integrative therapy. The objective of this study was to describe the nurses' role in non-pharmacological pain management in cancer patients.

CONTENTS: Integrative literature review. Scientific publications indexed in the Medline, Integrated Building Environmental Communications System, LILACS and Nursing databases, accessed through the Virtual Health Library in October 2016, were evaluated. Following the inclusion criteria, seven studies were selected, published between 2006 and 2016. Data were subjected to content analysis. Based on this analysis, the articles were described in three categories: 1) the perception of nurses; 2) the perception of the patient, and 3) nursing actions.

CONCLUSION: It was evident the fundamental and important role of the nursing staff in the non-pharmacological pain management in cancer patients. Both patients and family members should actively participate in the treatment. It is recommended the development of reliable and effective communication links, in addition to the implementation of educational actions involving the triad patient-family-team.

Keywords: Neoplasia, Nursing care, Pain management, Perception of pain.

RESUMO

JUSTIFICATIVA E OBJETIVOS: A terapia não farmacológica é importante e complementa o tratamento farmacológico no alívio da dor e da ansiedade em muitos pacientes, e também é classificada como terapia complementar e integrativa. O objetivo deste estudo foi descrever o papel da enfermagem no manuseio não farmacológico da dor de pacientes oncológicos.

CONTEÚDO: Revisão integrativa da literatura. Foram avaliadas publicações científicas indexadas nas bases de dados Medline, *Integrated Building Environmental Communications System*, LILACS e Base de Dados em Enfermagem, acessadas por meio da Biblioteca Virtual em Saúde, em outubro de 2016. Seguindo os critérios de inclusão, selecionaram-se sete estudos com publicações entre 2006 e 2016. Os dados foram submetidos à análise de conteúdo temática. Com base nessa análise, os artigos foram descritos em três categorias: 1) a percepção do enfermeiro; 2) a percepção do paciente; e 3) as ações de enfermagem.

CONCLUSÃO: Evidenciou-se o fundamental e importante papel da equipe de enfermagem no manuseio não farmacológico da dor do paciente oncológico. Tanto pacientes quanto familiares devem participar de forma ativa do tratamento. Recomenda-se o desenvolvimento de vínculos de confiança e eficaz comunicação, além da implementação de ações educativas envolvendo a tríade paciente-família-equipe.

Descritores: Cuidados de enfermagem, Manuseio da dor, Neoplasias, Percepção da dor.

INTRODUCTION

Cancer can be defined as the uncontrolled growth of cells that can reach different regions of the body. The disease represents one of the leading causes of death in the world population. About 8.2 million people die every year due to the disease, accounting for 13% of global deaths. In addition, it is estimated a 70% increase in cancer cases over the next two decades¹. There are more than 100 types of cancer that require specific diagnoses and treatments. The areas most commonly affected in men are the lungs, prostate, intestine (colorectal region), stomach and liver; and in women, breast, intestine (colorectal region), lungs, uterus and stomach¹.

In Brazil, the *Instituto Nacional de Câncer José Alencar Gomes da Silva* (INCA) estimated an increase of almost 600,000 new cancer cases in 2016. According to the Institute, this can be attributed partly to an increase in life expectancy, urbanization, and globalization. Regarding the types of cancer in the country, the highest incidences are those of non-melanoma, prostate and breast².

Pain prevalence in cancer patients increases with the progression of the disease. Pain is present in about 30% of cancer cases during treatment; and in cases where the disease has spread, around 60 to 90% of the patients have pain. On the other hand, in about 80 to 90% of the cases, pain can be completely relieved, and an acceptable relief level can be achieved in most other cases³.

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Living with cancer brings with it important daily changes that require personal and family reorganization in the social, organic, emotional and spiritual spheres. In this context, nursing is inserted in these patients care, aiming at visualizing this population needs, as well as rethinking a care program directed to the current problem⁴.

Pain control and relief are a multidisciplinary team attribution. As the nursing team is the professional class who remain most of the time close to the patient, being responsible for their care, it is clear their important role in pain evaluation and management of the cancer patient, especially non-pharmacological management⁵. It was considered as a research question: do nurses have knowledge about pain management with non-pharmacological measures? Thus, it is evident the importance of adequate pain management in this class of patients.

The purpose of this study was to describe the nursing role in the non-pharmacological pain management in cancer patients.

CONTENTS

This is an integrative review of the literature, with a qualitative approach to identify scientific papers on the nursing role in the non-pharmacological pain management in cancer patients. To conduct the study, the six steps for integrative review were followed, namely: selection of the research question; inclusion criteria definition of studies and samples selection; table format representation of selected studies; critical analysis of the results, identification of differences and conflicts; clear interpretation of the results to be reported, the evidence found.

For the selection of the studies, we searched the publications indexed in Medline (Medical Literature and Retrieval System on Line), IBECs (Integrated Building Environmental Communications System), LILACS (Latin American and Caribbean Health Sciences) and the Nursing Databases (BDENF), accessed through the Virtual Health Library (VHL), in October 2016.

To search for the articles in the databases, the following Health Science Descriptors (DeCS) were used: "Nursing Assessment," "Nursing Care," "Pain," "Pain Measurement," "Pain Perception," "Pain Management," "Neoplasms," "Cancerism".

The following inclusion criteria were considered: studies involving cancer patients, including the evaluation of the nursing role in the non-pharmacological management of cancer; including only adult patients, all study designs, such as randomized clinical trials, observational studies, qualitative studies, case-control, cross-sectional studies, case reports, systematic reviews and meta-analyzes, and literature reviews, published between 2006 and 2016, in Portuguese. As for the exclusion criteria, books chapters, dissertations, thesis and publications with duplicate data were considered illegible for the study. For the potentially eligible studies, the full texts were searched for a thorough examination. Studies that met the previously established eligibility criteria were included.

For the data extraction of the selected articles, we used an instrument designed for this purpose, with title, authors, journal and year of publication, type of research, place of research, objective, methods, main results and conclusion. The material was grouped and compared by content similarity. Three analysis categories were constructed: the nurse's perception, the patient's perception, and the nursing actions. The searches conducted in the electronic databases resulted in 2034 citations, which included studies related to pain, not only in the nursing field or addressing non-pharmacological treatment. Of the 2034 articles, 61 were published between 2006 and 2016 in the Portuguese language. Of those, 36 were duplicate texts, remaining 25 citations for titles and abstracts analysis. Of the 25 studies, 10 were excluded because they did not meet the eligibility criteria, remaining 15 articles for the full text analysis. Among them, seven met the eligibility criteria previously defined and were included in this study (Figure 1). The seven articles included were published between 2008 and 2015 and used a qualitative methodology, one of which is a literature review⁶. Participants included nurses as well as cancer patients. Such information, as well as each study purpose and location, are shown in table 1.

As previously described, based on the results of these studies, three categories were organized: the nurse's perception, the patient's perception, and the nursing actions. Table 2 sum-

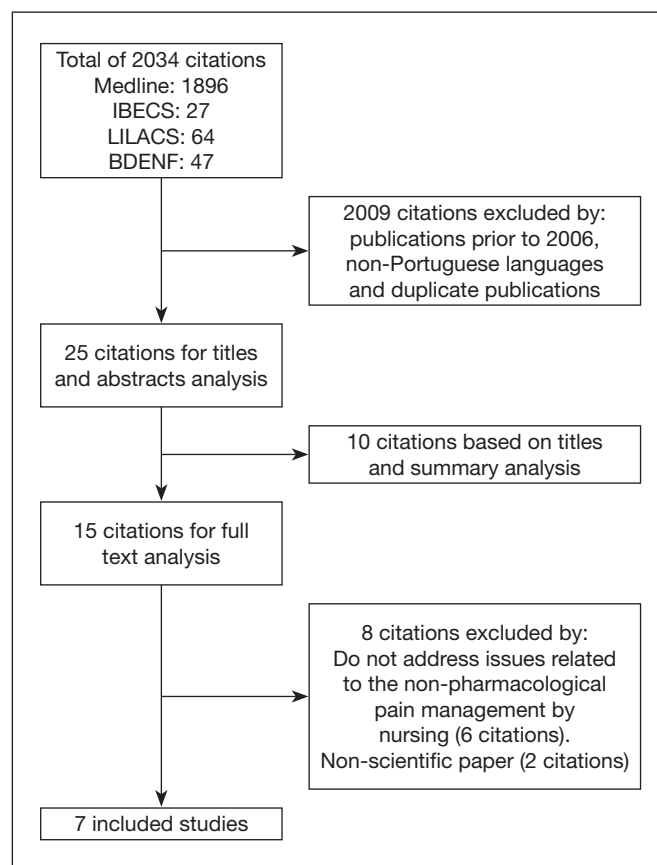


Figure 1. Study selection flowchart

Source: authors.

Table 1. Characteristics of the studies included

Authors	Purposes	Studies design	Locations	Participants
Stübe et al. ⁷	Apprehending the nurses' perception who works in Oncology, referring to the patient's pain and knowing the actions for their handling.	Descriptive, qualitative study.	Oncologic clinic, chemotherapeutic and radiotherapeutic units of a general hospital in Rio Grande do Sul.	7 nurses
Rennó e Campos ⁸	Analyzing the patients' perception of an oncology ambulatory about professional-patient interpersonal communication.	Exploratory qualitative case study.	High complexity Oncology unit from south of Minas Gerais.	13 oncologic patients
Macedo, Romanek e Avelar ⁹	Reflecting on the pain management in the immediate postoperative period of cancer patients by the perioperative nursing team.	Descriptive, qualitative study. Literature review.	NA	NA
Fernandes et al. ¹⁰	Knowing the nurse's perception of the cancer patient under palliative care.	Exploratory qualitative study.	Hospital treating cancer patients under palliative care in the city of João Pessoa, Paraíba.	9 nurses
Waterkemper e Reibnitz ¹¹	Revealing the nurses' conceptions and contributions on the pain evaluation in cancer patients under palliative care, through an education at work proposal based on the problematic education presuppositions of Paulo Freire.	Qualitative research of convergent-assistance type.	Palliative Care Unit of the Oncology Research Center, in Florianópolis, Santa Catarina.	6 nurses
Leal et al. ¹²	Knowing and analyzing the evaluation and register means performed by nurses in the pain context of cancer patients.	Qualitative research.		
Nobre ¹³	Identifying how nurses perceive chronic pain in cancer patients and analyzing nursing care for these patients.	Qualitative, descriptive, exploratory.		

marizes the articles distribution identified in the categories, followed by the description of the findings in each of them.

Table 2. Articles distribution identified in the categories

Category order	Category name	Included articles
Category 1	The nurse's perception	Stübe et al. ⁷ Fernandes et al. ¹⁰ Waterkemper e Reibnitz ¹¹ Nobre ¹³
Category 2	The patient's perception	Rennó e Campos ⁸
Category 3	The nursing actions	Stübe et al. ⁷ Macedo, Romanek e Avelar ⁹ Waterkemper e Reibnitz ¹¹ Leal et al. ¹²

THE NURSE'S PERCEPTION

The pain experienced by the cancer patient goes beyond the physiological scope, extending to the psychological and social dimensions and is perceived by the nurses through verbal reports, facial expression and through the eyes^{7,11}. Emotional pain, also called soul pain, psychological or emotional or spiritual pain, is also often mentioned by nurses. This is an immeasurable aspect, which can be manifested through denial mechanisms regarding diagnosis and treatment. In this context, the perception of the nursing team regarding the cancer patient's attitudes is of great importance, since it can

contribute to the planning of fast and adequate actions, taking into account individuality, uniqueness, lifestyle, beliefs and cultural values⁷.

With regard to terminal cancer patient pain relief, nurses reported pain and suffering relief to improve the patient's quality of life. Palliative care promotes comprehensive, humanized and multidisciplinary care and aims to minimize the patient and family's longings and provide therapeutic support. In this context, communication seems to be a highly relevant tool in palliative care, because it promotes adequate assistance so that the patient reaches his final destination with dignity¹⁰. In addition, it is important to emphasize that pain is understood as a stress agent not only for the patient but also for the team and the family⁷.

THE PATIENT'S PERCEPTION

For the cancer patient, the importance of communication seems to be a consensus in order to promote comfort, calm, alleviate symptoms, diminish distress and provide balance. In this sense, inadequate or noisy communication with the patient can cause distress, fears, anxiety, among other negative feelings, and may cause interference in the assistance⁸.

THE NURSING ACTIONS

In order to minimize the cancer patient pain, the nurse must be able to perform the appropriate patient assessment in order to identify the pain causes and possible nursing behaviors. Stübe et al.⁷ identified as the most common conducts the administra-

tion of analgesics, especially opioids, as well as care regarding dosage, indications, schedules, especially at the patient's home and guidelines to the nursing team. In the same study, other conducts were also mentioned, such as heat application, decubitus changes and walking stimulus; besides care, individualized care, comfort measures and proximity to the patient⁷.

In addition, the importance of the work in a multidisciplinary team is emphasized, favoring patient's integral assistance, as well as educational actions with this team and family integration in the care of cancer patients⁷. A dialogical relationship that aims to listen to the patient and his family is reinforced by the bond and trust between the professional and the patient/family^{9,11}.

Regarding the ways to evaluate pain, one study by Waterkemper and Reibnitz¹¹ did not identify any specific instrument to evaluate pain in cancer patients among the nurses interviewed; in addition, the items identified in the nursing records were considered as low-comprehensive. Therefore, pain evaluation occurs in an individualized and unsystematic way, subjectivity being pointed out as the major obstacle¹¹. Macedo, Romanek and Avelar⁹ identified, through a literature review, the need to use specific instruments for pain evaluation in order to guide the treatment. However, it does not provide descriptions of what instruments should be used. Regarding pain management in the postoperative period in cancer patients, it was found that sensitivity and perception of the nursing team are fundamental⁹.

The pain experienced by the patient with cancer extends beyond the physiological pain to the psychological, social and spiritual spheres. The implementation of appropriate nursing approaches depends on the sensitivity and acumen for the correct pain assessment, which involves pharmacological and non-pharmacological actions.

In the context of pharmacological actions to relieve cancer pain, the nursing team should be able to manipulate drugs, especially opioids. Proper management of drugs and materials is extremely important and can directly influence the patient's clinical outcomes, reduce hospital stay and costs^{9,14}.

However, adequate pain control involves multiple interventions in order to act on the various pain components. Non-pharmacological interventions include a range of educational, physical, emotional, behavioral, and spiritual measures. In general, they are inexpensive and simple to use measures that can be taught to patients and caregivers. However, it is the nursing assignment to choose the interventions for each patient, based on an adequate evaluation¹⁵.

In the context of pain evaluation, the absence of standards by the nursing teams for the adequate assessment of patient pain was evidenced in this study. It is considered that these actions can be improved more specifically with the use of the *Sistematização da Assistência de Enfermagem* (SAE) (Systematization of Nursing Care)⁷. The nursing process is systematic, once it consists of five steps: investigation, diagnosis, planning, implementation, and evaluation¹⁶.

It is known that pain assessment is complex, as it is a subjective symptom, influenced not only by the pathophysiological

process but also by emotion and culture. In this context, international organizations such as the Joint Commission Accreditation of Healthcare Organizations (JCAHO), the American Pain Society (APS) and the World Health Organization (WHO) propose assessment and treatment policies based on the need of a systematic implementation of pain assessment and recording routines in health institutions. APS suggests the incorporation of pain assessment in the routine of vital signs check, thus creating the expression "Pain: 5th Vital Sign", in an attempt to make health professionals aware of the importance of assessing this parameter¹⁶.

The role of educational actions together with the multidisciplinary team is also highlighted, through the awareness of the importance to identify the causes that generate noise, excessive light, and parallel conversations, which may intensify the patient's discomfort and pain in the hospital environment¹⁷.

The significant role of communication to manage the pain in cancer patients was also evidenced in this study. Communication can be defined as a process of understanding and sharing messages that can interfere with the behavior of the people involved. It is a fundamental interpersonal competence in the context of nursing care, which will allow the adequate attendance of the patient's needs⁸. From the patient's perspective, the balance in the health-disease process and the humanization in interpersonal relationships were achieved when the communication was established⁸. Many times, pain is inadequately managed due to the difficulty of hearing the patient's complaint¹¹.

The patient-family-team triad needs to be built with confidence and bond for the treatment success. In the face of the complexity and variability of the problems arising from cancer treatment, the clinical, social, psychological, spiritual and economic aspects associated with cancer should be considered, as well as family members care⁷. The family integration into the cancer patient's care is of extreme importance in several initiatives aimed at minimizing pain, including educational actions regarding home care. The nursing team should encourage the family to be present and be active in the process of caring and in the confrontation of the disease¹⁸.

CONCLUSION

Nurses recognize the existence of non-pharmacological measures for pain relief. However, the huge workload coming from many fronts end up using too much care time of these professionals, and pharmacological measures are, in many cases, the first choice to treat patients' pain. From the non-pharmacological measures that can be employed and that nurses are aware of for pain treatment, the following stand out: patient orientation with regard to protective postures, emotional support, massage, music therapy, Reiki, relaxing massage, heat or cold application, use of cushions, mechanical immobilization, among other measures that can be implemented by nurses, their teams and family members, contributing decisively to the pain relief of hospitalized patients.

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