

# Occurrence of pain in oncological patients outside therapeutic possibility

Presencia de dolor en pacientes oncológicos fuera de la posibilidad terapéutica

Ocorrência da dor nos pacientes oncológicos fora de possibilidade terapêutica

## ABSTRACT

The objective was to evaluate the occurrence of cancer-associated pain in cancer patients out of therapeutic possibilities. This is an integrative review in the databases MEDLINE, BDNF - Enfermagem and LILACS, in articles in English, Spanish and Portuguese, from 2009 to 2019, selecting 06 articles through exploratory and critical reading of the titles, abstracts and results achieved in the studies. The studies showed differences in relation to the methodology and instruments used. The pain was mainly related to the presence of metastases, such as bone. Pain is present in most cases of cancer patients out of the therapeutic possibility of the studies analyzed, accompanied by various unwanted signs and symptoms, such as tiredness, sadness, feelings of worthlessness and anguish.

**DESCRIPTORS:** Palliative Care; Oncological pain; Epidemiology.

## RESUMEN

El objetivo de este estudio fue evaluar la aparición de dolor asociado al cáncer en pacientes con cáncer fuera de las posibilidades terapéuticas. Se trata de una revisión integradora en las bases de datos MEDLINE, BDNF - Enfermagem y LILACS, en artículos en inglés, español y portugués, de 2009 a 2019, seleccionando 06 artículos mediante lectura exploratoria y crítica de los títulos, resúmenes y resultados obtenidos en los estudios. Los estudios mostraron diferencias en cuanto a la metodología y los instrumentos utilizados. El dolor se relacionó principalmente con la presencia de metástasis, como hueso. El dolor está presente en la mayoría de los casos de pacientes oncológicos fuera de la posibilidad terapéutica de los estudios analizados, acompañado de diversos signos y síntomas no deseados, como cansancio, tristeza, sentimientos de inutilidad y angustia.

**DESCRIPTORES:** Cuidados Paliativos; Dolor oncológico; Epidemiología.

## RESUMO

Objetivou-se avaliar a ocorrência da dor associada ao câncer em pacientes oncológicos fora de possibilidade terapêutica. Trata-se de uma Revisão integrativa nas bases de dados MEDLINE, BDNF - Enfermagem e LILACS, em artigos nos idiomas inglês, espanhol e português, no período de 2009 a 2019, selecionando-se 06 artigos por meio de leitura exploratória e crítica dos títulos, resumos e resultados alcançados nos estudos. Os estudos apresentaram diferenças em relação à metodologia e aos instrumentos utilizados. O quadro algíco foi relacionado principalmente à presença de metástases, como por exemplo, a óssea. A dor está presente na maior parte dos casos de pacientes com câncer fora de possibilidade terapêutica dos estudos analisados, acompanhada de vários sinais e sintomas indesejados, como cansaço, tristeza, sentimentos de inutilidade e angústia.

**DESCRIPTORIOS:** Cuidados Paliativos; Dor Oncológica; Epidemiologia.

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**INTRODUCTION**

**C**ancer is a chronic-degenerative disease, defined as a set of more than 100 diseases that have in common the disordered growth of cells, affecting adjacent tissues and structures. Considered a serious public health problem, cancer has a wide epidemiological range, being the second leading cause of death in Brazil. <sup>(1)</sup>

The diagnosis of cancer brings with it not only the finding of the installation of a disease with high morbidity, but the experience of pain, the change in self-image, the possibility of death, the distance from the family and working life, this emotional suffering contributes to a worse evolution of the disease. <sup>(2)</sup>

According to the International Association for the Study of Pain - IASP, pain is an unpleasant sensory and emotional experience related to actual or potential tissue damage, or described in terms of such damage. <sup>(3)</sup> Each individual learns how to apply pain through experiences related to injuries in early life and, as this symptom progresses, different forms of manifestation appear, which may or may not be verbally expressed by those who feel the pain. <sup>(4)</sup>

However, the inability and/or difficulty to communicate verbally does not negate the possibility that an individual is in pain and needs adequate treatment for its relief. <sup>(4)</sup> It is important to

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understand patients in their multidimensionality in biological, psychological, social and spiritual aspects, providing comprehensiveness, with respect to their subjectivity, principles and personal and family beliefs. <sup>(5)</sup>

For Oliveira et al 2020, humanized care, with comfort measures, therapeutic touch, can alleviate pain and meet the basic needs of cancer patients. Spiritual practice is also one of the strategies used to help relieve the physical pain of patients with cancer. <sup>(6)</sup>

Psychosocial aspects such as: culture, religion and family; psychological and psycho-behavioral exert a great influence on pain perception and its consequences, compromising the central neuromodulation of afferent stimuli; therefore, this structural support is important during cancer pain treatment. Therefore, the care of the health team, in the face of cancer patients with pain, implies the implementation of pharmacological and non-pharmacological therapies. <sup>(7)</sup>

The first based on the choice of analgesics respecting the analgesic ladder, suggested by the World Health Organization (WHO) and the second, a set of adjuvant interventions, low-cost, easy to apply and minimal undesirable effects that collaborate with the propaedeutics and provides an improvement in the quality of life. <sup>(8)</sup> Thus, the health team seeks to identify the

pain and measure pain, as well as ensuring interventions that encompass the multidimensionality of the individual, performing actions compatible with the reality of each patient, in search of a positive result for the client, with reduced pain from cancer.<sup>(8)</sup>

However, to provide specific interventions for oncologic pain, it is also important to understand the origin of pain and the factors related to its occurrence, with emphasis on onco-palliative aspects that are linked to this theme.<sup>(8)</sup> Thus, this article aims to assess the occurrence of pain in cancer patients undergoing palliative care, through a literature review.

## METHOD

This is an integrative review, using the PICO strategy, an acronym for Patient, Intervention, Comparison and Outcomes, which is based on the development of a guiding question to guide the search for evidence.<sup>(9)</sup>

In the construction of this study, the following steps were taken: 1) Selection of the guiding question; 2) Determina-

tion of inclusion and exclusion criteria and literature search; 3) Determination of information to be extracted and categorization of studies; 4) Evaluation of the studies included in the integrative review; 5) Interpretation of results

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and; 6) The presentation of the review with a synthesis of the knowledge produced.<sup>(10)</sup>

Thus, the PICO strategy was used, checking: a P, patients in palliative cancer care; to I, cancer-related pain; at C, the comparison with the results obtained in the studies; and to O, the expected result in the survey.

In this sense, the defined question was: "What is the occurrence of pain in cancer patients undergoing palliative care?"

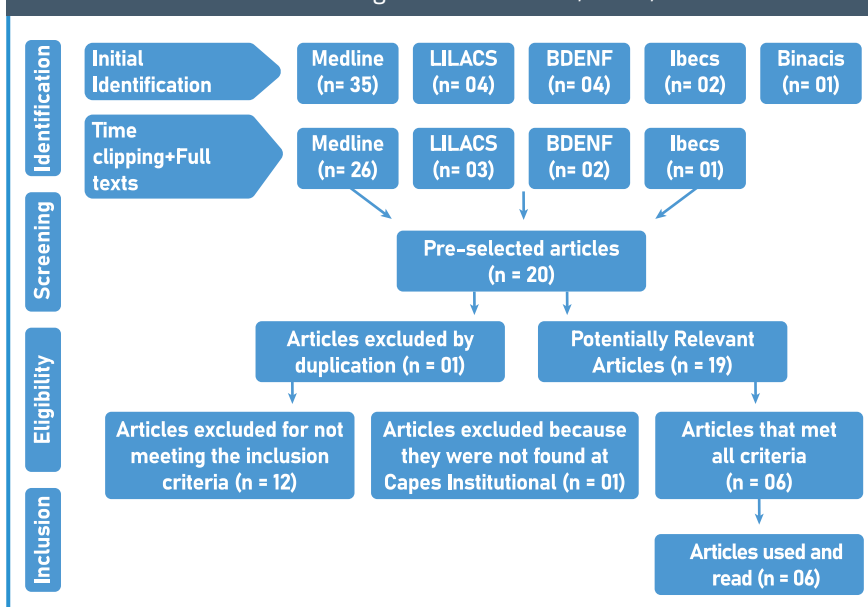
For this, a search was performed in the following databases: MEDLINE, BDENF – Nursing and LILACS, using the indexed descriptors "Cuidados Palliativos, Dor Oncológica e Epidemiologia" and their correspondents in English "Palliative Care, Oncology Pain and Epidemiology" associated with the Boolean AND operator, from a single crossing.

It is noteworthy the delimitation of the time frame of the last ten years, that is, from 2009 to 2019. The inclusion criteria were: studies in which the population consisted of adult patients in palliative cancer care; studies published in Portuguese, English or Spanish, registered in the databases until December 2019.

Studies with children under 18 years old, which did not contemplate the thematic triad "oncological pain, palliative care and nursing" were excluded, as well as those that addressed "grief" and "pediatric oncology" (given the specificity of the population), dissertations of master's, doctoral theses, editorials, conference proceedings, guidelines and studies that addressed the therapeutic possibility.

Forty-five articles were found that matched the theme and, after applying the time frame and selected studies available in full, the amount resulted in 32 articles. Of these, 04 were repeated in the verified databases and 21 were excluded for being in line with the exclusion criteria. Of the 06 articles selected, it was not possible to access 1 through the Institutional Capes Platform, according to flowchart 1.

Fluxograma 1. Fluxograma PRISMA do processo de busca e seleção dos estudos incluídos na revisão integrativa. Brasília-DF, Brasil, 2019.



Source: the authors, 2019

The studies used different methodologies and primary data, with the following types of research: randomized (02), cohort (02), transversal-qualitative (01), longitudinal-analytical (01). The articles were selected after reading the title and abstract, excluding duplicates, those that did not meet the inclusion criteria and those that were in accordance with the exclusion criteria.

The process of analyzing the articles occurred through exploratory and descriptive reading of titles, abstracts and results found on the occurrence of pain in cancer patients in palliative care. The interpretation and discussion were carried out in a descriptive way, depending on the objective of the research, which requires a qualitative reading of the findings.

After reading, the levels of evidence were verified, which were ordered according to the classification of the studies, as follows: Level I - evidence from meta-analysis of randomized clinical trials (RCT); Level II - evidence resulting from well-designed clinical trials without randomization; Level III - evidence from descriptive and qualitative studies; and Level IV - evidence originating from a single descriptive or qualitative study.<sup>(11)</sup>

## RESULTS

After analyzing the articles found in the database, 06 articles were considered for reading, carried out in 04 countries, with Germany and Canada having the highest number of publications. Three were published in English, two in German, one in Italian and one in Spanish.

The selected studies were carried out with cancer patients in palliative care who presented with pain. The total number of study participants was 3,697. Several instruments were used to identify and assess pain and its repercussions, such as Verbal Pain Scale, Visual Analog Scale (VAS), Valoración de Dolor Total (VDT) and performan-

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ce scores from the Eastern Cooperative Oncology Group (ECOG).

The variety of instruments may be related to the diversity of countries involved in this study. Regarding demographic characteristics, the percentage of male patients in palliative cancer care was above 60%.

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When evaluating the existential suffering of patients in palliative cancer care, even participating in pain relief care and having adequate instruments to alleviate personal pain and suffering, it was identified in the data that all patients will experience pain and suffering related to the advanced cancer, which will be associated with an anguish of being separated, of feeling tired, sad and with a sense of loss of usefulness.<sup>(13)</sup>

The evaluation of pain in patients with advanced cancer pain level with and without a diagnosis of delirium in elderly patients, it was possible to identify that, among this patient profile, the mean portion of the days on which the patient complains of pain was 60% , and had no significant relationship to the case of delirium. In contrast, when evaluating the clinical benefit of High-density polyethylene (Re-HEDP) in routine care of palliative care to cancer clients. It was identified that there was a 69% reduction in the painful sensation after application of the Re-HEDP injection.<sup>(14)</sup>

Treatment with cannabis in irreversible cancer patients who have pain complaints, according to a study that aimed to discover the efficacy and safety of this therapy, in its final result concluded that pain was found in 77% of patients, requiring therapy with use

of cannabis to assist in the client's treatment. <sup>(15)</sup>

The articles were characterized by year of publication, country, authors, study objectives, methodology, number of participants, main results and level of evidence, as shown in chart 1.

## DISCUSSION

According to Alt-Epping et al. <sup>(12)</sup>

showed that pain is one of the physical symptoms most reported by cancer patients in palliative care, varying between the extremes: mild and high intensity. Cancer patients with no therapeutic possibility may present pain related to metastases, such as bone metastases. This argument is defended by Chow et al, <sup>(13)</sup> where the authors associate the painful sensation to the individual's gender, showing that women reported worse scores in painful places.

Corroborating with Chow et al the study by Overbeek et al <sup>(14)</sup> pointed out bone metastasis as the main cause of pain associated with cancer in palliative care. On the other hand, the authors proposed the use of the radiopharmaceutical Re-HEDP, generating a 69% reduction in the patients' painful sensation.

The study by Mah et al. <sup>(15)</sup> showed that oncologic patients undergoing

Chart 1 - Characterization of articles selected for integrative review. Brasília, DF, Brazil, 2019.

AUTHOR/ YEAR. COUNTRY	OBJECTIVE(S)	METHOD	POPULATION	SUMMARY OF RESULTS	NL.E.
Alt-Epping, 2016, Alemanha	Assess the symptoms and needs of patients suffering from incurable cancer.	Multicenter, longitudinal, prospective cohort study.	22 patients with incurable cancer.	Pain is identified as one of the physical symptoms most reported by patients in the study, varying between extremes.	IIV
Show, 2017, Canadá	Check whether the intensity of the cancer-related pain sensation is associated with the patient's gender.	Randomized Clinical Trial.	298 patients undergoing palliative radiotherapy treatment.	Study patients presented pain related to metastases. However, women reported worse scores on painful parts.	II
Mah, 2016, Canadá	To compare health care workers' cancer pain trials among elderly patients with more advanced cancer with and without a diagnosis of delirium.	Retrospective cohort study.	149 patients admitted with advanced cancer, ≥65 years of age, in palliative care.	The average proportion of days patients were in pain was 60%. There was no significant relationship between pain and delirium.	IIV
Muñoz e Monje, 2010, Chile	Assess the existential suffering of patients in palliative cancer care who participated in care for pain relief and propose an effective instrument to alleviate pain and suffering at the end of life.	Cross-sectional, qualitative study using the Valoración de Dolor Total (VDT) instrument.	211 patients in palliative cancer care.	All patients in the study had pain and suffering related to advanced cancer, associated with separation anguish, tiredness, sadness and feelings of worthlessness.	IIV
Overbeek, 2016, Alemanha	Evaluate the clinical benefit of Re-HEDP in routine clinical care in palliative cancer care.	Randomized Clinical Trial.	47 patients in palliative cancer care.	Patients had pain related to cancer. There was a 69% reduction in pain sensation after a Re-HEDP injection.	II
Schleider, 2018, Israel	Characterize the epidemiology of cancer patients receiving medical treatment for cannabis and describe the efficacy and safety of this therapy.	Cohort study - prospective.	2970 patients with advanced cancer.	Pain was evidenced in 77% of study participants, being identified as the second cause for the need for therapy with cannabis.	IV

Source: the authors, 2019

palliation who present with delirium demonstrate an alternation of painful sensation on some days, but not on others. The authors suggest the use of a specific pain assessment instrument that can differentiate pain from oncological pathology and the painful sensation from delirium.

Schleider et al <sup>(16)</sup> pointed out the occurrence of pain associated with advanced cancer in 77% of the study patients, evidencing the painful sensation as the second cause for the need for cannabis therapy. The authors also point to cannabis as an effective palliative treatment to control the symptoms of malignancy.

To Muñoz & Monje <sup>(17)</sup> most patients

with advanced cancer experience pain and there is a need for a full evaluation of the pain. The authors were successful with the use of the Valoración de Dolor Total (VDT) instrument, which allowed for the monitoring of total pain relief, as well as the main causes and associations.

## CONCLUSION

Pain is present in most cases of cancer patients out of therapeutic possibility in the analyzed studies. The occurrence of cancer pain is mainly related to the presence of metastasis. There is still a need to develop specific instruments that allow health professionals to differentiate can-

cer-related pain from other painful sensations resulting from other pathologies.

Effective pain control therapies are indicated. In drugs, the radiopharmaceutical Re-HEDP was highly effective in controlling pain and, in non-drugs, it was used to assess the patient's needs and measure pain. It is also noteworthy that the results obtained in this integrative review may contribute to the knowledge about the occurrence of pain in cancer patients undergoing palliative care and its repercussions on health care. It is suggested to carry out field studies with the aim of evaluating, in a practical way, the occurrence of pain in cancer patients with no therapeutic possibility. ■

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