RESUMO

Objetivo: compreender o impacto da dor do câncer na saúde holística de pacientes. Método: revisão integrativa da literatura, a partir da questão norteadora: qual o impacto da dor do câncer na saúde holística de pacientes? A pesquisa dos artigos científicos foi desenvolvida nas bases de dados LILACS e MEDLINE, de 2008 a 2019. Selecionaram-se sete artigos como corpus de análise. Resultados: a dor do câncer limita a pessoa doente nas atividades cotidianas, altera a dinâmica familiar e afeta a pessoa de forma holística. Alguns doentes visualizam a dor oncológica como sintoma que os impulsiona a continuar a viver e expressam uma aprendizagem pessoal. Conclusão: a dor do câncer não afeta somente a dimensão física, como também as dimensões psicológica, social e espiritual, sendo caraterizada como dor total. Em virtude da natureza multidimensional da dor oncológica, o sucesso para o tratamento requer abordagem de equipa multidisciplinar.

Descritores: Dor do câncer; Pacientes; Oncologia; Acontecimentos que mudam a vida; Atividades cotidianas; Saúde holística.

ABSTRACT

Objective: to understand the impact of cancer pain on the holistic health of patients. Method: integrative literature review, based on the guiding question: what is the impact of cancer pain on patients' holistic health? The research of scientific articles was carried out in the LILACS and MEDLINE databases from 2008 to 2019. Seven articles were selected as the corpus of analysis. Results: cancer pain limits the sick person in daily activities, changes family dynamics, and holistically affects the person. Some patients see cancer pain as a symptom that drives them to continue living and express personal learning. Conclusion: cancer pain does affect not only the physical dimension but also the psychological, social, and spiritual dimensions, being characterized...
as total pain. Due to the multidimensional nature of cancer pain, successful treatment requires a multidisciplinary team approach.

**Descriptors:** Cancer pain; Patients; Medical oncology; Life change events; activities of daily living; Holistic health.

**RESUMEN**

**Objetivo:** comprender el impacto del dolor por cáncer en la salud holística de los pacientes.

**Método:** revisión integradora de la literatura, basada en la pregunta orientadora: ¿cuál es el impacto del dolor por cáncer en la salud holística de los pacientes? La búsqueda de artículos científicos se llevó a cabo en las bases de datos LILACS y MEDLINE de 2008 a 2019. Se seleccionaron siete artículos como corpus de análisis. **Resultados:** el dolor por cáncer limita la persona enferma en sus actividades diarias, cambia la dinámica familiar y afecta de manera integral a la persona. Algunos pacientes ven el dolor del cáncer como un síntoma que los impulsa a seguir viviendo y a expresar su aprendizaje personal. **Conclusión:** el dolor por cáncer afecta no solo la dimensión física sino también la psicológica, social y espiritual, caracterizándose como dolor integral. Debido a la naturaleza multidimensional del dolor por cáncer, el tratamiento exitoso requiere un enfoque de equipo multidisciplinario.

**Descriptores:** Dolor en cáncer; Pacientes; Oncología médica; Acontecimientos que cambian la vida; actividades cotidianas; Salud holística.

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**INTRODUCTION**

Over the centuries, pain has been explained by several theories. With no other apparent cause such as trauma, in ancient societies, the pain was attributed to evil spirits (which invaded the body) and gods' punishment. The theory of affects refers to the perception of pain as emotion or passion of the soul, alluding that pain is an emotion. The intensity of the pain depends on the meaning of the part involved, not including the physiological aspects.1
In defending the separation of body and soul, this theory was later rejected, and the specificity theory was proposed. This theory considers that pain messages are taken to a certain transmission in a straight line, from peripheral receptors to the brain.

Thus, the theory does not involve the psychological aspects of the perception of pain and variability of responses, thus being considered as having the same degree as the injury.

Afterward, the theory of patterns became evident, which explains that people responded differently to the same stimulus.

It is noteworthy that, although these theories have many limitations, they all contributed to the understanding of the mechanisms of pain and, in 1965, based on the existing relationships between the first theories, the gate theory emerged, which offers an important contribution to understanding the pain process, when declaring that pain is not a simple sensory experience. However, complex integration of affective and cognitive sensory dimensions and the perception of pain and reactions to it are not predictable and vary with each person and experience.

It is explained that some factors facilitate or inhibit the transmission of painful impulses, which lead to different reactions to pain between people and even in the same person, at different times, such as childhood experience, previous experiences, age, personality, cultural values, religious beliefs, attention and distraction, knowledge/understanding, degree of anxiety, tension, and fear.

It appears that defining pain, over time, has not been easy, as this is a complex and subjective phenomenon experienced in an individual level, and not directly observable. Currently, pain is defined as "whatever the experiencing person says it is, existing whenever the experiencing person says it does". Pain can be classified as acute or chronic. Acute pain is described as the pain of recent onset and limited duration, with usually temporal or causal definition. Chronic pain is defined as pain that is prolonged over time, usually with difficult temporal or causal identification, which generates suffering and can manifest itself through several characteristics, leading to several pathological stages.

It has been shown, through studies, that chronic pain produces physical, emotional, and social stress and generates work disability, changes in sleep, appetite, and family life. Thus, it is essential to assist the person in pain in a holistic manner. Being a person means having a physical, mental, and spiritual body. Thus, chronic pain is considered an total pain, described as a multidimensional phenomenon, that exceeds the limit of the physical dimension, and includes the psychological, social, and spiritual dimensions, as well as the cognitive, relational, professional and leisure spheres, which cooperate for a global pain experience. Thus, it requires a comprehensive, holistic, and multi-professional pain assessment.
It should be noted that chronic pain is prolonged over time, causes changes in the sick person (in various dimensions)\textsuperscript{1-3} and often affect cancer patients. Patients with cancer experiencing pain need to be fully assisted to achieve balance in the physical, social/family, and psychological dimensions.\textsuperscript{4}

It is understood, therefore, that cancer pain, which is a multidimensional experience, does not invade, does not lacerate, and does not just kill the body; but also occupies, afflicts, and declines the person globally, which justifies this study to understand better the impact of cancer pain on the holistic health of sick people.

**OBJECTIVE**

To understand the impact of cancer pain on the holistic health of patients.

**METHOD**

This is a bibliographic, descriptive, integrative review, developed according to the proposition of three Brazilian authors,\textsuperscript{5} composed of six stages: identification of the problem and definition of the general objective; definition of inclusion and exclusion criteria; establishment of the data to be extracted from the selected studies; evaluation of studies included in the review; analysis and discussion of results; and presentation of the review.\textsuperscript{5}

The following guiding question was defined: what is the scientific evidence on the impact of cancer pain on patients' holistic health?

The articles were searched in the Virtual Health Library (VHL), in the Latin American and Caribbean Health Sciences Literature (LILACS), and in the Medical Literature Analysis and Retrieval System Online (MEDLINE) database, using the following Health Sciences Descriptors (DeCS) combined: "Cancer pain "; "Patients"; "Oncology"; "Life-changing events"; "Daily activities"; and "Holistic health", with the use of the Boolean operator AND, combined with the main subject descriptor "Cancer pain".

The following inclusion criteria were considered: full text articles written in Portuguese, English, or Spanish; published from 2008 to 2019; and articles related to cancer pain and the holistic health of sick persons.

The advanced search conducted in the VHL database resulted in 720 records. Articles published outside the time frame, theses, dissertations, and gray literature were excluded, as well as duplicate studies (n = 52). Six hundred fifty-five articles were also eliminated by title and abstract screening, as they did not answer the research question. After a reflective and rigorous reading of the selected studies, six articles that did not meet the study design were also excluded.

Two reviewers independently screened the titles, abstracts, and descriptors to identify the articles that met the selection criteria to guarantee the rigor of the method and the reliability of
the results. Thus, seven articles were chosen to compose the present review because they contain information directed to the studied theme.

To present the results, we used the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow chart, which depicts the analysis conducted in this review, as shown in Figure 1.\(^6\)

The selected studies were evaluated for the level of evidence, according to the adapted Critical Appraisal Skills Program (CASP) tool, whose classification involves six levels: I - meta-analysis or systematic reviews; II - experimental or randomized studies; III - non-randomized or case-control studies; IV - descriptive studies, qualitative research, and bibliographic reviews; V - case reports or program evaluation data; VI - opinion of authors or reports of expert committees.\(^7\)

The analysis of the eligibility of the selected studies was carried out using the adapted Systematic review tool of the Critical Appraisal Skills Program (CASP), which is a critical reading skills program belonging to the Public Health Resource Unit (PHRU), developed by the University of Oxford, in 1993.\(^8\) This instrument is composed of “yes or no” responses, with scores of one and zero, respectively, for each question assessed, with the result being presented by the sum of all items. Studies were classified in two categories: A: studies that obtained from six to ten points, being considered as articles of good methodological quality and reduced bias; and B: studies that reached at least five points, classified as articles of satisfactory methodological quality, however, with an increased risk of bias.

Therefore, seven articles were included in this study classified in category A, as shown in Figure 1, which describes the steps for identifying, selecting, and retrieving the articles.
Seven articles were included in the integrative review. Most studies (71%) were retrieved from the LILACS database\textsuperscript{10-13,15} and two (29%) from MEDLINE.\textsuperscript{9-14} The seven articles (100%) were published in Portuguese.
Four qualitative studies (58%)\textsuperscript{12-15} and three quantitative articles (42\%\textsuperscript{9-11}) were retrieved. Regarding the nationality of the studies, four (58\%) were carried out in Brazil,\textsuperscript{11-13;15} one (14\%) in England,\textsuperscript{14} one (14\%) in Norway\textsuperscript{9} and one (14\%) in Chile.\textsuperscript{10}

The sources of publications were found to be diverse, as follows: Revista da Escola de Enfermagem, University of São Paulo;\textsuperscript{12} Nursing Older People;\textsuperscript{14} Palliative & Supportive Care;\textsuperscript{9} Psychology Studies (Campinas);\textsuperscript{15} Rene - Revista da Rede de Enfermagem do Nordeste, Federal University of Ceará;\textsuperscript{13} Revista El Dolor - Chilean Association for the Study of Pain\textsuperscript{10}; and Acta Paulista de Enfermagem.\textsuperscript{11}

It was found, regarding the year of publication, that most studies\textsuperscript{11-15} (71.43\%) were carried out in 2014,\textsuperscript{11} 2015,\textsuperscript{12} 2016,\textsuperscript{13} and 2017,\textsuperscript{14-15} and the other two surveys were carried out in 2008\textsuperscript{9} and 2010.\textsuperscript{10}

In order to systematize the integrative review, the articles were organized according to the chronological order, from the oldest to the most current and, with respect to the concepts presented by the authors, an instrument was constructed for the data extraction from the publications, as shown in Figure 2, which characterizes the studies regarding the titles, authors/years, objectives of the studies, methods used, main results and conclusions, and levels of evidence.

<table>
<thead>
<tr>
<th>N</th>
<th>Titles</th>
<th>Authors/Years</th>
<th>Objectives</th>
<th>Methods</th>
<th>Main Results and Conclusions</th>
<th>Levels of Evidenc e</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>The relationship between hope and pain in a sample of hospitalized oncology patients.</td>
<td>Utne, Miaskowski, Bjordal, Paul, Jakobsen, Rustoen.\textsuperscript{9} (2008)</td>
<td>To describe hope in a sample of cancer patients hospitalized with pain in a Norwegian hospital. To compare the results of the hope levels of cancer patients hospitalized with pain with those of the Norwegian population in general.</td>
<td>Quantitative</td>
<td>The hope levels of cancer patients hospitalized with pain were higher than those of the Norwegian population in general, and no relationship was found between the total levels of the hope index and any of the levels of pain intensity. Significant relationships were found between the levels of the hope index and the most psychosocial interference items, which suggests that hope may be more related to psychosocial effects on pain than on physical achievements.</td>
<td>IV - A</td>
</tr>
<tr>
<td>2</td>
<td>Valuation of total pain at pain relief</td>
<td>Muñoz, Monge.\textsuperscript{10} (2010)</td>
<td>To assess human suffering due to total pain.</td>
<td>Quantitative, descriptive.</td>
<td>It is reported that, concerning total pain, human suffering resulting</td>
<td>IV - A</td>
</tr>
</tbody>
</table>
and palliative care clinic at complejo hospitalario San José.

to pain and advanced cancer disease.

from pain and advanced cancer disease is characterized by separation anxiety, tiredness, sadness, feelings of worthlessness, fear of pain and suffering, and insomnia. The holistic assessment of pain, if achieved, will certainly improve the quality of life and well-being of cancer patients and their families.

### 3. Occurrence of pain in cancer patients in palliative care.

**Mendes, Boaventura, Castro, Mendonça.** (2014)

To assess the occurrence of pain and quality of life among cancer patients in palliative care.

Quantitative, cross-sectional study.

It is reported that the occurrence of pain in the study participants compromises the activities of daily living and affects the quality of life in all domains: physical, psychological, social relationships, and the environment, whether for mild, moderate, or severe pain. It is explained that effective pain relief depends on a global assessment in order to identify the physical, psychological, social, and spiritual aspects as a basis for multidisciplinary interventions.

### 4. Life experiences of elderly with cancer pain: the existential comprehensive approach

**Reticena, Beuter, Sales.** (2015)

To understand the experience of cancer pain among elderly people.

Qualitative, Phenomenological approach.

It is explained that cancer pain limits the performance of activities of daily living, being called total pain, as it has repercussions of a biopsychosocial scope and generates multidimensional changes. It should be noted that some elderly people view pain as a symptom that drives them to continue living. However, for others, at certain times, pain reaches the limit between existence and death.

### 5. Perception and impact of pain in the lives of elderly patients with oncological diseases

**Costa, Simpson, Mendonça, Isoldi, Silva, Suely da Costa, Silva, Ricelli da Costa.** (2016)

To understand the impact and changes in the routine of relations caused by pain in the elderly with oncological disease.

Qualitative study.

It is noteworthy that the diagnosis of cancer and the pain inherent to it produces important physical and psychological repercussions in the elderly, leading to a feeling of sadness and isolation, which changes their daily lives and that of their families. It is reported that the success of pain management depends on the performance of professionals, as it
requires a multidisciplinary approach, requiring the complete identification of the pain complaint, to select and evaluate strategies and responses in the care of the elderly with oncological disease and pain.

6 Older people's experiences of cancer pain: a qualitative study

Dunham, Allmark, Collins. (2017)

To understand how the elderly build the experience of cancer pain and how expectations and experiences are reported by them.

Qualitative

The themes identified in the study revealed a perspective on the corporeal meaning of "pain" in everyday life. It is explained that the clinical evaluation of pain alone, without listening to people's histories, does not always identify pain or problems with daily life, since the appreciation of the individuality of the experience of cancer can promote the understanding of pain and care at the end of life.

7 Significance of spirituality for patients with cancer receiving palliative care

Benites, Neme, Santos. (2017)

To understand the experiences of cancer patients in palliative care and the meaning of spirituality in the face of the pain and the possibility of death.

Qualitative, Phenomenological approach

The phenomenological analysis allowed to unveil two thematic axes: - Faith as a hope for healing, support and trust, and the search for meaning/reframing of life. - The search for meaning in death and beliefs about the post-mortem and the experience of transcendence. The importance of the spiritual dimension in the experience of the dying process was evidenced, enabling the search for meanings for life and death. This study revealed that facing death motivates the veneration of life, referring to personal beliefs and a meaningful life.

Figure 2. Characterization of the studies, based on titles, authors, years of publication, objectives, methods, main results, conclusions, and evidence levels. Beja, Portugal, 2020.

It was observed that one of the studies was carried out in a hospital, two in basic health units, two other studies within the scope of palliative care consultations, hemotherapy and hematology, and one in the home care context.

Concerning the study participants, it was found that 28.57% were elderly with cancer and cancer-associated pain; and adults and elderly with a diagnosis of advanced cancer. The
remaining participants were hospitalized patients with an oncological disease and associated pain,\textsuperscript{9} elderly people on cancer treatment with pain,\textsuperscript{13} and patients with cancer undergoing palliative treatment with pain,\textsuperscript{11} representing 14.29\% each. The studied samples varied between 5,\textsuperscript{13} 9,\textsuperscript{14} 10,\textsuperscript{15} and 12\textsuperscript{12} participants in the qualitative studies, and between 56,\textsuperscript{11} 211,\textsuperscript{10} and 225\textsuperscript{9} participants, in the quantitative studies.

\section*{DISCUSSION}

When analyzing the evidence available in the scientific productions consulted about the impact of cancer pain on patients' holistic health, the studies have shown that pain is a common and most feared symptom in cancer patients,\textsuperscript{10-14} and may be associated with the neoplasm itself, as well as with other comorbidities and/or with the treatment itself.

It was observed that cancer pain goes beyond the threshold of the physical dimension because, when it penetrates the context of the sick person's life, it makes him feel limited, lacerates the person, and modifies the daily life.\textsuperscript{10-14} Furthermore, the disease affect the patient's habits in the social\textsuperscript{10-14} and leisure fields,\textsuperscript{13} and also the basic needs, from food to sleep patterns,\textsuperscript{10,12} being also expressed by the many difficulties to maintain habitual activities, such as working, walking or even knitting.\textsuperscript{13}

It was reported that cancer pain ends up breaking the sick person's relationship with the world, depriving them of the social, professional, and personal life routines,\textsuperscript{10-14} causing them to be trapped by the disease and pain and increasingly isolated\textsuperscript{12-13} and making them indifferent to the events that take place, therefore, causing suffering.\textsuperscript{16}

It was also found that human suffering resulting from total pain and cancer disease is characterized not only by the anguish of separation from loved ones but also by tiredness related to feelings of worthlessness and sadness due to the loss of energy, vital and social position and, equally, by the fears related to pain and suffering.\textsuperscript{10}

It was pointed out that the cancer pain, in addition to the implications in the physical, psychological and interpersonal domains, also considerably alters the daily lives of family members,\textsuperscript{10,13} since when a person gets sick, generally, the other family members are affected, which causes tension, stress, and fatigue in the family context, especially among those responsible for carrying out daily tasks.\textsuperscript{13} Oncological diseases impact the lives of family members on a daily basis since the family assumes the roles of the sick person in the activities that the patient cannot perform, which requires reorganizing tasks.\textsuperscript{17}

It was found that cancer pain forces the sick person to live a life in which they cannot find themselves, in a loss of identity in the adaptation and mourning of an old self,\textsuperscript{14} due to sadness and
isolation, and changes in the daily lives of the sick person and family members. At certain times, the limit between existence and death is reached.

It was recognized that cancer pain affects the physical dimension and extends to the psychological, social, and spiritual spheres. From the above, it is emphasized that the changes that occur in the various dimensions contribute to the increase in the perception of pain. The exacerbation of pain leads to new changes and other losses at the various levels, resulting in a new increase in the perception of pain. Pain, therefore, assumes multidimensionality, being characterized as total pain for having biopsychosocial repercussions and generating multidimensional changes.

It was emphasized that the holistic assessment of pain is a current challenge that, if achieved, will improve the quality of life and psychological well-being of patients and families, therefore, it is necessary to fully identify the pain complaint using a global assessment to identify the physical, psychological, social, and spiritual aspects of the sick person.

It was also pointed out that the clinical assessment of pain alone, without listening to people's pain histories, does not always identify pain or problems with daily life. Thus, it is essential to value the individuality of the experience of cancer for better understand pain and, based on individual and global appreciation, enable a multidisciplinary approach.

It has been reported that some patients view the pain of cancer as a symptom that drives them to continue living. Despite the dismay caused by pain, the desire to overcome the disease is greater, so they try to overcome or adapt to the pain, maintaining hope and not giving up the quest to survive cancer, expressing hope for the future and continuing to make plans according to present expectations. Thus, hope is seen as a possible way out of the cycle of pain and suffering, and the person focuses on the possibility of successfully overcoming the present situation.

Significant relationships were found between the total levels of the hope index and those of psychosocial interference in the brief pain inventory, suggesting that hope may be more related to psychosocial effects on pain than to physical effects.

It was also emphasized that some of the patients expressed faith through the hope of getting healed, support, and trust. Faith is sustained by hope because hope characterizes the state of mind that accompanies faith, being conceived as comfort, a source of support that makes it possible to believe in something positive, reducing anxiety and fears. It is a possibility of sharing, with the transcendent or the divine, allowing the sick person not to feel alone. It also works as a force propelling, which acts positively in coping with the disease and can explain what seems to be inexplicable in the face of adversity.
For some patients, the importance of the spiritual dimension was evidenced, which enables the search for meaning and re-signification of different aspects of human life, resizes values and the very process of dying, which reflects the transformation and the transcendence of the sick person, that is, the inner growth and the development of the spiritual dimension.

It was revealed that facing death motivates the veneration of life, referring to personal beliefs and what is sought as meanings for living. In the face of a serious illness and the psychosocial repercussions generated by it, spirituality demarcates its role and importance, since the spiritual dimension becomes exalted and takes on relevance in situations of emotional stress, physical illness, near death and, in short, in the face of life’s adversities, such as cancer pain. Spirituality is reported as a tool capable of reducing physical pain caused by cancer, since it activates neurotransmitters, triggers a feeling of well-being, improves the immune system, decreases stress, and anxiety.

It was noted that, in the face of the anguish of facing death as an end in itself, some patients focus on reflections based on religious beliefs about the post-mortem, focusing on the possibility of the continuity of existence, with religion being mostly professed as a source of spiritual and social support, and used as a coping strategy by most people with cancer who, in addition to dealing with the disease, have pain as an aggravating factor.

The present study’s findings corroborate the knowledge that religiosity and spirituality are complementary terms, but not synonyms. Spirituality translates into a dimension of depth and is inherent to the human being (since we all have spirituality). But, not all of us have religiosity since it refers to a system of structured beliefs, capable of responding to spiritual issues; that is, it involves a doctrine of spiritual and moral values and principles, shared by people in a community.

It is evident, in this study, that the spiritual dimension works as a strategy used by people with cancer pain, being able to decrease the perception of pain. In some situations, spirituality is linked to religiosity, which, in turn, is a tool of coping, that enables the search for meaning in the face of adversity, being recognized as a source of support.

As a limitation of the present study, the time frame chosen for the search may have limited the amount of studies assessed.

CONCLUSION

It is concluded that studies about cancer pain address this phenomenon as total pain, since it limits the performance of activities of daily living, as it significantly compromises the day-to-day and affects the quality of life of the sick person. This phenomenon is responsible for biopsychosocial repercussions and multidimensional changes, not only in the physical dimension but also in the psychological, social, labor, family, and spiritual spheres.
It is noteworthy that the diagnosis of cancer and the pain related to it produces important physical and psychological repercussions, causing suffering that is characterized by feelings of sadness and loneliness. The separation anxiety due to tiredness, fear of pain, and feeling of worthlessness changes the daily life of the sick person and family members.

The importance of the spiritual dimension in the experience of the dying process and in the readjustment of the patient is reinforced, facilitating the search for a meaningful life and death. It also mirrors the transcendence of the sick person and the inner and spiritual growth.

It is emphasized that facing death motivates the veneration of life, referring to personal beliefs and what is sought as reasons for living. Faith stands out as a hope for healing, support and trust, and the search for meaning/re-signification of life, as well as the search for meaning in death and beliefs about the post-mortem, in addition to experiencing transcendence.

It also appears that, since cancer pain is an integral, multifaceted pain, it is important to understand the person with cancer pain in a holistic manner (globally). Therefore, it is essential to know the individual particularities, listen to the patients’ stories, and value the meanings and experiences of these patients, so that health professionals can be more attentive to the uniqueness of each person.

We highlight the importance of assessing cancer pain in a multidisciplinary approach to better understand the pain and the person experiencing pain to identify the physical, psychological, social, and spiritual related aspects as a basis for selecting and evaluating strategies and responses in the care of people with cancer and pain. The holistic assessment of pain, if achieved, will certainly improve the quality of life and well-being of cancer patients and their families.

CONTRIBUTIONS

The authors contributed equally to the design of the research project, collection, analysis, and discussion of data, writing and critical review of the manuscript's content with intellectual contribution, and approval of the final version of the manuscript.

CONFLICT OF INTERESTS

None to declare.

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