



# Signs and symptoms manifested by patients in palliative cancer care in homecare: integrative review

*Sinais e sintomas manifestados por pacientes em cuidados paliativos oncológicos na assistência domiciliar: uma revisão integrativa*

*Signos y síntomas manifestados por pacientes en cuidados oncológicos paliativos en atención domiciliar: una revisión integradora*

Nair Caroline Cavalcanti de Mendonça

Bittencourt<sup>1</sup>

Karoliny Alves Santos<sup>1</sup>

Maria Gefé da Rosa Mesquita<sup>1</sup>

Vanessa Gomes da Silva<sup>2</sup>

Audrei Castro Telles<sup>2</sup>

Marcelle Miranda da Silva<sup>1</sup>

1. Universidade Federal do Rio de Janeiro, Escola de Enfermagem Anna Nery. Rio de Janeiro, RJ, Brasil.

2. Instituto Nacional de Câncer José Alencar Gomes da Silva, Hospital do Câncer IV. Rio de Janeiro, RJ, Brasil.

## ABSTRACT

**Objective:** to identify the main signs and symptoms manifested by palliative care oncology patients in home care. **Method:** integrative review in LILACS, MEDLINE and CINAHL databases in January 2020. The question was asked: "What are the main signs and symptoms manifested by patients in palliative oncology care highlighted in studies covering the context of the home?" **Descriptors/terms were:** Signs and Symptoms/Signs and Symptoms; Home Care/Home Care Services; Palliative Care/Palliative Care and Neoplasms/Neoplasms. Eligibility criteria were listed as follows: full text; between 2015 and 2019; in English, Portuguese or Spanish and adult age. For data mapping, the following were considered: title; country; year; objective; method; signs and symptoms. The results were categorized into subgroups, considering the predetermined conceptual classification (sign and symptom). The counting element facilitated the analysis and comparison of data. **Results:** a total of 35 articles were selected, and 25 signs and 23 symptoms were identified. The most frequent were: pain, nausea/vomiting, dyspnea, fatigue, depression, anxiety, constipation, loss of appetite, sleepiness, well-being, and insomnia. Most (39) were related to the physical domain. **Conclusion:** the identification of the main signs and symptoms, in this context, directs the practice of health professionals to the most appropriate interventions as early as possible, contributing to the feasibility of home care, and alerts to the need for continuing education on this topic.

**Keywords:** Signs and Symptoms; Palliative Care; Neoplasms; Home Nursing; Review.

## RESUMO

**Objetivo:** identificar os principais sinais e sintomas manifestados por pacientes em cuidados paliativos oncológicos na assistência domiciliar. **Método:** revisão integrativa nas bases LILACS, MEDLINE e CINAHL em janeiro de 2020. Perguntou-se: "Quais os principais sinais e sintomas manifestados por pacientes em cuidados paliativos oncológicos destacados nos estudos abrangendo o contexto do domicílio?". Foram descritores/termos: Sinais e Sintomas/*Signs and Symptoms*; Assistência Domiciliar/*Home Care Services*; Cuidados Paliativos/*Palliative Care* e Neoplasias/*Neoplasms*. Elencaram-se como critérios de elegibilidade: texto completo; entre 2015 e 2019; em inglês, português ou espanhol e idade adulta. Para o mapeamento dos dados, consideraram-se: título; país; ano; objetivo; método; sinais e sintomas. Os resultados foram categorizados em subgrupos, considerando a classificação conceitual predeterminada (sinal e sintoma). O elemento contagem facilitou a análise e a comparação de dados. **Resultados:** foram selecionados 35 artigos, sendo identificados 25 sinais e 23 sintomas. Os mais frequentes foram: dor, náusea/vômito, dispnéia, fadiga, depressão, ansiedade, constipação, perda de apetite, sonolência, bem-estar e insônia. A maioria (39) relacionou-se ao domínio físico. **Conclusão:** a identificação dos principais sinais e sintomas, neste contexto, direciona a prática dos profissionais de saúde para as intervenções mais adequadas e o mais precocemente possível, contribuindo para viabilizar a assistência domiciliar, e alerta para a necessidade de educação permanente sobre este tema.

**Palavras-chave:** Sinais e Sintomas; Cuidados Paliativos; Neoplasias; Assistência Domiciliar; Revisão.

## RESUMEN

**Objetivo:** identificar los principales signos y síntomas que manifiestan los pacientes en cuidados oncológicos paliativos en la atención domiciliar. **Método:** revisión integradora basada en LILACS, MEDLINE y CINAHL en enero de 2020. Se preguntó: "¿Cuáles son los principales signos y síntomas que manifiestan los pacientes en cuidados paliativos oncológicos destacados en estudios que abarcan el contexto del hogar?". Los descriptores / términos fueron: signos y síntomas / *Signs and Symptoms*; Asistencia domiciliar / *Home Care Services*; Cuidados paliativos / *Palliative Care* / y Neoplasias/ *Neoplasms*. Se enumeraron los siguientes criterios de elegibilidad: texto completo; entre 2015 y 2019; en inglés, portugués o español y edad adulta. Para el mapeo de datos, se consideraron los siguientes: título; países; año; objetivo; método; signos y síntomas. Los resultados se categorizaron en subgrupos, considerando la clasificación conceptual predeterminada (signo y sintoma). El elemento de conteo facilitó el análisis y la comparación de datos. **Resultados:** Se seleccionaron 35 artículos, se identificaron 25 signos

### Corresponding author:

Marcelle Miranda da Silva.  
E-mail: marcellemisufjr@gmail.com.

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y 23 síntomas. Los más frecuentes fueron: dolor, náuseas / vómitos, disnea, fatiga, depresión, ansiedad, estreñimiento, pérdida de apetito, somnolencia, bienestar e insomnio. La mayoría (39) estaban relacionados con el dominio físico. **Conclusión:** la identificación de los principales signos y síntomas, en este contexto, orienta la práctica de los profesionales de la salud hacia las intervenciones más adecuadas y lo más temprano posible, contribuyendo a hacer factible la atención domiciliaria, y alerta sobre la necesidad de una educación permanente sobre este tema.

**Palabras-clave:** Signos y Síntomas; Cuidados Paliativos; Neoplasias; Cuidado domiciliario.

## INTRODUCTION

Noncommunicable Diseases (NCD) are the main causes of illness and death in the population, especially cancer. In Brazil, it is estimated, for the triennium 2020-2022, the occurrence of 625 thousand new cases of cancer each year and, due to the high morbidity and mortality rates of this disease, its diagnosis is stigmatized, bringing with it the idea of suffering and death, despite the possibility of cure<sup>1</sup>.

As a consequence of advanced cancer, there are disabling signs and symptoms, such as pain and other problems of physical, psychosocial and spiritual nature. In this context, to assist in the management of signs and symptoms in order to promote comfort and quality of life, the integration of Palliative Care (PC) into the treatment goals is indicated as soon as possible<sup>2</sup>. Once the measures for disease control are exhausted, the specialized assistance of Exclusive Palliative Care (EPC) must prevail, which is based on integrality, interdisciplinarity and the binomial patient/family<sup>3</sup>.

PC can be offered in different settings, from hospital units, in outpatient clinics, or at home, according to previously established criteria. In models of PC care, Home Care (HC) is the modality of differential care, indicated for patients with compromised functionality, i.e., those with difficulty or who can no longer move around, contributing to the comfort and quality of life, since it allows the patient to live with family, greater autonomy and lower risk of infections<sup>4</sup>.

However, HC requires greater support and participation of the family, which must consider the imminent possibility of death at home. In this sense, it is essential to recognize and properly manage the signs and symptoms, since feelings such as fear of death can exacerbate them, leading the person or his/her family to opt for hospitalization, marking the last days of life with recurrent admissions to emergency rooms, hospitalizations, and death in the hospital environment. The careful evaluation and control of signs and symptoms as the main goal in HC help in the indicators of quality of care and death at home, as well as in the most appropriate indication of hospital admission of the patient in EPC<sup>5</sup>.

A comprehensive evaluation of signs and symptoms is the basis for individualized and effective palliative care, and in order for death to be dignified, it is fundamental that the patient receives comfort, despite limitations, and that his or her autonomy is respected<sup>6</sup>.

For successful care management and follow-up of the patient and his family at home, there is a need for attention to the reading of signs and symptoms and their rapid change associated with the disease and the patient<sup>7</sup>.

Thus, the objective was to identify the main signs and symptoms manifested by patients in palliative oncology care at home.

## METHOD

This is an Integrative Literature Review (ILR) that followed the following steps: formulation of the research question and objective; literature search (establishment of inclusion and exclusion criteria, use of databases and selection of studies); categorization of studies (extraction, organization and summarization of information and formation of the database); evaluation of studies included in the review (based on previously established inclusion and exclusion criteria and analysis of selected studies); interpretation of results and synthesis of knowledge<sup>8</sup>.

To construct the research question, we applied the acronym PICO (population, phenomenon of interest and context) in which: the population is represented by patients in oncologic palliative care; the phenomenon of interest comprises the signs and symptoms and the context involves home care<sup>9</sup>. Thus, it has the question, "What are the main signs and symptoms manifested by patients in palliative oncology care highlighted in studies covering the home setting?"

The search via the Periodical Portal of the *Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES)* was developed in the following databases: Latin American and Caribbean Literature on Health Sciences (LILACS®); Public Medline (PubMed®) and Cumulative Index to Nursing & Allied Health Literature (CINAHL®).

Different search strategies were applied for each base. However, only the strategy applied in CINAHL is presented in Box 1. The other search strategies may be made available in full by contacting the corresponding author via e-mail.

The database search was performed in January 2020 by two *Stricto sensu* graduate student researchers, who were trained to perform the search independently, following the same criteria. A group discussion, with the participation of a third researcher, was held for the critical evaluation of eligible articles and final consensus of the selection for the review.

As eligibility criteria, the following filters were applied: full texts available in academic journals; published between 2015 and 2019; in English, Portuguese or Spanish languages; and adult age. The use of the filter related to age was due to the experience of the researchers in palliative care of the adult patient. The temporal cut-off was justified by the need to review the theme based on the current situation.

Articles that did not answer the research question and editorials were excluded. Exclusions were not made based on the degree of recommendation of the studies, since the calculation

**Box 1.** Search strategies for the CINAHL database. Rio de Janeiro, Brazil, 2020.

CINAHL
<p>((((MH "Signs and Symptoms") OR (MH "Neurobehavioral Manifestations") OR (MH "Neuromuscular Manifestations") OR (MH "Signs and Symptoms, Respiratory") OR (MH "Signs and Symptoms, Digestive") OR (MH "Behavioral Symptoms") OR (MH "Symptoms") OR (MH "Symptoms and General Pathology") OR (MH "Neurologic Manifestations") OR (MH "Eye Manifestations") OR (MH "Skin Manifestations") OR (MH "Oral Manifestations"))) OR TI (sign OR signs OR symptom OR symptoms OR manifestation OR manifestations) OR AB (sign OR signs OR symptom OR symptoms OR manifestation OR manifestations)) AND (((MH "Home Health Care") OR (MH "Home Care Equipment and Supplies") OR (MH "Home Health Care Information Systems") OR (MH "Home Health Aides") OR (MH "Home Health Agencies") OR (MH "Home Visits") OR (MH "Home Nursing, Professional") OR (MH "Residential Care"))) OR TI ((home OR homes OR domicile OR domiciles OR house OR houses OR residence OR residences OR residency OR residencies) AND (care OR caring OR healthcare OR treatment)) OR AB ((home OR homes OR domicile OR domiciles OR house OR houses OR residence OR residences OR residency OR residencies) AND (care OR caring OR healthcare OR treatment))) AND (((MH "Palliative Care") OR (MH "Hospice and Palliative Nursing") OR (MH "Terminal Care") OR (MH "Hospice Care")) AND ((MH "Oncology") OR (MH "Oncology Care Units") OR (MH "Cancer Patients") OR (MH "Psycho-Oncology") OR (MH "Oncologic Nursing") OR (MH "Oncologic Care") OR (MH "Neoplasms+") OR (MH "Cancer Care Facilities")))) OR TI ((palliative OR palliatives OR palliation OR hospice OR hospices OR "end-of-life" OR "end of life") AND (cancer OR cancers OR oncology OR oncological OR oncologist OR oncologists OR neoplasm OR neoplasms OR neoplasia OR neoplastic)) OR AB ((palliative OR palliatives OR palliation OR hospice OR hospices OR "end-of-life" OR "end of life") AND (cancer OR cancers OR oncology OR oncological OR oncologist OR oncologists OR neoplasm OR neoplasms OR neoplasia OR neoplastic)))</p>

Source: Research data.

of a quality score is not recommended for the ILR due to the multiplicity of methods of the primary studies selected<sup>10</sup>. The evaluation of the included studies was based on the previously established inclusion and exclusion criteria, the framing being rigorously carried out by reading the titles and abstracts and/or reading the full text of the eligible studies.

Data mapping was performed after defining the information that should be extracted from the selected articles. For this study, the following information was considered: title; country; year of publication; objective; method and signs and symptoms mentioned.

For the analysis, we applied the categorization of the results in subgroups, considering the predetermined conceptual classification, in this case, referring to the sign as an objective and verifiable data and the symptom as a subjective data, which depends on the patient's verbalization or any other form of non-verbal manifestation<sup>11</sup>.

The display of data in graphs and tables was employed to enhance the visualization of patterns and relationships within and between primary data sources, taking the place of a starting point for interpretation. Signs and symptoms were recorded in a Microsoft Excel® spreadsheet and sorted according to the number of times they were mentioned at least once in each article. Thus, the counting element was the strategy employed to facilitate data analysis and comparison<sup>10</sup>. EndNote<sup>x9</sup> software was used for reference management.

## RESULTS

Figure 1 illustrates the number of evidence sources selected, tracing the sample selection flow according to the eligibility criteria and the reasons for exclusions.

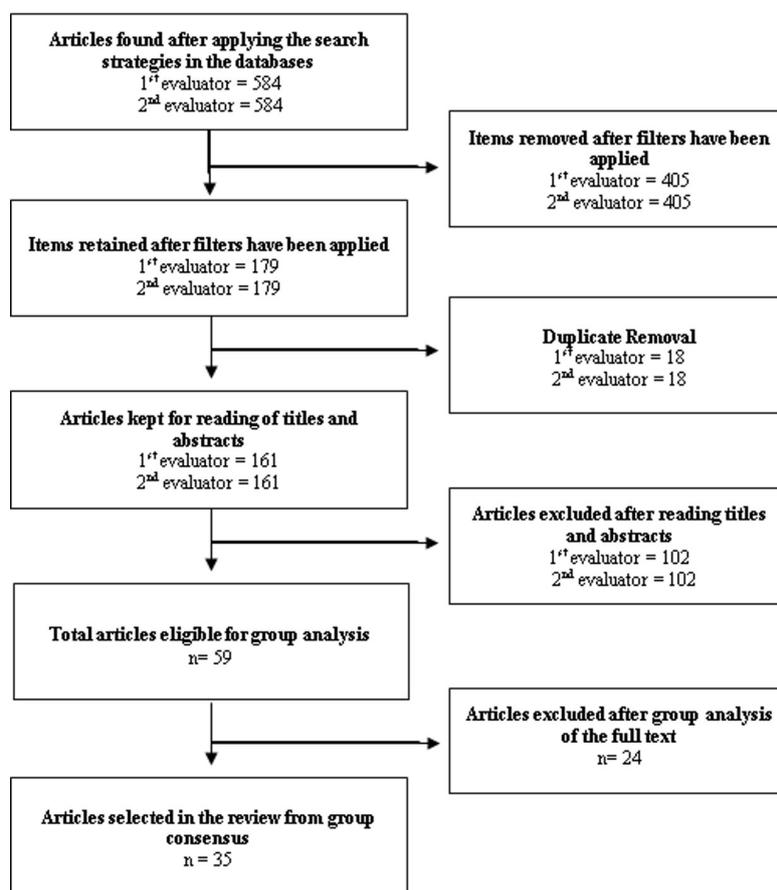
Of the 35 articles selected, seven (20%) were published in Italy, five (14.3%) in the United States of America, five (14.3%) in Brazil, three (8.6%) in Germany, and three (8.6%) in Japan. In Canada and the United Kingdom, two (5.7%) were published in each country. In each country, such as Egypt, France, Holland, Poland, South Africa, China, Chile and Taiwan, one article (2.85%) was published.

Box 2 presents the mapping of the characteristics of the 35 selected articles.

Among the 48 signs and symptoms mentioned in the articles, the most frequently mentioned, in descending order in number of times, were: pain (34); nausea/vomiting (22); dyspnea (21); fatigue/weakness/asthenia (21); depression (19); loss of appetite/anorexia (17); constipation (15); anxiety (14); sleepiness (12); well-being (11); and insomnia (10) (Figure 2).

According to the predetermined conceptual classification adopted in this study, 25 (52%) signs and 23 (48%) symptoms were mentioned (Box 3). The greatest mention is made of physical signs and symptoms. It is noteworthy that of the 48 signs and symptoms, except for well-being, which gathers different domains, 39 (83%) were related to the physical domain and eight (17%) to the psycho-emotional domain and cognitive performance.

Despite the proximity presented between the variation of items in the two subgroups, it is noteworthy that, when compared in relation to the number of times they were mentioned at least once in the selected articles, the items in the symptoms subgroup appeared 184 (65.9%) times, while the items in the signs subgroup were mentioned 95 (34.1%) times.



**Figure 1.** Flow of the selection process of the articles that related to the question and objective of this review. Rio de Janeiro, Brazil, 2020.

Source: Research data.

**Box 2.** Mapping of the characteristics of the 35 selected articles. Rio de Janeiro, Brazil, 2020.

Title	Year / Country	Objective (s)	Method	Main signs and symptoms related to oncologic disease
<i>Correlation between patient quality of life in palliative care and burden of their family caregivers: a prospective observational cohort study</i> <sup>12</sup>	2016/ Germany	To identify the correlations between change in patient quality of life and family caregiver burden that need to be considered in patient management.	Prospective, observational, cohort study	Pain, fatigue, dyspnea, insomnia, nausea/vomiting, loss of appetite, constipation, depression, and anxiety
<i>How much psychological distress is experienced at home by patients with palliative care needs in Germany? A cross-sectional study using the distress thermometer</i> <sup>13</sup>	2017/ Germany	To describe the prevalence of psychosocial distress in palliative care patients living at home and related factors and test the implementation of the Emergency Thermometer in the home palliative care service.	Prospective, cross-sectional study	Fear, nervousness, sadness, constipation, fatigue, dyspnea, changes in urination, pain, insomnia, memory/concentration, appetite, bloating, diarrhea, indigestion, nausea, dry/congestive nose, sleep, dry/itchy skin, tingling hands/foot, and distress

Source: Research data.

## Box 2. Continued...

Title	Year / Country	Objective (s)	Method	Main signs and symptoms related to oncologic disease
<i>Palliative home care for patients with advanced haematological malignancies-a multicenter survey</i> <sup>14</sup>	2017/ Germany	To analyze the physical symptoms and psychosocial demands of patients with advanced hematologic disease under specialized home palliative care.	Retrospective, descriptive, multicenter	Pain, bleeding, fatigue, depression, dyspnea, nausea/vomiting, edema, constipation, diarrhea, weight loss, dysphagia, hypotension/hypertension, incontinence, and dehydration.
Prevalence of neoplastic cachexia and associated factors at home <sup>15</sup>	2015/ Brazil	To verify which factors are associated with cachexia in oncology patients participating in a home hospice program, using standardized concepts for the syndrome.	Cross-sectional and descriptive	Anorexia, pain, satiety, xerostomia, nausea, constipation, dysphagia, vomiting, dysgeusia, dysosmia, diarrhea, and cachexia.
Multidimensional Scale in the Assessment of Pain and Symptoms in the Elderly in Palliative Care <sup>16</sup>	2016/ Brazil	To evaluate pain and associated symptoms in elderly cancer patients in palliative care at home.	Cross-sectional	Pain, fatigue, drowsiness, nausea, appetite, shortness of breath, depression, anxiety and feeling of well-being, constipation, diarrhea, urinary incontinence, polyuria, insomnia, anorexia, and fatigue.
<i>Cancer patients, emergencies service and provision of palliative care</i> <sup>17</sup>	2016/ Brazil	To describe the clinical and sociodemographic profile of oncology patients seen at the emergency department of a High Complexity Oncology Center, observing the coverage of palliative care and home care.	Cross-sectional	Pain, gastrointestinal and respiratory symptoms.
Manifestations and needs related to the process of death and dying: perspective of the person with cancer <sup>18</sup>	2017/ Brazil	To know the manifestations and needs related to the process of death and dying of the person with cancer at the end of life.	Case Study	Pain, nausea/vomiting, constipation, anorexia, dyspnea, anxiety, depression, agitation, insomnia, confusion, fatigue, dysphagia.
<i>Cognition, functionality and symptoms in patients under home palliative care</i> <sup>19</sup>	2018/ Brazil	To evaluate the degree of cognition, functionality, presence of symptoms and medications prescribed for patients in home palliative care.	Cross-sectional	Constipation, dyspnea, appetite, anxiety, depression, nausea, pain, asthenia.

Source: Research data.

**Box 2.** Continued...

Title	Year / Country	Objective (s)	Method	Main signs and symptoms related to oncologic disease
<i>Correlates and predictors of changes in dyspnea symptoms over time among community-dwelling palliative home care clients</i> <sup>20</sup>	2015/ Canada	Describe the clinical and health characteristics of people with dyspnea receiving home-based palliative care and identify factors affecting change in dyspnea over time.	Observational cohort	Pain, depression, insomnia, drowsiness, fatigue, airway secretion, weight loss, peripheral edema, urinary incontinence, bowel incontinence, acid reflux, and nausea/vomiting.
<i>Palliative care experience in the last 3 months of life: a quantitative comparison of care provided in residential hospices, hospitals, and the home from the perspectives of bereaved caregivers</i> <sup>21</sup>	2018/ Canada	To capture the experiences of end-of-life care in various settings of bereaved caregivers of people who have died in a residential hospice.	Quantitative and descriptive	The study cites physical pain and “other symptoms” across the board.
<i>Emergency department visits at the end of life of patients with terminal cancer: pattern, causes, and avoidability</i> <sup>22</sup>	2016/ Egypt	To describe the pattern of emergency department visits, explore their causes and potential avoidability during the last three months of life for patients with terminal cancer.	Observational cohort	Pain, dyspnea, nausea/vomiting, fatigue, altered consciousness, fever, bleeding, diarrhea, cough, anorexia, constipation, dehydration, jaundice, urinary symptoms, skin symptoms, edema, insomnia, choking, agitation, seizures, dysarthria, dysphagia, hoarseness, hypotension, and rhinorrhea
<i>Informal caregiver challenges for advanced cancer patients during end-of-life care in Johannesburg, South Africa and distinctions based on place of death</i> <sup>23</sup>	2018/ United states	To better understand the challenges of informal caregivers at the end of life in South Africa, both at home and in inpatient units.	Retrospective cohort study	Pain, dyspnea, urinary incontinence, fecal incontinence, insomnia, constipation, diarrhea, fatigue, limb weakness, edema, fever, thirst, convulsions, and sadness.
<i>Palliative care for patients with cancer: do patients receive the care they consider important? A survey study</i> <sup>7</sup>	2018/ United states	To study what aspects of patient care general practitioners and home care nurses consider important and	Quantitative and descriptive	Pain, shortness of breath, tiredness, constipation, anxiety, and depression.
<i>Communicating caregivers' challenges with cancer pain management: an analysis of home hospice visits</i> <sup>24</sup>	2018/ United states	To identify how family caregivers of cancer patients communicate their pain management challenges to nurses during home visits and how these nurses respond to these raised challenges.	Quantitative and descriptive	Pain.

Source: Research data.

## Box 2. Continued...

Title	Year / Country	Objective (s)	Method	Main signs and symptoms related to oncologic disease
<i>Predictors of posthospital transitions of care in patients with advanced cancer</i> <sup>25</sup>	2018/ United states	To examine predictors of discharge location and assess the relationship between location with survival and risk factors for hospital readmission.	Quantitative and descriptive	Revised Edmonton Symptom Assessment System (ESAS-r) to assess symptoms: nausea, dyspnea, poor appetite, pain, drowsiness, depression, anxiety, well-being, and fatigue. Constipation included.
<i>Home palliative sedation using phenobarbital suppositories: time to death, patient characteristics, and administration protocol</i> <sup>26</sup>	2019/ United states	Describe the use of phenobarbital suppositories in the home for sedation purposes; understand the characteristics of potential patients and those in whom suppositories were actually used; measure time to death after initiation of phenobarbital suppositories.	Case series study, retrospective	Delirium, pain, and dyspnea.
<i>Reasons for transferral to emergency departments of terminally ill patients - a French descriptive and retrospective study</i> <sup>27</sup>	2016/ France	Identificar quais razões levam os pacientes terminais hospitalizados em casa a procurar os serviços de emergência para, assim, determinar se essas procuras eram potencialmente evitáveis.	Quantitativo e descritivo	Fraqueza generalizada, dispneia, dor, oclusão e sangramento.
<i>The effect of weekly specialist palliative care teleconsultations in patients with advanced cancer - a randomized clinical trial</i> <sup>28</sup>	2017/ The Netherlands	To determine whether weekly teleconsultations by home-based palliative care specialists improve the symptom burden experienced by the patient when compared to "usual care".	Randomized, prospective, non-blinded, two-armed study	Edmonton Symptom Assessment System (ESAS): pain, fatigue, nausea, depression, anxiety, drowsiness, loss of appetite, and well-being plus anxiety and depression.
<i>Hospital admission of cancer patients: avoidable practice or necessary care?</i> <sup>29</sup>	2015/Italy	To describe admissions to a medical oncology inpatient service with respect to patients and tumor characteristics and the outcome of the hospital stay.	Quantitative and retrospective	Dyspnea, pain, fever, bowel obstruction, nausea/vomiting, jaundice, diarrhea, dysphagia, fatigue, and cachexia.
<i>Sleep disturbances in patients with advanced cancer in different palliative care settings</i> <sup>30</sup>	2015/Italy	To evaluate the prevalence of sleep disturbances and possible correlations with associated factors in a large number of patients with advanced cancer admitted to different palliative care settings.	Quantitative and descriptive	ESAS: pain, asthenia, nausea, anorexia, anxiety, depression, dyspnea, and well-being.

Source: Research data.

**Box 2.** Continued...

<b>Title</b>	<b>Year / Country</b>	<b>Objective (s)</b>	<b>Method</b>	<b>Main signs and symptoms related to oncologic disease</b>
<i>Age differences in the last week of life in advanced cancer patients followed at home</i> <sup>31</sup>	2016/Italy	To evaluate the possible differences in symptom burden and pain problems and the need for palliative sedation, in different age groups, in the last week of life.	Cross-sectional and retrospective	ESAS: pain, nausea, asthenia, anxiety, depression, anorexia, dyspnea, drowsiness, and well-being.
<i>Characteristics of advanced cancer patients who were readmitted to an acute palliative/supportive care unit</i> <sup>32</sup>	2017/Italy	To evaluate the characteristics of patients readmitted to a palliative care unit, the reasons for readmission, and the outcome after receiving specialized evaluation and treatment.	Observational and analytical	ESAS: pain, weakness, nausea, depression, anxiety, drowsiness, dyspnea, insomnia, appetite, and well-being.
<i>Characteristics of patients with an unplanned admission to an acute palliative care unit</i> <sup>33</sup>	2017/Italy	To compare the symptom burden of patients who had an unplanned admission to an acute palliative care unit with patients who had a regular planned admission.	Cohort	ESAS: pain, weakness, nausea, depression, anxiety, drowsiness, dyspnea, insomnia, appetite, and well-being.
<i>Prevalence of delirium in advanced cancer patients in home care and hospice and outcomes after 1 week of palliative care</i> <sup>34</sup>	2018/Italy	Assess the prevalence of delirium in patients with advanced cancer admitted to different palliative care services in Italy and possible related factors.	Quantitative, study of consecutive cases	ESAS: pain, asthenia, nausea, anorexia, anxiety, depression, drowsiness, dyspnea, and well-being.
<i>Symptom expression in advanced cancer patients admitted to hospice or home care with and without delirium</i> <sup>35</sup>	2018/Italy	To investigate the relationship between delirium and symptom expression in patients with advanced cancer admitted to palliative care services.	Quantitative and prospective.	Weakness, nausea, drowsiness, lack of appetite, well-being, depression, and delirium.
<i>Do symptoms among home palliative care patients with advanced cancer decide the place of death? Focusing on the presence or absence of symptoms during home care</i> <sup>36</sup>	2016/Japan	To investigate the association between the actual place of death of Japanese patients in home care with advanced cancer and individual, disease, and environmental factors, including the presence or absence of symptoms.	Quantitative and descriptive	Pain, delirium, depression, and dyspnea.
<i>Changes in Relatives' Perspectives on Quality of Death, Quality of Care, Pain Relief, and Caregiving Burden Before and After a Region-Based Palliative Care Intervention</i> <sup>37</sup>	2016/Japan	To examine changes in palliative care outcomes in different care settings (hospitals, palliative care units, and home) and to obtain information on how to improve palliative care at the regional level.	Intervention trial	Pain.

Source: Research data.

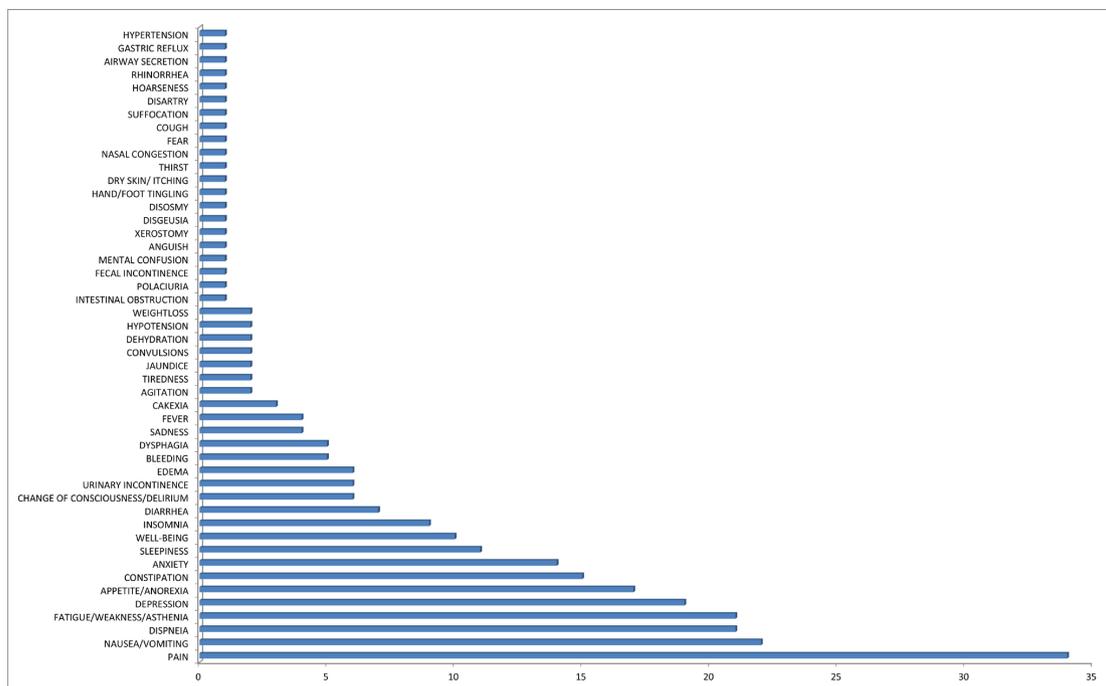
## Box 2. Continued...

Title	Year / Country	Objective (s)	Method	Main signs and symptoms related to oncologic disease
<i>How to come to terms with facing death: a qualitative study examining the experiences of patients with terminal cancer</i> <sup>38</sup>	2019/ Japan	To explore how patients with terminal cancer, who have not expressed depressed mood or pain, manage feelings associated with anxiety and depression.	Qualitative, exploratory	Physical pain, anxiety, depression, sadness, well-being, and weakness.
<i>Behavioral risk factors of constipation in palliative care patients</i> <sup>39</sup>	2015/ Poland	To assess the correlation between frequency of bowel movements and risk factors for constipation.	Cohort, retrospective	Pain, drowsiness, nausea, vomiting, cachexia, and constipation.
<i>Is dying in hospital better than home in incurable cancer and what factors influence this? A population-based study</i> <sup>40</sup>	2015/ United Kingdom	Verify the association between the location of death, health services used, and grief, sense of peace, and intensity of grief.	Case-control study	Pain and sadness.
<i>What are the current challenges of managing cancer pain and could digital technologies help?</i> <sup>41</sup>	2018/ United Kingdom	Explore current pain management strategies used by patients, caregivers, and professionals and investigate opportunities for digital technologies to enhance cancer pain management.	Qualitative	Pain, constipation, hallucinations, and urinary side effects.
<i>Factors associated with emergency services use in Taiwanese advanced cancer patients receiving palliative home care services during out-of-hours periods: a retrospective medical record study</i> <sup>42</sup>	2018/ Taiwan	Investigate the factors for emergency department use by patients with advanced cancer in the out-of-hours periods of the home palliative care service.	Case-control based retrospective review.	Pain, fever, nausea/vomiting, constipation, dyspnea, change in consciousness, and gastrointestinal bleeding.
<i>A Prospective Cohort Study of Factors Associated With Place of Death Among Patients With Late-Stage Cancer in Southern Africa</i> <sup>43</sup>	2019/ South Africa	To investigate the factors associated with preferred and actual place of death for cancer patients in Johannesburg, South Africa.	Prospective cohort	Pain.
<i>An examination of home-based end-of-life care for cancer patients: a qualitative study</i> <sup>44</sup>	2019/ China	To explore how home-based end-of-life care is provided in community health service centers in Shanghai and examine the difficulties during the provision of such care.	Qualitative	Pain.
<i>Intervention of Humanized Nursing Accompaniment and Quality of Life in People with Advanced Cancer</i> <sup>45</sup>	2019/Chile	To evaluate the effect of a humanized Nursing home care intervention on the quality of life of people with advanced cancer and the family caregiver.	Pre- and post-intervention experimental.	Fatigue, dyspnea, lack of appetite, constipation, diarrhea, insomnia, anorexia, nausea/vomiting, and pain.

Source: Research data.

**Signs and symptoms in palliative care oncology**

Bittencourt NCCM, Santos KA, Mesquita MGR, Silva VG, Telles AC, Silva MM



**Figure 2.** List of the 48 signs and symptoms mentioned in the 35 articles. Rio de Janeiro, Brazil, 2020. Source: Research data.

**Box 3.** Classification of the subgroups of signs and symptoms mentioned in the 35 articles. Rio de Janeiro, Brazil, 2020.

SIGNS	SYMPTOMS
Nausea/Vomiting	Pain
Sleepiness	Dyspnea
Diarrhea	Fatigue/Weakness/Asthenia
Urinary incontinence	Depression
Change in consciousness/delirium	Anxiety
Edema	Constipation/ constipation
Bleeding	Lack of Appetite/Anorexia
Fever	Wellness
Caquexia	Insomnia
Agitation	Dysphagia
Jaundice	Sadness
Convulsions	Tiredness
Dehydration	Intestinal obstruction
Hypotension	Polyuria
Weight loss	Distress
Fecal incontinence	Xerostomia
Mental confusion	Dysgeusia
Dry, itchy skin	Dysosmia
Cough	Hand/foot tingling
Dysarthria	Thirst
Hoarseness	Nasal congestion
Rhinorrhea	Fear
Airway secretion	Suffocation
Gastric reflux	
Hypertension	

Source: Research data.

## DISCUSSION

The identification of the main signs and symptoms manifested by the population highlighted in this study can guide the practice of health professionals responsible for consultations in home care programs in oncologic palliative care. Managing the physical and psychological symptoms of patients is of substantial importance, and this is the main conduct of the palliative team, which must be involved in the line of care of patients with cancer early on, in order to prevent complications and provide improvement in quality of life, besides providing support and reducing the burden on caregivers<sup>7,12,17-19,25,29</sup>.

Evidence shows that patients with advanced cancer have concomitant complications or uncontrolled symptoms throughout the course of the disease<sup>17,22,33</sup>. Although total symptom control is not always possible, its ineffective approach at home has been the reason for emergency room visits, discontinuing HC and impairing the quality of the care plan for EPC<sup>22</sup>. Home care services need to organize the routine of consultations, prioritizing patients in the dying process, because the proximity of death increases suffering and the burden of symptoms<sup>19,22,29,31</sup>.

The HC, if well organized and structured, can avoid the use of emergency centers and contribute to the optimization of hospital beds, reintegrating the patient to the family nucleus, preserving his autonomy and seeking his functional independence<sup>7,16</sup>. But this review ratifies that the provision of PC at home depends largely on the family caregivers, and the lack of information about them may limit the studies on this theme, which occurs mainly in retrospective methodological designs, such as those in the selected sample<sup>12,19,24,29</sup>.

One symptom, inadequately managed, can negatively interfere with the development or worsening of another symptom<sup>19</sup>. The most cited symptoms in the different studies should be evaluated with regard to their causes, since they may be primary to the cancer or secondary to other factors and be reversible or not.<sup>19</sup> Furthermore, the greater representativeness of symptoms in the number of times they were mentioned in the selected studies indicates that health professionals need to be attentive to effective communication with patients and families, since, as subjective data, they require attention and sensitivity to better identify them, establish related factors, and better act<sup>11,20,30,38</sup>.

It is noted, for example, that the inadequate control of pain is related, among other factors, to the difficulty of professionals in adequately measuring the complaint; as well as the evaluation of the mental state of patients based on their narratives, beyond the scale, considering the prominence of the symptom of depression<sup>13,17,38</sup>. The management of these symptoms requires continuous monitoring due to the severity and the need for frequent assessments as in the case of pain, which may require changes in the type and dose of medications<sup>27,41</sup>.

It is important to highlight that, in this study, most of the selected articles presented quantitative methodology, which indicates the possibility of limitations in understanding the phenomena. In this review, the relevance of symptoms in relation to signs and the evidence of the influence of psychological and emotional

issues in the potentiation of physical symptoms<sup>11-14,18,20,30,38</sup> point to the need for mixed approach research to better understand the subjective character of what is felt and manifested by each patient in different realities.

Thus, identifying pain as the symptom most often mentioned in the selected studies points to the need to institute care technologies that can guide professional practices for the adequate control of this symptom, as well as all the others highlighted in this review, also valuing health education to help patients and families identify them as early as possible and monitor the response to therapies<sup>24,41</sup>.

To help manage symptoms in patients with advanced cancer, the literature has highlighted the ESAS, which covers physical and psychological symptoms such as pain, fatigue, nausea, depression, anxiety, sleepiness, insomnia, appetite, well-being, and shortness of breath. It is, therefore, an important tool to guide health professionals in planning care for these patients<sup>7,19,25,28,30-34</sup>.

The home setting should be an alert to professionals for the possibility of the patient manifesting, in a more intense way, certain symptoms, as pointed out by the studies when portraying constipation, anxiety, and depression. In the case of constipation, patients seen at home are much more bedridden compared to hospitalized patients, which contributes to its development, which seems to be one of the unresolved causes of suffering of these patients, difficult to treat<sup>39</sup>. And in the case of anxiety and depression, at home, added to the need for family care, these patients suffer grief for having developed the disease, one of the main sources of crisis and feelings associated with awareness of the prognosis and approaching death<sup>30,38</sup>.

After the identification of the main signs and symptoms that compromise the patient's physical, psychological, and emotional state, harming his well-being, it is important that care be established to control them, minimizing the suffering of these people and their families<sup>18,20,29</sup>. However, dealing with the distressing signs and symptoms manifested by patients with advanced cancer and promoting quality PC, including the context of the home, depend mainly on trained and skilled health professionals. Thus, the results of this ILR can direct actions of professional training and continuing education, contemplating this theme of great relevance<sup>46</sup>.

## CONCLUSION AND IMPLICATIONS FOR PRACTICE

In this ILR, a great variety of signs and symptoms that can be manifested by patients in oncologic palliative care at home were identified. By counting the number of times they were mentioned at least once in the selected articles, it was possible to identify the most common ones, in order to direct the attention of professionals to the most appropriate interventions as early as possible, which contributes to make the HC feasible, considering the challenge of being an uncontrolled environment.

The presence of uncontrolled symptoms leads to impaired quality of life, while proper management improves the well-being

of cancer patients in PC. In practice, symptom control in home care can help in indicators of quality of care and death at home. Thus, it is necessary to pay attention to the need for professional training and continuing education to achieve this goal, equipping professionals to practice based on the best evidence and health education.

It is noteworthy that, to minimize biases, such as selection bias, strategies were employed to reduce the loss of possible eligible studies in the databases investigated, such as the selection of articles in three languages, including English as the universal language, and access to the databases through the Capes Journals Portal. It is also noteworthy that, throughout the sample selection and data extraction process, we worked with more than one researcher to minimize errors in the interpretation.

This study demonstrated the need for next steps in research related to the identification and appropriate management of signs and symptoms manifested by palliative care oncology patients in home care, as well as about factors associated with the use of emergencies and death at home.

## AUTHOR'S CONTRIBUTIONS

Design and planning of the revision proposal. Nair Caroline Cavalcanti de Mendonça Bittencourt. Marcelle Miranda da Silva.

Search for the bibliographic sources. Nair Caroline Cavalcanti de Mendonça Bittencourt. Karoliny Alves Santos.

Data analysis. Nair Caroline Cavalcanti de Mendonça Bittencourt. Karoliny Alves Santos. Maria Gefé da Rosa Mesquita. Vanessa Gomes da Silva. Audrei Castro Telles. Marcelle Miranda da Silva.

Data interpretation. Nair Caroline Cavalcanti de Mendonça Bittencourt. Karoliny Alves Santos. Maria Gefé da Rosa Mesquita. Vanessa Gomes da Silva. Audrei Castro Telles. Marcelle Miranda da Silva.

Writing and critical revision of the manuscript. Nair Caroline Cavalcanti de Mendonça Bittencourt. Karoliny Alves Santos. Maria Gefé da Rosa Mesquita. Vanessa Gomes da Silva. Audrei Castro Telles. Marcelle Miranda da Silva.

Approval of the final version of the content to be published. Nair Caroline Cavalcanti de Mendonça Bittencourt. Karoliny Alves Santos. Maria Gefé da Rosa Mesquita. Vanessa Gomes da Silva. Audrei Castro Telles. Marcelle Miranda da Silva.

Agreement to take responsibility for all aspects of the work ensuring that issues related to the accuracy or completeness of any parts of the work will be properly investigated and resolved. Nair Caroline Cavalcanti de Mendonça Bittencourt. Karoliny Alves Santos. Maria Gefé da Rosa Mesquita. Vanessa Gomes da Silva. Audrei Castro Telles. Marcelle Miranda da Silva.

## ASSOCIATE EDITOR

Rodrigo Nogueira da Silva 

## SCIENTIFIC EDITOR

Ivone Evangelsita Cabral 

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