LIFE QUALITY ASSESSMENT OF PATIENTS IN PALLIATIVE CHEMOTHERAPY AND PALLIATIVE CARE: SCOPING REVIEW

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ABSTRACT

Objective: evaluate the domains that compromise the quality of life of patients with advanced cancer in palliative chemotherapy and palliative care. **Method:** This is a scoping review conducted from March to May 2018 in the databases CINAHL, LILACS, PubMed, Cuiden and in the gray literature (Google Scholar and references found in the articles analyzed), using the descriptors "palliative care", "quality of life", "emotional care", "functional care", "sexual care", "physical care", "social care", "comfort care", "spiritual care", "palliative chemotherapy" and "advanced cancer". Methodological quality evaluation was done by using the STROBE instrument for observational studies and CONSORT for clinical trials. **Result:** The nine articles found and analyzed are international, published between 2012 and 2016, with good methodological quality. The domains identified were physical, social and emotional, hospitalization and place of death are factors that also compromised the quality of life. It is concluded that the patients in palliative chemotherapy have low quality of life. **Conclusion:** However, the presence of family members and the concomitant companion with the palliative care service improves this situation. The evaluation of the patients, focusing on these domains, allows Nursing to adopt strategies to improve the quality of life.

Keywords: Quality of life. Palliative care. Drug therapy. Neoplasms. Oncology nursing.

INTRODUCTION

Advanced cancer is defined as that diagnosed with staging III and IV, which cannot be cured, but can be offered to the patient palliative therapy that aims to reduce symptoms, prevent disease progression and consequently improve quality of life (QoL); among them, palliative chemotherapy. It is estimated that of 600 thousand new cases in Brazil, 60% are diagnosed at an advanced stage[1-2].

QoL is defined by WHO as the individual's perception of their position in life and in the context of culture and value systems in which the person lives in relation to their goals, expectations, standards and concerns. The concept is broad and covers the complexity of the construct; interrelates the environment with emotional, functional, sexual, physical, social, comfort and spiritual domains[3].

Aiming to alleviate physical, social, psychological and spiritual signs and symptoms (such as pain, dyspnea, fatigue, sleep disorders, mood, nausea or constipation), common in advanced cancer; and to improve the QoL of these patients and their families, WHO defined in 1990 and updated in 2002 the concept of palliative care (PC)[4].

There are, however, many patients in the advanced stage of the disease who do not initiate PC, but palliative chemotherapy, which aims at palliation of the complications of the disease; may or may not prolong the survival; delays the appearance of symptoms related to pathology and assumes that it improves QoL[5].

When comparing PCs with palliative chemotherapy, there is evidence that the use of chemotherapy near the end of life is not related to the probability of providing benefits[6]. Therefore, this scoping review aimed to evaluate domains that compromise the QoL of patients with advanced cancer in palliative chemotherapy and palliative care.

METHODOLOGY

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This is a scoping review, which followed the recommendations of Joanna Briggs Institute (JBI)[7] and used the acronym PCC (P - population, C - concept and C - context) to guide the search, presented in Table 1.

Table 1. Descriptors for each element of the PCC strategy - Curitiba, 2018

P = population	"Cancer advanced"
C = concept	"Quality of life" OR "Emotional Care" OR "Functional Care" OR "Sexual Care" OR "Physical care" OR "Social care" OR "Confort Care" OR "Spiritual Care"
C = context	"Palliative chemotherapy"; "PalliativeCare"

Source: The author (2018)

The research was carried out from March to May 2018, in four databases, Cumulative Index to Nursing and Allied Health Literature (CINAHL), Latin American and Caribbean Literature in Health Sciences (LILACS), National Library of Medicine (Cuiden), as well as articles found through manual search in the gray literature, as a free search in Google Scholar and references presented in the articles analyzed.

The search descriptors were selected using the DeCS (Health Sciences Descriptors) and MeSH (Medical Subject Headings), as well as the uncontrolled ones (Table 1). Table 2 presents the search strategies used.

Table 2. Database search strategy - Curitiba, 2018

LILACS andCuiden: "palliative care" AND "quality of life" OR "emotional care" OR "functional care" OR "sexual care" OR "physical care" OR "social care" OR "comfort care" OR "spiritual care" AND "palliative chemotherapy" AND "cancer advanced".
PubMed and CINAHL: "palliative care" AND "quality of life" AND "palliative chemotherapy" AND "cancer advanced".

Source: The author (2018)

The inclusion criteria were: language (Portuguese, Spanish, English and Italian); articles published in the period from 2002 to January 2018 (2002 was established considering the year that the new PC concept was defined); as well as the acronym PCC. Participants: patients older than 18 years with advanced cancer; Concept: physical aspects such as: control of pain, dyspnea, fatigue, anorexia; psychological, social, functional aspects, depression and anxiety; Context: palliative chemotherapy and PC.

This review considered randomized controlled trials, non-randomized controlled trials, prospective and retrospective cohorts, control cases, cross-sectional analyzes, case series, individual case reports, and cross-sectional descriptive studies.

The selection of the studies was carried out by two researchers independently with insertion of a third one for consensus meeting when there was disagreement. In the first step, it was verified, from the titles and abstracts of the studies obtained by the search strategy, if these included the inclusion and exclusion criteria. For those included, a form with data regarding the identification of the study (type of journal, year of publication, authors, country) was adopted; method; particularities of the participants. The data were analyzed in a descriptive way.

To evaluate the quality of the included studies, the instruments Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) for observational studies and the Consolidated Standards of Reporting Trials (CONSORT) for clinical trials were used.

For STROBE evaluation, each of the 22 criteria received a score from 0 to 1 (0 - not described and 1 - described). In the evaluation according to the CONSORT statement, composed of 25 items, the score was performed considering 0 - not described, 1 - described. The total score was transformed into percentage to better evaluate the articles. The articles that reached a percentage higher than 70% were considered as good quality.

RESULTS

The initial search totaled 234 studies, added

to three articles found by manual search; after the exclusion of duplicate articles that did not meet the inclusion criteria, the final composition for scoping review was nine

articles. The illustration of the selection of the articles followed the PRISMA method (FIGURE 1).
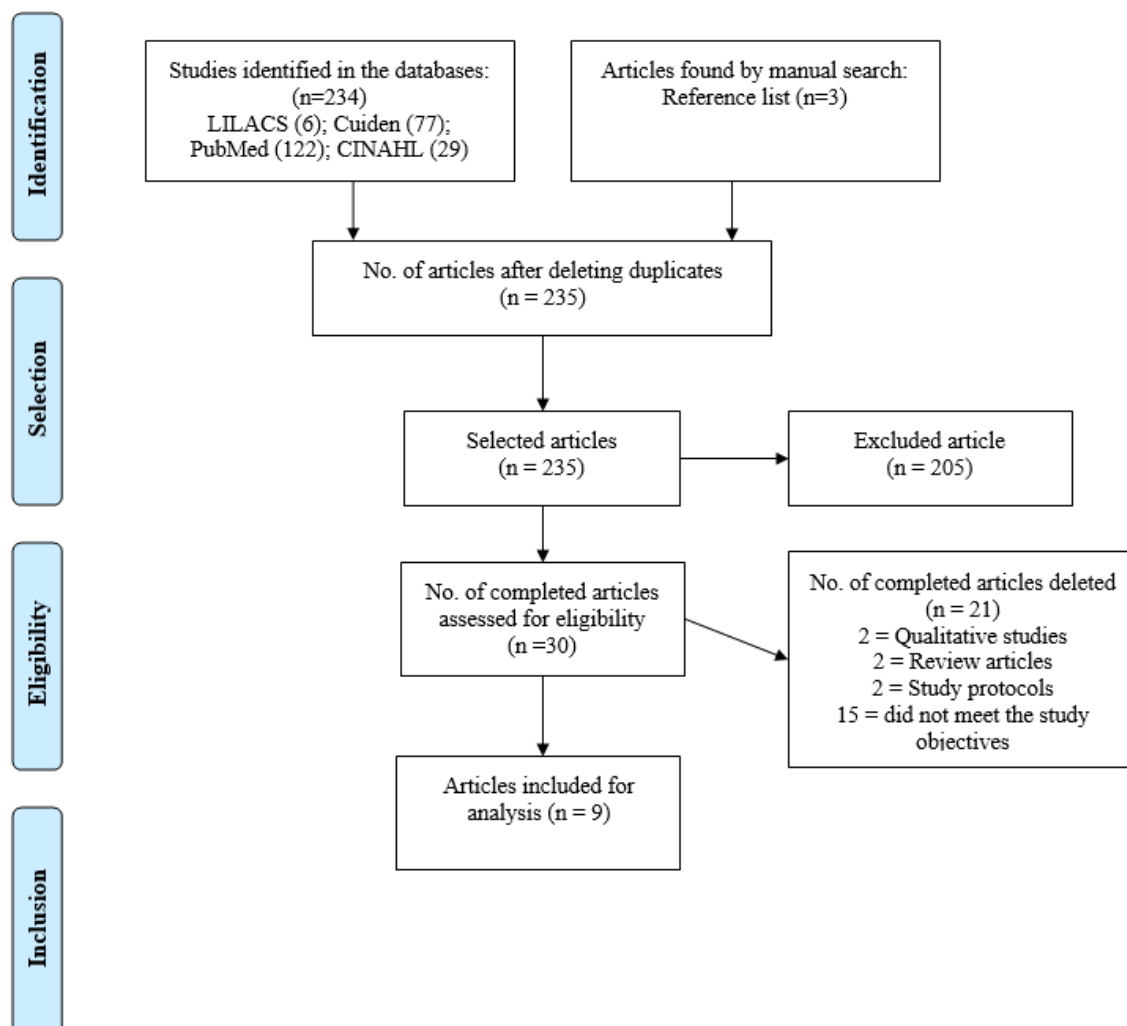

Figure 1 – Flowchart of article selection
Source: The author (2018)

- **Characterization of the studies**

Of the nine articles selected for the review, publications are observed between the years 2006 and 2016, and in the years 2014 and 2015, three articles were published. All included articles were published in international journals, including the Journal of Pain and Symptom Management, Cancer, BMC Palliative Care, Journal of Clinical Oncology, Supportive Care in Cancer, British Medical Journal and Archives of Internal

Medicine, of these two are not exclusive to oncology or PC.

Highlight was for Supportive Care in Cancer, focusing on palliative care, which had three articles.

Table 3 presents methodology, objective, participants and main results found, as well as the methodological analysis of the articles.

For the discussion, three categories emerged: domains that interfere with QoL; main causes of hospitalization and place of death and its relationship with QoL.

Table 3. Caracterização dos artigos incluídos na revisão – Curitiba, 2018.

	Author/ year place of study	Type of study	Objective	Sample	Result/Methodological analysis
A1	Hui et al, 2014; EUA.	Retrospective cohort.	To compare quality of life at the end of life among patients with hematological malignancies and solid tumors.	816 patients. - 123 Hematological diseases. -703 solid tumors.	Last 30 days: haematological ones sought emergency (54% vs 43% p = 0.03); had more hospitalizations (81% vs 47%, p <0.001); they died (33% vs 4% p <0.001); received chemotherapy (43% vs 14% p <0.001); and received PC (8% vs 17% p = 0.02). Methodological analysis: 72.7%.
A2	Enzinger et al, 2014; EUA.	Prospective cohort.	To examine the relationship among quality of life at the end of life of cancer patients participating in a clinical trial with those who do not participate.	358 patients. - 37 participated in a clinical trial. - 321 did not attend.	Those who participated in clinical trials received aggressive care (21.6% vs 12%); were referred late to hospices (51.4% vs 42.2%); hospital death (48.6% vs 25.7%); Lower QoL close to death (leastsquare mean 5.93 vs 7.6 p <0.001). Methodological analysis: 86.3%.
A3	Bakitas et al, 2015; EUA.	Randomized clinical trial.	To investigate the early effect of PC versus late on QoL.	207 patients. -104 received early PC intervention. - 103 participated in the control group.	Those who received early PC had fewer days of hospitalization (0.73, 95% CI, 0.41 to 1.27, P = 0.26), fewer emergency visits (0.73, 95% CI 0.45 to 1,19 (P = 0.21), chemotherapy in the last 14 days (1.57, 95% CI, 0.37 to 6.7, P = 0.27) and home death (27 [54%] v 28 [47%]; P = 0.60). Methodological analysis: 80%.
A4	Creutzfeld et al, 2016; Alemanha.	Descriptive.	To evaluate the predictive value of pre-treatment and during chemotherapy, QoL and symptom load.	47 patients with metastatic gastrointestinal cancer.	In the pre-treatment the patients had better QoL and less symptoms. They had efficacy in the treatment, they presented relief in the symptoms fatigue and appetite; better social, emotional and cognitive function. Methodological analysis: 86.3%.
A5	Wright et al., 2014; EUA	Observational, prospective, longitudinal.	To determine if the chemotherapy among terminal cancer patients months before death was associated with subsequent intensive care.	386 adult patients with metastatic refractory cancer, at least one cycle of chemotherapy.	The use of chemotherapy was associated with higher rates of cardiopulmonary resuscitation, mechanical ventilation, or both in the last week of life (14% vs 2%), and late hospice hospitalization (54% vs37%). No difference in survival rate. They died at home (47% vs 66%) less chance of dying in places they preferred (65% vs 80%). Methodological analysis: 86.3%.
A6	Laborei et al., 2006; Noruega.	Observational, prospective, longitudinal.	To describe the prevalence and severity of symptoms related to disease, QoL and the need for PC.	51 patients with advanced pancreatic cancer.	At baseline, they reported that QoL was significantly impaired (p <0.01). Fatigue, loss of appetite and impaired well-being were the most troublesome symptoms measured by ESAS. 44 of the 51 (86%) initial consultations and 107 (58%) of the following 185 resulted in PC interventions, being the most frequent in the use of opioid or laxative medication and in diet counseling. Methodological analysis: 68.1%.
A7	Zhang et al., 2015; EUA.	Observational, prospective, longitudinal.	To determine the factors influencing QoL at the end of life, identifying promising targets for interventions at this stage.	396 pacientes com câncer avançado e seus cuidadores informais.	Patients with major depressive disorder, post-traumatic stress disorder and panic disorder who were worried at baseline had worse QoL at the end of life, while those with a sense of inner peace had better QoL. Those with religious support and a good relationship with the doctor showed better quality of life at the end of life. Deaths in hospitals or ICUs were associated with worse QoL at the end of life compared to deaths at home. Methodological analysis: 86.3%.
A8	Mayrbäurl et al., 2015; Austria.	Observational, prospective, longitudinal.	To evaluate the QoL of patients with advanced colorectal cancer that is unresectable in chemotherapy treatment (1st, 2nd and 3rd line).	100 pacientes com câncer de colorretal metastático.	QoL deteriorated over time. Physical functioning, fatigue, pain, dyspnea and loss of appetite worsened constantly after 1st lineChemotherapy. Emotional functioning improved slightly after 1st line Chemotherapy. Methodological analysis: 81.8%.
A9	Mayrbäurl et al., 2012; Austria.	Observational, prospective, longitudinal. Observational, prospective, longitudinal.	To investigate the QoL among patients with advanced cancer receiving 2nd and 3rd line of chemotherapy.	104 pacientes com câncer metastático.	In the 1st line chemotherapy, patients presented better social and emotional functioning compared to the 2nd line; less financial difficulty compared to the 3rd line. Main symptoms: loss of appetite, fatigue, dyspnea, constipation, pain, nausea and vomiting. Methodological analysis: 77.2%.

Legend: QoL = quality of life; PC = palliative care; ICU = intensive care unit

DISCUSSION

Advanced cancer has caused concern due to the increase in new cases since the diagnosis of

the disease. For these patients, palliative treatment may be offered, including chemotherapy and PC alone or associated with chemotherapy treatment[8,9].

In this scoping review it is noticed that the emphasis in the type of study is for the observational ones, that describe a variety of phenomena related to the thematic, and had variety of publication in the last decade[10];also point out that in order to carry out research with other methods it needs the motivation of the patients to continue until the end of the collection period, and this sometimes does not occur due to the clinical decline that it presents.

It was noted that the integration of CPC in cancer treatment has been recommended for patients with advanced cancer. The publications related to the subject focus on international journals whose English language is predominant, but they are from all fields, allowing access to the professionals who work in it. It is observed that there was no Brazilian publication, this possibly denotes, when compared with other countries, that the theme is recent in Brazil and that the applicability of policies on PC is still insipient[11].

Patients with advanced cancer receive special attention in relation to their QoL because of the burden of symptoms that they may develop due to illness and/or treatment altering their quality of life. In this study, the categories that emerged affirmed this condition.

- Domains that interfere with the quality of living

The articles selected indicate that the presence of symptoms resulting from palliative chemotherapy interferes with QoL. Articles A4, A5, A8 and A9 emphasize that the symptoms that most affect patients in palliative chemotherapy are pain, fatigue, insomnia, depression, loss of appetite, dyspnea, constipation, nausea and vomiting, that is, physical and emotionalafflictions. In addition to these domains observed in this review, a study[12] that evaluated the QoL of women with breast cancer under chemotherapy indicated that the main domains affected were social, cognitive and sexual.

Articles A4, A8 and A9 showed that as the disease progressed, even in chemotherapy, the

symptoms worsened. Similarly, an observational study identified that in the last week of life, in addition to presenting more symptoms, their intensity increases. Among the main signs and symptoms are pain, nausea, anxiety, depression, shortness of breath, drowsiness, well-being, loss of appetite and tiredness, being the intensity between moderate and severe[13,14].

Article A3 showed that advanced cancer patients who received PC early had a better QoL than patients who had access to care late. In conclusion, a study[15] carried out in China with patients with advanced small cell lung cancer showed that the symptoms with higher intensities were dyspnea, anorexia and weight loss, which negatively affected QoL, leading the authors to conclude that the ideal for these patients is early or exclusive follow-up in PC.

Articles A4, A8 and A9 emphasize that the spiritual domain compromises QoL. A study conducted in the United States[16], with 396 patients, showed that patients with good symptoms control, good interaction with the health team, and receiving some type of religious or spiritual care reported better QoL. Moreover, they reinforce that the reduction of the patients anxiety helps to improve QoL at the end of life[16]. In this sense, a meta-analysis study found that associating measures of religious and spiritual support regardless of the type and stage of the disease, as well as improving spiritual well-being and QoL reduces anxiety, depressive symptoms and hopelessness[17].

In this category it can be evidenced that the QoL of patients with advanced cancer is better when they have access to PC early or when it is performed concomitantly with the chemotherapy palliative treatment.

- Hospitalization and quality of life

Articles A1, A2, A3 and A5 discuss that hospitalization in the hospital environment worsens the QoL of patients with advanced cancer and that patients receiving palliative chemotherapy are more likely to be hospitalized. It is noteworthy that the treatment triggers several side effects, some without improvement with medications, such as febrile neutropenia and renal insufficiency, as well as have poorly controlled symptoms related to disease

progression. These conditions, themselves, may already worsen patients' living conditions.

In a study carried out in the Czech Republic, aiming to evaluate QoL during hospitalization of patients with advanced cancer and identifying the protective factors for QoL improvement, it was pointed out that the hospitalization during an advanced stage of the disease is distressing for patients and that the QoL deteriorates during hospital stay. It showed that the predictors that influenced negatively were: experiences of new emotions, being female, being over 75 years old; while protective factors were: *Karnofsky Performance Status* at the beginning of hospitalization greater than 60%, presence of companion and absence of depression[18].

A study conducted in California with the objective of assessing adverse events in patients with metastatic breast cancer and their clinical impact on the chemotherapy regimen, identified that of 1,682 women evaluated, 909 (54%) had adverse events. As consequence, 121 women required hospitalization lasting three or more days, negatively impacting QoL [19].

Articles A1, A3, A5 and A7 report that QoL is worse in patients with advanced cancer who remain in the intensive care unit (ICU). A3, specifically, reports that patients who receive PC early have less time in the ICU.

In California, a study of 59 patients with metastatic breast cancer, found that 38 of them died, but data on the treatment were only available in the charts of 18 of them, and it was possible to identify that five (27.8%) received chemotherapy in the last two weeks of life; none of them remained in the ICU during the last 30 days of life and 13 (72.2%) were referred to hospices and had a better QoL, due to lower hospitalization[20].

The study in Florida highlights that the QoL of patients with advanced cancer is better in hospices than in hospitals, because they have greater contact with loved ones, receive assistance from a multidisciplinary team, do not suffer aggressive interventions aimed at prolonging life , besides the fact that they are usually places close to nature[21].

- Place of death and the quality of life.

The fact that QoL is influenced by the place of death of patients with advanced cancer was pointed out in articles A2, A3, A5 and A7, and that patients who evolve to death at home or who choose the place where they want to die have a better QoL of those who evolve to death in hospital settings. Corroborating with these data, a retrospective study carried out in Japan with family caregivers concluded that patients who died at home had better QoL than those in the hospital setting[22].

In the study carried out in Egypt, aiming to identify the place of preference for dying, it was shown that patients with advanced cancer and their family caregivers prefer death at home, 93% and 90.1%, respectively; also found that the worse the patient's performance status and if the family caregiver has job, the desire is that the place of death is the hospital, consequently, the less the possibility of accompanying a PC service, the greater the intensity of symptoms and the lower to QoL[23].

Epidemiological study conducted in the United States on cancer deaths from 1999 to 2015 found that the proportion of hospital deaths decreased from 36.6% to 24.6%; household and hospice deaths increased from 38.4% to 42.6% and 0 to 14%, respectively[24]. The authors[24] attribute this statistical change to the increase of patients to PC services.

On the other hand, a study that analyzed the location of all deaths occurring in a large municipality in the south of Brazil from 1996 to 2010, found that neoplasms were the cause that contributed the most to the growth of hospital deaths in the last 5 years - approximately 82% of these deaths were in the hospital environment, and the authors concluded that the limiting factors for home deaths were: few medical visits, low availability of home support staff, and family acceptance[25].

Systematic review suggests that for the death of the patient to occur at home, he/she must first desire it, cannot live by himself/herself, it is necessary to have a PC team and a caregiver with coping skills[26]. In the United States, more than 90% of adults say they prefer to die at home, but less than 25% of deaths occur at home. Many advanced cancer patients are hospitalized, undergoing ineffective treatment interventions that decrease their QoL, and die in the hospital with various distressing symptoms[27].

Although studies relate the place of death with QoL, there are authors[26] who mention that the place of death may not be a good indicator for QoL, since it is determined by multiple factors and therefore depends on individual circumstances.

CONCLUSION

This review showed a deficit in national studies with this theme, perhaps because PC is a recent issue in Brazil, compared to other countries. It identified that patients who receive PC early experience lower intensity of symptoms and consequently better QoL.

The signs and symptoms that most affect the patient in palliative chemotherapy are pain, fatigue, depression, anxiety, nausea, vomiting, constipation, neutropenia, loss of appetite, dyspnea and spirituality. Consequently, the most affected domains are physical, emotional and spiritual. According to the studies included in the review the presence of family members, concomitant follow-up of a PC service, search for emergency care and hospitalizations, are factors that may affect the QoL of patients with advanced cancer in palliative chemotherapy.

This research is relevant for nursing, since it contributes to the evaluation of these patients, focusing on the domains compromised by palliative chemotherapy, and allows to adopt strategies to minimize them and, consequently, improve the quality of life.

COMPROMETIMENTO DA QUALIDADE DE VIDA DE PACIENTES EM QUIMIOTERAPIA PALIATIVA E CUIDADOS PALIATIVOS: SCOPING REVIEW

RESUMO

Objetivo: avaliar os domínios que comprometem a qualidade de vida de pacientes com câncer avançado em tratamento quimioterápico paliativo e cuidado paliativo. **Método:** Trata-se de uma *scoping review* realizada de março a maio de 2018, nas bases de dados CINAHL, LILACS, PubMed, Cuiden e na literatura cinzenta (*Google Scholar* e referências encontradas nos artigos analisados), utilizando os descritores "*palliative care*","*quality of life*","*emotionalcare*", "*functional care*","sexual care", "*physical care*","*social care*","*comfort care*","*spiritual care*","*palliative chemotherapy*" e "*cancer advanced*". Foi realizada avaliação da qualidade metodológica por meio do instrumento STROBE para estudos observacionais e o CONSORT para os ensaios clínicos. **Resultados:** Os nove artigos encontrados e analisados são internacionais, publicados entre 2012 e 2016, com boa qualidade metodológica. Os domínios identificados foram os físicos, sociais e emocionais; o internamento hospitalar e local de óbito são fatores que também comprometeram a qualidade de vida. **Conclusão:** os pacientes em quimioterapia paliativa possuem baixa qualidade de vida. Porém, a presença de familiar e o acompanhamento concomitante com o serviço de cuidados paliativos melhoram essa situação. A avaliação dos pacientes, com enfoque nestes domínios, permite à Enfermagem adotar estratégias para melhoraria da qualidade de vida.

Palavras-chave: Qualidade de vida. Cuidados paliativos. Tratamento farmacológico. Neoplasias. Enfermagem oncológica.

COMPROMETIMIENTO DE LA CALIDAD DE VIDA DE PACIENTES EN QUIMIOTERAPIA PALIATIVA Y CUIDADOS PALIATIVOS: SCOPING REVIEW

RESUMEN

Objetivo: evaluar los dominios que comprometen la calidad de vida de pacientes con cáncer avanzado en tratamiento de quimioterapia paliativa y cuidado paliativo. **Métodos:** se trata de una *scoping review* realizada de marzo a mayo de 2018, en las bases de datos CINAHL, LILACS, PubMed, Cuiden y en la literatura gris (*Google Scholar* y referencias encontradas en los artículos analizados), utilizando los descriptores "*palliative care*", "*quality of life*", "*emotional care*", "*functional care*", "sexual care", "*physical care*", "*social care*", "*comfort care*", "*spiritual care*", "*palliative chemotherapy*" y "*cancer advanced*". Fue realizada evaluación de la calidad metodológica por medio del instrumento STROBE para estudios observacionales y el CONSORT para los ensayos clínicos. **Resultados:** Los nueve artículos encontrados y analizados son internacionales, publicados entre 2012 y 2016, con buena calidad metodológica. Los dominios identificados fueron los físicos, sociales y emocionales, la hospitalización y lugar de fallecimiento son factores que también comprometieron la calidad de vida. **Conclusión:** los pacientes en quimioterapia paliativa poseen baja calidad de vida. Sin embargo, la presencia de familiar y el acompañamiento concomitante con el servicio de cuidados paliativos mejoran esta situación. La evaluación de los pacientes, con enfoque en estos ámbitos, permite que la Enfermería adopte estrategias para la mejora de la calidad de vida.

Palabras clave: Calidad de vida. Cuidados paliativos. Tratamiento farmacológico. Neoplasias. Enfermería oncológica.

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