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INTERVENÇÕES DE ENFERMAGEM NA PESSOA EM CUIDADOS PALIATIVOS COM FADIGA: UMA SCOPING REVIEW
NURSING INTERVENTIONS IN THE PERSON IN PALLIATIVE CARE WITH FATIGUE: A SCOPING REVIEW
INTERVENCIONES DE ENFERMERÍA EN LA PERSONA EN CUIDADOS PALIATIVOS CON FATIGA: REVISIÓN DEL ALCANCE

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RESUMO

Introdução: A fadiga é um dos sintomas mais comuns na pessoa em situação paliativa que afeta a sua qualidade de vida e, cuja gestão permanece um desafio.
Objetivo: Mapear as intervenções de enfermagem utilizadas no controlo da fadiga na pessoa em situação paliativa.
Métodos: Scoping Review de acordo com a metodologia do Joanna Briggs Institute. Dois investigadores independentes realizaram a análise, extração e síntese dos resultados.
Resultados: Intervenções de enfermagem como Intervenção Psicossocial, Massagem Aromática, Cuidados paliativos standard, Intervenção colaborativa Online, Terapia Cognitivo Comportamental, Exercício físico e acupuntura foram identificadas.
Conclusão: Os estudos apontam para intervenções multidisciplinares multimodais, onde o enfermeiro tem um papel primordial. No entanto, não há estudos em pessoas numa fase terminal da sua doença, ou seja, nos últimos meses ou dias de vida, pelo que se sugerem novas investigações sobre a eficácia das intervenções no controlo da fadiga da pessoa em cuidados paliativos e a adoção de estratégias que permitam melhorar o conhecimento dos profissionais de saúde sobre o impacto da fadiga.

Palavras-chave: cuidados paliativos; fadiga; enfermagem

ABSTRACT

Introduction: Fatigue is one of the most common symptoms in patients in palliative care that affects their quality of life and whose management remains a challenge.
Objective: To map the nursing interventions used to control fatigue in people in palliative situations.
Methods: Scoping Review according to the Joanna Briggs Institute methodology. Two independent researchers performed the analysis, extraction and synthesis of the results.
Results: Nursing interventions such as Psychosocial Intervention, Aromatic Massage, Standard Palliative Care, Online Collaborative Intervention, Cognitive Behavioural Therapy, Physical Exercise and acupuncture were identified.
Conclusion: The studies point to multidisciplinary multimodal interventions, where the nurse has a primary role. However, there are no studies in patients in a terminal phase of their disease, that is, in the last months or days of life, so further research is suggested on the effectiveness of interventions to control patient fatigue in palliative care and the adoption of strategies that improve the knowledge of health professionals about the impact of fatigue.

Keywords: palliative care; fatigue; nursing

RESUMEN

Introducción: La fatiga es uno de los síntomas más comunes en pacientes en cuidados paliativos que afecta su calidad de vida y cuyo manejo permanece un desafío.
Objetivo: Mapear las intervenciones de enfermería utilizadas para el control de la fatiga en personas en situaciones paliativas.
Métodos: Scoping Review según la metodología del Joanna Briggs Institute. Dos investigadores independientes realizaron el análisis, extracción y síntesis de los resultados.
Resultados: Se identificaron intervenciones de enfermería como Intervención Psicosocial, Masaje Aromático, Cuidados Paliativos Estándar, Intervención Colaborativa Online, Terapia Cognitivo-Conductual, Ejercicio Físico y Acupuntura.
Conclusión: Los estudios apuntan a intervenciones multidisciplinares multimodales, donde el enfermero tiene un papel primordial. Sin embargo, no existen estudios en pacientes en fase terminal de su enfermedad, es decir, en los últimos meses o días de vida, por lo que se sugiere profundizar en la investigación sobre la efectividad de las intervenciones para el control de la fatiga del paciente en cuidados paliativos y la adopción de estrategias que mejoran el conocimiento de los profesionales de la salud sobre el impacto de la fatiga.

Palabras Clave: cuidados paliativos; fatiga; enfermería

INTRODUCTION

According to the International Association for Hospice and Palliative Care (Radbruch, et al., 2020, p.755), palliative care is “holistic, active care provided to individuals of all ages with intense suffering resulting from serious illness, especially aimed at those near the end of life. The aim is to improve the quality of life of sick people, their families, and caregivers."

Advances in medical treatments for patients with incurable diseases have led to a prolongation of survival. Today, patients with incurable cancer undergoing cancer therapy with palliative intent, can remain in a chronic disease process for a period of time lasting years (Poort et al., 2017, p.6).

According to the Australian National Sub-acute and Non-acute Patient, a terminal illness is associated with four palliative phases, which are described and based on individual characteristics of the suffering presented by each patient. Thus, the four palliative phases are associated with the stage of the disease, where each of them corresponds to a different level of complexity: the acute phase, the deterioration phase, the terminal phase and the stable phase.

For Radbruch et al. (2008) fatigue is one of the most common symptoms in people in palliative care, affecting more than 80% of patients. For the authors it is described as "a subjective feeling of tiredness, weakness and lack of energy" that affects the person physically, emotionally and cognitively, not only the cancer patient, but also the patient with non-oncological pathology.

According to National Comprehensive Cancer Network (NCCN) cancer-related fatigue is "a distressing, persistent and subjective feeling of physical, emotional, and/or cognitive tiredness or exhaustion related to cancer or its treatment that is not proportional to recent activity and interferes with normal functioning (Berger, 2020, p. FT-1). Poort et al. (2017, p.3) add that, in addition to being a prevalent symptom, fatigue is also a factor that affects the patient's quality of life.

In patients with advanced cancer, fatigue is associated with a multitude of factors such as sociodemographic, clinical (functional status of the patient and cancer treatment), biological parameters (serum levels of haemoglobin and albumin) and lack of control of other physical symptoms, such as pain or dyspnea (Ghoshal et al., 2017).

According to Klasson, Frankling, Hagelin & Björkhem-bergman (2021, p.5) the aetiology of fatigue "may differ in the initial palliative phase compared to the late phase. In the initial phase, fatigue and change in fatigue often show an association with biomarkers of inflammation. However, in the late stage, close to death, an improvement in fatigue is often difficult to achieve and recovery of inflammatory biomarkers is rarely possible.

The experience of fatigue in the last days of life is also influenced by other symptoms and the fact that life comes to an end. Despite the same influential aetiology, the experience and meaning of fatigue may differ at the end of life compared to earlier palliative phases."

Thus, fatigue is a symptom whose management remains a challenge, not only because of the above, but also because of the overlap of other specific symptoms of the disease, and because of the lack of evidence of the effectiveness of interventions in the context of palliative care (Ingham & Urban, 2020, p.59).

In a study carried out in Australia, whose objective was to understand the attitudes of palliative care health professionals towards fatigue, Ingham & Urban (2020) found that most participants recognized fatigue as a common symptom, associating it with a normal course of incurable disease, not recognizing this symptom, when severe, as potentially more impacting than pain. In the same study, the authors also verified that health professionals considered strategies based on exercise and energy conservation, and intervention aimed at the patient's expectations in the control of fatigue consensual. On the other hand, they identified the following as barriers: lack of time and resources, low capacity and motivation of patients who adopt an attitude of resignation in the face of fatigue, factors associated with the disease such as the coexistence of other uncontrolled symptoms, difficulty in measuring fatigue by the patient, who confuses the level of the symptom with the level of suffering caused by it and by the limited therapeutic options (Ingham & Urban, 2020, p.62).

According to the literature, fatigue management "involves a multidimensional strategy, divided into pharmacological and non-pharmacological strategies" (Poort et al. 2017, p.6). In a narrative review of pharmacological interventions, Klasson, Frankling, Hagelin & Björkhem-bergman (2021, p.1) concluded that "the evidence is still weak for the use of pharmacological treatments for fatigue in patients in palliative care, although methylphenidate and corticosteroids may be considered in their treatment.

Taking into account the little evidence about nursing interventions aimed at improving care delivery in controlling fatigue, we decided to carry out a scoping review with the aim of mapping nursing interventions used to control fatigue in the person in palliative care. The aim of this is to answer the research question: What are the nursing interventions used to control fatigue in people in palliative situations?

1. METHODS

The study was conducted in accordance with the methodology proposed by the Joanna Briggs Institute (JBI) for Scoping Reviews (Peters et al., 2020). A research protocol was developed defining the inclusion criteria, the limitations, the research question, the time limit, the Boolean phrase, among other considerations presented below.

The question was based on the acronym PCC (Population, Concept and Context), where the Population corresponded to Patients with fatigue, the Concept to Interventions for the control of fatigue and the Context to Palliative Care.

Having defined the terms of the question, the researchers defined studies with adults in palliative situations and nursing interventions in the control of fatigue as inclusion criteria. The search limitations defined by the investigators were articles written in Portuguese, English or Spanish and the time limit from 2016 to 2021.

The DeCS/MeSH and CINAHL Headings descriptors were identified and the Boolean phrase was elaborated:

> (TI (((MH "Hospice and Palliative Nursing")) OR (MH "Palliative Care") OR (MH "Terminally Ill Patients") OR "end-of-life care" OR "Palliative Medicine" OR ((MH "Hospice and Palliative Nurses Association")) OR (MH "Hospice Care") OR (MH "Terminal Care") OR "Palliative" OR "end of life" OR (MH "Hospices")) OR AB (((MH "Hospice and Palliative Nursing")) OR (MH "Palliative Care") OR (MH "Terminally Ill Patients") OR "end-of-life care" OR "Palliative Medicine" OR ((MH "Hospice and Palliative Nurses Association")) OR (MH "Hospice Care") OR (MH "Terminal Care") OR "Palliative" OR "end of life" OR (MH "Hospices"))) AND (TI ((MH "fatigue") OR (MH "Asthenia") OR " symptom fatigue ") OR AB ((MH "fatigue") OR (MH "Asthenia") OR " symptom fatigue "))

The search strategy included both published and unpublished sources of evidence and comprised 3 steps. In the first stage (03/6/2021) a search was carried out in the CINAHL Complete, MEDLINE Complete and Cochrane Central Register of Controlled Trials databases through the content aggregator EBSCOHost. In the second stage (03/10/2021) the search terms were replicated in Scopus, in RCAAP (Portuguese Open Access Scientific Repositories available at https://www.rcaap.pt/) and in Google Scholar. In the third step, the bibliographic references of eligible articles were examined in order to identify additional studies.
After analysing the eligible articles, the time limit was applied, due to the redundancy of the results. The articles were analysed by two independent researchers. In situations where there was no consensus among the researchers, evaluation by a third researcher was requested. Rayyan and Mendeley software was used to manage the bibliographic references.
To extract the results, and in accordance with the JBI (2020), an instrument was prepared with data on the authors, year of publication, origin, study objectives, population and sample size within the source of evidence (if applicable), methodology/methods, type of intervention, duration of intervention (if applicable) and results. Two independent researchers performed data extraction and synthesis. Situations of uncertainty were resolved through discussion with a third researcher.
Since the objective of a scoping review is to determine what type of evidence is available, regardless of quality, the methodological quality of the studies was not evaluated.

2. RESULTS

The studies were analysed according to the Prism Diagram. The research carried out identified 619 studies with potential relevance, as shown in Figure 1. Of these, 153 were excluded because they were duplicates. Of the 466 records analysed, 400 were excluded after the title and abstract had been evaluated and 46 for not meeting the stipulated time limit. After the evaluation, 20 articles were selected which, after full reading, led to the exclusion of 5 articles for context and 6 for concept, since they did not meet the inclusion criteria. Finally, 9 articles were included in this review.

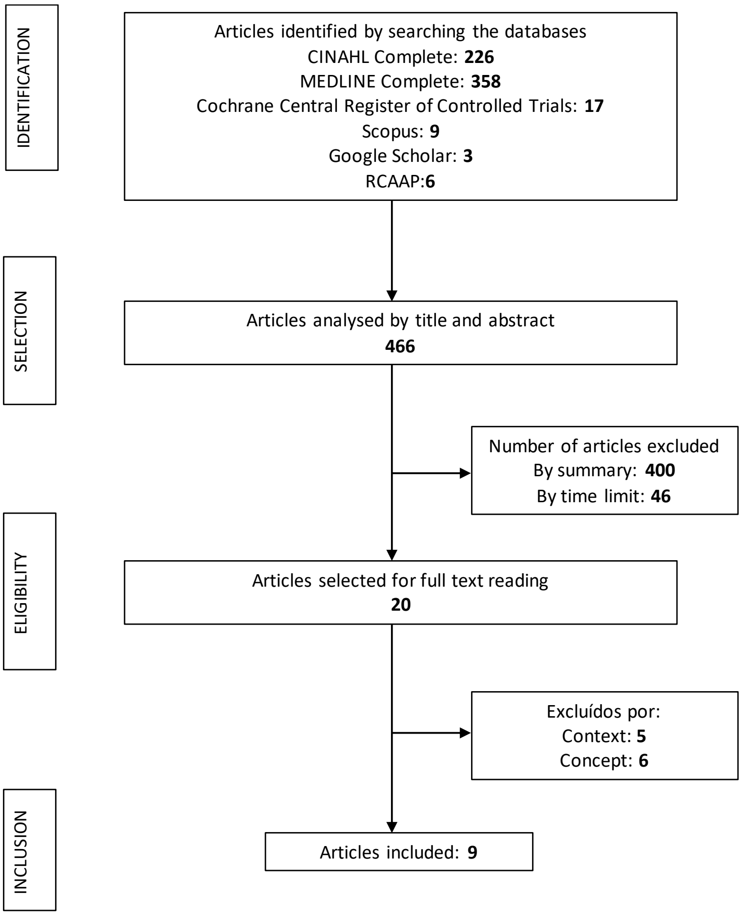

Figure 1 – Diagram with selection of studies according to (PRISMA, 2009)

The nine articles included in the study and which were part of the analysis corpus are presented below (Table 1).

Table 1 – Studies included in the review

Studies Included
Poort, H., Peters, M. E. W. J., van der Graaf, W. T. A., Nieuwkerk, P. T., van de Wouw, A. J., Nijhuis-van der Sanden, M. W. G., Bleijenberg, G., Verhagen, C. A. H. H. V. M., & Knoop, H. (2020). Cognitive behavioral therapy or graded exercise therapy compared with usual care for severe fatigue in patients with advanced cancer during treatment: a randomized controlled trial.
Zuo, X.-L., Wen, Y., Gong, S.-Q., & Meng, F.-J. (2019). Effectiveness of integrated nursing interventions for fatigue in patients with advanced cancer: A systematic review of randomized controlled trials.
Koesel, N., Tocchi, C., Burke, L., Yap, T., & Harrison, A. (2019). Symptom Distress: Implementation of Palliative Care Guidelines to Improve Pain, Fatigue, and Anxiety in Patients With Advanced Cancer.
Miller, K. R., Patel, J. N., Symanowski, J. T., Edelen, C. A., & Walsh, D. (2019). Acupuncture for Cancer Pain and Symptom Management in a Palliative Medicine Clinic.
Poort, H., Peters, M., Bleijenberg, G., Gielissen, M. F., Goedendorp, M. M., Jacobsen, P., Verhagen, S., & Knoop, H. (2017). Psychosocial interventions for fatigue during cancer treatment with palliative intent.
Ghoshal, A., Salins, N., Deodhar, J., Damani, A., & Muckaden, M. A. (2017). Impact of symptom control on fatigue improvement in patients with advanced cancer: A prospective observational study.
Cheng, C., Chen, L., Ning, Z., Zhang, C., Chen, H., Chen, Z., Zhu, X., & Xie, J. (2017). Acupuncture for cancer-related fatigue in lung cancer patients: a randomized, double blind, placebo-controlled pilot trial.
Park, H., Chun, Y., & Kwak, S. (2016). *The effects of aroma hand massage on fatigue and sleeping among hospice patients*.
Steel, J. L., Geller, D. A., Kim, K. H., Butterfield, L. H., Spring, M., Grady, J., Sun, W., Marsh, W., Antoni, M., Dew, M. A., Helgeson, V., Schulz, R., & Tsung, A. (2016). Web-based collaborative care intervention to manage cancer-related symptoms in the palliative care setting.

As previously mentioned for extracting the results, and according to the JBI (2020), a summary table of the articles selected for analysis was prepared in order to present the results and map the revised material in a logical and descriptive way (Table 2).

Table 2 – Summary table of articles selected for analysis

Year	Authors	Methodology	Results
2020	Poort et al.	Randomized study	Cognitive-behavioural therapy reduced fatigue and improved quality of life and functional capacity up to 3 months after the intervention. Regarding physical exercise, there was no statistically significant reduction in fatigue levels.
2019	Zuo, Wen, Gong & Meng	Systematic review	The collaborative intervention through a multidisciplinary team composed of professionals, patient and caregiver, proved to be a beneficial intervention in the control of fatigue. The provision of personalized care based on a protocol, psychoeducation, which includes interventions such as relaxation, imagination and distraction, passive exercises with the patient seated, ensuring a balance between activity and rest, cognitive- and a qigong, which includes body awareness training, relaxation and massage, has been shown to have positive results in controlling fatigue and muscle strength in patients undergoing chemotherapy.
2019	Koesel, Tocchi, Burke, Yap & Harrison	Pre- and post-test study	Statistically significant decrease in fatigue scores according to ESAS, after implementation of the safety guidelines palliative care American Society of Clinical Oncology (ASCO) in palliative care consultations.
2019	Miller, Patel, Symanowski, Edelen & Walsh	Retrospective study	There is a statistically significant improvement in fatigue control after the first acupuncture treatment and during the remainder, with the improvement in fatigue levels being correlated with the reduction in pain levels.
2017	Poort et al.	Systematic review	The results do not support the effectiveness of psychosocial interventions in reducing fatigue.
2017	Ghoshal, Salins, Deodhar, Damani & Muckaden	Retrospective observational study	The study showed that palliative care consultation is associated with an improvement in fatigue control at the time of the first follow-up (2-4 weeks after the intervention).
2017	Cheng et al.	Randomized Clinical Trial	The level of fatigue was reduced after 2 weeks in the group of participants who received acupuncture (8 sessions of 45 minutes, for 4 weeks, 2 per week) when compared with those who received a placebo treatment.
2016	Park, Chun, & Kwak	Comparative study	No statistically significant differences were found between groups
2016	Steel et al.	Randomized study	Collaborative care interventions involving nurses, physicians, psychologists, patients and caregivers reduce stress, pain and fatigue and improve the quality of life of patients with advanced cancer.

3. DISCUSSION

Currently, palliative care is increasingly recognized in Portugal, as part of the National Health System. The approach to this issue, in recent years, has been increasing due to both the aging of the population and the increase in more complex health conditions resulting from the higher prevalence of neoplasms, chronic or degenerative diseases. Palliative care is centred on an approach whose aim is to promote the quality of life of the person and their families, through the correct assessment and control of physical, social, emotional and spiritual symptoms that develop in the context of the disease (OMS, 2002). Care is provided by a multidisciplinary team during the period of diagnosis, illness, end of life and bereavement.

The palliative approach integrates a set of methods and procedures that must be used and that involve pharmacological and non-pharmacological measures to control symptoms in following up patients. Despite advances in recent years, cancer-related fatigue is an underappreciated symptom, understood as a natural part of the disease process and is, therefore, undertreated.

From analysing the articles, a set of consistent non-pharmacological interventions stands out, although there is some contradictory evidence.

In fact, people in situations with palliative needs require specialized care provided by their own multidisciplinary teams, with specialized skills, focused on optimizing their quality of life. In a retrospective observational study carried out in India on 500 patients with advanced cancer for whom standard palliative care was implemented and follow-up consultations were introduced after the initial intervention, Ghoshal et al. (2017) concluded that patients with continuous follow-up between two to four weeks after the intervention showed improvement in fatigue control. In the USA, Koesel et al. (2019) implemented the American Society of Clinical Oncology (ASCO) guidelines for palliative care with the aim of evaluating the reduction of symptoms, such as pain, fatigue and anxiety after its implementation in follow-up consultations. They studied 31 patients who applied the Edmonton Symptom Assessment Scale (ESAS). The ESAS scores for pain, fatigue, and anxiety were measured before consultation and at two subsequent visits. After implementing the guidelines, they observed a statistically significant decrease in ESAS fatigue scores at the three time points.

The analysis of these studies reveals the importance of monitoring by a team that provides palliative care. This idea is reinforced in the study by Steel et al. (2016), a randomized controlled trial conducted with 261 patients with advanced cancer and 179 caregivers, which examined the effectiveness of a collaborative care intervention. The collaborative care team included nurses, as coordinators, doctors, psychologists, the patient and his caregiver. The study demonstrated that collaborative teamwork reduces depression, pain and fatigue, and improves the quality of life of the cancer patient. In the study, the team monitored symptoms online or over the phone. Interventions included education, self-management, journaling, a chat room, an audiovisual library and peer support. Tele-monitoring and online interventions were recommended for patients with advanced cancer, reducing not only the symptoms of the disease but also the costs of healthcare.

These studies show that the existence of specialized, trained and dedicated teams that adopt a collaborative intervention involving a multidisciplinary team composed of doctors, nurses, psychologists, patients and family members is fundamental to control fatigue in the person in a palliative situation, particularly if a set of non-pharmacological strategies are adopted.

In a systematic review of 14 randomized studies, Poort et al. (2017) showed that psychosocial interventions performed individually or in groups, by psychologists or nurses were not effective in reducing fatigue. However, in a randomized controlled study carried out in 134 patients with locally advanced or metastatic cancer, with severe fatigue and with a life expectancy of more than six months undergoing cognitive-behavioural therapy in 2020, Poort et al., obtained reduced fatigue and improved quality of life and functional capacity when compared with the group that received usual care (control group). These two results, although controversial, suggest that cognitive-behavioural therapy may play an important role in reducing fatigue.

Even though the study by Poort et al. (2020) also encompasses physical exercise, the authors concluded that it did not produce a statistically significant reduction in fatigue levels. Ingham & Urban (2020) add that both physical exercise and cognitive-behavioural therapy are two interventions with high evidence in the control of fatigue. However, there is a lack of studies that identify which exercises are recommended and their relationship with the staging of the disease. Studies conducted outside the context of palliative care indicate strength/resistance exercises and aerobic exercises.

Regarding the collaborative intervention of a multidisciplinary team focused on providing personalized care based on protocols, there are several studies that describe a set of non-pharmacological interventions with effective results in the control of fatigue. In their systematic review involving six randomized studies, with 736 adult patients with advanced cancer, undergoing non-pharmacological interventions directed by nurses, Zuo, Wena, Gongb and Mengb (2019) identified relaxation, guided imagery and distraction, passive exercises with the patient seated, ensuring a balance between activity and rest, cognitive-behavioural intervention, acupuncture and *qigong*, which includes body awareness training, relaxation and massage as beneficial interventions in the control of fatigue. All interventions were shown to have positive results in the control of fatigue and muscle strength in the patient undergoing chemotherapy. Cheng et al. (2017), performed a randomized clinical trial with 28 patients diagnosed with small cell lung carcinoma, under chemotherapy and radiotherapy with fatigue and found that the level of fatigue reduced after two weeks in the group of participants who received acupuncture sessions when compared to with the group that received placebo treatment. In a retrospective study of all patient files referred to in the Levine Cancer Institute Section of Palliative Medicine, undergoing acupuncture for the treatment of pain and other symptoms, Miller et al. (2019) concluded that there was a statistically significant improvement in fatigue control after the first acupuncture session and during the others, with improvement in fatigue levels being correlated with the reduction in pain levels. In South Korea, Park et al. (2016) compared the effects of massage intervention, with and without aromatherapy, in order to understand its influence on the level of fatigue and sleep of patients in palliative care units in a sample of 30 patients; however, they did not find statistically significant differences between groups.

Although some non-pharmacological interventions in some studies have not shown statistically significant differences, most of them allow us to conclude that there is a set of non-pharmacological interventions such as: relaxation, distraction or guided imagery, passive exercises, cognitive-behavioural intervention, acupuncture and massage with or without aromatherapy, which produce effects in the control of fatigue in the person in palliative care.

CONCLUSION

The study made it possible to verify that consensual interventions go through a multidisciplinary multimodal intervention, in which the nurse plays a key role, including interventions in the context of individual physical exercise combined with energy conservation strategies (passive exercises), education and counselling (sleep hygiene). and diet) and cognitive-behavioural therapy. There is also a set of non-pharmacological interventions integrated in a collaborative intervention of a multidisciplinary team such as massage, acupuncture, relaxation, distraction or guided imagery that reduce the effect of fatigue. It has also been found that interventions in the scope of palliative care, where the philosophy focuses on the patient and family at the centre of care, on symptom control, on communication and on teamwork, show positive results in fatigue control. Similarly, in the person in palliative care, where the objective is to provide maximum comfort, it is necessary to balance the impact of fatigue with targeted interventions.

The studies were found to include people at different stages of their disease, namely cancer patients undergoing curative therapy, cancer survivors and patients in a palliative phase. However, there are no studies in patients in the terminal phase of their disease, that is, in the last months or days of life. Consequently, further investigations are suggested on the effectiveness of interventions to control fatigue in palliative care patients at this stage of the disease.

IMPLICATIONS FOR PRACTICE

This study highlights that for the control of fatigue in the person in palliative care, a multidisciplinary multimodal intervention is essential, involving a team of professionals with diversified skills who work complementarily, adopting a treatment plan that involves pharmacological and non-pharmacological interventions.

REFERENCES

Berger, A., et al. (2020). NCCN Clinical practice guidelines in Oncology. Cancer-related Fftigue. Version 1.2021. https://www.nccn.org/

Cheng, C., Chen, L., Ning, Z., Zhang, C., Chen, H., Chen, Z., Zhu, X., & Xie, J. (2017). Acupuncture for cancer-related fatigue in lung cancer patients: a randomized, double blind, placebo-controlled pilot trial. *Supportive Care in Cancer*, *25*(12), 3807–3814. http://search.ebscohost.com/login.aspx?direct=true&db=ccm&AN=125895078&lang=pt-br&site=ehost-live

Ghoshal, A., Salins, N., Deodhar, J., Damani, A., & Muckaden, M. A. (2017). Impact of symptom control on fatigue improvement in patients with advanced cancer: A prospective observational study. Progress in Palliative Care, *25*(2), 63–74. https://doi.org/10.1080/09699260.2016.1200818

Ingham, G., & Urban, K. (2020). How confident are we at assessing and managing fatigue in palliative care patients? A multicenter survey exploring the current attitudes of palliative care professionals. Palliative Medicine Reports, 1(1), 58–65. https://doi.org/10.1089/pmr.2020.0005

Klasson, C., Frankling, M. H., Hagelin, C. L., & Björkhem-bergman, L. (2021). Fatigue in cancer patients in palliative care—a review on pharmacological interventions. *Cancers*, 13(5), 1–18. https://doi.org/10.3390/cancers13050985

Koesel, N., Tocchi, C., Burke, L., Yap, T., & Harrison, A. (2019). Symptom distress: Implementation of palliative care guidelines to improve pain, fatigue, and anxiety in patients with advanced cancer. Clinical Journal of Oncology Nursing, *23*(2), 149–155. http://search.ebscohost.com/login.aspx?direct=true&db=mdc&AN=30880813&lang=pt-br&site=ehost-live

Miller, K. R., Patel, J. N., Symanowski, J. T., Edelen, C. A., & Walsh, D. (2019). Acupuncture for cancer pain and symptom management in a palliative medicine *Clinic.* American Journal of Hospice and Palliative Medicine, *36*(4), 326–332. https://doi.org/10.1177/1049909118804464

Peters, M. D. J., Godfrey, C., McInerney, P., Munn, Z., Tricco, A. C. & Khalil, H. (2020). Chapter 11: Scoping Reviews. In: Aromataris E, Munn Z (Editors). *JBI Manual for Evidence Synthesis*. https://doi.org/10.46658/JBIMES-20-12

Poort, H., Peters, M., Bleijenberg, G., Gielissen, M. F., Goedendorp, M. M., Jacobsen, P., Verhagen, S., & Knoop, H. (2017). Psychosocial interventions for fatigue during cancer treatment with palliative intent. *The Cochrane Database of* Systematic Reviews, *7*, CD012030. http://search.ebscohost.com/login.aspx?direct=true&db=mdc&AN=28708236&lang=pt-br&site=ehost-live

Poort, H., Peters, M. E. W. J., van der Graaf, W. T. A., Nieuwkerk, P. T., van de Wouw, A. J., Nijhuis-van der Sanden, M. W. G., Bleijenberg, G., Verhagen, C. A. H. H. V. M., & Knoop, H. (2020). Cognitive behavioral therapy or graded exercise therapy compared with usual care for severe fatigue in patients with advanced cancer during treatment: a randomized controlled trial. Annals of Oncology. Official Journal of the European Society for Medical Oncology, *31*(1), 115–122. http://search.ebscohost.com/login.aspx?direct=true&db=mdc&AN=31912784&lang=pt-br&site=ehost-live

Radbruch, L., De Lima, L., Knaul, F., Wenk, R., Ali, Z., Bhatnaghar, S., Blanchard, C., Bruera, E., Buitrago, R., Burla, C., Callaway, M., Munyoro, E. C., Centeno, C., Cleary, J., Connor, S., Davaasuren, O., Downing, J., Foley, K., Goh, C., … & Pastrana, T. (2020). Redefining palliative care—A new consensus-based definition. Journal of Pain and Symptom Management, *60*(4), 754–764. https://doi.org/10.1016/j.jpainsymman.2020.04.027

Radbruch, L., Strasser, F., Elsner, F., Gonçalves, J. F., Løge, J., Kaasa, S., Nauck, F., & Stone, P. (2008). Fatigue in palliative care patients - An EAPC approach. Palliative Medicine, *22*(1), 13–32. https://doi.org/10.1177/0269216307085183

Steel, J. L., Geller, D. A., Kim, K. H., Butterfield, L. H., Spring, M., Grady, J., Sun, W., Marsh, W., Antoni, M., Dew, M. A., Helgeson, V., Schulz, R., & Tsung, A. (2016). Web-based collaborative care intervention to manage cancer-related symptoms in the palliative care setting. Cancer, *122*(8), 1270–1282. http://search.ebscohost.com/login.aspx?direct=true&db=mdc&AN=26970434&lang=pt-br&site=ehost-live

World Health Organization. (2002). WHO – Definition of palliative care. World Health Organization. http://www.who.int/cancer/palliative/definition/en/

Zuo, X. L., Wen, Y., Gong, S. Q., & Meng, F. J. (2019). Effectiveness of integrated nursing interventions for fatigue in patients with advanced cancer: A systematic review of randomized controlled trials. Frontiers of Nursing, *6*(3), 203–210. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85075195386&doi=10.2478%2FFON-2019-0027&partnerID=40&md5=490956e09181ef419104429f9804b376