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REVISTA IBERO-AMERICANA DE SAÚDE E ENVELHECIMENTO
REVISTA IBERO-AMERICANA DE SALUD Y ENVEJECIMIENTO

**THE IMPORTANCE OF TRAINING HEALTH PROFESSIONALS
IN PROVIDING CARE TO PATIENTS
WITH PALLIATIVE NEEDS:
A SYSTEMATIC LITERATURE REVIEW**

**A IMPORTÂNCIA DA CAPACITAÇÃO DOS PROFISSIONAIS DE SAÚDE
NA PRESTAÇÃO DE CUIDADOS AOS DOENTES
COM NECESSIDADES PALIATIVAS:
REVISÃO SISTEMÁTICA DA LITERATURA**

**LA IMPORTANCIA DE LA FORMACIÓN DE LOS PROFESIONALES
SANITARIOS EN LA ATENCIÓN A LOS PACIENTES
CON NECESIDADES PALIATIVAS:
REVISIÓN SISTEMÁTICA DE LA LITERATURA**

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ABSTRACT

Introduction: The lack of knowledge of health professionals in Palliative Care is one of the biggest barriers to patient access to this care. Therefore, increasing the education and training of professionals is considered by international organizations as a priority area for action in order to reduce one of the greatest global disparities, inequality in access to Palliative Care. The aim of this review is to assess whether the training of health care professionals in Palliative Care contributes to an increase in abilities in the approach to patients with palliative needs and to identify what types of intervention programs have been used to promote this training.

Methods: A search was conducted in PubMed and EBSCOhost (CINAHL plus with full text, Medline with full text, MedicLatina and ERIC) databases from 2016-2021. Five hundred eight were found and 6 articles were included for final review. The articles were submitted to methodological quality assessment according to the recommendations of the Joanna Briggs Institute.

Results: In all articles the professionals were submitted to specific training programmes in Palliative Care and in all of them there was an acquisition of new knowledge and skills with application in daily clinical practice.

Conclusion: The training programmes contributed to the increase of new skills in the approach to the patient/family with palliative needs.

Keywords: Education; Health Personnel; Palliative Care; Skills; Training.

RESUMO

Introdução: A falta de conhecimentos dos profissionais de saúde em Cuidados Paliativos constitui uma das maiores barreiras no acesso dos doentes a estes cuidados. Aumentar a formação e a capacitação dos profissionais é considerado pelas entidades internacionais como um eixo prioritário de atuação, de modo a reduzir uma das maiores disparidades mundiais: a desigualdade no acesso aos Cuidados Paliativos. O objetivo desta revisão é avaliar se a capacitação dos profissionais de saúde em Cuidados Paliativos contribui para um aumento das competências na abordagem ao doente com necessidades paliativas e identificar que tipos de programas de intervenção foram utilizados para promover essa capacitação.

Métodos: Foi realizada uma pesquisa nas bases de dados da PubMed e EBSCOhost (CINAHL plus with full text, Medline with full text, MedicLatina e na ERIC), no período compreendido entre 2016-2021. Foram encontrados 508 artigos tendo sido incluídos 6 artigos para revisão final. Os artigos foram submetidos a avaliação da qualidade metodológica segundo as recomendações do Instituto Joanna Briggs.

Resultados: Em todos os artigos os profissionais foram submetidos a programas específicos de formação em Cuidados Paliativos e em todos eles verificou-se aquisição de novos conhecimentos e competências com aplicação na prática clínica diária.

Conclusão: Os programas de formação contribuíram para o aumento de novas competências na abordagem ao doente/família com necessidades paliativas.

Palavras-chave: Capacitação; Competências; Cuidados Paliativos; Formação; Profissionais de Saúde.

RESUMEN

Introducción: La falta de conocimientos de los profesionales de la salud en los Cuidados Paliativos constituye una de las mayores barreras en el acceso de los pacientes a estos cuidados. Las organizaciones internacionales consideran que el aumento de la educación y la formación de los profesionales es un área de acción prioritaria para reducir una de las principales disparidades mundiales: la desigualdad en el acceso a los Cuidados Paliativos. El objetivo de esta revisión es evaluar si la formación de los profesionales sanitarios en Cuidados Paliativos contribuye a aumentar las competencias en el abordaje de los pacientes con necesidades paliativas e identificar qué tipos de programas de intervención se han utilizado para promover esta formación.

Métodos: Se realizó una búsqueda en las bases de datos PubMed y EBSCOhost (CINAHL plus with full text, Medline with full text, MedicLatina y ERIC) entre 2016 y 2021. Se encontraron un total de 508 artículos y se incluyeron 6 artículos en la revisión final. Los artículos se sometieron a una evaluación de la calidad metodológica según las recomendaciones del Instituto Joanna Briggs.

Resultados: En todos los artículos los profesionales se sometieron a programas específicos de formación en Cuidados Paliativos y en todos ellos se verificó la adquisición de nuevos conocimientos y competencias con aplicación en la práctica clínica diaria.

Conclusión: Los programas de formación contribuyeron al aumento de nuevas habilidades en el abordaje del paciente/familia con necesidades paliativas.

Descriptores: Capacitación; Cuidados Paliativos; Formación; Habilidades; Profesionales de la Salud.

INTRODUCTION

Population ageing is a global reality, which has contributed to the increase in the number of chronic diseases with a strong impact on the quality of life of citizens. Forecasts indicate that worldwide population aging and the increase in non-communicable diseases will increase by more than 100 million by 2060, thus contributing to an increase in levels of unnecessary suffering and greater palliative care needs (PC)⁽¹⁾.

Recent global estimates indicate that more than 56.8 million people need PC. Of these, an estimated 31.1 million people need the disease early and 25.7 million people need this care in the last year of life. A worrying fact is that this care worldwide only reaches 14% of the people who need it⁽²⁾.

This problem tends to increase, the burden of severe suffering related to health problems that will require this care will double from 2016 to 2060. It is estimated that deaths with serious health problems will increase from 45% to 47%, representing 22 million deaths, an 87% increase in terms of suffering, meaning that more than 48 million people worldwide will die in severe suffering⁽¹⁾.

Currently, one of the biggest barriers to patients' access to this care is due to health professionals, namely the little knowledge revealed about their concept and scope, as well as a set of beliefs and stigmas about them. Another of the conclusions to which the authors reached was the lack of preparation of health professionals in dealing with end-of-life patients, the difficulties they present in talking about palliation and therapeutic obstinacy. This review warns of the importance of training health professionals on PC, being a priority to achieve an early referral of patients with palliative needs⁽³⁾.

In the study about the perceptions that primary health care professionals have about the barriers and facilitating factors for the provision of PC were identified as main barriers, lack of skills and abilities in the management of symptomatic control, discomfort in talking about this care and emotional discomfort in addressing the issues related to death and dying. As facilitating factors, the professionals indicated: the need for training and to increase the degree of knowledge in this specific area. They argue that communication between professionals, with specialized PC teams, with patients and families should be improved and the need to promote basic training to professionals to contribute to improving care in the approach to patients with palliative needs⁽⁴⁾.

In response to these problems the European Association for Palliative Care (EAPC), in 2004 created a task force with the aim of creating a set of guidelines to prepare nurses for the practice of PC. The document considered that the academic and clinical preparations of nurses should be structured at three levels. They recommend that students should have contact with PC training during the base course. For professionals who are already practicing, post-graduate courses should be made available. Although at the time it was considered a relevant and useful document, studies demonstrating the effectiveness and impact of the program are lacking. Later, several committees were set up that included other professional groups, namely doctors, psychologists, social workers, physiotherapists, occupational therapists and chaplains. These studies allowed us to reformulate the academic curricula of the courses of Medicine, Nursing, Psychology and more recently those of Social Work^(5,6).

In 2013, The EAPC developed a guidance on PC education, which reaffirms that all health professionals should be able to provide adequate PC, regardless of the health context in which they are inserted. This is necessary to develop skills through training to respond to the challenges and needs of patients/families, thus ensuring the highest standard of care⁽⁶⁾.

The World Health Organization (WHO) has been warning that the need for this care will reach a greater number of citizens. In 2014, at the 67th World Health Assembly, he called for the importance of each country's health systems integrating PC as a response to avoidable suffering. It argues that basic training in this area should be an integral part of medical and nursing courses. They also highlight the importance of promoting basic, intermediate and advanced formative and continuous training to health professionals⁽⁷⁾.

Currently, the EAPC advocates three levels of education: the palliative approach, which encompasses methods and procedures of PC in the context of general care; General PC, indicated for professionals dealing with patients with potentially fatal diseases; specialized PC, indicated for professionals who work exclusively in this specific context⁽⁶⁾.

Although international organizations recognize the importance of education and training, there is little data in the literature to analyze the degree of effectiveness of training programs as an agent of change in the daily practice of health professionals, which is why the relevance of the theme is justified.

METHODS

The research question that was the basis of this systematic review was: Does the training of health professionals in PC contribute to the increase of clinical skills in addressing patients with palliative needs?

The objectives we propose are: To identify whether the training/training of health professionals in PC represents an increase in their competencies and describe the types of intervention programs that were used to promote this training.

To guide the research, we applied the PI(C)O method – population, intervention, comparison and outcome, according to the Systematic Review Resource Package by Joanna Briggs Institute [JBI]⁽⁸⁾. The population consisted of health professionals; intervention – training of professionals through training/training programs in PC; comparison – several types of training; outcome – increased skills of health professionals in addressing patients with palliative needs and what types of intervention were used to promote this training.

Based on the JBI methodology defined as eligible criteria for inclusion in this review: type of participants – participants aged 19 years or older and health professionals; type of intervention – studies that included intervention with their assessment of the impact of training programs on the population studied; type of results – studies that show the impact of training programs that lead to an improvement in the training of health professionals; type of studies – quantitative and qualitative studies conducted between 2016 and 2021, published in English, Spanish and Portuguese.

Studies in which the type of participants – under the age of 19 and were medical and nursing students – were excluded; types of intervention – all studies that did not present which training program were implemented were excluded; type of results – there was no assessment of the impact of the intervention programs carried out, as well as the non-description of how that impact was monitored; type of studies – grey literature, books, empirical studies, official documents, abstracts and narrative reviews.

Search strategy

The survey was conducted on April 2, 2021. The databases used to answer the research question were PubMed (National Center for Biotechnology Information) and the EBSCOhost platform, namely CINAHL plus with full text, Medline with full text, MedicLatina and ERIC. The following limitations were used: full text and free access, peer-reviewed, date of publication in the last 5 years (2016-2021), published in English, Portuguese and Spanish.

The words used were validated according to MeSH terminology. The descriptors combined with the Boleyn operator “AND” were used as follows: “Palliative Care” AND “Training” AND “Health Personnel”. The selection process of the articles was conducted by two reviewers.

The selection process is represented in the PRISMA flow diagram (Fig. 1⁷).

Evaluation of methodological quality

After the selection process, the six articles were submitted to methodological evaluation, using the JBI standardized critical evaluation instrument – Checklist for Quasi- Experimental Studies and Critical Appraisal Checklist for Cohort Studies. All articles presented a moderate to high quality (Table 1⁷).

RESULTS

The data from the included articles were extracted by two reviewers, using the Joanna Briggs Method for Systematic Review Research Quick Reference Guide⁽⁸⁾. The extracted data are summarized in Table 2⁷, with the identification of the study, study objective, total number of participants, results and conclusions.

The studies included in this review took place mostly in the European context, more specifically in the United Kingdom (A¹), Germany (A³), Israel (A⁵) and the Netherlands (A⁶). The other two studies took place in Iran (A²) and the United States of America (A⁴). Of the six eligible articles, one was conducted in 2017 (A⁵), two in 2018 (A¹ and A³), two in 2019 (A⁴ and A⁶) and one in 2020 (A²). Regarding methodological orientation, five near-experimental studies (A¹, A², A³, A⁴ and A⁵) – a elevated level of evidence and a randomized controlled study (A⁶) of elevated level of evidence were obtained. Regarding methodological quality, there is a moderate quality study (A³) and five studies (A¹, A², A⁴, A⁵ and A⁶) of high quality.

DISCUSSION

The main objective of this review was to find primary studies that evaluated the impact of training programs on the daily practice of health professionals in response to the palliative needs of users. The concern with this theme is notorious, since all the studies analyzed concluded the effectiveness of training programs as a response to the increase in the palliative needs of the population due to population aging.

We verified that all studies developed specific training programs, be it workshops or simulation training, ranging from short-term training, from only 2 days (A² and A⁴), to training programs in which there was a follow-up of professionals, 1 month (A⁴), 3 months (A³) or 4 months (A⁶) after training. All these studies considered that the training of health professionals leads to changes in their behavior, thus allowing an improvement in the quality of care provided to patients with palliative needs.

In study A⁴, professionals thought they had a better preparation than they did. After training, the professionals recognized that they had many limitations in the communication skills with patients. This training had an impact of more than 75%, and one month later it was found that these new acquisitions were used in daily clinical practice (93%). These conclusions are in line with the study conducted by Chang *et al*⁽¹⁸⁾ it concluded that the experimental group undergoing specific training in PC presented a much more efficient response in the care provided to terminally ill patients than the control group which did not have access to any training program. The study by Gunten *et al*⁽¹⁹⁾ demonstrated that health professionals submitted to practical training together with theoretical support improved their knowledge and communication skills in PC by about 10% after four weeks.

It is important to highlight the fact that the training programs are directed to a more practical and not so much theoretical aspect, this fact is supported by the study by Fischer *et al*⁽²⁰⁾ that it concluded that providing only a theoretical approach did not have a significant effect on improving knowledge and changing attitudes of health professionals towards end-of-life care.

Most studies have developed training in symptom management (A², A³), and communication (A¹, A⁴, A⁵, A⁶). None of the studies directed their intervention to the development of strategies that would facilitate professionals to identify the palliative needs of users. We consider that this is a current and transversal problem for all health professionals. According to the study by Innis *et al*⁽²¹⁾, on the ability of Primary Health Care profes-

nals to identify people with palliative needs concluded that only 14.3% were able to correctly identify. A key factor has to do with the familiarization of health professionals with the area of PC, a factor that can be a facilitator in the identification and subsequent referral to specialized teams. The study recommends the need for training of Primary Health Care professionals and the promotion of communication between these care and PC teams.

We believe that this problem, coupled with the lack of knowledge, may be at the root of users not accessing this care. Those who receive end up accessing a late stage of the disease. This can be explained by the study by Allsop *et al*⁽²²⁾ it estimates that in the UK every year around 90 000 people with chronic, advanced and progressive disease could benefit from PC, but they end up not having access to them. The study of Capelas *et al*⁽²³⁾ It goes in the same direction to conclude that in Portugal, in 2018 the estimates pointed to about 110 000 people who needed to receive PC, however, only 25 570 users accessed this care. The rate of access to these services was only 25%.

We found that in three studies there was a predominant factor in terms of training directed to oncologists (A³, A⁴ and A⁶), this seems to us to be important and an indicator of a necessary reflection on the care provided to end-of-life cancer patients. According to the study by Martins-Branco *et al*⁽²⁴⁾ conducted in Portugal, concluded that 7 out of 10 cancer patients who die in a public hospital were subjected to excessively aggressive treatment during the last month of life, thus increasing end-of-life suffering. This study brings us to the importance of a necessary formation of this professional group to reverse the scale of suffering with high impact on inferior quality of life and loss of human dignity.

In future studies, we consider it important to have studies evaluating the impact of training in PC on primary health care professionals. According to the WHO, most people with palliative needs are in the community, many of whom prefer to stay in their homes in the last phase of life. It would be important to analyze whether the training and training of these professionals in the community context would become relevant to counteract against one of the world's greatest disparities, inequality in access to PC⁽²⁵⁾.

CONCLUSION

This systematic review allows affirmative response to the research question, that is, the training of professionals in PC represents an added value in responding to patients with palliative needs. We conclude that health professionals earn if they receive specific training in this area, particularly in terms of trust in dealing with this type of patients/families, shared decision-making, improving self-efficacy, communication skills and planning realistic goals and objectives to be established with the user/family. A better internalization of the philosophy of these cares was noticeable, a more effective response in the management of symptoms and in the reduction of therapeutic obstinacy. The professionals were more awakened to start a palliative approach as early as anticipating, if applicable, the references for the PC teams, thus evidencing the gains in health.

About intervention programs, we concluded that simulation training was extremely important for the acquisition of new skills, proving effective and feasible, which contributed to the quality of end-of-life care. It was found that the simulated training and subsequent group reflexive analysis contributed to a greater importance of teamwork, fundamental in responding to the challenges of patients/families with palliative needs. Efforts should be made to increase the supply of form in this area.

We consider as a limitation the studies that were conducted only in the hospital context, it would be important to include Primary Health Care to understand if the gains would be similar.

At the research level we consider it important to have additional studies on this topic that strengthen these results, or identify new, more effective interventions to be included in the response to patients/families with palliative needs.

Authors' contributions

RC: Study design, bibliographical research, evaluation of the methodological quality of the articles, discussion and writing of the article.

AC: Coordination, review, analysis, discussion and writing of the article.

MP: Review, analysis and discussion.

All authors read and agreed with the version published in the manuscript.

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REFERENCES

1. Sleeman KE, de Brito M, Etkind S, Nkhoma K, Guo P, Higginson IJ, et al. The escalating global burden of serious health-related suffering: projections to 2060 by world regions, age groups, and health conditions. *Lancet Glob Health*. 2019;7:e883-92. doi:10.1016/S2214-109X(19)30172-X.
2. Worldwide Palliative Care Alliance. *Global Atlas of Palliative Care*. London: WHPCA; 2020. [cited 2021 Apr 28]. Available from: <http://www.thewhpc.org/resources/global-atlas-on-end-of-life-care>
3. Alves J, Marinho M, Sapeta P. Referenciação tardia: barreiras a referenciação de doentes adultos oncológicos e não oncológicos para serviços de cuidados paliativos. *Rev Cuidados Paliat*. 2019. [cited Apr 30]; 6. Available from: https://www.apcp.com.pt/uploads/s/revista-cuidados-paliativos_vol06_n01_2019.pdf
4. Carey ML, Zucca AC, Freund MA, Bryant J, Herrmann A, Roberts BJ. Systematic review of barriers and enablers to the delivery of palliative care by primary care practitioners. *Palliat Med*. 2019;33:1131-45. doi:10.1177/0269216319865414.
5. De Vlieger M, Gorchs N, Larkin P, Porchet F. A Guide for the Development of Palliative Nurse Education In Europe. *Palliative Nurse Education: Report of the EAPC Task Force*. Milan: EAPC, 2004. [citada em 30 abr 2021]. Available from: <https://www.apcp.com.pt/uploads/NursingEducationRecommendations.pdf>
6. Gamondi C, Larkin P, Payne S. Core competencies in palliative care: An EAPC white paper on palliative care education - Part 1. *Eur J Palliat Care*. 2013. [cited 2021 May 1]; 20. Available from: https://www.palliative.ch/fileadmin/user_upload/palliative/fachwelt/E_Standards/AG_Ausbildung/EPAC_White_Paper_-E_-Kernkompetenzen_in_der_Palliativversorgung.pdf
7. World Health Assembly. WHA67.19 Strengthening of palliative care as a component of comprehensive care throughout the life course. 24 May 2014. [cited 2021 May 2]. Available from: https://apps.who.int/gb/ebwha/pdf_files/WHA67/A67_R19-en.pdf

8. Joanna Briggs Institute. Systematic Review Resource Package: The Joanna Briggs Institute Method for Systematic Review Research Quick Reference Guide. Version 4.0. QJBC. Adelaide: JBI; 2015.
9. Moher D, Liberati A, Tetzlaff J, Altman DG. Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. The PRISMA Group. 2009. PLoS Med. 2009;6:e1000097. doi:10.1371/journal.pmed.1000097
10. Weil A, Weldon SM, Kronfli M, Watkins B, Kneebone R, Bello F, et al. A new approach to multi-professional end of life care training using a sequential simulation (SqS Simulation™) design: A mixed methods study. Nurse Education Today. 2018. [cited 2021 May 3]; 71. Available from: <https://doi.org/10.1016/j.nedt.2018.08.022>
11. Dehghani F, Barkhordari-Sharifabad M, Sedaghati-Kasbakhhi M, Fallahzadeh H. Effect of palliative care training on perceived self-efficacy of the nurses. BMC Palliat Care. 2020; 19:63. doi:10.1186/s12904-020-00567-4.
12. Kolben T, Haberland B, Degenhardt T, Burgmann M, Koenig A, Kolben TM, Ulbach K, Mahner S, Bausewein C, Harbeck N, Wuerstlein R. Evaluation of an interdisciplinary palliative care inhouse training for professionals in gynecological oncology. Arch Gynecol Obstet. 2018;297:767-73. doi:10.1007/s00404-018-4681-0.
13. Lefkowitz C, Bevis K, Carey EC, Sheeder J, Arnold RM, Podgurski L. Gynecologic oncology providers endorse practice-changing impact of communication skills training. Gynecol Oncol. 2019;153:633-8. doi:10.1016/j.ygyno.2019.03.242.
14. Brezis M, Lahat Y, Frankel M, Rubinov A, Bohm D, Cohen MJ, Koslowsky M, Shalomson O, Sprung CL, Perry-Mezare H, Yahalom R, Ziv A. What can we learn from simulation-based training to improve skills for end-of-life care? Insights from a national project in Israel. Isr J Health Policy Res. 2017;6:48. doi:10.1186/s13584-017-0169-9.
15. Henselmans I, van Laarhoven HW, de Haes HC, Tokat M, Engelhardt EG, van Maarschalkerweerd PE, et al. Training for Medical Oncologists on Shared Decision-Making About Palliative Chemotherapy: A Randomized Controlled Trial. Oncologist. 2019;24:259-65. doi:10.1634/theoncologist.2018-0090.
16. Joanna Briggs Institute. Critical Appraisal Checklist for Quasi-Experimental Studies. 2017 [cited 2021 May 8]. Available from: https://joannabriggs.org/sites/default/files/2019-05/JBI_Quasi-Experimental_Appraisal_Tool2017_0.pdf

17. Joanna Briggs Institute. Critical Appraisal Checklist for Randomized Controlled Trials. 2017 [cited 2021 May 8]. Available from: https://jbi.global/sites/default/files/2019-05/JBI_RCTs_Appraisal_tool2017_0.pdf
18. Chang J, Qi Z, Jiang S, Li L, Sun Q. The impact of palliative care education and training program on the resident physicians. *Ann Palliat Med*. 2021;10:2758-65. doi:10.21037/apm-20-1625.
19. von Gunten CF, Twaddle M, Preodor M, Neely KJ, Martinez J, Lyons J. Evidence of improved knowledge and skills after an elective rotation in a hospice and palliative care program for internal medicine residents. *Am J Hosp Palliat Care*. 2005;22:195-203. doi:10.1177/104990910502200309.
20. Fischer SM, Gozansky WS, Kutner JS, Chomiak A, Kramer A. Palliative care education: an intervention to improve medical residents' knowledge and attitudes. *J Palliat Med*. 2003;6:391-9. doi:10.1089/109662103322144709.
21. Innis M, Capelas M, Caldas A. Capacidade dos profissionais de saúde de medicina e enfermagem dos cuidados de saúde primários em identificar doentes de cuidados paliativos. *Gaz Méd*. 2017;4:78-85.
22. Allsop, MJ, Ziegler, LE, Mulvey, MR, Russell S, Taylor R, Bennett MI. Duration and determinants of hospice-based specialist palliative care: a national retrospective cohort study. *Palliat Med*. 2018;32:1322-33. doi:10.1177/0269216318781417.
23. Capelas M, Afonso T, Durão S, Teves C. Relatório de Outono 2019 do Observatório Português dos Cuidados Paliativos: Secção II Atividade Assistencial das Equipas/Serviços de Cuidados Paliativos. 2020. Available from: <https://repositorio.ucp.pt/bi-tstream/10400.14/30228/4/9789725407158>
24. Martins-Branco D, Lopes S, Canario R, Freire J, Feio M, Ferraz-Goncalves J, et al. Factors associated with the aggressiveness of care at the end of life for patients with cancer dying in hospital: a nationwide retrospective cohort study in mainland Portugal. *ESMO Open*. 2020;5:e000953. doi:10.1136/esmoopen-2020-000953
25. World Health Organization. Integrating Palliative Care and Symptom Relief Into Primary Health Care: A WHO Guide for Planners, Implementers and Managers. Geneva: WHO; 2018. Available from: <https://apps.who.int/iris/bitstream/handle/10665/274559/9789241514477-eng.pdf?ua=1>

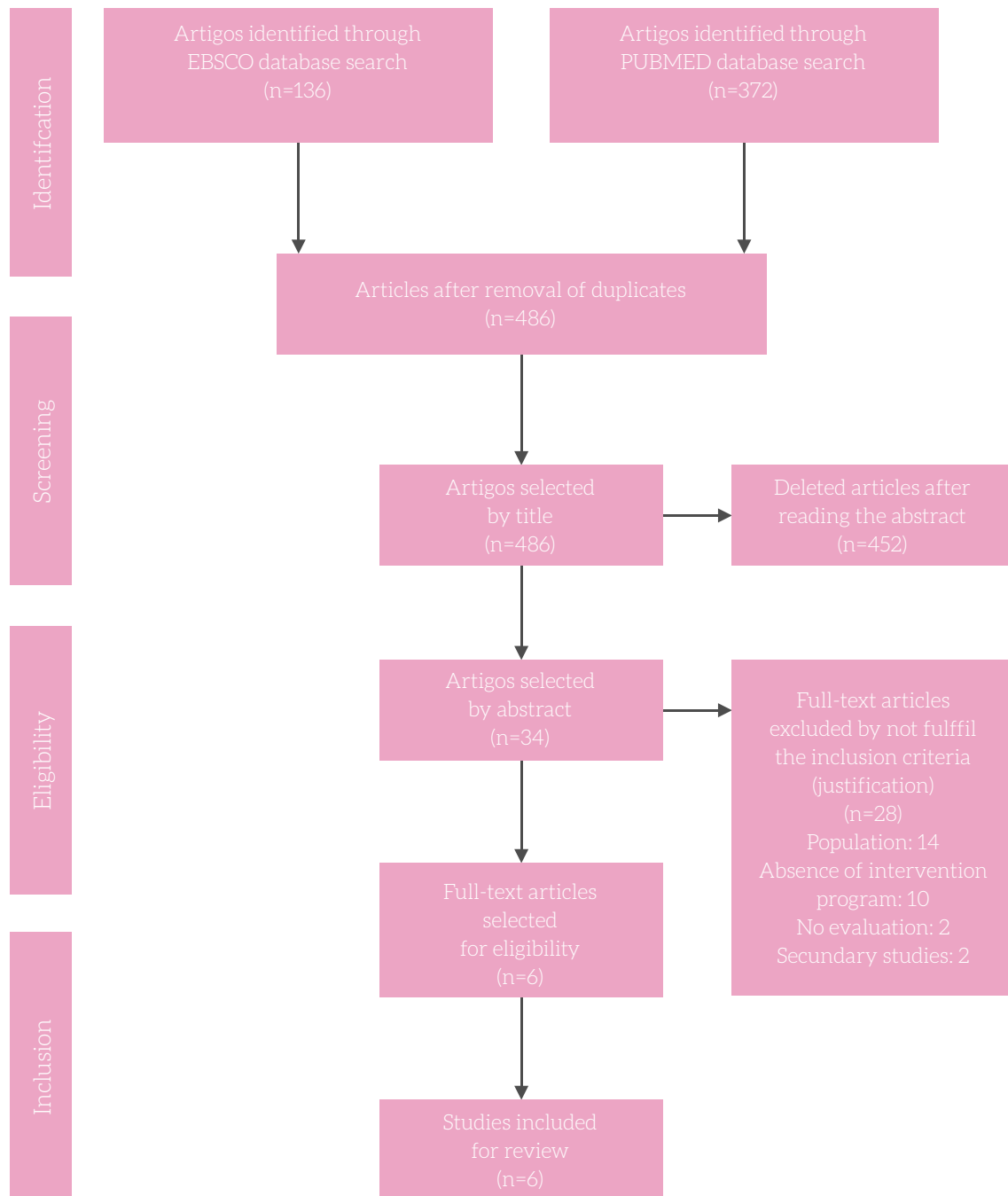


Figure 1 - PRISMA Flow Diagram of the article selection process^{9, 8}

Table 1 – Evaluation of methodological quality.^κ

Study	Level of evidence JBI	Quality/methodological recommendation JBI
A1. Weil A, <i>et al</i> (2018) ⁽¹⁰⁾	Quasi-experimental mixed methods 2b ⁽¹⁶⁾	7
A2. Dehghani F, <i>et al</i> (2020) ⁽¹¹⁾	Quasi-experimental 2b ⁽¹⁶⁾	7
A3. Kolben T, <i>et al</i> (2018) ⁽¹²⁾	Quasi-experimental 2d ⁽¹⁶⁾	5
A4. Lefkowitz C, <i>et al</i> (2019) ⁽¹³⁾	Quasi-experimental 2b ⁽¹⁶⁾	7
A5. Brezis M <i>et al</i> (2017) ⁽¹⁴⁾	Quasi-experimental 2b ⁽¹⁶⁾	8
A6. Henselmans I, <i>et al</i> (2019) ⁽¹⁵⁾	Randomized controlled 1c ⁽¹⁷⁾	10

Table 2 – Data synthesis.↗↖

Identification of the study	Study objective	Total number of participants	Interventions	Results	Study design	Conclusions
A ¹ . A new approach to multi-professional end of life care training using a sequential simulation (SqS Simulation™) design: A mixed methods study.	Investigate the effectiveness of a training program to improve the confidence of healthcare professionals and multidisciplinary teams providing end-of-life care.	57 participants, of which 26 physicians, 14 nurses and 17 therapists.	Sequential simulation training consisting of three illustrative scenarios of hospital care provided to end-of-life patients.	All participants improved confidence levels towards end-of- life patients. The differences were considered highly significant for physicians and significant for therapists.	Study of mixed methods.	The study showed benefit among disciplines in the use of (SqS Simulation™) as training in the identification and planning of end-of-life care. There was a general improvement in the confidence of the multidisciplinary team as well as to develop greater knowledge in planning and goals, communication and teamwork.
A ² . Effect of palliative care training on perceived self-efficacy of the nurses.	Determine the effect of PC on the perception of nurses' self-efficacy.	40 Participants (nurses) of Imam Jafar Sadegh hospital.	Workshop in PC composed of four educational sessions: I – Concept, principles and objectives of PC; II – Pain control; III – Control of predominant end-of-life symptoms; IV – Communication in PC.	The results showed that there was a significant improvement after the intervention in terms of perceived self-efficacy, psychosocial support and symptom management.	Quantitative study.	The study concluded that a PC training program has the potential to increase the perception of nurses' self-efficacy.

Table 2 – Data synthesis.

Identification of the study	Study objective	Total number of participants	Interventions	Results	Study design	Conclusions
A ³ . Evaluation of an interdisciplinary palliative care Inhouse training for professionals in gynecological oncology.	Evaluate the effect of pilot training in PC for gynecological oncologists.	31 Participants (doctors and nurses) of the University Hospital of Munich.	Training in PC composed of four modules: psychological aspects of communication; treatment of cancer pain; early will directives; control of frequent symptoms in the patient of gynecology with oncological pathology.	A more cheerful outlook towards PC was observed. The participants felt more competent and with greater knowledge of all palliative areas, allowing to give a different response when in the presence of a palliative patient. PCs would be started earlier than verified until then.	Quantitative study.	Internal training improves understanding and interdisciplinary approach in the management of patients with advanced disease. It is a feasible and useful tool to improve the PC skills of gynecological oncology specialists.
A ⁴ . Gynecologic oncology providers endorse practice-changing impact of communication skills training.	Develop and test communication skills training (workshop) for gynecological oncologists.	20 Participants (doctors).	Role-playing-based communication skills workshop highlighting the transmission of sad news.	The proportion of participants who felt more than “somewhat prepared” improved significantly in all areas of communication evaluated. One month after the workshop, 93% used communication techniques at least weekly. The impact rates of change of practice were higher than 75%.	Quantitative study.	The workshop allowed participants to receive high quality training for changing practices. Participants reported a sustained and statistically significant improvement in preparation to deal with challenging communication tasks. The training of communication skills is feasible, with high rates of effectiveness and impact on clinical practice. The study recommends that the communication workshop should be integrated into the training of gynecological oncologists.

Table 2 – Data synthesis.^{←↵}

Identification of the study	Study objective	Total number of participants	Interventions	Results	Study design	Conclusions
A ⁵ . What can we learn from simulation-based training to improve skills for end-of-life care? Insights from a national project in Israel.	Develop and run a simulation-based workshop to improve the skills of end-of-life care professionals.	1324 Health professionals (doctors, nurses, social workers, clinical psychologists, nutritionists, physiotherapists).	Educational intervention based on simulation training in communication skills. The topics addressed were the discussion about the preferences of the end-of-life patient and the family; management of conflicts between family members and teams; conspiracy of silence.	The data from the questionnaires showed lack of training, knowledge and time, excessive use of technology, uncertainty in decision making, poor communication skills and teamwork. Participants recognized the need to improve active listening skills, attention to affection, and teamwork. They also noted that the simulation-based workshop will improve end-of-life care.	Qualitative study.	Simulation-based training is an interesting and promising method for improving the quality of end-of-life care. When facing end-of-life situations, physicians and nurses use cognitive language much more often than expressions related to emotions, active listening or the presence of silence. Training can be valuable in inducing a cultural shift in end-of-life care.
A ⁶ . Training for Medical Oncologists on Shared Decision-Making About Palliative Chemotherapy: A Randomized Controlled Trial.	Analyze what effect training has on shared decision-making for oncologists compared to standard practice.	31 Oncologists treating patients with metastatic or inoperable tumors in medical oncology departments in the Netherlands.	Training based on shared decision-making model. It consisted of behavior change techniques, through modeling (videos on palliative systemic treatment) and practice (role-playing).	The training had a significant effect on shared decision-making observed in the simulated consultations (experimental group compared to the control group). Training improved oncologists' information transmission behaviors and skills, skills related to anticipating/responding to emotions, and satisfaction with consultation.	Quantitative study.	The study concluded that training skills in shared decision making was effective and highly appreciated by participants. The skills and strategies taught support oncologists in providing user-centered care. This study proves that training medical oncologists on palliative systemic treatment is feasible and significantly improves their skills.