

Perception of health professionals regarding palliative care in primary health care: a quasi-experimental study

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Abstract

Introduction

Primary health care is responsible for promoting health, preventing diseases, and managing chronic conditions, including providing palliative care for patients and families, alleviating suffering, and improving quality of life. However, this setting faces challenges related to palliative care, such as the lack of provider education. Continuing education is a tool for integrating generalist and specialized palliative care, enhancing the equity and quality of care at this level of the health care network, including home-based care.

Objective

To assess health professionals' perception of palliative care in primary health care before and after a training course on the basic principles of this field.

Methods

This is an uncontrolled quasi-experimental study with a single group involving pre- and post-intervention evaluation of an educational intervention, following adapted STROBE guidelines. We conducted the interventions at the National Cancer Institute in July/August 2023, targeting health professionals from the municipality of Duque de Caxias, Rio de Janeiro, Brazil. Simple statistical analyses were performed to evaluate quantitative data from the "Floor Line" (Linha de chão) dynamic, and qualitative analysis was conducted on individual evaluations collected via Google Forms[®], supported by webQDA[®] software. Ethical principles were observed.

Results

The "Floor Line" dynamic demonstrated a difference between pre- and post-course results, with an increase in the number of correct answers to the statements presented during the activity. Before the course, perceptions of palliative care were predominantly associated with end-of-life care, with limited knowledge of legislation and related concepts such as dysthanasia and orthothanasia. However, at both time points, professionals agreed that primary health care should provide palliative care and that the home is an important care setting.

Conclusion

The results indicate that health professionals need to improve their understanding of palliative care, although they recognize its importance within primary health care. Challenges must be addressed to ensure the comprehensive integration of palliative care throughout the health care network, and professional training may offer an effective response. The course proved an important educational tool for equipping health professionals and promoting palliative care within the network, including primary health care.

Keywords

Primary Health Care; Palliative Care; Continuing Education; Public Health.

Introduction

The Unified Health System (Sistema Único de Saúde – SUS) is a right guaranteed to all Brazilian citizens by the 1988 Federal Constitution, encompassing all health actions and services provided by public and private institutions throughout the country. Given SUS's broad and complex structure—similar to other international health systems—the main entry point for accessing services is primary health care, which includes a set of actions aimed at promoting health, protecting against diseases, and preventing health problems. Its core approach is to provide comprehensive and holistic care throughout the life course, including managing chronic conditions and end-of-life care¹.

Regarding the management of chronic conditions that cause suffering and may lead to death, palliative care is prescribed and can be delivered across all levels of the Health Care Network (Rede de Atenção à Saúde – RAS), including primary health care².

Investment in palliative care warrants significant attention within health policy, given the high prevalence of noncommunicable diseases (NCDs), such as cancer, cardiovascular diseases, pulmonary diseases, and neurodegenerative diseases. Each year, an estimated 17 million people under the age of 70 die from NCDs, with 86% of these deaths occurring in low- and middle-income countries². However, only 12% of global palliative care needs are met, with services largely concentrated in high-income countries³.

Thus, the participation of primary health care teams can expand equity in access to palliative care and contribute to promoting quality of life for patients and their families, as it strengthens the relationship between primary care and specialized palliative care resources available at other levels of the RAS^{4,5}. This integrated network of palliative care is based on the principle of differentiating professional qualifications across generalist, intermediate, and specialized levels of care⁵, ensuring holistic care for individuals of all ages, especially those nearing the end of life⁶.

With educational objectives focused on generalist palliative care, family physicians, family nurses, and other health professionals working in primary health care can assume responsibilities in delivering these services, given that their practice settings are often marked by the presence of older individuals, people living with chronic conditions, and patients at risk of death.

In this context, generalist palliative care delivered by primary health care professionals can help improve the quality of life for individuals requiring continued and long-term care by identifying uncontrolled physical and psychological symptoms, as well as social suffering⁵. To that end, primary health care offers several strategies, including home-based care, which can facilitate the implementation of palliative care and, when articulated within the network, ensure support for complex cases requiring specialized palliative care and more advanced technological resources, such as

hospital admissions for pain control or management of refractory symptoms.

However, primary health care in Brazil and other developing countries has had limited involvement in delivering palliative care despite playing a key role within the RAS and being essential to integrated, person-centered care. This is mainly due to the lack of knowledge about generalist palliative care among health professionals, low health literacy among the population regarding this subject, and the fragility of the Health Care Network stemming from weak integration with specialized palliative care services capable of providing support during crisis management^{5,7}.

Considering that avoidable suffering from treatable symptoms persists because of the lack of knowledge about palliative care, there is a pressing need for continuing education and appropriate training for all health care providers, whether in hospitals or community settings, including workers from non-governmental organizations and family caregivers⁸.

Moreover, integrating primary palliative care into the overall provision of palliative care requires planning and implementing educational initiatives for the general population to raise awareness about the importance of palliative care and its positive impact on quality of life. This process begins with educating health professionals, who must serve as agents of change, given their social responsibility to translate knowledge into practice. Therefore, palliative care must be incorporated into the education of health professionals, especially through Continuing Professional Development (CPD), which seeks to enhance practices in primary health care by linking management, education, service delivery, and community engagement⁹.

Once trained in generalist palliative care, primary health care teams—particularly family physicians and family nurses—can identify patients with palliative care needs and deliver palliative care interventions to address less complex needs. These actions include symptom management, empathetic communication, care planning, education, and support, to ensure the continuity and quality of care⁵.

In addition to addressing patients' physical needs, health professionals working in primary health care can also manage the delivery of bad news, discuss death, handle emotional responses, and explain complex end-of-life care options¹⁰. Through CPD, these professionals can acquire the knowledge and tools needed to guide patients' therapeutic trajectories within the RAS, making appropriate referrals to specialized palliative care teams based either in hospitals or in community settings.

Thus, to highlight the importance of CPD, this study aimed to assess health professionals' perception of palliative care in primary health care before and after a training course on the basic principles of this field.

Methods

An uncontrolled quasi-experimental study was conducted using a pre- and post-intervention evaluation design with a single group of participants, following the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) guidelines in an adapted format. This design was selected because it allowed the analysis of changes within a single group, without a control group, focusing on the immediate outcomes of the intervention.

The training course interventions were implemented in a classroom of the Teaching and Research Coordination Department of the National Cancer Institute (Instituto Nacional de Câncer – INCA), in downtown Rio de Janeiro, Brazil. The choice of this venue was justified because INCA was one of the partner institutions in the doctoral research project originating from the Anna Nery School of Nursing, which employed action research methodology. This study represented one of the learning activities developed within the context of the Duque de Caxias Municipal Health Department, in the state of Rio de Janeiro, serving a population estimated at 866,347 inhabitants in 2024 and with a demographic density of 1,729.36 inhabitants per square kilometer in 2022.

Participant selection was carried out by convenience sampling, including health professionals who met the following criteria: (1) members of the multidisciplinary team holding at minimum a bachelor's degree; (2) formal employment contracts; (3) availability to participate in activities during the study period; and (4) a minimum of six months of service in primary health care in the municipality of Duque de Caxias, specifically within the Family Health Support Center (*Núcleo de Apoio à Saúde da Família – NASF*), the Home Care Service (*Serviço de Atenção Domiciliar – SAD*), the Primary Care Department (*Departamento de Atenção Primária – DAP*), or the Family Health Strategy (*Estratégia Saúde da Família – ESF*). No exclusion criteria were established. Professionals who were on any type of leave or vacation during the training activity were not eligible to participate in the study.

All study participants provided written informed consent in accordance with ethical principles and guidelines for research involving human subjects.

Two training cohorts were formed, each cohort completing the course over two weekdays. The first cohort, composed of eight health professionals, attended the course on July 25 and 27, 2023. The second cohort, composed of 15 health professionals, attended on August 1 and 3, 2023.

The educational approach was in-person, combining lectures, interactive discussions, and practical activities, including the “Floor Line” dynamic to explore participants’ initial and final perceptions. For this dynamic, a line was drawn on the floor, with one side representing “true” and the other “false.” The course facilitator presented ten statements about the philosophy and principles of palliative

care (Table 1), and participants were asked to think quickly and respond according to their prior knowledge (pre-test) or knowledge acquired (post-test). Those who did not know the answer stood directly on the line, indicating abstention.

The correct answers to the statements were discussed immediately after the participants positioned themselves, serving as a pedagogical tool to further explore specific content during the course, whether the responses were correct or incorrect.

Through observation and field notes, the entire dynamic was documented with the assistance of two fellows from the INCA Fellowship Program and an undergraduate nursing student from the Federal University of Rio de Janeiro, who received a scientific initiation scholarship. At the end of the activity, the results were presented to the cohort.

After the end of the course, the “Floor Line” dynamic was repeated using the same set of questions from the initial evaluation, and responses were recorded in the same manner.

In addition, most participants completed a self-administered final course evaluation form, which included open-ended questions allowing them to identify the most important learning points developed throughout the course and to describe how the training contributed to their professional development in generalist palliative care. To analyze participants’ responses, we used the WebQDA[®] software to create a word cloud highlighting the most frequently mentioned terms.

Several strategies were employed to ensure the reliability of the results: the combination of two distinct data collection techniques; the use of software to systematically analyze one set of qualitative responses; support from research assistants throughout the intervention; and internal validation through independent reviews conducted by two experienced researchers to guarantee consistency in data interpretation.

Course dynamic

The Training Course in Palliative Care for Higher Education Health Professionals working in primary health care in the municipality of Duque de Caxias was developed with lesson plans organized in a structured and interconnected manner to address the topic “Palliative Care,” using various active learning methodologies. The course was divided and organized over two days to make the training more dynamic and engaging (Figures 1 and 2).

The course began with the previously described “Floor Line” dynamic. Immediately afterward, a collaborative panel activity was conducted. In this activity, the participants were divided into four groups, each assigned to answer a specific question: What do you understand by palliative care? (Group 1); What do you understand by generalist and specialized palliative care? (Group 2); In which settings can

palliative care be provided? (Group 3); and Which health care team members can deliver palliative care? (Group 4).

The groups' responses were posted on a panel and discussed collectively.

Table 1: Sentences used in the “Floor Line” dynamic to assess health professionals' perception of palliative care.

FLOOR LINE DYNAMIC	
TRUE SENTENCES	1- The main goal of palliative care is to improve the patient's quality of life, positively influencing the course of serious illness.
	2- There is specific legislation mandating the implementation of palliative care throughout the Health Care Network in the State of Rio de Janeiro.
	3- Orthothanasia refers to natural death, with symptom relief to alleviate suffering.
	4- Most patients with serious illnesses prefer to die at home, but the lack of home-based care is one of the reasons for death occurring in hospitals.
	5- Primary health care professionals can make a difference in palliative care because they have easy access to patients and families, are close to their homes, and are sensitive to the realities of the community.
	6- Primary health care must provide health promotion, preventive, curative, rehabilitative, and palliative services throughout the life course.
FALSE SENTENCES	7- Palliative care is a multidisciplinary approach focused on the end-of-life phase, preparing families for the grieving process.
	8- Dysthanasia refers to death without the necessary resources, resulting from poor public health management and professional negligence.
	9- Euthanasia is the prolongation of death through the disproportionate and futile use of medical and hospital resources.
	10- Offering palliative care considers only the needs of the ill person.

Following this activity, an interactive lecture was delivered on palliative care's concept, philosophy, and historical background. In addition to the physical panel, an interactive online board was created using the Padlet® platform, allowing participants to further develop the topics.

All lectures and activities on the first day of the training course were facilitated by the doctoral student, a nurse at the National Cancer Institute (*Instituto Nacional de Câncer – INCA*), who was responsible for the action research. She also addressed the history of palliative care, the role of the multidisciplinary team, the different care settings, and the distinction between generalist and specialized palliative care teams, frequently returning to the physical or online board to reinforce the material as needed.

Building on the topics covered in the course, a semi-structured panel was set up featuring the terms “dysthanasia,” “euthanasia,” “orthothonasia,” and “mistanasia.” The participants received cards with prewritten definitions of these concepts and were asked, in groups, to match each definition to the appropriate term on the panel. In addition, the short film *The Lady and Death* was shown to complement the interactive lecture on these concepts and contextualize the integration between generalist and specialized palliative care throughout the course of serious illness.

With the screening of the documentary *The Courageous End of Ana Beatriz Cerisara*, participants were introduced to issues related to advance directives and shared

decision-making in palliative care. Based on this, the course facilitator led a discussion on autonomy and decision-making, grounded in the health care professionals' code of ethics as it relates to palliative care.

The Brainstorming technique was used throughout the activities, supported by the Mentimeter® app, with the question: “What is the profile of the patients you serve?” This exercise aimed to stimulate reflection on the characteristics of individuals with palliative care needs and the communication challenges involved in health-illness situations.

This activity fostered a broader class discussion about the need for palliative care within the RAS, illustrating key ordinances, resolutions, and existing Brazilian legislation. In addition, the facilitator addressed models of integrated care and home-based care, the delivery of palliative care, and the referral process and collaborative work with specialized palliative care teams. Using Padlet® again and applying the SWOT matrix, participants were asked how palliative care could be incorporated into primary health care, considering the strengths, opportunities, weaknesses, and threats involved in making this happen.

Next, using the “Placard Response” dynamic, placards with expressions symbolizing “yes” or “agree” and “no” or “disagree” were distributed to participants to answer the following questions: 1) Have you ever attended a class or taken a course on health communication?; 2) Do you encounter difficulties maintaining communication across different levels of the RAS?; 3) Have you faced challenges in maintaining effective communication in health care?; 4)

Have you faced challenges maintaining effective communication in health care?

Following this, the video *The Communication Processes* was shown, accompanied by an interactive lecture on specific aspects of communication in health-illness situations, with an emphasis on verbal and nonverbal communication when conveying difficult news. Additionally, the session addressed communication goals in critical situations, progressive disclosure of difficult news, and the importance of planning internal communication strategies within the health unit team and among the various levels of the RAS. Before another lecture on assessment scales, another “Placard Response” dynamic was carried out, addressing participants’ knowledge and use of assessment scales and prognostic tools in palliative care, such as the Edmonton Symptom Assessment Scale, the Palliative Performance Scale, the Karnofsky Performance Status, the Eastern Cooperative Oncology Group Performance Status (ECOG PS), the Palliative Prognostic Scale (PaP), the Palliative Prognostic Index (PPI), the Bristol Stool Scale, and the Visual Analog Scale for pain measurement. Participants who indicated familiarity were asked whether they applied the respective scale in their professional practice.

At the end of the first day of the course, the “Floor Line” dynamic was repeated as a formative final evaluation, using the same questions from the initial assessment. The results were recorded and analyzed in the present study.

On the second day of the course, the facilitator reviewed the assessment scales before introducing additional topics related to palliative care. The subjects covered on the second day were presented by a physician from the INCA, residents from the Oncology Residency Programs, and fellows from the Palliative Care Fellowship Program in Psychology, Physical Therapy, Nutrition, Medicine, Nursing, and Social Work.

Regarding the analysis, for the quantitative data from the “Floor Line” dynamic, we applied simple descriptive statistics (absolute and relative numbers). For the qualitative data from the overall course evaluation, we conducted content analysis with the support of WebQDA® software.

Ethical principles for research involving human subjects were respected in accordance with Brazilian regulations, following Resolution No. 466/2012 of the National Health Council (Conselho Nacional de Saúde – CNS) and Operational Standard CNS No. 001/2013. The research project was approved by the ethics committees of the proposing institution (as part of the doctoral research in nursing) and the partner institutions, with final approval granted on June 5, 2022.

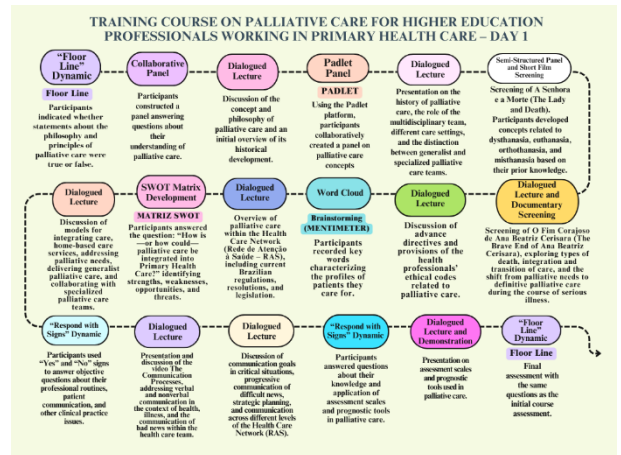


Figure 1: Dynamic of the First Day of the Training Course in Palliative Care for Higher Education Health Professionals Working in Primary Health Care.

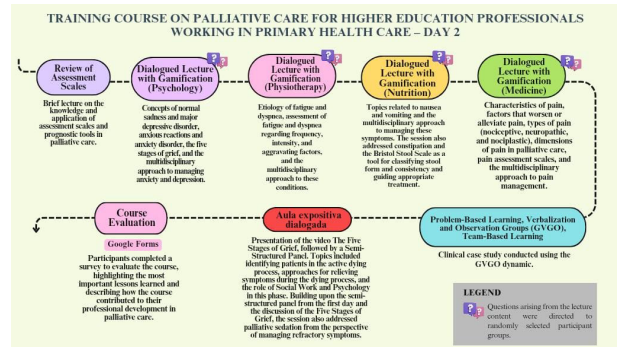


Figure 2: Dynamic of the Second Day of the Training Course in Palliative Care for Higher Education Health Professionals Working in Primary Health Care.

Results

Among the 23 participants, there was a wide variation in age groups: seven (30,5%) were between 31 and 40 years old, eight (34,7%) between 41 and 50 years old, five (21,7%) between 51 and 60 years old, two (8,7%) between 61 and 70 years old, and one (4,4%) was between 20 and 30 years old.

Regarding professional categories, there were seven nurses, two physical therapists, five social workers, one speech therapist, two physicians, two dentists, two psychologists, and two nutritionists. Six (26,1%) participants worked in the NASF, seven (30,4%) in the ESF, six (26,1%) in the SAD, and four (17,4%) in the DAP. Nine (39,1%) participants reported between 6 and 10 years of professional experience, eight (34,7%) between 6 months and 5 years, and six (26,2%) between 11 and 25 years. In terms of educational background, five (21,7%) participants held a bachelor’s degree, 16 (69,6%) had

earned a graduate certificate, and two (8,7%) had earned a master's or doctoral degree.

The results of the "Floor Line" dynamic showed a notable progression in the professionals' knowledge before and after the course, as can be seen in Table 2.

indicated an important pre-existing understanding of the role of primary health care and its ethical foundations in palliative care.

Thus, these results suggest that the training had a significant impact on participants' understanding of legislation and types of death, whereas basic concepts of palliative care were already relatively familiar to the group.

In addition to the records from the "Floor Line" dynamic,

Table 2: Results of the "Floor Line" Dynamic

"FLOOR LINE" DYNAMIC								
Statements	PRE-COURSE RESULTS (n = 22)				POST-COURSE RESULTS (n=23*)			
	Correct answers	Incorrect answers	Abstention	% of correct answers	Correct answers	Incorrect answers	Abstention	% of correct answers
1 (true)	22	0	0	100%	22	1	0	95,65%
2 (true)	10	3	9	45,45%	23	0	0	100%
3 (true)	10	0	12	45,45%	23	0	0	100%
4 (true)	22	0	0	100%	23	0	0	100%
5 (true)	22	0	0	100%	23	0	0	100%
6 (true)	21	0	1	95,45%	23	0	0	100%
7 (false)	7	14	1	31,80%	14	9	0	60,87%
8 (false)	0	5	17	0%	15	8	0	65,21%
9 (false)	20	2	0	90,90%	23	0	0	100%
10 (false)	22	0	0	100%	22	0	1	95,65%

* One additional participant was included after arriving late.

In statement 2, which addressed specific legislation on palliative care, the difference indicated that there was initially a lack of awareness or clarity regarding the existence of such legislation. After the course, 100% of the participants reported awareness of the legal framework. In statement 3, related to orthothanasia, the difference between pre- and post-course results suggested that participants gained confidence distinguishing ethical and legal practices. In statement 7, regarding palliative care as a multidisciplinary approach, the increased accuracy reflected a better understanding that palliative care is not limited to end-of-life situations but encompasses a holistic and multidisciplinary approach that also prepares families for the grieving process. Statement 8 revealed that none of the participants had prior knowledge of the concept of dysthanasia.

On the other hand, the high performance observed both before and after the course on the remaining statements

19 participants voluntarily completed the individual evaluations via Google Forms®, providing the following perceptions:

"It was a very good experience, learning and acquiring knowledge I did not have before. It would be great to have courses like this more often. It would be great if more people could learn about and know how to handle palliative care." (P10)

"The course was surprisingly positive. It provided an opportunity to discuss many aspects of health care that can treat and bring comfort during a patient's end-of-life process in a light and approachable manner." (P2).

Regarding the most important lessons learned, participants shared the following experiences:

"I learned a lot about palliative care, what it is and how it is delivered, and the types of support and the key issues for patients and families who require specialized care. I learned a lot about understanding the patient's needs and how essential communication is. I learned about building a network among primary, specialized, and tertiary care to

improve the overall coordination of services. This connection and integration are extremely important.” (P5) “At times, it was about demystifying concepts; at others, about learning new concepts regarding medications used in the treatment of patients with serious oncological diseases [...]. Reinforcing the importance of multidisciplinary, interdisciplinary, and humanized care, in which all team members are equally involved in the patient’s history and disease progression. The discussion about the existence of federal and state laws on palliative care, and the need to build policies to ensure the law is enforced, was also very valuable.” (P8)

“I learned about the role of Primary Health Care in palliative care and that, if proper matrix support is provided, much can be accomplished at this level of the health care network to ensure higher-quality care.” (P12)

Regarding how the course contributed to their professional practice, participants responded:

“Using continuing education as a tool, encouraging services to adopt the practices discussed during the course, considering the various areas of knowledge involved, and working with management to raise awareness about the topic, identify allies, and promote and/or expand the collaboration between Primary Health Care in Duque de Caxias and Tertiary Care at the National Cancer Institute.” (P16)

“In every way: in welcoming patients, in active listening, in therapeutic planning, in supporting patients and their families, in understanding all areas involved, and in developing better intervention strategies to provide comfort to patients at their most difficult moments.” (P1)

“This course helped me a lot, and I will be able to perform better in my work setting since we have palliative care patients. I will be more attentive to all issues involving the patient and their family. I will also be able to share this knowledge with my colleagues.” (P4)

Figure 3 shows the 50 most frequently used words by participants in this general evaluation of the course.



Figure 3: Word cloud of the 50 most frequent words from participants' overall evaluation of the palliative care training course.

Discussion

The results of the “Floor Line” dynamic, before and after the training course, demonstrated an increase in the number of correct responses following the interactive lectures and educational activities on the topic, particularly concerning the concept of palliative care, types of death, the Brazilian legal framework, and international guidelines. A strong final performance regarding knowledge of the legal framework for palliative care is critical for implementing and supporting clinical practices. Similarly, understanding concepts such as orthothanasia and dysthanasia enhances perceptions of dignified death with alleviated suffering and influences ethical and professional conduct.

However, mastery of the core concept of palliative care did not reach 100%, suggesting that foundational knowledge in this area still requires reinforcement. This finding is consistent with a study involving 181 Brazilian nurses working in primary health care, which revealed that knowledge of palliative care remains limited¹¹. Insufficient understanding of the philosophy and principles of palliative care undermines the ability to identify patients requiring such services and, consequently, to make appropriate referrals to specialized teams, ultimately compromising comprehensive care¹¹.

These statements that showed strong performance both before and after the course raise important points, particularly regarding the fact that professionals recognized their proximity to families and the community as a key strength in supporting palliative care. All participants acknowledged the potential of primary health care within the RAS to promote generalist palliative care, as evidenced by the unanimous correct responses to statement 4, even before the course. However, despite this recognition,

managerial issues identified by participants at both evaluation points indicate that primary health care faces challenges in effectively and comprehensively serving all populations, such as resource limitations and insufficient professional knowledge in certain care areas.

These difficulties are compounded by the growing need to integrate palliative care into the training of health professionals, given the aging population and the rising demand for holistic care that addresses physical, emotional, and spiritual dimensions¹².

Nevertheless, the prior recognition that primary health care professionals can make a difference in palliative care—because of their easy access to patients, proximity to homes, and sensitivity to the community context—is crucial for strengthening actions aimed at improving the quality of life for individuals with chronic or end-of-life conditions. This recognition also contributes to improving quality indicators for palliative care, such as increasing the time patients remain at home and reducing emergency department visits and inappropriate hospitalizations¹³.

This is because recognizing palliative needs and addressing fewer complex demands through the efforts of primary health care professionals can expand access to palliative care. By focusing on relieving pain and other distressing symptoms and promoting effective communication, these actions improve patients' and their families' quality of life and even contribute to supporting home death¹⁴.

Thus, integrating palliative care into home-based services aligns with meeting many individuals' wishes and preferences, as studies show that home death is the preferred option for many patients at the end of life, especially among older adults¹⁵. Moreover, home care strengthens primary health care and optimizes health system resources. Home visits ensure adequate care within the family setting, with continuous support from family physicians and nurses¹⁶.

However, strategies and resources for professional training are essential to overcome the identified barriers and to foster the effective integration of palliative care into primary health care. Continuing education is one of the effective tools to promote compassionate and holistic care, ensuring that patients and their families receive the necessary support during challenging moments in their lives and are able to maintain their wish to remain at home. Health professionals must possess broad knowledge and the skills necessary to adequately meet patients' needs and be equipped to work as part of a team in close coordination with specialized palliative care services whenever needed. Moreover, continuing education strengthens professionals' abilities to engage in discussions about prognosis, treatment options, and end-of-life preferences while fostering the development of sensitive and effective communication skills delivered in a compassionate and humanized manner¹⁷.

Furthermore, the results from statements 3 and 8, which explore concepts related to types of death, reveal that even

though these concepts are not recent, they are still poorly disseminated and often misunderstood. Studies indicate this deficiency stems from gaps during undergraduate education for health professionals, as palliative care is often not included in curricula, particularly topics involving bioethics¹⁸. This reality underscores the importance of integrating palliative care education into ongoing professional development initiatives, using continuing education as an essential tool. It also emphasizes the need to engage in community health education, to explain the differences between types of death, clarify the ethical and practical contexts in which each applies¹⁹, and foster discussions about the legal and ethical implications, helping health professionals to facilitate informed and ethically sound decision-making processes in accordance with the country's legal and ethical standards²⁰.

Based on this understanding, it is important to note that the lack of knowledge about palliative care legislation, combined with the need for greater awareness and education among both professionals and the general public, represents a major obstacle to the effective implementation of palliative care. Awareness of citizens' rights and responsibilities is essential to advocate for public policies and foster community engagement, ensuring that palliative care services are understood, valued, and appropriately integrated into the health system.

The implementation of the training course can contribute to strengthening the palliative care network within the SUS, ensuring comprehensiveness, accessibility, and patient- and family-centered care. An integrated and collaborative approach among RAS services, involving greater primary health care participation in generalist palliative care, improves the quality of care delivery and optimizes resource utilization.

Ongoing professional development in health care, focusing on continuous training and qualification, is a central aspect of the National Policy on Continuing Education, which aims to develop strategies for the continuity and comprehensiveness of health services²¹. Continuing education should be understood as an ongoing process tailored to the needs and guidelines of the health system, particularly within the contexts where practice occurs²².

Aligned with global recommendations for professional training in palliative care² and grounded in scientific evidence, the course commits to transferring knowledge into practice and improving health indicators. It represents a strategic approach that seeks cumulative results in professionals' acquisition of knowledge and experience, as well as in promoting public health education on palliative care. It emphasizes adapting and integrating palliative care into public health according to each community's needs, available resources, and cultural context.

The course experience was consistent with the findings of a systematic review on professional development in palliative care for primary health care providers, which highlighted the importance of combining different teaching

methods and fostering interprofessional collaboration to enhance attitudes, confidence, knowledge, and skills²³, as evidenced by the participants' feedback in the individual course evaluations.

Conclusion

The results confirmed that health professionals need to improve their understanding of palliative care, although they recognize the potential and importance of this field within primary health care. Challenges must be overcome to ensure the comprehensive integration of palliative care throughout the continuum of care. In addition, professional training can serve as an effective strategy, as the course successfully addressed critical gaps, such as knowledge of legislation, bioethics concepts, and multidisciplinary approaches. At the same time, it reinforces existing competencies and promotes a deeper conceptual and practical understanding of palliative care.

The findings reinforce the role of continuing education in health care as an essential pillar for enhancing the quality of palliative care delivery. The training course demonstrated its value as an advanced strategy to expand professionals' knowledge, enabling them to promote high-quality palliative care within an integrated network. It is recommended that palliative care training programs be systematically incorporated into ongoing professional education and that institutional policies be strengthened to include palliative care instruction beginning at the undergraduate level.

Future research should explore the long-term impact of such training programs, evaluating changes in clinical practice, patient care planning, and the overall level of health literacy within the population.

Study limitations

This study has some limitations. The evaluation dynamic was conducted on the same day, which does not guarantee long-term retention of knowledge; much of what was learned may have been forgotten, and there was also potential for fatigue at the end of the day and test bias due to recall of previous answers. Additionally, the absence of one participant during the initial stage of the "Floor Line" dynamic limited the completeness of the pre- and post-course comparison, as no exclusion or individualization of responses had been planned to address potential absences. Nevertheless, conducting the pre- and post-evaluation with the same group of participants was an important strategy to strengthen internal validity. Other variables were also controlled, such as the voluntary nature of participation and the absence of financial incentives, ensuring the participants' genuine interest in the training. Furthermore, all participants held a higher education degree and worked in the same professional environment.

Authorship and Contributions

Zidan J: Conception and design of the study, data collection, data analysis and interpretation, statistical analysis and writing of the manuscript.

Telles AC: Study conception and design, data analysis and interpretation, statistical analysis and critical revision of the manuscript.

Reis BS: Data collection, data analysis and interpretation, statistical analysis and critical revision of the manuscript.

Kiesse AT: Data collection, data analysis and interpretation, statistical analysis and critical revision of the manuscript.

Sá E: Conception and design of the study, analysis and interpretation of the data and critical revision of the manuscript.

Silva MM: Conception and design of the study, data collection, data analysis and interpretation, obtaining funding and writing the manuscript.

Conflicts of interest and Funding

No conflict of interest.

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