



Artigo original

Palliative care in the undergraduate medical course

Cuidados paliativos na graduação do curso médico

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Abstract

Objective: to evaluate the knowledge of medical students regarding palliative care. **Materials and Methods:** this is a cross-sectional, quantitative, and descriptive study conducted with medical students from two colleges in Montes Claros, Minas Gerais, Brazil. The questionnaire included sociodemographic data and the instrument “Self-Assessment on Palliative Care” an adapted version of a Colombian questionnaire. **Results:** a total of 223 students participated, with 35.4% from the first semester, 31.8% from the sixth, and 32.8% from the eleventh. The majority were from private institutions, with an average age of 23.1 years (SD=3.8), predominantly female, and Catholic. The perception of receiving sufficient information about palliative care was higher in the sixth semester, while knowledge of the WHO definition increased from the first semester (36.7%) to the sixth (64.8%). Pain management showed the highest positive response in the sixth semester, and symptom control in the eleventh semester. Learning tools for delivering bad news were most frequent in the sixth semester. **Conclusion:** palliative care education in medical schools showed significant progress up to the sixth semester, but the perception of knowledge does not improve beyond this stage. Strengthening the teaching of palliative care in curricula and enhancing its practical application throughout medical training are essential. **Keywords:** Palliative Care. Students, Medical. Terminal Care.

Resumo

Objetivo: avaliar o conhecimento dos estudantes de medicina acerca de cuidados paliativos. **Materiais e Métodos:** trata-se de um estudo transversal, quantitativo e descritivo realizado com acadêmicos de medicina de duas faculdades de Montes Claros, Minas Gerais. O questionário continha dados sociodemográficos e o instrumento “Autoavaliação sobre Cuidados Paliativos”, versão adaptada de um questionário colombiano. **Resultados:** participaram 223 estudantes sendo 35,4% do primeiro período, 31,8 do sexto e 32,8 do décimo primeiro. A maioria era de instituição particular, com média de idade de 23,1 anos (DP=3,8), do sexo feminino e católicos. A percepção sobre receber informações suficientes sobre cuidados paliativos foi maior no sexto período, enquanto o conhecimento sobre a definição da Organização Mundial da Saúde aumentou do primeiro (36,7%) para o sexto (64,8%). O manejo da dor teve maior resposta positiva no sexto e o controle de sintomas no décimo primeiro período. A aprendizagem de ferramentas para dar más notícias foi mais frequente no sexto período. **Conclusão:** a formação em Cuidados Paliativos nas faculdades de medicina avançou até o sexto período, mas a percepção de conhecimento não avança após essa fase. É fundamental fortalecer o ensino de CP nas grades curriculares e melhorar sua aplicação prática ao longo de toda a formação médica. **Palavras-chave:** Cuidados Paliativos. Estudantes de Medicina. Assistência Terminal.

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Received: 12 | 19 | 2024. Approved: 05 | 26 | 2025.

Assessed by the double blind reviewprocess.

How to cite this article: Fraga MA, Nobre MLRB, Assis KBO, Rossi-Barbosa LAR. Palliative care in the undergraduate medical course. Revista Bionorte. 2025 jul-dec;14(2):724-731. <https://doi.org/10.47822/bn.v14i2.1234>



Introduction

Palliative care (PC) encompasses all measures aimed at reducing suffering in patients facing a terminal stage of life¹⁻³. Although its initial focus was on cancer patients, this care has been expanded to include any health condition that poses a threat to life⁴. This change is due to the aging of the population, since the number of elderly people is increasing, thus demanding a more comprehensive palliative care. Estimates indicate that, by 2040, about 1,166,279 people will need palliative care in Brazil⁵.

Palliative medicine is classified at the quaternary level of health care, since it aims to prevent and alleviate suffering through early identification, proper evaluation and treatment of pain and other physical, psychological, social, family and spiritual problems^{2,3,6}. This approach provides a better quality of life for both patient and family. In a holistic perspective of medicine, these principles should be part of all specialties, and it is essential that physicians have basic knowledge to deal with palliative care. However, the current reality is different, since only 14% of the 20 million people in the world who need palliative care receive care⁷.

In Brazil, only 14% of medical schools include the topic of palliative care in their curricula, reflecting a lack of preparation of newly trained doctors to deal with end-patients. The absence of an approach focused on palliative care is contradictory, since the doctor's view must be entirely directed to the human being. It is imperative to increase the implementation of palliative care in medical curricula, in order to meet the growing demands and needs of the population⁸. Therefore, the Resolution of the National Council for Education (CNS/CES) n. 3/2014 establishes the National Curriculum Guidelines of the Undergraduate Course in Medicine approved on November 3, 2022, in order to incorporate fundamental topics on palliative care into the curriculum of Medicine courses⁹, positioning Brazil among the countries that include this area in medical training. However, due to the recent introduction of this guideline in the country, many medical schools have not yet adjusted their curricula to include the development of these skills in the training of students. This curricular gap can result in an incipient preparation of professionals, compromising the quality of care offered to patients who need palliative care¹⁰.

Within this context, the objective of this study is to analyze the knowledge about palliative care among medical students from two institutions in northern Minas Gerais.

Materials and Methods

Cross-sectional, quantitative, descriptive study conducted with academics from the first, sixth and eleventh periods of two medical schools in Minas Gerais. To ensure the accuracy and



homogeneity of the sample, exclusion criteria were established, such as; academics under 18 years old, academics who were not regularly attending the medical course due to registration lock-in or incomplete medical certificates and questionnaires, ie those that were not fully filled out, since the absence of data would compromise the analysis and validity of results. With the application of these exclusion criteria, the final sample was composed by 223 academics.

The questionnaire contained sociodemographic data (age, sex, public or private institution, religion) and the instrument "Self-assessment on Palliative Care", based on a Colombian questionnaire adapted by Vasconcelos *et al.*, 2021⁸. It comprises five closed questions, with dichotomized answer options (yes and no), regarding information that may have been received during graduation on the terminality, the definition of palliative care by WHO, communication tools and medical posture in the face of terminality.

The data were analyzed in a descriptive way (mean, standard deviation, variability, absolute and relative frequency). The statistical program IBM SPSS 20.0 (Statistical Package for the Social Sciences) was used.

Ethical care

The project was approved by the Research Ethics Committee of Uninorte Minas number 3.294.506 / 2019.

Results

223 students answered the questionnaire: 61.0% belonging to the private institution and 39.0% to the public institution. Of these, 35.4% were in the first period, 31.8% in the sixth period and 32.8% in the eleventh period. The mean age of participants was 23.1 (SD=3.8) with minimum age of 18 and maximum age of 45, most (62.6%) were female. As for religion, 59.0% self-declared Catholic and 13.8% Protestant, 9.7% other religions or atheists.

Regarding the self-assessment on Palliative Care, the answers are presented in table 1.

Table 1. Self-assessment on Palliative Care

Questions	Periods		
	First n (%)	Sixth n (%)	Eleventh n (%)
Do you believe that, during graduation, you have received sufficient information about the care of terminal patients?	24 (30.4)	27 (38.0%)	23 (31.5)
Do you know the World Health Organization's definition of Palliative Care?	29 (36.7)	46 (64.8%)	36 (49.3)



Do you believe that, during graduation, have received sufficient information to perform the management of patients with pain?	30 (38.0)	40 (56.3)	37 (50.7)
Do you believe that, during graduation, have received sufficient information on the control of most common symptoms (dyspnea, vomiting, constipation, cachexia) in patients in palliative care?	27 (34.2)	30 (42.3)	37 (50.7)
Have you learned, during graduation, communication and posture tools to "give bad news" to patients and families?	41 (51.9)	49 (69.0)	41 (56.2)

Discussion

Through PC teaching, health professionals develop values, skills and attitudes essential for medical practice, such as the ability to provide care that respects patient autonomy and the application of more effective communicative techniques⁵. Thinking in this perspective, the Resolution n. 3/2014, implemented by CNS/CES, in 2022, includes the mandatory adjustment in the curriculum of the medical course, from the insertion of knowledge and skills in PC, with emphasis on communication, pain management and symptoms, as well as in the approach of psychosocial and spiritual aspects for the care of patients with serious and incurable diseases⁹.

When questioned about the receipt of sufficient information about the care of patients in terminal situations, in relation to the school year, an increase in the perception of knowledge capture up to the sixth period can be observed, followed by a reduction to the tenth period. In a study carried out with students of the fifth and sixth year at Universities of Sergipe, only 21.2% believed that they had received sufficient information about patients in terminality¹¹. Another study conducted with 264 students from a Federal University in Porto Alegre, showed that only 23.4% of the students reported sufficient information about this theme¹². It is proposed that students from more advanced periods tend to be more critical about the content taught.

Concerning the knowledge of the definition of PC by the World Health Organization, half of the students said they recognized it, especially the sixth period students. Other studies presented similar data: 55%, 53.2% and 45.9%¹¹⁻¹³, whose students reported familiarity with this definition.

Proper pain management, a crucial part of PC, can significantly improve patients' quality of life. However, this management is complex due to the multifactorial nature of pain and increased sensitivity to drugs and their side effects. Despite the availability of effective therapies, many PC patients still suffer from inadequate pain control and other common symptoms¹⁴.

In this study, less than half of the students reported having received sufficient information about pain management, with a higher proportion of positive responses in the sixth period. Previous studies show variations: 66.5%, 56.2% and 23.4%^{11,12,15} positive responses, respectively. This

difference may be associated with students' difficulty in applying in practice the theoretical knowledge acquired.

PC training covers skills in care planning, as well as the management of common symptoms such as pain, dyspnea, constipation, vomiting and caquexia¹⁶. In a study, 42.4% of the students reported having received sufficient information about common symptom control¹¹. In this study, the number was similar, with emphasis on the eleventh period, where more than half gave positive answers. In another survey, 80.9% of the students reported insufficient technical knowledge for managing common symptoms¹².

These data may suggest that the Problem-Based Learning (PBL) system, adopted in the institutions analyzed in this study and in Regis *et al.*, 2023¹¹; can positively influence learning on the control of symptoms in PC. On the other hand, the traditional system, which is predominant in the university studied by Dalpai *et al.*, 2017¹²; may explain the lower proportions of positive responses. The PBL method is an active teaching methodology in which students learn content and strategies, develop self-directed learning skills, solve problems collaboratively, reflect on their experiences and are encouraged to take responsibility for their own learning, these factors may explain the greater performance of symptom control in palliative care in institutions that use this teaching methodology¹⁷.

Although doctors still face difficulties in dealing with the death process and take the lead in communication between professionals, patients and families¹⁸, more than half of the students in this study responded positively about the acquisition of communication tools and posture to give bad news, especially for the sixth period. Other authors found more expressive numbers: 84.1% of the students reported that graduation prepared them to communicate more news¹¹.

Analyzing critically the results of this study, an increase in the proportion of positive responses was observed until the sixth period, indicating an evolution in knowledge about PC throughout the medical course. Nevertheless, comparing the sixth to the eleventh period, there were decreases in positive responses, except for the control of common symptoms. It is inferred that, after the internship, students start to prioritize more clinical and urgent areas¹⁹.

The discrepancy in results between different study periods also suggests that, although the theoretical training is comprehensive, the practical application and consolidation of knowledge in PC still represent a challenge. The variability of this study, compared to other studies that address different teaching methodologies related to knowledge in PC, such as the use of Problem-Based Learning (PBL) versus traditional methods, seems to directly influence the effectiveness of learning, especially regarding symptom control and communication with patients and family.

Among the limitations of this study, it should be noted that students from the same period were separated into groups and started their internship in different rodizios. The practical contact with

Palliative Care can happen during the rotation of medical clinic and urgency and emergency when dealing with patients who need this type of assistance. Thus, the learning about Palliative Care is not directly related to the period of the internship, but to living with patients in this condition throughout the residuous in these modules, which made it difficult to evaluate the gain of knowledge during the internship.

Conclusion

From the analysis of the data presented, it is possible to conclude that PC training in medical schools has evolved positively, with remarkable advances throughout the course, especially until the sixth period. The increase in knowledge about PC is a reflection of the implementation of CNE/CES Resolution n. 3/2014. However, it is observed that after the sixth period, the perception of students about obtaining sufficient information tends to decrease, possibly due to the prioritization of other more clinical areas in the boarding school.

Therefore, the inclusion and strengthening of palliative care teaching in curricular grades are essential, but it is fundamental that institutions seek to optimize the practical application of this knowledge throughout medical training, ensuring that future physicians feel fully prepared to deal with the challenges of terminally treated patients and their complex needs.

Author contributions

Maria Luísa Ribeiro Brant Nobre e Luiza Augusta Rosa Rossi-Barbosa: conception and design of the research. **Maria Luísa Ribeiro Brant Nobre:** data collection. **Luiza Augusta Rosa Rossi-Barbosa:** analysis and interpretation of the data. **Marcella Almeida Fraga:** writing of the manuscript. **Marcella Almeida Fraga, Maria Luísa Ribeiro Brant Nobre, Katyane Benquerer Oliveira de Assis e Luiza Augusta Rosa Rossi-Barbosa:** critical revision of the manuscript in terms of intellectual content and final presentation. The authors approved the final version of the manuscript and declared themselves responsible for all aspects of the work, including guaranteeing its accuracy and integrity.

Conflict of interests

The authors declare no conflict of interest.

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