

# Bioethics and palliative care in medical school: a curriculum proposal

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## Abstract

Population aging caused by increased life expectancy will result in an increasing demand for professionals specialized in palliative care. Due to the growing number of patients in need of this care profile, medical schools must prioritize palliative education during undergraduate studies, since the teaching of bioethics and palliative care remains timid in the curricula of Brazilian medical schools. Discussing new curricula can therefore contribute to medical education in the field and allow for better training in palliative medicine for the future professional trajectory of medical students. A new curriculum proposal is presented, result of a research on the teaching of bioethics and palliative care in a medical school in the Federal District, Brazil.

**Keywords:** Palliative care. Bioética. Education, medical.

## Resumo

### Bioética e cuidados paliativos na graduação médica: proposta curricular

O envelhecimento populacional provocado pelo aumento da expectativa de vida resultará em uma demanda cada vez maior de profissionais especializados em cuidados paliativos. Devido ao crescente número de pacientes que necessitam desse perfil de cuidado, é de grande relevância priorizar o ensino paliativo durante a graduação médica, visto que o ensino de bioética e cuidados paliativos ainda é tímido nos currículos das faculdades de medicina brasileiras. Portanto, discutir novos currículos pode contribuir para a educação médica na área e permitir melhor capacitação em medicina paliativa para a futura trajetória profissional do estudante de medicina. Apresentamos uma nova proposta curricular, fruto de pesquisa sobre o ensino de bioética e cuidados paliativos na graduação médica de uma escola do Distrito Federal.

**Palavras-chave:** Cuidados paliativos. Bioética. Educação médica

## Resumen

### Bioética y cuidados paliativos en la graduación médica: propuesta curricular

El envejecimiento de la población causado por el aumento de la esperanza de vida se traducirá en una creciente demanda de profesionales especializados en cuidados paliativos. Debido al creciente número de pacientes que necesitan ese perfil de atención, es de gran relevancia priorizar la educación paliativa durante la graduación médica, ya que la enseñanza de la bioética y los cuidados paliativos es todavía tímida en los currículos de las escuelas de medicina brasileñas. Por lo tanto, discutir nuevos currículos puede contribuir a la educación médica en el área y permitir una mejor formación en medicina paliativa para la futura trayectoria profesional del estudiante de medicina. Presentamos una nueva propuesta curricular, resultado de una investigación sobre la enseñanza de la bioética y los cuidados paliativos en la graduación de medicina de una escuela del Distrito Federal.

**Palabras clave:** Cuidados paliativos. Bioética. Educación médica.

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Palliative care (PC) is a health care multidisciplinary model designed to provide comfort to patients living with a life-threatening illness. According to the World Health Organization (WHO), PC is *an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychological, socio-family and spiritual*<sup>1</sup>.

New demographic trends caused by population aging will result in an increasing patient demand for palliative care. In 2019, the total number of people over 65 in the world reached 703 million and it is estimated that this number will approach 1.5 billion by 2050<sup>2</sup>. According to the Brazilian Institute of Geography and Statistics (IBGE), Brazil has 28 million people over 60, representing 13% of the population, and it is estimated that this number will double in the coming decades<sup>3</sup>.

Each year, about 20 million people worldwide need palliative care in their last year of life, yet it is estimated that only 14% actually receive adequate care. Most of them (78%) live in middle and low income countries, a factor that limits access to healthcare<sup>4</sup>. In 2015, the *Economist Intelligence Unit* evaluated the quality of death in 80 countries by analyzing items such as access to opioids, the existence of public policies for palliative healthcare, and access to palliative care approaches in healthcare services.

Brazil ranked 42nd in this classification, below Uganda (35th), Mongolia (28th) and Malaysia (38th)<sup>5</sup>. Since the 2000s, however, PC in Brazil has undergone great progress and by 2019 the country already had 191 PC services, most of which were located in the Southeastern region (55%)<sup>6</sup>. But despite the latest advances of the palliative care movement in Brazil, its presence in undergraduate medical courses is still incipient.

According to the National Academy of Palliative Care (ANCP), of the 302 undergraduate medical courses in the country, only 42 (14%) offer discipline in the field and only 18 (6%) have a compulsory PC discipline<sup>7</sup>. In Brazil,

palliative medicine was recognized as an area of practice in 2011, with Resolution 1,973/2011<sup>8</sup>, and is therefore a relatively recent subspecialty. Undergraduate courses can thus be an important moment to encourage future physicians to become specialists in palliative medicine, making it essential for medical students to have a good foundation in their undergraduate studies.

In their first year of professional practice, physicians are estimated to care for 120 patients who are in the last three months of life and 40 patients in the last days and hours of life, on average<sup>9</sup>. Given this growing demand for palliative care, it is paramount to prioritize teaching PC during medical school. A better relationship between theory and practice from the first years of medical training contributes to the development of professionals better qualified to provide palliative care in the future<sup>6</sup>.

## Bioethics in medical school

“Bioethics” is a neologism derived from the Greek *bios* (life) and *ethike* (ethics), defined as the *systematic study of the moral dimensions, including view, decision, conduct, and guidelines of life sciences and healthcare*<sup>10</sup>. This concept is not limited to discussing science nor does it focus on health, because public opinion, ethics, science and politics are intertwined in these contemporary issues. Bioethics education thus aims to improve “moral judgment competence,” seeking decision-making<sup>11</sup>; therefore, it cares about dignity and life, specifically the sense and meaning of existence<sup>12</sup>.

This is a relatively recent discipline in Brazil and its first records date back to the early 1990s, with the creation of the research ethics committees, which played an important role in institutionalizing the field<sup>13</sup>. In 2001, the National Curriculum Guidelines (DCN) for undergraduate healthcare courses cited bioethics as one of the knowledges to be learned during medical education<sup>14</sup>. According to Silva and Ribeiro<sup>15</sup>, bioethics education should provide students with theoretical and practical conditions for moral self-development, since the discipline focuses on the health professional’s moral training and decisions.

Changes in the healthcare epidemiological profile, as well as advances in scientific and technological development, further demand that these professionals face ethical dilemmas<sup>16</sup>. A systematic review, however, revealed that the last 30 years saw little progress regarding the organizational structure of ethics and bioethics courses in Brazilian medical schools, having few numbers of exclusive teachers, small offer of specific disciplines in the area and low course load<sup>17</sup>.

In a research on PC in undergraduate medical schools in the state of Minas Gerais, Oliveira<sup>18</sup> found that the knowledge of palliative care bioethics and the training of physicians to meet the emerging needs of the field were insufficient in the participating schools.

### Palliative care in medical school

A research on PC education in undergraduate medical studies in the United States interviewed 51 deans from medical schools, of which most (84%) described PC education as “very important” and supported a greater focus on the topic in the undergraduate curriculum. Although most participants were less in favor of compulsory courses (59%) or creating internships (70%) in PC, they unanimously agreed that palliative care should be integrated into existing courses<sup>19</sup>.

A European study noted that the offer of palliative care training in medical education varies widely: only nine of the 51 European countries had PC education in all their medical schools<sup>20</sup>. In Brazil, a study with 58 medical school coordinators concluded that end-of-life care teaching in medical schools is limited and has little priority in undergraduate studies, although most (96.6%) considered it very important. The reduced number of specialized professors is one of the barriers to integrating PC into the undergraduate curriculum<sup>21</sup>.

Palliative care education in Brazil remains timid in undergraduate medical studies curricula. Even when offered, PC appears as part of major areas, with insufficient course load, and is taught in a non-horizontal way, hindering its integration with other study topics<sup>22</sup>.

### Curriculum proposals for palliative care

The curriculum should favor the inherent competencies of each healthcare course, but topics such as communication (verbal and nonverbal), interdisciplinarity and bioethics must feature and pervade the entire course<sup>23</sup>. In this respect, the European Association for Palliative Care (EAPC) listed ten core competencies for professional practice, regardless of discipline, as a resource for healthcare professionals and educators: apply the core constituents of PC in the setting where patients and families are based; enhance physical comfort throughout patients' disease trajectories; meet patients' psychological needs; meet patients' social needs; meet patients' spiritual needs; respond to the needs of family caregivers in relation to short-, medium- and long-term patient care goals; respond to the challenges of clinical and ethical decision-making and in PC; practice comprehensive care coordination and interdisciplinary teamwork; develop interpersonal and communication skills appropriate to PC; practice self-awareness and undergo continuing professional development<sup>24</sup>.

In 2020, the EAPC described new recommendations for a model undergraduate palliative care curriculum. Called EDUPALL, the project involves a multidisciplinary and interdisciplinary team that aims to produce a universally applicable PC curriculum, providing guidelines on teaching resources, faculty training and development, and PC assessment. It proposed the last years of the course as the ideal time for palliative care training in undergraduate studies, for students exhibit greater scientific maturity and clinical experience, allowing for better development in PC education.

The structural outline for the EDUPALL curriculum would be: core constituents of PC: 5%; pain (25%) and symptom (25%) control: 50%; psychosocial and spiritual aspects: 20%; ethical and legal issues: 5%; communication: 15%; teamwork and self-reflection: 5%<sup>20</sup>. A new PC curriculum proposal sought to develop an assessment instrument to facilitate curricular mapping of palliative care education, given its largely

interdisciplinary nature and the heterogeneity of medical schools.

Designed to be a flexible self-assessment tool, the Palliative Education Assessment Tool (PEAT) helps determine the existence of PC in a wide range of curriculum formats and comprises seven domains: 1) core concepts in palliative medicine; 2) pain; 3) neuropsychological symptoms; 4) other symptoms; 5) end-of-life ethics and law; 6) patient/family/caregiver perspectives on end-of-life care; 7) clinical communication skills<sup>25</sup>.

The new DCN for undergraduate medical education, of June 20, 2014, recommend that medical schools provide for the achievement of quality healthcare. In its chapter III, article 23, paragraph VI, the DCN emphasize the curricular contents and pedagogical project of the course: *health promotion and understanding of the physiological processes of human beings (pregnancy, birth, growth and development, aging and death)*<sup>26</sup>.

## Research

Our overall goal was to evaluate the teaching of bioethics and PC in the undergraduate medical course at Central Plateau University Center Aparecido dos Santos (Uniceplac), in Brasília, Federal District, Brazil. As specific objectives, were sought: to identify whether bioethics and PC content were adequately present in the curriculum; to assess whether students mastered the curriculum content; and to propose changes in curriculum strategies, if necessary<sup>27</sup>. Participants signed an informed consent form (ICF), written in accordance with Resolution 466/2012 of the National Health Council<sup>28</sup>. The research took place from May to August 2016 and involved students from the internship periods.

## Method

Qualitative, cross-sectional study carried out using data triangulation, a strategy for improving qualitative studies that involves different perspectives. This technique was used to both increase credibility, by using two or more methods, theories, data sources, and researchers,

and allow an understanding of the phenomenon at different levels, considering the complexity of the objects under study<sup>29</sup>.

## Population

The study population consisted of all internship students regularly enrolled at Uniceplac in the last two years of the course, totaling 155 students, of which 83 (53.5%) agreed to participate – 52 from the 9th period, 18 from the 10th, and 13 from the 11th. Students from the 12th period could not participate for they were interning outside the university. Most were women (46 students, 55.4%) and single (67 students, 80.7%), with mean age of 25 years, ranging from 21 to 38 years old.

## Materials

We used following research strategies: 1) document review of the curriculum based on the medical course teaching plans; 2) completion of structured questionnaire to assess the internship students' use of knowledge on bioethics and PC. The curriculum program was made available by the course coordination, after formal request and signing of a consent form for use of data. The curriculum was then thoroughly reviewed based on teaching plans and curricular strategies on bioethics and PC.

By means of a questionnaire to assess applied knowledge on bioethics and PC, developed using clinical cases or situations and issues based on a study by Oliveira, Guaimi, and Cipullo<sup>30</sup>, this study sought to assess whether students could correctly respond to medical dilemmas considered everyday situations in this professional practice (Appendix 1). Questions 1 to 7 cover the participants' demographic data; 8 to 12 seek to understand their opinion regarding the teaching of bioethics and PC at Uniceplac; and questions 13, 19, 20, 21 and 22 are clinical cases that address topics related to PC, comprising five alternatives each. Questions 14 to 18 are problems formulated based on everyday situations and aim to assess knowledge on bioethics; 23 to 30 address the process of death and dying and were previously validated by Colares and collaborators in 2002<sup>31</sup>.

## Results and discussion

### Results concerning the research instrument

To assess specific knowledge on both topics, we considered the number of correct answers, which was named “score”. As there were five questions for each topic – PC and bioethics (BIO) –, the maximum score was 5 and their sum 10. The students’ performance was satisfactory in both topics, separately and in the sum of the scores. With PC+BIO at a 60% success rate, the 9th and 10th period students would pass (PC+BIO score of 6.8), according to the minimum score required for approval at Uniceplac. Those in the 11th period had a score of 5.1, a difference that may be attributed to the change of bioethics professor in 2016, which would have disrupted their learning.

Questions 14 to 18 touched on clinical cases related to bioethics. The question number, learning objective and corresponding percentage of correct answers are as follows: 14, an ethical dilemma between patient autonomy and medical benefit, 57.85%; 15, recognize the patient’s rights regarding medical records, 63.9%; 16, know the patient’s right to confidentiality and the limits of professional responsibility, 56.6%; 17, know the fundamental principles of the Code of Medical Ethics<sup>32</sup>, 45.8%; and 18, know the physician’s duties, 90.4%.

Questions 13, 19, 20, 21, 22 presented clinical cases focusing on PC. The question number, learning objective and corresponding percentage of correct answers are as follows: 13, make a medical decision following the principle of patient autonomy, 63.9%; 19, suggest invasive procedures to PC patients, 91.6%; 20, recognize the goals of medical support for PC patients, 66.3%; 21, provide for individualized needs in possible complications, 85.6%; and 22, decide to suggest a surgical procedure to a technology-dependent patient, 34.9%.

Among the questions discussing bioethics topics, only question 18 had a high percentage of correct answers (90.4%); among those concerned with PC themes, only questions 19 and 21 had a high percentage of correct answers. Such result indicates the need to

better address everyday situations and relate them to the Code of Medical Ethics. Regarding question 22, which raises a controversial issue relating end-of-life and technological support, we identified a need for further in-depth discussions about the individualized therapeutic plan. Results obtained for questions 23 to 30, on the process of death and dying, show no statistical difference between students from the three periods regarding the “Moment of Death” score, with a mean of 3.4 points: 3 for 9th period students, 3.4 for 10th period students, and 3.1 for 11th period students.

Most students declared: unpreparedness to communicate patient death to the family and to experience patient death in an emergency service; lack of communication skills with patient’s relatives; insecurity about knowledge of the Code of Medical Ethics; and discomfort in communicating with family of end-of-life patients. Thus, undergraduate courses need to better address communication skills and communication of bad news. Our results also indicate that the approach to PC topics should be more valued in the undergraduate curriculum.

Regarding the assessment of knowledge on bioethics and PC, the participants presented satisfactory performance in both topics. Our analysis of the current curriculum proposal for bioethics education concluded that the learning objectives were adequate and in agreement with the 2014 DCN. As for palliative care education, coping with death situations and breaking bad news skills require improvement.

### Curriculum program

At Uniceplac, the medical school’s curriculum presents topics that transversely touch on bioethics, including the history of medicine (first period), legal medicine and deontology (fourth period), and bioethics (eighth period). In the first period, the discipline medical psychology addresses topics such as physician-patient relationship, breaking bad news and understanding the individual in its complexity. No discipline focused on PC in a structured manner nor one specific on the topic were found, which was loosely discussed only in the eighth period, in two disciplines: oncology and aging process.

### Teaching bioethics

We identified a concern with developing critical and reflexive thinking in decision-making related to ethical situations in medical practice. The proposal presented was constructivist, problem-based, and sought to prepare students for the future challenges of medical practice. Classes were helped by resources to encourage the problematization of topics such as: video testimonies, printed media articles and real case reports brought by teachers and students.

Most students (57, 68.7%) answered that they noticed a change in their attitude towards bioethics topics after having undergone this experience. However, 65% considered the discussions on bioethics in real practice settings insufficient, and therefore a need for expanding these opportunities for problematization remains.

### Educational product

Regarding palliative care, the choice to develop a complementary extension course

was based on the deficiencies identified by the curriculum analysis. Considering the strong interdisciplinarity of PC, we outlined an integrative extension course also open to nursing, psychology, physical therapy and dentistry students. The proposed discipline sought to integrate students from Uniceplac's various healthcare courses, addressing the related topics of bioethics and PC, based on the thematic axis "health of older adults."

Tables 1 and 2 summarize the teaching plan of the extension course and its list of competencies. A competence-based curriculum entails an organization that balances and alternates knowledge building with the development of skills and attitudes necessary for a good medical practice, seeking to articulate all learning domains. It seeks to integrate and align teaching-learning methodologies, educational practices, learning contexts, and evaluation methods in a new perspective of academic advising and professional training<sup>33</sup>.

**Table 1.** Teaching plan for the extension course in palliative care

Teaching Plan Multidisciplinary course in Palliative Care	
Duration: 1 academic semester Practical course load: 6 technical visits (with internship supervisors) Theoretical course load: 30 hours/class Formative evaluations (points distribution): A multiple choice theoretical test with clinical cases at the end of the course: 7 points Classroom exercises: 3 points	
Topics considered for discussion with students: (learning objectives) Ten topics for discussion with advisors:	
<ul style="list-style-type: none"> <li>• Concepts and principles in Palliative Care</li> <li>• Palliative Care implementation strategies: Elaboration of individualized care plans</li> <li>• Techniques for breaking bad news</li> <li>• Approach to pain, clinical syndromes, and medical procedures</li> <li>• Approach and techniques for coping with death</li> </ul>	<ul style="list-style-type: none"> <li>• Patient and family as a care unit</li> <li>• Multidisciplinary approach</li> <li>• Characteristics of palliative care for pediatric patients</li> <li>• Illness and death aspects, religious aspects</li> <li>• Patients' rights in palliative care, ethical and legal aspects</li> </ul>
Five basic topics for discussion with hospital ward supervisors. Other topics will be discussed according to the prevalent nosology in the practice setting.	
Core Domains (CD):	
A Patient care B Medical knowledge C Practical skills	D Communication E Professionalism F Interface with healthcare systems

**Table 2.** Matrix competencies × instructional activities x evaluation

N	Competencies	Core domains	Instructional activity	Evaluation
1	Carry out individualized therapeutic plan	ABC	Clinical cases	Formative
2	Work in a multidisciplinary team, considering biological and psychosocial factors associated with the health issues of patients in palliative care	ABC	Clinical cases	Formative
3	List the main differential diagnoses of diseases, according to clinical presentation	ABC	Clinical cases	Formative
4	Administer the necessary and adequate analgesic measures	ABC	Clinical cases	Formative
5	Plan individual care focused on preventing major complications	ABCDEF	Written assignment	-
6	Exercise the ethical and deontological principles of medical practice, with emphasis on medical confidentiality, medical records	ABE	Clinical cases	Formative
7	Correctly record the care provided in the medical records and understand the importance of medical records as a tool for providing care and recording health care	ABE	Clinical cases	Formative
8	Promote education for death with patients and their families. Approach to patient and family, strategies to cope with death	ABC	Hospital ward	Formative
9	Properly record the anamnesis and examination performed	ABCDE	Hospital ward	Formative
10	Communicate correctly with patients and their family	DEF	Hospital ward	Formative

A: patient care; B: medical knowledge; C: practical skills; D: communication; E: professionalism; F: interface with healthcare systems.

### Final considerations

Population aging and the growing life expectancy will increase the demand for specialized healthcare professionals, making it essential for medical students, regardless of their future specialty, to acquire basic competencies regarding bioethics and PC. As palliative care education in Brazilian medical schools remains a challenge, new curricular

models aimed at integrating medical students into the context of palliative care must be observed.

This research intends to contribute to the inclusion of such topics in undergraduate medical courses, as well as to their integration with other healthcare themes. Finally, the educational strategies suggested must be implemented so they can be evaluated to better validate the proposed initiatives.

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Priscilla Biazibetti wrote the manuscript. Alexandre Pereira performed the critical review and helped write the final version. Ilma da Cunha Barros wrote the original master’s thesis on which this article was based and critically reviewed the latter.

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## APPENDIX 1

### Questionnaire – Data collection tool

#### QUESTIONNAIRE

1. Name: \_\_\_\_\_ 2. Course admission: \_\_\_\_\_ 3. Registration: \_\_\_\_\_
4. Current period: 9th period ( ) 10th period ( )  
11th period ( ) 12th period ( )
5. Gender: Female ( ) Male ( ) 6. Age: \_\_\_\_\_
7. Marital status: 1 Single ( ) 2 Married/Common-law marriage ( ) 3 Separate ( ) 4 Widower ( )
8. Which of the topics listed below do you remember discussing during your medical course so far?
- Euthanasia ( ) Abortion ( ) Genetics and health ( ) Ecology and bioethics ( )  
Brain death ( ) Transplantation ( ) Assisted reproduction ( )  
Physician-patient relationship ( ) Public health ( ) Animal testing ( )  
End of life ( ) Analgesia and sedation ( ) Other ( )
9. In your opinion, the topics on bioethics and palliative care (PC) discussed during the course were:
- Insufficient 1  2  3  4  5  Sufficient
10. During case discussions in hospitals and outpatient clinics, ethical aspects are usually addressed:
- Always 1  2  3  4  5  Never
11. In your opinion, having topics such as PC bioethics in medical education is:
- Unimportant 1  2  3  4  5  Very Important
12. Was there a change of attitude on your part after attending classes in these disciplines?
- None 1  2  3  4  5  Many
13. A terminally ill patient, in a serious and conscious state, is under your professional care and requests not to be admitted to an intensive care center. From an ethical perspective, the most appropriate conduct is:
- Respect the patient's decision and communicate this fact to the family (correct answer)
  - Communicate the patient's wish to a legal authority, requesting formal authorization
  - Request a medical board to arbitrate the matter
  - Request permission from a close relative to fulfill the request
  - I do not know
14. A 17-year-old car accident victim is brought to the emergency room with profuse bleeding. After emergency evaluation, it is found that the patient requires an emergency transfusion. However, the family's religion does not allow blood transfusion. The most ethically appropriate conduct is:
- Accept the family's wishes
  - Request legal action immediately
  - Perform the transfusion (correct answer)
  - Immediately inform the hospital administration
  - I do not know

15. A hospitalized patient asks the resident physician to see their medical records. The resident physician must:

- Make the medical records available after authorization by the attending physician
- Immediately make the medical records available to the patient (correct answer)
- Ask the patient to request permission from the hospital administration
- Deny the patient access to the medical records, as it is a medical document
- I do not know

16. A man, after donating blood, is notified by the blood bank that he tested positive for HIV. He is married and has unprotected sex with his wife, but asks that this be kept secret and refuses to tell his partner, despite the doctor's best efforts. What should the doctor do?

- Nothing, because the couple's relationship has nothing to do with the doctor
- Ask the wife for a blood test to check if she is also a carrier
- Communicate the fact to the wife himself (correct answer)
- Refuse to treat the patient
- I do not know

17. A 50-year-old hypertensive, diabetic and obese patient is awaiting consultation at the only Unified Health System (SUS) outpatient clinic in the city. The attending cardiologist, seeing the patient smoking, asks him to see another doctor, for he had previously advised the patient not to smoke. This conduct was:

- Right, because the patient does not follow the treatment correctly
- Wrong, because the doctor has no right to attend to the patient
- Right, because the doctor has the right to refuse to treat the patient
- Wrong, because it is the doctor's duty to insist, even if the patient does not cooperate (correct answer)
- I do not know

18. There are two treatments available for a pathology. One is considered gold standard, but is highly costly; the other is satisfactory, with a significantly lower cost. You consider it correct to:

- Treat with the gold standard only
- Prescribe the most satisfactory treatment in the public service and the costliest in the private service
- Inform the patient about the two treatments and decide together on the treatment to be carried out (correct answer)
- Always start the satisfactory treatment, due to the ethical principle of equity
- I do not know

19. A 75-year-old patient with Alzheimer's presents difficulty swallowing. Considering the patient's disease, the best approach is to:

- Provide the family with multidisciplinary support and perform the necessary procedures to provide nourishment to the patient (correct answer)
- Provide the family with multidisciplinary support and not perform the procedure
- Provide the family with multidisciplinary support and refer the patient to hospital admission
- Wait for the family to decide and then follow its wishes
- I do not know

20. A 5-year-old child with metastatic melanoma with no chance of cure receiving palliative home care is brought to the hospital by her grandmother, who asks for her granddaughter to be admitted for she cannot bear to see the child in such a situation. Upon admission, the pediatrician requests an intensive care unit (ICU) because the child is on continuous use of morphine by infusion pump. About the ICU admission, you consider:

- Understand the institution's limitations in caring for a severely ill patient who requires resources outside the ICU
- Admit the patient to the ICU and perform new tests and staging of the pathology to communicate the family as requested
- Discuss with the institution's team of professionals about the challenges involving pediatric palliative care and define the treatment goals and interventions to be performed (correct answer)
- Not to hospitalize the patient and inform that, when palliative treatment is indicated, the conduct is to keep the patient in home care, which that will promote greater comfort
- I do not know

21. A 1 year and 2 months old child diagnosed with osteogenesis imperfecta. Having discussed and defined with the family the implementation of palliative care and transfer to home in the upcoming days, the patient presents fever and a drop in general condition, with a productive cough. The assistant physician requests laboratory tests to assess the need for antimicrobials. The child's guardians question the blood collection, since the girl would be subjected to a painful procedure. Considering the facts, the best course of action is to:

- Reassess the request for laboratory tests and prescribe antiemetics and observation
- Inform the family on the importance of early detection and treatment of an infection and maintain the prescription (correct answer)
- Ignore the child's fever as a risk of infection and only prescribe antiemetic
- Expedite transfer to the patient's home, because if the fever is caused by infection it can speed up death
- I do not know

22. A 12-year-old neuropathic child with kernicterus sequelae is hospitalized with pneumonia. Radiological examination shows major thoracic deformity and trapped right lung, but the patient presents clinical improvement, maintaining dependence on mechanical ventilation. The best approach is:

- As the patient has a thoracic deformity, inform the family of the therapeutic impossibility and define comfort measures
- Discuss with the family the performance of tracheostomy to return home on mechanical ventilation
- Discuss with the family the comfort measures given the reserved prognosis
- Propose treatment for deformity correction to improve respiratory parameters (correct answer)
- I do not know

Check the answer for each statement using the following coding:

1 Strongly disagree 2 Disagree 3 Neither agree nor disagree 4 Agree 5 Strongly agree

23. I feel prepared to communicate a poor prognosis to a patient

- 1  2  3  4  5

24. I feel prepared to communicate the death of a patient to their family

- 1  2  3  4  5

25. I feel unprepared to experience death in an emergency room

- 1  2  3  4  5

26. I feel unsure about how to respect the ethical precepts of my profession

1  2  3  4  5

27. I feel unprepared to communicate the death of a patient to their family

1  2  3  4  5

28. I do not mind having to answer questions asked by family members of a severely ill patient

1  2  3  4  5

29. I get very upset when faced with the death of a young patient

1  2  3  4  5

30. I feel uncomfortable answering questions from family members of a terminally ill patient

1  2  3  4  5