Bioethics teaching in graduate programs in the field of medicine III

Jackson Luís Ferreira Cantão¹, Caroline Mendes Santos¹, Juliano Cordeiro Gallotte¹, Isaac Prado Ramos¹, Edicarla Torres Ribeiro¹, Silma Sousa de Paula¹, Ademilson Teles do Vale Júnior¹, Catarine Mendes Santos¹, José Antônio Cordero da Silva¹

1. Universidade do Estado do Pará, Belém/PA, Brasil.

Abstract

The objective of this article is to examine how ethics/bioethics teaching is included in the curricula of *stricto sensu* graduate programs in the field of medicine III, according to the classification of the Coordination for the Improvement of Higher Education Personnel, in the North and Northeast regions of Brazil. This is a documentary, descriptive and exploratory study, of a qualitative and quantitative nature. The Sucupira Platform was used to search for the following information about the programs: state, institution, name of the program, category (academic/professional), score, compulsoriness and name of the course, workload and *website* of the program. We found nine programs in the field of medicine III, mainly professional master's degree programs, most of which offer ethics-related courses as compulsory courses. We found that ethics/bioethics-related courses are present in all programs, although with different workloads. Further studies are necessary in order to research the methodological approaches to ethics teaching in programs in the field.

Keywords: Ethics. Bioethics. Health postgraduate programs.

Resumo

Ensino de bioética em pós-graduações na área de medicina III

O objetivo deste artigo é verificar como o ensino de ética/bioética está inserido nas grades curriculares dos programas de pós-graduação *stricto sensu* na área medicina III, conforme classificação da Coordenação de Aperfeiçoamento de Pessoal de Nível Superior, nas regiões Norte e Nordeste. Trata-se de estudo documental, descritivo e exploratório, de natureza qualiquantitativa. Utilizou-se a Plataforma Sucupira para buscar as seguintes informações sobre os programas: estado, instituição, nome do programa, categoria (acadêmico/profissional), nota, obrigatoriedade e nome da disciplina, carga horária e *site* do programa. Foram encontrados nove programas na área medicina III, sobretudo mestrados profissionais, e a maioria deles oferece disciplinas ligadas a ética como obrigatórias. Verificou-se que disciplinas ligadas a ética/bioética estão presentes em todos os programas, embora com diferentes cargas horárias. São necessários estudos futuros que investiguem as abordagens metodológicas para ensino de ética nos cursos da área.

Palavras-chave: Ética. Bioética. Programas de pós-graduação em saúde.

Resumen

Enseñanza de la bioética en cursos de posgrado en el campo de la medicina III

El objetivo de este artículo es comprobar la manera en que se incluye la enseñanza de la ética/bioética en los planes de estudio de los programas de posgrado *stricto sensu* en el campo de la medicina III, según la clasificación de la Coordinación de Perfeccionamiento de Personal de Nivel Superior, en las regiones Norte y Nordeste. Se trata de un estudio documental, descriptivo y exploratorio, de carácter cualicuantitativo. Se utilizó la Plataforma Sucupira para buscar la siguiente información sobre los programas: estado, institución, nombre del programa, categoría (académico/profesional), nota, obligatoriedad y nombre de la asignatura, horas lectivas y página web del programa. Se encontraron nueve programas en el campo de medicina III, sobre todo de másteres profesionales, y la mayoría ofrece asignaturas relacionadas con la ética con carácter obligatorio. Se constató que las asignaturas relacionadas con la ética/bioética están presentes en todos los programas, aunque con diferentes horas lectivas. Se requieren estudios futuros para investigar los enfoques metodológicos para la enseñanza de la ética en cursos de este ámbito.

Palabras clave: Ética. Bioética. Programas de posgrado en salud.

The authors declare no conflict of interest.

Research

Ethics is the study of conduct and character, and relates to determining what is good for individuals, groups, and society as a whole. Acts considered ethical reflect a commitment to values beyond personal preferences—standards that professions and societies strive to achieve. Ethical education based only on conceptual discussions is not sufficient to train ethically competent professionals, as the current teaching model requires social subjects, new ways of providing services, and new ways of training professionals ¹.

The theme of "ethics in scientific activity" is of concern and is increasingly present in national and international research. Scientific and technological advances and their controversial developments in recent decades have evoked important discussions and reflections that associate science with an accumulation of academic productions and spaces dedicated to the theme, as well as the institutionalization of specific regulations².

In this context, it is noted that ethics must be included in a practical and active manner in *stricto sensu* graduate programs in the field of medicine III of the classification of the Coordination for the Improvement of Higher Education Personnel (CAPES), a field that comprises subjects related to surgery, anesthesiology, urgency and emergency. The field of bioethics, initially associated with clinical and experimental medicine, encompasses a broad and diverse set of research groups and productions that intersect between science and ethics. Thus, in the national scientific production, it is possible to recognize a plurality of themes, perspectives and approaches coming mainly from academic production ^{2,3}.

Bioethics arises in the context of health as a field of reflection between human survival and values. Thus, considering numerous events and facts that violate human dignity, it is increasingly evident that teaching ethics and bioethics courses in isolation and without communication with the other subjects is not sufficient for academics and professionals to solve dilemmas that affect all human beings ^{4,5}.

It is noted that the introduction of bioethics and ethics in curricular matrices is still slow; hence, teaching courses addressing these themes is a task that requires a certain creativity from professors, as well as changes in traditional teaching models in most universities. Therefore, the bioethics teaching-learning process should be based on guidance for decision-making in relation to conflicts, with the concern of training professionals as individuals with ethical knowledge ⁶.

In Brazil, the expansion and transformation of education policies on health and disease require new requests for care. This translates into the need to innovate teaching in this field, including, for example, courses related to bioethics. These pedagogical methods enable critical reflection and training, transforming students into protagonists of the learning process ^{5,7}.

From this perspective, we propose the following questions: how is ethics included in undergraduate curricula in the field of medicine III? Is there longitudinality, that is, does the theme permeate all courses, or most of them, throughout the program? These questions are necessary to reflect on the complexity related to the domain of health, recent events motivated by social, cultural and economic changes, as well as their implications for society ^{8,9}.

In addition, professionals are poorly prepared to deal with situations in which decision-making disregards the autonomy, beliefs and values of individuals. Thus, the debate on ethics is necessary for professional training, and is not limited to technical aspects ^{8,9}.

In view of the above, the objective of this study was to examine how ethics/bioethics teaching is included in the curricula of *stricto sensu* programs in the field of medicine III in the North and Northeast regions of Brazil.

Method

This is a documentary, descriptive and exploratory study, of a qualitative and quantitative nature, whose methodology was based on Bertolin and collaborators ¹⁰. Initially, we researched all academic and professional master's degree programs recognized by CAPES in the field of medicine III.

We included active programs, with a CAPES score equal to or greater than 3 (2017 quadrennial evaluation), offered in states in the north region (Acre, Amazonas, Amapá, Pará, Rondônia, Roraima

and Tocantins) and northeast region (Alagoas, Bahia, Ceará, Maranhão, Paraíba, Piauí, Pernambuco, Rio Grande do Norte and Sergipe). We excluded programs with scores 1 and 2 (de-accredited), with no CAPES score, inactive, and not in the field of interest of this study.

We prepared a chart with the summary description of all master's degree programs that met the requirements, including institution, Capes score, mode and website. Subsequently, were accessed the websites to trace courses

associated with the keywords "ethics," "bioethics," or "medical ethics." Based on analysis of the curricular structure of each program, we added to the chart information referring to program and course name, workload and nature (elective or compulsory). The summary of the methodology is shown in Figure 1.

As this is a documentary study with freeaccess data, submission to a research ethics committee is not required. The data were tabulated in Excel and Word.

Figure 1. Method

- Sucupira Platform (https://sucupira.capes.gov.br) > Evaluated and recognized courses > Advanced search (regions: North and Northeast. Field of knowledge: medicine III)
- Inclusion criteria: *stricto sensu* graduate programs in the field of medicine III, with a score equal to or higher than 3, offered in states in the North and Northeast regions
- Access to the websites of each program to analyze the curricular matrices
- 4 Search in the curricular matrices for the terms "ethics," "bioethics," or "medical ethics"
- Preparation of a chart containing state, institution, name of the program and course, CAPES score, workload, nature of the course and link to the program website

Results and discussion

We found nine *stricto sensu* graduate programs in the field of medicine III in the North and Northeast regions, most of which being professional programs, offered by public institutions and offering compulsory courses related to ethics (Chart 1).

The study of bioethics/ethics in master's degree programs classified in the CAPES field of medicine III is of major importance, since ethics is a basic directive both for health care professionals who work in scientific settings and for those who relate to people in the daily routine ¹¹. The survey found nine programs, all with a score 3 or higher

in CAPES, of which two are located in the North region and seven in the Northeast region. With regard to the designation of the master's degree program, 67% of the programs are professional and 33% are academic.

Only one program did not inform the workload for the ethics/bioethics courses on its platform; the others indicated a minimum workload of 15 hours and a maximum of 48 hours, the latter in a course classified as elective. The average among all programs was 34.1 hours, corresponding to 4% of the minimum total workload of 720 hours for a master's degree program in Brazil, according to the Sucupira Platform ¹².

Chart 1. Ethics teaching in stricto sensu graduate programs in the field of medicine III in the North and Northeast regions, Brazil, 2023

State	Institution	Program name	Academic/ Professional	CAPES score	Course nature	Course name Workload	rkload	Website
Pará	Universidade do Estado do Pará	Professional Master's Degree Program "Experimental Research and Surgery"	Professional	က	Compulsory	Bioethics	15	https://paginas.uepa.br/mestradocipe/ Disciplinas.php
Amazonas	Universidade Federal do Amazonas	Graduate Program in Surgery – Professional Master's Degree Program	Professional	ო	Compulsory	Bioethics	30	https://www.ppgraci.ufam.edu.br/ estrutura-curricular.html
Piauí	Universidade Federal do Piauí	Graduate Program in Women's Health - Professional Master's Degree Program	Professional	ო	Compulsory	Bioethics	30	https://sigaa.ufpi.br/sigaa/public/ programa/curriculo_resumo. jsf?id=897&lc=pt_BR
Pernambuco	Universidade Federal de Pernambuco	Graduate Program in Surgery – Professional Master's Degree Program	Academic	4	Compulsory	Bioethics	09	https://www.ufpe.br/ppgc/grade- curricular
Rio Grande do Norte	Universidade Federal do Rio Grande do Norte	Graduate Program in Sciences Applied to Women's Health	Academic	25	Compulsory	Bioethics	30	https://sigaa.ufrn.br/sigaa/public/ programa/curriculo_resumo. jsf?id=30544&lc=pt_BR
Rio Grande do Norte	Universidade Federal do Rio Grande do Norte	Graduate Program in Health Management and Innovation	Professional	4	Compulsory	Ethics and Bioethics	30	https://sigaa.ufrn.br/sigaa/public/ programa/curriculo_resumo. jsf?id=10482&lc=pt_BR
Ceará	Universidade Federal do Ceará	Graduate Program – Surgical Medical Sciences	Academic	22	Elective	Other names	48	https://ppgcmc.ufc.br
Ceará	Unichristus	Graduate Program in Technological Innovation in Health	Professional	ო	Compulsory	Bioethics	30	https://mestrado.unichristus.edu.br/ matriz-curricular/matriz-curricular- temis/
Ceará	Universidade Estadual do Ceará	Professional Master's Degree Program – Technology in Organ Transplantation	Professional	ю	Compulsory	Bioethics	Z	https://pdv.iepro.org.br/cursos/ mestrado_profissional_em_transplantes/

CAPES: Coordination for the Improvement of Higher Education Personnel; N/I: not informed

In addition, regarding the mode of offering the course, eight courses were compulsory, and one is offered as an elective course. We also found that one course is of a private institution and eight courses are of public institutions, of which six are of federal universities and two are of state universities. Therefore, there is a predominance of master's degrees programs with better CAPES scores in public institutions, instead of private ones, as well as with higher overall average scores.

It can also be seen that, among the programs that reached maximum score, the program of the Federal University of Ceará (UFC) presented the highest workload for the course. Thus, it is noted the importance of developing master's degree students with the ability to contemplate ethical aspects, considering that the research lines and projects, as well as the curricular structure of the programs, are CAPES performance evaluation criteria 13. The data show a strong intention to improve bioethics/ethics teaching in professional master's degree programs in the North and Northeast regions, as all programs analyzed make these courses available in their curriculum.

However, important points still need improvement, such as workload, since the study of ethics, bioethics and deontology in programs in the field of health is usually trivialized, since these concepts are merely associated with prescriptive application 14. Therefore, this learning deficit still persists in undergraduate and even graduate programs, in which these concepts are of paramount importance, given the impact on the academic and professional training of the master's degree programs analyzed.

In addition, ethics/bioethics courses are taught transversally in the programs under study, with no inclusion of topics of the subject in the other disciplines. This pattern follows the trend of medical training in Latin American and Caribbean countries, where 91.5% of public medical educational institutions and 66.2% of private universities offer ethics/bioethics studies in isolation or transversally. In addition, the workload of studies on this subject in medical schools amounts to only 0.6% to 1.5% of the total workload in undergraduate programs, being a small number of hours 15.

Thus, it is observed that from undergraduate programs to stricto sensu graduate programs, such as those analyzed in this study, there is a trend of offering minimal dedication to subjects related to ethics/bioethics. This is evident when observing that the time dedicated to the theme. as well as the teaching methodology that allocates the subjects related to the discipline only in a transversal manner, enables only specific reflection of these subjects throughout the programs, resulting in a deficiency in their applicability.

Thus, in addition to the need to reformulate the curricula and curricular guidelines of undergraduate programs, a similar change is also needed in master's degree programs, especially academic ones, which aim to train teachers capable of fostering the biopsychosocial approach in their students. These changes would directly impact the training of health care professionals not only with a focus on technical knowledge, but also with a humanistic view 15.

Final considerations

Ethics involves moral, cultural and social concepts present in professional settings and outside them, and it is essential that students have a view that is more associated with the biopsychosocial approach to their patients and their work, in the scientific or care area. Thus, including ethics/bioethics-related courses in stricto sensu graduate programs in the field of health is of paramount importance, especially in medicine III, considering the trend of trivializing the discipline and its importance that permeates from undergraduate to graduate medical programs.

Analysis of the listed programs shows that the ethics/bioethics course is usually approached in isolation, which suggests that the curricula need to be reviewed, since the longitudinality of the subject in an integrated way with other courses is of paramount importance. Despite that, all programs had some course related to the subject, most often compulsory, which denotes awareness of the importance of the theme.

Further studies are needed in order to analyze—from a pedagogical point of view the methodologies used to teach ethics in stricto sensu graduate programs in the field of medicine III, in order to understand the training offered. It is also noted that it is necessary to

reformulate the curricula to increase the workload of this course and allocate it as compulsory within health programs, especially graduate programs.

Therefore, reflections—such as those presented in this study—should be widely encouraged so such changes are implemented.

References

- 1. Gerber VKQ, Zagonel IPS. A ética no ensino superior na área da saúde: uma revisão integrativa. Rev. bioét. (Impr.) [Internet]. 2013 [acesso 9 abr 2024];21(1):168-78. Disponível: https://bit.ly/3xuu1RT
- 2. de la Fare M, Carvalho ICDM, Pereira MV. Ética e pesquisa em educação: entre a regulação e a potencialidade reflexiva da formação. Educação [Internet]. 2017 [acesso 9 abr 2024];40(2):192-202. DOI: 10.15448/1981-2582.2017.2.27603
- 3. Qualis Periódicos. Plataforma Sucupira [Internet]. [s.d.] [acesso 9 abr 2024]. Disponível: https://sucupira.capes.gov.br/sucupira/
- 4. Bastos MLA, Nunes RAL, Lopes SVMU, Amorim RF. O espaço da ética e bioética na graduação em medicina. Rev Bras Promoc Saúde [Internet]. 2018 [acesso 9 abr 2024];31(4). DOI: 10.5020/18061230.2018.8762
- 5. Amorim KPC, Araújo EM. Formação ética e humana no curso de medicina da UFRN: uma análise crítica. Rev Bras Educ Méd [Internet]. 2013 [acesso 9 abr 2024];37(1):138-48. DOI: 10.1590/S0100-55022013000100020
- 6. Paiva LM, Guilhem D, Sousa ALL. O ensino da bioética na graduação do profissional de saúde. Medicina (Ribeirão Preto). 2014 [acesso 9 abr 2024];47(4):357-69. DOI: 10.11606/issn.2176-7262.v47i4p357-369
- 7. Menezes MM, Maia LC, Abreu MHNG, Sampaio CA, Costa SM. Percepções sobre o ensino de ética na medicina: estudo qualitativo. Rev. bioét. (Impr.) [Internet]. 2019 [acesso 9 abr 2024];27(2):341-9. DOI: 10.1590/1983-80422019272318
- 8. Neves WA Jr, Araújo LZS, Rego S. Ensino de bioética nas faculdades de medicina do Brasil. Rev. bioét. (Impr.) [Internet]. 2016 [acesso 9 abr 2024];24(1):98-107. DOI: 10.1590/1983-80422016241111
- 9. Silva J, Leão HMC, Pereira ACAC. Ensino de bioética na graduação de medicina: relato de experiência. Rev. bioét. (Impr.) [Internet]. 2013 [acesso 9 abr 2024];21(2):338-43. Disponível: https://www.scielo.br/j/bioet/a/QDKTJMrRJDdT4xn4D7v4zBw/
- 10. Bertolin RV, Bozzini ICT, Furlan EGM. A disciplina didática das ciências em cursos de pós-graduação. Aondê [Internet]. 2022 [acesso 9 abr 2024];2(1)1-11. DOI: 10.29327/2309399.2.1-7
- 11. Alexandre MG, Bavaresco RMS, Brew MC, Bavaresco CS. Ética e Bioética no processo de ensinoaprendizagem em um programa de residência médica. Revista Saúde & Ciência [Internet]. 2018 [acesso 9 abr 2024];7(1):5-14. DOI: 10.35572/rsc.v7i1.76
- 12. Resumo fichas de avaliação acadêmica e profissional área medicina III: quadrienal 2017-2020: quesitos, itens, indicadores e pesos. Plataforma Sucupira [Internet]. 2017 [acesso 9 abr 2024]. Disponível: https://bit.ly/3Q1kBDX
- **13.** Cursos avaliados e reconhecidos. Plataforma Sucupira [Internet]. 2022 [acesso 9 abr 2024]. Disponível: https://bit.ly/3PUYlf6
- 14. Souza TP, Rech RS, Gomes E, Souza TP, Rech RS, Gomes E. Methodologies applied in the teaching of Ethics, Bioethics and Deontology during the last decade: an integrative review. Interface Comun Saúde Educ [Internet]. 2022 [acesso 9 abr 2024];26:e210621. DOI: 10.1590/interface.210621
- 15. Ferrari AG, Silva CM, Siqueira JE. Ensino de bioética nas escolas de medicina da América Latina. Rev. bioét. (Impr.) [Internet]. 2018 [acesso 9 abr 2024];26(2):228-34. DOI: 10.1590/1983-80422018262243

Jackson Luís Ferreira Cantão - Master's student - jacksoncantao@gmail.com

D 0009-0005-7946-8064

Caroline Mendes Santos – Master's student – carol.ms.bm@gmail.com

D 0000-0003-0911-7064

Juliano Cordeiro Gallotte - Master's student - julianocgallotte@hotmail.com

D 0009-0009-9237-4774

Isaac Prado Ramos – Master's student – isaacramos030919@gmail.com

(b) 0000-0001-5701-5236

Edicarla Torres Ribeiro - Master's student - edicarla.torres@hotmail.com

(D) 0009-0007-8487-2592

Silma Sousa de Paula - Master's student - silmapaula2015@gmail.com

(i) 0009-0006-1410-5745

Ademilson Teles do Vale Júnior – Master's student – ademilsonteles@gmail.com

D 0000-0001-8530-0640

Catarine Mendes Santos - Graduate - catarine.ms01@gmail.com

(D) 0000-0002-9590-0866

José Antônio Cordero da Silva - PhD - corderobel4@gmail.com

D 0000-0002-4403-5665

Corresponding author

Catarine Mendes Santos – Rua Rio Vermelho, 631, Novo Horizonte CEP 68503-430. Marabá/PA, Brasil.

Contribution of the authors

All authors participated in the research design, article drafting and article review.

Received: 10.15.2023 **Revised:** 3.9.2024

Approved: 3.10.2024