



Revista Bioética

ISSN: 1983-8042

ISSN: 1983-8034

Conselho Federal de Medicina

Mota, Jarbas Carneiro; Vêras, Renata Meira
Eixo ético-humanístico da Faculdade de Medicina da Bahia: percepção dos estudantes
Revista Bioética, vol. 28, no. 2, 2020, April-June, pp. 319-331
Conselho Federal de Medicina

DOI: <https://doi.org/10.1590/1983-80422020282394>

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RESEARCH

Ethical-humanistic axis of a medical school in Bahia: students' perception

Jarbas Carneiro Mota¹, Renata Meira Vêras¹

1. Departamento de Medicina, Universidade Federal da Bahia (Ufba), Salvador/BA, Brasil.

Abstract

Universities have been restructuring their curricula to direct medical practice onto the Brazilian Unified Health System, driven by the publication of the National Curricular Guidelines for the Undergraduate Medical Course in 2001, by introducing humanities as an important instrument to the students' education. The Faculty of Medicine of Bahia, Brazil, reformulated its curriculum in 2007 and implemented the ethical-humanistic axis, provided from the first to the eighth semester of the course, aiming at adapting the education of physicians to the profile proposed by the guidelines. Our study analyzes the students' perception of this axis in the curriculum. Questionnaires were applied to obtain 418 respondents. The students know the objectives of the ethical-humanistic axis; however, they think their colleagues do not consider the axis important for their education. Although most of students favor subjects from the biological and clinical modules, they also consider the disciplines of the ethical-humanistic axis should be present in all semesters.

Keywords: Ethics, medical. Teaching. Education, medical, undergraduate. Humanities.

Resumo

Eixo ético-humanístico da Faculdade de Medicina da Bahia: percepção dos estudantes

Impulsionadas pelas Diretrizes Curriculares Nacionais do curso de graduação em medicina, publicadas em 2001, as universidades reestruturaram seus currículos a fim de articular a prática médica ao Sistema Único de Saúde, dando maior atenção às humanidades. A Faculdade de Medicina da Universidade Federal da Bahia reformulou seu currículo em 2007, implantando o eixo ético-humanístico, ofertado do primeiro ao oitavo semestre. Este estudo analisa a percepção acerca desse eixo com base em questionário respondido por 418 estudantes. A maioria dos participantes afirmou conhecer os objetivos do eixo ético-humanístico, mas acredita que seus colegas de curso não o consideram importante para a formação. A maior parte diz privilegiar disciplinas dos módulos biológico e clínico, mas considera necessário que disciplinas do eixo ético-humanístico estejam presentes em todos os semestres.

Palavras-chave: Ética médica. Ensino. Educação de graduação em medicina. Ciências humanas.

Resumen

Eje ético-humanístico de la Facultad de Medicina de Bahía: percepción de los estudiantes

Impulsadas por la publicación de las Directrices Curriculares Nacionales para el Curso de Grado en Medicina, publicadas en 2001, las universidades reestructuraron sus planes de estudio para articular la práctica médica al Sistema Único de Salud, para lo que concedieron mayor atención a las humanidades. La Facultad de Medicina de la Universidad Federal de Bahía reformuló su plan de estudios en 2007 e implementó el eje ético-humanístico, ofrecido desde el primero hasta el octavo semestre. Este estudio analiza la percepción de este eje, sobre la base de un cuestionario al que respondieron 418 estudiantes. La mayoría de los participantes afirmó que conocía los objetivos del eje ético-humanista, aunque piensan que sus compañeros de curso no lo consideran importante para su formación. La mayor parte afirma que prioriza las disciplinas de los módulos biológico y clínico, aunque considera necesario que las disciplinas del eje ético-humanista estén presentes en todos los semestres.

Palabras clave: Ética médica. Enseñanza. Educación de pregrado en medicina. Humanidades.

Approval CEP-Ufba CAAE 87862917.8.0000.5531

The authors declare no conflict of interest.

Changes in health education have been driven by the exhaustion of the biomedical model, which emphasizes curative actions and neglects social, cultural, psychological, economic and political aspects due to the focus on the disease, and not on the person^{1,2}. An education based only on scientific knowledge of human physiology fails to meet the needs of the professional practice, since a patient-centered attention must consider variables absent in this model³⁻⁵. Thus, it is necessary to add other fields of knowledge into the medical education, such as philosophy, sociology, and ethics^{5,6}.

As a result, initiatives to promote the inclusion of disciplines of humanities in the curriculum have been developed to reformulate teaching. They were initially driven by the National Interinstitutional Commission for the Evaluation of Medical Education created in 1991⁷. Subsequently, some laws and programs were developed to stimulate these transformations: Law of Guidelines and Bases of National Education⁸, National Program to Encourage Curricular Changes for Medical Schools⁹ and the National Program for the Reorientation of Health Education (Pró-Saúde)¹⁰.

This process was consolidated in 2001 with the publication of the National Curricular Guidelines (DCN) for the medical courses¹¹, updated in 2014. Based on these guidelines, university curricula were restructured to focus on the medical practice in the Unified Health System, and the humanities were an important aspect in this reformulation^{8,9}. For instance, article 12 of the DCN advocates the inclusion of *ethical and humanistic dimensions, developing in the student citizenship-oriented attitudes and values*¹¹. This document reorients the pedagogical practice, which was until then focused mainly on the medical knowledge itself, to the development of competences, including humanistic ones.

The DCN encourage active interaction among medical students, professors, health professionals and patients, proposing an education of competent, ethical, and committed physicians to the population's health needs:

Art. 3º The Medicine course aims at the training of a professional with generalist, humanistic, critical and reflective education, qualified to act in the health-disease process in its different levels of care guided by ethical principles, with actions to promote, prevent, recover and rehabilitate health, in the perspective of comprehensive care, with a

*sense of social responsibility and commitment to citizenship, as a promoter of the holistic health of human beings*¹¹.

Based on the DCN, the Medical School of the Federal University of Bahia (FMB/Ufba) implemented in 2007 the "ethical-humanistic axis," evoking the medical school's obligation to ensure the ethical education of students, as well as the fact that education influences the conduct of professionals and their relationship with patients¹². Implemented with support from Pró-Saúde, the axis covers the first to the eighth semester of the course. The new curriculum was organized by modules to contemplate scientific knowledge, research training and ethical-humanistic dimensions, which is present in all segments¹³.

Considering that curricular reforms can be unsuccessful if students are not included in this process^{11,14}, the current study aims to analyze the perception of FMB/Ufba students of the ethical-humanistic axis and outline their profile.

Method

This is a quantitative, cross-sectional study, carried out with students from FMB/Ufba in 2018, when 713 students were enrolled in the medical school (from the first to the eighth semester), according to the University's Superintendence. The sample was formed by convenience, with the following inclusion criteria: the participant should be over 18 years old, student (from the first to the eighth semester) of the medical school at Ufba and, after being informed about the research objectives, agreed to participate in the study by signing an informed consent form in two copies. The period chosen is because students go to internship and residency after the eighth semester and no longer attend curricular components of the ethical-humanistic axis.

We developed the questionnaire specifically for this study, but it can be useful for future studies. The Likert scale was chosen because it allows measuring the attitude of the respondents, which, according to Lucian, *is important because this knowledge is useful to understand people's behavior, how they make decisions and how they organize themselves into groups*¹⁵. The questions addressed curricular structure and the ethical-humanistic axis. The instrument was

applied on the day of the last semester test, related to the components of the axis. In total, 418 questionnaires were fully answered. We used the Statistical Package for the Social Sciences 18 software for descriptive analysis of the frequencies and respective percentages of the answers.

Results

The average age of the participants was 23 years old, and 63.3% of them were between 20 and 24 years old. Regarding gender, 50.5% were men, and 49.5% women. In the self-classification of color, most students (52.4%) considered themselves brown. When asked about their knowledge on the DCN for medical schools, 34.9% said they only had heard about them. Only 7.7% had read/studied them, and 3.6% knew the changes the guidelines brought to the undergraduate course in the area (Table 1). The percentages of responses to 11 questions addressing the curricular structure of the FMB/Ufba course and its ethical-humanistic axis are shown on Table 2.

Table 1. Knowledge of the medical school students on the National Curriculum Guidelines

Question	n	%
I have heard about the DCN, but I do not know what they are about	146	34.9
I know what DCN are	118	28.2
I do not know the DCN	107	25.6
I have read/studied the DCN	32	7.7
I know what changes the DCN have brought to my education	15	3.6

DCN: National Curriculum Guidelines

The results show that most of the students claim to know the curricular structure of the course (75.4%), remain neutral regarding the statement that the FMB curriculum meets the DCN (57.2%) and believe that the course favors technical and scientific disciplines (69.9%). Among the participants, 50.2% deem the biological disciplines more important than others, 77.8% the clinical module and 57.4% the disciplines of the ethical-humanistic axis; 65.6% *do not* consider the research training disciplines more important for their education, whereas 59.8% think their classmates *do not* consider the ethical-humanistic axis important. Most of them say they know the objectives of the ethical-humanistic axis (84.7%), consider that the disciplines of this

axis must be present in all semesters (74.2%) and recognize the importance of attending elective courses from other university institutes during the medicine course (60.3%).

Table 2. Answers to the questionnaire

Question	n	%
I know the curriculum structure of my undergraduate course		
Agree	315	75.4
Neither agree nor disagree	31	7.4
Disagree	72	17.2
My institution's curriculum meets the objectives of the National Curriculum Guidelines for my course		
Agree	123	29.4
Neither agree nor disagree	239	57.2
Disagree	56	13.4
The medical school curriculum privileges technical and scientific disciplines		
Agree	292	69.9
Neither agree nor disagree	42	10.0
Disagree	84	20.1
I consider the biological disciplines the most important for my education		
Agree	210	50.2
Neither agree nor disagree	51	12.2
Disagree	157	37.6
I consider the disciplines of clinical modules the most important for my education		
Agree	325	77.8
Neither agree nor disagree	21	5.0
Disagree	72	17.2
I consider the disciplines of research training the most important for my education		
Agree	78	18.7
Neither agree nor disagree	66	15.8
Disagree	274	65.6
I consider the ethical-humanistic disciplines the most important for my education		
Agree	240	57.4
Neither agree nor disagree	65	15.6
Disagree	113	27.0
My classmates do not consider the ethical-humanistic axis important for their education		
Agree	250	59.8
Neither agree nor disagree	58	13.9
Disagree	110	26.3
I know the objectives of the ethical-humanistic axis		
Agree	354	84.7
Neither agree nor disagree	29	6.9
Disagree	35	8.4

continues...

Table 2. Continuation

Question	n	%
I consider that the disciplines of the ethical-humanistic axis must be present in all semesters		
Agree	310	74.2
Neither agree nor disagree	17	4.1
Disagree	91	21.7
It is important to study courses from other institutes of Ufba (other than the standard curriculum) during the medicine course		
Agree	252	60.3
Neither agree nor disagree	88	21.0
Disagree	78	18.7

Discussion

The profile of participants shows the percentage of female students in FMB/Ufba is 13% lower than the percentage for all female university students in the country. According to the 2017 census for higher education¹⁶, women occupy 57% of the vacancies of higher education institutions (HEIs), whereas they account for 49.5% of our sample. Men are 50.5% of the participants, whereas the percentage in the aforementioned census is 43%¹⁶. In a 2008 study about the interest and knowledge on medical and bioethical ethics in the FMB/Ufba¹⁷, 46.8% of the participants were men and 53.2% women. Compared with this study, the number of women decreased by 7% in our sample.

The average age among the participants was 23 years, ranging from 17 to 44 years. In the 2008 study by Almeida and collaborators¹⁷, the mean was 21.6 years, ranging from 18 to 39 years. In our study, 63.3% of the participants were between 20 and 24 years, whereas 40.39% of the Brazilian university students are in this age group, according to the 2017 census¹⁶.

Regarding color, of the 8,286,663 Brazilian university students, only 6.42% declare themselves black¹⁶. In the FMB/Ufba sample, 15.3% declared themselves black, a percentage about 138% higher. The fact that Salvador is the Brazilian city with the largest black population in the country¹⁸ and the implementation of the quotas at Ufba for the promotion of diversity, social justice and equity are the main reasons for this high percentage.

Ristoff's study¹⁹ on the profile of university students in Brazil showed that the number of brown students in higher education institutions is 20% lower than their percentage in society. For this group, no representation equal to or

greater than its percentage in the population was observed. Therefore, our study found different results from Ristoff's¹⁹: whereas 43.1% of the total population is brown¹⁸, in the sample studied this percentage is 52.4%.

White students account for 39.7% of the Brazilian university students¹⁶; however, in the semesters surveyed in the FMB/Ufba, only 30.6% of the students declared themselves white, which is about 36% lower. According to Ristoff¹⁹, although slow, medical courses become "less white" each year. This phenomenon results from the Brazilian program *Universidade para Todos* (University for all) and the Student Finance Fund, both in private HEIs, and from the racial quota Law for federal institutions.

Only 1.4% of the students in the sample declared themselves indigenous. This percentage, above the national percentage (0.68%, according to the 2017 census¹⁶), is the result of Ufba's quota policy, which reserves 2% of the vacancies for candidates from public schools self-declared indigenous descendants and two additional vacancies for candidates from public schools self-declared indigenous.

It is important to trace the profile of the future physicians, because, according to the DCN, the Political Pedagogical Project (PPP) must be built collectively, focusing on the education of the student as a subject of learning, aiming at competent and ethical professionals committed with the health needs of the population¹¹. Based on the students' perception on their education, such as the ethical-humanistic axis, this guideline can be put into practice, constructing and reevaluating the PPP according to the needs of society and focusing on the student.

The DCN are not definitive guidelines and rules; they give general orientation for the reformulation of a PPP^{14,17,20}. These guidelines emphasize the need for training professionals to meet the society demands – including the relationship with new technologies and care – with clinical, humanist and critical skills^{17,20}. However, when asked about their knowledge on DCN, only 7.7% of students claimed to have already read/studied them, and only 3.6% knew what changes they have brought.

Formigli and collaborators¹⁴ pointed out that only eight students participated in the PPP (DCN-based) working group currently in force at FMB/Ufba. This small participation may have reflected in our results, since 25.6% of the students said that they did not know the DCN, and 34.9% that they had heard about them, but did not know what they

were about. This result is worrisome because the participation of students is essential to transform education. They are the main actors of the changes in the higher education courses, considering the PPP promotes citizen education and represents the subjects involved in this reformulation.

Historically, the medical student movement has always wanted to transform medical education according to social needs and to create a comprehensive, quality and universal health system^{12,17,21}. However, although the PPP of the FMB/Ufba was elaborated with the participation of professors, students and technical-administrative staff, we observed that their engagement was not satisfactory. Following the national trend, the movement of medical students from Ufba grew, but not enough to drive significant changes²¹.

Regarding the current curricular structure, 75.4% of the interviewees stated they knew the DCN, but only 29.4% agree that the FMB curriculum meets the guidelines, whereas 57.2% remained neutral regarding this question. Established in 2007 and based on competencies, the main pedagogical change at the medical school was an integrated teaching program, organized by modules based on the concepts of inter and transdisciplinarity¹³.

In our study, 69.9% of the students agree that the curriculum emphasizes technical and scientific disciplines, a reality resulting from a mechanistic education based on the idea of cure promoted by biomedicine and recommended by the Flexner Report²². This document contributed to the compartmentalization of the teaching of basic sciences and to the use of teaching hospitals as the main field of clinical learning, without considering the social, psychological, and economic dimensions of health²².

This reality can still be observed in the curricular and organizational structure of the medical school. Despite the integration, the school still has an initial period of basic disciplines and another dedicated to clinical studies, with the insertion of disciplines related to medical specialties that do not correlate with each other and do not promote a comprehensive health system.

Professors and departments of FMB/Ufba resisted the full implementation of interdisciplinary and interdepartmental modules, and several adaptations were necessary¹⁴. Teaching still focus on the disease and its evolution, pathophysiology, therapeutics, prognosis, etc., which may explain the

preference of most students for biological disciplines and clinical modules.

A positive aspect of the FMB/Ufba curriculum is the research training axis, which also covers every semester and prepare students to develop projects and present papers in scientific events¹⁴. However, 65.6% of students do not consider the disciplines of this axis to be the most important for their education, although the PPP of the FMB/Ufba emphasizes scientific research, encouraging the student to investigate and integrate academic-scientific knowledge with other knowledge in the field of health¹⁴.

A study by Oliveira, Alves, and Luz²³ with sixth-year students from six medical schools in four Brazilian states showed that 28% of the interviewees did not participate in scientific initiation programs. The lack of qualified or motivated personnel, structure and institutional incentives are pointed by these authors as the main causes for this situation. This reality is worrisome, since research enable the students to improve their education, facing the obtained data with honesty, especially when they contradict their initial hypotheses²⁴.

Regarding the ethical-humanistic axis, 57.4% consider their disciplines the most important for training. Therefore, their perception of this innovative part of the curriculum is positive, since humanities were not specifically addressed in medical school at Ufba. In a study by Almeida and collaborators¹⁷, on a scale of 1 to 5, the importance attributed by students to the medical ethics discipline was 4.5 (on average). Interesting data, especially considering that only the disciplines of deontological ethics and medical rights comprised the curriculum at the time of the study. Therefore, we observe a trend in the teaching of ethics and humanities and appreciation of this type of knowledge by students.

Almeida and collaborators¹⁷ also showed that 28.7% of the students wanted disciplines related to medical ethics in the first semester, whereas 21.4% wanted them in all semesters. Only one student (0.3%) considered it non-essential and four thought that such disciplines should be optional.

In our study, after 11 years of the implementation of the ethical-humanistic axis, 84.7% of the students claim to know their objectives and 74.2% consider their presence necessary in all semesters. Despite the light course load of the axis (187 of 8,957 hours, that is, 2%), the curricular reform of 2007 represented a milestone in the teaching of the humanities¹⁴; however, it should

continue advancing, since 27% of the participants still do not consider the ethical-humanistic axis the most important for their education.

Finally, we emphasize that 60.3% of them considered important to study subjects from other Ufba institutes. They seem to understand that, through dialogue between areas and researchers, interdisciplinarity can help researchers to solve problems that cannot be resolved only by medicine²⁵.

Final considerations

In the last decades, the model of medical education has been criticized due to its lack of humanistic background for professionals to deal with moral problems. Curricular reforms have been trying to innovate and vary competencies, seeking

to prioritize ethics and bioethics. This change is necessary and must be effective to significantly redirect clinical practice.

However, transformations depend on the students' involvement in discussions about the health system and about the hegemonic teaching model to reflect upon the evident lack of integration between these two poles.

The insertion of the ethical-humanistic axis in the FMB/Ufba curriculum should be further studied, since it needs to be adjusted and, perhaps, to become a reference for other schools in the country. The limitation of our study is in the Likert scale, which allowed us to group the answers only into "agreement" and "disagreement," without measuring how the insertion of the ethical-humanistic axis changed the perception of students, and this could be an objective for future studies.

The authors thank Professor Maria de Fátima Diz Fernandez, from the ethical-humanistic axis of the Medical School of the Federal University of Bahia, as well as the partners of the research group Promoção da Saúde e Qualidade de Vida, Caio Cezar Feitosa, Clara Couto Fernandez and Vitoria Passos, for all the support and collaboration. We also thank the Institutional Program of Scientific Initiation Scholarships for the grant research support, Propci/Ufba 1/2018 – Project No. 14,720.

References

1. Gomes AMA, Moura ERF, Amorim RF. O lugar da ética e bioética nos currículos de formação médica. *Rev Bras Educ Méd* [Internet]. 2006 [acesso 13 maio 2019];30(2):56-65. DOI: 10.1590/S0100-55022006000200008
2. González AD, Almeida MJ. Integralidade da saúde: norteando mudanças na graduação dos novos profissionais. *Ciênc Saúde Coletiva* [Internet]. 2010 [acesso 13 maio 2019];15(3):757-62. DOI: 10.1590/S1413-81232010000300018
3. Pessotti I. A formação humanística do médico. *Medicina* [Internet]. 1996 [acesso 13 maio 2019];29(4):440-8. DOI: 10.11606/issn.2176-7262.v29i4p440-448
4. Nogueira MI. As mudanças na educação médica brasileira em perspectiva: reflexões sobre a emergência de um novo estilo de pensamento. *Rev Bras Educ Méd* [Internet]. 2009 [acesso 13 maio 2019];33(2):262-70. DOI: 10.1590/S0100-55022009000200014
5. Almeida MJ. A educação médica e as atuais propostas de mudança: alguns antecedentes históricos. *Rev Bras Educ Méd* [Internet]. 2001 [acesso 13 maio 2019];25(2):42-52. Disponível: <https://bit.ly/3aEbRgg>
6. Serodio AMB, Almeida JAM. Situações de conflitos éticos relevantes para a discussão com estudantes de medicina: uma visão docente. *Rev Bras Educ Méd* [Internet]. 2009 [acesso 13 maio 2019];33(1):55-62. DOI: 10.1590/S0100-55022009000100008
7. Santos RC, Piccini R, Fachhini LA, organizadores. Comissão Interinstitucional Nacional de Avaliação do Ensino Médico: preparando a transformação da educação médica brasileira: Projeto Cinaem III fase: relatório 1999-2000. Pelotas: UFPel; 2000.
8. Brasil. Lei nº 9.394, de 20 de dezembro de 1996. Estabelece as diretrizes e bases da educação nacional. *Diário Oficial da União* [Internet]. Brasília, 23 dez 1996 [acesso 2 jan 2019]. Disponível: <https://bit.ly/2X78QkE>
9. Brasil. Ministério da Saúde, Ministério da Educação. Portaria Interministerial MS/MEC nº 610, de 26 de março de 2002. Institui o Programa Nacional de Incentivo às Mudanças Curriculares para as Escolas Médicas. *Diário Oficial da União* [Internet]. Brasília, p. 75, 1º abr 2002 [acesso 2 jan 2019]. Seção 1. Disponível: <https://bit.ly/3aRxV76>
10. Brasil. Ministério da Saúde, Ministério da Educação. Programa Nacional de Reorientação da Formação Profissional em Saúde: Pró-Saúde: objetivos, implementação e desenvolvimento potencial [Internet]. Brasília: Ministério da Saúde; 2007 [acesso 2 jan 2019]. Disponível: <https://bit.ly/3aHey0y>
11. Conselho Nacional de Educação. Resolução CNE/CES nº 4, de 7 de novembro de 2001. Institui diretrizes curriculares nacionais do curso de graduação em medicina. *Diário Oficial da União* [Internet]. Brasília, p. 38, 9 nov 2001 [acesso 13 maio 2019]. Seção 1. Disponível: <https://bit.ly/2yzb2rb>

12. Nunes ED, Cecília Donnangelo: pioneira na construção teórica de um pensamento social em saúde. *Ciênc Saúde Coletiva* [Internet]. 2008 [acesso 13 maio 2019];13(3):909-16. DOI: 10.1590/S1413-81232008000300013
13. Barros NF, Nunes ED. Sociologia, medicina e a construção da sociologia da saúde. *Rev Saúde Pública* [Internet]. 2009 [acesso 13 maio 2019];43(1):169-75. DOI: 10.1590/S0034-89102009000100022
14. Formigli VL, Barbosa HS, Lima MAG, Araújo IB, Fagundes NC, Macedo RSA. Projeto político-pedagógico do curso de graduação em medicina da FMB/Ufba. *Gaz Méd Bahia* [Internet]. 2010 [acesso 13 maio 2019];79(1):3-47. Disponível: <https://bit.ly/2V2z8lq>
15. Lucian R. Repensando o uso da escala Likert: tradição ou escolha técnica? *PMKT* [Internet]. 2016 [acesso 13 maio 2019];9(1):12-28. p. 13. Disponível: <https://bit.ly/3dXooh9>
16. Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira. Sinopse estatística da educação superior 2017 [Internet]. Brasília: Ministério da Educação; 2017 [acesso 2 set 2018]. Disponível: <https://bit.ly/3dKM4VE>
17. Almeida AM, Bitencourt AGV, Neves NMBC, Neves FBCS, Lordelo MR, Lemos KM *et al.* Conhecimento e interesse em ética médica e bioética na graduação médica. *Rev Bras Educ Méd* [Internet]. 2008 [acesso 13 maio 2019];32(4):437-44. DOI: 10.1590/S0100-55022008000400005
18. Censo 2010. Instituto Brasileiro de Geografia e Estatística [Internet]. 2010 [acesso 13 maio 2019]. Disponível: <https://bit.ly/39EYATI>
19. Ristoff D. O novo perfil do campus brasileiro: uma análise do perfil socioeconômico do estudante de graduação. *Aval* [Internet]. 2014 [acesso 13 maio 2019];19(3):723-47. DOI: 10.1590/S1414-40772014000300010
20. Pereira IDF, Lages I. Diretrizes curriculares para a formação de profissionais de saúde: competências ou práxis? *Trab Educ Saúde* [Internet]. 2013 [acesso 13 maio 2019];11(2):319-38. DOI: 10.1590/S1981-77462013000200004
21. Pinto HA. O movimento estudantil de medicina e a transformação da escola médica. *Interface Comun Saúde Educ* [Internet]. 2000 [acesso 13 maio 2019];4(7):159-60. DOI: 10.1590/S1414-32832000000200023
22. Pagliosa FL, Da Ros MA. O Relatório Flexner: para o bem e para o mal. *Rev Bras Educ Méd* [Internet]. 2008 [acesso 13 maio 2019];32(4):492-9. DOI: 10.1590/S0100-55022008000400012
23. Oliveira NA, Alves LA, Luz MR. Iniciação científica na graduação: o que diz o estudante de medicina? *Rev Bras Educ Méd* [Internet]. 2008 [acesso 13 maio 2019];32(3):309-14. DOI: 10.1590/S0100-55022008000300005
24. Abrão MN, Bensi CG, Gonçalves MS, Narahara JL, Otsuka FC, Ranzatti RP *et al.* Pesquisa clínica conduzida por estudantes de medicina: seu potencial para o aprendizado e para a produção científica nacional. *Rev Assoc Méd Bras* [Internet]. 2006 [acesso 13 maio 2019];52(4):188-9. DOI: 10.1590/S0104-42302006000400002
25. Garcia MAA, Pinto ATBCS, Odoni APC, Longhi BS, Machado LI, Linek MS, Costa NA. A interdisciplinaridade necessária à educação médica. *Rev Bras Educ Méd* [Internet]. 2007 [acesso 13 maio 2019];31(2):147-55. DOI: 10.1590/S0100-55022007000200005

Participation of the authors

Jarbas Carneiro Mota collected and analyzed the data, and wrote the article. Renata Meira Vêras advised the project and reviewed the manuscript.

Correspondence

Jarbas Carneiro Mota – Praça XV de novembro, s/n, Largo do Terreiro de Jesus CEP 40026-010. Salvador/BA, Brasil.

Jarbas Carneiro Mota – Undergraduate – jarbascm@hotmail.com

 0000-0002-9077-6173

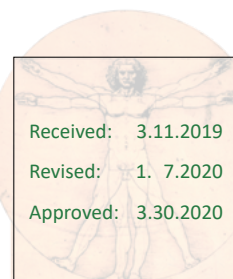
Renata Meira Vêras – PhD – renatameiraveras@gmail.com

 0000-0002-1681-1401

Received: 3.11.2019

Revised: 1. 7.2020

Approved: 3.30.2020



Appendix

Questionnaire

1. Age: ____ years Gender: () Male () Female
2. Place of birth: () Salvador () Interior of Bahia () Other state: _____
3. How do you consider yourself? () White () Black () Indigenous () Brown () Yellow
4. Where did you study most part of the high school? () Public school () Private school
5. What is your parents' schooling?
 Mother () None () Elementary school () High school () Higher education () Postgraduate
 Father () None () Elementary school () High school () Higher education () Postgraduate
6. What is your family's total income (including your income)?
 () Up to 1.5 minimum wage (up to R\$ 1,086.00).
 () From 1.5 to 3 minimum wages (R\$ 1,086.01 to R\$ 2,172.00).
 () From 3 to 4.5 minimum wages (R\$ 2,172.01 to R\$ 3,258.00).
 () From 4.5 to 6 minimum wages (R\$ 3,258.01 to R\$ 4,344.00).
 () From 6 to 10 minimum wages (R\$ 4,344.01 to R\$ 7,240.00).
 () From 10 to 30 minimum wages (R\$ 7,240.01 to R\$ 21,720.00).
 () Above 30 minimum wages.
7. Did you enter the undergraduate course through affirmative action policies or social inclusion policies?
 () No.
 () Yes, by ethnic-racial criteria.
 () Yes, by income criterion.
 () Yes, for having studied in public or private school with scholarship.
 () Yes, by system that combines two or more previous criteria.
 () Yes, by a different system from the previous ones.
8. Do you get some kind of...
 a. Grant?
 () None.
 () Housing benefit.
 () Food aid.
 () Housing and food aid.
 () Scholarship permanence.
 () Other type of aid.
 b. Academic scholarship?
 () None.
 () Scientific initiation scholarship.
 () Extension course scholarship.
 () Monitoring/tutoring scholarship.
 () Tutorial Education Program Scholarship.
 () Another type of academic scholarship.
9. Do you have a previous degree? () No () Yes. Which? _____

10. Beginning (year and semester) of the medicine course: _____
11. What is your current semester of the ethical-humanistic axis?
☐ 1º ☐ 2º ☐ 3º ☐ 4º ☐ 5º ☐ 6º ☐ 7º ☐ 8º
12. Have you ever worked as a professional? ☐ No ☐ Yes Have you ever done an internship? ☐ No ☐ Yes
13. Are you currently working? ☐ No ☐ Yes
14. Did you participate in any extension activity in medical school? ☐ No ☐ Yes
15. Did you participate in a research group in medical school? ☐ No ☐ Yes
16. Have you studied non-mandatory disciplines in other Ufba institutes or faculties during the undergraduate course in medicine? ☐ No ☐ Yes
17. Do you want to do specialization after graduating? ☐ No ☐ Yes. Which? _____
18. Do you know the National Curriculum Guidelines (DCN) of the undergraduate medical course?
☐ I do not know the DCN.
☐ I have heard about the DCN, but I do not know what they are about.
☐ I know what DCN are.
☐ I have read/studied the DCN.
☐ I know what changes the DCN have brought to my education.

In this part of the questionnaire, answer according to your level of agreement with the following sentences.

1. I know the curriculum structure of my undergraduate course.
☐ Totally disagree
☐ Partially disagree
☐ Neither agree nor disagree
☐ Partially agree
☐ Completely agree
2. My institution's curriculum meets the objectives of the National Curriculum Guidelines for my course.
☐ Totally disagree
☐ Partially disagree
☐ Neither agree nor disagree
☐ Partially agree
☐ Completely agree
3. The medical school curriculum privileges technical and scientific disciplines.
☐ Totally disagree
☐ Partially disagree
☐ Neither agree nor disagree
☐ Partially agree
☐ Completely agree
4. I consider the biological disciplines the most important for my education.
☐ Totally disagree
☐ Partially disagree
☐ Neither agree nor disagree
☐ Partially agree
☐ Completely agree

5. I consider the disciplines of clinical modules the most important for my education.

- () Totally disagree
- () Partially disagree
- () Neither agree nor disagree
- () Partially agree
- () Completely agree

6. I consider the disciplines of research training the most important for my education.

- () Totally disagree
- () Partially disagree
- () Neither agree nor disagree
- () Partially agree
- () Completely agree

7. I consider the ethical-humanistic disciplines the most important for my education.

- () Totally disagree
- () Partially disagree
- () Neither agree nor disagree
- () Partially agree
- () Completely agree

8. My classmates do not consider the ethical-humanistic axis important for their education.

- () Totally disagree
- () Partially disagree
- () Neither agree nor disagree
- () Partially agree
- () Completely agree

9. I know the objectives of the ethical-humanistic axis.

- () Totally disagree
- () Partially disagree
- () Neither agree nor disagree
- () Partially agree
- () Completely agree

10. I consider it necessary that the disciplines of the ethical-humanistic axis be present in all semesters of graduation.

- () Totally disagree
- () Partially disagree
- () Neither agree nor disagree
- () Partially agree
- () Completely agree

11. It is important to study courses from other Ufba institutes (other than the standard curriculum) during the undergraduate course in medicine.

- () Totally disagree
- () Partially disagree
- () Neither agree nor disagree
- () Partially agree
- () Completely agree

12. The ethical-humanistic axis approaches the contents in an interdisciplinary way.

- () Totally disagree
- () Partially disagree
- () Neither agree nor disagree
- () Partially agree
- () Completely agree

13. Disciplines of the ethical-humanistic axis are integrated.

- () Totally disagree
- () Partially disagree
- () Neither agree nor disagree
- () Partially agree
- () Completely agree

14. There is correlation/integration between the subjects studied in the ethical-humanistic axis and the contents of the other disciplines.

- () Totally disagree
- () Partially disagree
- () Neither agree nor disagree
- () Partially agree
- () Completely agree

15. The program of the disciplines of the ethical-humanistic axis makes me interested in my education.

- () Totally disagree
- () Partially disagree
- () Neither agree nor disagree
- () Partially agree
- () Completely agree

16. The professors of the ethical-humanistic axis demonstrate mastery of the contents and themes.

- () Totally disagree
- () Partially disagree
- () Neither agree nor disagree
- () Partially agree
- () Completely agree

17. The course load of the ethical-humanistic axis should increase for learning about the contents to be satisfactory.

- () Totally disagree
- () Partially disagree
- () Neither agree nor disagree
- () Partially agree
- () Completely agree

18. Bibliographic materials are available and sufficient to approach the contents in the ethical-humanistic axis.

- () Totally disagree
- () Partially disagree
- () Neither agree nor disagree
- () Partially agree
- () Completely agree

19. There is coherence between the proposed objectives of the humanistic ethical axis and the content of their classes.
- () Totally disagree
 - () Partially disagree
 - () Neither agree nor disagree
 - () Partially agree
 - () Completely agree
20. The subjects addressed in the ethical-humanistic axis prioritize aspects related to the Code of Medical Ethics.
- () Totally disagree
 - () Partially disagree
 - () Neither agree nor disagree
 - () Partially agree
 - () Completely agree
21. After graduating, I intend to join a medical residency program immediately.
- () Totally disagree
 - () Partially disagree
 - () Neither agree nor disagree
 - () Partially agree
 - () Completely agree
22. Once I have graduated, I intend to open my own office.
- () Totally disagree
 - () Partially disagree
 - () Neither agree nor disagree
 - () Partially agree
 - () Completely agree
23. After graduating, I intend to pursue an academic career.
- () Totally disagree
 - () Partially disagree
 - () Neither agree nor disagree
 - () Partially agree
 - () Completely agree
24. After graduating, I intend to work in a private health institution.
- () Totally disagree
 - () Partially disagree
 - () Neither agree nor disagree
 - () Partially agree
 - () Completely agree
25. After graduating, I intend to work in the Brazilian Unified Health System.
- () Totally disagree
 - () Partially disagree
 - () Neither agree nor disagree
 - () Partially agree
 - () Completely agree

26. I apply the knowledge acquired in the ethical-humanistic axis in my clinical practice.

- () Totally disagree
- () Partially disagree
- () Neither agree nor disagree
- () Partially agree
- () Completely agree

27. Studying the Code of Medical Ethics is the most important thing for my professional performance.

- () Totally disagree
- () Partially disagree
- () Neither agree nor disagree
- () Partially agree
- () Completely agree

28. Studying about the ethics involved in the doctor-patient relationship is the most important for my professional performance.

- () Totally disagree
- () Partially disagree
- () Neither agree nor disagree
- () Partially agree
- () Completely agree

29. I consider that the teaching of medical ethics in all semesters of the undergraduate course in medicine is fundamental to develop my professional practice.

- () Totally disagree
- () Partially disagree
- () Neither agree nor disagree
- () Partially agree
- () Completely agree

30. If the ethical-humanistic axis did not exist, my clinical practice would be the same.

- () Totally disagree
- () Partially disagree
- () Neither agree nor disagree
- () Partially agree
- () Completely agree