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RESEARCH

Knowledge of medical ethics among medical students in Salvador

Jorge Santana Barbosa [1], *Paulo Demétrio da Silva* [1], *Nedy Maria Branco Cerqueira Neves* [2]

1. Departamento de Ciências da Saúde, Universidade Salvador (Unifacs), Salvador/BA, Brasil. **2.** Departamento de Ética Médica e Bioética, Unifacs, Salvador/BA, Brasil.

Abstract

This is a cross-sectional, observational study conducted between August and October 2018, to survey knowledge of medical ethics among 601 medical college students of a private university in the city of Salvador, Bahia, Brazil. Were collected the data through a multiple-choice questionnaire with a simulation of seven cases involving ethical conflicts. The participants were mostly young females, and part of them had a previous academic degree. Most students reported having read the code of medical ethics and considered its language easy to understand. Except for some slight variations, knowledge of medical ethics proved to be progressive over the semesters, and the best performance was in the last semester of the program.

Keywords: Ethics, medical. Educational measurement. Students, medical. Codes of ethics. Education, medical.

Resumo

Conhecimento em ética médica entre estudantes de medicina de Salvador

Trata-se de estudo observacional, do tipo transversal, realizado entre agosto e outubro de 2018 para avaliar o conhecimento sobre ética médica de 601 estudantes de medicina de uma universidade privada de Salvador/BA. Os dados foram coletados por meio de questionário de múltipla escolha com simulação de sete casos envolvendo conflitos éticos. Os participantes, em sua maioria, eram jovens do sexo feminino, e uma parcela já tinha formação acadêmica prévia. A maior parte dos alunos afirmou já ter lido o Código de Ética Médica e considerar sua linguagem de fácil entendimento. Exceto por pequenas variações, o conhecimento demonstrou-se progressivo ao longo dos semestres, com evolução no aprendizado após cumprimento do componente curricular dedicado à ética médica e melhor desempenho no último semestre da graduação.

Palavras-chave: Ética médica. Avaliação educacional. Estudantes de medicina. Códigos de ética. Educação médica.

Resumen

Conocimiento sobre ética médica de los estudiantes de medicina de Salvador

Se trata de un estudio observacional transversal, realizado entre agosto y octubre de 2018 para evaluar los conocimientos sobre ética médica de 601 estudiantes de medicina de una universidad privada de Salvador, Bahia, Brasil. Los datos se reunieron mediante un cuestionario de opción múltiple presentando simulaciones de siete casos de conflictos éticos. La mayoría de los participantes eran mujeres jóvenes, y un grupo tenía formación académica previa. La mayoría de los estudiantes declararon que ya habían leído el Código de Ética Médica y que consideraban que su lenguaje es fácil de entender. Salvo pequeñas variaciones, los conocimientos demostraron ser progresivos a lo largo de los semestres, con una evolución en el aprendizaje después de cumplir los requisitos educativos dedicados a la ética médica y un mejor rendimiento en el último semestre de la graduación.

Palabras-clave: Ética médica. Evaluación educacional. Estudiantes de medicina. Códigos de ética. Educación médica.

Approval CEP-Unifacs 90802618.3.0000.5033

The authors declare no conflict of interest.

We are currently going through social, moral, economic and technological changes that facilitate access to information, enlightening society and making it more attentive to health professionals' performance. Due to these changes and the progress of science, medicine is also changing. New technical and ethical demands arise every day and, in this context, medical education is essential for improving professional practice.

The word "ethics" comes from the Greek e*thos* and refers to individuals' way of being, that is, their character. Its meaning goes back to Ancient Greece, cradle of philosophy [1]. On the other hand, "morals" are a set of rules of conduct specific to a society or culture, while "deontology" is the code of rules and procedures for a given professional category [2]. Therefore, morals and deontology change according to human evolution through the centuries and people's cultural yearnings in different spaces and times.

Medical ethics can be considered a set of moral conduct rules and principles aimed at matters of the profession [1]. To improve professional practice, these rules are brought together in the Code of Medical Ethics (CEM), whose version currently in force in Brazil became effective in 2019, according to Resolution 2.217/2018 of the Federal Council of Medicine (CFM) [3]. The new code incorporated articles that address technological innovations in communication and social relations, applying deontological principles to these issues [3].

It is up to the professional to get to know the CEM, and for that there is no more adequate means than education. In this context, the relevance of medical ethics in academic training has been growing since 1969, when the CFM made it mandatory in medical schools [1]. However, between 1985 and 1992, the course load on this subject remained between 10 and 40 class hours, often "diluted" in other subjects – whereas, in some colleges, it was not even addressed [4]. Even in the early 21st century, teaching still lasted only one semester in most institutions [5].

The transversal teaching of medical ethics throughout the undergraduate program has been advocated more strongly since the 1980s, but without being effective in practice. In 2017, Brazil had 289 medical schools, 101 of which were opened after the CEM was validated in 2010. Even so, in the last decades there has been no significant increase in the number of subjects dedicated exclusively to the topic and bioethics, nor has the number of professors with specific functions related to these matters increased [4,6,7]. This contributes to a portion of students graduating without reading the CEM fully, entering the profession with a limited view of this important instrument.

The motto of the Regional Council of Medicine of the State of São Paulo for 1993, "Instruct, not to punish" [8], shows the importance of training for the full exercise of the profession. Thus, to ensure an appropriate medical care, schools must provide an education that covers ethics, guaranteeing that the student acts with dignity in diverse situations [8].

In this sense, this study assessed the level of medical ethics knowledge among medical students from a private university in Salvador, Bahia, Brazil. Specifically, we sought to characterize the demographic profile of the participants and to compare their level of knowledge according to some variables: gender, semester of the program, full reading of the CEM, perception of the curriculum, first or second academic degree, and compliance with the subject Ethics and Professionalism, offered in the fifth semester of the undergraduate course. From this information, we determined medical students' knowledge and position regarding professional responsibility, the doctor-patient and interprofessional relationship, medical documents, confidentiality, and end of life.

Method

This is an observational, cross-sectional study with a quantitative approach, which assessed the knowledge of medical ethics by medical students from a private university in Salvador, BA. Altogether, at the time of the survey, 1,109 students were enrolled in the institution, attending between the first and the 12th semester of the medical program (except the fifth, seventh and 11th semesters, without classes at the time of data collection).

The sample size was calculated using software OpenEpi (version 3.01), with an estimated 50% frequency of the study population, an alpha level of 0.05, and a 95% confidence interval. The sample size obtained was 286 students, but we decided to expand it to at least 50% of the studied population. The study sampling was probabilistic, with a random draw of respondents at the time of collection. In each classroom, the participants were drawn using the list of students enrolled per class, selecting odd

ordinals until at least 50% of the students in each semester answered the questionnaire (Appendix).

To design the project, we used relevant studies in order to find a model to evaluate the interviewees' knowledge of medical ethics. However, none of the consulted research works had a questionnaire that met the authors' expectations (for example, these instruments did not allow space for participants to express their lack of knowledge about the topic).

On that account, a specific questionnaire based on the CEM was prepared for this survey. The instrument was validated by a medical ethics specialist and approved by the Research Ethics Committee. Additionally, before the data collection, the questionnaire was tested with ten volunteer medical students, who were instructed to point out spelling errors, dubious statements and content issues, making any criticisms or suggestions they deemed appropriate. We discarded the data obtained in this test and did not use them in the research.

The data collection took place between August and September 2018, through application of the multiple-choice questionnaire with seven hypothetical cases involving ethical conflicts. Each question had five choices, with only one answer considered correct, according to the CEM. One of the choices allowed the interviewee to express his ignorance about the topic, in order to avoid random responses. Always respecting anonymity, we also gathered information on the student's profile: age, gender, semester and previous academic training, in addition to data on perception about the CEM and studying medical ethics during the medicine course.

We analyzed the data with the Statistical Package for Social Sciences (SPSS 2.0) and, for continuous variables, calculated mean, median, standard deviation and variance. Chi-square and Student's t-test were used to compare variables, and non-parametric Mann-Whitney tests and Anova were used to analyze proportions, with a 95% confidence interval. Values of $p<0.05$ were considered as statically significant; graphs and tables were generated using Microsoft Excel 2016.

All participants signed an informed consent form, and the research complied with the rules of Resolution 466/2012 of the Brazilian National Health Council (CNS)[9]. The results were made available to the academic community and to all those interested in the topic, always keeping confidentiality regarding the identity of the educational institution and participants.

Results and Discussion

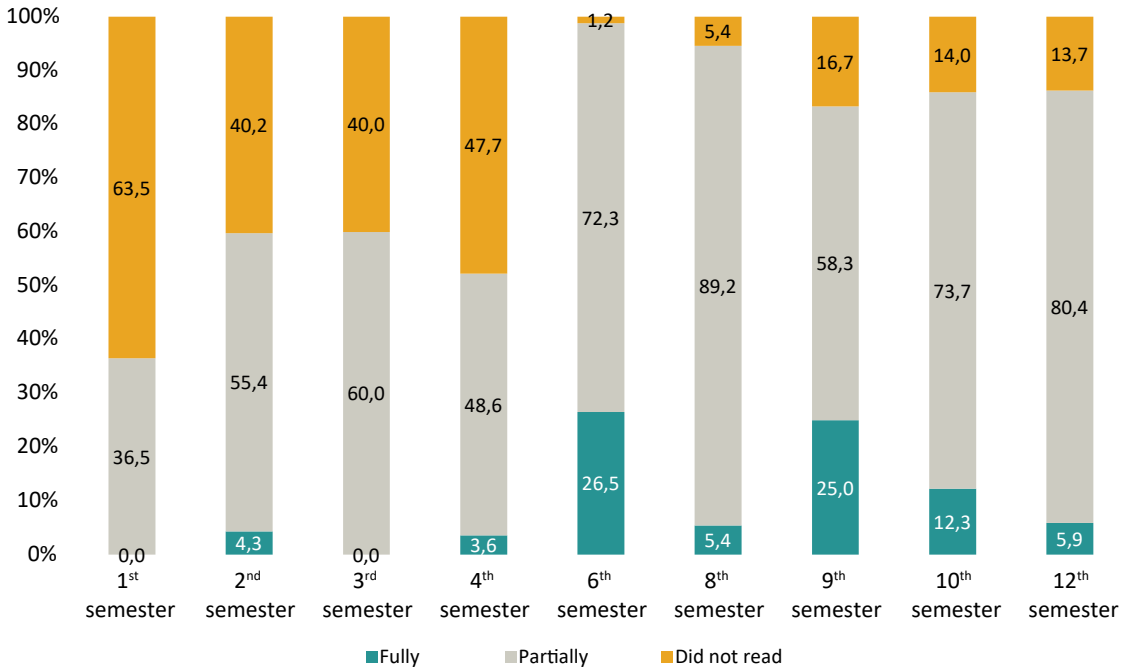
The sample consisted of 601 medical students, whose ages ranged from 17 to 39 (mean=22.5±3.6 years), the median was 22 and the mode 20. Among the 601 participants, 84.4% (n=507) were 25 years old or less, and only 4.8% (n=29) were older than 30. Of the total participants, 58.9% (n=354) were female, with mean age of 22.7±3.7. Among males (41.1%; n=247), the mean age was 22.3±3.5. Regarding the semester in the college, 49.9% (n=300) had not yet completed the 5th semester and 50.1% (n=301) had completed it.

Fifty-three participants (8.8%) claimed to have prior academic background. Among them, 24.5% (n=13) were male and 75.5% (n=40) female, with a mean age of 29.6±4. Twenty areas of prior training were reported, and the most recurrent were nursing (18.9%; n=10), law (13.2%; n=7), dentistry (9.4%; n=5), speech therapy (9.4%; n=5) and physical therapy (9.4%; n=5). Two participants (3.8%) reported having two previous college degrees.

The questionnaire asked about the interviewee's CEM reading and their opinion on its language. Of the participants, 9% (n=54) reported having fully read the code, 63.4% (n=381) having partially read it, and 27.6% (n=166) having not read it at all. Figure 1 shows the relationship between CEM reading and current semester. Of the students with a prior degree (n=53), 84.9% (n=45) reported having read the code, a percentage that drops to 71.2% (n=390) in students without prior training (p=0.033). Participants who claimed to have read the CEM (n=435) were asked if they consider the language clear and easy to understand: 75.9% (n=330) answered "yes," and 24.1% (n=105) answered "no."

When asked if they considered the study of medical ethics necessary, 98.8% (n=594) answered "yes," and 1.2% (n=7) "no." Six hundred students (99.8%) considered medical ethics relevant for professional training, while 0.2% (n=1) stated the opposite. Participants were also asked whether their medical professors have demonstrated they knew the CEM – 83% (n=499) answered "yes," and 17% (n=102) answered "no" – and whether medical professors pose questions of professional practice that involve ethical conflicts – 68.7% (n=413) answered that they did, and 31.3% (n=188) that they did not.

Figure 1. Reading of the Code of Medical Ethics by semester (Salvador, Bahia, Brazil, 2018)



Of the respondents, 49.4% (n=297) had not yet studied Ethics and Professionalism. Among those who attended it (n=304), 57.2% (n=174) considered the credit hours sufficient, while 42.8% (n=130) did not. Among those with a previous degree and who attended the course (n=36), 69.4% (n=25) consider such a load sufficient, a percentage higher than that of students without a previous degree who consider the load sufficient: 55.6% (n=149; p=0.003).

The general average regarding knowledge in medical ethics was 3.98±1.53 (correct answers), with a median of 4, a minimum of 0 and a maximum of 7. Only five students (0.8%) did not answer any questions, while 3.8 % (n=23) answered all seven questions correctly. The participants said that they did not know the topic addressed in 0.55±0.98 question, with a median of 0, a maximum of 5 and a minimum of 0; 68.9% (n=414) did not report lack of knowledge about any question, while 0.7% (n=4) marked five questions as "I am unaware of the topic addressed."

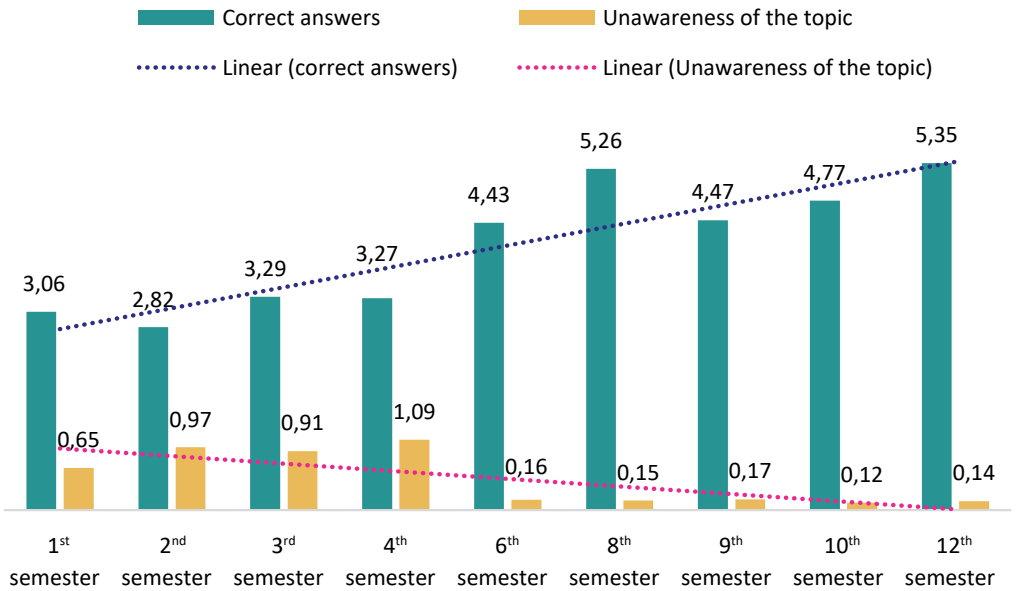
Regarding the distribution per period of the course, the average score ranged from 2.82 to 5.35, showing a growth trend of 0.286 per semester (p<0.001). The worst performance was found for the second semester, with an average of 2.82±1.13 hits, median 3, while the best performance was found for the 12th semester, with an average of 5.35±1.15 hits, median 5 (Figure 2).

As for the answers "I am unaware of the topic addressed," the distribution per semester varied between 0.12 and 1.09 question. The tenth semester had an average of 0.12±0.33 question, median 0. The fourth semester had an average of 1.09±1.33 question, median 1 (p<0.001). Comparing the correct answers among gender, men obtained an average of 3.93±1.48 correct answers, while women's average was 4.01±1.57 (p=0.516). The average unawareness was 0.62±1.05 question for males and 0.5±0.93 question for females (p=0.159).

The average of correct answers for those who did not read the CEM was 3.40±1.43, while those who read the code had an average of 4.20±1.52 (p<0.001). Among CEM readers, unawareness of the topic was 0.41±0.86 question, and among non-readers was 0.91±1.19 (p<0.001). For those who reported having fully read the CEM, the average of correct answers was 4.65±1.20, and for those who partially read it the average of correct answers was 4.14±1.55 (p=0.021). The unawareness of the topic of those who read the CEM in full was 0.13±0.39 question, against 0.45±0.90 of those who partially read it (p=0.011).

The mean of correct answers among participants with previous academic degree was 4.13±1.77 questions; in the group of participants without previous degree, this index was 3.97±1.51 questions (p=0.452). Among graduates, the unawareness of the topic was 0.28±0.79 question; among those without previous degree, it was 0.57±1 (p=0.016).

Figure 2. Distribution of the average number of correct answers and lack of knowledge per semester (Salvador, Bahia, Brazil, 2018)



The average of correct answers for the participants who had not taken the subject Ethics and Professionalism was 3.11±1.33, while for those who had already taken it was 4.83±1.22 (p<0.001). The average unawareness among those who had already attended it was 0.15±0.42 question, and among those who had not attended the subject it was 0.95±1.21 (p<0.001). Participants who considered the class hours of the subject Ethics and Professionalism sufficient had an average of 4.67±1.17 correct answers, while those who deemed the workload insufficient had an average of 5.08±1.18 correct answers (p=0.003). The mean unawareness of the topic among those who considered the workload enough was 0.16±0.38 question, and among those who considered it insufficient it was 0.13±0.40 (p=0.528).

The questions involving hypothetical cases addressed issues relevant to medical ethics and professional practice. In the "medical documents" category, the overall percentage of correct answers was 62.6%, with 15.1% of unawareness of the topic addressed. In "end of life," the participants obtained 41.5% of correct answers, with 9.6% of unawareness of the topic. In "interprofessional relationship," 34.6% of correct answers and 11% of unawareness on the topic. In "professional responsibility", assessed with interprofessional and doctor-patient relationships, there was 63.2% of correct answers and 6.8% of unawareness on the topic. In "confidentiality," 54.9% of correct answers and 5.7% of unawareness of the topic. In "doctor-patient relationship," 67.8% of correct answers and 9% of unawareness of the topic (Figure 3).

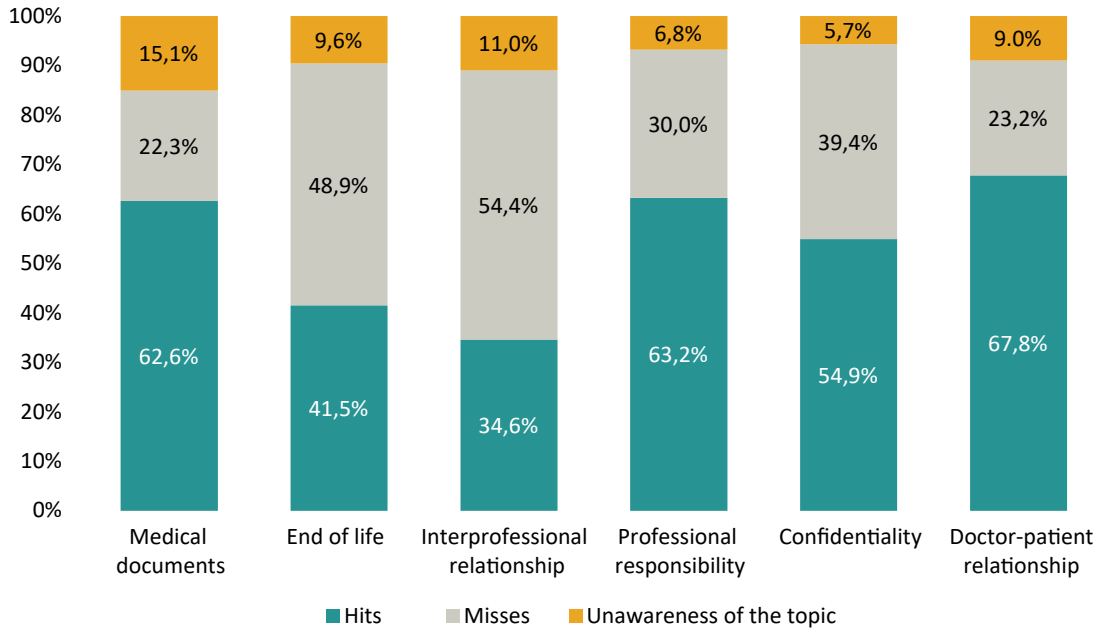
The percentage of correct answers regarding "end of life" varied 30.1% when comparing students who studied Ethics and Professionalism (56.4%) with those who did not (26.3%; p<0.001). In relation to the rate of unawareness of the topic, "medical documents" varied 20%, going from 5.3% for those who had studied the subject to 25.3% in those who did not (p<0.001).

The participants in this study are mostly young, confirming the reality of medical colleges and the recent decrease in doctors' mean age. These data confirm other research that identified students with a mean age below 25 years [10-12]. Additionally, data published in the report *Medical demography in Brazil 2018* [7] show that doctors generally enter the job market when they are between 25 and 29 years old.

Women predominated in the sample, also in agreement with the feminization observed in recent years in higher education institutions in the country [13] and in medicine [14]. This trend is evidenced by the number of new professional registrations for female doctors, which has been higher than that for male doctors since 2009, when women requested 50.4% (n=6,417) of the new registrations – although, in total, men are still the majority in the profession (54.4%) [7].

Research

Figure 3. Participants' overall performance by area of medical ethics (Salvador, Bahia, Brazil, 2018)



Our findings show that 8.8% of the participants had an academic background prior to the medical school, a percentage similar to that reported in other studies [15]. Again, most of these students were women, confirming their increasing presence in the academic environment [16]. Health-related areas prevailed in their prior background, which may demonstrate these students' wish to expand their activities in the same scientific field.

Most participants stated that they had read the CEM, but few did so completely, a similar result to that of another study [17], but different from Vieira and Neves [10], whose survey showed that only 4% of students did not read the code. Among respondents from the last semester, 13.7% said they had not read it, which demonstrates a certain lack of interest, perhaps because they did not adequately understand the ethical issues addressed in their course.

This result is worrying, because these students are about to enter the job market without reading the normative instrument of their profession, despite the appeal and contribution of course subjects. Therefore, they cannot be excused from guilt due to the lack of interest in the CEM, which is widely known, disseminated and easily accessible. The seriousness of the situation is even more compelling as we find that most professionals ascribe the ethical problems they experience to unawareness of the code [11,18]. On the other hand, among previously trained participants, the percentage of reading grows significantly, which may be due to these students being more used to the reality of the professional routine and, therefore, recognize the importance of the Code of Ethics.

The lack of interest in reading the CEM can be hypothetically explained by the fact that students are not yet subject to its authority at the medical school. However, for that matter, there is the Medical Student Code of Ethics, published by CFM [19], whose content not only conveys basic notions of medical ethics but emphasizes the importance of knowing and consulting the CEM.

As for the language used in the code, most participants considered it clear and easy to understand (no similar studies were found to compare these data), which allows us to infer that the difficulty of understanding the document cannot be used as a pretext for unethical actions.

Most students considered the study of medical ethics necessary and relevant – which is important, since professional practice is not possible without this basis [1,20] – and that the amount of class hours used for such study was sufficient. In the surveyed institution, the subject Ethics and Professionalism has a 60-hour workload, which is higher than the average of North American universities (25 hours) [21] and similar to Brazilian universities, pointed out by Souza and Dantas [22] as 30 credit hours. Still, 42.8% (n=130) of the participants who studied that subject considered the load insufficient, so that the study of medical ethics could be even more present,

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distributed throughout undergraduate years, as proposed by Vieira and Neves [10] and Grisard [4].

We must highlight that among participants with a previous university degree, the perception that the workload is sufficient was greater, in contrast to the studies cited, in which professors themselves draw attention to the need to distribute the study of medical ethics throughout the medical course [4,10]. One hypothesis is that these students already have the experience of a college degree and thus can perceive ethical issues not only in the Ethics and Professionalism subject, but in the entire course.

Most students consider that their professors are aware of ethical issues, but do not have as much interest in sharing it. This perception can be a signal of lack of guidance from professors regarding the importance of sharing experiences related to the topic [10,11].

In the questionnaire, seven questions referred to cases involving some type of ethical conflict. Each participant could have 0 to 7 correct answers, and in all questions the students could declare not knowing the topic to avoid random responses. We verified that the number of correct answers increased over the semesters, demonstrating continuous progress in learning, a result also reported in a similar survey carried out in the state of São Paulo [23].

As for the unawareness of the topic addressed, the tendency for indications to grow until the fourth semester may demonstrate greater responsibility and commitment by the student when answering the questionnaire. This seriousness in relation to research may be due to student's awareness as the course progresses. First-semester students feel less responsible for mistakes, since their insertion in the academic environment takes place precisely in search of knowledge, and their exposure to the scientific method of research is recent, so there is a tendency to answer the questionnaire with common sense notions.

The data found differ from those reported in the study by Godoy, Ferreira and Pria [23], in which they had a significant decrease in unawareness in the early years and accommodation after medical ethics content in the course. In this case, the search and acquisition of knowledge are closely related to the study of ethical themes in curricular components with this purpose [23].

After the fifth semester, participants' commitment to answer the questions can be explained by the fact that they have taken the Ethics and Professionalism subject, by practical experiences, and by the very evolution of knowledge. Here, the data are compatible with those of Godoy, Ferreira and Pria [23], which indicate student development over semesters. However, in the case of the surveyed institution, the increase in knowledge is more significant after the Ethics and Professionalism subject, offered precisely in the fifth semester. Therefore, despite the natural evolution throughout the course, progress is more effective when they study medical ethics [23].

Regarding the distribution of performance by gender, although women have higher average of correct answers and less unawareness, this difference is not statistically significant, confirming a research that also demonstrated that gender has little influence on the knowledge acquired [10].

Reading the CEM is extremely important to resolve the conflicts posed by the questions. The analysis of this variable shows that reading the code of ethics increases the number of correct answers and reduces unawareness. Among those who fully read CEM, the drop in the proportion of responses "I am unaware of the topic addressed" is quite significant.

As for the performance of previously trained students, there is no relevant variation in the correct answers, demonstrating that a previous degree is not significant for the knowledge of medical ethics, even though with several health-related professionals in this group. On the other hand, in relation to ignorance, we found statistically significant variation that can be ascribed to these professionals feeling more secure or prepared to give their opinion.

Even in the distribution by semester, the average of correct answers of graduates was similar to that of non-graduates, in some cases even smaller, confirming that previous degrees do not significantly increase knowledge of medical ethics. The subject Ethics and Professionalism seems to be more important, since, as stated, the improvement in students performance is notable after attending it. As they fulfilled this curricular requirement, they may have supplemented their previous knowledge, correcting it and making it concrete.

The lower number of correct answers by those who consider the workload sufficient may reflect misjudgment on the part of these students, who end up underestimating their lack of knowledge of medical ethics. Thus, we assume that the capacity for self-criticism must be developed. In fact, it is

important to further advance the syllabus of Ethics and Professionalism.

The highest rate of the response "I am not aware of the topic addressed" was observed in the topic "medical documents," and the lowest in "confidentiality." These data, however, were not reflected in the number of correct answers. Thus, it is worth mentioning that when we refer to unawareness we do not speak of mistakes.

The theme "doctor-patient relationship" had the highest rate of correct answers, and "interprofessional relationship" the lowest. The former seems to be more often addressed in everyday life, while the latter is less discussed, given the fear of questioning colleagues' positions or attitudes – behavior that is usually called "corporatism" [24]. Regarding the rate of unawareness, "confidentiality" seems to be a sufficiently widespread topic, popular among participants, while "medical documents" is little debated, confirming the findings of Serodio and Almeida [24].

Final considerations

Are students who "have read" the CEM and consider themselves ready for the profession really prepared? Are they not overestimating the effect of content learning and reflection from a simple reading? Ethical challenges are huge and constant in daily work – more than demonstrating the degree of knowledge of a specific group of students, research like this seeks to stimulate discussion about the process by which medical ethics content is transmitted.

The findings are similar to those of other studies, confirming the need for constant deepening on medical ethics, an essential topic in training and practice. Thus, we must discuss and reflect collectively on the theme, based on the entities directly involved: CFM, educational institutions, professors and students. Only then will ethics really base professional performance.

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Participation of the authors

Jorge Santana Barbosa and Paulo Demétrio da Silva conceived and designed the project, collected data, analyzed and interpreted the results and wrote the manuscript. Nedy Maria Branco Cerqueira Neves collaborated in the conception and guidance of the work, also assisting in the final writing and revision of the manuscript.

Correspondence

Jorge Santana Barbosa – Rua das Árvores, 6A, apt. 201, Cabula VI CEP 41181-280. Salvador/BA, Brasil.

Jorge Santana Barbosa – Undergraduate – jorge.sbsantana@gmail.com
0000-0001-8271-5410

Paulo Demétrio da Silva – Undergraduate – dimitri799@gmail.com
0000-0002-5163-552X

Nedy Maria Branco Cerqueira Neves – PhD – nedyneves@terra.com.br
0000-0002-6383-3320

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Research

Appendix

Questionnaire for data collection

Age: _____ Gender: ( ) Male ( ) Female Religion: _____

What is your current semester?

( ) 1st ( ) 2nd ( ) 3rd ( ) 4th ( ) 5th ( ) 6th ( ) 7th ( ) 8th ( ) 9th ( ) 10th ( ) 11th ( ) 12th

Do you have any previous academic training? ( ) Yes ( ) No

If so, what is your academic background? _____

Regarding medical ethics, answer the following questions:

Have you read the Code of Medical Ethics (CEM)? ( ) In full ( ) Partially ( ) No

If so, do you find the language understandable and easy to comprehend? ( ) Yes ( ) No

Do you consider it necessary to read the CEM? ( ) Yes ( ) No

Do you consider the study of medical ethics relevant to your academic background? ( ) Yes ( ) No

Have you studied Ethics and Professionalism? ( ) Yes ( ) No

If so, do you consider the workload sufficient? ( ) Yes ( ) No

Do the professors (physicians) of the other subjects demonstrate that they know the CEM? ( ) Yes ( ) No

Do professors (physicians) from other subjects show an interest in presenting questions of medical practice that involve some kind of ethical conflict? ( ) Yes ( ) No

Answer the questions below according to your knowledge of CEM.

1. (*Doctor-patient relationship + confidentiality*) A female 14-year-old patient, hospitalized after attempting suicide, mentions sexual abuse by her stepfather. This abuse is confirmed by another 18-year-old sister who accompanied her and claims to have been a victim as well. The doctor, together with social assistance, seeks the mother to expose the case. She claims personal reasons and refuses to take the case to a court. In that case, the doctor must:

a) Accept the mother's decision and keep the case under medical confidentiality.

b) Reinforce the need to bring the case to justice, but following the wish of the person responsible.

c) Denounce the case because it is a degrading situation, characterizing a just reason for breach of confidentiality.

d) Bring the case to court only if there is consent from the victim, thus preserving the right to medical confidentiality.

e) I am unaware of the topic addressed.

Key: c

2. (*Doctor-patient relationship + professional responsibility*) A 30-year-old patient underwent surgery to remove a cyst in the right ovary. During the procedure, surgeon Dr. Hector realizes that the patient's left ovary has an even larger cyst than the right one. In this way, he removes the patient's two ovaries, saving her from further surgery. However, the patient, who planned to have children, is sterile. In this case, answer:

a) For the removal of the left ovarian cyst, the surgeon should, before any surgical act, obtain the consent of the person responsible, except in an emergency.

b) The surgeon acted correctly, because, seeing that the left ovarian cyst was even larger than the right, he acted on behalf of the patient, and for this reason, no guilt is attributed to him.

c) The surgeon acted correctly, as he prevented the patient from having another surgery.

d) The surgeon acted incorrectly, as oophorectomy resulted in sterility. If it were another organ, the doctor would be unaccountable.

e) I am unaware of the topic addressed.

Key: a

3. (*Interprofessional relationship + professional responsibility*) Dr. Caio, an obstetrician, phones at 6:50 a.m. to the hospital where he would have to arrive at 7 a.m. to replace Dr. Marcus, and says only that he will be late. Dr. Marcus, the only obstetrician present at the unit, leaves the shift at 7:20 a.m., claiming that his shift has ended and needs to move to another unit. Dr. Caio arrives at the maternity at 9:40 am. During this period, complications in the childbirth resulted in fetal death. In these circumstances:

a) Both doctors will be held responsible, regardless of the circumstances.

b) The two doctors cannot be blamed if there is a doctor in the unit.

c) Dr. Marcus will be guilty of abandonment on duty.

d) Dr. Marcus will be acquitted, Dr. Caio being the real responsible for what happened, as he was late on duty.

e) I am unaware of the topic addressed.

Key: c

4. (*End of life*) During his shift, a doctor admits a 97-year-old patient, debilitated, with incurable and terminal illness, presenting respiratory failure. The doctor performs orotracheal intubation. The patient's condition worsens, culminating in a cardiorespiratory arrest (CRA). The doctor then initiates cardiopulmonary resuscitation maneuvers, successfully reversing the CRA. But the patient dies the next day. As for the case, answer:

a) The conduct adopted by the doctor was correct, as one must work for the maintenance of life always.

b) The doctor acted incorrectly. Given the patient's terminal state, the measures adopted, such as orotracheal intubation and resuscitation, are banned and only prolong the suffering.

c) If the patient requested medication so he could sleep and not wake up anymore, the doctor could respond to his request, to end his suffering.

d) The doctor acted incorrectly, because, knowing the patient's terminal stage, he should not even admit him on his duty, since nothing could be done to cure him.

e) I am unaware of the topic addressed.

Key: b

5. (*Doctor-patient relationship + confidentiality*) An 81-year-old patient, robust, lucid, complains about weight loss and dyspnea. He is accompanied by his 41-year-old daughter, who lives with her father. After the exams, the doctor finds pancreatic carcinoma in an advanced stage, with no chance of recovery. The doctor explains to the patient's daughter that chemotherapy could help, but only for a few months. The daughter asks the doctor not to inform the patient of his diagnosis, claiming that it will speed up his death. In that case, the doctor should:

a) Respect the daughter's decision, who, endowed with wisdom, can decide on what can or cannot be said to her elderly father.

b) Inform the patient that this is not a serious condition, respecting the daughter's decision, preserving the father from emotional distress.

c) Attempt to dissuade the daughter from this idea and convince her to communicate the situation to the father, only doing so after her authorization.

d) Inform the patient about his real health status, regardless of the daughter's decision.

e) I am unaware of the topic addressed.

Key: d

6. (*Doctor-Patient relationship*) A 57-year-old man, lucid and oriented, with chronic kidney disease, is hospitalized in an intensive care unit and does not accept the indicated dialysis therapy, saying that he prefers the disease to follow its natural course. In this case:

a) The patient's autonomy must be respected, even if this incurs damage to health.

b) The doctor must sedate the patient in order to carry out dialysis therapy.

c) The doctor cannot, in this case, even if there are other professionals in the unit, refuse to provide any type of care.

d) Even in case of imminent risk to life, with worsening of the condition, the patient's wishes must be respected by the professional.

e) I am unaware of the topic addressed.

Key: a

7. (*Medical documents*) A patient who underwent surgery seven years ago has complained about pain in surgical scars since then. He is submitted to an image exam that finds the presence of a surgical instrument left on the site. The patient seeks the institution where the surgery was performed requesting his medical record in order to file a lawsuit against the surgeon. In this case, answer:

a) The hospital has no duty to deliver a copy of the medical record to the patient, as it only has the obligation to keep it for five years.

b) The hospital must deliver only one copy containing the entire contents of the document, but keeping the original with it, since it is responsible for keeping it.

c) The patient must request a copy of the medical record from the surgeon, as he is responsible for keeping this document.

d) The hospital is obliged to provide a copy of the medical record, provided that the patient presents a court order for this purpose.

e) I am unaware of the topic addressed.

Key: b