

# Teaching bioethics in a medical science graduation: an experience report

Josimário Silva <sup>1</sup>, Helena Maria Carneiro Leão <sup>2</sup>, Amanda Cristina de Andrade Costa Pereira <sup>3</sup>

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## Resumo

O ensino da bioética vem se revelando ferramenta essencial na formação do futuro médico, tendo em vista que pode propiciar o despertar de nova sensibilidade na tomada de decisão em procedimentos que irão definir, muitas vezes, o limite entre vida e morte, entre sofrer e aliviar o sofrimento. Este trabalho discorre sobre a aplicação de metodologia de ensino de bioética em curso de medicina, buscando enfatizar nova abordagem entre pessoas em situação antagônica – médicos e pacientes –, dotando os primeiros a adotar o princípio da solidariedade no cotidiano profissional, considerando especialmente que se vive em uma sociedade que necessita se tornar fraterna.

**Palavras-chave:** Ética. Bioética. Educação médica.

## Resumen

### Enseñanza de la bioética en la graduación de medicina: relato de experiencia

La enseñanza de la bioética se ha revelado una herramienta de gran relevancia en la formación del futuro médico, dado que puede proporcionar el despertar una nueva conciencia en la toma de decisiones que van a definir, muchas veces, el límite entre vida y muerte, entre sufrir y el alivio del sufrimiento. Este estudio discurre acerca de la aplicación de una metodología de enseñanza de la bioética en el curso de medicina que busca destacar un nuevo enfoque en la relación entre personas en situación antagónica – médicos y pacientes - Facilitando a los primeros a adoptar el principio de la solidaridad en el cotidiano profesional, considerando sobre todo que se vive en una sociedad que se hace necesario volverse fraterna.

**Palabras-clave:** Ética. Bioética. Educación médica.

## Abstract

### Teaching bioethics in a medical science graduation: an experience report

Bioethics is becoming a great relevancy instrument in graduating future doctors, considering that it may awake new awareness of decision making, which may determine the limit between life and death, suffering and being relieved. This work discusses bioethics methodology in the medicine course that emphasizes a new approach between people in antagonistic situation – doctors and patients - to our daily days the principle of solidarity, ones that society needs to become fraternal.

**Key words:** Ethics. Bioethics. Medical education.

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1. **Doctor** josimario.bioetica@gmail.com 2. **Doctoral student** helenacleao@hotmail.com 3. **Undergraduate student** acac.pereira@gmail.com Universidade Federal de Pernambuco (UFPE), Recife/PE, Brazil

## Correspondence

Josimário Silva – Rua Conselheiro Portela, 565/201 CEP 52020-030. Recife/PE, Brazil.

They declare that they have no conflict of interest.

Educating is certainly one of the most difficult tasks in the social construction of a nation. In most cases, the educator has the natural tendency to teach according to their perceptions and values, a process in which the transmission of knowledge does not give space to the existence of a more open and reflective dialogue between educator and student. But education is, above all, not dogmatizing. And therein lies the great challenge of the educator: how to educate without printing their dogmas to the learner <sup>1</sup>.

First, educators must realize that there were changes in the teaching-learning process, and which was unilateral, centered on the figure of the educator, became dynamic, leaving the student to seek the solution of problems and the teacher, guide and help them overcome difficulties and limitations. So, they should maintain personal, moral and social commitments which lead to technical and ethical responsibilities. In the medical field is added also the altruistic character, inspiring solidarity, help and protection that should be present in the educational and medical management. It is important to establish this relationship without paternalism, because this conduct restricts autonomy ability, and it may undermine the educational process in the face of numerous situations and anxieties that arise in clinical daily work <sup>2</sup>.

Knowledge is a process of continuous and permanent construction, in which the interlocutors must always be sensitive to changes in science. We cannot forget that the basis of medicine is in the biological sciences, but also in the human and social sciences. Another big challenge of the educator in the medical field is tune the teaching to the contemporary requirements (high-tech, large volume of information, high standard of service expectation, social discrepancy to access health services and civil rights), emphasizing their social role <sup>3</sup>.

Currently, the medical education, from the beginning, has been striving for technique, the use of technology to solve all the problems and failures which the body can show <sup>3</sup>. We teach our students and residents that the cure of the patient will be achieved if they are technically competent and they use all the technological resources available, but we forgot to say that, like humans, machines also fail and when that happens, we do not teach to establish a frank and open dialogue with the patient. That is when the indifference, fear, failure and little ability to deal with the most basic aspects of the doctor-patient relationship arise.

The introduction of bioethics in undergraduate medical education opens a new perspective on the future professionals. How to be positioned before dilemmas and conflicts in medical practice when they are faced through different morals? How to accept the plurality of beliefs and values in health interventions? We observe the impact that issues such as abortion, euthanasia, right to decision, right to choose etc. cause in the students, who are eager for practical subjects and internships. That fake universe of omnipotence, which has been culturally settled in the minds of many students, starts to crumble, leading them to realize how fragile they are by facing the possibility of having to decide for another person, who is sick, vulnerable and who often cannot measure the risks aggregate to their disease. It is not simple to take decisions in the medical context, especially when distinct moral values are at stake.

On the one hand, contemporary medicine has been promoting and enhancing the technical model, which increasingly earlier brings many advances in curing diseases, early diagnosis and therapeutic interventions; on the other hand, the same medicine has caused the need to rethink the model of doctor-patient relationship. The dichotomy resulted of this advance, which is not influencing the acceptance of certain outsider parameters regarding the scientific world, such as spirituality and other cultural aspects inherent to human beings, is questionable<sup>5</sup>.

In a society of rights and duties, it is up to the professional to understand the patient's ability to deliberate and the responsibility to guide and help so that the resolution meets the real interest of the individual who, in his vulnerability, is weakened for a more consistent decision-making with respect to his clinical picture <sup>6</sup>. But how to teach ethics in medical school if there are still indoctrinating thoughts which do not allow establishing dialogue in academic activities? How to teach the student to be ethical but giving them the freedom to make critical reflections, becoming, from that, combined with a participatory teaching model, in which all actors are responsible for training?

The Hippocratic ethics, yet so present in professional education, must be contextualized in a new perspective, since that new dilemmas and conflicts settled relationships in Medicine <sup>3</sup>. This model, which is also called as consequentialist or priestly, puts the health professional in a paternalistic position in relation to the patient, in which, under the principle of beneficence, all decisions are taken, disregarding their wishes, beliefs and opinions <sup>3</sup>. This

process provides a little involvement and it is based on the asymmetrical power relationship between doctor and patient <sup>7</sup>.

But how to teach the student that the most appropriate moral conduct to govern the doctor-patient relationship is the virtue? Finding the right balance between the need for intervention and the right to autonomy of the patient is the biggest challenge of contemporary medicine. The understanding of this process should guide the education of the student, and it is initiated since entering college. Respect and understand the moral ambiguity of the decisions which they face and not leaving to seek what is right and good in every decision is the core of this challenge.

The teaching of ethics and bioethics in medical school has been the subject of intense debate in recent years. This fact is driven by changes occurring in the social, cultural, economic, technological and political fields. It is imperative to better qualify the ethical education of medical professionals, in order to be essential in their daily work as well as in relationships with patients/families and the community in general. The twenty-first century requires skilled professionals to make prudent decisions before moral dilemmas related to human health <sup>8</sup>.

In 1910, the study "Medical Education in United States and Canada: A Report to the Carnegie Foundation for the Advancement of Teaching" was published. It is known as the Flexner Report <sup>9</sup>, it pointed out the reality of medicine in the beginning of that century and proposals for change, in order to reach the current scientific medicine, which led to estrangement between medicine and ethics. The scientific-technological medicine forwent of ethical reflections, which brought consequences to teaching and medical practice. Two surveys conducted in 1985 and 1992 show the status of the teaching of ethics in undergraduate courses in medicine in Brazil led to the conclusion and implementation of the content of bioethics, considering the characteristics of this course and the needs of academic education <sup>10</sup>.

Due to the social changes which have occurred in recent years, there was a need to deepen the ethical debate regarding the education process, since it currently requires the inclusion of more contextualized pedagogical models to the new characteristics of the structure and social dynamics <sup>11</sup>. In addition, in this process of social change, the new requirements of the Unified Health System (SUS) are taken into account, which imply substantial differences in the education process, by emphasizing the need to enable the student to understand the importance of

ethical principles for strengthening the legitimacy of the system in society.

## Method

This paper describes an experiment in the classroom from methodological change in strategy with scholars of the third period of medical school at the Federal University of Pernambuco (UFPE). It is about a qualitative and phenomenological research, which is resulted from the implementation of teaching methodology.

In phenomenological research, the speech of the observer reports his experience, and point the methodological way traveled toward to which Benjamin <sup>12</sup>calls as narrative. When qualitative research analyzes an activity of the science, it aims to portray the reality, by taking into account that this cannot be quantified. Thus, this tool works with the universe of beliefs, values, meanings, and other deep constructions come from relationships which cannot be reduced to simple operationalization of variables measured quantitatively <sup>13</sup>.

The module Medicine, Society and Ethics is an integral part of the axis of personal development of the new pedagogical project of the medical course of UFPE. Its purpose, in the third training period of this course is to continue contributing, in an ascending way, to the learning process started in the first and second periods in the disciplines "Medicine, Ethics and Human Relations" and "The Construction of Knowledge Process".

The adequacy of the topic aimed to work contents and methodology in order to allow the student deepening reflection around reading, questioning and systematization of themes which are related to the complexity of the challenges to the skills, attitudes and future medical practices in the social context marked by diversity in all areas. From an instrument developed by the course coordinator, an evaluation was performed by the students, in order to identify weaknesses and strengths. Several items were assessed, such as teacher performance, time to study, infrastructure and workload.

The object of study was the topic Medicine, Ethics and Society in the knowledge area in Bioethics. The group, which was composed of 76 students, has scored an average score of 3.5 from 0 to 10. In the questionnaire there was a field in which the students described their perception of the classes. The statements about the topic identified it as "mismanaged", "discouraging", "pointless". It was clear that,

through the application of the instrument, there was no motivation in students with the methodology adopted. The repeated use of these expressions highlighted the “urgent need to reformulate” the methodology.

With the result in hands, the course coordinator was facing the challenge to improve the negative aspects flagged in the evaluation. The first initiative was to change the coordination of modules which have not been well evaluated in the rankings, including Bioethics. With regard to this topic, the challenge was to change the scenario of low motivation on the part of learners.

## Results

From the results, the methodology was modified. We adopted the active methodology for the transmission of knowledge, seeking to encourage the development of skills and abilities from the contents. Relevant topics of Bioethics were inserted into the programmatic content of the discipline: ethical dilemmas in the process of death and dying; attention to the patient who needs palliative care; abortion, sex reassignment surgery, and the ethical and legal issues involved; living wills and advance will directives, ethical issues in neonatology, bariatric surgery, methods of assisted fertilization, among others.

In order to diversify pedagogical activities it was inserted in the schedule films, seminars, role plays, debates, participation of guests from various medical fields and areas of knowledge (prosecutors, psychologists, anthropologists, health service managers etc.). These professionals showed their realities and established an expanded and deepened discussion, which caused unusual student participation.

Another initiative was from the Laboratory of Bioethics, which had as its main goal to promote lively debate through symposia, films, workshops. As a space which seeks to build knowledge, a partnership with Radio Cremepe was established, which is an initiative of the Regional Medical Council of the State of Pernambuco (Cremepe), aiming to disseminate topics of interest to health professionals and the community. Thus, all laboratory activities were directly transmitted by radio to professionals and other listeners.

The best seminars presented by students were transformed into social inclusion activities, emphasizing the role of the medical student in the collective dimension.

In the first year of adoption of the methodology, we were able to develop a booklet that guides the population about the rational use of medicines. It was developed in playful way and was easy to understand, and addressed to the lay population, explaining the risks of misuse of medication or self-medication, and the importance of medical advice. The booklet was distributed in primary programs of the health network linked to medical course of UFPE. It was later transcribed into braille, which was an important initiative to consolidate the process of social inclusion for people with visual impairments, since there are (in Braille) very few guidance publications on the correct use of medicines.

Another initiative was the Academic League of Transplantation of Organs and Tissues of Pernambuco (Lattope), in which students were trained on issues related to transplants of organs and tissues, from politics to the national transplant surgical procedure. After the training, the students began the second phase of the project: participating in awareness campaigns about the importance of organ and tissue donation by society. In the third and final phase of the project, the students started to monitor transplant surgeries and perform duties in hospitals which are collectors of organs, aiming to monitor protocols of brain death – project in which we highlight the effective participation of the Transplantation Center of Pernambuco.

The development of a Code of Ethics for Medical Student further was another action approached in the Bioethics topic – which academics participated intensely. Heated debates about the elaboration of this code and its regulatory norms contributed not only to students debate conflicts of ethical professional practice, as well as become familiar with the Code of Medical Ethics (CEM), which defines the deontological criteria for the exercise of medicine. For this activity, the Cremepe provided the necessary subsidy to the construction of the instrument. Various strategies were adopted, and always seeking to involve the academic student in the sense of contextualizing the reality experienced by doctors in clinical care.

At the end of the module, a new student evaluation was carried out – these evaluations were being repeated over other groups. The evaluation associated with qualitative observation showed an effective participation of the academics, with very low absenteeism in classes. It is worth to highlight that the use of observation as a research technique aimed to analyze and/or measure the events studied without employing statistical apparel in data anal-

ysis, involving only descriptive data about people, places and interactive processes from direct contact between the researcher and the situation studied.

Thus, we sought to understand the phenomena according to the perspective of the subject, i.e., the participants in the situation under study. In this sense, we provide a few lines in response to questioning the importance of the topics discussed in the module:

*“The themes discussed are controversial, but they are essential to be reflected and discussed. It was important to my education realizing that the discussion is a fundamental element in the formation of a more ethical society” – Academic student 1;*

*“It was totally relevant for my education. I was really surprised with some issues because I started to know things which I did not know or I stopped to reflect on different aspects. In this subject, I developed the reasoning of medical ethics in daily activities to which doctors are submitted. You have to think that their actions will have consequences in the lives of human beings and, therefore, you have to be prepared to bear your responsibilities, being righteous and coherent in your ethical decisions” – Academic student 2;*

*“During the presentations and discussions, different viewpoints from mine were repeatedly exposed. I understand that in a democratic society I cannot impose my ideas on others, but I advocate them by supporting them with arguments” – Academic student 3.*

Either by observation or by the result of the evaluations, it was possible to note a greater motivation and interest in the content and the strategies we adopted, as well as a greater interaction and participation in discussions and debates. According to the evaluation instrument used for allowing the student to present the observations, it was evident that the participation of professionals from various fields of knowledge has broadened the vision of the medical universe, contributing to the perception of different moralities of social actors that can be inserted into given clinical situation.

### Final considerations

For a long time, medical education in public institutions focused on the power of the teacher. The ancient scholars, who mastered the knowledge, did

not allow a discussion forum further expanded with the students. In this unilateral and vertical model, the student was the product of a frequently inflexible vision, in which counterarguments were not allowed. Thus, critical thinking had no room – despite acknowledging that the model previously adopted had its merit<sup>2,3</sup>. With the development of pedagogical models and the emergence of new social realities, the medical praxis has changed, making it essential to admit the need for new forms in medical education.

We believe, therefore, that there is a need to build an active methodology, in which teachers and students are partners in the quest for knowledge. Instigating students is a way of they understand that the educational process is a partnership in which developing a critical view of the dilemmas and conflicts in everyday situations is the medical challenge in a society with so plural moral values. As a result, this is one of our greatest goals<sup>1</sup>.

Curricular reforms are needed to bring the evolution of knowledge and, indeed, they can train a good doctor. The inclusion of bioethics in the training model resulted in a more frequent participation of the students in the discussions, besides also showing the need to expand their perception regarding the sick person as an agent of rights and prerogatives<sup>8,11</sup>. From this, it could be noted that an educational proposal, which inserts the social actors as the agents who legitimate medical education, produces a greater identity with the community and develops the sense of citizenship,<sup>1,5</sup>

The experience allowed us seeing that, in the current model, the role of the teacher should be transformative, and promoting inducing actions which arouse a new view and interest in the collective construction of knowledge. This sensitivity should not be based on scientific evidence, but add – above all – the understanding of the human being in his plurality<sup>7,9</sup>. The methodology adopted in the module of Bioethics at the medical course of UFPE has managed to sensitize students to widen the view beyond the content of the books, also highlighting their importance as an agent of social transformation.

In this experience report, the path adopted to develop a methodology in teaching of bioethics, which transforms regarding the previous form of transmission of knowledge, is described. The goal was achieved to the extent that the other classes that pass through module can be identified as social agents of the numerous ethical dilemmas and conflicts which are common in this field of knowledge.

The module allowed students to directly participate in the construction of a model which meets their real education needs in medical school, by giving them freedom to think and express themselves.

As educators, we know that such experience is just the beginning of a process which aims to stimulate a new mentality in order to contribute to knowledge. Since then, we clearly observed that, in this radical transformation, there is interest on the part of the students. We should bring

Bioethics to daily life of clinical practice and, with this, cause in the students the need to reflect on professional decision making, as well as in their operation in the social context. The operation in other interaction spaces trains the student in order to understand Ethics in a wide and deep way, contributing to the debates of citizens. Teaching by example, but allow this reflection, may favor more favorable alternatives to patient-doctor relationship.

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### Participation of the authors

Josimário Silva, who is coordinator of the module, elaborated this article. Helena Leão collaborated in the elaboration.

Amanda Cristina Pereira collaborated in the research of related articles, text proofreading and translation to English and Spanish.

