Contributions to the planning and evaluation of bioethics teaching

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Abstract

The purpose of this article is to present a reflection on the teaching of bioethics and its evaluation in degree and post-graduate courses in the area of health, considering the possible educational objectives of such teaching. The contents, methods, and techniques of teaching must be suitable for the educational stage in which the student is inserted. Theoretical content, the so-called "toolbox" of bioethics, is of particular importance, and should be suitable for the level and objectives of the training. Attention is drawn to the distinction between competence in ethics and moral competence. The study discusses the role of the teacher and the teaching environment in the formation of critical and dialogical thinking.

Keywords: Bioethics. Education. Methods-Educational measurement. Faculty.

Resumo

Contribuições para planejamento e avaliação do ensino da bioética

O propósito deste artigo é refletir sobre ensino da bioética e sua avaliação em graduações e pós-graduações da área da saúde, considerando seus possíveis objetivos educacionais. Conteúdos, métodos e técnicas de ensino devem ser apropriados para o nível de formação em que o aluno está inserido. Ressalta-se a importância dos conteúdos teóricos, a chamada "caixa de ferramentas" da bioética, que devem ser adequados ao nível de formação e aos objetivos. Chama-se atenção para a distinção entre competência em ética e competência moral. Discute-se o papel do docente e do ambiente de ensino na formação do pensamento crítico e dialógico.

Palavras-chave: Bioética. Educação. Métodos-Avaliação educacional. Docentes.

Resumen

Contribuciones para la planificación y evaluación de la enseñanza de la bioética

El propósito de este artículo es reflexionar sobre la enseñanza de la bioética y su evaluación en carreras de pregrado y de postgrado en el área de la salud, al considerar sus posibles objetivos educativos. Los contenidos, métodos y técnicas de enseñanza deben ser apropiados para el nivel de formación en el cual se inserta el estudiante. Cabe resaltar la importancia de los contenidos teóricos, la llamada "caja de herramientas" de la bioética, los cuales deben ser adecuados al nivel de formación y a los objetivos. Se enfatiza sobre la distinción entre la competencia en ética y la competencia moral. Se discute el rol del docente y el ambiente de aprendizaje en la formación del pensamiento crítico y dialógico.

Palabras clave: Bioética. Educación. Métodos-Evaluación educacional. Docentes.

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We cannot, without being naive, expect positive results from a program, be it educational in a more technical sense or of political action if, lacking respect for a particular world view of the people, it constitutes a type of "cultural invasion", even if performed with the best intentions. But always a "cultural invasion".

Paulo Freire [1]

The purpose of this article is to reflect on the teaching of bioethics and its evaluation in graduate and postgraduate courses in the health area, considering its possible educational objectives. Accepting the socio-historical perspective proposed by Mori [2], it is understood that the cultural, political agitation and the development of biotechnology in the 1960s brought objective conditions for paradigmatic changes in the field of health ethics to occur more intensely. In this cultural context, it is necessary to include both the greater diffusion and acceptance of psychological theories, beyond psychiatry, and the very definition of health adopted by the World Health Organization in 1946 as a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity [3].

The concern with the teaching of bioethics in the health area is confused with the moral and ethical training of physicians, nurses and, later, other health professionals. Initially, professional ethics training did not justify the undertaking of specific educational actions with this objective. According to Fox, Arnold and Brody [4], until the 1970s, the learning of ethics in medical school was only through "osmosis". Merton [5] described the process of professional socialization of medical students stating that values were better embodied by students through the occult curriculum than by formal lessons. Fox, Arnold, and Brody [4] noted that as early as 1994, all medical schools in the United States included medical ethics as an independent and compulsory subject.

In Brazil, as highlighted by Dantas and Sousa [6], only about 32% of medical schools offered medical ethics or bioethics as an autonomous discipline in 2001. In October 1999 the World Medical Association (WMA) approved a resolution recommending the teaching of medical ethics and of human rights in undergraduate medical courses [7]. This resolution was revised in 2015, when the subject was defined as compulsory education [8]. The symbolic power of the medical corporation, expressed by the recognition by society and governments of their right to professional self-regulation turned their different codes of ethics into absolute guides of the practice of its members and served as a moral foundation to guide their conduct.

The harmonious relationship between the Hippocratic tradition, religious morality and "codes of medical ethics" ensured the reproduction of the values that guided professional decisions when moral aspects were in question. The deontological understanding of medical morality left no doubt as to how to act. The realization that the primary mission of the health professional was to combat death, and that he should use the best resources that science offered, made moral decisions easy for many professionals, even though these decisions were still often painful. Along this, the process of professional socialization and the hidden curriculum are reasonable explanatory elements to transmit values and principles, although the moral contents are not always effectively those recommended by the corporation, and can only be based on free interpretation [9].

The development of the biotechnosciences, along with the outbreak of social movements questioning the status quo, made the answers based on a single absolute principle (as was the principle of the sacredness of life) insufficient for the solution of moral issues as they came to be perceived. Not only biotechnology brought new questions, but social forces demanded new insights that led to profound changes in understanding what is morally relevant in a society characterized by moral plurality, as Mori [2] had pointed out.

Social determinants of health-disease

Besides social development questioning the deontological principles of medicine, another fact that seems relevant is situated in the context of the creation and crisis of the welfare state in the economically richer countries. In the case of Latin America, the crisis came before the establishment of the welfare state itself. Recognition of health rights and access to health services does not effectively incorporate the understanding that the health-disease process is not limited to the biological and individual dimensions alone. Although Latin American health thought has already recognized and valued social determinants of the health-disease process at least since the 1960s, only the 66th revision of the WMA resolution included the need for these determinants to be understood [8].

It can be deduced from this WMA proposal that this limited understanding of the health-illness

process also has repercussions on the understanding of moral problems and the possibilities to seek rational solutions that are supposedly unbiased and reasonable for health care. However, incorporating issues such as misery or constraints originating from the process of economic development and work that affect the general and worker environment will bring to the scene different risks according to the position occupied in the social scenario by different groups. With this, the perception and understanding of the moral issues involved in the health-disease process and the inclusion of the health area in the moral debate of society in a more informed and conscious way will be broadened.

Education and bioethics

Before discussing the teaching of bioethics it is relevant to state the concept of "bioethics" under consideration: *the systematic study of the moral dimensions of life sciences and health care, employing a variety of methodologies. (...) is concerned with analyzing the moral arguments for and against certain human practices that affect the quality of life and well-being of humans and other living beings and the quality of their environments and to make decisions based on these analyses* [10]. As Vidal [11] described recently, there are different conceptions about education and specifically about education in bioethics. The diversity of educational conceptions is reflected in the diversity of educational objectives, methods and, therefore, in the evaluation of the educational process.

Fox, Arnold and Brody [4] used simple classification to characterize the teaching of ethics: traditional model and alternative models. For them, the traditional model seeks to contribute to the future clinical competence of students, offering knowledge and cognitive skills. The traditional model would be *essentially analytical, emphasizing the process of moral deliberation rather than its conclusions* [12]. Alternative models would be influenced by social sciences and psychology and would be characterized by the focus on results, that is, by the intention of intervening in students' attitudes. In highlighting the search for alternative models, these authors recognize specific skills that must be mastered by medical students:

The ability to identify the moral aspects of medical practice; the ability to obtain valid consent or refusal of treatment; knowledge about how to proceed if the patient is only partially incompetent or totally incompetent; knowledge of how to proceed if a patient refuses treatment; the ability to decide when it is morally justified does not inform the patient appropriately; the ability to decide when it is morally justified to breach confidentiality; and knowledge about the moral aspects of care with patients with poor prognosis [13].

This classification, however, seems little useful, since the counterpoint is a supposed contradiction between moral reasoning, ethical decision and consequences. What we will defend is the necessary articulation between these three points. The first question that needs to be recognized or defined refers precisely to the role or limits of the actuation and transformation of education in society. This is because it would be naive to believe that mere educational action is capable of transforming society, given the complexity of social, economic, and political relations. Moreover, no educator ignores or minimizes the existence of so-called "hidden curricula", which interfere in the formative processes within the training apparatus and, obviously, outside it, through the media.

But it is equally naive to imagine that education or educational processes may have no role to play in transforming processes. Of course, they have or may have. The answer about what role this is will depend on the very conception of education that is adopted, as well as on the understanding of the focus or objective that the educational process must have. This issue will be discussed in the context of reflections on bioethics teaching, focusing initially on the question of evaluation, and then relating this assessment (i.e. the fulfillment of the educational objectives) with the contents, methods and techniques of teaching.

Educational goals and assessment

In order to discuss the assessment of the teaching of bioethics, it is also necessary to determine the dimension of the approach that will be made here, since the subject of the evaluation can have as object different aspects. The first to be presented, which should soon be discarded because it refers to the assessment of the course and not of the result of the educational action, concerns the quantitative evaluation in the molds of what is done in Brazil, the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES - Coordination for the Improvement of Higher Level Personnel). It is not this type of assessment that will be discussed

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in this paper. Aspects related to the effectiveness of teaching, as the way in which the teaching process succeeds in achieving its objectives, will be approached.

In order to follow this path, some questions may guide reflection. Can the results of the teaching-learning process in bioethics be measured? What is the best evaluation strategy? What is or can be expected of bioethical education at different levels of education? Should our goal be to teach students to acquire information about ethical theories and political philosophy, master these concepts and apply them in specific situations? Would we like to see our students, at the end of a course or discipline, being able, for example, to present arguments to support moral decision in accordance with UNESCO's *Universal Declaration on Bioethics and Human Rights* [14]?

This purpose applies to what Rego, Palácios and Schramm [15] called "competence in bioethics (or in ethics)". This concept, formulated from the reflections of Perrenoud [16], can be expressed as the faculty of mobilizing a set of cognitive resources (in this case, theoretical and methodological knowledge related to ethics / bioethics). It should be noted that the model of banking education 1, in which one expects only the accumulation of information, and may even be encyclopedic, but does not always reflect true understanding, is not even mentioned. In this case, what is sought in the assessment process is to compare intended and obtained results, to verify the knowledge about how to correctly apply given knowledge (know-how).

If this is the case, the assessment of teaching will be done by comparing what information/skills were acquired, assimilated and constructed in the educational process with what was expected to be achieved. It is clear that, in academic education, this question is important because it will assess the correct understanding of the theories and methods being discussed.

Of course, it is not desired that someone who has studied a particular discipline lacks understanding of its theoretical foundations. In this sense, discursive and multiple-choice testes, discussion of cases, or any other evaluative method that would allow this measurement would be elaborated. This is even the recommendation in the Core curriculum proposed by UNESCO [17].

Would this, then, be all? Would we stop here, even though trying to respect the limits of the different levels of formation? It is clear that it is necessary to distinguish which knowledge is appropriate for what is expected from the training. Training the health professional to identify and understand the moral problems of their day to day life is different from forming a future teacher in the field. The broad spectrum between one and the other shows the necessary sensitivity in the definition of educational goals. There is, however, a different expectation in society in general. It is expected that, after the formative processes, attitudes and values that prevail will be less individualistic and more solidary, focused on the search for justice.

The discussion then, necessarily becomes: Is it possible that the educational process change the values of the individual? That you transform it in such a way that your attitudes are modified? How? And even if it is possible, what values should be taught? Which attitudes are most desired? And, especially, who would define this? And how to assess this?

And there is the one that seems to be the key question in the discussion: is it reasonable to assess student performance in terms of their attitudes or values? The sensible answer seems to be "no." It is not coherent to imagine that students should be expected to adhere to values and principles that we consider as desirable, however qualified and supposedly universal the forums that define them.

This would, in practice, be an attempt at indoctrination, an essentially heteronomous process, as traditionally are the educational processes related to religious and professional education. In general, these methods presuppose students' passivity from a cognitive and affective point of view, such as *tabula rasa*, in which, through educational actions, the values and principles recommended are inscribed. This does not seem to us to be the proper understanding of this process. And even if it were, it is known that attitudes are easily falsifiable in evaluations, as will be seen below.

Feldman and collaborators 18 conducted a study that shows the ease in simulating attitudes in order to meet the expectations of the evaluator. In the study, an objective structured clinical examination (OSCE) assessment station was used, in which the student was exposed to a situation of moral conflict and was expected to make a decision and to base it. There was clearly expectation about the student's expected behavior, which was to respect the patient's will, and this was the attitude taken by the majority of the students evaluated. Leaving the evaluation station, the researcher

submitted a short interview. When asked if they thought that in a real situation they would make the same decision, most respondents replied that they probably would not.

This reinforces the idea defended by Lind that *although the medical profession has a high demand for morally competent professionals, medical students are trained only to deal with the technical aspects of their profession, not the moral ones* (...). *In relation to the moral implications of their decisions, they are poorly prepared* [19].

From our experience as clinical bioethics teachers teaching physicians and other health professionals in masters and doctoral courses for more than ten years, we find that they have difficulty recognizing a moral problem in itself. They are reluctant to accept the idea that decisions are no longer only in their hands, in their conceptions of right or wrong, good or bad, fair or unfair.

To address this issue, it is essential that a basic point be clear, because it will be on this foundation that a coherent pedagogical proposal must be built: how does the individual acquire or develop the ability to evaluate moral issues and make decisions? Is this innate? Is it something that is acquired or developed? And the selection of moral content? What makes someone have different conceptions about what is right or wrong, fair or unfair? And what causes changes in the convictions of different individuals? And why do some people act in accordance with their convictions and others, depending on concrete situations, do not?

It should be noted that one is not presupposing any kind of moral content, which may or may not be selfish or supportive. The conformity of the action with your convictions is that it is being emphasized. The understanding of these processes has been the object of studies with different theoretical foundations, be they of psychology and its theories of development, be they of psychoanalysis, neurosciences, among others.

Thus, among the assumptions made in this article is the understanding that this capacity for discernment and moral judgment is the result of a process of development that, according to the one proposed by Jean Piaget and Lawrence Kohlberg,

presupposes basic transformations of the cognitive structures as totalities organized in a system of relations, which lead to higher forms of equilibrium, resulting from processes of interaction between the organism and the environment [20].

Kohlberg's concept of "moral competence" has been studied by Lind and is strategic for thinking about education [21]. It is understood as *the ability to make decisions and make moral judgments (based on internal principles) and to act in accordance with such judgments* [22]. Lind recognizes that moral competence is expressed in the assessment of an individual's ability to apply and value arguments with the same structure in different situations, and does not dissociate affective and cognitive dimensions, if not for merely descriptive purposes.

Thus, a pedagogical proposal in bioethics that incorporates this perspective needs to take these dimensions into account. It should be noted that action must be consistent with the reason for the recognition of mature moral competence, and this makes theoretical and practical difference.

The hypothesis that morality is innate, or capable of forming through communication or indoctrination is therefore rejected. We incorporate here the understanding that constructivism offers: that both knowledge and values and morality are the result of an internal process that emerges as a result of its interaction with the social environment, but essentially as an internal process. It is thus reaffirmed that one of the key concepts from the point of view of the cognitive process is that of moral competence, but it is emphasized that it differs significantly from that previously mentioned competence in ethics that derives from the thought of Perrenoud.

Understanding that social interaction and critical thinking are indispensable to the development of this (moral) competence, it is necessary to emphasize that this is not and can not be an isolated, introspective process, but strongly based on the interaction perspective. That is, it is necessary to take into account the teaching environment, stimulating it to be the most conducive to the development of critical thinking and democratic practice.

It is necessary that the environment, as well as the educational process, encourage students to be subjects of their process and active agents in the social environment in which they are inserted [23]. This means that the relationships established in the teaching environment between students, teachers, patients and other workers and family members or companions should be based on the respect for diversity and human rights.

In order to expand the understanding of the diversity of health care, university extension has

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been shown to be an appropriate space, endowed with an educational philosophy that reinforces this perspective. Unfortunately, there are many examples of educational institutions that are apparently in tune with the most modern pedagogy, which even use methods such as problematization or problem-based teaching, with active methodologies, but maintaining the dichotomy between the general segment and the professional education segment itself. In the case of health, it is characterized by a significant distinction between the practices in the first phase of the course and the internship.

We have observed that teachers who do not believe in the active method, even without understanding it, or do not agree with the new forms of work organization in health, often take refuge in internship, where they impose routines of practices in which they refute principles And practices that had been discussed and practiced until then in the courses.

This practical split in the process of professional training needs to be addressed by the institutions, but it will not be easy. It is necessary to institute in these organizations a process of permanent education that can lead teachers -even if not directly linked to the teaching of ethics, bioethics or human rights- to minimum field training, and which is an institutional decision.

Everyone involved in the training process needs to be committed to critical training. A critical formative process must be supported by firm institutional commitment, making moral and ethical development a commitment of all involved, capable of promoting respect for plurality. What, then, is the educational goal pertinent to this expectation of transforming attitudes, promoting socially fair values? We understand that the purpose should be to train people who are autonomous, committed to dialogue and also willing to commit themselves to a personal relationship with a critical use of reason, openness to others and respect for human rights [24].

How can we act in the evaluation of this purpose? First, by abandoning the idea that objective and quantitative evaluation will provide this. Let us also leave out the idea that we could evaluate our students by doing psychological tests in the style of Defining Issues Test (DIT) or DIT2, by Rest and collaborators [25], or any other with similar purpose. These tests are intended to quantify the moral development of individuals. It is understood that the focus should be on the evaluation of the educational process, ensuring that it is appropriately based on theories compatible with its purposes and on the practices guided by them.

For example, a concept that seems to be very useful in guiding the preparation of courses and even in the classes themselves, regardless of the study level of students, is that of meaningful learning, by Ausubel [26,27]. This physician-psychologist, a scholar of development theories, formulated his theory anchored in the foundations of Piaget and Vygotsky. Simply put, meaningful learning stems from the learning that occurs in addition to the knowledge that the individual already has. Therefore, for someone to learn, for example, how to solve second-degree equations, it is necessary for the individual to hold a series of prior knowledge to which others will be aggregated to solve the problem.

It is a concept linked to Piaget's ideas, which said that an imbalance was necessary to allow a new response to be incorporated by the individual. Ausubel [26], however, also mentions the possibility that this new knowledge may, in fact, subordinate previous knowledge as a new category of knowledge.

The importance of this method to the teaching-learning process lies in the understanding that new knowledge or new knowledge is built only on the basis of previously existing knowledge structures. Thus, for the theoretical teaching of ethics, for example, one must identify what knowledge is previously necessary for this new structure. As Frezza and Marques state:

For knowledge to be constructed by the subject it is necessary to have structures to assimilate it. Otherwise, the new knowledge will not be meaningful to the subject, therefore it will not be assimilated by the structure. If it is significant, the structure will suffer a disturbance and, in an attempt to regain equilibrium, the structure reorganizes and evolves to a new level of knowledge [28].

A similar perspective was also adopted by Kohlberg in his theoretical proposal, in identifying models of moral justification that would be necessary for other, more complex ones, to develop. This is his notion of stages of development. This does not mean, however, that we should attach ourselves to the structure of stages and focus our studies on the classification of individuals. It seems more reasonable to understand them as models of argumentative structure, without concern about the possibility that evolution is invariant and progressive or not. The idea of classifying students to form

groups with individuals at different stages seems to be already abandoned.

Thus, the environment and teaching techniques need to be a facilitator of reflection and respectful debate on moral issues inherent in students' daily lives. Likewise, they should be optimizers of circumstances recognized as promoters of this process, such as guided reflection and the opportunity to act morally autonomously. For example, schools need to have clear norms about actions and relationships in the school environment, enabling students and teachers to participate in forums and processes that reflect on the rules and seek to improve them as well as curb violence in all its forms.

This does not need and should not be operationalized independently of the effort to inform the students of the so-called "toolbox" of bioethics, which is fundamental to the development of competence in ethics. In this toolbox are different approaches to bioethics, with their theories and methods, without being limited to the currently hegemonic approaches. Diversity is fundamental for the formation of individuals capable of thinking and deciding autonomously, understanding the circumstances in which they are inserted. But recalling the concept of "meaningful learning", these discussions need to rest on the cognitive structures necessary for new knowledge to be structured.

We need to prepare individuals with critical thinking who are able to present and defend their positions with valid arguments, not force or intimidation. In this sense, this perspective converges with the purpose of preparing individuals committed to democracy and to the exercise of citizenship. We understand that the *Universal Declaration of Human Rights* [30] can be seen as the closest to the idea of universal morality. Thus, the critical discussion on human rights can also and, in our view, should be included among the foundations of the "toolbox" mentioned.

Thus, to the classic question of teaching philosophy (ethics) or philosophizing (ethically thinking), as proposed generically by Hegel and Kant, respectively, we respond with Ramos [31], who stated that it is necessary to imbue the student with a critical philosophical perspective, possible only when One learns to philosophize. But it is also necessary to present the systematic side that is translated by the apprehension of scholastic contents established in various philosophical systems of the history of philosophy, at which point one learns the contents of the philosophy of a particular philosopher or system [31]. Perhaps the best expression of what one needs to be done is what Thompson [32] defines as *practical ethics*: liaison discipline, which seeks to establish the bridge between theory and practice, which is recognized by Arras [33] as one of the greatest challenges of bioethics.

Teaching methods and techniques

If we have already addressed the issue of content and teaching environment, it is also necessary to discuss teaching methods and techniques. Understanding, as stated, that it is not enough to deal with content, it is necessary to mobilize also true moral emotions, we must think of a broad set of techniques and teaching methods, capable of acting at different levels. It follows that the first reflection should be the identification of pedagogical objectives, the expectation of the course, the lesson, a specific activity so that one can then identify which method or technique should be used to achieve this purpose.

All didactic approaches may be relevant as long as they are appropriately related to desired or expected pedagogical objectives. Based on Lind's reflections [34,35], a brief summary of these possibilities will be presented, which can be used even as simple triggers to motivate discussions. The discussion of cases is one of the most used methods, even by proximity to professional practices in the health area. In general, students are expected to apply their learned knowledge in a general way to solve particular cases.

When using this technique to discuss moral problems, the difficulties range from the most basic, such as the identification of the moral dimension of the problem, to the use of formal argumentation. And there are at least two possible paths in terms of educational objectives: to promote the application of the theoretical knowledge learned (relevant to the development of ethical competence as described), or problem solving, as advocated by practical ethics, in which theories are merely applied, but contextualized for the reasonable solution and acceptable to those concerned.

Some techniques more related to activities of psychology have been incorporated in many pedagogical experiences. For example, role-playing, psychodrama and sociodrama, in addition to requiring specific training to be applied, allow participants to demonstrate that they are able to understand different perspectives of those involved

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in the problems. They may represent the role of "health professional", "patient", "public manager", etc., roles that are not usually experienced on a day-to-day basis, but represented. It is clear that this representation can also bring about undesirable feelings, with some degree of suffering.

There is a certain tradition, related to the teaching of professional ethics, of using a technique that simulates judgment in an ethical court. The source of inspiration to this lies in professional control bodies, which evaluate the actions of professionals accused of not observing their codes of ethics. This practice can both be a way of assessing knowledge and application of professional moral norms, more likely to only train participants in their discursive ability to convince others of the arguments they present. There is, in fact, no commitment to the truth. Nor does it propose that the individual defend a point of view in which he/she believes. It is more of a discursive exercise that values strategies of argumentation. This practice is similar to that of debate clubs.

The use of films in the so-called "teaching of bioethics" has become quite common. However, the objectives are no always clearly presented and pursued, although their use is highly praised by the audience. And why? Maybe because movies are seen as fun and distracting. Of course, movies can stimulate reflections, but to be useful for pedagogical purposes, they need to be used in organized practices. They can motivate debates by provoking emotional reactions, of indignation or empathy, for example, in addition to presenting historical information or contextualizing moral problems.

But the fact is that to be used as an educational strategy, they need more than just showing and recommending that students reflect or publicly state their comments. We recommend that, for the use of films as educational support, a prior discussion script should be prepared and/or bibliography provided for prior reading and/or prior discussion to prepare students for reflection after the screening, and so on. Knowing that movies mobilize emotions, one should make good use of these feelings so that it is not just an "exciting movie".

One must also think about the length of time the film is shown. Is it appropriate to devote nearly two hours to a movie? Would not it be better to just use short films? Would it be worth showing only selected excerpts from feature films? It is understood that the showing of feature films can be quite counterproductive from the point of view of pedagogical results, by limiting the time devoted to debate and guided reflection. Although it is not the intention here to effectively show it, *Konstanz method of dilemma discussion*, developed by Linden is one of the most elaborate teaching strategies and encourages moral competence.

Its basis is the theory of the double aspect of this same author, with original foundations in theories of Piaget, Vygotsky, Kohlberg and Habermas [35]. Its development, training and practice are performed by Lind in courses offered around the world, but especially in Konstanze, Germany. There are other methods and techniques, but presenting them here would extrapolate the purpose of the article. Finally, the teaching of ethical theories and their methods may modify self-referenced attitudes and promote mastery of theoretical contents. The choice of method to be used will depend on the teacher's familiarity with it, but, above all, on the objectives of the proposed activity.

Although the diversity of teaching methods and techniques is reasonably recognized, these methods are often seen as an end in itself. In everyday life, bioethics teachers tend to advocate discussion in small groups, but holding this discussion seems to be seen as something almost intuitive, natural, assuming that "truth" will come spontaneously through discussion or teacher enlightenment. This allows teachers to act, even in small groups, trying to convince students to correct their conceptions, doing something like indoctrination.

Its is not enough to just hold small group discussions, it is also necessary to know what and how to do. Likewise, it is not enough to only pass films to the students, but to lead the discussion, taking the film as a case or trigger to other discussions. Students, especially undergraduates, are very much hoping that lessons will inform them about what is right or what they should do to solve this or that case. It is understood, however, that this expectation should be in vain, since the role of the teacher should be to guide the reflection of the student, not to provide an answer.

The role of the teacher

Finally, as a last topic, we would like to approach the teacher's performance. What profile do we consider necessary for the role of the teacher in the disciplinary field of bioethics? We will not address the issue of theoretical and practical knowledge related to bioethics. We will,

however, deal with the necessary understanding that common-sense knowledge is not enough to be formally discussed within the field. There must be specific training, and this should be one of our concerns, to avoid serious distortions occurring in the understanding of theories that can reinforce prejudices, stereotypes and even pure and simple disinformation.

As Fullinwider points out [36], the very practices and norms associated with common morality are replete with "bad theory" or "metaphysical chatter" of all kinds, largely stemming from provincial social attitudes and uncritical religious beliefs. We understand that the basic principle for the bioethics teacher should be respect. Respect for the other, respect for difference. He must seek to understand the other's point of view, even if he does not agree with it, in the effort to build possible bases for coexistence. The other can not be seen as someone to be persuaded, but someone to talk to, stimulating appropriate argumentation. Being open to being surprised by the student's argument seems to be the best attitude of the teacher, allowing the other to, through argumentation, modify their own beliefs.

Another point that needs to be highlighted is the comprehension of what we understand as one of the fundamental missions of the teacher: to provoke cognitive conflicts. We must take our students out of their comfort zones, where they have reasonably consolidated answers, and provoke unbalance, by offering arguments that confront their positions, whatever they may be.

The purpose is not for them to change positions to please the teacher or colleague or anyone else, but to reflect on themselves by listening and pondering different arguments so that they can mature their positions or even change them. Changing their position or maintaining it not because it is the expectation of the teacher or colleagues, but because it is the result of their reflection.

Final considerations

In this study, we tried to discuss the teaching of bioethics in undergraduate and postgraduate courses. Our emphasis was on the distinction between education with a view to developing ethical and/or moral competence. We try to emphasize that it is not enough to transmit cognitive knowledge, but it is necessary to work the affective dimension and seek to arouse true moral feelings during the process of moral reasoning. Bioethics training can not have the same model, content and techniques for any level of training. Rather, content, methods, and teaching techniques should be appropriate for the level of training the student is in. If we think about the insertion of bioethics into professional training courses at the undergraduate level, it should not be only punctual, but effectively cross-cutting and interdisciplinary.

At this level, bioethics should interact with the entire body of course teachers, so that ethical reflection can be effectively transversal, involving everyone in the academic environment. It is known that this is still a mere desire, but it must be seen as a goal toward which we will work. The evaluation of teaching should also be directly related to the pedagogical objectives of the course or activities. Although we do not minimize the importance of theoretical content, in the so-called "toolbox" for bioethics it is indispensable to include practical wisdom that enables the solution of concrete problems of daily care.

Referências

1. Freire P. Pedagogia do oprimido. 17ª ed. Rio de Janeiro: Paz e Terra; 1987. p. 86.
2. Mori M. A bioética: sua natureza e história. Humanidades. 1994;9(4):333-41.
3. World Health Organization. Preamble to the Constitution of the World Health Organization. New York: WHO; 1946. p. 1.
4. Fox E, Arnold RM, Brody B. Medical ethics education: past, present, and future. Acad Med. 1995;70(9):761-9.
5. Merton RK, Reader GG, Kendall P, editors. The student-physician: introductory studies in the sociology of medical education. Cambridge: Harvard University Press; 1957.
6. Dantas F, Sousa EG. Ensino da deontologia, ética médica e bioética nas escolas médicas brasileiras: uma revisão sistemática. Rev Bras Educ Med. 2008;32(4):507-17.
7. World Medical Association. WMA resolution on the inclusion of medical ethics and human rights in the curriculum of medical schools world-wide [Internet]. 30 set 1999 [acesso 26 nov 2016]. Disponível: http://bit.ly/2pqIlUb
8. World Medical Association. WMA resolution on the inclusion of medical ethics and human rights in the curriculum of medical schools world-wide. World Med J [Internet]. 2015 [acesso 26 nov 2016];61(4):148. Disponível: http://bit.ly/2pmVAba

9. Rego S. A formação ética dos médicos: saindo da adolescência com a vida (dos outros) nas mãos. Rio de Janeiro: Fiocruz; 2003.
10. Rego S. Contribuições da bioética para a saúde pública. Cad Saúde Pública [Internet]. 2007 [acesso 26 nov 2016];23(11):2530-1. Disponível: http://bit.ly/2pn10Da
11. Vidal SM. Nuevas y viejas preguntas en la educación en bioética. In: Vidal SM, editora. La educación en bioética en América Latina y el Caribe: experiencias realizadas y desafíos futuros [Internet]. Montevideo: Unesco; 2012 [acesso 26 nov 2016]. p. 15-35. Disponível: http://bit.ly/2oBgKzq
12. Fox E, Arnold RM, Brody B. Op. cit. p. 762.
13. Fox E, Arnold RM, Brody B. Op. cit. p. 765.
14. Organização das Nações Unidas para Educação, Ciência e a Cultura. Declaração universal sobre bioética e direitos humanos [Internet]. Genebra: Unesco; 2005 [acesso 16 abr 2017]. Disponível: http://bit.ly/1TRJFa9
15. Rego S, Palácios M, Schramm FR. Competência bioética em saúde materna infantil. In: Schramm FR, Braz M, organizadores. Bioética e saúde: novos tempos para mulheres e crianças? Rio de Janeiro: Fiocruz; 2005. p. 81-104.
16. Perrenoud P. Construir as competências desde a escola. Porto Alegre: Artmed; 1999.
17. Organização das Nações Unidas para Educação, a Ciência e a Cultura. Bioethics core curriculum [Internet]. Genebra: Unesco; 2008 [acesso 26 nov 2016]. Disponível: http://bit.ly/2okc0wr
18. Feldman DS, Novack DH, Farber NJ, Fleetwood J. The ethical dilemma of students learning to perform procedures on nonconsenting patients. Acad Med. 1999;74(1):79.
19. Lind G. Moral regression in medical students and their learning environment. Rev Bras Educ Med. 2000;24(3):24-33. p. 28.
20. Bataglia PUR, Morais A, Lepre RM. A teoria de Kohlberg sobre o desenvolvimento do raciocínio moral e os instrumentos de avaliação de juízo e competência moral em uso no Brasil. Estud Psicol. 2010;15(1):25-32. p. 26.
21. Serodio A, Kopelman BI, Bataglia PUR. A promoção das competências moral e democrática: por uma virada educacional da bioética. Rev. bioét. (Impr.). [Internet]. 2016 [acesso 26 nov 2016];24(2):235-42. Disponível: http://bit.ly/2oNCSst
22. Bataglia PUR, Morais A, Lepre RM. Op. cit. p. 29.
23. Schillinger MM. Learning environment and moral development: how university education fosters moral judgment competence in Brazil and two German speaking countries. Aachen: Shaker Verlag; 2006.
24. Puig JM. Ética e valores: métodos para um ensino transversal. São Paulo: Casa do Psicólogo; 1998.
25. Rest JR, Narvaez D, Thoma SJ, Bebeau MJ. DIT2: devising and testing a revised instrument of moral judgment. J Educ Psychol. 1999;91(4):644-59.
26. Ausubel DP. The psychology of meaningful verbal learning. Oxford: Grune & Stratton; 1963.
27. Gomes AP, Dias-Coelho UC, Cavalheiro PO, Gonçalvez CAN, Rôças G, Siqueira-Batista R. A educação médica entre mapas e âncoras: a aprendizagem significativa de David Ausubel, em busca da arca perdida. Rev Bras Educ Med. 2008;32(1):105-11.
28. Frezza JS, Marques TBI. A evolução das estruturas cognitivas e o papel do senso comum. Schème: revista eletrônica de psicologia e epistemologia genéticas [Internet]. 2009 [acesso 29 nov 2016];2(3):278-94. p. 281. Disponível: http://bit.ly/2oE1Cmz
29. Baggini J, Fosl PS. The ethics toolkit: a compendium of ethical concepts and methods. Malden: Wiley-Blackwell; 2007.
30. Organização das Nações Unidas para Educação, Ciência e a Cultura. Declaração universal dos direitos humanos [Internet]. Brasília: Unesco; 1998 [acesso 29 nov 2016]. Disponível: http://bit.ly/1c4a30C
31. Ramos CA. Aprender a filosofar ou aprender a filosofia: Kant ou Hegel? Trans/Form/Ação [Internet]. 2007 [acesso 29 nov 2016];30(2):197-217. Disponível: http://bit.ly/2oBnKMF
32. Thompson DF. What is practical ethics? Harvard Edmonde J. Safre Center for Ethics [Internet]. 2007 [acesso 29 nov 2016]. Disponível: http://bit.ly/2oBbmfL
33. Arras J. Theory and bioethics. Stanford Encyclopedia of Philosophy Archive [Internet]. Winter ed. 2016 [acesso 16 abr 2017]. Disponível: http://stanford.io/2oBoNfC
34. Lind G. How to teach morality: promoting deliberation and discussion, reducing violence and deceit. Berlim: Logos Verlag; 2016.
35. Lind G. Fostering moral competence with the KMDD [Internet]. 20 fev 2016 [acesso 29 nov 2016]. Disponível: http://bit.ly/2oE4CQ5
36. Fullinwider RK. Against theory, or Applied philosophy: a cautionary tale. Metaphilosophy. 1989;20(3-4):222-34.

Participation of the autthors

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