

Teaching bioethics for undergraduate medical students.

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Abstract

Teaching bioethics has vast importance for medical student education, which is commonly delivered to undergraduate students using traditional didactic lectures and sometimes small group tutorials. Applying the theoretical knowledge on the daily medical practice and ward-based learning is a challenging task. 12 steps were formulated to help teachers develop their student's skills and attitudes necessary to practice according to ethical perspective, students should demonstrate sensitivity to ethical issues, analyse ethical issues and make ethical decisions in medical practice.

Keywords: Bioethics, Medical student, Ethical issues, Medical practice.

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Introduction

Ethics is the philosophy behind moral or the theoretical basis for moral. Bioethics defined as a significant inspection of the ethical extent of making judgments in medical and biological science situations [1]. Teaching bioethics is a comprehensive and long-term effort helping graduate and undergraduate students to become more fully linked to the roots of their own personal principles [2]. The nature and content of this field and their interrelationship remains puzzled and unclear, and that ambiguity, in turn, impairs the efficiency of medical education process. This indistinctness encourages more argument over designing curriculum, teaching and assessment methods, staff responsible delivering the course.

Today, we also come across greatly different views on the tackles, regulations, and skills that are innate in medical ethics itself. Some see medical ethics as an interdisciplinary field and provoke humanists of every persuasion, assorted health professionals, and multiculturalists to join their ranks and contribute to their deliberations. Others see medical ethics as a demanding specialty that brings the insights of philosophers to bear on contemporary clinical dilemmas arising from dramatic advances in medical technology and knowledge. And others see philosophers as having nothing especially distinctive or valuable to contribute to the field [3]. The formal inclusion of medical ethics education in the medical curriculum has produced a growing number of ethics curricula. Within these curricula there have been a diversity of goals and methods used. While it is recognized that there is no single, best model

for medical ethics education, consensus is developing on the design of ethics undergraduate curricula [4-6]. So, we aimed in this paper to map 12 steps for developing and applying ethics curricula at health professions institution. These steps will be as follows:

Step 1: Define Needs Assessment

Begin by asking teachers and program directors questions about their target students and their goals: Who will be the students? at which level will they be learning these courses? Why are you teaching these courses? How much time be offered to deliver these courses, and how will that time be organized? What is the contents should be included? what is he proper teaching method should be used? The answers, with respect to teaching medical ethics, will differ significantly. So, you have to be very specific about your course [7].

Step 2: Setting Goals and Objectives for the Curriculum

Although the medical ethics is a well-defined subject and has common core topics, but there are many aims and objectives that each course could generate. Since 1989, Miles et al. [6] identified the compromise which had developed to enhance teaching medical ethics. accordingly, the following aims were listed:

1. To teach doctors to recognize the humanistic and ethical aspects of medical careers.

2. To enable doctors to examine and affirm their-own personal and professional moral commitments.
3. To equip doctors with a foundation of philosophical, social and legal knowledge.
4. To enable doctors to employ this knowledge in clinical reasoning.
5. To equip doctors with the interactional skills needed to apply this insight, knowledge and reasoning to human clinical care.

The De Camp conference, of prominent medical ethicists in the United States, produced what they believed to be the essential short-term goals of medical ethics education [5]. De Camp's/Gillon's recommendations on the medical ethics core curriculum

De Camp recommendations:

1. The ability to identify the moral aspects of medical practice.
2. The ability to obtain a valid consent or refusal of treatment.
3. The knowledge of how to proceed if a patient is only partially competent or fully incompetent.
4. The knowledge of how to proceed if a patient refuses treatment.
5. The ability to decide when it is morally justifiable to withhold information from a patient.
6. The ability to decide when it is morally justified to breach confidentiality.
7. The knowledge of the moral aspects of caring for a patient whose prognosis is poor.

Gillon [8] stated that from these goals the content of a core curriculum for medical ethics could be identified. The recent UK Consensus statement proposed a model for the United Kingdom core curriculum which they believe to be consistent with the General Medical Council's stated goal for undergraduate medical ethics teaching [9].

Recommendations of the UK Consensus Statement on the topics of the curriculum [9]:

1. Informed consent and refusal of treatment
2. The clinical relationship truthfulness, trust and good communication
3. Confidentiality and good clinical practice
4. Medical research
5. Human reproduction
6. The 'new genetics'
7. Children
8. Mental disorders and disability
9. Life, death, dying and killing
10. Vulnerabilities created by the duties of doctors and medical students
11. Resource allocation

12. Rights

Step 3: Use Inductive Ethics Pedagogy

The technique of teaching medical ethics should begin by preparing students in their personal ethical principles, to help them in learning ethics from a foundation of their own beliefs, as well as they get an introduction to the existing debate in their own level as well as to the general international debate [2].

Medical ethics teachers recognized that a single, separate course in medical ethics during the medical curriculum was not enough to meet the objectives of medical ethics education, and although self-contained courses could be valuable, they can also have the effect of marginalizing ethics [10]. As a result they experimented with different curricular designs. Layman [11], in her 1996 deliberation on the ethics curricula that have been developed for the health care professions, identified four curricular patterns which have emerged:

1. Integrated modules across the curriculum.
2. A single discrete course and integrated modules across the curriculum.
3. Multiple courses.
4. Multiple courses or seminars and clinical rotations.

A common feature of the medical ethics curricula which developed is that the foundation of knowledge and analytical skills obtained by students in the preclinical years is built through providing ethics education in clinical settings [12,13]. This would enable the students to develop and employ their previously acquired knowledge, and acquire the interactional skills needed to apply this insight, knowledge and reasoning to clinical care [14].

Regarding the educational strategy to be adopted, Harden et al.'s S.P.I.C.E.S model [15], can be used as a basis to review the consensus on the educational strategies:

1. Student-centered/teacher-centered
2. Problem solving/information gathering
3. Integrated teaching/discipline-based
4. Community-based/hospital-based

Step 4: Create a Climate of Efficacy for Interpersonal Sharing

A significant part of ethics education occurs submissively through osmosis, in the true spirit of the apprenticeship mode of medical education. We need to create 'community friendly health care providers', which will work at grass root level, in the community in a more friendly and professional way. The responsibilities of medical universities and the medical colleges are much more in the implementation of the curriculum in its full spirit.

The GMC in Tomorrow's Doctors [16] recommended that clinical teaching should adapt to changing patterns in health

care, and should provide experience of primary care and of community medical services as well as of hospital services. With the increasing emphasis on context in medical ethics education, these issues would possibly be best addressed by involving the members of community and primary health care teams, in community and primary care settings.

Step 5: Apply the Four Levels of Ethical Analysis

Individual, group, organizational, and international perspectives, so that learners comprehend how ethical action becomes more complex, and less under individual control, when moving from individual personal codes to international contexts. Each level of analysis addresses key concepts and how to structure student discussion and provides case examples.

Step 6: Put Context and Cultural Norms into Account

The design and implementation of any ethics course in any country should be guided by asset of rules and regulations based on global ethical principles but domesticated within local laws, regulations and culture. In many experiences, it was clear that the concepts students associate with ethics include morality, a view of correct and incorrect often deriving from religious beliefs; values, a cultural derivative; and law, the societal compromise of right and wrong [17].

As human identities form through childhood, adolescence, and adulthood, we selectively retain or discard values and principles from our backgrounds, families, and group norms, transforming our ethics in the process. In an evolving valuing process as independent rational agents, we may credit or discredit sources of moral authority, or we may disconnect specific beliefs from their original source or framework. Thus, from formal and informal, tangible and intangible influences, we absorb and later modify the beliefs and values of our family, community, culture, society, geographic environment, and philosophical and religious traditions. Laws and standards form to codify historical collective values [18].

Step 7. Assign at least Two Teachers

A clinician and ethicist should be involved. The clinician is able to answer certain questions (to elucidate details in the patient's record, to clarify why this test was taken, why not that). An ethicist trained helps in analyzing not only value conflicts but also conceptual and epistemological issues and can help to answer other questions, as well as to make explicit hidden value assumptions and value conflicts. Moreover, the ethicist may help to explore the consequences of various normative alternatives and to problematic some suggestions put forward in the course of the discussion with the students; and both teachers can together further a constructive dialogue with the students.

Step 8: Encourage Critical Thinking

There is emergent agreement that ethics teaching should be case-centered, especially during the clinical phase of education [4,5]. Case discussion serves many of the aims of ethics philosophy; it teaches sensitivity to the moral aspects of medicine, illustrates the application of humanistic or legal concepts to medical practice and shows doctors acting as responsible moral agents [19,20].

For the students to be prepared to participate actively in the discussions, create their own independent point of view and be able to argue for these, it is of importance that they get a good introduction to ethics and the way ethicists approach the problems of bioethics. The brainstorming that can take place in a group will, as a rule, improve the decision and make it more morally stable and able to stand the test of time. So education in bioethics is likely to be cost-effective, quite apart from its importance for personal development.

Step 9: Include Interactive Sessions

Debate of ethical and cultural relativism and ethical absolutism relevant to the global context the concepts students most commonly associate with ethics include morality, a view of right and wrong often deriving from religious beliefs; values, a cultural derivative; and law, the societal consensus of right and wrong.

These principles do not give answers as to how to deal with a specific situation, but give a helpful structure for understanding conflicts. When conflict arises, the result is an ethical dilemma or crisis. Many clinical medical ethicists advocate the presentation of clinical cases using 4 main headings: medical indications, patient preferences, quality-of-life issues and contextual features. This analytic framework is helpful for identifying issues that require ethical analysis and resolution. It provides structure and reminds students of important but less scientific aspects of the case that should be considered in the ethical analysis.

It is important that students study positive cases of ethical conduct as well as negative examples. These will serve to promote visions of courage and right doing in students' future choices. Concrete and specific examples are important. Moral problems and moral decisions need to be put in context. Small changes in the diagnosis or prognosis, small variations in the situation, or in our understanding of it, can have great consequences for the decision. Analytical skills by exercises in identifying ethical problems and analyzing them in a structured and constructive way, to identify assumptions taken for granted in the discussion of the problem, as well as to analyze them given different normative and theoretical premises, and attitude by using role plays and brainstorming in groups where people with different perspectives and experiences can meet and can learn from each other, to improve maturity and moral sensitivity.

Step 11: Students' Assessment

Assessment should be both formative and summative [5], and it should also reflect the integration of medical ethics into the medical curriculum, 'each clinical discipline should address ethical and legal issues of particular relevance to it and its students should be subject to assessment as they would for any other teaching in that specialty' [4]. Numerous techniques have been devised to assess the cognitive aspects of ethical problem solving, such as the abilities to understand concepts, construct rational arguments and recognize moral problems [21].

Also, there have been various approaches used to assess humanistic qualities using ratings by medical tutors, patients, nurses or peers [22]. Behavioral skills have been assessed through chart review, objective structured clinical examinations, direct observation, videotaping and simulated patients [23]. There is yet no 'gold standard' for medical ethics assessment [5].

Step 12: Implementation and Evaluation

Before fully implementing the curriculum, we should pilot it over a small batch. This will give insight of the achievement of the intended learning outcomes and objectives. And will provide information about restrains, obstacles,etc. to overcome.

It is mandatory after phasing out of each course to evaluate all its merits:

- Objective based evaluation;
- Process based evaluation; and
- Outcome based evaluation

Though many researchers [24-26] have commented on the lack of information regarding evaluation. Reasons given for the lack of evaluation include: the perceived difficulty of objectively evaluating intangibles dealt with in medical ethics courses such as values and beliefs; and the lack of suitable evaluation instruments [27]. But, other studies such as Hebert et al. [25], Rezler et al. [28], Shapiro and Miller [21], and in the nursing field McAlpine et al. [29] show that proper evaluation is possible.

Conclusion

Designing a comprehensive curriculum for bioethics with proper implementation of this course regarding teaching, learning processes in which Students are encouraged to actively participate in all process. The learning outcomes for each activity should be used as a guide to assess the adequacy of achievement of the stated competencies together with evaluation of performance. Strict following of previous steps will lead to actual impact on the development of the students' ethical thinking which will be reflected on their clinical experiences and become competent in applying ethical principles to practices. Students also will be able to critically analyze ethical issues commonly encountered in medical

practice and formulate a framework within which such issues could be resolved

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