# Moral Education in Medical Schools

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*The present report summarizes challenges in teaching medical ethics, defines its goals, describes theoretical frameworks for moral education, and reviews strategies for teaching medical ethics to serve as guidelines in developing medical ethics instruction. Medical teachers should clarify the instructional goals in cognitive, attitudinal, and behavioral domains. The cognitive developmental and behavior-analytic theories called for ethical instruction using a series of discussions based on real-life ethical dilemmas while pointing out all the basic rules related to medical practice. Ethical courses for medical students should be student-centered, problem-based, and integrative. Ethical instruction should be systematically taught to every student, but additional elective courses could also be used. Moral education for residents should be more focused to issues specific to their specialties. Medical researchers need both formal ethical training and informal teaching, and role modeling. Finally, experienced staff could use small group discussions of shared ethical problems to maintain their ethical knowledge and skills.*

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Moral education is an important component in the process of educating physicians. Over the past few decades, there has been great emphasis on the importance of medical ethics in medical practice. However, despite the integration of medical ethics as a required part of medical curricula in most medical schools throughout the world, many physicians still feel unprepared for ethical dilemmas found in current clinical practice[1-3]. The present report summarizes challenges of teaching medical ethics, goals of medical ethics education, relevant theories, and available teaching methods reported in literature. The present report is useful for medical teachers who are interested in developing or improving their medical ethics instruction.

**Challenges in teaching medical ethics**

Despite the recognition of its importance in medical curricula throughout the world, teaching medical ethics remains one of the most controversial areas in medical education. There are many philosophical and practical challenges in medical ethics education that medical teachers have to encounter in developing formal medical ethics courses. Thorough understanding of these challenges is essential in developing effective medical ethics instruction.

The philosophical challenge of medical ethics education is the difference in its goals from those in other fields of moral education. While the purpose of moral education in other professions is to provide principles of morality and justice to encourage students to articulate and defend their moral viewpoints, medical ethics education for physicians aims for behavioral changes. The ultimate goal of moral education in a medical school is not simply to teach moral principles, but also to craft moral behavior[4-6].

On a practical level, although many students strongly welcome an ethics curriculum, some students have attitudinal problems that impede their learning. Some students believe ethics cannot be taught, while many perceive an ethics class as hindering their professional growth because it takes their time away from clinical learning. Furthermore, many students want classes that they can see immediate application, which many of the ethical topics cannot provide. Many students doubt the usability of ethical knowledge in everyday clinical practice[1].

Besides these challenges from students, teaching of medical ethics also encounters many other management challenges including time constraints,

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scheduling demands on teachers, lack of background training among clinical faculty members, and lack of budgetary support and reinforcement from medical schools[7].

Medical teachers have a lot of work to do to address these challenges, both in research and application levels. The present report serves as one of the efforts to help medical teachers in meeting these challenges by summarizing relevant theories and research findings and their appropriate applications, which hopefully will lead to effective approaches in medical ethics instruction.

**Goals of medical ethics education**

In meeting with the many challenges in medical ethics education, the first thing to do is to clarify the goals. Evaluating the educational intervention is not possible without clear goals[8]. Medical ethics education is notoriously known to be vague about the goals, which range from concrete objectives of teaching fundamental principles of bioethics, law, and many common ethical dilemmas to considerably more abstract goals such as ethical sensitivity or moral behavior. These goals can be conceptualized into three main dimensions: cognitive, attitudinal, and behavioral.

***A. The Cognitive dimension***

***a. Knowledge in bioethical principles***

Acquisition of key bioethical principles remains the most direct aim of ethics education. The common bioethical principles and themes considered to be important among medical ethics courses include autonomy, confidentiality, end-of-life decision, patient decision-making capacity, informed consent, medical indemnity, mental illness and regulation, genetics, professional conduct, research ethics, resource allocation, relationship with other health professions, organ donation, abortion, infertility, telling the truth, patients' wishes, and medical mistakes and complaints[2,3,6,9-12]. Besides understanding these principles, students should have confidence in their knowledge to the level that they can apply these principles to make a decision in a real ethical dilemma.

***b. Interest in bioethical issues***

Besides providing ethical knowledge, the teachers should foster an interest in ethical issues among students. They should recognize the ethical dimensions of the medical profession. They should have moral sensitivity to perceive ethical aspects of situations. This interest can be reflected by some forms of behavior including reading academic journals in bioethics, attending conferences devoted to medical ethics, and consulting ethics committee[6,8,11].

***c. Moral development***

The last cognitive goal of medical ethics education is to foster the moral development of learners from "primitive" to "more evolved" stages of moral judgment. Students need to develop thinking skills to better understand practical problems of an increasingly complex society. This goal is based on Kohlberg's theory of the six stages of moral judgment. Mature moral reasoning emerged through a process of reorganization of psychological structures to balance the equilibrium of the interaction between individuals and environment. These six stages are:

Stage 1: Heteronymous morality: Avoiding punishment and physical damage

Stage 2: Individualism, instrumental purpose, and exchange: Serving one's own interest while recognizing interests of others

Stage 3: Mutual interpersonal expectations and relationships: Becoming a good person in one's own eyes and those of others and to maintain rules to keep mutual relationships and respect

Stage 4: Social system and conscience: Keeping the institution going as a whole to avoid system breakdown

Stage 5: Social contract and individual rights: Having a sense of obligation to law for the welfare of all people.

Stage 6: Universal ethical principles: Serving the belief as a rational person in the validity of universal moral principles[13,14]

***B. The Attitudinal Dimension***

The attitudinal goal of medical ethics education is to lead students to morally-oriented attitudes based on an appropriate application of moral reasoning, instead of those reflecting competing socioeconomic values. Students should see the world and interpret the situation from the moral viewpoint, and then justify their actions using appropriate moral reasoning. Students should have appropriate internal drive to act ethically[6,8].

***C. The Behavioral Dimension***

Specifying behavioral outcomes of ethics education remains problematic. The cognitive developmental approach to morality focuses on how indivi-

duals think, not what they do. As a result, higher stages of moral reasoning do not imply appropriate moral behaviors. Nevertheless, the teachers should expect medical ethics education to affect some forms of moral behavior. The teachers should expect students to demonstrate how they apply and use the ethical knowledge and skills in their practice[6,8].

The De Camp conference of prominent medical ethicists in the United States produced a set of recommendations on the goals of medical ethics education. The recommended goals are:

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

This list is well recognized as setting a minimum standard for ethics education in the United States medical curricula[11,15]. Medical teachers should keep these recommendations in mind when developing goals for medical ethics instruction.

**Theoretical frameworks of moral education**

To achieve the above goals, the educational interventions have to develop on strong theoretical frameworks. The two most important approaches being used to develop interventions in moral education are cognitive developmental and behavior-analytic approaches.

***A. The Cognitive Developmental Approach***

The cognitive developmental approach suggested that moral development occurred through the transformation of cognitive structure resulting from an interaction between individuals and environment. Maturation of moral thinking evolves through the restructuring of self-concept in its relationship to concepts of other people in a society[13]. Moral educational interventions should aim at providing an environment for students to interact in a way that (1) enhances students' moral reasoning through participation in moral discussion, (2) creates a moral culture of norms and values through democratic rule-making for the community, and (3) provides a context for students to act on their moral intuitions and decisions. In such moral educational environment, students' morality would develop through moral discussions that transform their own value positions into rules and norms for group behavior through democratic decision-making[16].

***B. The Behavior-Analytic Approach***

The behavior-analytic approach suggested that moral behavior is a result of learning through sequential and reciprocal influence in interaction between the individual's behavior and environmental stimuli. The acquisition of moral behavior is governed by *reinforcement* and *punishment*. The behavior-analytic approach differentiates between two types of moral behaviors: direct contingency-shaped and rule-governed behaviors. Direct contingency-shaped behavior is behavior shaped directly by its consequences. On the other hand, rule-governed behavior is behavior shaped by reinforcement of rules without having to face directly with its consequences. Most moral behavior in adults is rule-governed rather than direct-contingency shaped[17].

Based on these theories, effective moral education should enhance students' moral reasoning through a series of discussions. The topics that involve real-life ethical dilemmas should receive the most attention. However, topics should be broad enough to cover all the basic issues in current medical practice to build up appropriate rule-governed behaviors. These discussions should be structured throughout the curriculum, not only a short period of time, to repeatedly stimulate their moral thinking. Besides the formal courses of moral education, moral culture of norms and values should also be developed in the school in the form of hidden curriculum. Teachers should behave morally to provide good role models for students.

**Strategies in teaching medical ethics**

Every medical school has increased educational emphasis on ethics education significantly in the past decade. Evaluation of the impact of these efforts has demonstrated some level of success. The importance of these educational efforts was highlighted by reports suggesting that without educational intervention, usual age-appropriate increase in medical students' moral reasoning scores did not occur, suggesting that the experience of medical training inhibited moral development rather than facilitated it[18-20].

Medical schools comprise a variety of groups of learners with different goals, different knowledge bases, and different levels of experience. Moral education in medical schools should be tailored to serve appropriately the different requirements for different groups of learners.

***A. Medical Students***

The traditional approach in teaching medical ethics using a single, separate course in a medical curriculum is inadequate. The diverse aims of medical ethics education require a variety of methods at multiple phases of medical curriculum. There has been a move away from formal lectures to more small-group, case-based discussions[15,21,22]. Case discussion serves several objectives of medical ethics education. It teaches ethical sensitivity, illustrates the application of ethical concepts to medical practice, and shows how doctors can act as responsible moral agents. The ethical discussion, which invites students to think thoroughly, should help to improve their ethical problem-solving skills[1].

Evidence from literature showed that an early clinical exposure assist the development of a patient-centered, rather than disease-centered, approach to patients. Early clinical experiences can foster ethical sensitivity, help students examine the values they bring to clinical care, and teach ethical reasoning in clinical context. Several methods have been employed to facilitate students' learning in clinical settings including ethical grand ward rounds, ward round with ethicists, simulated patients and retreats, role playing, and film discussion[11,23,24].

Role models are important for professional character formation among medical students. Although medical students' basic character is formed at the time of admission, professional character is formed in medical schools, shaped by various factors including ward rounds, peer interactions, and role models. Medical teachers should have *role model consciousness* and demonstrate moral behavior while showing clinical skills to medical students[25].

In applying these teaching strategies into a medical curriculum, six main curriculum issues should be considered as suggested by Harden's SPICES model of curriculum development[26].

1. Student-centered or teacher-centered learning: The current trend in the movement toward student-centered learning in medical curricula also applies to medical ethics curricula. Adult learning principles, which stress the importance of student-centered learning, should be used in designing medical ethics courses[15]. Focusing on their needs, students are more motivated in learning. This will prepare them for continuing moral education after graduation.

2. Problem-based learning or information gathering: The traditional information gathering or knowledge-based approach to medical teaching has been gradually replaced by problem-based learning. Problem-based learning is an effective approach in developing problem-solving skills[26]. Because the nature of ethical inquiry is compatible with the problem-based learning process, medical ethics courses should also move toward problem-based learning.

3. Integrated or discipline-based teaching: Integration is the organization of teaching matter to unify subjects frequently taught in separate courses or departments. Integration can be done horizontally or vertically. Horizontal integration is integration between parallel disciplines that are traditionally taught at the same phase of the curriculum. Vertical integration is integration between disciplines traditionally taught at different phases of the curriculum[26]. There is widespread consensus that medical ethics should be integrated both horizontally and vertically to demonstrate the ubiquitous nature of ethical issues. However, integrating medical ethics comprehensively throughout the whole medical curriculum has not yet been successfully done due to its practical difficulty[11].

4. Community-based or hospital-based education: Because many ethical issues in community settings are different from what are found in hospital settings, physicians from community settings should also be involved in ethical courses to address these unique issues[11].

5. Elective or standard program: Although medical ethics has become a required part of medical curriculum in almost every medical school, many schools also reported providing elective courses in medical ethics[24,27]. These elective courses not only provide ethically-motivated students with an opportunity to further explore ethical issues, but also provide educational researchers with an opportunity to experiment innovative educational strategies.

6. Systematic or apprenticeship program: Medical ethics instruction should no longer be left to chance and should be systematically planned like other areas of medical instruction. Every student needs to learn all core concepts required by their professional and legal responsibilities[11].

### *B. Residents*

Due to their higher level of responsibility, higher level of medical knowledge and skills, more focused career goals, and time constraint; strategies for teaching medical ethics to residents should be different from those for medical students. On the one hand, their focused goals and advanced medical knowledge and skills will put them in a better position to understand complicated ethical issues and the availability of options. On the other hand, their workload and time constraint always seem to distract their attention from ethical consideration in their work.

Residents are generally adept with basic knowledge in medical ethics principles and moral reasoning skills from their undergraduate study. Instead of repeating all the basic ethical principles, medical ethics education for residents should be more focused to the ethical issues in their specialties and more implementation-oriented rather than theoretical-oriented.

Various strategies have been implemented to foster moral behaviors among residents including lecture series, case conferences, small group discussions, and role playing[8,12,28,29]. These interventions were demonstrated to have significant impacts on residents' moral reasoning and behaviors[8,29].

### *C. Medical Researchers*

Despite having various educational programs for medical researchers implemented by research institutions, these programs have only limited impact on researchers' moral behaviors due to their sole focus on knowledge-oriented instruction. These knowledge-oriented programs could only improve an awareness of ethical issues, but have no impact on ethical behaviors among researchers[8]. To influence moral research practice, other interventions should be considered, including role modeling of mentors and colleagues, proper incentive structures, external review mechanisms, and legislative law.

### *D. Experienced Staff*

Medical ethics, like all other medical fields, requires continuing education to maintain the repertoire of knowledge and skills needed for practice. The recommended educational approach for experienced staff is a small group discussion among mixed groups of specialists working in the same field. Interaction between participants who share similar clinical and ethical problems will lead to an in-depth discussion that is a key component to a successful educational intervention[30].

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## *การสอนจริยธรรมในโรงเรียนแพทย์*

***เชิดศักดิ์ ไอรมณีรัตน์***

*บทความนี้สรุปปัญหาในการสอนจริยธรรมทางการแพทย์ กำหนดวัตถุประสงค์ของการสอน บรรยายทฤษฎีพื้นฐานและแนะนำเทคนิคการสอนจริยธรรม เพื่อชี้แนะแนวทางในการจัดการสอนจริยธรรมที่เหมาะสมในโรงเรียนแพทย์ อาจารย์แพทย์ต้องคำนึงถึงวัตถุประสงค์ทั้งในเชิงความคิด เจตคติ และพฤติกรรมในการวางแผนการสอนทฤษฎี การพัฒนาความคิดและทฤษฎีการวิเคราะห์พฤติกรรมชี้แนะการสอนจริยธรรมโดยใช้การวิจารณ์ประเด็นทางจริยธรรมที่หยิบยกมาจากปัญหาจริงร่วมกับการชี้นำกฎเกณฑ์พื้นฐานทางจริยธรรมทั้งหมดที่เกี่ยวข้องกับเวชปฏิบัติ การสอนจริยธรรมให้นักเรียนแพทย์ควรเน้นความต้องการของผู้เรียนเป็นหลักโดยใช้การเรียนจากโจทย์ปัญหาในรูปแบบผสมผสานโดยอาจารย์จากหลายภาควิชา โรงเรียนแพทย์ต้องวางหลักสูตรให้นักเรียนแพทย์ทุกคนได้รับการสอนจริยธรรมอย่างเป็นระบบ โดยอาจเสริมวิชาเลือกเสรีด้วยตามความเหมาะสม การสอนจริยธรรมให้แพทย์ประจำบ้านควรเน้นประเด็นสำคัญทางจริยธรรมที่เกี่ยวเนื่องกับเวชปฏิบัติในสาขาเฉพาะทางของแพทย์ประจำบ้าน นักวิจัยควรได้รับการอบรมจริยธรรมอย่างเป็นทางการ ร่วมกับ การสังเกตแบบอย่างการปฏิบัติของนักวิจัยตัวอย่างแพทย์ผู้มีประสบการณ์สามารถใช้การอภิปรายกลุ่มย่อยเกี่ยวกับประเด็นปัญหาทางจริยธรรมที่พบร่วมกันเพื่อรักษาระดับความรู้และทักษะทางจริยธรรมอย่างต่อเนื่อง*