

Medical ethics and professional training: building competencies for responsible healthcare practice

Ética médica y formación profesional: construyendo competencias para el ejercicio responsable de la salud

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ABSTRACT

This essay aimed to analyze the importance of medical ethics in professional training for future physicians, emphasizing current challenges and proposing strategies to strengthen ethical competencies in clinical practice. Through a critical review of the literature and educational contexts in countries such as Ecuador, the paper identifies weaknesses in bioethics programs and calls for a comprehensive approach that incorporates both technological advancements and humanistic values. It recommends reinforcing curricula with practical modules, fostering medical professionalism, and establishing ethics committees within academic institutions to promote a more just, empathetic, and responsible healthcare practice.

Keywords: medical ethics, bioethics, medical education, professionalism, doctor-patient.

RESUMEN

Este ensayo tuvo como objetivo analizar la importancia de la ética médica en la formación profesional de los futuros médicos, destacando los desafíos actuales y proponiendo estrategias para fortalecer las competencias éticas en el ejercicio clínico. A partir de una revisión crítica de la literatura y el contexto educativo en países como Ecuador, se evidencian debilidades en los programas de bioética y se plantea la necesidad de una formación integral que considere tanto los avances tecnológicos como los valores humanistas. Se propone reforzar los currículos con módulos prácticos, fomentar el profesionalismo médico y establecer comités de ética en las instituciones formadoras, promoviendo una atención en salud más justa, empática y responsable.

Palabras clave: ética médica, bioética, formación médica, profesionalismo, doctor-paciente.

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INTRODUCTION

In the course of historical and professional development in the area of health Multiple obstacles have arisen, not only individually but also at the level of the medical population in training, thus understanding that they are facing a major problem with such an impact that it affects the largest number possible from the medical staff and consequently but no less important, on the contrary essential for those people who come to the consultation hoping for find an answer to their condition or relief from what torments them.

According to the aforementioned, it can be inferred that this increase in problems in the field of health is due to poor practice, without interfering with the consultation space or the medical practice as such, but rather to a deficiency in ethical medical training. This is part of a branch of ethics that focuses on the principles and values that guide medical practice and reflects institutional commitments to socially responsible education (García, 2025). Moreover, they are essential since they guide the conduct of health professionals and trainees in their relationship with patients, colleagues, and society in general (Inglada et al., 2024).

Over the past decade, medical ethics training programs have sought to address the increasing demand for physicians who are not only technically competent but also capable of making ethically sound decisions. However, several studies have highlighted deficiencies in bioethics teaching, particularly in the integration of practical content that prepares students for real-life scenarios (Viesca et al., 2018). For example, in countries such as Mexico and Canada, guidelines and programs have been implemented to improve ethics education. However, progress remains uneven depending on the socioeconomic context and resources available at each institution (Navarro & Rodríguez, 2023).

The relevance of medical ethics is also reflected in its impact on the doctor-patient relationship, an interaction that transcends clinical aspects to focus on mutual trust and respect. In this sense, training programs must not only address basic ethical principles but also adapt to modern challenges, such as the use of emerging technologies and the globalization of medicine, which bring with them new dilemmas and responsibilities for healthcare professionals (Ayelén-Ferreyra, 2022).

DEVELOPMENT

Medical ethics and bioethics are essential disciplines that guide healthcare professionals in

making responsible and fair decisions based on sound moral principles. The intersection of science, technology, and humanism places these areas at the center of contemporary debates about the limits and responsibilities of medical practice. Below, the most relevant aspects of this field are developed, with a focus on the advances, challenges, and proposals for its teaching and application in the last decade (Biscioni et al., 2023).

Medical ethics, historically grounded in the Hippocratic Oath, focuses on fundamental principles such as beneficence, non-maleficence, autonomy, and justice. These values have evolved to meet current needs, as technological advances, social demands, and patient expectations have reshaped the physician's role. Bioethics, on the other hand, extends these principles to address contemporary issues such as genetic manipulation, the use of artificial intelligence in medicine, and decision-making in situations of resource scarcity (Panadés et al., 2024).

In recent decades, bioethics has established itself as an interdisciplinary discipline that integrates philosophical, legal, and cultural aspects to address complex ethical dilemmas. For example, issues related to end-of-life care, palliative care, and equitable access to treatment are areas of intense debate. In this context, bioethics not only seeks to establish standards but also to foster the development of critical skills in physicians to assess each situation (Pérez-García, 2017) comprehensively.

Medical ethics education faces significant challenges in universities and medical schools. Despite its importance, this discipline still occupies a limited space in curricula. In countries like Mexico, bioethics programs constitute less than 2% of medical training, which limits the development of ethical competencies in future professionals. Furthermore, the lack of formal assessment of these competencies makes it challenging to identify areas for improvement (De Freitas et al., 2021).

The implementation of specific guidelines and the formation of ethics committees in medical institutions have proven to be effective strategies for strengthening bioethics teaching. For example, in Canada, the Ethics Committee of the College of Family Physicians developed guidelines for integrating ethics into daily medical practice, especially in rural areas where access to experts is limited. This experience highlights the need for tailored approaches that consider the specificities of each context (Vayena et al., 2018).

One of the greatest ethical challenges today is the doctor-patient relationship, which is shaped by factors such as the commercialization of medicine, disparities in access to healthcare, and the utilization of advanced technologies. Commercialization can generate conflicts of interest, while technologies, although promising great benefits, pose dilemmas regarding privacy and informed consent. For example, the use of big data in healthcare has generated debates about the confidentiality of medical data and patients' rights to decide on the use of their personal information (Perales, 2008).

Another critical issue is the education of values during medical internships. Students often face pressure to perform procedures under suboptimal conditions, which can compromise professional ethics. This highlights the importance of supervision and guidance from experienced faculty, as well as the establishment of an educational environment that prioritizes ethical values over operational objectives (Chamba, 2024).

Solving the identified challenges requires a multidimensional approach. First, medical ethics curricula must be strengthened with mandatory modules and practical assessments that measure the impact of teaching on students' ethical decision-making. Second, it is crucial to foster a culture of medical professionalism that recognizes the importance of ethical values in developing trust and empathy in the doctor-patient relationship (Trujillo, 2023).

Furthermore, collaboration between academic institutions, healthcare systems, and regulators can facilitate the implementation of universal ethical standards. This includes promoting research that evaluates the effectiveness of teaching strategies and adapting them to the changing needs of the medical environment (García-León, 2019). In this regard, ethical training should also consider the relationship between social determinants of health and patient well-being. For instance, the quality of life and nutritional status of older adults—often overlooked in ethical reflection—are essential components of a just and compassionate healthcare model. A recent systematic review emphasized how nutritional vulnerability can compromise not only physical health but also autonomy and dignity in aging populations, highlighting the ethical imperative to address these factors in professional training (Angulo et al., 2024).

The advancement of technology and globalization have transformed medicine in recent years, introducing new ethical dilemmas. Technologies such as artificial intelligence (AI) in

diagnosis and treatment, CRISPR gene editing, and the utilization of big data in healthcare have significantly enhanced the accuracy and effectiveness of medical care. However, they have also raised critical ethical questions about privacy, equitable access, and the responsible use of these tools. For example, the use of big data in healthcare raises questions about who should have access to this information, how to ensure patient privacy, and how to avoid discrimination based on genetic or personal health data (Adeyi et al., 2024).

In this context, medical ethics must adapt rapidly to address these emerging challenges. This involves not only updating traditional ethical codes but also equipping healthcare professionals with the skills to navigate these new realities. Bioethics training should include case studies related to these technologies, providing physicians with the tools to make ethically justified decisions in complex situations (Nascimento et al., 2024).

Medical practice in a globalized world also demands cultural sensitivity and an understanding of diverse values. Today's healthcare systems operate in multicultural contexts where religious beliefs, traditions, and individual values can significantly influence medical decisions. For example, informed consent in cultures where decisions are made collectively by families rather than individually, or the management of patients with beliefs contrary to specific treatments, are common challenges (Turner, 2001).

In this regard, bioethics education should promote empathy and respect for diversity, training professionals to provide inclusive and culturally competent healthcare. Training should include modules on effective communication in multicultural contexts and resolving ethical conflicts related to cultural differences (Moreira et al., 2021).

One of the most widely discussed topics in medical ethics is the preservation of the doctor-patient relationship, founded on trust, mutual respect, and open communication —a relationship deeply rooted in historical and symbolic traditions of healing and responsibility (Zevallos & Borroto, 2024). With the increasing reliance on technology in modern medicine, there is a risk that human interaction may become secondary. Recent studies have shown that patients value both a doctor's technical competence and their ability to listen and understand their concerns. Therefore, ethics training should reinforce skills such as empathy, active listening, and the ability to handle

difficult conversations, especially in the context of terminal diagnoses or critical decisions (Tutor et al., 2023).

Another crucial aspect is the ethics of medical research, particularly in clinical trials and experimental studies. International ethical codes, such as the Declaration of Helsinki, establish clear guidelines to ensure that patients are protected from potential abuse and that the benefits of research are shared equitably. However, concerns remain about how these guidelines are implemented in resource-limited settings, where a lack of oversight can increase the risk of exploitation (Ríos-Uriarte & Cerón-Apipilhuasco, 2025).

Including research ethics in medical curricula can help ensure that physicians and scientists understand the importance of obtaining valid informed consent, balancing risks and benefits, and protecting the rights of participants in their studies (Holm & Williams-Jones, 2006).

In contemporary society, which urgently needs more equitable and efficient health services, there is open disagreement about who should be responsible for decisions about life and death with dignity. The current wave of reflection on this issue opens the door to bioethics as a sphere that provides a philosophical and moral framework for resolving the dilemmas of science and medical practices in an orderly and fair manner, respecting and tolerating the ethics of personal, professional, and social environments (Mesa-Trujillo, 2022). It is evident that there is a flaw in the system that must be corrected, so specific actions must be implemented, such as strengthening the Code of Medical Ethics, establishing more effective control mechanisms, promoting a culture of responsibility, and, although it may sound superfluous, improving communication between doctors and patients so that they can express their concerns and expectations clearly and directly.

According to a study conducted among 601 medical degree students in El Salvador, the results obtained suggest the need for a continuous deepening of medical ethics, a cornerstone of medical training and practice (Sanchez, 2022). It is striking that, although they stated they did not experience significant complications when reading the Ethics Manual due to its easy language, their analysis in front of the seven simulated cases of ethical conflict revealed minor variations, indicating that the "worst responses" were in the lower groups. In contrast, those from higher semesters had a "better response" that responds to the responsibility that increases during this path of personal growth, and what this represents in their professional life.

Based on the above, several questions arise that they believe they will have answers to much later, perhaps in practice and specific cases in vocational training, but recognizing at the same time that it plays an important role in the direction of professors. Is it the obligation of medical schools to ensure that their future professionals are fit to practice a profession of such magnitude and connect with the population if they do not have such ethical principles? Moreover, indeed, the answer should be in unison, because we do not treat diseases; we treat people, with their stories, dreams, and families. The responsibility lies with each individual who is involved in this area of health, as it is not an individualistic training, and that knowledge should already be general.

Many future doctors will also learn during their training process in medical units that this principle is still a statement. They, while receiving formal courses with the message of not causing harm, were, on the other hand, exposed to the hidden curriculum, which involves carrying out procedures in unfavorable conditions and at high risk to patients. To overcome the nineteenth-century perspective on the role of patients in medical education, it is necessary to promote the development of guidelines and codes of ethics for teaching and healthcare, including dynamic methods such as gamification, which have shown benefits in strengthening ethical decision-making skills in medical students (Beltrán & Vega, 2024), as well as the establishment of a teaching ethics committee in every medical unit with medical students to ensure their application and compliance. The right to health of the population and the education of medical students in medical units are what they need (Vásquez, 2022). On the other hand, in Mexico, the need to reflect on the ethical implications of patient participation in medical education is mentioned. Arguing on the foundations of teaching-care ethics and its shortcomings in this system, suggesting an in-depth analysis of the lack of participation from professionals, who sometimes decide to relegate responsibilities, thus falling into a reprehensible education.

In the Ecuadorian context, the legislator has limited the legal treatment of liability for medical malpractice to the production of a result of harm only in cases of death, overlooking broader impacts such as social vulnerability and access to justice in economically depressed areas (Macías et al., 2025). Other harmful consequences must be considered when configuring the crime. In this sense, there are psychological effects, partial disorders that affect motor qualities and, above all, moral damage that has not been foreseen either (De Freitas et al., 2021). The aforementioned

is somewhat alarming, since we have been instructed that the patient must be approached biopsychosocially, so the current approach, focused solely on death as a trigger for legal liability, is restrictive and does not reflect the extent of the harm that malpractice can cause. The possibility of compensating patients who suffer serious physical or psychological consequences, such as permanent disabilities or emotional trauma, even if they are not life-threatening, is ignored.

At the Technical University of Manabí (Portoviejo, Ecuador), numerous weaknesses have been observed in the Bioethics program offered by the Faculty of Health Sciences of the university (Zevallos, 2021). This begins by offering only one subject, which represents 1.89% of the total courses taught in the Medicine program, with a weekly commitment of only two hours. The changes that have occurred are not significant in terms of the bioethical training that future professionals should receive. Mesa-Trujillo (2022) advocates for a preventive approach in primary health care, emphasizing the development of competencies for professional performance and a correct perception of risk, grounded in respect for the fundamental principles of medical ethics.

Medical ethics, historically grounded in the Hippocratic Oath, focuses on fundamental principles such as beneficence, non-maleficence, autonomy, and justice. These values have evolved to meet current needs, as technological advances, social demands, and patient expectations have reshaped the physician's role. Bioethics, on the other hand, extends these principles to address contemporary issues such as genetic manipulation, the use of artificial intelligence in medicine, and decision-making in situations of resource scarcity (De Freitas et al., 2021).

Based on the studies conducted, it is believed that the doctor's deficiencies in understanding current events are multifactorial. The medical ethics that are part of those who solemnly swore to practice their art to cure the sick. Hampered by insufficient training from medical schools, they often lose sight of the objective that should guide them. Instead, they are influenced by the pharmaceutical industry, prioritizing personal interests over the needs of the afflicted patient. Excessive ambition is present, driven either by a desire for success or recognition. Moreover, even more important and sadly on the rise, is the Lack of empathy in the health environment on the part of the actors directly involved, such as doctors, nurses, dentists, to mention a few. It is firmly believed that, at present, we should bet on a comprehensive health and education, not only with the basic foundations of medicine, but also to education as kind, highly communicative people, compassionate and with skills such as leadership, emphasizing the importance of implement

medical ethics to obtain doctors who are knowledgeable about the repercussions that this It mainly covers for he patient.

Medical ethics and bioethics have acquired increasing relevance in the field of medicine, not only as tools for resolving ethical dilemmas, but as a set of fundamental principles that guide the professional behavior of physicians. Since the time of Hippocrates, medical ethics has been grounded in values such as beneficence, autonomy, and justice, which have evolved to accommodate the complexities of modern medicine. In a world increasingly influenced by technology and scientific advances, bioethics is positioned as a key discipline for addressing moral challenges in areas such as genetics, artificial intelligence in healthcare, and medical data confidentiality (Pérez-García, 2017).

CONCLUSIONS

The bioethics education process should focus on practical learning that prepares future physicians to face ethical dilemmas in clinical practice, integrating ethical principles into decision-making, and fostering competent faculty supervision as a role model. Given the challenges posed by the technological and commercialization of medicine, physicians must develop professionalism and ethical sensitivity to strengthen trust in the doctor-patient relationship, ensuring that morally defensible decisions are made that respect patients' rights and interests. To achieve this, close collaboration between universities, health systems, and regulatory agencies is essential, establishing clear and adaptable standards that ensure solid ethics training in an increasingly complex and globalized healthcare environment.

CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest.

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