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Bioethics in healthcare

Abstract

Ethics comes from the Greek word "Ethos", meaning character. In the modern world, ethics is a wide branch of philosophy that conceptualizes the rights, the wrongs and morality of one's conduct. Ethical choices, both minor and major, challenge us every day in the delivery of health care for persons with diverse values living in a mixed and multicultural, multi-religious society. Medical ethics is a system of moral and ethical principles that apply values and judgments to the practice of medicine. At its core, medical ethics stresses the importance of fair distribution of healthcare. The application of ethical principles in biological sciences, in research, as well as in clinical application is covered under bioethics. In fact, bioethics stands at the intersection of medicine, science, law, philosophy, theology, and social sciences. It addresses the moral questions that arise in the application of medical and biological technologies as well as with the technologies themselves, ensuring that such developments are aligned with societal values and ethical principles. The scope of bioethics reaches far beyond the traditional limits of medical ethics, encompassing a wider range of issues brought forth by progresses in biological research and biotechnological innovations. Such advances include research in genetic engineering, gene editing and gene therapy stem cells, reproductive technologies, the formulation of public health policies, artificial intelligence in healthcare, public health surveillance etc. As science advances into unexplored terrains, it is important to abide by ethical principles and use it as a guiding force, ensuring that research serves humanity responsibly and equitably. Attempt has been made in this review to delve into some of these domains and discuss the bioethical issues and challenges which pop up.
Keywords: Bioethics, healthcare, clinical, autonomy, beneficence, non-malfeasance, justice, patient, informed consent

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DOI: https://doi.org/10.12681/aprlp.254.3291

Historical perspective of bioethics

The modern era of healthcare ethics is often traced to Henry Beecher's persuasive, 1966 article on ethical problems in clinical research, with particular attention (through a series of actual examples) to the failure to inform patients of the risks involved in experimental treatments. Henry Beecher had identified that in clinical research, the most "reliable safeguard" of the patient's interests, and against unethical behaviour, was the involvement of an informed, conscientious, compassionate, responsible investigator (Scher & Kozlowska, 2018). Newer problems started emerging in medical profession, which extended the scope of healthcare ethics. The new field that took shape was called *bioethics*, a term explicitly preferred to encompass not only medicine and the rest of healthcare, but the entire field of the (human) life sciences (Beecher, 1966; Reich, 1994).

Van Rensselaer Potter, an American biochemist cum oncologist from the University of Wisconsin, is generally accredited to be the first person to have used the term '*bioethics*.' In 1970, Potter had published a paper entitled "*Bioethics: The science of survival*" in the journal Perspectives in Biology and Medicine (1970; 14: 127-153). A year later, he published a book "*Bioethics: Bridge to the Future*", in which he expressed concern about the dehumanisation in science and the need for a new discipline, which would help re-establish ecological equilibrium and defend natural resources (Potter, 1971).

The Declaration of Helsinki which is a set of principles developed by the World Medical Association's (WMA), is the best-known policy statement on medical research involving human participants. The first version was adopted in 1964 (at Helsinki, Finland) and has been amended seven times since, most recently at the General Assembly in October 2024. Bioethics and bioethicists loomed large in both healthcare ethics discourse and professional education in the U.S. by the early 1980s. This growth was further solidified by the founding of The International Association of Bioethics in 1991 (Scher & Kozlowska, 2018).

Principles of bioethics

The 4 basic principles or pillars of bioethics are autonomy, non-maleficence, beneficence, and justice. Due to the many variables that exist in the context of clinical and other associated cases in healthcare, several of these ethical principles may seem to be applicable in numerous situations. At the same time these principles are not considered absolutes, but serve as guidelines in clinical medicine (Lawrence, 2007).

a) ***Principle of autonomy:*** All individuals have a fundamental right to self-determination. The principle of autonomy indicates that the patient should be considered capable of acting based on an understanding of the treatment offered, as well as the risks, complications and outcomes associated with such treatment (Entwistle et al., 2010). For this to occur, patients must be fully informed about their medical condition and it's the doctors' responsibility to ensure true informed consent is provided.
b) ***Principle of equality and justice:*** All individuals are equal as persons and have a right to be treated accordingly. It is expected that a physician should be fair in offering his or her services, and that there should not be any preferential attribution of services. The question of distributive justice also seems to pivot on the fact that some goods and services are in short supply, thus some fair means of allocating scarce resources must be determined (Yudhistir & Jugessur, 2023).
c) ***Principle of beneficence:*** Medical practice often involves a compromise between benefit and harm, especially with regard to interventional procedures and drug therapy, but should always be biased towards 'benefit' (Attard-Montalto, 2001). The principle suggests that the physician has a duty to benefit the patients, and also to prevent them from any harm that may be caused by a medical treatment.
d) ***Principle of non-maleficence:*** All individuals have a duty to avoid harm to other persons, insofar as it lies within their power to do so without unwarranted harm to themselves. The princi-

ple of non-maleficence suggests that there should be no harm caused to the patient by providing or denying a treatment (Katz, 2024). While beneficence means acting to benefit others and promote their well-being, while non-maleficence means refraining from causing harm. It is understandable that medical mistakes may occur; however, this principle articulates a fundamental commitment on the part of health care professionals to protect their patients from harm and need for medical competence.

Role of bioethics in healthcare

Bioethics is vital in today's rapidly growing scientific and technological landscape in healthcare for numerous reasons:

- Navigating moral dilemmas in modern medicine: As medical science advances, it gives rise to previously unheard-of ethical challenges. Bioethicists help navigate these intricacies, balancing technological possibilities with ethical concerns.
- Influencing public health policies: Bioethics plays a vital role in shaping public health policies, ensuring they are socially responsible (Benatar, 2006). This is particularly noteworthy in areas like vaccination policies, resource allocation during pandemics, public health surveillance, and access to healthcare.
- Guiding biotechnology and emerging technologies: Bioethics plays an important role in guiding the ethical development of biotechnology and emergent technologies, ensuring innovations respect human values and environmental integrity (O'Mathúna, 2007). For instance, with progression in areas such as cloning, gene editing and reproductive technologies, bioethics addresses concerns associated with genetic privacy, personalized medicine, designer babies, eugenics, and the moral status of embryos.
- Fostering responsible scientific research: Bioethics emphasizes research integrity and the ethical conduct of scientific investigations, stressing the need to build confidence in the findings, and to acknowledge the limitations of science in addressing the moral dimensions inherent in research involving human and an-

imal subjects. It stresses that scientific studies should remain grounded in ethical principles, safeguarding against potential misinterpretations (Teessar, 2024).

- Enhancing patient autonomy and rights: Bioethics underpins the importance of patient autonomy, informed consent, and the right to privacy, ensuring patient's rights are at the forefront of healthcare decisions.

Bioethical issues faced in different healthcare domains

a) In clinical research. Ethical considerations are paramount in the clinical trial (CT) or research process to ensure patient safety, data privacy, and scientific integrity. Balancing patient safety and scientific progress is a fundamental concern for CT researchers. Risk-benefit analysis is at the core of bioethics, as it is the ethical consideration that underpins all scientific research. These analyses consider various factors, such as the efficacy of the drug, safety concerns, regulatory guidelines, and patient population. Researchers must uphold informed consent, carefully select subjects, conduct risk-benefit analysis, maintain privacy, and provide post-trial care in lines with the Belmont report (Nagai et al., 2022). The fundamental concepts of the ethical framework for undertaking clinical research focuses on the principle of scientific necessity, which is covered in two regulatory requirements:

i) the equitable selection of subjects –wherein Institutional review boards (IRBs) or Ethics Committees (ECs) should consider the purposes of the research and the setting where the research will be conducted and should be aware of the unique challenges of conducting such a research.

ii) minimization of risk – wherein research procedures should be consistent with sound research design and should not expose subjects/patients to risk unnecessarily. The duration of the exposure to the risk, the characteristics of the risk, and the reversibility of harm should also be considered.

Clinical studies should be carried out according to Internation-

al Conference on Harmonization (ICH)/World health organization (WHO) Good Clinical Practice standards (GCPs), which are consistent with the ethical principles originated in the Declaration of Helsinki. These principles include voluntary participation, informed consent, anonymity, confidentiality, potential for harm, and results communication. The ethical principles of autonomy, beneficence, and justice are reflected in U.S. FDA-regulated clinical investigations under 21 CFR parts 50 (Lindsay, 2022). Sponsors and clinical investigators must always adhere to the code of ethical conduct when collecting subject/patient data. Researchers must uphold informed consent, carefully select participants, conduct risk-benefit analysis, maintain privacy, and provide post-trial care.

b) Obtaining informed consent. Informed consent is a cornerstone of contemporary healthcare, integrating the professional standard with ethical considerations to safeguard patient autonomy and rights, not just during CTs, but for other medical and surgical procedures as well. Its importance cannot be overstated, as it captures the principle of respecting patient's/subject's autonomy by involving them in decisions about their own healthcare (Satyanarayana, 2008). Consent must be informed, in such a way that the patient can understand the nature of the procedure, the associated risks, benefits and any alternative treatments, if any. This means disclosing the risks of a particular treatment. The ethical principle of respect for patient autonomy requires that healthcare providers accept and respect decisions from autonomous patients to refuse medical therapy (Van Norman, 2008).

The ethical framework addresses the complexities of obtaining informed consent from different demographics, such as children or incapacitated individuals, where consent must be obtained from guardians or legal representatives. Although minors require consent from their parents or guardians, children above a certain age must also provide their assent which might become problematic with differing opinions. Additionally, researchers must use specialized communication methods to ensure that people with learning disabilities and other vulnerable individuals fully understand the study's implications (Moran, 2024). Clinical researchers are respon-

sible for ensuring that the ambition to discover a safe and effective medication does not come at the expense of patient safety, and guaranteeing informed consent is a major component of that. The balance between safeguarding patient autonomy and fulfilling clinical responsibilities underscores the intricate nature of informed consent (Pugh, 2020).

c) Vaccination. The vaccine development and research process include diverse experts of many scientific and social disciplines, including public health, epidemiology, immunology, and statistics, and from pharmaceutical companies. These stakeholders may have conflicting priorities and motives, which contributes to various ethical discussions (Ulmer & Liu, 2002). Vaccine policy is uniquely challenging because it involves balancing personal medical decision to vaccinate with the collective goal of public health, which often creates legal and ethical disputes, such as those concerning vaccine risks and government mandates. (Schwartz & Caplan, 2021). When evaluating vaccination responsibilities, two main ethical principles are considered: harm prevention and ensuring fair participation in public health efforts. While some believe these principles justify mandating vaccinations, others weigh them against factors such as: individual freedom of conscience, personal beliefs against vaccination, as well as the small but real risk of side effects from vaccines. This debate requires balancing collective benefits against individual risks and rights (Giubilini, 2021). Additionally, it is important to understand a vaccine's safety and efficacy in various populations, but testing a vaccine in vulnerable populations, such as children, also raises ethical concerns. Many vaccine-related ethical debates centre on the evidence that access to vaccination depends in some way on socioeconomic and racial ethnic minority status (Jalilian et al., 2023). Implicit in these discussions is whether all lives are equal, and equally deserving of opportunities to be protected by vaccination.

Ethical debates also arise because some individuals and communities disagree with the vaccine mandates, and/or have religious or philosophical beliefs that conflict with vaccination. For example, in an effort to protect the greatest number of people,

public health vaccine regulations may infringe upon individual autonomy and liberty. Many would agree that individual governments have an obligation to protect the health of their population, and try to achieve herd immunity against certain infectious diseases through vaccination. The real ethical question is not *if*, but *how* and within what limits they should do it. There is a range of possible vaccination policies that can be ranked in terms of restrictiveness. These go from mere information campaigns to outright compulsion or even forced vaccination (Giubilini, 2019). Regulating vaccine hesitancy is ethically justified when it is done to protect public health, ensure justice and equity, maintain trust in public health systems, and use healthcare resources efficiently. However, such regulations must carefully balance individual rights with the collective good, ensuring that they are implemented in a fair, transparent, and proportionate manner (Williamson & Glaab, 2018).

d) Assisted reproductive technologies. Women's health can be enhanced if women are given the opportunity to make their own reproduction choices about sex, contraception, abortion and application of reproductive technologies. There are many ethical facets which stem from the application of reproduction control in women's health (Macklin, 1996). Reproductive ethics is concerned with the ethics surrounding human reproduction and beginning-of-life issues such as contraception, assisted reproductive technologies (ARTs) [e.g., in vitro fertilization (IVF), zygote intrafallopian transfer (ZIFT), intracytoplasmic sperm injection (ISCI) etc.], surrogacy, and preimplantation genetic diagnosis (Thacker & Lenow, 2025). The main ethical dilemmas following the development of ART that are worth considering (Schenker & Eisenberg, 1997) are related to:

- Experimentation on pre-embryos, their genetic manipulation and cryopreservation
- The right to procreate or reproduce; the process of IVF itself
- Rights of children born by these techniques.
- Rights of the woman versus the rights of the foetus due to induced abortion.

- The moral status of the embryo
- The embryo selection that is carried out using preimplantation genetic diagnosis (PGD) to transfer only the best quality embryos.
- The fate of surplus human embryos
- Gamete donation, especially the right to privacy of donors and of children to know their parents.
- The production of saviour siblings.
- The possible use of these techniques for social purposes, unrelated to the woman's own fertility, such as 'gestational surrogacy' and 'social freezing'.
- The possible hyperinflated success rates in advertisement projected by assisted reproduction clinics to attract gullible customers.

These challenges place an onus on healthcare providers to ensure that counselling procedures are adequate. Critical consideration must be given to appropriate information delivery procedures, including what, how and when information is provided to users to best support reproductive autonomy (Coco, 2014).

e) Surrogacy. Surrogacy, by definition, is "*an arrangement in which a woman agrees to a pregnancy, achieved through ART, with the intention to carry it and hand over the child to the commissioning/intended parents for whom she is acting as a surrogate*." Surrogacy may be commercial or altruistic, depending on whether the surrogate receives financial reward for her pregnancy. The surrogate might be very close to the intended parents and volunteer out of compassion. Surrogacy could also be an attractive alternative for a poor surrogate mother as she gets very much needed money, and an infertile couple gets their long-desired biologically related baby, but the real picture could be very different due to ethical, legal and social reasons (Saxena et al., 2012). There is a saying, "*Surrogacy industry is run by haves, to exploit the have-nots*". The unethical practices, may vary by location and the specific circumstances surrounding each case may vary. The bioethical issues and the legal issues surrounding surrogacy have been widely reported (Frati et al., 2021). Some of these are enlisted below.

- Ethical concerns of exploitation, commodification, and/or coercion, wherein women are paid to be pregnant and deliver babies for wealthier people in the society (Patel et al., 2018).
- Some perceive that it is morally and ethically wrong for a woman's body to be utilized as a vessel for carrying a child (Watson, 2016).
- Few clinics practice multiple embryo transfers – over and above 03, allowed as per the ART guidelines. The subsequent fetal reductions can pose health risks for the surrogate mother. Few clinics don't have the perseverance to even wait it out so that the egg donors can be tested for infectious diseases. There have been cases of HIV positive status being detected after the donation.
- Some clinics would resort to the practice of introducing a single surrogate mother to multiple intended parents. Once the surrogate mother would be impregnated with one of the couple's embryos, other intended parents would be told that the embryo transfer for their surrogate mother had failed and would make them pay up for another IVF cycle (Kneebone et al., 2022).
- Advances in reproductive technology may lead to ethical concerns about 'designer babies' born through surrogacy, where parents can select certain traits, potentially leading to eugenics and social inequality.
- In surrogacy, the rights of the child are almost never considered. Transferring the duties of parenthood from the birthing mother to a contracting couple denies the child any claim to its "gestational carrier" and to its biological parents if the egg and/or sperm is/are not that of the contracting parents (Ber, 2000). Issues can arise concerning the child's identity, citizenship, and rights if the surrogacy arrangement involves international borders.
- Intended parents who end up with twins through surrogacy, reject one while selecting the other, leaving the fate of other new-born in limbo.

Altruistic and not commercial surrogacy should be promoted. Due to the lack of regulation on cross-border surrogacy in low income countries, it undermines the dignity and rights of women as even a

modest economic compensation determines a significant purchasing power. To address the ethical, moral and other concerns, there is a need for stricter regulations, ethical guidelines, and comprehensive support systems for all parties involved in surrogacy arrangements.

f) Organ donation and transplantation. Organ transplantation involves the surgical procedure of removal of damaged/injured tissues or organs from the body of a person and their substitution by similar tissues/organs from a donor. The donor and recipient may be at the same location, or organs may be transported from a donor site to another location. Types of organs which are transplanted include kidneys, liver, heart, lung, pancreas, intestine, cornea etc. The human donors could be either living donors or deceased donors (from whom organs could be taken after their death - either through brain death or circulatory death, for transplantation (Sulania et al., 2016). The practice of organ transplantation is overshadowed by severe shortage of suitable donor organs. The supply of organs of high quality and efficacy, aided by organ preservation techniques, has always been one step of extreme importance in the overall multi-disciplinary approach to transplantation (Guibert et al., 2011).

The ethics of allocating human organs for transplantation is a specific application of ethical norms to social practices. Ethical guidelines provide a framework for ensuring that organ transplantation is conducted in a manner that respects human rights and dignity (Bunnik, 2023). These guidelines often include:

- **Voluntary donation** - Ensuring that all donations are made voluntarily and without coercion.
- **Respect for persons, equity and fairness -** Ensuring equal access to scarce organs for transplantation services for all patients
- **Transparency** - Maintaining transparency in the organ allocation process and in the criteria used for donor and recipient selection.

While organ donation should be voluntary, often there are incentives offered to donors to lure them into donation. Those who argue

against incentives for organ donation point out that having only altruistic donors (whether related to the donor or not), has eliminated any sense of intimidation. Opponents of incentives emphasize the potential risk to donors and the impact incentives might have on society's moral standpoint. They cite harms such as coercion, exploitation, undermining dignity, repugnance, and commodification (Matas et al., 2011). As part of the efforts to combat unethical practices, organizations like the WHO and the United Nations (UN) have established international guidelines and conventions to combat organ trafficking. Similarly, individual countries have implemented laws and guidelines to regulate organ donation and transplantation, though with varying degrees of success. The ruling governments of the countries also need to educate the public about the risks and ethical issues associated with illegal organ trade by carrying out public awareness campaigns for increasing donor registrations and ensuring ethical practices (Howard & Cornell, 2016; Martin et al., 2019).

g) Blood donation and transfusion. Every year, blood transfusion has been responsible for saving thousands of lives across the world. Yet, globally, the quantity and quality of blood pool available for transfusions is still distressing, specifically in the developing countries. Bioethics provides a framework for making difficult decisions about the allocation of scarce healthcare resources (including blood, its components or blood products), ensuring fairness and equity (O'Sullivan et al., 2022). The legality and ethics of blood transfusion compels a doctor to obtain the patient's informed consent before administering blood or blood products, just like for other medical treatments. This includes explaining to the patient the relative benefits and risks of receiving v/s not receiving the blood products/components, as well as any reasonably viable alternatives. Blood donation should be voluntary without coercion or payment. Similarly, confidentiality should be maintained regarding the patient and their treatment.

The major ethical concern surrounding the use of blood/ blood components/blood products is that of the perception of the risk has been far greater than the objectively measurable risk. The blood used in a transfusion must work with the recipient's blood type. If

it doesn't, the antibodies (proteins) in the recipient's blood attack the new blood that is been transfused (from the donor) and could cause incompatibility and make one sick. The correct management of the processes that make up the transfusion supply chain affects the safety of the whole process, the monitoring of which is a specific aim of haemovigilance systems (Sacchini et al., 2013). Unfortunately, some medical personnel do not handle this sensitive procedure with the desired carefulness. In some instances, blood is transfused without proper screening to find out the blood group and rule out the problem of incompatibilities before transfusion. Further, monitoring and managing transfusion reactions, such as allergic reactions, febrile non-haemolytic transfusion reactions, and more severe complications, are essential for ensuring patient safety not only from a medical standpoint but from an ethical perspective as well. If the patient has been transfused blood and its components that were not intended for him/her, whether harmed or not, he/she has the right to be informed. Similarly, a patient who has inadvertently received blood positive for a transfusion transmissible infection (like HIV), also has a right to be informed and given due compensation (Elhence, 2006). There are also cultural issues which one has to deal with during transfusion. For e.g., some religious sects such as Jehovah's Witnesses do not accept blood transfusions, since as per their belief it is wrong to accept a blood transfusion. Such patient's rights should be respected (Petrini, 2014). Respecting their choice, is not simply a matter of attitude, but a matter of recognizing and even promoting the autonomous actions of the patient.

h) In lifeline decisions. Advancements in medical treatment may prolong life, but quality of life can decrease once an individual becomes terminally ill. Then it is time to consider the level of pain management and the kind of medications offered, whether to deliver care at home or in a hospital setting, and what kind of caregiver is needed. The goals of care for terminally ill patients are the alleviation of suffering, the optimization of quality of life until death occurs, and the provision of comfort in death. However, achieving these goals is not always easy (Akdeniz et al., 2021). The patients, their family members, well-wishers, and caregivers may pray silent-

ly and hope for early death but still hesitate taking active steps for relief from miserable existence of the patient, out of fear, social norms or, and other reasons (Minocha & Mishra, 2019).

Understanding the principles underlying biomedical ethics (viz. autonomy, beneficence, nonmaleficence, fidelity, and justice) is important for physicians or health care professionals (HCPs) and their patients to solve the problems they face in end-of-life care (Karnik & Kanekar, 2016). If the patient has lost the ability to make decisions, the family, the proxy health care or the physician must decide about the care to be provided to the patient (Akdeniz et al., 2021). Medical interventions used in patients to bring about the end of life in patients include a) Terminal sedation; b) Withholding and withdrawing treatment; c) Euthanasia; and d) Assisted suicide. In the end-of-life care of a patient, the decision to implement practices to prolong the patient's life or to alleviate the suffering for the patient, by bringing an end to the patient's very life by one of the above means, may be difficult for the physician, patient or the family members.

i) In health informatics. Health informatics is the discipline that deals with how health data are electronically collected, stored, manipulated, communicated and processed into health information that is suitable for administrative and clinical decision making, management, and how information and telecommunication technologies are designed, developed and applied to support the research into and delivery of health care services (Kluge, 2016). In this digital age, medical professionals have the prospects not only to obtain a greater depth of medical knowledge but also to access patient health information (including a patient's list of allergies, medications and dosages, and past medical and surgical histories) almost effortlessly (Javaid et al., 2024). Although the electronic medical records (EMRs) improve the retrieval and exchange of information between HCPs, it poses a severe threat of unauthorized access, disclosure of confidential information, and breach of patient's private data (Seh et al., 2020).

Common ethical issues associated with EMRs cover patient privacy and security breaches, autonomy, generosity, non-maleficence, sys-

tem operation, data imprecisions, and related accountability (Afzal & Arshad, 2021). Ethics in health information management (HIM) are also rooted in the principles of medical care: autonomy, beneficence, non-maleficence, and justice.

- Respect for Autonomy - Patients have the rights to control their personal health information, a fundamental right to privacy, and hence to control over the collection, storage, access, use, communication, manipulation, and disposition of their data.
- Beneficence – The physicians have to act in the best interest of patients, ensuring possible advantage outweighs the potential hazards.
- Justice and Equity – It mandates fair treatment to all and the equitable distribution of healthcare resources, including information. One needs to ensure that there is no prejudice or discrimination in data sharing (Varkey, 2020).
- Privacy and Confidentiality – Ethical concerns are raised when patient's health information is shared with third parties, whether big tech, pharmaceuticals, or insurance companies. With more technology companies entering into health care field, concerns over patient privacy are growing louder. Implementing robust data security, anonymization strategies to protect patient identity while permitting the proper use of data for innovation and research are necessary to strike a healthy balance (McGraw & Mandl, 2021).

j) Usage of artificial intelligence (AI) in healthcare. Integrating AI in healthcare represents a transformative shift with substantial potential for enhancing patient care. By harnessing AI's capabilities, healthcare systems stand on the brink of a paradigm shift characterized by enhanced diagnostic accuracy, personalized treatment strategies, and increased efficiency in healthcare delivery. In doing so, there are significant ethical, legal, and technological challenges, particularly w.r.t patient privacy, decision-making autonomy, data protection, data integrity and the risk of data breaches (Wang et al., 2022). Foremost among these is the need to safeguard patient

privacy in an environment where data are both a valuable resource and a potential for vulnerability (Williamson & Prybutok, 2024). Additionally, the increasing reliance on AI for decision-making in healthcare poses questions about maintaining human autonomy in medical decisions. There is also a need for adaptive regulatory frameworks and redefined patient consent processes to address the ethical, legal, and practical challenges (Reddy et al., 2019).

Bioethics and business ethics in corporate healthcare

Bioethics has conventionally dealt with individual moral dilemmas of contemporary medical practice, while business ethics has been concerned with how corporations can integrate an ethical perspective into business practices (Eiser et al., 1999). The bioethical tenets of autonomy, beneficence, and justice are often overwhelmed by the values of market competition and fiduciary accountability to capital investments. Organizations understand their fiduciary responsibilities differently than do professionals. Physicians have their responsibilities predominantly in terms of individual patients, whereas organizations are accountable to groups, populations, or parties representing those groups. The marketplace, by its very nature, is more likely to emphasize return on investment than augmentation of social goods. Corporate houses and pharmaceutical companies, particularly publicly traded for-profit ones, and privately-run hospitals and medical/paramedical colleges, have priorities that emphasize more on revenues and profits (Gray, 1986). Health care organizations manage care by a variety of mechanisms, including financial incentives and working around the regulations. "*No money, no mission*" is a business phrase that physicians are reluctantly learning in this era of cost consciousness and market competitiveness (Eiser et al., 1999). As medical practice becomes industrialized, physicians are challenged to understand business perspectives and work in the "re-engineered" medical milieu. At the same time, a fundamental recommitment to the moral nature of medical care will be needed in order to preserve the medical profession's fiduciary responsibility to its patients.

Conclusion

The physician-patient relationship is grounded in essential ethical principles, with a strong emphasis on impartiality, independence, and decisions made free from conflicts of interest. The responsibility of healthcare professionals is to not only diagnose and treat patients but also to consider the moral consequences of their actions. This includes fostering compassion, respecting patient autonomy, and prioritizing patients' best interests. Ethical dilemmas often require concerted problem-solving, with inputs from interdisciplinary teams comprising of experts from fields such as medicine, law, philosophy, and social sciences. The collaborative approaches to ethical problem-solving leveraged from interdisciplinary teams, bring diverse perspectives to the table, enriching the ethical analysis, stakeholder engagement, case studies, and reflective practice. Bioethics delves into the ethical implications of various cutting-edge developments in medicine, science, and technology. With ethical complexities and challenges emerging in modern medicine, bioethics seeks ways in which people in societies can work together under the provision of medical care and research (Yadavendu & Kumar, 2011).

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