Encyclopedia of Global Bioethics
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Medicine and Ethics

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Abstract

A new world has probably emerged through the progression of technology which has led to significant debates on social, cultural, legal, and ethical issues, especially in the biomedical field in this century. Application of physician-patient relationship, principles of pluralism, autonomy, democracy, human dignity, and human rights is being challenged within the medicine and health-care system of today. Development of technology-based remedies has fostered greater degrees of medicalization. Hence, the automatic application of such technologies risks distorting the nature of medicine. To be sure, there is a cultural shift that is affecting the society that is increasingly unable to adapt to traditional legal systems. This cultural shift, perhaps, demands new ethics. This entry aims to evaluate the gap between traditional deontological nature of medicine and the emerging new ethics and assess why bioethical reflection is needed.

Keywords

Medical ethics; Bioethics; Paradigm shift

Introduction

Medical doctors traditionally enjoy the highest respect among different professions in the world. However, rapid advancement of science and technology coupled with a lack of proper education in medical ethics has tended to deteriorate the standard of public health service. Malpractices and misconducts by medical practitioners are increasingly becoming of common public concern. Medical negligence is the third leading cause of death in the United States after heart disease and cancer. The cost of medical malpractice in the United States is $55.6 billion a year, which is 2.4 % of the annual health-care budget (US News and World Report 2010). A report of the United States Department of Health and Human Services in 2002 estimated the total cost of malpractice insurance to doctors to be $6.3 billion. The United Kingdom amended its National Health Service (NHS) Redress Act 2006 for funding medical malpractice compensation for the taxpayer physician (Bal 2009). Conversely, there are increasing tendencies of some doctors of rural government hospitals to remain in the capital city by taking a long leave from duties. As a consequence, villages, hilly and tribal areas, and urban slums are lacking in their presence. The tendency among some physicians for advising many investigations and even high technology is increasing exponentially (Lasker and Hossain 2009). A report said that doctors prescribe unnecessary tests or treatments to avoid lawsuits. Researchers of Harvard University and Brigham and

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Women's Hospital in Boston said that this protective medicine cannot prevent medical errors and unavoidable injuries (US News and World Report 2010). Unnecessary investigations not only are unethical and increase the cost of health care but also undermined the humanistic aspect of medicine. Therefore, the patients' disappointments are on the rise.

On the other hand, the physicians are constantly facing ethical dilemma in the choice of treatment and in the choice of the patients who should receive the available treatment, e.g., use of life support systems is significant. Sick patients are sometimes refused admission in public hospitals due to lack of beds. Many times doctors in these hospitals have to rely on the second or third line of therapy as the best may not be affordable for the patient. In some cases, health-care professionals face dilemma in having to operate to save the life of a criminal who had harmed several people. In some instances, health professionals countenance quandary while treating HIV/AIDS patients. Truth-telling, withdrawal of treatment, physician-assisted suicide, and euthanasia to terminally ill patients are common ethical dilemmas of physicians. In short, evolution of the patient-physician relationship characterized by the patient's rights has created conditions in which physicians now face challenges in their clinical practice. So, physicians are under stress in coping with this new situation (Lasker 2014).

This entry seeks to identify the gaps in traditional medicine and discusses what mechanism can be imposed to cope with this new situation.

History of Medical Ethics

In ancient time, the most famous Mesopotamian law, Babylonian Code of Hammurabi (1790 B.C.), attempted to regulate medicine and to protect patient's rights. The Code of Hammurabi description "If a surgeon performs a major operation on a nobleman with a bronze lancet and caused the death of this man, they shall cut off his hands" may be the first clearly outlined medical malpractice restrained by medical code (Halwani and Takrouri 2007 cited in Waber 2010). The Sassanian Persian's Encyclopedia (Dinkard) and Zoroastrian's holy book have mentioned the characteristics of a good physician (Zahedi et al. 2009). Certain ethical precepts were identified as ideals from Homer to Constantine the Great (ninth-century BC–fourth-century AD) and from Hippocrates to Galen (fifth-century BC–second-century AD). Although Hippocrates is usually known as the author of the texts of the Hippocratic Oath, there have been some doubts on this. The bases for doubting are that the medicine was practiced in the Hellenic World long before the time of Hippocrates. Many parts of the Hippocratic Oath were the reflection of Pythagorean rather than Hippocratic philosophy. The two major ancient medical schools, Cos and Cnidus, partook of the all-pervading philosophical climate of Plato and Aristotle. Nicomachus, doctor and father of Aristotle, was a student of the Cnidus school. Both Plato and Aristotle permitted abortion under certain circumstances, and only the Pythagoreans forbade it absolutely. Medical-assisted suicide, a widespread practice in antiquity, was also opposed only by the Pythagoreans. Therefore, the oath was considerably influenced by Pythagorean ideas and teaching, and some people believed it to have been written by a doctor in Pythagorean circles (Koios et al. 2012).

However, some 2,500 years ago, in the early third-century BC, Hippocrates included moral principles for the medical professionals to serve the patients which gain popularity to date. In early Christian religion, diseases were viewed as divine punishment or instruments to test a follower's faith, thus denying the natural origins of illnesses. Christian religion and the Hippocratic Oath were first criticized by the ideas introduced under the theological doctrine of Saint Augustine (340–430 AD). Later, Hippocratic values were well accepted and gained operational stage due to its moral principles. Christianity played an outstanding role to uphold the physician's moral authority, based on Hippocratic values, which persisted throughout the middle ages.

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The original Hippocratic Oaths contain the following: (1) a statement that the physician must pray to the Greek gods Apollo, Aesculapius, Hygeia, and Panacea as witnesses to his oath; (2) a statement the physician must accept the commitment, together with his master, to teach the art of medicine, free of cost, to the latter's children and other disciples taking the oath in the future; (3) moral principles prohibiting abortion, euthanasia, assisted suicide, surgery (remove kidney stone), and sexual relations with patients; and (4) the reaffirmation of the commitment and the opposite should the principles be violated. Ethos of Hippocratic Oath was the reflection of classical Hellenic society, which promoted a paternalistic attitude which made the physician the dominant party in deciding what was best for the patient. In fact, doctors in Greece care more for the well-being of their patients than for their rights. Beneficence, non-maleficence, and paternalistic idea express that physicians have the right to decide for their patients. Thus, physicians do not usually inform patients and sometimes even take major decisions for them without their informed consent. Emile Littrè wrote criticisms on the Hippocratic Oath in 1861. A significant revision of the of Hippocratic Oath appeared in 1948, when the newly organized World Medical Association (WMA) adopted the Geneva Declaration, a secular oath with no reference to religious tenets.

However, in this day and age, biomedical advances and changing social demands have raised a number of new moral questions and dilemmas for which the traditional ethical guidelines laid down in the Hippocratic Corpus are no longer adequate. Such include the demand to legalize abortion in terms of maternal health, organ transplant, definition of brain death, artificial fertilization, euthanasia, stem cell research, and dilemma in who should receive new technology. In 1994, Beauchamp and Childress adapted the theory of prima facie principles developed by Ross, e.g., justice, non-maleficence, and beneficence, and proposed that these principles were not mandatory or absolute but flexible under specific circumstances. However, principles of non-maleficence and beneficence adopted from Hippocratic Oath, where the justice from Rawls theory (de Almeida and Schramm 1999).

From the eighteenth to the nineteenth century, different types of human rights were developed, e.g., civil, political, economic, social, cultural, and ecological rights. In addition, after the World War II, with regard to abuses in scientific experimentation on human beings, respect to patient gets importance, e.g., autonomy, informed consent, and privacy. Autonomy is one of the most powerful driving social forces in modern medicine. Free and informed consent has been considered the cause of the greatest changes occurring in the physician-patient relationship. In 1995, Pellegrino said that autonomy gives the medical ethics in to modern essence and he termed "metamorphosis of medical ethics." However, he emphasized that in conflict between principles, principles of justice and non-maleficence give priority over beneficence and autonomy which affirms the superiority of the common good (Pellegrino 1995 cited in de Almeida and Schramm 1999). The medical profession has therefore come to realize that clinical practice is not merely an applied natural science but clinical decisions always entail value judgments. The results of these new ethics are that the contemporary clinicians can now speak not only for cure and survival but also for quality of life for their patients.

Global Changes in Health-Care System

Professional deontology is still emphasized in medicine in most of the countries in the world. Since the 1960s, in Northern European and in North American countries, medical ethics has been progressively restructured. At the end of the 1960s, patient-physician relationship has been developed by the application of the patients' rights within the field of medicine. This process significantly abolished the hitherto paternalistic tendency of medicine and thereby fostered a more autonomous or adult relationship between the patient and physician. However, it raised the risks for more conflicts within the relationship. Nowadays, clinical decisions thus increasingly involve questions such as personhood, quality and sanctity

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of life, best interests, resource allocation, pluralism, autonomy, democracy, and human rights which shape the meaning of life, suffering, and death which strictly go beyond the medical horizon. It also generates new fundamental questions about the origin of life, structure, potential, limits, and end of life of human beings.

Moreover, due to the application of technology, medical possibility has increased. The critical aspect connected with this particular situation is also evident. Increased possibility reinforces diagnostic, therapeutic, and rehabilitative resources and makes them more accessible. This again shapes medicalization of certain clinical regimen including euthanasia, physician-assisted suicide, and stem cell therapy. However, the automatic application of such technologies risks distorting the nature and the normative intrinsic value of medicine, such as prevention, diagnosis, therapy, and rehabilitation.

Consequently, there is a new demand for ethics for an ever-increasing range of health-care professionals. The intention of this ever-increasing network is to allow an increasingly personalized response to the needs of each patient. Personalized response to each patient creates a new demand for ethics in the health-care system. But there is a real risk as there would be fragmentation of the medical approach and conflict between different ethico-professional sensibilities (Viafora 1999).

The process of reordering health-care systems to cope with scarce resources is another element. As this scarcity forces reorganization on the basis of an analysis of the priorities, it becomes increasingly vital to determine the ethical criteria on which such analysis will be based. Reordering health-care systems to deal with inadequate resources also demands new ethics. In dealing with this, bioethics represents an attempt to provide answers that traditional medical ethics is unable to do (Viafora 1999). Therefore, intrinsic morality or deontological norm of medical care (such as standards and code of conduct) is being challenged by the values, norms, and rules prevailing in social, cultural, and religious traditions as external determinants of medicine. In this regard, bioethics can offer a bridge between adherence to code of conduct of medicine and a critical view of health-care practice. This shows that while medical ethics is primarily patient-oriented, bioethics is substantially society-oriented.

Ethics Versus Bioethics

Ethics means moral values, norms, and attitudes. It is a list of principles or rules to determine which behaviors are good and acceptable and which are bad. Medical ethics therefore deals with moral values which guide the members of the medical profession in their practice and in their relationship with the patients and other members of the professionals. Codification of medical conduct is exclusively for the competence of physicians. Indeed, one could say that medical ethics was the ethics of physicians (ten Have 2005; Engelhardt 1996).

Bioethics, on the other hand, defines rights, responsibilities, justices, and moral interactions toward the living beings. The simplest definition of bioethics is the ethical issues raised by questions involving life (Macer 2006). It teaches how to balance different benefits, risks, and duties which entails moral reflection on societal changes and to balance the risk and benefit brought about by scientific and technological developments (ten Have 2005). Bioethics includes medical ethics, environmental ethics, animal ethics, research ethics, etc. and ethical, legal, and social issues arising from biotechnology and medicine. The most dominant approach to bioethical issues is the four principles. These are respect for the person, non-maleficence, beneficence, and justice.

Bioethics emerged as an independent discipline of academic in the 1970s in the United States due to the increased complexity of medical advances. Van Rensselaer Potter proposed the theory of bioethics for preventing possible threats in life especially in humans. It soon acquired meanings distinct from traditional medical ethics which encompassed the code of conduct that pointed out the physician's duty

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to the patient's life and their welfare. However, the main focus of bioethics is justice, fundamentally utilitarian to maximize total human happiness (ten Have 2005). Since its inception, the field has grown exponentially in its scope and importance. Today, 80 % of the medical centers in the United States have bioethics department. Many hospitals are now employing bioethics experts to guide on issues such as allocation of scarce resources, how to care for terminally ill patients, and dilemmas that doctors are facing everyday for the advancement of new technology. Over 95 % of hospitals have ethics committees to help physicians, nurses, and families on bioethical issues on a case-by-case basis (de Almeida and Schramm 1999). Thus, bioethics has not only become a reasoned discourse but a matter of crisis management.

Bioethics questions what should be done. For instance, transplant of organs raises debates in public. Should a person be kept alive solely through the use of machines? The use of genetic engineering enables us to determine what type of child a couple will have, but does that mean we actually should take such actions? Also, cloning of Dolly the sheep questions human dignity. These examples further show that bioethics consists of critical reflections on the moral dimensions in health care and medical science.

Serving the patient even with rigor medical technique till death even though there is no chance of recovering is the physician's moral obligation as the Hippocratic Oath says. Another argues that to relieve pain is the physician's ethical obligation even if the patient dies. How to resolve this dilemma of the physician according to the "do no harm" principle is a real question. Jonsen (2000) argues that the exhortation against taking on desperate cases, far from endorsing the abandonment of dying patients, was in fact a judicious caution against futile therapy. He also observes that Eastern and Western cultures shared similar ethical precepts, in contrast to the modern view that medical ethics is culture-specific (Jonsen 2000). Today's bioethics is enriched by a conceptual framework that goes beyond decorum and deontology and that takes the patient's perspective as its starting point. Modern bioethics reformulates the fundamental moral problem as a problem for society, rather than merely one of professional self-regulation.

Some scholars regard bioethics as the love of life (Macer 2006). Applied to human heritage, the concept of the love of life is probably thousands of years old and may be defined as the concept of love, balancing benefits, and risks of choices and decisions. Some of the relevant questions in this regard include the following: "What food should we eat? How is the food grown? Where should I live and how much disturbance of nature should I make? What relationships should I have with fellow organisms including human beings? How do I balance the quality of my life with development of love of my life, other's lives, and the community?" We have the power to remodel whole ecosystems of the planets, but the fundamental way of reasoning of people making decisions is to balance doing good against doing harm. We could group these ideals under the idea of love, though the question of benefits for whom and harm to whom is central to deciding whether an action is one of love or not. One of the underlying philosophical ideas of society is to pursue progress. The most common justification for this is the pursuit of improved medicines and health, which entails doing good. According to this stance, failure to attempt to do good is therefore a form of doing harm, the sin of omission. This is the principle of beneficence.

Medical Ethics Education

Generally in Asia, medical ethics is taught in the 3rd year of the MBBS course and 2nd year of the BDS course at the department Forensic Medicine and Preventive Dental Medicine, respectively, in all medical and dental schools. A half or a unit course in ethics is taught in the 4th year in the department of clinical pharmacy and pharmacology and department of pharmaceutical technology. However, nurses read ethics from the 1st year to the end of the course. Like the United States, only 1 % of the medical curriculum

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comprises the bioethics education in almost all part of the world. A survey in 2004 shows that 20 % of the medical schools in the United States and Canada did not finance for teaching ethics.

However, in the past, Asian countries, in general, had an informal method of learning and practicing other aspects of medical ethics and professional code of conduct through discussion in the clinical classes. Medical students were also encouraged to respect patient's rights and to be aware of the moral and ethical responsibilities involved in patient care. Students learned ethics and etiquette by following their teachers as role models. But nowadays, the above approach is replaced by classroom lectures only like the other countries of the world. This may be due to the introduction of larger numbers of medical students in a class and emergence of private medical schools. The main problem in the teaching of ethics is that teachers may have little knowledge about medical ethics and medical etiquette as well as medical code of conduct.

In addition they are engaged in finishing the syllabus rather than allowing the student to devote much time on the issue of medical ethics. However, students also do not have much interest in learning about medical ethics as they consider other subjects and other parts of forensic medicine as more important for qualifying the examination. Professional conduct and etiquette are learned by observation from senior doctors rather than reading of books. The students rarely find a role model among their teachers for ethical practice (ten Have 2014; Lasker and Hossain 2009).

Bioethics not only deals with the code of conduct and clinical problems but also deals with the power of science and technology. How an individual patient and citizen are empowered to choose a treatment and intervention that will benefit them and not harm them. Therefore, bioethics education is needed. With globalization, doctors and patients alike are moving around to different parts of the world. It becomes common that physicians may have to provide medical services to patients with ethical precepts which are different from that of their own. Physicians need to be sensitive to this diversity and avoid a stereotyped approach to religious patients. Moreover, the demand for health research is constantly increasing and international collaboration is growing rapidly. Clinical trials become now the global industry and offshore to developing country. Currently 40–55 % of clinical researches are conducted outside the United States. In addition to drugs, health-care devices are being developed elsewhere in the world. Teaching of bioethics education can accommodate these issues (ten Have 2014).

Conclusion

There has been an evolution in the concept and application of ethics to medical issues. Traditional medical ethics has morphed into bioethics largely in response to political, social, and technological challenges. The specific nature of these issues in different regions of the world will therefore shape particular kinds of ethics and account for variations. Nevertheless, there is a general gap between the deontological norm of medicine and the radical nature of the new demand of bioethics. The biomedical field has therefore become the place where the various moral approaches present in our pluralistic society are most directly confronted. In dealing with this new demand, bioethics is needed in medical curriculum as physicians and other health professionals inevitably require bioethical know-how as an adjunct to their professional skills and as a tool with which to have meaningful dialogue with larger societal issues.

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Cross-References

- ▶ Bioethics Education
- ▶ End of Life Issue
- ▶ Surrogacy
- ▶ Transplantation Ethics

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Further Readings

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