

## Introduction to Bioethics

### Gade S.

FAIMER fellow,  
Assistant Professor, Department of Physiology,  
NKP Salve institute of Medical sciences & Research Centre Nagpur Maharashtra India

Email: shubhagade@gmail.com

#### Abstract:

In recent decades medical education curricula have undergone many modifications for a variety of reasons. In spite of these changes, ethics education has not received adequate attention in medical schools throughout the world. There is an emerging need for introduction of teaching medical ethics as a consequence of several social and scientific reasons.

Bioethics has brought about significant changes in standards for the treatment of the sick and for the conduct of research. The bioethical issues being addressed are numerous to count, but the flavor of bioethics in the early twenty-first century can be conveyed by an exploration of the bioethical implications of genetic research, health care access reform, and stem cell research.

The International Center for Health, Law and Ethics at the University of Haifa has initiated an international project, the aim of which is to form a new, modern curriculum of medical ethics to be taught in medical schools all over the world. The need for a modernized curriculum derives not only from the fact that many of the existent curricula are antiquated and completely out of tune with the intricacies of recent scientific developments, but also from the safeguards which we require in the form of educational innovations which will inculcate ethical values in our students, in spite of this materialistic age in which we live.

**Key words:** bioethical issues, principles of bioethics, nature and scope, modernized curriculum

Medicine is one the time honored professions that had a preexisting code of behavior for its practitioners dating as far as the vedic and Hippocratic era. The doctor patient relationship which was fiduciary and paternalistic, since time immemorial has changed. In addition rising cost of medical care, advances in medical sciences and technology pose new ethical dilemmas for a practicing physician.

The ethical principles emphasize the clinician's dual contract to patient and society. Increased complexity for caring of patients in a consumer – satisfaction oriented society necessitates learning of ethically driven decision process and today Bioethics is at the centre stage of medical education.

"Bioethics" has been used in the last twenty years to describe the investigation and a study of ways in which decisions in medicine and science touch upon our health and lives and upon our society and environment. Bioethics involves issues relating to the beginning and end of human life, all the way from issues relating to in-vitro fertilisation and abortion to euthanasia and palliative care. Bioethics has an impact on every level of human community from the local nursing home to the huge international conferences on issues like the Human Genome(1).

The term Bioethics (Greek bios, life; ethos, behavior) was coined in 1926 by Fritz Jahr, who "anticipated many of the arguments and discussions now current in biological research involving animals. Many religious communities have their own histories

of inquiry into bioethical issues and have developed rules and guidelines on how to deal with these issues from within the viewpoint of their respective faiths.

#### Defining Bioethics:

##### Medical Definition of Bioethics:

*"The discipline dealing with the ethical implications of biological research and applications especially in medicine. Bioethics includes the study of what is right and wrong in new discoveries and techniques in biology, such as genetic engineering and the transplantation of organs."*

New medicines, biomedical procedures, and ways of altering plants and animals are bringing benefits to millions of people. However, these same innovations also have the potential to bring harms or to raise other kinds of ethical questions about their appropriate use.

Bioethics looks at "what should be done" when dealing with or taking care of people and other living creatures. Bioethics looks at questions about values and what matters in medicine, biological research, care of people who cannot speak up for themselves (the severely mentally ill, small children, prisoners) and similar topics. The word is made up of two parts: "bio" (from the Greek word for "life") and "ethics", so it is the study of ethics as it relates to living things.

It involves not just doctors, but patients, not just scientists and politicians but the general public. Bioethics is also concerned with questions about

basic human values such as the rights to life and health, and the rightness or wrongness of certain developments in healthcare institutions, life technology, medicine, the health professions and about society's responsibility for the life and health of its members.

### **Bioethics Principles:**

Early founders of bioethics put forth four principles which form the framework for moral reasoning.

- **Nonmaleficence** - One should avoid causing harm. The healthcare professional should not harm the patient. All treatment involves some harm, even if minimal, but the harm should not be disproportionate to the benefits of treatment.
- **Justice** - Benefits and risks should be fairly distributed. The notion that patients in similar positions should be treated in a similar manner.
- **Beneficence** - One should take positive steps to help others. Considers the balancing of benefits of treatment against the risks and costs; the healthcare professional should act in a way that benefits the patient
- **Autonomy** - one should respect the right of individuals to make their own decisions by respecting the decision making capacities of autonomous persons; enabling individuals to make reasoned informed choices.

These 'Four Principles' have been one of the most widely discussed issues in Biomedical Ethics with arguments for and against them. The authors' claim has been tested by research conducted in different cultures and societies(2).

### **Why do we need bioethics?**

Bioethics understood and practiced along the lines of Socratic conception is needed to improve medical decision making by health care staff, in teaching in medical schools and for personal developments.

This thesis is based on two assumptions:

- 1) we are all affected directly or indirectly by decisions in and concerning health care and medical research,
- 2) there is room for improvement of these decisions from an ethical point of view.(3)

In recent decades medical education curricula have undergone many modifications for a variety of reasons. In spite of these changes, ethics education has not received adequate attention in medical schools throughout the world. There is an emerging need for introduction of teaching medical ethics as a consequence of several social and scientific processes:

- Health-care consumers emphasize nowadays not only the need for health but the need for quality

of life. Patients expect professionalism, effectiveness and quality, along with empathy, reliability and devotion.

- Health-care providers are detached from traditional concepts of idealistic medicine, adopting a contractual and consumer paradigm.
- Medical technology has created new dilemmas (e.g. procreation, euthanasia, intensive care, medical genetics and bio-technology), while at the same time causing previous ethical resolutions to become obsolete (e.g. definition of death, family composition).
- Specialization and sub-specialization in medicine have encouraged technicality at the expense of patient-physician relationship and communication skills, thus creating a growing gap between physicians and their patients and between medicine and society at large.
- Growing social concern, suspicion and demand for closer inspection on medical activities is filling this gap. The demand has materialized in the form of ample litigation, increased health-related legislation and formulation of international declarations, conventions, charters etc., creating new ethical and legal frameworks and new obligations for the practicing physician.
- The need to adhere to ethical norms in scientific research and experimentation (human cloning, pharmacology etc.) remains a constant challenge.

### **Nature and Scope of Bioethics**

At the core of bioethics are questions about medical professionalism, such as: What are the obligations of physicians to their patients? and What are the virtues of the "good doctor"? Bioethics explores critical issues in clinical and research medicine, including truth telling, informed consent, confidentiality, end-of-life care, conflict of interest, nonabandonment, euthanasia, substituted judgment, rationing of and access to health care, and the withdrawal and withholding of care. Only minimally affected by advances in technology and science, these core bioethical concerns remain the so-called bread-and-butter issues of the field.

The second mission of bioethics is to enable ethical reflection to keep pace with scientific and medical breakthroughs. With each new technology or medical breakthrough, the public finds itself in uncharted ethical terrain it does not know how to navigate. In the twenty-first century—what is very likely to be the "century of biology"—there will be a constant stream of moral quandaries as scientific reach exceeds ethical grasp. As a response to these monumental strides in science and technology, the scope of bioethics has expanded to include the ethical questions raised by the Human Genome Project, stem cell research, artificial reproductive technologies, the

genetic engineering of plants and animals, the synthesis of new life-forms, the possibility of successful reproductive cloning, preimplantation genetic diagnosis, nanotechnology, and xenotransplantation — to name only some of the key advances.

Bioethics has also begun to engage with the challenges posed by delivering care in underdeveloped nations. Whose moral standards should govern the conduct of research to find therapies or preventive vaccines useful against malaria, HIV, or Ebola—local standards or Western principles? And to what extent is manipulation or even coercion justified in pursuing such goals as the reduction of risks to health care in children or the advancement of national security? This population-based focus raises new sorts of ethical challenges both for health care providers who seek to improve overall health indicators in populations and for researchers who are trying to conduct research against fatal diseases that are at epidemic levels in some parts of the world (4).

### **Current Issues in the Field: Bioethics in the Early Twenty-First Century**

The bioethical issues being addressed by the field are too numerous to count, but the flavor of bioethics in the early twenty-first century can be conveyed by an exploration of the bioethical implications of genetic research, health care access reform, and stem cell research, arguably the most pressing issue in the field to date.

Advances in the science of genetics, including the Human Genome Project and the ability to find genetic markers for particular diseases, have raised difficult ethical dilemmas. Two of the most pressing issues are preimplantation genetic diagnosis and the genetic testing of adults. With the technology to identify inherited diseases in the early embryo comes questions about which embryos ought to be implanted, which diseases constitute a legitimate moral reason to discard an embryo or become the criterion for embryo selection, which traits ought parents be allowed to select or test for, and who ought to have access to this technology and on what grounds. For example, while there might be widespread support for testing embryos that might carry the trait for Tay-Sachs disease or cystic fibrosis, there are troubling questions about selecting embryos on the basis of sex, nonlethal trisomes (such as Down's syndrome), or aesthetic or character traits that technology may someday be able to screen for. In adult medicine, genetic tests already exist to detect mutations leading to some forms of inherited breast cancer and to Huntington's disease. Here, questions arise about privacy of health care information, psychological impact, stigmatization, lack of informed consent, health insurance access, and

familial disclosure. With the advent of commercial genetic testing centers, patients will soon have easy access to genetic tests independent of the practice of clinical medicine, without the benefit of genetic counseling services, professional psychological support, or adequate, and possibly accurate, clinical information. The Internet, for example, will likely bring universal access to any genetic test as it becomes available (5)

### **What is its Impact?**

Bioethics has brought about significant changes in standards for the treatment of the sick and for the conduct of research. Every health care professional now understands that patients have a right to know what is being done to them, and to refuse. Every researcher now understands that participants in their studies have the same rights, and review boards to evaluate proposed research on those grounds are almost universal. (5)

It would appear that the more time is spent on the teaching of ethics, the longer it stretches over the whole course of the students in medicine, the better the results should be. However, even if such a recommendation is universally accepted, it will not be strong enough to challenge and eliminate the problem of ineffectual teaching methods which are crying out for modernization and radical reform.

### **The new curriculum.**

A medical ethics curriculum ought to reflect the changing faces of medicine and should govern the following fields, each having multiple sub-categories, with varying ramifications:

- A. The relationship between health-care providers and their patients.
- B. The choice of medical intervention for the individual patient.
- C. The choice of public health interventions.
- D. The evaluation of effects of health-care interventions.
- E. The collaboration between teams engaged in health care activities.
- F. The choice of goals and methods of medical research.

The International Center for Health, Law and Ethics at the University of Haifa has initiated an international project, the aim of which is to form a new, modern curriculum of medical ethics to be taught in medical schools all over the world. The need for a modernized curriculum derives not only from the fact that many of the existent curricula are antiquated and completely out of tune with the intricacies of recent scientific developments, but also from the safeguards which we require in the form of

educational innovations which will inseminate ethical values in our students, in spite of this materialistic age in which we live. The UNESCO Chair adopted the idea and undertook the mission.

**References:**

1. What is bioethics. online article [cited 2015 august 2] available from <http://www.bioethics.org.au/Resources/Bioethical%20Issues.html>.
2. Bioethics: Basic definition & principles- disabled World [cited 2015 august 2] available from <http://www.disabled-world.com/definitions/bioethics.php>
3. teaching Bioethics. Report from a seminar. November 2001. [cited 2015 august 20] available from Bioethics. [cited 2015 august 20] available from [\[http://www.encyclopedia.com/topic/bioethics.aspx](http://www.encyclopedia.com/topic/bioethics.aspx)
4. What is Bioethics [cited 2015 august 20] available from <http://www.bioethics.msu.edu/what-is-bioethics>
5. What is Bioethics [cited 2015 august 20] available from <http://www.bioethics.msu.edu/what-is-bioethics>.