



Importance of Biomedical Ethics in Medical Education

KEYWORDS

Bioethics, Medical Education, Hidden curriculum.

Dr.V. Prabha

Associate professor, Department of Physiology, Chamarajanagar Institute of Medical Sciences, Chamarajanagar, Karnataka, India. Corresponding Author

Dr.A.Meriton Stanly

Professor, Department of community Medicine, Sri Ramachandra Medical college, Porur, Chennai- 600125

ABSTRACT *Importance of biomedical ethics in medical education*

We are living in the time of technological advances; which enable us to envisage the possibilities of human cloning and designer organs, which was only dreamed of. In the light of these developments we are confronting questions and challenges never faced before by the human race.

Medical ethics has existed since the time of Hippocrates. However, formal training in bioethics has not established till today. Biomedical Ethics and Medical Humanities is a foundation area which explores the moral, social, and humanistic dimensions of medicine and biomedical sciences. Inculcation of moral values to promote humanistic skills and professional conduct in physicians is not taught in a medical school nor assessed. There is still no structured content for undergraduate medical ethics education, & significant debate on methods learning and teaching methods. Assessment methods also remain contentious.

Ethics education is aimed at teaching the cognitive and behavioral aspects of ethics for the purpose of improving the quality of care in terms of both the process and outcome of care. For the good practice of medicine inevitably raises both ethical and legal issues and demands an understanding of both. The major goal of medical education in ethics and humanities is to promote humanistic skills and professional conduct in physicians. Implementation of a comprehensive medical ethics and humanities curriculum in medical school is essentially required for professional development in medicine.

INTRODUCTION

Medical ethics has existed since the time of Hippocrates. However, formal training in bioethics has not established till today. Bioethics has gained a strong foothold in health sciences in the developed world. Biomedical Ethics and Medical Humanities is a foundation area which explores the moral, social, and humanistic dimensions of medicine and biomedical sciences. Medical education organizations require medical ethics and humanities education to develop professionalism in medical learners. In medical education, how these disciplines should be integrated with one another, and how best they could be integrated into undergraduate and graduate medical education? The major goal of medical education in ethics and humanities is to promote humanistic skills and professional conduct in physicians. Patient-centered skills enable learners to become medical professionals, whereas critical thinking skills assist learners to critically appraise the concept and implementation of medical professionalism. Implementation of a comprehensive medical ethics and humanities curriculum in medical school is essentially required for professional development in medicine.

Knowledge, Skill & Attitude is the three main domains of medical education. We assess the first two domains in summative assessment. But are we evaluating our professionals for the attitude; the way they act & react with the patients. The so called "Hidden curriculum," are we evaluating it? The answer is no! It doesn't stop with only dress code, discipline, sincerity, attendance, maintenance of class notes & records.

Bioethics:

- Science that studies the ethical issues pertaining to the life sciences, including health care, medicine, genetics, Etc.,
- Investigates the conflicts created when a decision is taken in relation to a medical practice.
- Introduces the methods that attempt to introduce students to the main problems and dilemmas that physicians and nurses face when caring for patients.
- Established in 1979 by an eleven member National Commission with three bioethical principles in mind:

Autonomy refers to the right of individuals to make their own decisions.

Beneficence addresses the development of attitudes to help others.

Justice deals with the fairly distribution of medical resources based on medical needs.

PURPOSE

Inculcation of moral values starts from the cradle. Bioethics is an important consideration for teachers because students:

1. want to know about the world around them
2. are experiencing self-discovery, which includes questioning issues
3. need to hone their critical thinking skills

Adolescents are passionately interested in ethical questions suggesting adolescence may be a critical period for

including bioethics in science education.

"Men are neither angels nor devils; that makes morality both necessary and possible."

E.g. Human genome project predict that will determine the genetic causes of human disease which is coupled with high economic & social costs of disease.

Do we need to teach bioethics?

Plato asked a form of this question more than two thousand years ago "Is ethics taught, inherited or passed on by some other mechanism? Does ethics need to be taught?" Experts have studied how we learn ethical concepts and behavior and what roles nature and nurture play in the process (figure 1). Their hypothesis doesn't always agree.

Some believe that ethics are learned by observation:

Hypothesis 1: Nature is more influential than nurture.

Some believe that ethics need to be reinforced by instruction:

Hypothesis 2: Nurture is more influential than nature.

Some believe that observation is balanced by instruction:

Hypothesis 3: Nature and nurture interact in sequential stages.

Some believe there is a critical window of opportunity through which we learn bioethics:

Hypothesis 4: Nurture interacts with nature at the critical window stage.

E.g. "lazy eye." If the human brain fails to receive input from both eyes before about the age of five years, the information from the eye with very poor vision is permanently ignored even after corrective surgery or lenses.



DISCUSSION

We are living in a time of increasing complexity; technological advances enable us to envisage the possibilities of human cloning and designer organs, which was only dreamed of. In the light of these developments we are confronting questions and challenges never faced before by the human race. Yet, somewhat paradoxically, it is the perception that many people remain very certain about their judgments of what is right and wrong. The observations relating to this question have led to a further conclusion; many cases people seem to arrive at their convictions only as an activity of *personal judgment* based on limited information and or misinformation. "If one can argue as to tell that they are right or wrong?" it seems that no other standard of rightness or wrongness is allowed or needed

than the standard of *private choice*. There comes an approach to moral decision making. Alternatively, on assumption that we were *totally incapable of deciding for ourselves what was good or right?* Acting in the "right" way depends on "seeing a right." *We act according to the way we see things.* All of our decisions and stands involve, whether consciously or unconsciously, a set of values and attitudes regarding what are most important.

The General Medical Council has stated that medical ethics and law should constitute one of the core components of the medical curriculum (1). The practice of good medicine inevitably raises both ethical and legal issues and demands an understanding of both.

A national expert panel of educators representing the various disciplines of ethics, history, literature, and the visual arts, was tasked with describing the major pedagogical goals of art, ethics, history, and literature in medical education, how these disciplines should be integrated with one another in medical education, and how best they could be integrated into undergraduate and graduate medical education. Implementation of a comprehensive medical ethics and humanities curriculum in medical school and residency requires clear direction and academic support and should be based on clear goals and objectives that can be reliably assessed.

According to Potter, bioethics is "the application of ethics to all of life" [3]. In the developed world education in ethics is no longer a "hidden curriculum" [4] that is passively passed to medical students during their training. Ethics education is aimed at teaching the cognitive and behavioral aspects of ethics for the purpose of improving the quality of care in terms of both the process and outcome of care. It enhances the student's ability to integrate the technical and moral components of the decision making process in clinical practice [5]. Those who have undergone bioethics training in the developed world and have become pioneers in their institutions have an awesome responsibility of establishing credible training agenda for their countries [6-9].

As individual's needs & expectations change, societies must be prepared to change. *Bioethics instruction must assist students in distinguishing between fact and opinion.*

What skills and characteristics in physicians are necessary for them to practice good medicine?

Familiarity with medical law is crucial. Knowledge of the health care delivery system is vital. Physicians should be aware of current health policies and legislation. Bioethicists can also introduce physicians to medical humanities. Physicians should be wary of conflict-of-interest situations.

CONCLUSION

It is felt that there is a need to teach ethics at the Undergraduate level requesting Medical Council of India to implement as a part of curriculum to impart as preliminary knowledge to create an awareness among student population.

Bioethics education should be mandatory for medical students and physicians.

Lacunae in implementation of Bioethics:

Bioethics curricula lack national standards: Barrier to bioethics implementation throughout medical curricula is that there is substantial variation in the quantity and quality of

curriculum. It is fairly new and remains underfunded; less effort has been expended in developing programs than in other aspects of medical education.

Even in institutions where bioethics is already part of the medical curriculum, it is unlikely that there are enough bioethics teachers. In this regard, efforts should be made to international agencies for fund training of developing world bioethicists.

REFERENCE

1. General Medical Council. Tomorrow's doctors. London: General Medical Council 1993;14,26.
2. Tangwa GB: Globalisation or westernisation? Ethical concerns in the whole bio-business. *Bioethics* 1999, 13(3&4):218-226. PubMed Abstract | Publisher Full Text
3. Potter VR: What does bioethics mean? In *The AG Bioethics Forum* 1998, 8(1):2-3.
4. Hafferty FW, Franks R: The hidden curriculum, ethics teaching and the structure of medical education.
5. Pellegrino ED, Siegler M, Singer PA: Teaching clinical ethics. *J Clin Ethics* 1990, 1(3):175-80.
6. Howe KR: Medical students' evaluations of different levels of medical ethics teaching: implications for curricula. *Med Educ* 1987, 21(4):340-9.
7. Oluokoya AA: Attitudes of medical students to medical ethics in their curriculum. *Med Educ* 1983, 17(2):83-6.
8. Price J, Price D, Williams G, Hoffenberg R: Changes in medical student attitudes as they progress through a medical course. *J Med Ethics* 1998, 24(2):110-7.
9. Delaney B, Kean L: Attitudes of medical students to the teaching of medical ethics. *Med Educ* 1988, 22(1):8-10.