**BIOETHICS THROUGH THE LENS OF MEDICAL STUDENTS**

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ABSTRACT

The policies in health care systems in India are ever changing. Medical students are not equipped to tackle the ethical dilemmas they encounter. Inclusion of ethics in medical education is the need of hour. The concept and understanding of bioethics in 206 undergraduate students were assessed using open and close ended questionnaire. It was seen that though they had a brief orientation; ethical dilemmas still persisted in many situations. Especially ethics in research necessitated a special consideration. Lack of good doctor patient communication is one of the main reasons for ethical erosion and reduced empathy in clinical practice. Majority of the students believe that introduction of ethics in medical education will definitely help them improve these skills in their clinical practice. We strongly recommend integration of all the spheres of ethics vertically throughout the five years of medical schooling.

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INTRODUCTION:

Bioethics, though a modern term, is as old as medicine itself. Biomedical ethics, commonly called ‘Bioethics’ is the study of the typically controversial ethical issues emerging from new situations and possibilities brought about by advances in biology and medicine. It includes moral discernment as it relates to medical policy and practice.

Bioethics education is essential for medical practice in today’s world as medical policies and patient-rights legislations are ever changing. The healthcare systems also function differently today as compared to a few years before; clinical practice nowadays involves decision-making about many new issues such as dealing with the increasing complexity of caring for patients and making difficult choices that new technologies demand. However, it also encompasses often experienced, less-visible but more common issues such as ensuring patient self-determination and proper informed consent for medical procedures, end-of-life decision-making, research ethics, reproductive medicine, and managed care and related economic issues. In order to provide medical care in an ethical and humane way, physicians need to be better educated about specific aspects of ethical medical practice and taught to think critically about the increasingly complex world of medical practice.

Medical students are not appropriately equipped to the ethical dilemmas they encounter. Routine bioethics education for medical students and resident students in the early years would be beneficial1, and Continuing Medical Education for practicing doctors is the best way to accomplish this goal.

AIM: To evaluate the knowledge of medical students regarding bioethics.

OBJECTIVES:

1. To know the level of sensitization of bioethics in medical students.
2. To understand student perception of ethics and the value of ethical education.
3. To revise existing methodology regarding ethical education for a better future.
4. To inculcate ethical values across medical personnel.

METHODOLOGY:

Type of study: Cross-sectional study

Duration of study: 2 months

Study population: Undergraduate medical students studying in a tertiary care teaching hospital.

Selection criteria: Medical students of 3rd year part I & II were selected as they have regular exposure to hospital patients during clinic hours and are often subjected to bioethical dilemmas.

Sample size: 206 students

Study design:A questionnaire-based study that was ethically approved by the institutional review committee was carried out at a tertiary care teaching hospital. 206 consenting responses of 3rd year part I and II medical students were collected. A self-administered validated questionnaire was used which contained open and close-ended questions to assess their knowledge and attitude towards bioethics.

RESULTS:

*Familiarity and Concept of Bioethics*

The study had participation of 206 students, enrolled in third MBBS part I and II. Out of them 68% were familiar with the term ‘Bioethics’ and 41% had discussed Bioethics in the class. 97% students felt that Bioethics is just a common sense or has nothing to do with developing doctor skills in practice. Some even felt that it prevents the doctors from being sued.

Most of them considered medical ethics as an important part of medical profession.39% felt that ethics education will help them take appropriate decisions in difficult situations whereas,16% felt that it would help in identification and management of conflicts. Eight students also felt that it would help them gain popularity.

*Ethical principles*

Various ethical principles such as autonomy, veracity, justice, fidelity, beneficence were assessed. Ethical dilemmas still exist in majority of the students.

*Medical student predicament*

Students face many problems during their training period such as withholding the truth from the patients, not admitting their mistakes to the patients, omitting salient facts from patients, for fears of repercussion. Some students have issues with setting professional boundaries and defining limits of a doctor’s compassion.

*Doctor patient relationship*

70% students considered empathy as an important part in clinical practice and also admitted that there is ethical erosion in practice nowadays. The main reasons for ethical erosion according to them being, a money making mind-set of doctors (32%) and lack of good doctor –patient communication (27%). Eleven students felt that overwork for doctors is also one of the reasons for ethical erosion.

35% students felt that bioethics can help improve the problem solving skills of a doctor. Students believe that better training, improving the knowledge base and good working conditions, as well as increasing the duration of doctor-patient communication time are some measures to improve empathy in clinical practices.

*Social media ethics*

Most students agreed that social media in medical education is very useful, but 55% of them were unaware of a number of ethical, legal and professional issues.

*Medical research and ethics*

Majority (89%) of the students were unaware of the principles of ethics in medical research. Almost all were lacking detailed knowledge regarding ethics in medical research.

DISCUSSION:

Fritz Jahr coined the term bioethics in 1926. The American biochemist Van Rensellaer Potter popularized the term, using it to indicate “global ethics” – technological advances which had helped protect the environment and all species linked to an ethical value system.

There are three broad spheres of bioethics. The first is academic which primarily focuses on how theoretical and practical aspects of medicine affect a patient.The second, is public policy and law; bioethics involving regulation of clinical and research practices. The third sphere is clinical ethics, which is directly related to how the incorporation of bioethics in clinical practice can improve patient care.The objective of teaching bioethics is not to create bioethicists, but to equip medical graduates with adequate reasoning skills to be able to identify ethical dilemmas as they occur in their practices as well as to attempt a judicious resolution using the knowledge and experience imparted during their training years.

Doctors should have a working knowledge of medical law and should understand the social and institutional aspects of healthcare delivery.In India currently there are large numbers of bioethics units. Major medical organizations such as the Indian Medical Association, the National Board of Examinations, and the Medical Council of India have recognized its importance and some have formed units. Vice-chancellors of several health universities have also formed bioethics groups and joined the movement. The SRM University, Chennai, has formulated an undergraduate curriculum to be taught across 5 years as modules attached to the existing major subjects. The Medical Council of India has a bioethics cell that presently focuses on medical research in India2.

Medical practitioners with knowledge of medical ethics, are perhaps best suited to teach medical students and postgraduates. They have first-hand experience of the sort of issues that arise and are also armed with the know-how of ethics to be able to deal with thereal problems that are faced in the clinical environment by the students and clinicians3.

Not only should the teaching hours, but also year of study in which medical ethics is to be taught be defined. It is well documented that students start facing ethical challenges right from the first year of medical education4. Ideally this integration should not only be horizontal but also vertical throughout the five years of medical schooling5. Teaching hours in various countries across the world vary from a minimum of 10 hours to maximum 60 hours; average teaching hours being 27.1 hour per year6. Interactive teaching formats are mostly preferred.

Students learn the science of physical examination and procedures during their training, but are seldom taught the art-empathy and humanity. Truth and respect, essential to doctor-patient relationships are missing from students learning bedside medicine. SP Kalantri suggests in his article, that guidelines on the rights of patients in medical education laid down by The London School of Medicine can help both teachers as well as students. Students and teachers should learn the art of balancing learner’s needs and patients’ autonomy, both7.

For the betterment of our people we need good research that is done for the right reasons. In medical colleges students are specially trained to be good clinicians but are seldom taught even the fundamentals of ethical clinical research. There are many ethical guidelines formulated and students should be cognizant of them during their MBBS curriculum so as to fulfil the attributes of a good clinical researcher in the future.

Social media usage nowadays is increasing in healthcare. It has become a tool for sharing and gathering information. There should be a careful reflection of roles and responsibilities while exploiting medical data on social media. Preserving privacy and confidentiality should be the utmost priority of the users. There is strong need of certain guidelines which ensure in maintaining professionalism and also the ethical principles.

We propose a model curriculum which incorporates all such significant topics in bioethics with special emphasis given on research ethics for medical students.Students can have the opportunity to practice and demonstrate their real-world approach to complex issues in innovative Objective Structured Clinical Examinations (OSCE) stations. Group sessions, tutorial groups; facilitated by pairs of physicians and their collaborators (academic and clinical) in health care can also be of use.

IMPLICATIONS:

* Increase sensitivity amongst medical students to bioethical issues.
* To cognizant the students and the medical fraternity regarding information about knowledge of bioethical issues.
* Inculcation of Bioethics programs in medical schools and affiliated teaching hospitals to reduce exposure to legal risks in the future.

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