Review article:

Bioethics education in Preclinical medical curriculum: Review

Tayade Motilal C, Latti Ramchandra G

1Assistant Professor and PhD Scholar, Department of Physiology, Rural Medical College, Pravara Institute of Medical Sciences, Loni, Tal. Rahata, Dist. Ahmednager, Maharashtra, India

2Professor and HOD, Department of Physiology, Rural Medical College, Pravara Institute of Medical Sciences, Loni, Tal. Rahata, Dist. Ahmednager, Maharashtra, India

Corresponding author: Dr Motilal C Tayade, Email: drmctayade@gmail.com

Abstract:

When medical students enter in final year, they abruptly face complex relationship with patients, family members, consultants, residents, nurses, and with each another as professionals. Nowadays medical ethics education has become a universal component of undergraduate formal medical training in most countries. From the standpoint of vertical integration, medical ethics should be taught step by step throughout preclinical and clinical education. The increase in bioethics education in preclinical curricula trains and aware medical students to recognize ethical issues and determine right action. In India, Medical Council of India (MCI) has proposed bioethics as compulsory part of curriculum in preclinical years of students since current academic year.

Well integrated syllabus pattern, small group teaching, special examination oriented study modules, clinical teachers involvement, training, opportunities for peer analysis/assessment, and timeliness of the teaching found provides strength to ethics teaching in medical universities. Weakness identified by many authors that need for greater integration framework, heavy theoretical concepts of ethics, literature language, lack of time, lack of resources, lack of workshops and staff developmental activities, regular knowledge brushing, ensuring practical learning, core of learning with regular learning are noted major reasons which are factors that unpopular medical ethics in medical curricula. Present review article underlines the importance of training of bioethics and challenges in implementation in preclinical medical curricula in India.

Keywords: Bioethics, preclinical medical curriculum

Background:

Nowadays medical ethics education has become a universal component of undergraduate formal medical training in most countries. From the standpoint of vertical integration, medical ethics should be taught step by step throughout preclinical and clinical education. However, examples of well-integrated ethics programmers, quite often found in the literature, are mostly limited to Western industrialized countries. Significant progress has been made in developing the place of ethics in undergraduate medical curricula over the last two decades.

The increase in bioethics education in preclinical curricula trains and aware medical students to recognize ethical issues and determine right action. Formal teaching of ethics in the medical school curriculum has increased greatly during the past 15 years. Yet, there is noted variations in their teaching pattern, syllabus framework, assessment tools etc.

In India, Medical Council of India (MCI) has proposed bioethics as compulsory part of curriculum in preclinical years of students since current...
academic year. Present review article underlines the importance of training of bioethics and challenges in implementation in preclinical medical curricula.

The Pond Report:
This movement of bioethics implementation in medical curricula really started with The Pond Report, which considered the area of ethics in medical education and made recommendations for the development of ethics teaching. Subsequently, the General Medical Council's (GMC) report on undergraduate medical education, Tomorrow's Doctors, recommended the inclusion of “ethics and legal issues relevant to the practice of medicine” as a knowledge objective and “an awareness of the moral and ethical responsibilities involved in individual patient care and in the provision of care to populations of patients” as an attitudinal objective. By 1997, most medical schools had a written syllabus and provided summative assessment in ethics, but there was still an urgent need for full time teachers.

Need of medical ethics in preclinical years:
When medical students enter in final year, they abruptly face complex relationship with patients, family members, consultants, residents, nurses, and with each another as professionals. These relationships may immerse students in ethically charged situations. Formal teaching of ethics in the medical school curriculum has increased greatly during the past 15 years.

Medical ethics education is instruction that endeavors to teach the examination of the role of values in the doctor's relationship with patients, colleagues, and society. It is one front of a broad curricular effort to develop physicians' values, social perspectives, and interpersonal skills for the practice of medicine.

Medical ethics training is not based on traditional teaching pattern henceforth found difficult to implement. The urge behind such training is mainly advances in technologies and consequent horizons developed by them and lacking in ethical practices in clinical. Knowledge based teaching found limited area than developing cognitive skills necessary for ethical decision making. Students’ exposure to media and internet has changes their personal development. Student’s personal values, attitudes and behaviors is also linked with training in medical ethics.

Strengths and weaknesses of ethics teaching:
Well integrated syllabus pattern, small group teaching, special examination oriented study modules, clinical teachers involvement, training, opportunities for peer analysis/assessment, and timeliness of the teaching found provides strength to ethics teaching in medical universities.

Weakness identified by many authors that need for greater integration framework, heavy theoretical concepts of ethics, literature language, lack of time, lack of resources, lack of workshops and staff developmental activities, regular knowledge brushing, ensuring practical learning, core of learning with regular learning are noted major reasons which are factors that unpopular medical ethics in medical curricula. Small group teaching is widely accepted to be the best approach for classroom based teaching in this survey, although respondents observed that certain topics could be covered adequately by a didactic delivery.

Course Content:
After search and recent review, it was found that there is observed variations in the content of ethics curricula across the world. This reflects an emerging awareness among students, teachers and policymakers. As students are under developing stage, there may see different concepts of ethical
dilemma. Genetic counseling is most challenging with difficult to accept by patients. Hence this topic is included by majority Institutions. Secondly commercial support is increasing nowadays for basic research in medical institutions and their importance in increased. Hence professionalism, financial incentive ethics and conflict of interest are also included by majority universities. Obviously inclusion of basic concepts in medical ethics like autonomy, privacy, beneficence, euthanasia, medical confidentiality etc are included in preclinical ethics curricula. As students of anatomy embalming, body decomposition etc topics are included in preclinical ethics syllabus. Animal ethics is also finds topic of interest by many physiology departments from worldwide universities. As paraclinical curriculum professionalism, research ethics, conflict of interest, drug related ethical issues are included. However very few medical institutions chose humanities topic area in bioethics curricula.  

Assessment Pattern:
The pattern of assessment is also finds challenging in medical ethics education. To assess the format, content, method, and placement of medical ethics education in medical schools the faculty and curricular resources and institutional structure and support of medical ethics and their perceptive. In United states and Canada, compulsory theoretical – practical based examination pattern is formed. Equal weitage is devoted to medical ethics, henceforth student’s starts studying hard and theory pattern increase seeding act while practical approach increases their psychomotor skills with change in attitude. 

A recent report by the Association of American Medical Colleges (AAMC) argues that medical schools “must ensure that before graduation a student will have demonstrated . . . knowledge of the theories and principles that govern ethical decision making and of the major ethical dilemmas in medicine.”

Faculty Resources:
There is noticed faculty pattern of variations. In some schools part time faculties are recruited from other other working departments from same universities. While in some schools full time trained faculties are appointed. Some institutions formed core group or bioethics cell with active supporting student’s wings. These bioethics core team regularly conduct classes is specified time frame like two classes per week etc. Bioethics cell also promotes faculties’ updates workshops and sharing knowledge based concepts increases their curiosity and increment in knowledge. As medical bioethics curriculum mainly focuses preclinical departments, hence widely faculties are chose from these departments. Secondly students are more linked to these faculties in their early years. The principal medical ethics course faculties tended to hold degree from clinical area although these are working in preclinical departments. In one survey study conducted over large sample size, Friedman et al noted, most deans (70%) reported there was a faculty member at their school whose primary responsibility was to teach medical ethics to medical students. Although full-time ethics researchers were less common, (56%)  

Institutional Structure for Ethics Education:
In many institutions separate core department is formed including faculties from preclinical and clinical settings. These core departments independently handles routine curriculum activates as well as assessment. Very few universities found with specialized trained doctors as part of cell or department.
Obstacles to Ethics Education: There is noticed number of obstacles in implementation of medical ethics in curriculum of many medical universities across the world. Lack of time: Due to heavy schedule and exposure to new terminologies of medical field finds lack of time to both students and medical faculties to grasp these concepts of medical ethics. Resistance from faculties: Faculty resistance is another big noted obstacle. Limited availability of trained faculties: This is also big lacuna observed in various reviews over this aspect. This is noticeably seen due to limited training resources especially in asian countries. However it is ray of hope that after compulsion by Medical Council of India, many bioethics cells are activated within very short span of time. Many major universities from India, like Maharashtra University of Health sciences, Nasik, SRM University, Manipal University, Gujrat university etc. seriously started their training workshops over broader range. Limited availability of literature and textbooks: This is also major issue. Majority literature and textbooks are written from experts from USA, Canada and other established countries. These authors framed these books according to their needs from that culture and society and literature format language is another big issue.

Specialized syllabus terminology: This is one of great challenge to faculties to teach these theoretical based concepts and along with improvement in psychomotor skills of ethics. Interdisciplinary coordination: During working in bioethics cell, interdisciplinary coordination will be major challenge.

Conclusion: Medical ethics is implemented by various developed countries before 2002. However Medical council of India (MCI) has proposed bioethics as compulsory part of curriculum in preclinical years of students since current academic year. This will definitely change the scenario of medical ethics education in preclinical years. As assessment is going as part of university examination, the students view will be more serious. This will definitely found fruitful in future of medical education and clinical practice in India.

Acknowledgement: Authors are very thankful to vice chancellor, Maharashtra University of Health sciences, Nasik for conducting 3T training programme on Medical bioethics and allowed us active participation.

This review article will be definitely an important document as guide.

Source of support: Nil

Conflict of interest: Nil

References: