Integration of medical ethics with undergraduate medical curriculum: Instructors and Students perspectives

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India, one of the most populous nations, has the most extensive health care systems. Indian medical degrees fall short of giving patients compassionate, all-encompassing care. According to Samaj Adhikari et al. (2016), a sizeable percentage of doctors and nurses are not familiar with the key papers of health care ethics that outline fundamental principles. The majority of physicians and nurses demonstrated a desire to learn ethics and requested that medical ethics be taught in schools. The goal of the current study is to evaluate medical students' knowledge, attitudes, and perceptions of medical ethics in order to incorporate it into the curriculum for paraclinical and clinical students of medicine.
Aim: To gauge how important, it is to incorporate medical ethics into undergraduate medical education from the perspectives of teachers and students.
Objectives: To assess the current status of knowledge of preclinical and para clinical medical students about medical ethics.
Study methods:Questionnaire based study
Results and conclusions: In the present study students preferred to learn ethics as bed side group discussion in clinics, small group teaching and self learning. However, class room teaching with didactic lectures were the least preferred mode of teaching among study population. In the present study clinical teaching was chosen as the best source of knowledge to learn medical ethics when compared to lecture class, ethicalbooks, seminars and workshops. The next preferred source of knowledge was media. Further study population preferred medical educator with formal qualification in bioethics to teach medical ethics for undergraduate curriculum. This finding warrants for special training in bioethics for a medical teacher to be eligible to teach medical and research ethics. This study is novel one to explore the knowledge on ethical codes and perception of undergraduates and faculty members regarding integration of ethics into medical curriculum. It is obvious that inclusion of medical ethics is favored by medical fraternity

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Background

India has the greatest health care system among the countries with the highest population density. It enjoys the benefit of having the most medical colleges (412), which produces 50,000 new medical graduates each year [1]. The current undergraduate medical curriculum has been designed with a focus on three key learning objectives: cognitive (head), psychomotor (hand), and affective (Heart). But the emotive component is mostly disregarded and has evolved into a type of informal curriculum [2]. Indian medical education therefore falls short of offering patients

compassionate, holistic care. Since 1999, it has been recommended to teach medical ethics and human rights in medical school. Because the practice of medicine predictably raises both ethical and legal issues[3.] Curriculum of Indian medical education focuses least on medical ethics. Education system mainly focuses on traditional components of medicine. Medical education remains largely focused on traditional medical science components. Hence affective component of education system is seldom lost among doctors. Medical ethical decision-making skills and moral attitudes expected to learn passively. Through the concealed or informal curricula, there is no consistency in what the pupils learn, and there is no way to guarantee that a minimal standard is being met. The need for undergraduate medical ethics instruction has grown as a result of declining professional standards in the medical field, deteriorating patient-physician relationships, and declining physician morale[4] . According to reports, medical students' sensitivity decreases as the semester goes on[5]. Credit for it has been given to hidden curricula [6]Samaj Adhikari el al (2016) stated that significant portion of doctors and nurses are unaware of the major documents of health care ethics which depicts the core principles. Majority of doctors and nurses showed motivation to learn ethics and asked for inclusion of medical ethics in the curriculum.[7].In his study, Tahra Al Mahmoud (2017) found that medical students regularly experience ethical dilemmas while undergoing training. however, they received a fair amount of ethics instruction in medical school.[8]They observed that dealing with ethical dilemmas had been somewhat aided by their schooling. The value of ethics instruction and the value of having positive role models as teachers were both strongly supported by the students. Compared to male students, female students felt that they needed more ethics instruction. Students who reported engaging in some unethical behaviour had a more constrained perception of the significance of ethics as a subject. According to a study by Rashmi Gour et al. (2014), the majority of students (38.5%) believed that being aware of medical ethics is crucial. They felt that the finest information source and preferred teaching method is clinical training. The current investigation showed that medical students lacked medical ethics knowledge. 9. According to Alex M. Varghese et al. (2016), interns and resident doctors lacked a sizable quantity of knowledge regarding medical negligence and medical ethics. The majority of interns (61.3%) had inadequate knowledge of the subject. 48.1% of resident doctors had mediocre knowledge, compared to 4.8% who had outstanding knowledge.

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compared to the residents. All faculty members and 94% of residents were of the same opinion that there is a need for further education on bioethics. They didn't prefere lectures as a mode of teaching ethics. Peer learning was the preferred mode of consultation for any ethical problem. Some residents had challenges in ethics during publication[13].According to Aldughaither, Almazyiad et al. (2012), 84% of their students were happy with the course and its timeliness, however 85% of them thought that the teaching style should be altered to case-based teaching. Students wanted to talk about issues with professionalism and the doctor-patient relationship. Brain death (76.8%), organ transplantation (72.4%), cosmetic surgery (68.8%), abortion (66.8%), terminal care (61.6%), reproduction (59.6%), doctors' rights (56.4%), end-of-life issues (56%) and medical errors (45%) were the topics that the students preferred to be covered. (2012) [14].There is little information available regarding medical undergraduates' understanding of and attitudes toward the incorporation of bioethics into their curricula. Although the MCI has recommended adding a "Attitude and Communication Skills (AT-COM)" course to the medical curriculum and formalizing ethical instruction beginning in the preclinical years, these suggestions have not yet been fully and uniformly implemented in all medical institutions. Therefore, there are no set procedures, and it is now up to individual schools to decide whether to provide such a course. It is critical to evaluate students' knowledge of medical ethics as well as their attitudes and perceptions regarding the integration of medical ethics into curriculum at this time, as MCI is moving forward with the ATCOM curriculum. Therefore, the goal of the current study is to evaluateinstructors and students' perspectives on importance of integration of medical ethics with undergraduate medical curriculum.

Objectives

- To assess the attitude and perception of para-clinical and clinical medical students and faculty members on integration of medical ethics into undergraduate curriculum.
- To assess the current status of knowledge of para-clinical and clinical medical students and faculty members about medical ethics.

Methodology

In KMC Mangalore, Karnataka, India, a cross-sectional self-administered questionnaire survey was conducted. The study included faculty members and second through fourth-year MBBS students. In August 2018, a cross-sectional survey of second, third, and fourth year (para-clinical and clinical) medical students and faculty at Kasturba Medical College, Mangalore, was carried out using self-administered 17-item structured questionnaires. Adapted and validated questionnaire (Johnston and Haughton 2007, Chatterjee and Sarkar 2012, Chopra, Bhardwaj et al. 2013).

Table 1: Medical ethics can be best integrated into the undergraduate medical curriculum

Characteristics	Preferential order No%				
	1	2	3	4	5
As an exclusive compulsory subject with theory and practical training	49(27.2)	26(14.4)	44(24.4)	31(17.2)	30(16.7)

As an exclusive compulsory subject with theory only	44(24.4)	54(30)	35(19.4)	31(17.2)	16(8.9)
As an exclusive compulsory subject with practical only	20(11.1)	44(24.4)	44(24.4)	51(28.3)	21(11.7)
Not as an exclusive compulsory subject, but to be integrated with each clinical subject	15(8.3)	18(10)	23(12.8)	38(21.1)	86(47.8)
Need not be included in any training since it has to be learnt naturally	52(28.9)	38(21.1)	34(18.9)	29(16.1)	27(15.0)

2:

The ideal time during the medical course when medical ethics should be taught?

Table 2 will give an overview about the perception of students and faculty members regarding the ideal time during which bioethics can be taught. Majority of the study population felt that medical ethics should be taught along with the clinical subjects (51%). Second preference was given to the teaching during all the years of training. (34%). However significant portion of study population felt that ethics can be taught during post- graduation also (25%)

Table 2: The ideal time during the medical course when medical ethics should be taught.

Characteristics		**Preferential order** No (%)					
		1	2	3	4	5	6
2. What is the ideal time during the medical course when medical ethics should be taught?	Along with preclinical subjects (from the day 1 of professional course)	54(30)	24(13.3)	36(20)	15(8.3)	17(9.4)	34(18.9)
	Along with paramedical subjects	43(23.9)	51(28.3)	25(13.9)	1(6)	23(12.8)	12(6.7)
	Along with clinical subjects	25(13.9)	17(9.4)	39(21.7)	34(18.9)	22(12.2)	42(23.3)
	During all the years of training	33(18.3)	31(17.2)	38(21.1)	17(9.4)	29(16.1)	32(17.8)
	During internship	32 (17.8)	47(26.1)	33(18.3)	22(12.2)	23(12.8)	23(12.8)
	During post-graduation	66(36.7)	17(9.4)	31(17.2)	21(11.7)	14(7.8)	31(17.2)

3: The ideal method of teaching medical ethics:

Present study findings reported that majority of study population preferred bed side group discussion in clinics should be the most preferred method of teaching ethics in a medical school (56%). Small group teaching, journal club analysis and self- learning were also next preferred modes of teaching/learning by study population. However, class room teaching with didactic lectures were the least preferred mode of teaching among the study population (62.2%)

Table 3: The ideal method of teaching medical ethics.

Characteristics		Preferential order No(%)				
		1	2	3	4	5
3. What is the ideal method of teaching medical ethics?	Classroom teaching with didactic lectures	112((62.2)	30(16.7)	18(10)	10(5.6)	10(5.6)
	Practicals/labs	40 (22.2)	52(28.9)	43(23.9)	27(15.0)	18(10)
	Small group teaching	44(24.4)	33(18.3)	46(25.6)	23(12.8)	34(18.9)
	Bedside group discussion in clinics	19(10.6)	23(12.8)	36(20)	39(21.7)	63(35.0)
	Journal clubs and news analysis	31(17.2)	36(20)	48(26.7)	34(18.9)	31(17.2)
	Self -learning by the student	49(27.2)	29(16.1)	42(23.3)	25(13.9)	35(19.4)

4: The most important quality in Medical ethics teachers

Among all the qualities given in the questionnaire, study population felt that communication skills, empathy and formal qualification in bioethics are the most preferred qualities to become medical ethics teachers among study population.(58.3%,56%, 46%)

Table 4: The most important quality in Medical ethics teachers

Characteristics		Preferential order No (%)					
		1	2	3	4	5	6
4. What do you think is the most important quality in Medical ethics teachers?	Communicational skills	22(12.2)	11(6.1)	19(10.6)	23(12.8)	33(18.3)	72(40)
	Empathy	12(6.7)	21(11.7)	29(16.1)	18(10)	30(16.7)	70(38.9)
	Honesty	12(6.7)	18(10)	36(20)	29(16.1)	31(17.2)	54(30)
	Integrity	10(5.6)	10(5.6)	38(21.1)	32(17.8)	37(20.6)	53(29.4)
	Competence	13(7.2)	32(17.8)	28(15.6)	25(13.9)	35(19.4)	47(26.1)
	Formal qualification in bioethics	38(21.1)	15(8.3)	22(12.2)	21(11.7)	26(14.4)	58(32.2)

5: The best source of knowledge of Medical ethics among undergraduate students:

Table 5 presents respondents preference about the best source of knowledge of medical ethics among undergraduate students. Clinical teaching was chosen as the best source of knowledge to learn medical ethics among respondents (60%). The next preferred source of knowledge was media (25.6%)

Table 5: The best source of knowledge of Medical ethics among undergraduate students

Characteristics		Preferential order No (%)					
		1	2	3	4	5	6
6. What do you think is the best source of knowledge of Medical ethics among undergraduate students	Lecture class	77(42.8)	26(14.4)	39(21.7)	18(10)	7(3.9)	13(7.2)
	Ethical books	44(24.4)	40(22.2)	52(28.9)	23(12.8)	12(6.7)	9(5.0)
	Seminar & workshops	14(7.8)	19(10.6)	49(27.2)	35(19.4)	32(17.8)	31(17.2)
	Clinical training	8(4.4)	8(4.4)	32(17.8)	39(21.7)	33(18.3)	60(33.33)
	Journals	28(15.6)	22(12.2)	47(26.1)	36(20.0)	25(13.9)	22(12.2)
	Media	20(11.1)	15(8.3)	35(19.4)	30(16.7)	34(18.9)	46(25.6)

Discussion

Table 1 shows the perception of study population regarding their preference on mode of integration of ethics into medical curriculum. Significant respondents of study population was of the opinion that medical ethics should be integrated with each clinical subject 86(47.8%).This was the most preferred mode of integration of medical ethics into undergraduate curriculum. On the other hand more than 25% of the study population least preferred of medical ethics being taught as an exclusive compulsory subjects in theory and practicals Table 2. Regarding this there was no significant difference between faculty and students. In the present study faculty members and students preferred to learn ethics as bed side group discussion in clinics, small group teaching and self-learning. However class room teaching with didactic lectures was the least preferred mode of teaching among the study population (62.2%). There was statistical significant difference between faculty and students regarding self-learning as the mode of learning.Regarding preference in consulting on an ethical issue majority of study population preferred immediate seniors and close friends over HODs and peers .This implies that if they pose a ethical problem in their profession they tend to settle it effectively at the departmental level with the help of immediate supervisors.

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