

STUDY OF KNOWLEDGE AND ATTITUDE ON MEDICAL ETHICS IN PHASE I MBBS STUDENTS OF A TERTIARY CARE TECHING HOSPITAL- A DESCRIPTIVE OBSERVATIONAL STUDY

Running title: study of knowledge and attitude on medical ethics
**Dr.Aruna Gurung¹, Dr.Pradnyesh N. Panshewdikar², Dr. Prashant .A. Shirure³,
Dr.*Harsholhas N. Panshewdikar⁴**

1. Associate Professor , Department of Pharmacology, Vedanta Institute of Medical Sciences, Dahanu, Palghar, Maharashtra-401606
2. Associate Professor , Department of Anatomy, Vedanta Institute of Medical Sciences, Dahanu, Palghar, Maharashtra-401606
3. Associate Professor , Department of Pharmacology, Dr.V.M.Govt.Medical College Solapur Maharashtra-401606
4. *Associate Professor, Department of Forensic Medicine and Toxicology, Grant Govt. Medical College and Sir J.J Group of hospitals Mumbai, Maharashtra-400008

*Corresponding author :Dr.Harsholhas N. Panshewdikar, Associate Professor , Department of Forensic Medicine and Toxicology, Grant Govt. Medical College and Sir J.J group of hospitals Mumbai, Maharashtra-400008. Phone number :7058102055, Email id:drpnp123@gmail.com

Abstract

Background:The initial stage of MBBS is the best time to make the students aware about the importance of medical ethics. Hence this study was conducted to know the knowledge and attitude of Phase I MBBS students about medical ethics.

Aim: To study the knowledge and attitude of medical ethics in I MBBS students of a tertiary care teaching hospital

Material and methods: A pre-test and post-test questionnaire based study was conducted in Phase I MBBS students to assess their knowledge and attitude towards medical ethics. A total of 124 students participated in the study. Results were expressed in percentage, mean and standard deviation. Paired t-test was used.

Result: The mean knowledge during and after the lecture session was 50.32 ± 27.52 . and 86.09 ± 9.86 respectively. The p-value was highly significant (p value < 0.005). Participant's knowledge about the presence of IEC (Institutional Ethics Committee) improved after the lecture session. Participants became more aware regarding euthanasia after the lecture session. The knowledge of participants regarding consent before and after lecture session was 45.5% and 75.5% respectively. 98.3% of the students in the pre-test and 99.3% in the post-test agreed to learn more about medical ethics.

Conclusion

Our study brings about the attention to the importance of knowledge, and attitude towards medical ethics in the students of Phase I MBBS students. This study showed that most of the students were aware about bioethics but variability in the attitude towards different ethical issues was found.

Key words: Medical ethics, Knowledge, attitude, Phase I MBBS

Introduction

Health care decisions are based not only on clinical and technical grounds, but also on ethical grounds. Ethics education aims to help medical students understand moral principles and analyse and define their own values. (1)

Medical ethics is a system of moral principles that gives values for health professionals to practice medicine and also guides in the field of scientific research. The importance of knowing medical ethics is very relevant to a medical professional due to a variety of reasons, including increasing litigation, changes in complexities in medical practice and the importance of consumer courts. (1,2)

When we consider medical ethics, four principles form the basis of ethical medical practice, namely, autonomy, justice, beneficence, and non-maleficence. Hence the physician has an ethical obligation to benefit the patient, to avoid or minimize harm, to respect the values and preferences of the patient and to give each person what he or she deserves. (3)

In the recent past, we have seen a gradual erosion of the public's confidence in our health care professionals with their ethical practice being questioned frequently, also the growing public awareness regarding the ethical conduct of medical practitioners, and complaints against physicians appear to be escalating. In many instances, conflicts arise between patients and doctors which require doctors to be well versed with the ethical principles. (4)

In 2018, Medical Council of India (MCI) had released (Attitude Ethics and Communication [AETCOM]) module, which is a useful guide to train undergraduate medical students with focus on attitudes, values, and responsiveness of the undergraduate medical students along with requisite knowledge and skills.(5)

At present, in our college, the medical students are exposed to medical ethics topics during their foundation course in first year. But the student's knowledge and attitudes towards medical ethics had never been evaluated. Hence, we conducted this study to assess the knowledge and attitudes of medical ethics among the phase I undergraduate medical students who are future of the society to practice the art of cure.

Material and methods

After obtaining permission from the Institutional ethics committee, an online questionnaire based study was conducted among the undergraduate medical students from first year. The purpose of the study and nature of information to be furnished from the students was explained to them. Willingness to participate in the study was obtained from participants using online consent form. Those who are on leave, refused to participate were excluded from the study. It was ensured that respondents understood the meaning of questions as well. Questionnaire included demographic details, 10 questions on knowledge and 10 questions on attitude on ethical issues.

Questionnaire were made in google forms and same questions were distributed to the participants in pre-test and post-test session. The questions were pretested and validated. The link for self-administered online pre-test questionnaire was provided to the students through online chat group which was created at the same time for the conduct of the study. The students present in the class were added in the group. Participants were given 30 minutes to send their responses. After 30 minutes the responses were collected and were documented in google word file. After the lecture was completed post-test was conducted and again 30 minutes were given to complete the questions. Responses of the post-test after 30 minutes were collected and documented in google word file.

Statistical Analysis

The data was compiled in a Microsoft excel sheet. To compare the pre-test and post- test paired t-test was used. Significance level was set at 0.05. The responses was converted to percentage and mean and standard deviation were calculated.

Results

Out of 150 Phase I medical students, 124 (82.67%) participated in the study. Out of 124 students , 76(61.29%) were female and 48(40%)were male. The mean age group was 20.17 years. A total of 20 questions, 10 questions on knowledge and 10 questions on attitude on medical ethics were given to the 124 Phase I medical students.

Table 1 shows the knowledge of students before and after the lecture session. The mean knowledge during pre-test session was 50.32 ± 27.52 . The mean knowledge during post- session was 86.09 ± 9.86 . The p-value was highly significant (p value<0.005)

Table 1. Knowledge of Phase I medical students on Medical Ethics

Questions on Knowledge				
SN. No		Pre-test (N %)	Post-test (N %)	Percentage change (N %)
1	Do you have medical ethics committee in your college?	30	100	70
2	The following statement are true about ethics	55.5	80	24.5
3	The basic principle of ethics are	73.8	90	16.2
4	Autonomy in bioethics means	26.5	80	53.5
5	Medical ethics teaching is a part of medical syllabus in India	94.2	97.3	3.1
6	True statement about Euthanasia is	17	70	53
7	All are true about consent in health care except	45.5	75.5	30
8	The following statement for maintaining the medical record is correct	45.3	83.8	38.5
9	Following are considered Professionalism misconduct except	33.2	89.3	56.1
10	While conducting research in human participant following should be done	82.2	95	12.8

*p-value<0.005

Table 2 shows the attitude of the patients before and after the lecture.

Questions on Attitude									
		Pre-test				Post-test			
Sn. No		Neutral (N %)	Agree (N %)	Disagree (N %)	Strongly disagree (N %)	Neutral (N %)	Agree (N %)	Disagree (N %)	Strongly disagree (N %)
1	I have general interest in learning more about medical ethics	1.7	98.3			0.7	99.3		

2	The teaching of medical ethics will enable me to engage with contemporary ethical issues	26.1	71.4	2.50	0	7.6	91.4	1.0	0
3	Medical ethics teaching would neither influence the attitude and behaviour of doctors nor improve the patient- doctor relationship	7.5	9.2	47.5	35.8	10	1.8	52.1	36.1
4	Listening and respecting patients view does not play an important role in the duties of a doctor	8.1	3.3	40	48.6	6	3.0	40.6	50.4
5	The doctor cannot be held responsible for the therapy prescribed to patients	29.4	9.2	52.1	9.2	4.5	6.2	35.5	53.8
6	Motto of the doctor should be "no cure, no payment"	23.3	28.3	30.8	17.5	22.7	55.5	11.8	10
7	Doctor should do what is best irrespective of the patient's opinion	32	39.3	27	1.7	17.1	40.5	37.5	4.9
8	Close relatives must always be told about the patient's condition	13.9	79.5	1.5	5.1	13.2	79.2	7	0.6
9	During clinical rounds along with clinical aspects of a patient care, it is also essential to discuss ethical issues of the patient	24.8	67.8	7.4	0%	14.7	77.6	2.5	5.2
10	If law allows abortion,doctor must not refuse abortion	32.8	47.5	12.3	7.4	31.9	54.2	11	2.9

Discussion

This a descriptive study to assess the knowledge and attitude of Phase I medical students in a tertiary care teaching hospital. Since medical ethics is now introduced into the medical curriculum, and practicing ethics is necessary, we have conducted this study to know the knowledge of medical ethics and the attitude of the students towards ethical situations in Phase I MBBS students. This study was conducted in two sessions,before and after the lecture on medical ethics. In our study only 30% students were aware of the presence of ethics committee in the institution, however after the lecture 100% students became aware about the presence of IEC of the institution. It is very important for the medical students to know about the presence of institutional ethics committee since IEC will guide them regarding their future research projects and can help them to know about the basics of ethics while dealing with the patients.

Majority of the students knew that medical ethics is now a part of medical education system (94.2%in pre-test session and 97.3% in post- test session) which was better than the findings of study conducted by Ujwala U. Ukey et al, where only 74% of the participants were aware regarding the inclusion of medical ethics in medical curriculum.(6)

The students had an average knowledge about the meaning of ethics(55.5%) and the basic principle of ethics(73.8%) during the pre-test session, which improved following the lecture in the post-test session(80% and 90% respectively). Acquiring knowledge on basic principle of ethics and consent is important while dealing with the patient and human participants to avoid legalities and ensuring

patient and subject protections. Hence, participant's awareness after the sensitization can be seen as positive finding of this lecture.

The students had poor knowledge about concept of euthanasia (17% in pre-test vs 70% in post-test session). Medical students are future medical professionals, who will face many ethical dilemmas regarding requests for euthanasia by patients. Hence, their choices for their patients, remains crucial for doctors when they perform or consider euthanasia for patients in the future.

Participants also had a mediocre knowledge about the basics on consent during the pre-test session as only 45.5% in the pre-test answered correctly. But in the post-test session 75.5% participants correctly answered the basic questions on consent. However, regarding the question on the importance of informed consent, patient autonomy and compensation during the clinical research around 82.2 % (pre-test) vs 87.5% (post-test) answered correctly. Doctors are often criticized for initiating treatment without adequate consent. If proper and adequate consent is not taken from the patient there is breach in the autonomy of the patients.

45.3 % of the participant knew about the importance and management of patient's record keepings during the pre-test, whereas in post-test the percentage increased up to 83.8 %. This findings were better than the study conducted by Suja Purushothaman et al where only 11 percent knew that the medical records should be kept for a period of 3 years from the commencement of treatment.(7)

About 33.2% students in the pre-test and 75.4 % in the post –test correctly knew about the examples of professional misconduct and majority were aware of the MCI (Medical Council of India) now NMC (National Medical Council) rules for the registered medical practitioners regarding prescription of drugs with generic drugs. Prescription of drugs with generic name will not only make the patients easy to find the drugs in drug stores but will also help the patients to purchase the drugs at low cost if generics of the same drugs are available.

Attitude

Around 98.3% of the students in the pre-test and 99.3% of the students in the post-test agreed to learn more about medical ethics. This shows that the students are eager to learn about medical ethics and medical ethics can be easily incorporated in their day to learning.

When asked whether the participants agreed that teaching of medical ethics will enable them to engage in contemporary ethical issues, 71.4% students in the pre-test vs 91.4% students in post –test agreed that teaching of medical ethics will enable them to engage in contemporary ethical issues. In the study conducted by Jatana SK et al only 15.1% of students strongly agreed and 41.2% of students agreed to learn more about medical ethics and 26.2% of the participants strongly agreed and 55.6% agreed that teaching of medical ethics will enable them to engage in contemporary ethical issues.(8)

When question was asked to the students whether they believed that learning medical ethics may not influence the attitude and behaviour of the doctors and will not improve patient doctor relationship, 47.5% disagreed and 35.8% strongly disagreed to the question in pre-test and 52.1% disagreed and 36.1% strongly disagreed to the question in post-test. In the study conducted by Vibha Rani et al 38.4% and 23.1% of the second MBBS students and interns respectively disagreed and 36.3% and 62.5% of the second MBBS students and interns respectively strongly disagreed when same question was asked. (2)

Around 40.3% in pre-test disagreed and 48.6% strongly disagreed when they were asked if they think that listening to the patient and respecting patients view does not play an important role in the duties of a doctor. However 40.6% in the post-test disagreed and 50.4% strongly disagreed when the question was repeated in the second session. Hence the participants believes that patients play an equal role in their treatment process and a good communication based on understanding and respect of patient is important.

When the participants were asked if they think that a doctor is not responsible for the therapy prescribed to the patient, 52.1% disagreed and 9.2% strongly disagreed in the pre-test and 35.8%

disagreed and 53.8% strongly disagreed in the post test-test. This shows that the participants are well aware about their responsibilities as a future healer and following the principle of beneficence and non-maleficence is an important part of their job ethics.

When the students were told that the motto of the doctor should be no cure no fee, only 23.3 % disagreed and 28.3% strongly disagreed in the pre-test and 22.7% disagreed and 55.5% strongly disagreed in the post- test. A slight change in attitude is seen in post-test session and the participant's attitude of prioritizing money over patients can be seen in a positive light after the lecture session.

Majority of the participants during the pre-test, did not want to voice their opinion when they were asked that the doctor should do what is best irrespective of the patient's condition as 32% in the pre-test choose to be neutral however in the post-test only 17.1% choose to be neutral and 40.5% agreed that doctor should do what is best for the patient irrespective of patients decision. Also 27% in the pre-test and 37.5% in the post –test also disagreed with the question. A continuous exposure to similar situations can help them to develop more clear idea and face such ethical dilemmas.

When they were asked whether the patient condition should always be discussed with the close relatives 79.5% in the pre-test and 79.2 % in the post-test agreed that it is the right of the close relatives to know everything about the patients. This shows us that the first year professionals believes that communication with the right people is important in the patient care. However many participant have given neutral responses as they thought maintaining professional secrecy is important while dealing with a patient relatives. Hence they should learn to differentiate the situations where professional secrecy should be maintained and when and how much should be told to the patient close relatives.

67.8% of the participants in the pre-test and 77.6% in the post-test thought that ethical issues should be discussed during clinical rounds. This shows that the participants thinks ethical principles are important and they want to hone their ethical skills in future.

When asked , whether the doctor should perform abortion when both law and patient allows it 47.5% in the pre-test and 54.2% in the post-test agreed that in such situation abortion should be performed but many also opted to be neutral (32.8% in pre-test, 31.9% in post-test). This again is an ethical dilemma and the ability of decision making in such situation comes with expertise, hence the students should be taught and shown to face such situation repeatedly.

Conclusion

Our study brings about the attention to the importance of knowledge, and attitude towards medical ethics in the students of Phase I MBBS students. This study showed that most of the students were aware about bioethics but not much of them had deep knowledge about its importance in modern day medicine. Variability in the attitude towards different ethical issues was found and participants were still reluctant to choose the situations where they have to place the ethics principle above them. Hence continuous and quality sensitization on medical ethics is needed so that they can practice medical ethics better in future.

Limitations

The study was restricted only to the first year professionals who have no exposure to the patients and hence the results cannot be generalized. A large sample study including all the students and interns would have given a better picture.

Acknowledgement

I would like to thank all the Phase I MBBS students who have wholeheartedly participated in this study.

Conflict of interest: None declared

Author contributions :

Conceptualization: Dr.ArunaGurung, Dr.Pradnyesh N. Panshewdikar, Dr. Prashant A. Shirure, Dr.Harsholhas N. Panshewdikar

Data curation: Dr.Pradnyesh N. Panshewdikar,Dr.Harsholhas N. Panshewdikar

Methodology: Dr.ArunaGurung, Dr.Pradnyesh N. Panshewdikar

Project administration: Dr. Prashant A. Shirure

Visualization: Dr.ArunaGurung, Dr.Pradnyesh N. Panshewdikar,Dr. Prashant A. Shirure

Writing – original draft: Dr.ArunaGurung

Writing – review & editing: Dr.Pradnyesh N. Panshewdikar, Dr. Prashant A. Shirure, Dr.Harsholhas N. Panshewdikar

References

1. World Health Organization. Regional Office for South-East Asia. Module for teaching medical ethics to undergraduates [Internet]. WHO Regional Office for South-East Asia; 2009. Available from <https://apps.who.int/iris/handle/10665/205534>.
2. Rani V. Knowledge and attitude about medical ethics among undergraduate medical students - A cross sectional comparative study. Indian J Health Sci Biomed Res. 2022;15(2):131.
3. Varkey B. Principles of clinical ethics and their application to practice. Med PrincPract .2021;30(1):17–28.
4. Iswarya S, BhuvaneshwariS.Knowledge and attitude related to medical ethics among medical students. Int J Community Med Public Health. 2018;5(6):2222-5.
5. Medical Council of India. Competency Based Undergraduate Curriculum for the Indian Medical Graduate [Internet]. Medical Council of India; 2018. Vol. 1–3. . Available from <https://www.mciindia.org/CMS/information-desk/for-colleges/ug-curriculum>.
6. Ukey UU, Choudhary SM, Chitre DS. Knowledge and attitude about medical ethics among MBBS students-A cross sectional study from an institute in Central India. IOSR JDMS. Aug; 20(8):34–9.
7. Purushothaman S, salmani D, Somashekhar S, King KI, Reghunath S, Pushkar B. Knowledge and attitude of health care ethics among MBBS students. Indian J ClinAnat Physiol. 2021 Mar;4(1):97–9.
8. Jatana SK, Soe HHK, Phyu KL, LwinHtay, Nitra TN. A Survey on Knowledge and. Attitudes towards Medical Ethics among Undergraduate Medical Students. Education .2018;8(3):48–53