

Original Research Article

Awareness about medical ethics among undergraduates after introduction of humanities in curriculum

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ABSTRACT

Background: Modern day medicine is full of ethical challenges. A structured training in ethics can help doctors in choosing the best course of action during an ethical dilemma. It will be interesting to explore the knowledge and aptitude regarding bioethics in medical students who are already undergoing structured modules on humanities.

Methods: A cross-sectional study was done involving final year part I, final year part II medical students and interns using a validated semi-structured self-administered questionnaire. Questions were predominantly about doctor patient relationship which could be assessed using Likert scale.

Results: Acceptable response of over 70% was seen only in response to two questions, both on respect for person. Majority of students did not have a clear concept about consent, privacy and confidentiality. However, most of them gave acceptable response to respecting patient and his wishes. There were many fence sitters in response to the questions regarding paternalistic attitude of doctors and physician autonomy. Majority of students did not give acceptable response in questions pertaining to beneficence and justice. No significant difference was seen between the various phases of medical education.

Conclusions: The students were not clear about most aspects of doctor patient relationship like physician autonomy, confidentiality and consent. We need to revamp our teaching to increase understanding of ethics among our medical students.

Keywords: Bioethics, Medical ethics, Undergraduates, Humanities, Curriculum

INTRODUCTION

Medical ethics is the backbone of clinical practice. There is an increase in ethical issues at present due to the commercialization of the medical profession and increased consumer awareness. The lack of awareness about ethical practice among doctors is also partly responsible for the increase in ethical issues. A change in knowledge and attitude among the medical undergraduates will go a long way in helping tomorrow's doctors in handling ethical issues.

There is a need for including a structured format for teaching biomedical ethics in the undergraduate curriculum to inculcate ethical principles and moral values among our medical graduates. Appropriate assessment of their knowledge and attitude at timely intervals during the progression of their course is also essential. The undergraduate students in our institute are at present taught the legal aspects of medicine in phase II. We have also started classes on humanities from the first year onwards for a total of 40 hours since January 2015.¹ Humanities classes are taken in the 2nd, 3rd, 4th and 6th

semesters. There is however no formal training in clinical ethics with appropriate assessment.

A study of the awareness about ethical issues among our medical undergraduates will help to evaluate and plan or modify the teaching practices to produce competent doctors who will have the necessary expertise to handle ethical issues. It will also serve as a self-assessment of our sessions on humanities. The students will have self-perception about their knowledge of and attitudes about medical ethics and this could motivate self-improvement.

Aims and objectives

The main objective of the study was to assess the knowledge and attitudes regarding medical ethics among medical undergraduates in our institute. We also aimed to compare the knowledge and attitudes between the different phases of medical undergraduates.

METHODS

This cross-sectional study was conducted in a tertiary care institute in South India from May to June 2018, after

obtaining approval from institutional research and ethics committees. The study was done among final year part I, final year part II medical students and interns of our institute. A minimum sample size of 75 was arbitrarily decided for each group with a total sample size of 150. Inclusion criteria was medical undergraduates of our institute from the above phases who were willing to participate in the study. There were no specific exclusion criteria. The participants were chosen by convenience sampling. After obtaining informed consent, a validated semi-structured self-administered questionnaire was distributed among the participants, which they filled and returned in the same session itself (Table 1). There were 14 questions and the questions were predominantly about doctor-patient relationship which could be assessed by Likert's 5-point scale (strongly agree, agree, uncertain, disagree, strongly disagree). There were queries on topics like confidentiality, consent, respect, privacy, physicians' autonomy, paternalism and euthanasia. After obtaining the data, it was entered in excel spreadsheet and was analysed using SPSS software and frequencies and percentages were obtained. The proportion of students who had acceptable answers was calculated keeping the benchmark arbitrarily at 70%.

Table 1: Semi-structured questionnaire with acceptable response.

Topics	Questions	Acceptable response
A 1.	Confidentiality	
A 1.1	How often do you discuss about cases encountered in a day with your colleagues?	Never/seldom
A 1.2	Confidentiality cannot be kept in modern care and should be abandoned	Strongly disagree
A 1.3	Close relatives must always be told about the patient's condition	Strongly disagree/ disagree
A 2.	Consent	
A 2.1	Children (except in emergency) should never be treated without the consent of their parents or guardian	Strongly agree
A 2.2	Consent required only in cases of operations and not for tests and medications	Strongly disagree
A 3.	Respect for person	
A 3.1	The patient should always be told if something goes wrong	Strongly agree/agree
A 3.2	When people belonging to certain religious beliefs refuse to take blood or do operation or refuse treatment, what will be your stand?	Respect patients decision
A 3.3	During treatment, the patient's wish must always be adhered to	Strongly agree/agree
A 4.	Privacy	
A 4.1	During clinical teaching it is important to follow certain guidelines for intimate (vaginal, rectal) examinations of the patients like informed consent, maintain confidentiality	Strongly agree
A 4.2	This should also be followed for anaesthetized or sedated patients	Strongly agree
A 5.	Paternalism	
A 5.1	Doctor's know the best irrespective of the patient's opinion	Strongly disagree/disagree
A 6.	Physician's autonomy	
A 6.1	Doctors and nurses should refuse to treat patient's who behave violently	Strongly agree/agree
Beneficence/non-maleficence		
B 1.1	A patient who wishes to die should be assisted in doing so, no matter what his/her illness	Strongly disagree
Justice/equality		
J 1.1	Certain medical practitioners charge more from financially sound patients in order to raise money to treat poor patients. Do you agree with this?	Strongly disagree

RESULTS

Out of 300 questionnaires distributed in all the four groups, 253 students responded with a response rate of 84.3%. Out of 253, 79 were from final year part I (31.2%), 97 from part II (38.3%) and 77 were interns (30.4%). Their age ranged from 19 to 26 years, with a mean age of 21.43 years. 61.8% of the respondents were female.

In questions on knowledge of the participants, a total of 252 responded to the question 'is ethics important in our profession?'. Over 98% of the participants were aware of its importance in our profession. Only 4 (1.6%) felt that it was only somewhat important. However, 34% of respondents felt that ethics was necessary only to avoid legal issues. The source of their knowledge on ethical issues pertaining to medical profession was lecture classes and clinical classes respectively for 66.8 % and 70% of the respondents. Less than a third of the respondents quoted other sources of knowledge regarding ethics. Over 50% of the students were unaware of the main components of the Hippocratic oath. More than 80% felt that ethical, social and legal issues should be discussed on ward rounds.

We have a bioethics unit in our institute for the past six years. A clinical ethics committee has recently been established by the bioethics unit. This was apart from the institutional ethics committee which dealt with research ethics which had been there for over 10 years. 68% of the respondents were aware of the existence of this unit, 27% were not sure and 4.4% said that it did not exist. When asked whom they would approach when there was an ethical problem, 30% said they would approach a colleague or friend, 42% said they would approach the head of the department and 36% said that they would contact the ethics committee. The remaining said that they would contact hospital administrator, priest etc. Across the different batches, 55% of the interns said that they would contact the HOD as compared to 40% of final year part I and 33% of final year part II.

While answering the question about confidentiality of patients, more than 75% of the respondents felt that confidentiality should be maintained. 23% of the interns, however, were unsure. Over 68% of respondents thought that close relatives must be informed about the patients' condition. It was also revealed that 34.4% always discussed their cases with colleagues and 61.5% seldom did so. Only 4% of the students do not discuss their patients with their colleagues.

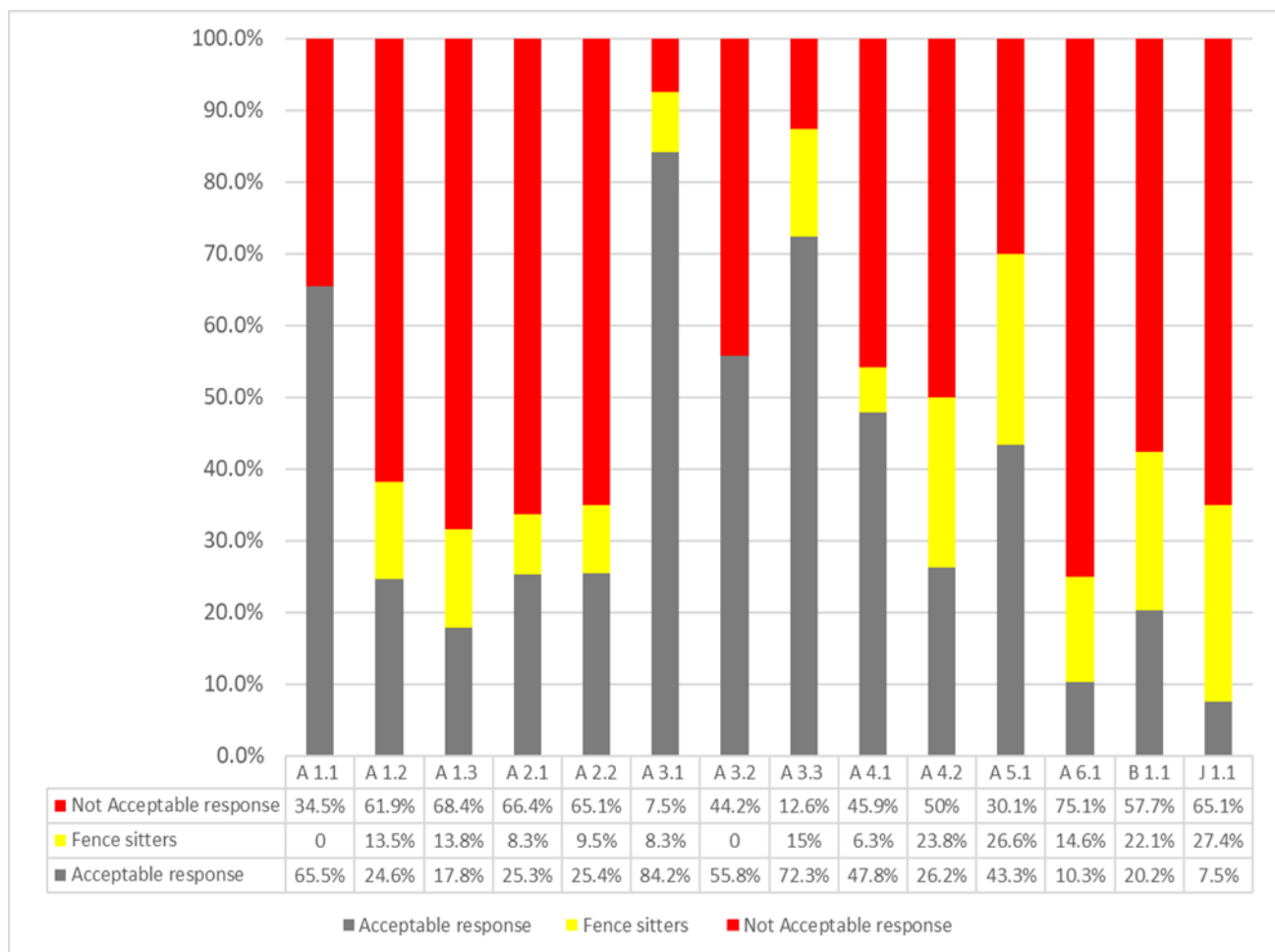


Figure 1: Acceptability of response to the questions.

For the questions about the concept of consent, 71% of respondents believed that consent was necessary not only for surgery but also for administering tests and medications. 19% however disagreed and almost 10% were unsure. More than 75% agree that parental or guardian's consent was required to treat children.

Students seemed to be well informed about the proper etiquettes in clinical teaching. 93.5% of our respondents agreed that during clinical teaching it was important to follow certain guidelines for intimate (vaginal, rectal) examinations of the patients like informed consent, maintain confidentiality etc. Most of the remaining were not sure and a total of 5 respondents disagreed. 66% agree that this was important even for the unconscious or anaesthetised patients, 24% were not sure and <10% did not think it was necessary to maintain confidentiality, informed consent etc in unconscious patients. Thus, their understanding of respecting the privacy of the patient seemed to be conflicted.

In the query regarding the paternalistic attitude among doctors, 30% thought that the doctor knew what was best for his/her patient, 27% were unsure while 42% did not agree with the statement that the doctor knew the best.

Few questions were asked to probe their attitude towards giving respect to the patients. 72% agreed that patient's wish should be adhered to, thus displaying a reasonable knowledge of autonomy. Approximately 85% felt that a patient must be informed if something goes wrong in diagnosis or management. Regarding refusal of surgery or transfusion by the patients due to religious beliefs, 51.8% felt that we must respect the decision of the patients, 31% would ask them to find another doctor with their belief, 11.5% would forcefully treat them and 4% were not clear about their stand. However, they seemed to be confused about the concept of physician's autonomy as 75% disagreed with the statement that doctors and nurses should refuse to treat a patient who exhibits violent behaviour.

Regarding the concept of justice/equality, the participants were divided on the issue of certain medical practitioners charging more from financially sound patients to raise money for treating poor patients. 42% agreed that this was a good idea, whereas 30% disagreed and 27% were not sure.

To assess their concept of beneficence/non-maleficence, one question was asked about complying with a patient's wish to die. Approximately 60% of respondents believed that we should not assist a person who wants to die, 22% were not sure and 18% agreed to assist a person to die.

The response of participants to questions on their attitude about doctor patient relationships is shown in Figure 1.

DISCUSSION

Medical ethics deals with application of moral values and judgement in practice of medicine. The growing awareness among public regarding various ethical and legal aspects of medical practice and a paradigm shift in attitude of laymen towards health professionals has resulted in an escalation of conflicts and litigations between health care workers and public. Therefore, it is crucial for the doctors to be aware of all the possible scenarios with ethical issues which they may come across in their professional life and the ideal way to deal with them.

There are four basic principles of medical ethics: autonomy, beneficence, non-maleficence and justice. In simple terms, autonomy refers to respect for the patient's right to self-determination, beneficence means the duty to do good, non-maleficence indicates the duty to not do bad and justice refers to treat all people equally and equitably. In addition, dignity (patients' right to dignity) as well as honesty (patients deserve to know truth about their illness and treatment) also may be considered as principles to be followed in medical practice. Having an in-depth knowledge of these concepts is of utmost importance to take ethical decisions on a day-to-day basis.

Teaching ethics can influence the professionalism and moral qualities of doctors significantly. Different modalities are being utilised to inculcate the best ethical conduct in health care workers like lectures, seminars, interactive workshops and case conferences. Instead of pedagogical teaching, a more clinically oriented practical approach using case studies and workshops, discussions on ethical dilemmas in integrated small group sessions, ward round model and problem-based learning methods with an opportunity for more interaction may be more effective.² More importantly students should understand that it is acceptable to give/take constructive criticism for their actions between colleagues. Students should be trained in such a way that they are able to develop their own ethical framework while navigating their routine clinical practice by asking themselves questions like 'am I doing the right thing?' 'is there another way to approach this?'. This can be achieved with various peer-led techniques like reflective listening, collaboration and shared decision-making.³

Humanities sessions have been going on in our institute for a few years now. Though initially it was not taken seriously by the students, we now see an increasing interest in the classes. There was, however, no structured assessment. This questionnaire-based assessment was done to identify the strengths and lacunae of the existing programme. From our present study, it was obvious that there are a lot of grey areas in students' understanding of medical ethics. Over 98% were aware about the importance of ethics and majority of them got their information about ethics from their lectures and clinical classes. Only 68% were aware about the existence of a

bioethics unit in our institution even though it is present for over 5 years and we had student representatives also in the unit. Approximately 50% knew about the contents of the Hippocratic oath. It may be beneficial for them to be aware of the modified declaration of Geneva and the code of ethics published by the Indian council of medical research (ICMR) also. About half of the respondents felt that ethics was necessary not only to prevent legal action but also to be a good doctor.

An acceptable response of over 70% was seen only in response to two questions, both on respect for person. Less than one-fourth had acceptable response on questions regarding maintaining patient confidentiality. Their concepts on consent especially while dealing with pediatric patients were also not acceptable. However, when it came to respecting patient and his wishes, majority gave acceptable response. Around 50% students were not clear on the matter of privacy especially in sedated patients. There were many fence sitters in response to the questions regarding paternalistic attitude of doctors and physician autonomy. Majority of students did not give acceptable response in questions pertaining to beneficence and justice.

Studies from other parts of India as well as from outside India have shown similar results. A recent study among medical students from Coimbatore in South India found that there was a gap in knowledge of ethical issues among medical students and especially found many students neutral or unsure on ethical issues, showing the need for training of medical students in ethics.⁴ Another study from Eastern India among interns also showed lacunae in their knowledge of medical ethics.⁵

Another matter of concern was that we could not find any change in their knowledge or attitude as they progress through their course and become interns from graduate students. A proportionate increase in awareness of ethical issues along with an increase in the years of medical education would have been reassuring. However, the response of interns in our study were remarkably similar to those of their juniors. A study done in West Bengal among medical students also did not show improvement in ethics awareness with increasing exposure to medical education.⁶ However, a study from Jodhpur showed that the awareness of medical ethics among consultants were better than that among senior residents.⁷

It is alarming to note that even senior practitioners were many a times unsure of the appropriate response in an ethical dilemma in medical practice. A study from Barbados among physicians and nurses showed that they commonly encountered ethical and legal issues in their workplace. However, many of these professionals were either unaware of their importance or unable to appropriately deal with these issues.⁸ In a study conducted among doctors in three teaching hospitals in Sri Lanka, 69.3% were aware of unethical practice among doctors and 12-41% of doctors acknowledged that they

sometimes engaged in unethical practices related to prescribing drugs, accepting gifts from pharmaceutical companies and obtaining leave.⁹ It was obvious that expecting medicos to learn ethics on their way to graduation from peers and role models like the olden times was not giving required results. Medical council of India (MCI)/National medical commission (NMC) has recently introduced structured syllabus for bioethics in MBBS undergraduate curriculum via AETCOM module (attitude, ethics and communication manual) as part of revamping the existing curriculum into competency-based curriculum in 2018. Unfortunately, due to the unforeseen COVID pandemic, we are still waiting to see the improvements this new module will bring to the syllabus. Our present study substantiated the introduction of AETCOM module for undergraduates as the lacunae were obvious from the results. They need to be trained to make the right choices while dealing with various situations like clinical judgement, decision-making, protecting privacy and confidentiality of patients, obtaining informed consent, breaking bad news, managing difficult patients and their relatives, indulging in social media, religious and cultural preferences, accepting gifts and favours, allocation of resources, research/trials on humans/animals, and resolving any conflicts of interest.

Our study had the limitation that the results need not be conclusive as this was purely a questionnaire based cross-sectional study based on genuine responses of the students. A comparative study between response of students before and after introduction of humanities would have thrown more light into the exact influence of the curriculum modification. A multi-centre study involving different Institutes may help in generalisation of these findings.

CONCLUSION

A baseline study among the medical graduates of the institute could serve as a basis to identify the areas requiring focus in curriculum on medical ethics. Similar studies have been done within the country and abroad. The ethical values of various categories of medical personnel have been studied. Our study was different in that it was done as a programme evaluation. The students were not clear about most aspects of doctor patient relationship like physician autonomy, confidentiality, and consent. The principles of justice, beneficence need further assessment as most of the questions in our questionnaire were regarding autonomy. There was no significant difference between responses from students in various phases of medical education. We need to revamp our teaching to increase the understanding of ethics among our medical students.

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