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# Student perceptions: Background to a new ethics curriculum in Indian medical colleges

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## Abstract:

**BACKGROUND:** Ethic education as a part of medical school curriculum is one which requires constant re-evaluation and re-emphasis. The medical regulatory body of India has, in recent times, introduced a revised module of the same, which is implemented across the country in all medical schools. Medical students' perception of ethics education is an important variable which will influence the validity of this module. This study attempts to evaluate the same.

**MATERIALS AND METHODS:** A peer-validated questionnaire was distributed to 150 undergraduate and postgraduate medical students (response rate: 74.4%) with the aim to evaluate their attitude toward knowledge of ethics, and their perceptions of contents and methods of learning ethics.

**RESULTS:** A significant number of students recognize the importance of medical ethics knowledge and its positive impact on their career ( $P < 0.05$ ). They accept material taught as per planned curriculum as a source of learning and favor interactive methods of teaching ( $P < 0.05$ ). Research projects and didactic lectures were rejected as learning methods ( $P < 0.05$ ).

**CONCLUSION:** "Deliberate teaching" has been accepted as a source of learning ethics by all students, though undergraduate students also favored learning about ethics "during practice." Perceptions have been identified that need to be addressed. The study reveals a need to further explore the purpose and contribution of role models in this context and to identify ways of strengthening their related perceptions by students.

## Keywords:

Attitude, learning, medical ethics, medical school

## Introduction

In the field of medicine, the inclusion of ethics in the core curriculum of medical schools was presented way back in the last decade of the previous century.<sup>[1,2]</sup> The World Medical Association in its 51<sup>st</sup> General Assembly at Tel Aviv, Israel, passed a resolution "recommending to all medical schools that the teaching of medical ethics and human rights be included as obligatory courses in their curricula."<sup>[3]</sup>

The Competence Based Medical Education introduced by the erstwhile Medical Council

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of India (MCI) from 2019 admissions – batch incorporates formal training in Attitudes, Ethics, and Communications (the AETCOM Module).<sup>[4]</sup> This was done with the intention to design a curriculum "better aligned with health professional attributes that are locally relevant and globally adaptive."<sup>[5]</sup> Currently, Indian medical schools vary in the duration, depth, and delivery of ethics education at both undergraduate (UG) and postgraduate (PG) level, akin to other countries.<sup>[6,7]</sup>

The Revised Basic Course Workshop on Medical Education conducted by the regulatory body, the MCI, has been

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strengthened and lengthened since 2016, for training medical faculty in the delivery of the AETCOM module. This systematic effort to ensure well-trained faculty will contribute greatly to the successful implementation of this module.

The active process of teaching–learning necessitates the participation of both, students and faculty. Training modules and teaching methodologies are successful when met with satisfaction by the student population. These must satisfactorily match students’ comprehension, perception, and attitude toward training in the subject. This study aimed to identify attitudes and perceptions of students toward the study of medical ethics. This will contribute in facilitating the delivery of the curriculum as planned by the MCI.

### Materials and Methods

A study of 112 medical students’ perception (distributed to 150 students, response rate of 74.7%) toward medical ethics was conducted through a peer-validated questionnaire, following approval of the Institutional Ethics Committee. The questionnaire, formulated through a literature search and expert opinion, was validated by peers and comprised 15 questions, and included the following sections: evaluating the adequacy, relevance and effectiveness of teaching of ethics, source of information of bioethics, relevance to modern day clinical practice, methodologies of teaching and learning ethics, indulgence in unethical practice, and attitude toward ethics and practical applicability of ethical principles. Extensive literature search was performed. The contextualization of the questionnaire to the existing situation was ensured through discussion with colleagues. Peer validation of the questionnaire was then done with the expertise of four senior professors with a total of over 80 years of experience in clinical departments of teaching medical college hospitals.

Respondents returned the filled questionnaire on the same day within 2 h. The answered questionnaires were evaluated, the data tabulated, and results analyzed.

### Results

Respondents included 50 (44.6%) 3<sup>rd</sup>-semester MBBS students and 62 postgraduate students. Of these, 61.6% were male ( $n = 69$ ) with gender not disclosed by 11.6%. All students agreed on the importance of having medical ethics knowledge, 96% agreed that medical ethics was taught during UG years, and 97% accepted that ethics knowledge will have a positive effect on their careers (all  $P < 0.05$ ). There was no agreement on the adequacy of the teaching among the students,

with no significant difference based on their level of the study [Figure 1].

### Sources of learning

Students were asked about the sources to learn about medical ethics. Options given and student responses are seen in Figure 2. Binomial parametric testing revealed that a significantly higher number of students believed that ethics could be learned during practice ( $P = 0.002$ ) and through deliberate teaching ( $P = 0.000$ ). A gender comparison of their responses revealed no significant differences (all  $P > 0.05$ ). Significant majority of UG students identified “deliberate teaching” ( $\chi(1) = 5.89$ ;  $P = 0.015$ ) and “during practice” ( $\chi(1) = 10.8$ ;  $P = 0.001$ ) as their chosen methods for learning about ethics while PG students opted for “deliberate teaching” ( $\chi(1) = 18.45$   $P = 0.000$ ).

Analysis of responses showed that UG students were twice as likely to favor self-teaching as a method of learning ethics (odds ratio [OR] 2.186, 95% confidence interval [CI] 1.006–4.747) as compared to PG students [Figure 3].

### Teaching methods

Students were also asked to opine on the format of deliberate teaching they favored to learn about medical ethics [Figure 4].

Binomial nonparametric testing revealed that a significantly higher number of students opined that bedside discussions ( $P = 0.001$ ) and case discussions ( $P = 0.019$ ) are either best or acceptable methods. Significantly, students deemed lectures ( $\chi(2) 12.485$ ;  $P = 0.002$ ) and research projects ( $\chi(2) = 28.91$ ;  $P = 0.000$ ) as not acceptable teaching methods for the subject. No significant gender difference or difference

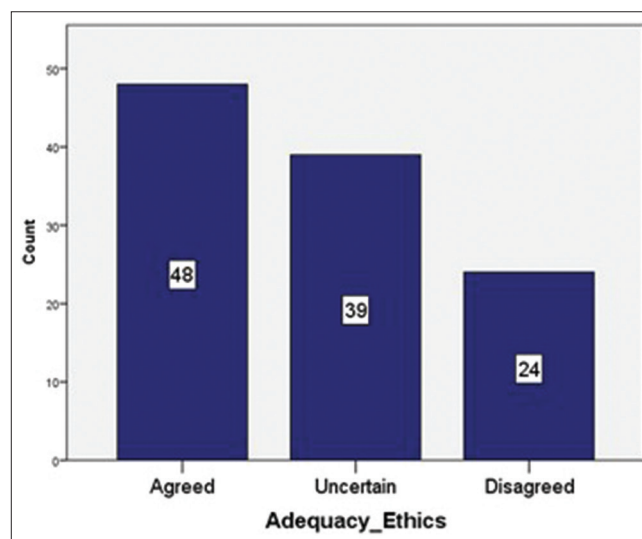


Figure 1: Adequacy of ethics teaching

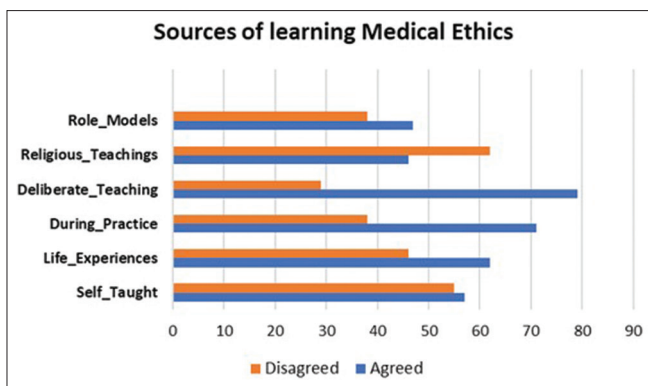


Figure 2: Sources of learning about medical ethics

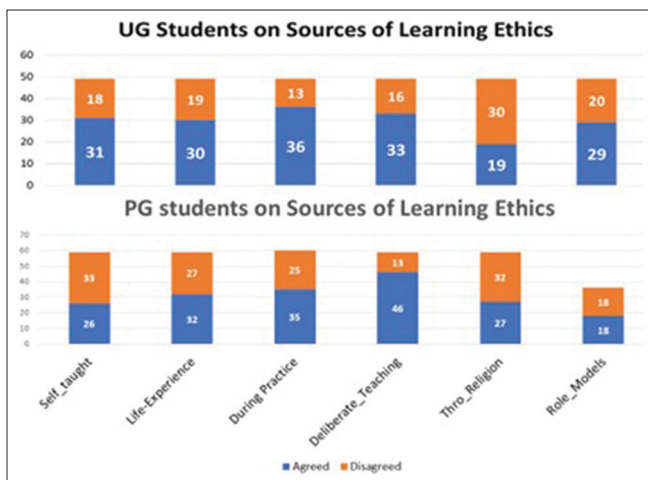


Figure 3: Undergraduate versus postgraduate on sources of learning ethics

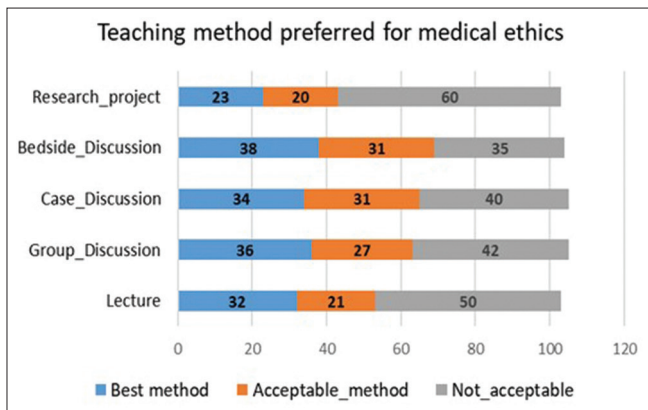


Figure 4: Teaching method preferred for medical ethics

between UG and PG students was noted in the responses ( $P > 0.05$ ).

## Discussion

The study reveals several facts that educators delivering ethics education would find pertinent.

It is heartening to note that despite uncertain judgment on adequacy of ethics presently taught in UG years, all

students were in agreement on the importance of having knowledge about ethics. This augurs well for imminent interactions with medical students in the coming years. This is further buttressed by the significant majority of respondents acknowledging that knowledge of ethics would have a positive effect on their careers. The results were in harmony with the findings of other Indian researchers.<sup>[8,9]</sup> The lack of agreement on the adequacy of ethics training currently given could partly be ascribed to the fact that ethics training through informal curricula is often covert and difficult to recognize as such for learners.

The journey of ethics becoming an inalienable part of the medical curriculum has been bumpy and interesting.<sup>[10]</sup> Teaching of ethics is unique in the medical curriculum and cannot simply be taught like other subjects.<sup>[11]</sup> Student expectations and perceptions on how best they think ethics can be learned by them would be an important determinant of their response to any ethics training.

In this study, one of the sources for learning favored by students was deliberate teaching, which would comfort many-a-faculty. A previous study among Indian students revealed that only 42% of respondents accepted that ethics could be taught at all.<sup>[12]</sup> The acceptance that there is indeed specific knowledge to be attained, and that there is content that can be taught and learned, suggests an openness to learn, progress, and potentially gain expertise in the subject.

Students also opined that another source of learning ethics is learning during practice. One interpretation could be that students recognize that the practice of ethics and its different nuances are best appreciated after years of actual clinical work. However, it may behoove faculty to address this point if it does, in fact, represent a faulty student belief that clinical practice alone can teach ethics or ethical resolution of situations. We opine that clinical practice is the time to apply one's knowledge of ethical principles and refine one's skills, after having previously gained the knowledge.

Results revealed that UG students were twice as likely to identify "self-taught" with reference to ethics education. This could reflect a lack of significant previous ethics training, as those students were in their 3<sup>rd</sup> semester. Furthermore, the term "ethics" is often confused in minds of the uninitiated with morals or values, which can be self-developed.

It is pertinent to note that role models were not seriously considered a source of learning ethics by students. This is of concern as even now, the informal (hidden) curriculum is a major platform of delivering ethics training and

is based on the process of observe-learn-adopt-do with faculty serving as role models. Haidet and Stein emphasized the role of relationships in the hidden curriculum.<sup>[13]</sup> Students have identified traits of a role model in previous studies, wherein prominent traits identified were: clinical excellence, patient empathy, taking time out to teach, facilitating learning, teaching, and communication skills. Students in a Sri Lankan study too identified “inspiring, supporting, and actively engaging with the students” as important traits. The desire to be “like them” or follow in their areas of specialization is often a function of the teachers’ behavior and attitude. As previous researchers have emphasized, students do recognize, imbibe, and apply humanistic behavior.<sup>[14-16]</sup> The rejection of role models as a source of learning ethics is hence, both, worrisome, and a cause for introspection. In India, the teacher–student relationship still rests largely on traditional doctrines of authority, paternalism, and is largely teacher centric. This amplifies the impact of a positive or negative role model on the students.<sup>[17]</sup> Drawing deliberate attention to one’s behavior, highlighting ethical and professional dilemmas, initiating, and encouraging discussions on what has to-date remained “hidden” during daily student–teacher interaction – all of these techniques need to be emphasized. Needless to say, this is contingent on the assumption that faculty conduct is at all times worthy of emulation. It is interesting to note that authors Paice and Moss expressed the view that “role models may not be a dependable way to impart professional values, attitudes, and behaviors.”<sup>[18]</sup> Other authors have commented on the “conflicting messages students received from higher members of clinical medical teams.”<sup>[19]</sup> It is in this context that the new curriculum introduced by the National Medical Commission, the erstwhile MCI, seems opportune. It does not, however, take away the onus from faculty to introspect and appropriately address this perception.

As with previous studies, interactive methods of teaching were favored by students in this study too, namely, case discussions, group discussions, and bedside discussions.<sup>[20]</sup> Students have emphatically rejected lectures and research projects as teaching methods for ethics. This serves as a guide for faculty as to which pitfalls to avoid. Ethics is best taught by a mix of different methods to encourage cognition, reflection, critical analysis, and decision-making. A combination of deliberate didactic sessions, interactive (small) group discussions, role play, case discussions, and emphasis on ethics during clinical rounds are all necessary for optimal transfer of knowledge in medical ethics.<sup>[21-23]</sup> Ethical situations can be identified in various situations and contexts during clinical training and in practice. Using these occasions to initiate teaching–learning interactions is an essential part of promoting ethics education.

## Conclusion

Students recognize the importance of gaining knowledge on medical ethics, accept deliberate teaching as a source of learning, and favor interactive methods of teaching – all findings fortuitous for ethics educators. Some perceptions on the need for clinical practice to learn ethics, and ethics being a self-taught discipline, need to be addressed to enhance transfer of knowledge and skills. Variable adequacy of ethics training in the medical school curriculum has been conclusively resolved by the medical regulatory body of India through its module from 2019. There is a scope to explore the contribution and function of role models in ethics education and an urgent need for further study and introspection on the issue.

## Limitations

The sample size of this study puts certain restrictions on the degree of generalization.

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## Conflicts of interest

There are no conflicts of interest.

## References

1. Raanan G. Thinking about a medical school core curriculum for medical ethics and law. *J Med Ethics* 1996;22:323-4.
2. Doyal L, Gillon R. Medical ethics and law as a core subject in medical education. *BMJ* 1998;316:1623-4.
3. Miyasaka M, Akabayashi A, Kai I, Ohi G. An international survey of medical ethics curricula in Asia. *J Med Ethics* 1999;25:514-21.
4. Carey GB, Curlin FA, Yoon JD. Carey GB, Curlin FA, Yoon JD Medical student opinions on character development in medical education: a national survey. *BMC Res Notes* 2015; 8:455 <https://doi.org/10.1186/s13104-015-1434-z>
5. AlMahmoud T, Hashim MJ, Elzubeir MA, Branicki F. AlMahmoud T, Hashim MJ, Elzubeir MA, Branicki F. Ethics teaching in a medical education environment: preferences for diversity of learning and assessment methods. *Med Educ Online*. 2017;22 (1):1328257. doi: 10.1080/10872981.2017.1328257.
6. Saad TC, Riley S, Hain R. A medical curriculum in transition: Audit and student perspective of undergraduate teaching of ethics and professionalism. *J Med Ethics* 2017;43:766.
7. Stirrat GM. Stirrat GM Reflections on learning and teaching medical ethics in UK medical schools. *J Med Ethics* 2015;41:8-11. doi: 10.1136/medethics-2014-102309
8. Anshu. Inclusion of ethics matters in the undergraduate medical curriculum. *Indian J Med Ethics* 2011;8:135-138. <https://doi.org/10.20529/IJME0.2011.057>
9. Rose A, George K, T AD, Pulimood AB. Rose A, Kuryan G, Dhas AT, Pulimood AB, Kang G Survey of ethical issues reported

- by Indian medical students: Basis for design of a new curriculum. *Indian J Med Ethics* 2014;11:25-8. <https://doi.org/10.20529/IJME0.2014.007>
10. Haidet P, Stein HF. Haidet P, Stein HF The role of the student-teacher relationship in the formation of physicians. The hidden curriculum as process. *J Gen Intern Med* 2006;21 Suppl 1:S16-20.
  11. Joubert PM, Krüger C, Bergh AM, Pickworth GE, Van Staden CW, Roos JL, *et al.* Medical students on the value of role models for developing 'soft skills' - "That's the way you do it. *Afr J Psychiatry* 2006;9:28-32.
  12. Mirhaghi A, Moonaghi HK, Sharafi S, Zeydi AE. Role modeling: A precious heritage in medical education. *Acta Fac Med Naiss* 2015;32:31-42.
  13. Jayasuriya-Illesinghe V, Nazeer I, Athauda L, Perera J. Jayasuriya-Illesinghe V, Nazeer I, Athauda L, Perera J Role models and teachers: Medical students perception of teaching-learning methods in clinical settings, a qualitative study from Sri Lanka. *BMC Med Educ* 2016;16:52. <https://doi.org/10.1186/s12909-016-0576-6>
  14. Paice E, Heard S, Moss F. Paice E, Heard S, Moss F How important are role models in making good doctors? *BMJ* 2002;325:707-10.
  15. Yavari N, Asghari F, Shahvari Z, Nedjat S, Larijani B. Yavari N, Asghari F, Shahvari Z, Nedjat S, Larijani B. Obstacles of professional behavior among medical trainees: A qualitative study from Iran (2018). *J Educ Health Promot* 2019;8:193.
  16. Lehmann JA, Hoop J, Hammond KG, Roberts LW. Medical students' affirmation of ethics education. *Acad Psychiatry* 2009;33:472-7.
  17. Alkabba AF, Hussein GM, Kasule OH, Jarallah J, Alrukban M, Alrashid A. Alkabba AF, Hussein GM, Kasule OH, Jarallah J, Alrukban M, Alrashid A. Teaching and evaluation methods of medical ethics in the Saudi public medical colleges: Cross-sectional questionnaire study. *BMC Med Educ* 2013;13:122.
  18. May DR, Luth MT. May DR, Luth MT. The effectiveness of ethics education: A quasi-experimental field study. *Sci Eng Ethics* 2013;19:545-68.
  19. Mattick K, Bligh J. Mattick K, Bligh J. Teaching and assessing medical ethics: Where are we now? *J Med Ethics* 2006;32:181-5.
  20. Burkemper JE, DuBois JM, Lavin MA, Meyer GA, McSweeney M. Burkemper JE, DuBois JM, Lavin MA, Meyer GA, McSweeney M. Ethics education in MSN programs: A study of national trends. *Nurs Educ Perspect* 2007;28:10-7.
  21. Beigy M, Pishgahi G, Moghaddas F, Maghbouli N, Shirbache K, Asghari F, *et al.* Students' medical ethics rounds: A combinatorial program for medical ethics education. *J Med Ethics Hist Med* 2016;9:3.
  22. Antes AL, Murphy ST, Waples EP, Mumford MD, Brown RP, Connelly S, *et al.* Antes AL, Murphy ST, Waples EP, Mumford MD, Brown RP *et al.* A Meta-analysis of ethics instruction effectiveness in the sciences. *Ethics Behav* 2009;19:379-402.
  23. Parker L, Watts L, Scicluna H. Parker L, Watts L, Scicluna H. Clinical ethics ward rounds: Building on the core curriculum. *J Med Ethics* 2012;38:501-5.