

## FEEDBACK OF THE SESSION ON PROFESSIONALISM AND ETHICS USING VARIOUS TEACHING METHODS AMONG UNDERGRADUATE MEDICAL STUDENTS

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### ABSTRACT

**Objectives:** This study aims to assess the feedback of the session on professionalism and ethics using various teaching-learning (TL) methods among the 1<sup>st</sup> year undergraduate medical students.

**Methods:** This was a cross-sectional study conducted among one hundred and twenty-four 1<sup>st</sup> year undergraduate medical students (2019–2020 batch) divided into three batches. They attended a 3 h session each day on professionalism and ethics module one using various TL methods such as an interactive lecture, a role play, and group discussion for 3 consecutive days. At the end of the session, the students filled out a self-administered questionnaire in a “Likert scale” design carrying a minimum score of 1 (1=strongly disagree) and a maximum score of 5 (5=strongly agree). Feedback was obtained to assess the quality of teaching and effectiveness of teaching methodologies. Descriptive statistics were used and the statistical analysis was performed using SPSS version 24.

**Results:** Overall 93% of the students gave positive feedback on various domains of the session that included organization, presentation, rapport, credibility, and control. About 83% of students responded that various methods of teaching such as interactive lectures and role play were used.

**Conclusion:** The majority of the students showed positive acceptance toward all aspects of this session. Active feedback given by the students may help us to identify the components that need to be upgraded for better delivery of course contents in the future.

**Keywords:** Professionalism, Ethics, Teaching methods, Medical students, Feedback.

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### INTRODUCTION

According to Epstein and Hundert, professionalism competence is the “habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community being served” [1,2]. Ethical (moral) principles such as autonomy, beneficence, non-maleficence, and justice are basic to the physician-patient relationship and it is also an essential element for the conduct of medical research and medical practice. Medical Council of India (MCI), in its revised regulations on graduate medical education 2017, has emphasized the importance of competencies connected to professionalism and ethics and endorsed it to be a vital part of the curriculum through a structured longitudinal and dedicated program [3,4]. It is said that “once a thief, always a thief” and this fact is substantiated by studies, showing that students who show “unprofessional and unethical behavior while undergoing graduation tend to be unprofessional and unethical after graduation.” Hence, professionalism and ethics should be key competencies that must be exhibited for a student to graduate from medical school [5].

Teaching professionalism and ethics in medical education is highly challenging and the necessity to include active teaching-learning (TL) methods has been addressed by the MCI [6]. Since they are multidimensional competencies with several component skills, a combined modality of practicable, justifiable, and compatible TL tools with the individualized institutional master plan is pivotal for imparting training, overruling the conventional teaching, and empowering explicit learning among the students. There are several TL tools such as interactive lectures, large group discussion, case-based studies, video cases/clips, cinemeducation, self-directed learning, reflective learning, brainstorming, role modeling, field visits

as a community worker, panel discussion, debates, the conduct of skits (role play), and portfolio [7,8]. The tool varies depending on the phase of undergraduate training and practicability, that is, during the pre-clinical and paraclinical phase, a method imparting more knowledge (interactive lectures and small/large group discussion) will be concentrated and during the clinical phase focus would be on “shows how” (self-directed learning, reflective learning, brainstorming, and case-based studies) [6,9,10].

There is a noteworthy difference in how professionalism and ethics are taught and how medical graduates wish it to be taught with more effectiveness and as there are only a few Indian studies involving the feedback of a session on professionalism and ethics among the 1<sup>st</sup> year undergraduate medical students like a study by Barman *et al.* [11]. Hence, the present study was taken up to generate valid and useful data. In the present study, the feedback of the session on professionalism and ethics using various teaching methods among undergraduate medical students was assessed retrospectively in a tertiary care teaching hospital.

### METHODS

This retrospective, cross-sectional study was conducted using purposive sampling among one hundred and twenty-four 1<sup>st</sup> year undergraduate medical students (2019–2020 batch), in the Department of Pharmacology, KMCH Institute of Health Sciences and Research, Coimbatore, India, for a duration of 3 months (April 2020–June 2020). The study began after acquiring permission from the medical education unit of the institute and approval and clearance from the Institutional Ethics Committee (IHEC/06/2020). Anonymity, confidentiality, and professional secrecy were maintained for all the study participants.

### Inclusion criteria

The following criteria were included in the study:

1. The 1<sup>st</sup> year undergraduate medical students who attended the session
2. Students of either gender.

### Exclusion criteria

Not willing to participate.

### Study procedure

As a part of the foundation course conducted in August 2019 at KMCHHSR, Coimbatore, professionalism and ethics module one (as proposed by MCI) was taught to one hundred and twenty-four 1<sup>st</sup> year undergraduate medical students divided into three batches for 3 consecutive days, and each day the session lasted for 3 h. A combined TL method comprising an initial half an hour of the *ice-breaking session*, in which a unique activity named "where is my quote" was conducted. Instructors distributed several placards (two placards containing the same educational quote) randomly to all the students and the students who got the same quote, introduced each other and read, inferred those quotes, simultaneously, it was projected in PowerPoint also and the instructor highlighted the keynote of those quotes and the next 1 h was an *interactive lecture* (slides, pictures, student inputs, and real-life experiences) on core concepts of professionalism, ethics, and altruism. Following which each batch was divided into four groups and each group was asked to do a *role play* and enact on topics such as altruism, medical negligence, informed consent, and research conduct [(for each group - 10 min was allotted for *group discussion* and 10 min for *role play*)-overall duration was 1 h and 20 min]]. The final 10 min *video cases/clips* related to the topics of role-playing were projected and discussed by the instructor.

At the end of the session, one hundred and twenty-four 1<sup>st</sup> year undergraduate medical students were selected by purposive sampling and they voluntarily participated and filled out the feedback form (pre-validated questionnaire) where the initial section had participant demographic details such as age, gender, place, and academic details (board of school education, medium of instruction, and second language) followed by the second section with 25 items divided into four categories, about the session on professionalism and ethics module one, of which five items were about the category of organization of the session, 13 items about the presentation, six items on rapport, and one item about credibility and control. Rating of these criteria was done on a descending 5-point Likert scale (5=strongly agree, 4=agree, 3=neutral, 2=disagree, and 1=strongly disagree) and no response=0.

### Statistical analysis

The data collected were analyzed statistically using descriptive statistics, namely, mean and standard deviation for quantitative variables and non-parametric tests for qualitative variables, for each domain and item of each group separately. Wherever necessary, the results are depicted in the form of percentages and graphs. Statistical software - SPSS Version 24 was used for the analysis of data and Microsoft Word and Excel to generate graphs and tables.

## RESULTS

Among the 124 participants whose responses were analyzed, 70 (56.45%) were male and 54 (43.54%) were female (Fig. 1). Their age ranged from 17 to 21 years. The students gave their feedback on the various aspects of the module such as organization, presentation, rapport, credibility, and control which are as follows. For the descriptive purpose, ratings of strongly agree/agree and strongly disagree/disagree were taken as one. Overall, 93% of students were satisfied with all four aspects of the professionalism and ethics module one session.

### Feedback on the organization of the session

Regarding the session's timing, 97.6% and 75.6% of participants agreed that it begin and end on time, respectively. About 98.4% of them felt that it had a clear objective. About 93.5% of the participants stated that a summary was provided. The majority (96%) of the students considered that the presenter was well prepared for the session (Fig. 2).

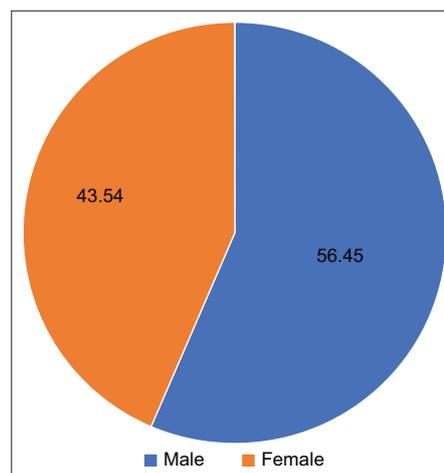


Fig. 1: Gender distribution of respondents

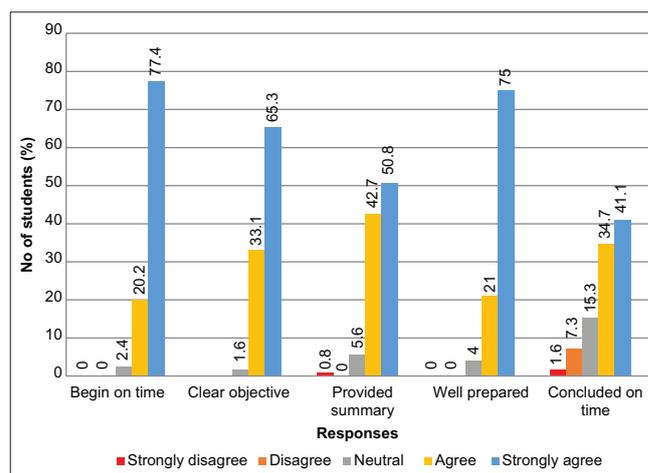


Fig. 2: Feedback on organization of the session\*. \* No. of participants who did not answer question number 1, 2, 3, 4, and 5 were 2, 1, 1, 1, and 3, respectively

### Feedback on presentation of the session

Almost all of the participants opined that various instructional supports such as slides and pictures were used and the presenter talked to the class and not to board or windows. The majority (83%) of students responded that various methods of teaching such as interactive lectures and role play were used, still, 16.9% remain neutral. Regarding the response to changes in student attentiveness and varying pace to keep them alert, 97.5% and 96.7% agreed, respectively. About 73.3% of participants positively replied on the usage of blackboard, while 10.4% disagreed and one student did not respond. Only 1.6% of the students remain neutral on the usage of humor and enthusiasm toward the content and the rest of them (98.4%) accepted. The level of language was appropriate according to 96% of them. It is interesting to note that only 0.8% disagreed with the statement difficult vocabulary was explained, the remaining 84.7% agreed and 14.5% were neutral. Although speech fillers were not distracting for most (88.7%) of the students, 11.2% continue to be neutral. According to 97.5% of students, the speech was audible and clear, but few (0.8%) of the participants, disagreed on this. Gestures were used according to 92.7% of students (Table 1).

### Feedback on rapport of the session

Student contributions were praised and they were treated equitably according to 96.8% and 97.6% of the students, respectively. Almost all of the participants believe that the presenter listened to questions. About 98.4% of the students said that there was a constructive response

and mutual respect between the students was encouraged. As far as, soliciting feedback was concerned 94.3% of the participants responded positively, but 4.8% of them were neutral in this regard (Fig. 3).

**Feedback on credibility and control**

About 89.5% of participants agreed to the statement, “Responds to distractions effectively yet constructively,” and 6.5% kept their stand neutral (Fig. 4).

**DISCUSSION**

After a student gets admitted to a medical school, to make them learn medicine effectively, there would be a foundation course for 2 months duration, aimed at orienting the students to national health scenarios, medical ethics, health economics, learning skills and communication, life support, computer learning, sociology and demographics, biohazard safety, environmental issues, and community orientation, as well as a synopsis in the three main subjects (Anatomy, Physiology, and Biochemistry) to be taught in the first MBBS as proposed by MCI Vision 2015 [12]. In line with the same, we conducted a session on professionalism and ethics module one in our institute and acquired feedback from one hundred and twenty-four 1<sup>st</sup> year medical students to determine the quality of teaching and to observe the effectiveness of teaching methodologies. There was an overall positive response in all facets of the session.

Because “today’s students are the physicians of tomorrow,” medical ethics focused curriculum may direct them to make better decisions using communication, problem-solving skills, etc. [13]. According to Paul, professionalism and ethics module has been incorporated in the course keeping in mind the nature of the profession where doctors face ethical dilemmas all the time. Teaching about disability rights is crucial for producing aware and empathetic doctors [14]. To idealize an effective professionalism and ethics teaching curriculum for undergraduate students, the primary step is to understand their views

on the various TL tools used for imparting modules of professionalism and ethics. In our study, the module was designed after discussion with the faculty in the medical education unit and the pre-clinical departments. Depending on the results obtained from the study, it was decided to take remedial measures and adhere to a suitable program and methodology in the ensuing academic years.

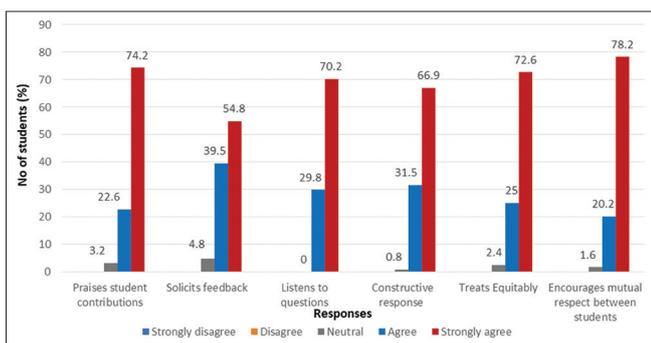
Positive feedback (83%) from our students on the usage of various methodologies of teaching was in line with the studies by Sullivan *et al.*, as per which the effective teaching of professionalism and ethics depends on choosing an objective-based, combined method of teaching wherein didactic lectures can be complemented by case studies, role plays, demonstrations, and group discussions [5,13,15]. Another study also suggests that reflective learning through role play and mentoring programs enhances real-life medical practice communication skills [16].

As per MCI, successful implementation of the competency-based medical education curriculum rests with the MCI Nodal and Regional Centers and Medical Education Units (MEU) of all medical colleges. As per our MEU, this module was taught by a specialist senior faculty from pharmacology, trained in bioethics and medical education in contrast to other studies, probably this may also be one of the reasons for positive feedback in this session [17].

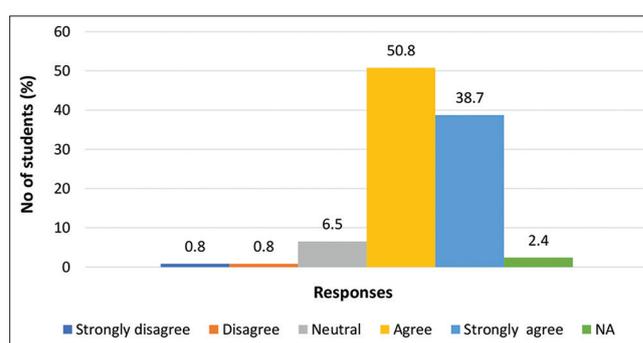
Overall, 93% of students satisfaction regarding various facets (organization, presentation, rapport, credibility, and control) of the session suggests that a well-trained faculty who could inculcate all the aspects included in our session using a variety of teaching methods, within a stipulated time frame is the need of the hour, to bring out the best professional and enhance the patient outcome. The active participation and positive feedback given by the students in this session will help faculty to fine-tune and add more interesting interactive TL methodologies and structure the modules in the longitudinal program.

**Table 1: Feedback on presentation of the session (total number=124), n (%)**

Items	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Incorporates various instructional supports such as slides and pictures	0	0	0	30 (24.1)	94 (75.8)
Responds to changes in student attentiveness	0	0	3 (2.4)	43 (34.6)	78 (62.9)
Used a variety of methods such as interactive lectures and role play	0	0	21 (16.9)	103 (83)	0
Used blackboard	7 (5.6)	6 (4.8)	19 (15.3)	48 (38.7)	43 (34.6)
Speech fillers like “OK, Ah” are not distracting	0	0	14 (11.2)	48 (38.7)	62 (50)
Speaks audibly and clearly	0	1 (0.8)	2 (1.6)	38 (30.6)	83 (66.9)
Uses gestures	0	0	9 (7.3)	55 (44.4)	60 (48.3)
Communicates a sense of enthusiasm, excitement toward the content	0	0	2 (1.6)	41 (33.1)	81 (65.3)
Use of humor is positive and appropriate	0	0	2 (1.6)	46 (37.1)	76 (61.3)
Difficult vocabulary is explained	1 (0.8)	0	18 (14.5)	49 (39.5)	56 (45.2)
Level of language is appropriate	0	0	5 (4)	43 (34.7)	76 (61.3)
Talks to the class, not board or windows	0	0	0	32 (25.8)	92 (74.1)
Varies pace to keep students alert	0	0	4 (3.2)	37 (29.8)	83 (66.9)



**Fig. 3: Feedback on Rapport**



**Fig. 4: Feedback on credibility and control**

## CONCLUSION

The majority of the students showed positive acceptance toward this session, especially in terms of various TL methods. Active feedback given by the students was valuable in identifying components that need to be upgraded so that suitable measures can be made to advance the overall worth and usefulness of the course in the future. A faculty development program on professionalism and ethics in teaching skills, student management, institutional leadership, and faculty development activities may prove to be the greatest asset. Further studies are needed to identify the best approach to educate professionalism and ethics and the impact of teaching modalities on patient outcomes.

## LIMITATIONS

Although the session had an overall positive response, pre-existing knowledge/improvement in cognizance after the session and comparison between groups was not done. The results of this study cannot be generalized since it does not encompass a broader range of undergraduate students, as well it's only a descriptive study.

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## AUTHORS' CONTRIBUTIONS

All the authors had contributed to the concept, design, data collection, data analysis, and interpretation, drafting the article, critical revision of the article, and final approval of the version to be published.

## CONFLICTS OF INTEREST

The authors declare that there are no conflicts of interest regarding the research, authorship, and publication of this article.

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