

professionalism varies globally, reflecting diverse cultural and institutional perspectives. Epstein and Hundert emphasised competence in communication and decision-making.^[5] The UK's Royal College of Physicians focused on values and trust, while the American Board of Internal Medicine highlighted ethical principles. Dutch educators prioritised observable behaviours for assessment.^[6]

National Medical Commission in India 2019 has revised the Indian Medical Graduate (IMG) programme to develop globally competent physicians with the knowledge, skills, ethics and professionalism needed to serve as clinicians, leaders, communicators and lifelong learners.^[7] The introduction of the AETCOM 2019 module for IMG defines professional attributes as the practice of selflessness, integrity, responsibility, accountability and respect.^[7]

Medical professionalism encompasses ethical, social and cultural competencies, necessitating diverse assessment tools.^[8] Medical education and mentorship play a crucial role in instilling these values from the beginning of medical training.^[9] To design a professional development programme, it is essential to understand the views on professionalism held by faculty and medical students.^[10] Understanding the factors that encourage and hinder the practice of professionalism from the perspectives of seasoned faculty and medical students is crucial before developing the professional development programme.^[11] To our knowledge, there has been no study in India that assessed parallel groups of 1st-year and final-year medical students along with faculty on their evolving perspectives on professionalism with career advancement. Hence, we aimed to evaluate the perceptions of faculty and undergraduate medical students regarding the most important attribute of professionalism.

MATERIALS AND METHODS

Study design and setting

This cross-sectional study was conducted at Tertiary Care Medical Institute, India, where we evaluated the perspectives of faculty and 1st and final-year MBBS students regarding professionalism and ranked the most critical attributes associated with it. Approval from the Institutional Ethics Committee was obtained before commencing the study (AIIMS/IEC/21/521/02/09/2021).

Study participants

All faculty and undergraduate medical students from the 1st and final professional years were invited to participate in this study through texts and emails. A total of 170 participants were included in the study out of which 46 were faculty members, 77 were 1st-year students and 47 were final-year students. The research team briefed the participants about

the objectives of the study and written informed consent was obtained. Faculty members and medical students filled out the self-administered questionnaire. The faculty was approached personally before or after outpatient department hours by the research team as per their suitability and convenience. The medical students were approached at the end of the lecture. They were free to complete the questionnaires anonymously or return them without answering. Faculty and medical students not consenting to participate in the study were excluded. Participants did not receive any remuneration for their participation.

Study tool

The Penn State College of Medicine (PSCOM) Professionalism Questionnaire was developed by Blackall *et al.* in the USA as a reliable and valid tool to measure professionalism amongst medical faculty and students.^[10] This instrument evaluates attitudes reflecting six elements of professionalism including Accountability, Altruism, Duty, Excellence, Honesty and Integrity and Respect.

There are a total of 36 items with six items representing six different elements of professionalism i.e. Accountability, Altruism, Duty, Excellence, Honesty and Integrity and Respect for others. All 36 items were divided into six with every group containing six random items from each of the six elements. The faculty and medical students were asked to match the items with their attitudes towards professionalism on a 5-point Likert scale: Never, Little, Some, Much and Great Deal. The maximum score given to every item is 5. Then, they were also asked to rank each of the six-item questions as per their most suitable definition of professionalism for all the six elements.

Statistical analysis

The data entry was done in the Microsoft Excel spreadsheet and the final analysis was done using the Statistical Package for the Social Sciences software, IBM manufacturer, Chicago, USA, version 25.0.

The categorical variables were presented in the form of numbers and percentages. On the other hand, the quantitative data with non-normal distribution were presented as a median with 25th and 75th percentiles (interquartile range). The data normality was checked using the Shapiro–Wilk test. In the cases in which the data was not normal, we used nonparametric tests. The following statistical tests were applied to the results:

1. The comparison of the variables which were quantitative and not normally distributed in nature was analysed using the Kruskal–Wallis test (for more than two groups) and a *post hoc* analysis by Dunn's multiple pairwise comparison test was carried out

2. The comparison of qualitative variables was analysed using Fisher's exact test as at least one cell had an expected value of <5.

For statistical significance, a $P < 0.05$ was considered statistically significant.

RESULTS

This cross-sectional study involved a total of 170 participants. Amongst them, 27% were faculty, 45% were first professional year students and 27% were final professional year students [Figure 1].

Significant differences were noted in several dimensions of professionalism. In the domain of upholding scientific standards and basing decisions on evidence and experience, faculty members scored higher (median: 4, 25th-75th percentile: 3-4) compared to 1st-year (3, 3-4) and final-year (3, 2-4) students ($P < 0.05$). However, maintaining patient/physician relationships without exploitation of personal gains showed significantly higher scores in faculty (4, 3-4) and 1st-year students (4, 3-4) compared to final-year students (3, 2-3) ($P < 0.05$). Other areas where significant differences were observed included taking time to review colleagues' work (1st year: 3, 3-4; final year: 3, 2-3; faculty: 3, 2-3; $P < 0.05$), attending faculty meetings as a reflection of support (1st year: 3, 2-3; final year: 2, 1-3; faculty: 3, 2-4; $P < 0.05$), working collaboratively within a team for improved patient care or research (1st year: 3, 3-4; final year: 3, 2-3; faculty: 3, 3-3.75; $P < 0.05$), not seeking career advancement at the expense of others (1st year: 3, 2-4; final year: 3, 2-3; faculty: 4, 3-4; $P < 0.05$), volunteering for the community's welfare (1st year: 3, 3-4; final year: 3, 3-4; faculty: 3, 3-4; $P < 0.05$) and demonstrating adaptability to changing needs and priorities (1st year: 3, 3-4; final year: 3, 2-3; faculty: 3, 3-4; $P < 0.05$). Moreover, faculty members exhibited

significantly higher scores in compassion and advocating for the patient's or research subject's interest over personal interest (all $P < 0.05$). However, 1st-year students exhibited significantly higher scores in reporting medical or research errors, recognition of their limitations and meaningful contributions to teaching (all $P < 0.05$). Notably, 1st-year students were found to excel in attitude towards meeting commitments and obligations compared to their final-year counterparts, with a statistically significant difference. However, both groups scored similarly in adopting uniform standards for patient care. In terms of empathy, 1st-year students demonstrated a higher level than final-year students, and this difference was statistically significant, while faculty scores fell in between [Table 1].

In the Item Group 1 category, which focused on the most and least important questions, significantly higher faculty members considered 'Upholds scientific standards and bases decisions on scientific evidence and experience' as the most crucial item (52.17%), than 1st-year (31.17%) and final-year (27.66%) students ($P = 0.003$). Conversely, 'Takes time to review other colleagues' work and provides meaningful and constructive comments to improve it' was deemed the least important by faculty (34.78%) than 1st-year students (22.08%) and final-year students (12.77%) ($P < 0.0001$) [Table 2].

In the Item Group 2 category, 1st-year students (32.47%) as compared to final-year students (23.40%) and faculty (17.39%) perceived the most important question as 'Shows a willingness to initiate and offer assistance towards a colleague's professional and personal development'. However, there were no significant differences in the responses to this question amongst the three groups ($P = 0.14$). Conversely, attendance at faculty meetings, seminars and student research presentations was considered least important by a substantial number of 1st-year students (33.77%), suggesting a divergence in priorities compared to final-year students (36.17%) and faculty (41.30%) who rated this aspect higher [Table 3].

In Item Group 3 category, professional attributes delved into issues of ethics and responsibilities in which 1st-year students considered 'Participates in corrective action processes towards those who fail to meet professional standards of conduct' as the most important (33.77%), significantly surpassing final-year students (12.77%) and faculty (10.87%) ($P < 0.0001$). Meanwhile, the least important question, 'Meets commitments and obligations conscientiously', showed no significant difference between groups [Table 4].

In the Item Group 4 category, 'Shows compassion' emerged as the most important for 1st-year students (49.35%), significantly surpassing final-year students (12.77%) and faculty (17.39%) participants ($P < 0.0001$). 'Recognises one's own limitations' emerged as the least important for 1st-year students (44.16%), significantly surpassing final-year students (14.89%) and faculty (21.74%) ($P < 0.0001$) [Table 5].

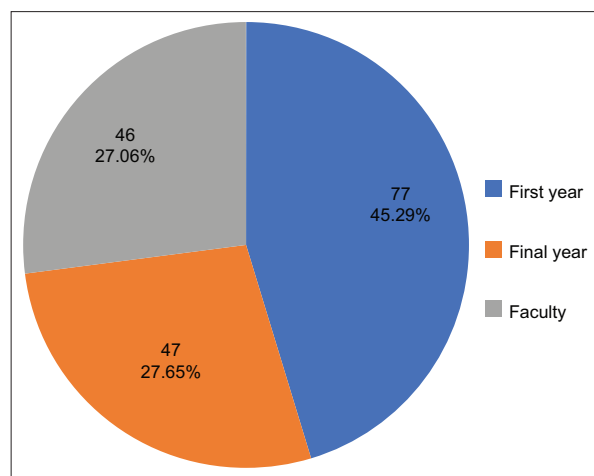


Figure 1: Distribution of participants amongst three groups.

Table 1: Comparison of Item Group scores amongst three groups (Values expressed as median [IQR]).

Questionnaire on professionalism	First year (n=77)	Final year (n=47)	Faculty (n=46)	P-value
Upholds scientific standards and bases decisions on scientific evidence and experience	3 (3–4)	3 (2–4)	4 (3–4)	0.005 [†] 1 st -year versus Final year: 0.686 1 st -year versus Faculty: 0.004 Final year versus Faculty: 0.003
Maintains patient/physician relationships that do not exploit personal financial gain, privacy or sexual advantages	4 (3–4)	3 (2–3)	4 (3–4)	<0.0001 [†] 1 st -year versus Final year: <0.0001 1 st -year versus Faculty: 0.778 Final year versus Faculty: <0.0001
Takes time to review other colleagues' work and provides meaningful and constructive comments to improve it	3 (3–4)	3 (2–3)	3 (2–3)	0.014 [†] 1 st -year versus Final year: 0.068 1 st -year versus Faculty: 0.005 Final year versus Faculty: 0.38
Attends faculty meetings, seminars and student research presentations as a reflection of support	3 (2–3)	2 (1–3)	3 (2–4)	0.011 [†] 1 st -year versus Final year: 0.003 1 st -year versus Faculty: 0.334 Final year versus Faculty: 0.072
Works collaboratively and respectfully within a team to the benefit of improved patient care or to the contribution of research	3 (3–4)	3 (2–3)	3 (3–3.75)	0.003 [†] 1 st -year versus Final year: 0.0008 1 st -year versus Faculty: 0.086 Final year versus Faculty: 0.151
Do not seek to advance one's career at the expense of another's career	3 (2–4)	3 (2–3)	4 (3–4)	<0.0001 [†] 1 st -year versus Final year: 0.122 1 st -year versus Faculty: <0.0001 Final year versus Faculty: <0.0001
Volunteers one's skills and expertise for the welfare of the community	3 (3–4)	3 (2–4)	3 (3–4)	0.029 [†] 1 st -year versus Final year: 0.01 1 st -year versus Faculty: 0.745 Final year versus Faculty: 0.045
Meets commitments and obligations in a conscientious manner	3 (3–4)	3 (2–3)	3 (2–3.75)	0.0009 [†] 1 st -year versus Final year: 0.0002 1 st -year versus Faculty: 0.047 Final year versus Faculty: 0.132
Meaningfully contributes to the teaching mission of the department and the College of Medicine	3 (3–4)	3 (2–4)	3 (2–4)	0.046 [†] 1 st -year versus Final year: 0.013 1 st -year versus Faculty: 0.443 Final year versus Faculty: 0.128
Shows compassion	3 (3–4)	3 (3–4)	4 (3–4)	0.001 [†] 1 st -year versus Final year: 0.136 1 st -year versus Faculty: 0.013 Final year versus Faculty: 0.0004
Demonstrates adaptability in responding to changing needs and priorities	3 (3–4)	3 (2–3)	3 (3–4)	0.045 [†] 1 st year versus Final year: 0.022 1 st year versus Faculty: 0.971 Final year versus Faculty: 0.037
Recognises one's own limitations	3 (3–4)	3 (2–3)	3 (2–3)	0.01 [†] 1 st -year versus Final year: 0.035 1 st year versus Faculty: 0.005 Final year versus Faculty: 0.512

(Contd...)

Table 1: (Continued).

Questionnaire on professionalism	First year (n=77)	Final year (n=47)	Faculty (n=46)	P-value
Reports of medical or research errors	3 (3-4)	3 (2-3)	2 (2-3)	<0.0001 [†] 1 st year versus Final year: 0.003 1 st year versus Faculty: <0.0001 Final year versus Faculty: 0.306
Demonstrates empathy	4 (3-4)	3 (3-4)	3 (3-4)	0.031 [†] 1 st year versus Final year: 0.008 1 st year versus Faculty: 0.317 Final year versus Faculty: 0.146
Advocates a patient's or research subject's interest over one's own interest	3 (2-3)	2 (2-3)	3.5 (3-4)	0.0004 [†] 1 st year versus Final year: 0.034 1 st year versus Faculty: 0.023 Final year versus Faculty: <0.0001

[†]Kruskal-Wallis test. IQR: Interquartile range. $P < 0.05$ was considered statistically significant.

Table 2: Comparison of ranking of Item Group 1 scores amongst three groups (%).

Ranking of questions	First year (n=77)	Final year (n=47)	Faculty (n=46)	P-value
Upholds scientific standards and bases decisions on scientific evidence and experience	31.17	27.66	52.17	0.003*
Maintains patient/physician relationships that do not exploit personal financial gain, privacy or sexual advantages	36.36	17.02	17.39	
Takes time to review other colleagues' work and provides meaningful and constructive comments to improve it	2.60	21.28	8.70	
Seeks self-improvement	18.18	12.77	6.52	
Reports data consistently, accurately and honestly	3.90	8.51	4.35	
Avoids offensive speech that offers unkind comments and unfair criticisms of others	7.79	12.77	10.87	
Avoids offensive speech that offers unkind comments and unfair criticisms of others	33.77	12.77	30.43	

*Fisher's exact test. $P < 0.05$ was considered statistically significant.

Table 3: Comparison of ranking of Item Group 2 scores amongst three groups (%).

Ranking of questions	First year (n=77)	Final year (n=47)	Faculty (n=46)	P-value
Shows a willingness to initiate and offer assistance towards a colleague's professional and personal development	32.47	23.40	17.39	0.14*
Promotes the welfare and development of junior faculty	7.79	2.13	13.04	
Refusal to violate one's personal and professional code of conduct	16.88	31.91	17.39	
Appreciates and respects the diverse nature of research subjects and/or patients and honours these differences in one's work with them	12.99	8.51	13.04	
Attends faculty meetings, seminars and student research presentations as a reflection of support	5.19	14.89	15.22	
Works collaboratively and respectfully within a team to the benefit of improved patient care or to the contribution of research	24.68	19.15	23.91	

*Fisher's exact test. $P < 0.05$ was considered statistically significant.

In the Item Group 5 category, focusing on patient care and empathy, 1st-year students and faculty identified 'Assumes

personal responsibility for decisions regarding patient care' as the most important (32.47% and 41.30%, respectively),

Table 4: Comparison of ranking of Item Group 3 scores amongst three groups (%).

Ranking of questions	First year (n=77)	Final year (n=47)	Faculty (n=46)	P-value
Participates in corrective action processes towards those who fail to meet professional standards of conduct	33.77	12.77	10.87	<0.0001*
Does not seek to advance one's career at the expense of other's career	20.78	21.28	36.96	
Volunteers one's skills and expertise for the welfare of the community	11.69	17.02	13.04	
Meets commitments and obligations in a conscientious manner	7.79	2.13	4.35	
Respects the rights, individuality and diversity of thought of colleagues and students	20.78	23.40	17.39	
Meaningfully contributes to the teaching mission of the department and the College of Medicine	5.19	23.40	17.39	

*Fisher's exact test $P < 0.05$ was considered statistically significant.

Table 5: Comparison of ranking of Item Group 4 scores amongst three groups (%).

Ranking of item questions	First year (n=77)	Final year (n=47)	Faculty (n=46)	P-value
Shows compassion	49.3	12.77	17.39	<0.0001*
Demonstrates adaptability in responding to changing needs and priorities	7.79	10.64	19.57	
Promotes justice in the healthcare delivery system by demonstrating efforts to eliminate discrimination in healthcare	20.78	36.17	21.74	
Respects patient autonomy and helps them make informed decisions	11.69	21.28	30.43	
Assumes leadership in patient management	2.60	2.13	6.52	
Recognises one's own limitations	7.79	17.02	4.35	

*Fisher's exact test. $P < 0.05$ was considered statistically significant.

significantly more than final-year students (17.02%) ($P < 0.0001$). Conversely, 'Reports medical or research errors' was considered least important by faculty (56.52%) and final-year students (46.81%) as compared to 1st-year (14.29%) students ($P < 0.0001$) [Table 6].

In the Item Group 6 category, focusing on professional conduct, 'Advocates a patient's or research subject's interest over one's own interest' was deemed most important by all groups, with 1st-year students (35.06%) ranking it significantly higher than final-year students (14.89%) ($P = 0.002$). 'Represents information and actions truthfully' was considered least important by 1st-year participants (35.06%), while it was deemed more important by final-year (14.89%) and faculty (6.52%) ($P < 0.0001$) [Table 7].

DISCUSSION

Professionalism by and large was attributed to 'Excellence' and 'Respect' for respondents in all three groups in all six-item groups in the present study. In a similar study by Mokhachane *et al.* 2024, in the 1st to 4th year of study of medical training, Ubuntu philosophy was compared to the Physician's Charter. They reported that 'Respect' is overarching while 'Compassion and Responsibility' are the

most comparable to the Charter.^[12] In our study, as reflected in item group 1, faculty prioritise 'Accountability' as scientific rigor and evidence-based decision-making, while students value peer collaboration and feedback. This divergence suggests that faculty may need to integrate more peer review opportunities into teaching. Students' lower emphasis on scientific standards may reflect their developmental stage, highlighting the need to address differing values in educational settings. The Item Group 2 category along with the 1st-year students prioritise 'Altruism' by assisting colleagues' development more than final-year students and faculty, though differences are not significant. Conversely, 1st-year students deem attendance at meetings and presentations less important than their peers, indicating a divergence in priorities and highlighting varying perspectives on professional engagement across academic stages. In the Item Group 3 category, 1st-year students prioritise 'Accountability' in professional conduct, with a significantly higher emphasis on corrective action processes compared to final-year students and faculty. Item Group 4 category students prioritise 'Altruism' more than the faculty. This suggests that early-stage students prioritise empathy, while later-stage students and faculty focus more on self-awareness. Item Group 5 category 1st-year students prioritise 'Accountability' more than faculty.

Table 6: Comparison of ranking of Item Group 5 scores amongst three groups (%).

Ranking of item questions	First year (n=77)	Final year (n=47)	Faculty (n=46)	P-value
Assumes personal responsibility for decisions regarding patient care	32.47	17.02	41.30	<0.0001*
Participates in activities aimed at attaining excellence in patient care	12.99	10.64	17.39	
Reports medical or research errors	10.39	8.51	0	
Acts in ways that show a commitment to confidentiality	3.90	19.15	19.57	
Adopts uniform and equitable standards for patient care	9.09	27.66	8.70	
Demonstrates empathy	31.17	17.02	13.04	

*Fisher's exact test. $P < 0.05$ was considered statistically significant.**Table 7:** Comparison of ranking of Item Group 6 scores amongst three groups (%).

Ranking of item questions	First year (n=77)	Final year (n=47)	Faculty (n=46)	P-value
Advocates a patient's or research subject's interest over one's own interest	35.06	14.89	26.09	<0.0001*
Discloses conflicts of interest in the course of professional duties and activities	14.29	10.64	6.52	
Is professionally attired in a manner that is respectful of others	9.09	21.28	21.74	
Responds to constructive criticism by working to improve one's capability in the area criticised	6.49	0	2.17	
Commits to implement cost-effective patient care	10.39	31.91	23.91	
Represents information and actions in a truthful way	24.68	21.28	19.57	

*Fisher's exact test. $P < 0.05$ was considered statistically significant.

Whereas, faculty reports 'Honesty and Integrity' as less important than other aspects of professionalism. This finding points to a need for reinforcing the importance of error reporting across all levels of medical education and ensuring that personal responsibility is continuously emphasised throughout training. Item Group 6 category students prioritise 'Altruism' more than the faculty. A similar study by Al Gahtani *et al.*, 2021 suggested that medical students had higher mean scores for the domains 'Honesty/Integrity' and 'Accountability/Responsibility' compared to residents and faculty.^[13] The present study findings suggest though all three groups considered 'Excellence' and 'Respect' for others as major determinants of professional behaviour; however, with career advancement, the perspective diverged to being more 'Accountable' and 'Altruism' amongst final year students and faculty which is evident from responses as a shift in ethical focus as students' progress in their training. Early in their education, students may prioritise patient advocacy over other aspects of professional conduct, while later, more experienced individuals, such as final-year students and faculty, understand the equal or greater importance of truthfulness in sustaining ethical and effective practice.

There is a need for targeted educational interventions to foster professionalism throughout medical training. Incorporating professionalism explicitly into the medical curriculum by enhancing emotional intelligence (EI)

amongst the students is crucial. EI is a critical competency in medical education, enabling healthcare professionals to navigate complex interpersonal dynamics and deliver compassionate patient care. To cultivate EI amongst medical students various strategies like simulation based training and role plays can be implemented in their lesson plan. Case studies and reflective practice by analysing complex patient cases, students can explore emotional and ethical dimensions, fostering empathy, integrity and self-awareness. Reflective practice, wherein students contemplate their emotional responses and decision-making processes, further reinforces EI development. Mentoring programmes typically involve personalised feedback, goal-setting and strategies for emotional regulation, contributing to the holistic development of medical trainees. These strategies can be adopted along with mentorship from experienced faculty and can bridge the gap between theoretical knowledge and practical application, ultimately leading to the development of compassionate, ethical and competent medical professionals.

Strengths and limitations

The ethnicity and demographic profile of the participants might limit their generalisability. The study gained strength by adopting a previously validated tool in a tertiary care setting.

CONCLUSION

Given the increasing violence against doctors and the critical importance of professionalism in medical practice, this study highlights the evolving priorities and perspectives on professionalism within the medical education continuum. A parallel group design of this study shows interesting findings amongst 1st-year and final-year medical students along with faculty on their changing perspectives on professionalism with career advancement. There exists a gap between theoretical knowledge and practical application in this domain of medical curricula. Medical training programmes should be designed to foster, inculcate and reinforce the values, behaviours and attitudes essential for maintaining the trust and respect of patients and society, thereby ensuring the safety and well-being of healthcare professionals and the communities they serve.

Acknowledgement: The authors would like to thank all participants of the 1st year and final year and faculty.

Ethical approval: The research study was approved by the Institutional Ethics Committee at AIIMS Rishikesh, approval number AIIMS/IEC/21/521/02/09/2021, dated 2nd September 2021.

Declaration of patient consent: The authors certify that they have obtained all appropriate patient consent forms. In the form, the patients have given their consent for their clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Financial support and sponsorship: Nil.

Conflicts of interest: There are no conflicts of interest.

Use of artificial intelligence (AI)-assisted technology for manuscript preparation: The authors confirm that there was no use of artificial intelligence (AI)-assisted technology for assisting in the writing or editing of the manuscript and no images were manipulated using AI.

REFERENCES

1. World Health Organisation. Violence against health workers; 2019. Available from: https://www.who.int/violence_injury_prevention/violence/workplace/en [Last accessed on

- 2024 Jul 22].
2. Reddy IR, Ukrani J, Indla V, Ukrani V. Violence against doctors: A viral epidemic? *Indian J Psychiatry* 2019;61:S782-5.
3. Attack on doctors: Will Delhi gov't's new order against violence in hospitals change things? Available from: <https://indianexpress.com/article/cities/delhi/attack/on/doctors/will/delhigovts/new/order/against-violence-in-hospitals-change-things-5687414> [Last accessed on 2024 Dec 09].
4. Paice E, Heard S, Moss F. How important are role models in making good doctors? *BMJ* 2002;325:707-10.
5. Epstein RM, Hundert EM. Defining and assessing professional competence. *JAMA* 2002;287:226-35.
6. O'Sullivan H, Van Mook W, Fewtrell R, Wass V. Integrating professionalism into the curriculum: AMEE Guide No. 61. *Med Teach* 2012;34:e64-77.
7. Available from: https://www.nmc.org.in/wp-content/uploads/2020/01/aetcom_book.pdf [Last accessed on 2024 Jul 22].
8. Byszewski A, Hendelman W, McGuinty C, Moineau G. Wanted: Role models--medical students' perceptions of professionalism. *BMC Med Educ* 2012;12:115.
9. Madhok R. The global Indian doctor: Workshop on promoting professionalism and ethics - brief notes and next steps. Kolkata, India; 2014. Available from: <https://leadershipforhealth.com/wp-content/uploads/2014/02/event-report.pdf> [Last accessed on 2014 Sep 29].
10. Blackall GF, Melnick SA, Shoop GH, George J, Lerner SM, Wilson PK, *et al.* Professionalism in medical education: The development and validation of a survey instrument to assess attitudes toward professionalism. *Med Teach* 2007;29:e58-62.
11. Gliatto PM, Stern DT. Professionalism. In: Dent JA, Harden RM, editors. *A practical guide for medical teachers*. 4th ed. London: Churchill Livingstone, Elsevier; 2013. p. 262-8.
12. Mokhachane M, Thompson LG, George A, Wyatt T, Kuper A. Medical students' views on what professionalism means: An Ubuntu perspective. *Adv in Health Sci Educ* 2024;29:841-57.
13. Al Gahtani HM, Jahrami HA, Silverman HJ. Perceptions of medical students towards the practice of professionalism at the Arabian Gulf University. *BMC Med Educ* 2021;21:38.

How to cite this article: Mahadule AA, Mittal S, Mohan L. Perspectives of faculty and medical students in defining professionalism: A cross-sectional study. *Indian J Physiol Pharmacol*. 2026;70:84-91. doi: 10.25259/IJPP_697_2024