

Original Research Article

Perceptions and challenges of the family adoption programme among medical students of a medical college in central India: a cross-sectional study

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Received: 28 July 2026

Revised: 27 September 2026

Accepted: 28 September 2026

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ABSTRACT

Background: The family adoption programme (FAP) was introduced by the National Medical Commission (NMC) under the competency-based medical education (CBME) curriculum to provide undergraduate medical students with community-based experiential learning and to foster social accountability. This study assessed the perceptions of medical students of a medical college in central India regarding the family adoption programme and the challenges faced during its implementation.

Methods: First-, second- and third-year MBBS students who had participated in the family adoption programme at a medical college in central India, over four months (July-October 2025), using a convenience sampling technique. Data were collected using a structured, pre-tested questionnaire administered through Google forms, comprising demographic characteristics and 18 items rated on a 3-point Likert scale (agree/disagree/neutral) covering perceptions of, and challenges within, the programme.

Results: 105 (52.5%) were male and 95 (47.5%) were female; maximum students 102 (51.0%) were in their second year of study. Most students reported that their mentor guided them properly during visits (91.0%), that they had obtained consent before collecting information from the family (94.5%), and that they understood the purpose and objectives of the programme (88.5%). Only 17 students (8.5%) reported facing language barriers.

Conclusions: The majority of medical students had a positive perception of the family adoption programme, reporting improvements in communication skills, understanding of community health, and motivation toward community-based practice. Strengthening faculty support and student preparedness could further improve the programme's implementation.

Keywords: Community-based medical education, Competency-based medical education, Family Adoption Programme, Medical students, Perception

INTRODUCTION

The family adoption programme (FAP) is a community-based experiential learning initiative introduced by the National Medical Commission (NMC) under the competency-based medical education (CBME) curriculum for undergraduate medical students in India.¹ Under this programme, groups of medical students are

assigned a defined number of families in the community, whom they visit periodically throughout their training to understand the social determinants of health, document health and demographic profiles, and provide basic health education and referral linkages.¹ By situating learning within the lived context of families rather than the classroom alone, the programme is intended to help students develop empathy, communication skills, and

problem-solving abilities that are difficult to teach through didactic instruction alone.²

Community-based education is not a new concept in Indian medical training; earlier models such as the reorientation of medical education (ROME) scheme sought similar goals of grounding clinical training in the community, though such efforts were often limited in scale and continuity.³ The family adoption programme has been described as a more structured and sustained iteration of this approach, embedding longitudinal family contact across the MBBS curriculum rather than a single rotation or camp.⁴ Proponents argue that this longitudinal exposure, if implemented well, can help create socially responsible and competent Indian medical graduates who contribute meaningfully toward universal health coverage.^{1,4}

However, the programme's success ultimately depends on how it is experienced by the students who implement it, and a growing body of literature has begun to document both its benefits and its operational challenges. Students across various settings have reported gains in communication skills and community understanding, alongside recurring difficulties such as language barriers, limited faculty engagement, logistic constraints, and variable cooperation from adopted families.⁵ Since the programme has been rolled out at different times and places across medical colleges in India, and student perceptions may vary by institution, region, and stage of implementation, continued documentation of student experience remains relevant to refining the programme.

Medical colleges in central India, where the programme has been implemented for a comparatively shorter duration, have been less represented in this emerging literature. Understanding how students in this setting perceive the programme, and what specific challenges they encounter, can help identify context-specific areas for improvement. The objective of present study was to assess the perceptions of medical students of a medical college in central India regarding the family adoption programme and the challenges faced during its implementation.

METHODS

This cross-sectional study was conducted in the department of community medicine, Government Medical College, Nagpur, a tertiary care teaching institution in central India, among undergraduate MBBS students who had participated in the Family Adoption Program (FAP). First-, second-, and third-year MBBS students who had participated in the program and were willing to provide informed consent were included in the study, while students who had not participated in the program or did not consent were excluded. The study was carried out over a period of four months, from July 2025 to October 2025. The sample size was estimated to be 200, assuming that 86% of students perceived the family

adoption program to have improved their understanding of patient-family dynamics, with a 95% confidence level and a 5% allowable error. Participants were recruited using a convenience sampling technique.

Data were collected using a structured, pre-tested questionnaire administered through Google forms. The questionnaire included demographic details such as gender and year of study, along with 18 items assessing student's perceptions of the family adoption program and the challenges encountered during family visits. Responses were recorded using a three-point Likert scale (agree, neutral, and disagree). Based on the responses to these items, each student's overall perception of the program was categorized as positive, partial, or negative according to predefined scoring criteria.

The collected data were entered and analyzed using Jamovi software. Descriptive statistics, including frequencies and percentages, were used to summarize participant's demographic characteristics, responses to individual questionnaire items, and the overall perception categories. Appropriate inferential statistical tests were applied wherever necessary to assess associations between study variables, and a p value of <0.05 was considered statistically significant.

RESULTS

Of 200 medical students who had participated in the family adoption programme, 105 (52.5%) were male and 95 (47.5%) were female (Table 1, Figure 1). Most participants were in their second year of study (102, 51.0%), followed by third year (68, 34.0%) and first year (30, 15.0%) (Table 2). Figure 2 shows the distribution of the number of families adopted by participating students as part of the programme.

Table 1: Gender distribution of participating medical students (n=200).

Gender	Number of students	% of total
Male	105	52.5
Female	95	47.5

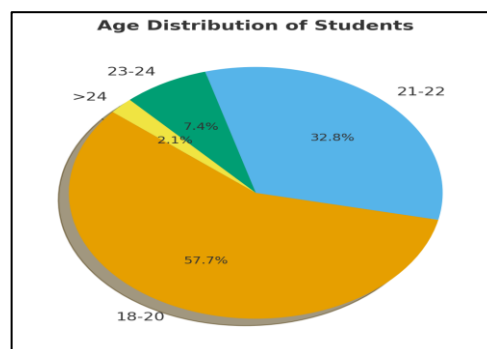


Figure 1: Age distribution of participating medical students (n=200).

Table 2: Year of study of participating medical students (n=200).

Year of study	Number of students	% of total
1 st	30	15.0
2 nd	102	51.0
3 rd	68	34.0

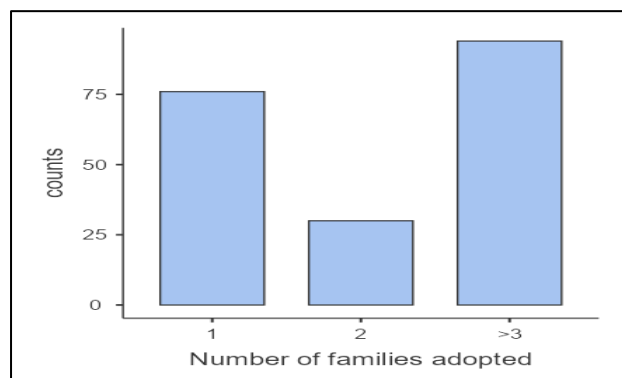
**Figure 2: Distribution of number of families adopted by participating students.**

Table 3 summarizes students' responses to the 18 perception and challenge items. The great majority of

students agreed that their mentor had guided them properly during visits (182, 91.0%), that they had obtained consent before collecting information from the family (189, 94.5%), and that they understood the purpose and objectives of the programme (177, 88.5%). Most students also felt that the orientation before visiting the family was adequate (162, 81.0%), that they were able to clearly explain the purpose of their visit to the family (169, 84.5%), and that the programme had improved their communication skills (168, 84.0%) and their understanding of community health needs (169, 86.7%). A large majority (172, 86.0%) felt the programme should be continued and strengthened in medical colleges, and 174 (87.0%) considered it to provide valuable real-life learning.

Regarding challenges, only 17 students (8.5%) reported facing language barriers while interacting with the family, while the majority (132, 66.0%) disagreed. However, 83 students (41.5%) felt they needed more institutional or faculty support during the programme, and 50 (25.0%) felt they lacked adequate medical knowledge to answer family queries. Perceived family disengagement was less common: 50 students (25.0%) agreed that families showed less interest during data collection, while 67 (33.5%) disagreed.

Table 3: Distribution of students according to perception towards the family adoption programme (n=200).

Perception item	Agree N (%)	Disagree N (%)	Neutral N (%)
The orientation before visiting the family was adequate	162 (81.0)	2 (1.0)	36 (18.0)
I understood the purpose and objectives of the family adoption programme	177 (88.5)	5 (2.5)	18 (9.0)
I felt prepared to interact with the adopted family	152 (76.0)	7 (3.5)	41 (20.5)
My mentor guided me properly during the visits	182 (91.0)	1 (0.5)	17 (8.5)
I was able to explain the purpose of my visit clearly to the family	169 (84.5)	4 (2.0)	27 (13.5)
The family members were cooperative during the visits	128 (64.0)	9 (4.5)	63 (31.5)
I faced language barriers while interacting with the family	17 (8.5)	132 (66.0)	51 (25.5)
I obtained consent before collecting information from the family	189 (94.5)	0 (0.0)	11 (5.5)
The family trusted the purpose of my visit	143 (71.5)	4 (2.0)	53 (26.5)
The FAP improved my communication skills	168 (84.0)	5 (2.5)	27 (13.5)
I believe my visits made a positive impact on the families	137 (68.5)	4 (2.0)	59 (29.5)
The FAP helped me understand community health needs better	169 (86.7)	3 (1.5)	23 (11.8)
The programme motivated me to work in community health in the future	157 (78.5)	7 (3.5)	36 (18.0)
Families showed less interest during data collection	50 (25.0)	67 (33.5)	83 (41.5)
I lacked adequate medical knowledge to answer family queries	50 (25.0)	54 (27.0)	96 (48.0)
I needed more institutional or faculty support during the FAP	83 (41.5)	36 (18.0)	81 (40.5)
The FAP provides valuable real-life learning for medical students	174 (87.0)	3 (1.5)	23 (11.5)
The FAP should be continued and strengthened in medical colleges	172 (86.0)	2 (1.0)	26 (13.0)

Note: item 12 was answered by 195 of the 200 students; percentages for that item are calculated out of 195.

Based on responses to all 18 items, 144 students (72.0%) were classified as having an overall positive perception of the family adoption programme, 56 (28.0%) a partial perception, and none (0%) a negative perception (Table 4).

Table 4: Overall perception of students towards the family adoption programme (n=200).

Perception	Number	Percentage
Positive	144	72.0
Partial	56	28.0
Negative	0	0.0

DISCUSSION

The findings of this study are consistent with similar research conducted among medical students in Haryana, where Sharma et al. also reported predominantly positive student perceptions toward the family adoption programme, with a large majority perceiving it as beneficial to both students and families.⁶ Comparable findings have been reported from Tripura, where Das et al. similarly found favourable perceptions alongside operational challenges among undergraduate students participating in the programme.⁷

In the present study, students acknowledged clear gains in communication skills, community understanding, and motivation toward community health work, echoing observations by Gurav et al, who similarly reported that medical students viewed the programme favourably in terms of skill development and attitude change.⁸

The challenges identified in this study- language barriers, the need for greater institutional and faculty support, and variable levels of preparedness to interact with families-mirror difficulties reported from medical colleges in Uttar Pradesh, where students similarly cited communication gaps, logistic constraints, and inconsistent family cooperation as barriers to effective implementation.⁹ A programme evaluation from a medical college in Assam similarly identified the need for stronger faculty engagement and institutional support as a key area for improvement, alongside logistic and coordination-related challenges.¹⁰

That the great majority of students in this study felt the programme should be continued and strengthened, despite these challenges, reaffirms the National Medical Commission's objective of embedding community-based experiential learning within the CBME curriculum to build socially accountable Indian medical graduates.¹ Taken together with findings from other Indian medical colleges, these results suggest that while the family adoption programme is broadly well received by students, its full potential is likely to depend on consistent faculty mentorship, adequate orientation, and institutional

support structures- themes that recur across the available literature regardless of region.^{2,4,5}

This study has certain limitations. It was conducted using a convenience sampling method in a single medical college, which may limit the generalizability of the findings to other settings. Self-reported responses may be influenced by social-desirability bias, potentially overestimating positive perceptions. Additionally, as a cross-sectional study, causal relationships between the family adoption programme and student learning outcomes cannot be established.

Regular faculty involvement and mentorship should be strengthened to provide continuous guidance and support during family adoption programme activities. More orientation and training sessions should be organized for students to enhance communication skills and confidence while interacting with families. The programme should be sustained and expanded across medical colleges, with periodic evaluation to ensure effective community engagement and achievement of National Medical Commission objectives.

CONCLUSION

Overall, the majority of students in this study had a positive perception of the family adoption programme, which was effective in improving their communication skills, understanding of community health, and motivation toward community-based practice. Although a few challenges, such as limited faculty support and varying family cooperation, were identified, the programme overall proved to be a valuable experiential learning opportunity for medical students.

ACKNOWLEDGEMENTS

The authors thank the faculty of the department of community medicine, the participating medical students, and the adopted families, for their cooperation and support in this study.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. National Medical Commission (Undergraduate Medical Education Board). Family Adoption Programme: guidelines for implementation under Competency Based Medical Education. Letter No. U.14021/8/2023-UGMEB. New Delhi: NMC; 2023.
2. Yalamanchili VK, Uthakalla VK, Naidana SP, Kalapala A, Venkata PK, Yendapu R. Family adoption programme for medical undergraduates in India- the way ahead: a qualitative exploration of

- stakeholders' perceptions. *Indian J Community Med*. 2023;48(1):142-146.
3. Dongre AR, Deshmukh PR, Gupta SS, Garg BS. An evaluation of ROME camp: forgotten innovation in medical education. *Educ Health*. 2010;23(2):363.
4. Vanikar A, Kumar V. Unique program of Indian undergraduate medical education- family adoption through village outreach. *Indian J Community Med*. 2024;49(3):459-60.
5. Ganganahalli P, Yankanchi SG, Yadavannavar M, Udgiri R. Perception and impact of the family adoption program (FAP) among Indian medical students: benefits and challenges. *Cureus*. 2024;16(11):e73893.
6. Sharma S, Poonia A, Diksha. Perception regarding family adoption programme among medical students: a cross-sectional study in a medical college of Haryana (India). *Med Innov*. 2024;13(2):38-41.
7. Das S, Baidya S, Mog C, Pal A, Pal A, Das P. Perception and challenges towards family adoption program among undergraduate students of a medical college of Tripura: a cross-sectional study. *Int J Community Med Public Health*. 2025;12(6):2650-5.
8. Gurav RB, Nair AS, Tomar P. Opinion, perception and attitude of medical students towards family adoption programme- a cross-sectional study. *Int J Community Med Public Health*. 2024;11(12):4797-803.
9. Sulgodu Ramachandra S, Khan IA, Mishra R, Dubey P, Tiwari HC, Srivastava AK, et al. MBBS students' perspectives on the benefits and challenges of the family adoption program: a mixed-methods cross-sectional study of medical colleges in Uttar Pradesh, India. *Cureus*. 2025;17(6):e98387.
10. Sharma S, Choudhari SG, Das D, Habib A, Ojah J. Program evaluation of the family adoption program for medical graduates in India: a strengths, weaknesses, opportunities and challenges (SWOC) and stakeholder analysis in a medical college in Assam. *Cureus*. 2025;17:e100365.

Cite this article as: Pawar V, Golawar S, Deshmukh J, Singh A, Rath D, Kumar M. Perceptions and challenges of the family adoption programme among medical students of a medical college in central India: a cross-sectional study. *Int J Community Med Public Health* 2026;13:6491-5.