

# Perceptions, Challenges and Learning Outcomes of Medical Students Participating in the Family Adoption Programme - A Qualitative Study

Melbin James S<sup>1</sup>, Pravinraj S<sup>2</sup>, Arthi M<sup>3</sup>, Surendar R<sup>3</sup>, Barathalakshmi J<sup>4\*</sup>, Venkat R<sup>5</sup>, Abinesh R<sup>5</sup>, Deebika M<sup>5</sup>

<sup>1</sup>Assistant Professor, <sup>2</sup>Associate Professor, <sup>3</sup>Professor, <sup>4</sup>Professor and Head, <sup>5</sup>Postgraduate Department of Community Medicine, Sri Venkateshwaraa Medical College Hospital and Research Centre, Puducherry, India  
E mail: j.barathalakshmi@gmail.com

## ABSTRACT

**Background:** The Family Adoption Programme (FAP) is an experiential learning initiative to foster community-oriented medical education. Understanding students' perceptions can offer valuable insights for its enhancement.

**Objectives:** To explore the experiences, challenges, and learning outcomes of undergraduate medical students involved in the FAP.

**Methods:** A qualitative study using focus group discussions was conducted among medical undergraduates who participated in the FAP. Data were analysed thematically using Braun and Clarke's method

**Results:** The analysis identified 8 themes and 16 categories reflecting students' experiences in the Family Adoption Programme (FAP). Initial curiosity and expectations of clinical exposure transformed into deeper appreciation of holistic care and community realities. Students encountered language and cultural barriers but adapted through rapport-building and sensitive communication. Field exposure highlighted untreated illnesses, poverty, and social inequities, bridging gaps between theory and practice. The program fostered clinical competence, empathy, teamwork, and professional identity formation, though operational challenges such as fatigue, safety concerns, and inadequate orientation were noted. Overall, FAP was perceived as a transformative learning experience integrating clinical skills with social responsibility.

**Conclusion:** FAP effectively bridges theoretical learning and real-world community exposure. Continued refinement through student feedback can enhance its impact on developing socially accountable physicians.

**Keywords:** Family Adoption Programme, community-based education, qualitative study, medical students, experiential learning

**How to cite this article:** Melbin James S, Pravinraj S, Arthi M, Surendar R, Barathalakshmi J, Venkat R, Abinesh R, Deebika M. Perceptions, Challenges and Learning Outcomes of Medical Students Participating in the Family Adoption Programme - A Qualitative Study. *Int J Drug Deliv Technol.* 2026;16(59s): 373-378. DOI: 10.25258/ijddt.16.59s.37

## INTRODUCTION

Community-oriented medical education has increasingly gained importance in modern medical curricula to produce socially accountable physicians capable of understanding the health needs of the community. Early exposure to community settings enables medical students to appreciate social determinants of health, improve communication skills, and develop empathy toward underserved populations.<sup>1</sup> The National Medical Commission (NMC) introduced Competency-Based Medical Education (CBME) in India with the objective of creating Indian Medical Graduates who are clinically competent, ethically sound, and socially responsive. As part of CBME, the Family Adoption Programme (FAP) was introduced to provide longitudinal community exposure to undergraduate medical students through repeated household visits and family interactions.<sup>2</sup> The programme aims to strengthen students' understanding of preventive, promotive, curative, and rehabilitative aspects of healthcare while fostering professional identity formation and communication skills. Students frequently have few opportunity to comprehend the sociocultural issues influencing health behavior and healthcare utilization in

traditional hospital-centered medical education. By promoting experience learning in authentic environments, community-based educational interventions like FAP aid in closing this gap. Prior research has shown that community immersion programs boost patient-centered communication, foster reflective learning, and improve students' attitudes toward community health.<sup>3-5</sup> Experiential learning theory emphasizes that meaningful learning occurs through active participation and reflective observation in authentic environments.<sup>6</sup> Repeated community interactions enable students to integrate theoretical concepts with practical understanding while simultaneously developing ethical sensitivity and social accountability. Community-based learning also exposes students to poverty, health inequities, cultural beliefs, and barriers to healthcare access, thereby broadening their perspectives regarding patient care.<sup>7</sup> There is little qualitative data on students' opinions, experiences, and difficulties during community exposure, despite the Family Adoption Program's increasing adoption in medical schools throughout India. To improve the program's structure and teaching efficacy, it is imperative to comprehend these experiences. Thus, the current qualitative study was conducted to investigate the

perspectives, difficulties, and educational results of undergraduate medical students taking part in the Family Adoption Program at a tertiary care teaching institution, Puducherry.

**MATERIALS AND METHODS**

A qualitative descriptive design was adopted to explore the perceptions and experiences of undergraduate medical students regarding the Family Adoption Programme (FAP).

Participants were II year MBBS students who had completed their FAP posting. Purposive sampling was used to ensure diversity in gender, year of study, and extent of community exposure. Data were collected through focus group discussions (FGDs) using a semi-structured guide developed after literature review and expert consultation. The guide included open-ended questions focusing on expectations, challenges, communication strategies, and learning outcomes.

Each FGD comprised 6 participants and lasted 30 – 60 minutes. Discussions were conducted in a quiet, neutral setting to encourage free expression. Sessions were moderated by a trained facilitator, while a note-taker recorded non-verbal cues and contextual observations. With prior informed consent, all FGDs were audio-recorded. Discussions continued until thematic saturation was reached.

Audio recordings were transcribed to verbatim and anonymized to protect confidentiality. Thematic analysis was performed following Braun and Clarke’s six-phase framework: (i) familiarization with the data, (ii) generating initial codes, (iii) searching for themes, (iv) reviewing themes, (v) defining and naming themes, and (vi) producing the report. Two researchers independently coded the transcripts, and differences were resolved through discussion until consensus was achieved. Representative quotes were used to illustrate each theme.

Credibility was enhanced through member checking wherein selected participants were invited to review and confirm whether the interpretations accurately reflected

their experiences. Dependability was maintained by keeping an audit trail of coding processes, theme development, and analytic decisions, thereby ensuring transparency and consistency. Reflexivity was practiced throughout the research process by the investigators, who continually reflected on their own assumptions and potential bias and documented reflexive notes to minimize undue influence on the findings. Transferability was supported by providing a detailed description of the study context, participant characteristics, and the Family Adoption Programme setting, enabling readers to assess the applicability of the findings to other contexts.

**RESULTS**

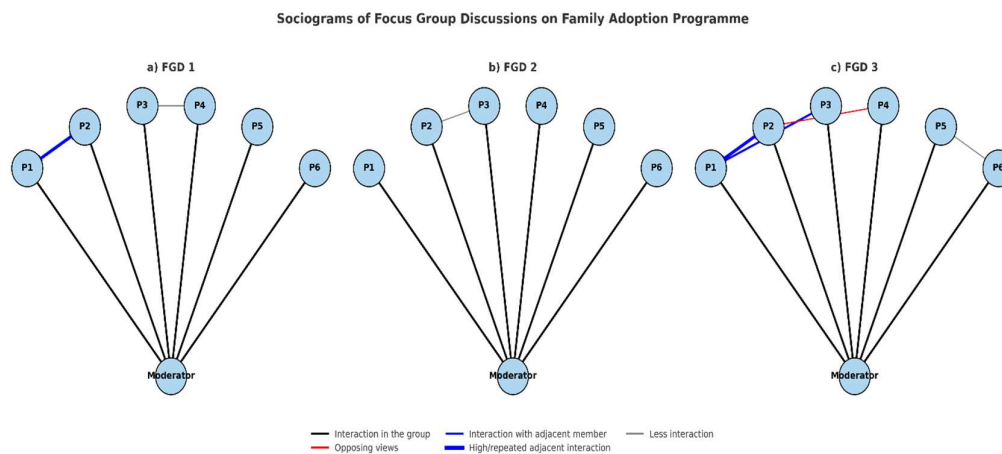
A total of three Focus Group Discussions (FGDs) were conducted with second-year MBBS students after completing their Family Adoption Programme (FAP) postings. Each FGD consisted of six participants (n = 18). Sociograms were constructed to map communication dynamics within the groups. Figure 1 showed the interaction patterns across the three Focus Group Discussions (FGDs)

In FGD 1, interaction was primarily moderator-centred, with a notable strong adjacent exchange between P1 and P2, and a weaker link between P3 and P4.

FGD 2 was the most facilitator-driven, with almost all contributions directed toward the moderator and minimal peer-to-peer communication (weak P2–P3 link). By contrast.

FGD 3 displayed richer engagement, with strong adjacent interactions (P1–P2, P1–P3), opposing views (P2–P4), and occasional weaker exchanges (P5–P6). These patterns indicate that while earlier FGDs reflected more reserved participation, later sessions encouraged greater peer dialogue and debate, suggesting increased comfort and openness among students.

Thematic analysis revealed three major themes: learning through community engagement, barriers and challenges during family visits, and personal and professional growth (Table 1).



**Figure 1: Sociograms of focus group discussions (FGDs) with 2<sup>nd</sup> year MBBS students on the Family Adoption Programme**

**Table 1: Thematic Framework from Focus Group Discussions on the Family Adoption Program (FAP)**

Theme	Category	Codes	Description
1. Expectations and Transformation Through Community Exposure	1.1 Initial Motivation and Anticipation	Curiosity, Clinical exposure, Communication skills, Peer influence, Diversity	Students expected to see diseases first-hand, improve communication, and gain exposure to a diverse community influenced by peer experiences.
	1.2 Evolution of Understanding	Holistic care, Active engagement, Realization of responsibilities	Expectations evolved from passive observation to deeper appreciation of the community context and the importance of communication and clinical judgment.
2. Preparedness for Community Engagement	2.1 Academic and Logistical Preparation	Checklist use, Form review, Equipment packing, Locker use	Students undertook careful planning including grouping questions, memorizing key items, and ensuring access to tools.
	2.2 Mental and Emotional Readiness	Self-confidence, Peer discussions, Rehearsal, Clinical revision	Mental preparation involved confidence-building, practicing Tamil, and managing anticipatory anxiety.
3. Communication Challenges and Adaptations	3.1 Language and Cultural Barriers	Tamil fluency, Misidentification, Non-verbal signals, Cultural assumptions	Language limitations and cultural missteps led to misunderstandings and required sensitive handling.
	3.2 Strategies for Overcoming Communication Gaps	Modulating tone, Indirect questioning, Self-disclosure, Rapport building	Adapted communication styles (e.g., using analogies, engaging with children) helped ease interaction and increase disclosure.
4. Fear, Hesitation, and Ethical Dilemmas	4.1 Anticipated Rejection and Stigma	Peer-induced anxiety, Community mistrust, Stigma over illness	Many students feared rejection based on senior narratives and perceived stigma surrounding illness.
	4.2 Clinical Sensitivity and Respect	Informed consent, Touch hesitancy, Body language cues	Students showed sensitivity towards personal space, obtaining consent, and recognizing non-verbal discomfort.
5. Trust-Building and Deepening Community Interaction	5.1 Role of the FAP Card	Trust symbol, Access facilitator, Legitimacy tool	The card helped build credibility, opening doors to meaningful interaction and care-seeking behaviour.
	5.2 From Stranger to Confidant	Disclosure of abuse, Personal sharing, Empathy-based interaction	Through time and empathy, students gained trust, leading to revelations about intimate and socioemotional issues.
6. Realizing Ground-Level Health Inequities	6.1 Encountering Social Determinants	Abandonment, Financial hardship, Patriarchal neglect	Stories of social and economic neglect highlighted the depth of inequality in health access and care.
	6.2 Theory vs. Reality Gap	Untreated diseases, Health illiteracy, "Apparently normal" conditions	Students faced real cases that challenged their theoretical assumptions, reinforcing the relevance of field experience.
7. Student Learning and Professional Identity Formation	7.1 Growth in Clinical Competence	Case diagnosis, BP analysis, Field decisions, Autonomy	Students developed hands-on clinical skills and grew more confident in independently assessing and managing basic conditions.
	7.2 Development of Soft Skills	Empathy, Confidence, Listening, Adjusting behavior	Exposure improved soft skills like cultural sensitivity, tact, and interpersonal trust—central to future medical practice.
8. Operational and Environmental Challenges	8.1 Fieldwork Fatigue and Timing	Heat exposure, Hunger, Exhaustion, Scheduling	Harsh weather and long hours without breaks were a major challenge, prompting suggestions for improved planning.
	8.2 Ethical and Safety Concerns	Photography consent, Gender comfort, Safety incidents	Students experienced ethical dilemmas and safety concerns during interactions, especially in unfamiliar and uncomfortable environments.

The analysis of the focus group discussion revealed eight overarching themes that encapsulate students' experiences and reflections during the Family Adoption Program (FAP). These themes emerged from iterative coding and inductive categorization of qualitative data.

**Theme 1: Expectations and Transformation Through Community Exposure** Students initially entered the FAP with a mix of curiosity and idealism, expecting exposure to diseases, opportunities to enhance communication, and social bonding. These expectations evolved as students encountered the complexities of community health, transforming passive learners into active health participants.

**Key Quote for Theme 1:** "Initially I thought they had pre-allocated homes, but many refused to talk to us. Only then I realized community work is not as straightforward as I imagined."

**Theme 2: Preparedness for Community Engagement** Participants reported a range of preparatory strategies—academic revision, equipment organization, language practice, and peer consultations—that enhanced their readiness. Logistical infrastructure like lockers significantly supported smoother field functioning.

**Key Quote for Theme 2:** "We revised case sheets, packed the kits, and even practiced Tamil lines before going. Still, it felt different once we actually entered the field."

Theme 3: Communication Challenges and Adaptations Language barriers (particularly with Tamil) and culturally sensitive topics posed communication hurdles. However, students developed coping strategies such as modulating language, leveraging body language, and using self-disclosure to ease discomfort and foster trust.

Key Quote for Theme 3: “I was nervous at first, but when they asked me to sit and offered water, I felt more comfortable to take the history in my own way.”

Theme 4: Fear, Hesitation, and Ethical Dilemmas Anticipatory fear was influenced by peer narratives about rejection, stigma, and uncertainty. Ethical dilemmas arose around informed consent, touching during examination, and addressing sensitive issues like alcohol use or open defecation. Students responded by modifying phrasing and timing of such questions.

Key Quote for Theme 4: “I was unsure how to ask about alcohol use directly, so I framed it differently. We had to be careful with such sensitive questions.”

Theme 5: Trust-Building and Deepening Community Interaction The FAP card emerged as a key tool in legitimizing student presence. Over time, students transitioned from outsiders to confidants, often being entrusted with deeply personal stories—ranging from chronic disease neglect to domestic abuse and unplanned pregnancies.

Key Quote for Theme 5: “In the beginning they were hesitant, but once they saw the FAP card, they opened up. Later, one aunty even shared personal problems she had never told anyone.”

Theme 6: Realizing Ground-Level Health Inequities Students witnessed stark gaps in care: untreated thyroids, undiagnosed diabetes, and barriers stemming from poverty, gender discrimination, and abandonment. This ground-level exposure contextualized classroom learning and added depth to their understanding of social determinants of health.

Key Quote for Theme 6: “We met a patient who stopped medicines because of money issues, and another who believed prayer would cure BP. That’s when I understood how social factors affect health.”

Theme 7: Student Learning and Professional Identity Formation FAP offered a unique platform for students to

practice clinical skills independently, enhance their cultural competence, and strengthen professional identity. Many described it as their first “real doctor” experience—without constant supervision, they cultivated autonomy and confidence.

Key Quote for Theme 7: “For the first time, I felt like a real doctor—checking BP, identifying a diabetic case, and making decisions without constant guidance.”

Theme 8: Operational and Environmental Challenges Concerns were raised about mid-day field visits during peak summer, lack of breaks, and safety during community interactions. Ethical concerns around photography and gender comfort were also noted, prompting calls for better planning and pre-visit briefings.

Key Quote for Theme 8: “Some didn’t even know how to use the kit properly, and with the heat and long hours it was exhausting. Orientation and planning could have helped us more.”

A Conceptual Model

A conceptual model was developed to illustrate the relationship between students’ expectations, field experiences, contextual challenges, and the transformative learning that occurred (Figure 2).

Pre-Field Expectations: Influenced by peer narratives and academic assumptions.

Preparation: Involves mental rehearsal, equipment readiness, and language practice.

Field Entry: Initial anxieties, first interactions, and self-doubt surface.

Community Dynamics: Trust is negotiated through rapport or resistance.

Communication Adaptation: Students learn to tailor conversations, overcome hesitance, and decode non-verbal cues.

Ground Realities: Socioeconomic barriers, untreated illnesses, and social neglect challenge textbook assumptions.

Professional Identity Formation: Clinical confidence, communication finesse, and ethical maturity emerge.

Feedback Loop: Reflective sessions, suggestions for change, and curriculum evolution

### The Community Immersiton Continuum



Figure 2: A conceptual model

### DISCUSSION

The present qualitative study explored the experiences, perceptions, and learning outcomes of undergraduate medical students participating in the Family Adoption Programme (FAP). The findings demonstrated that FAP served as a transformative educational experience that enabled students to bridge theoretical knowledge with practical understanding of community health realities. Students reported improvements in communication skills, empathy, cultural sensitivity, and professional confidence through repeated interactions with families and communities. Similar findings have been reported in previous studies evaluating community-based medical education programmes.<sup>3-5</sup> Students transition from passive spectators to active participants in community healthcare was one of the study's key conclusions. When they first started the program, students were curious, unsure, and nervous about interacting with the community. However, their confidence and engagement in patient encounters eventually increased with repeated field experience. Similar results were observed by Dhar et al., who found that community exposure improved students' comprehension of healthcare delivery systems and bolstered their feeling of social responsibility.<sup>3</sup> The fact that active participation in real-life environments fosters deeper learning and reflective thinking is also supported by experiential learning theory.<sup>6</sup> Communication barriers emerged as a major challenge during field visits, particularly due to language differences and sociocultural sensitivities. Students initially faced difficulty while

discussing sensitive topics such as alcohol consumption, hygiene practices, and family issues. Over time, they adapted by modifying their communication style, using culturally acceptable language, and building rapport with families. Grover et al. similarly observed that community postings improved reflective learning, interpersonal communication, and patient-centered interaction among undergraduate students.<sup>4</sup> Trust-building emerged as an important component of community engagement. Students perceived the FAP identification card not merely as an administrative tool but as a symbol of legitimacy and trust that facilitated meaningful interactions with families. Repeated household visits gradually transformed students from outsiders into trusted confidants. Longitudinal community exposure has been shown to strengthen relationship-building skills and improve continuity of care in community-oriented medical education.<sup>8</sup> The programme also exposed students to significant social determinants of health including poverty, gender inequality, financial hardship, untreated chronic illnesses, and health illiteracy. Such exposure challenged students' textbook-based assumptions regarding disease management and healthcare utilization. Mahajan and Sharma similarly reported that community orientation programmes improved medical students' understanding of social determinants influencing health-seeking behaviour.<sup>5</sup> These findings reinforce the importance of integrating socio-medical perspectives into undergraduate medical training. The growth of students' professional identities

and clinical confidence was another significant finding of this study. Participants reported feeling more comfortable taking their own blood pressure readings, spotting possible ailments, and speaking with patients face-to-face. It has been demonstrated that early clinical experience and community immersion enhance medical students' clinical thinking, communication abilities, and professional motivation.<sup>9</sup> Operational difficulties such as extreme weather conditions, fatigue, inadequate orientation, and safety concerns were also highlighted by participants. Students expressed the need for better logistical planning, structured orientation sessions, and faculty guidance prior to field postings. Similar operational challenges have been documented in studies assessing community-based educational programmes, emphasizing the importance of institutional support and structured supervision.<sup>10</sup> The findings of the present study have important implications for medical education. The Family Adoption Programme not only facilitates community exposure but also contributes to the development of empathy, ethical sensitivity, teamwork, communication skills, and social accountability among future physicians. Integrating structured reflection sessions, communication skill workshops, and regular feedback mechanisms may further enhance the educational impact of the programme. However, the present study has certain limitations. Being a qualitative study conducted in a single institution, the findings may not be generalizable to all settings. Participants' responses may also have been influenced by social desirability bias. Nevertheless, the study provides rich contextual insights into students' lived experiences and contributes valuable evidence regarding the educational value of the Family Adoption Programme.

### CONCLUSION

The Family Adoption Programme offers immense scope for community immersion and skill development in medical education. Student feedback reveals that while the program achieves its core objectives, better preparatory sessions, logistical support, and structured monitoring can enhance its effectiveness.

### RECOMMENDATIONS

It is essential to strengthen orientation modules so participants in order to optimize and understand program objectives. This requires improving supervision, guaranteeing the availability of medical kits and fostering teamwork by conducting regular audits for data accuracy.

**Conflict of Interest:** None declared.

**Funding:** None.

**Acknowledgments:** We thank all participating students and the faculty who supported the conduct of this study.

**Ethical Approval:** Obtained from the Institutional Ethics Committee.

### REFERENCES

1. Frenk J, Chen L, Bhutta ZA, Cohen J, Crisp N, Evans T, et al. Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. *Lancet*. 2010;376(9756):1923-58.
2. Medical Council of India. Competency Based Undergraduate Curriculum for the Indian Medical Graduate. New Delhi: Medical Council of India; 2018.
3. Dhar N, Rao NR, Nayak S. Community-based medical education: experience from a rural medical college. *Indian J Community Med*. 2020;45(1):78-81.
4. Grover A, Sinha D, Ghosh A. Reflective learning through community postings in MBBS: a qualitative study. *Natl Med J India*. 2021;34(1):16-20.
5. Mahajan H, Sharma B. Community orientation program: impact on medical students' attitude toward social determinants. *J Educ Health Promot*. 2019;8:203.
6. Kolb DA. *Experiential Learning: Experience as the Source of Learning and Development*. Englewood Cliffs: Prentice Hall; 1984.
7. Boelen C, Woollard R. Social accountability and accreditation: a new frontier for educational institutions. *Med Educ*. 2011;45(9):887-94.
8. Worley P, Prideaux D, Strasser R, Magarey A, March R. Empirical evidence for symbiotic medical education: a comparative analysis of community and tertiary-based programmes. *Med Educ*. 2006;40(2):109-16.
9. Littlewood S, Ypinazar V, Margolis SA, Scherpbier A, Spencer J, Dornan T. Early practical experience and the social responsiveness of clinical education: systematic review. *BMJ*. 2005;331(7513):387-91.
10. Oandasan I, Barker KK. Educating for advocacy: exploring the source and substance of community-responsive physicians. *Acad Med*. 2003;7.