

Original Research Article

Perception and challenges towards Family Adoption Program among undergraduate students of a Medical College of Tripura: a cross-sectional study

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ABSTRACT

Background: In 2022, NMC has introduced family adoption program as part Community Medicine Curriculum to sensitize upcoming medical professionals for the health needs of community. Objectives of the study were to assess perception towards FAP among first and second professional medical students of Agartala Government Medical College of Tripura and to determine the challenges encountered by the students during family adoption visits.

Methods: A cross-sectional study was conducted among 1st and 2nd Professional MBBS Students of AGMC for a period of one month. All students of 1st and 2nd Professional were included with a sample size of 250. A semi structured questionnaire was used for data collection and data were analysed using SPSS v.29. Perception towards FAP was measured with 1-5-point Likert scale where 1 being lowest and 5 being highest score. Mean score of each item was measured. Study was approved by Institutional Ethics Committee of AGMC.

Results: Total 210 students had participated. Regarding perception of students towards FAP, majority agreed that it will create health awareness in community and can understand dynamics of rural setup. Communication and leadership skill can be learned and it provide an early clinical exposure to students. Students had faced multiple challenges like, families expected curative treatment but students were not eligible to provide (47.8%), language barrier (26.8%), difficulty in gaining trust (26.3%) and cooperation from the families (18.7%) etc.

Conclusions: Family adoption helps the students to learn communication and leadership skill and it will improve health awareness in community.

Keywords: Challenges, Family adoption, Perception, Undergraduate students

INTRODUCTION

In India, as per 2020 statistics around 65.5% of population resides in rural areas whereas availability of health care facilities and services are targeted towards urban set ups. Accessing health care facilities by the rural citizen is a major concern because of health illiteracy, ignorance about communicable and non-communicable diseases, how to reach health care facility, services, take

time off from their daily wages work and workforce shortages. Hence it is very important to take some measures to make healthcare services accessible to the rural and needy population and impart community based and community-oriented training to budding healthcare professionals.¹ In 2022, National Medical Council (NMC) has introduced family adoption program (FAP) as part of the Community Medicine Curriculum to sensitize the upcoming medical professionals to the health needs of the

community and to provide a learning opportunity towards community-based health care for Indian medical graduates.² One or more villages outside the field practice area (Rural Health Training Centre) of community medicine department will be adopted for Family Adoption Program. Three to five families from the adopted village will be allotted to each medical student. In FAP, medical students will be oriented to rural health problems with rural health care delivery system from the very beginning of the foundation course in the first professional year. Faculties and Senior Residents of department of Community Medicine will act as the mentors and coordinate with local Panchayat Raj Institution members, villagers, local Accredited Social Health Activist (ASHA) worker and medical social workers for smooth implementation of the program. The medical students will collect data from the families allotted to them by visiting physically, also they will take part in the outreach health and awareness camps. As a step towards environmental consciousness, the students will be encouraged for tree plantation in the village.³ The program helps the students to learn communication skills, role of customs and cultural factors affecting health, health education, basic health services, develop empathy, leadership skill. They can work as primary consultants for the households and learn basic skills of diagnosing and managing health problems, ultimately having training in family medicine.^{4,5} They can function as a link between the health system and the families, enabling them to become physicians of first contact as envisaged in the Graduate Medical Education, 1997.⁶ FAP can provide early clinical exposure to the medical students and it will make them better doctors in future.⁵

Family adoption program (FAP) has been implemented in the Agartala Government Medical College as per the NMC guidelines for 2022-23 and 2023-24 batches of medical students. Two villages, namely Krisna Nagar and Gopal Nagar under Mohanpur RD block were adopted for this program. Initially one family was allotted to each student and on their subsequent visits four more families were allotted to each student. Visits were arranged for the students one in every month till the hours mandated by NMC are completed. Each student was instructed to maintain a log book with separate sections for each house-hold record during every visit which can help them to analyse health and disease profile of families at the end of 3rd year.

Though FAP is a novel program but it has got many challenges and opportunities. It is a very challenging task to implement this program by allotting five families to each student and sustaining the follow-up throughout the undergraduate period. It is very important to get feedback from the medical students in the initial stages of implementation, so that it may be better implemented for the newer batches in future. Also, very few studies have been conducted in our country till date on perceptions of students regarding Family adoption program since its implementation. So, the current study is being planned

with the objectives to assess perception towards Family Adoption Program among first and second professional medical students of Agartala Government Medical College of Tripura and to determine the challenges encountered by the students during family adoption visits.

METHODS

A cross-sectional study was conducted for one-month period starting from 12th September 2024 to 11th October 2024 among first (2022-23 batch) and second (2023-24 batch) professional MBBS students studying at Agartala Government Medical college of Tripura. Sample size was calculated as 250 by considering 80% students agreed that FAP should be included in the medical curriculum, at 95% confidence level and taking 5% absolute error.⁷ The College had intake of 125 students annually during that period. Total 250 medical students (125 from each batch) who were pursuing MBBS course were included in the study. Students who were not willing to participate, who had not attended at least 75% of the family adoption visits were excluded from the study. Study was approved by Institutional Ethics committee of Agartala Government Medical College and informed consent for participation in the study was sought from all eligible students. The students were explained about the objectives and purpose of the study. A predesigned semi structured questionnaire was used for data collection and it was administered via google form. The questionnaire had four sections, containing Section A: Basic information about the student, Section B: Information on family visit, Section C: Perception of student towards Family Adoption Program, Section D: Students reflections regarding challenges faced during the visits. Content validity of the questionnaire was measured by taking opinion of five experts on this field. CVI (Content Validity Index) score for all the items of the questionnaire and overall CVI score was measured and result has come 0.9. Personal identity and responses of the students were kept confidential. Data were analysed using Microsoft excel and SPSS version 29 software. Descriptive statistics were expressed as frequency, percentage, mean and standard deviation. Perception towards Family Adoption Program consisting of twelve items was measured by Likert scale of 1-5 with 1 being lowest and 5 being highest score. Mean score of each item was also measured.

RESULTS

Total 210 students had participated in the study. Male to female ratio was 11:9. Mean $\pm$ SD of age of students was 20.79 $\pm$ 1.33 years. Among study population, 79% students were from Tripura and 25.70% students never been exposed to rural settings. First professional and second professional students involved were 51% and 49% respectively (Table 1).

Three or more number of families were adopted by 47% of students, while all 1st professional students (51%) adopted only one family. Almost all the students (99%)

had taken consent before collecting data and 99% families were cooperative (Table 2).

Table 1: Basic information about the participating students (n=210).

Variables	Frequency	Percentage
Sex		
Male	115	54.76
Female	95	45.24
Tripura	166	79.00
Other Northeastern states	18	8.50
Northern states	10	4.70
Rajasthan	9	4.20
Bihar	7	3.30
Exposed to rural setting	156	74.30
Not exposed to rural setting	54	25.70
Professional year of the students		
1st professional	107	51
2 nd professional	103	49

Table 2: Information on family visit by students (n=210).

Variables	Frequency	Percentage
Number of family adopted by individual student		
One	107	51
Two	4	2
Three	8	4
Four	38	18
Five	53	25
Knowledge provided by the faculties or MSWs prior family visits was sufficient		
Yes	201	95.70
No	9	4.30
Purpose of visit for FAP explained by faculty		
Yes	206	98.10
No	4	1.90
Purpose of visit explained to head of family by the student		
Yes	207	98.60
No	3	1.40
Consent taken by the students before collecting data from the family		
Yes	208	99
No	2	1
Nature of cooperation of families during family visits		
Cooperative	207	98.57
Noncooperative	3	1.43
Any health education provided to families during FAP		
Yes	174	82.80
No	36	17.20
Student's feelings towards family during FAP		
Empathetic	117	55.71
Sympathetic	51	24.28
No feeling	42	20.00

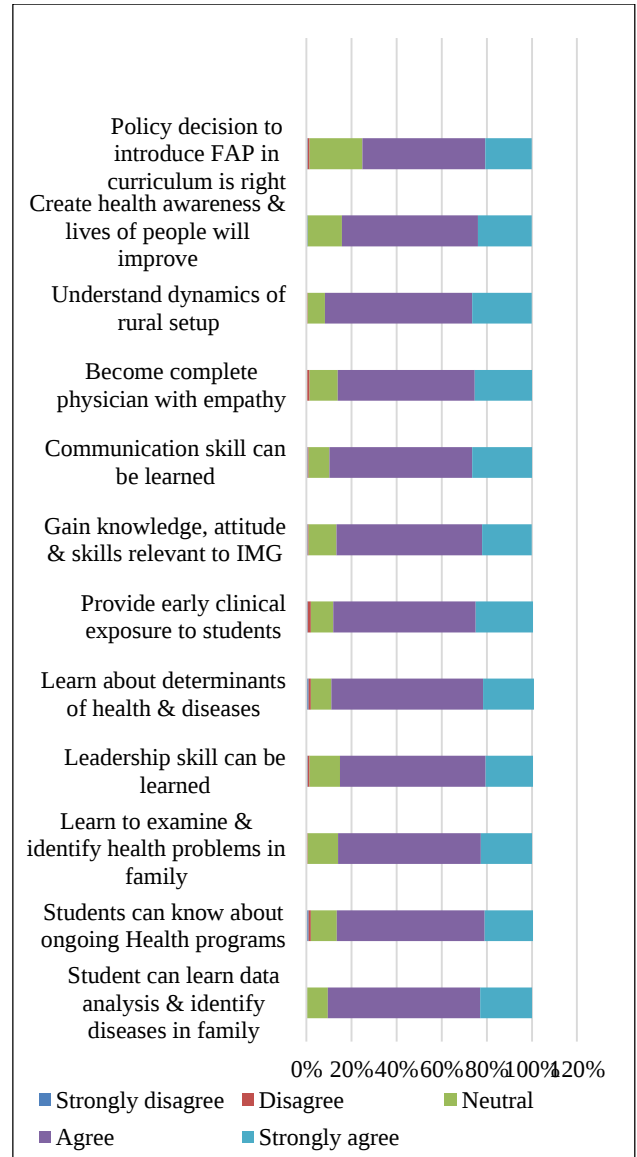


Figure 1: Perception of students towards Family Adoption Program.

Perception of students towards FAP is depicted on Figure 1. Majority of the students (84%) agreed that FAP will create health awareness in the community and lives of rural population will be improved (perception score, Mean±SD =4.06±0.66). About 92% student's perception was FAP helps them to understand the dynamics of rural setup and healthcare delivery system of the area (perception score, Mean±SD =4.15±0.59). Communication skill can be learned and improved was felt by 90% of students (perception score, Mean±SD =4.12±0.63). Least agreement was seen for policy decision to introduce the Family Adoption Program in MBBS curriculum. Only 76% students agreed and rest 24% students opined to gradual introduction of FAP in the curriculum (perception score, Mean±SD =3.93±0.72) (Table 3).

Around 24% students didn't face any challenge while their visit to families. Most common challenge faced by other students was family members expected curative treatment in form of prescription or medicine, but students could not provide as they are not eligible

(47.80%). Other challenges were language barrier (26.8%), difficulty in gaining trust from family members (26.3%), difficulty in gaining cooperation from the family (18.7%), less time during visit (16.3%) and difficulty in obtaining support from teachers (3.30%).

Table 3: Perception score of undergraduate students towards family adoption program.

Statements	Perception score (Mean±SD)
Policy decision to introduce the Family Adoption Program in MBBS curriculum is right	3.93±0.72
FAP will create health awareness in the community & lives of rural population will be improved	4.06±0.66
It helps the students to understand the dynamics of rural setup and healthcare delivery system of the area	4.15±0.59
FAP helps MBBS students to become a complete physician with empathy and confidence	4.08±0.65
Communication skill can be learned & improved after interacting with family members and with community-level workers like ASHA/AWWs.	4.12±0.63
FAP helps MBBS students to gain knowledge, skills and attitudes relevant to the IMG	4.07±0.62
FAP helps to provide an early clinical exposure to the medical students	4.11±0.63
FAP helps the students to learn about socio-cultural determinants of health & disease in rural communities.	4.10±0.59
FAP helps to inculcate leadership skill and working as primary consultants for the households	4.07±0.60
Learn to clinically examine and identify health problems of the family members	4.07±0.61
FAP helps the students to know about ongoing Government Health Programs for the community	4.06±0.64
Students will be able to learn data analysis and identify diseases/ill-health/malnutrition of allotted families	4.12±0.55

DISCUSSION

Out of 250 students, 210 had participated in our study with the response rate of participation was 84%. Result of the study showed that majority (55%) of the students were male with Mean±SD of age was 20.79±1.33 years. Similarly, Vairavasolai et al has found that age of the students ranged from 18 to 26, with most falling below 20 years, and 59% were male and 41% were female.⁸ In our study, it was observed that 25.70% students never been exposed to rural settings before. Vairavasolai et al in his study had seen that 39% students were not exposed to the rural setting and 44% had not interacted with the public before.⁸ In our study 1st professional and 2nd professional students involved were 51% and 49% respectively. Similarly, Shree et al in her study had also observed that majority of the students (66.4 %) had participated of Phase I of MBBS.⁹ This study had shown that 91.5% families were cooperative and we also observed that 99% families were cooperative.⁹ The present study revealed that 96% students had received sufficient knowledge from the department faculties prior visits and 98.6% students explained purpose of visit to head of family during their visit. Almost all the students (99%) had taken consent before collecting data from the family and 82.8% students had provided health education during FAP visit. Another study also found that 75.6% students said that they had received sufficient knowledge from the department

faculties prior their visits, 96.3% students explained purpose of visit to head of family by the during their visit, 98.9% had taken consent before collecting data from the family.⁹

In this study, 76% students agreed on policy decision to introduce the Family Adoption Program in MBBS curriculum is right. Rest 24% were not agreeing and mostly they were first professional students. They were very new in the curriculum and unsure about their clinical skills. So, they wanted to introduce FAP in the curriculum gradually so that they can become more experienced to handle any medical condition in the community. In a similar study, all the faculty members, the majority of undergraduate students, and the community were found to welcome the policy decision about the introduction of the FAP.¹⁰ In a similar study by Yalamanchili et al, the participants including the faculty, undergraduate and postgraduate students, and field workers suggested that the reforms should be gradual and sustained, and there should be some flexibility to maintain the quality.¹¹

In present study majority of the students agreed that FAP will create health awareness in the community and lives of rural population will be improved. Vairavasolai et al, Mudéy et al in their study also concluded that it will improve the QOL of rural community.^{8,12} Baruah et al, Mudéy et al found that FAP helps the students to

understand the social structures, rural health needs and the health status of the community.^{10,12} Similar result was observed in our study also. As students visit community and learning from community allows them to experience a more personal relationship with family members and they can recognize how the social factors have a significant impact on health.

In the present study, majority of the students agreed that FAP helps MBBS students to become a complete physician with empathy and confidence, communication skill can be learned and it helps MBBS students to gain knowledge, skills and attitudes relevant to the IMG. Similar findings have been reported by other studies conducted by Vairavasolai et al, Barua et al and Mudey et al.^{8,10,12}

The present study reported that 24% students didn't face any challenge while their visit to families. Other students had encountered multiple challenges. Most common challenge was family members expected curative treatment in form of prescription or medicine, but students could not provide as they are not eligible. Other challenges were language barrier, difficulty in gaining trust from family members, difficulty in gaining cooperation from the family, less time during visit and difficulty in obtaining support from teachers. The challenges encountered by the students resonated with the findings of other studies. In the study by Barua et al, students informed that difficulties in gaining cooperation from the family, establishing communication with the family members, and obtaining support from their teachers were the key challenges.¹⁰ In the study by Yalamanchili et al, shortage of logistics and transport facilities, human resources, reduced faculty were the major challenges of FAP.¹¹ In the study by Ganapathy et al, the challenges encountered were the new learning environment, personal challenges, language barrier, having to work independently, insufficient background medical knowledge, group dynamics, limited resources, filling log book and limited time.¹³ Also, lack of sensitization of stakeholders and inadequate planning were identified as the predominant challenges in the implementation of FAP in CBME.¹²

The limitation of the study is it was conducted among 1st and 2nd professional students during initial phase of implementation of the Family Adoption Program. While the experience of the other stakeholders like Faculties of the department of Community Medicine and community members were not included. A qualitative study including all professional students, faculties, administrators and community member is the need of the hour to understand the perception, barriers and also suggestions for improvement of implementation of FAP.

CONCLUSION

The study reported about the experience and acceptance of students towards FAP but could not provide

information on role of FAP to attain the competencies of IMG by the students. Majority of the students agreed that they can learn communication, leadership skill and also it will help them to become a complete confident physician. Further research needs to be carried out including all the stakeholders of the program on perception and challenges of FAP for better implementation of the program in future.

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