SSR Institute of International Journal of Life Sciences
ISSN (O): 2581-8740 | ISSN (P): 2581-8732
Dhabekar *et al.*, 2024
DOI: 10.21276/SSR-IIJLS.2024.10.5.24

Review Article

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Family Adoption Program Implementation for Undergraduate Medical Students at a Private Medical College of Maharashtra: An Experience with SWOT & Fish Bone Analysis

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Received: 14 May 2024/ Revised: 07 Jun 2024/ Accepted: 26 Aug 2024

ABSTRACT

The National Medical Commission (Undergraduate Medical Education Board) of India has introduced Family Adoption Program (FAP) under the Competency-Based Medical Education of MBBS curriculum. It is from 1st to 3rd Professional Year as a part of the Community Medicine curriculum. The program aims to provide experiential learning opportunities to Indian Medical Graduates to improve their communication skills & to get oriented with community-based health care. This helps in their professional growth as well as in fostering empathy towards the community and building cultural competence. Based on resource availability, feasibility and accessibility, medical colleges have started FAP at different times and various levels. This article aims to cover the FAP implementation process, its SWOT & Fishbone analysis. FAP was started for current phase I (2023) by adopting the village 11 km away from the college. At their first FAP class, students were oriented about the FAP survey & logbook and were briefed about the adopted village. A hands-on workshop for form fills & submission on the epicollect5 app was conducted before the field visit. Family allotment of 3 families per student was done in their first visit, which was then followed by collecting socio-demographic information and organizing medical camp/screening & FAP data analysis. FAP is beneficial to all the stakeholders involved with proper implementation of FAP, it is beneficial to all the associates involved.

Key-words: Community Medicine, Competency-Based Medical Education, Family Adoption Program (FAP), Indian Medical Graduate, SWOT, Fish bone analysis

INTRODUCTION

The National Medical Commission (NMC) has instructed Family Adoption Programme (FAP) for MBBS students from 2022. [1] It is from the first to third Professional Year as a part of the Community Medicine curriculum. [2]

How to cite this article
Dhabekar PD, Patil N, Padhyegurjar MS, Gosavi P, Padhyegurjar SB, et al. Family Adoption Program Implementation for Undergraduate Medical Students at a Private Medical College of Maharashtra: An Experience with SWOT & Fish Bone Analysis. SSR Inst Int J Life Sci., 2024; 10(5): 6277-6283.

Access this article online
https://iijls.com/

Ideally, the family adoption program should be run in villages not covered under PHCs/RHTC and adopted by the medical college. A slight flexibility to the colleges is given for implementing the program. FAP visits can be done in batches, or the whole class can go for the survey as per the schedule.

Two-thirds of the total population of India resides in rural areas [3,4]. The health-care facilities are in contrast to the population distribution in rural India & this was the prime reason for the implementation of this program. They also lack healthcare literacy, leading to poor healthcare-seeking behaviour and negative health outcomes. [5]

DOI: 10.21276/SSR-IIJLS.2024.10.5.24

Hence on that account, FAP is being introduced as a village outreach program for MBBS students.[1] Every student should be allotted three to five families (at least three). The student is expected to develop communication skills & establish rapport, fostering empathy and cultural competence. It will also help the students to understand the rural set-up, their health disparities & cultural factors in health/diseases. Which will eventually improve health-seeking behaviour & health care of the community [1,6]. The FAP implementation comes under the Department of Community Medicine, as it's a nodal department for it. Therefore, FAP under Community Medicine is bringing together healthcare professionals, social workers, and community leaders, promoting a team-based approach to address community health & social medicine.

The objectives of the present article on FAP implementation were to cover the FAP implementation process and the strengths, weaknesses, opportunities, and threats associated with FAP.

Fishbone Analysis- We have also prepared the fishbone analysis (Fig. 1) regarding FAP conduction. It helped us to brainstorm & categorize the causes of the problems & sort out the solutions. So, here we have categorized the potential problems we have faced during the implementation at the different levels i.e. institute, department, village & student with their respective solutions.

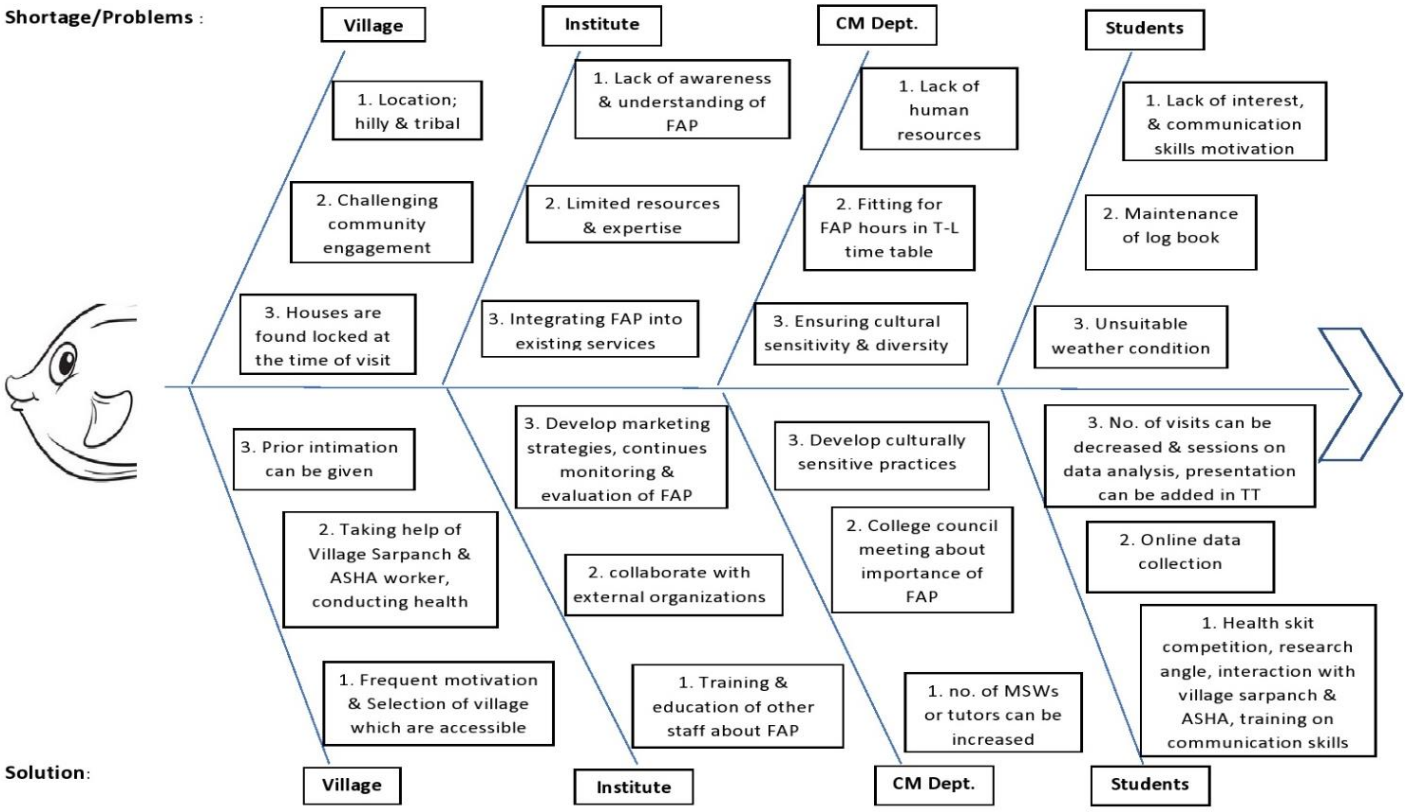

Fig. 1: Fish Bone analysis of FAP program conduction

At our institute FAP has been started from phase one MBBS (batch 2023–2024) batch, it was comprising 150 students. FAP of previous batches was done in the clinical posting from phase II. The selected village was around 11 km from the institute and had around 1156 families.

NMC guidelines instruct to have a total of 27 hours devoted to FAP in phase I MBBS. In these 27 hours, we included FAP orientation class, visits, data analysis, FAP booklet checking & certification. The FAP orientation class included:

- Introduction of the objectives of FAP
- Epicollect5 app orientation
- Role of students in these FAPs
- Targets to be achieved by phase I students in FAP
- Introduction of the adopted village & its health care center.

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FAP form was prepared in the epi-collect5 app, which later was validated by the faculties from the department. Orientation of this FAP form, along with hands-on practice of the epicollect5 app was also done in the orientation class. Each student was allotted 3 families. A booklet of 3 FAP forms was prepared and given to the students.

Further, as an NMC FAP guideline mandates, we organized a screening camp at 7th visit for non-communicable diseases like hypertension, diabetes mellitus, and nutrition deficiency disorders e.g. anaemia and vitamin A deficiency disorders. A prior permission from the village Sarpanch was taken. Anganwadi, near the village's primary school of the village, was the camp venue. Every student was asked to go to their respective families & motivate the family to come for the screening camp. MBBS interns and phase I students were instructed to record the body mass index & measurement of vitals under the supervision of faculty. Only the patients with a high risk of diabetes e.g. obese, positive family history of diabetes, were screened for RBSL with the help of glucometer. The patients who had pallor were screened for anaemia with Hemoglobinometer. At the camp, the PHC medical officer, PG residents & interns gave the proper treatment, advice for lifestyle modifications, nutrition education & referral to the patients. FAP committee has done the overall administration & supervision of the entire process of conduction of the camp. A role play was also done by the phase I students on the day of the camp to raise awareness of non-communicable disease prevention.

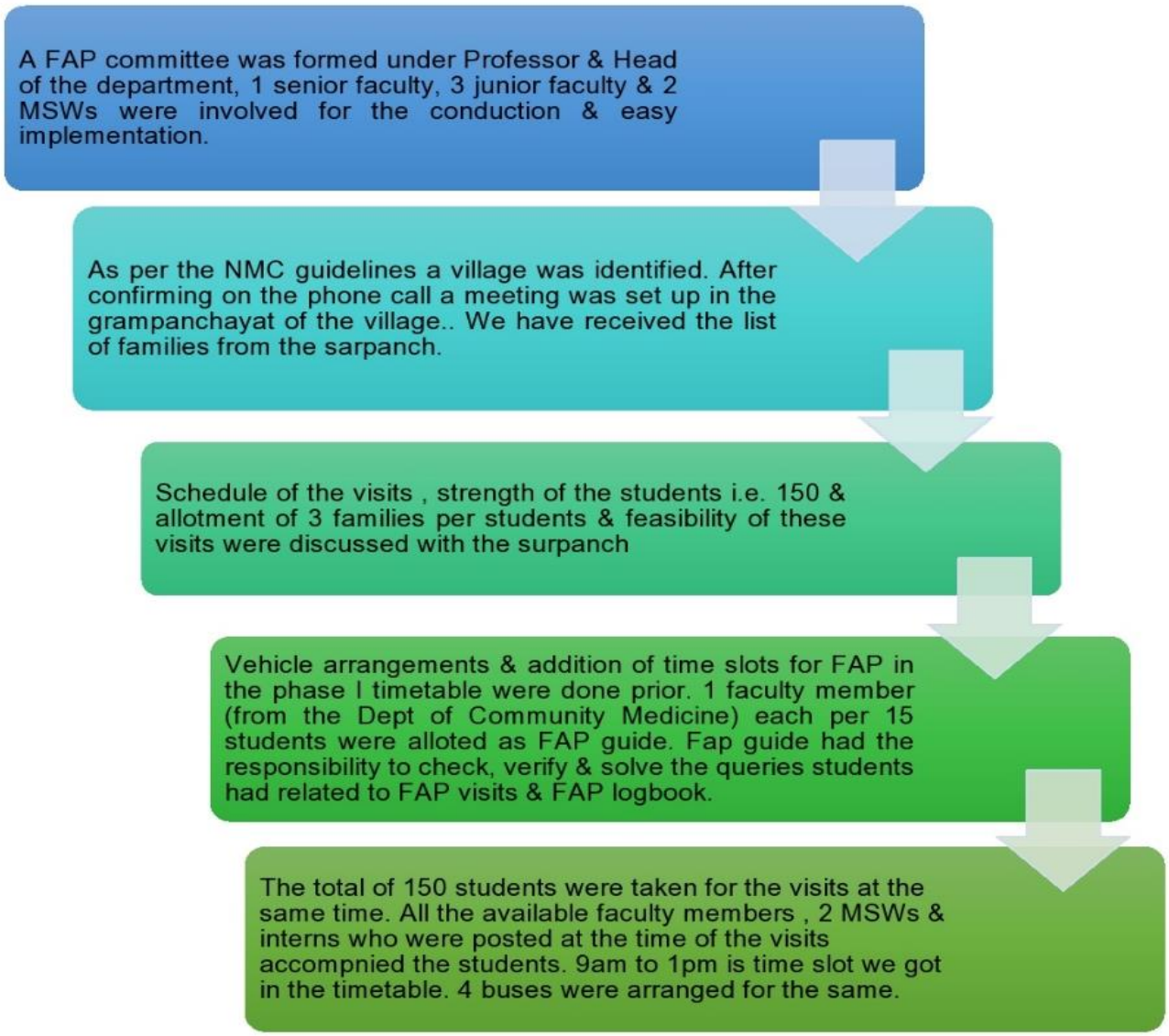

Fig. 2: The details of the Family Adoption Program (FAP) implementation

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Table 1: Teaching Learning methods used & activities conducted in each FAP class

Visit No.	Activity conducted	T-L method
FAP 1	Sensitization of the students with the FAP objectives & their role in the FAP along with briefing of the adopted village	Lecture in Phase I Small group discussion in Clinical posting
FAP 2	Orientation of the Epi-collect 5 app & FAP logbook for filling out FAP form online	Demonstration
FAP 3	Family allotment (3 families per student) & collection of the basic socio-demographic data	Family Survey
FAP 4	Conduction of clinical examination of family members & preparing a report of their basic health profile	Family Survey
FAP 5	Take part in environmental protection & sustenance activities e.g. skit	Participation in the (NSS) activities
FAP 6	Assessment of environmental & housing conditions	Community survey & visit to the allotted families
FAP 7	Health camp (Fig. 3a to 3d) to screen NCD organized for the adopted village & health education given by students	Conduction of the health camp Participation in the village activity
FAP 8	Follow-up visits of the adopted families for remedial measures, health education & referral	Community visit & Family survey
FAP 9	FAP data analysis & FAP log book certification	Demonstration

Fig. 3a: A meeting of FAP committee at Taked village with Sarpanch along with Gramvikas Adhikari, Anganwadi workers & ASHA workers

Fig. 3b: FAP visit phase I batch 2023 at Taked

Fig. 3c: Students taking history under FAP

Fig. 3d: Health camp under FAP

Fig. 3a to 3d: Photos of FAP implementation & health camp

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Previous literatures- FAP of the batch of 2023-24 phase I was conducted in Taked village, which is 11 km away from the medical college. The analysis of strengths, weaknesses, opportunities, and threats/challenges (SWOT) is presented in Table 2.

Table 2: SWOT analysis of FAP implementation

Strengths	**Weakness**
1) Students get early exposure to community health & it also improves their leadership skills 2) Improve communication skills 3) Community gets access to better health care, which improves health-seeking behaviour in the families 4) To equip students with a family practice 5) Inculcation of health promotive & disease preventive behaviour in families 6) Sense of belongingness of the family to the institute	1) Needs manpower, and vehicle resources as FAP needs many visits 2) Needs high motivation from the village Sarpanch, ASHA workers & village residents 3) Lack of faith of the village people in the students 2) Prohibitive distance between family & institute
Opportunity	**Threats/Challenges**
1) Research in community health 2) Increase in health awareness of the people living in rural areas 3) Achieving a goal of health for all; i) Explore coverage of immunization & contraception ii) Understanding the health-seeking behaviour of the community 4) skill building for students ➢ Liaisoning ➢ Networking	1) Previously adopted villages can get orphaned when phase III students get passed & enter into phase IV 2) Selecting a village every year for a new batch 3) Social & cultural taboos, language & communication barrier 4) Misbehavior of students can ruin the bond between the family & the institute

As a component of CBME, This program was first initiated at MGIMS, Sewagram.[7] The Sewagram curriculum starts with a 15-day orientation program on Gandhian ideology. After that, during the social service camp period, students stay in the adopted village for a fortnight & daily visit their respective families. In these visits, they conduct socio-demographic, dietary, and health evaluations of their families. [7] After the Social Service Camp, the students visit their adopted village every month on a Saturday for the next 3½ years. Till now, MGIMS and Sewagram have served around 51 villages. [5,7]

Other medical colleges were also seen conducting FAP programs at a full-fledged level with a slight difference of no. of families adopted per student. This may be due to the feasibility of the medical institution. However, the NMC criteria of having a village within 30 km from the College & not covered under RHTC were followed by all colleges [5-8]. Similar to our college few of the other colleges have also assigned mentors to the students for FAP[5,9]

A study by Arumugam *et al.* [8] stated that a tertiary care institute in Tamilnadu divided the batch (150 students) into teams and then allotted visits to each team. Each student was assigned to five families. They adopted three villages at once, and students in a batch of 50 were sent to each of these villages. A similar pattern was followed at a new medical college in Jharkhand, where a batch of 75 students was made & sent to the selected bigger villages having more than 200 houses. [5]

After the first FAP visit at Arunai Medical College and Hospital, Kilkachirapattu, Tamil Nadu, students were asked to present their experience of the family adoption program visit in the PowerPoint presentation. [8] We

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have also done this, but it is more feasible & fruitful in small group teaching like in clinical posting. As it gets more interactive in small group teaching.

Similar to our college, other colleges have conducted orientation programs to guide the students about FAP and to discuss the logbook [5,8] as well. But, at our institute, we also gave hands-on training in the epicollect5 app for data collection.

Kelly *et al.* 's study of Australia and Canada stated that they have Longitudinal Integrated Clerkships (LICs). This year-long community-based placement strengthens students' communication skills, clinical reasoning and management expertise. [10]

At the AIIMS, from the 4th semester onwards, students undergo a meticulous Community Medicine training program. There are two general postings: one in the rural region (Family Health Advisory Services; FHAS) & the urban region (Urban Health Survey). The Family Health Advisory Services (FHAS) programs have a similar objective as FAP. Again, every student is assigned to three families, and a visit to the family once a week is between 3 and 5 pm. FHAS is divided into six exercises to guide the student in the comprehensive assessment of health problems and to study the role of environmental and social factors in health. They prepare a Community Diagnosis after collecting and analyzing the data received from their respective families at the end of these six exercises. They prepare and implement relevant intervention programmes ("Community Intervention") through a skit by the entire batch. All these activities were performed under the faculty member's guidance & with combined efforts from the other staff and PG residents [11,12]. Yalamanchili *et al.* [6] stated that the main challenges were the faculty shortage in private colleges & the scarcity of transport facilities and logistics in government colleges.

Reflection by the Faculty- We are implementing FAP in the right spirit, which will serve as a Holistic approach to comprehensive health care & education. This resonates with our institute's vision and mission to address social determinants of health. Integrating the Family Adoption Program into our curriculum provides our students with hands-on experience in community health and social medicine & it also enhances students' understanding of cultural factors in health/disease.

CONCLUSIONS

All the associates who are involved in the FAP are getting benefitted from it. FAP helps students gain a better insight into people's needs in terms of health. The program offers an opportunity and a rich platform for research on community health and short/long-term health outcomes for the given area. This will also help them feel more confident while advising the family about disease prevention. We also want to add that once student's leaves FAP after Phase III, other students (maybe from Phase I) should be allotted to the same families who will continue the cycle of adoption and provide care services. Although it will need some improvement, as discussed in this study, we can refine the program to better serve vulnerable families and enhance medical education by reflecting on its strengths and challenges.

ACKNOWLEDGMENTS

We are grateful for the cooperation & wholehearted support from the head of the institute Dr. Meenal Mohgaokar, Deputy Dean Dr. Dhanaji Jadhav & Administrative Officer. We are also thankful for the village Sarpanch, ASHA workers & the students of the phase I (2023) MBBS batch of our Institute.

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DOI: 10.21276/SSR-IIJLS.2024.10.5.24

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