



## Residential Field Site Training (RFST) Program for MBBS Students: Current Situation and Implementation Guidelines



**National Institute of Preventive and Social Medicine (NIPSOM)**  
Health Services Division  
Ministry of Health and Family Welfare Bangladesh

Supported by



August 2025



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## Foreword

The Directorate General of Medical Education (DGME) is pleased to present this important publication on the *Residential Field Site Training (RFST)* for MBBS students in Bangladesh. This book summarizes the findings of a nationwide comprehensive evaluation—the first of its kind—on the current practices of RFST for undergraduate medical education.

This evaluation is a significant step toward improving medical education and developing healthcare professionals who are better equipped to meet community health needs. The book also provides clear recommendations for establishing a standard RFST program that ensures effective community-based learning across all medical colleges.

Bangladesh, with over 170 million people—about 70% living in rural areas—faces ongoing challenges in providing quality healthcare. The RFST program is a vital part of community based medical education, designed to prepare future doctors to understand and address rural health realities. By involving students in real-life primary healthcare systems, RFST contributes to achieving Universal Health Coverage (UHC) and equitable healthcare access.

The study highlights both the strengths and the challenges of the existing RFST framework. It shows that RFST enhances students' communication skills, community engagement, and professional development, but also reveals gaps in infrastructure, funding, and coordination. The limited residential component in current practice is a key weakness that needs urgent attention.

The DGME recognizes that effective RFST implementation requires cooperation among the Ministry of Health and Family Welfare, DGHS, medical colleges, and Upazila Health Complexes.

We appreciate the efforts of the *National Institute of Preventive and Social Medicine (NIPSOM)* and the *World Health Organization (WHO)* for conducting this valuable research. The DGME remains committed to implementing these recommendations to ensure RFST develops capable and socially responsible doctors ready to serve communities across Bangladesh.

**Professor Dr. Nazmul Hosain**



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## Preface

Medical education in Bangladesh is at a turning point. The traditional hospital-based model must now evolve to prepare doctors who can effectively respond to the country's complex and diverse health needs. *The Residential Field Site Training (RFST)* program offers a transformative approach, linking theoretical learning with real-world healthcare delivery—specially in rural areas where most of our people live.

This study recognizes that community-based medical education is not just an academic exercise, but a necessity for developing socially accountable healthcare professionals. As Bangladesh moves toward Universal Health Coverage (UHC) and the Sustainable Development Goals (SDGs), our medical graduates must possess the knowledge, skills, and empathy to serve communities across both rural and urban settings.

Introduced in 1988 and refined over the years, the RFST program reflects the World Health Organization's vision of community-oriented medical education. However, despite its long history there remain wide gaps between the curriculum's objectives and the way RFST is practiced in many medical colleges. This book presents the first comprehensive nationwide evaluation of RFST implementation, identifying both the successes achieved and the challenges that persist.

A key finding is the near-absence of the residential component—the heart of RFST—with fewer than one-fifth of students having real overnight community exposure. This gap highlights not only logistical barriers but also systemic issues that demand coordinated reforms at both institutional and national levels.

Despite these challenges, the study confirms RFST's strong educational value. It enhances students' communication, research, and community engagement skills while shaping their professional identity.

This publication documents the current state of RFST analyzes influencing factors, and provides clear, evidence-based recommendations for improvement. We hope it encourages educators, policymakers, and healthcare leaders to strengthen RFST as a cornerstone of producing competent, compassionate, and community-focused doctors for Bangladesh.

**Prof. Dr. Md. Ziaul Islam, PhD**

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## Introduction

Medical education is evolving to generate physicians who will be socially responsible, clinically skilled, and empathetic to the needs of the community and it is acknowledged globally that undergraduate medical education requires changes to meet the demands of the modern world (1). Traditional hospitals are no longer regarded as the only or best places to train doctors for the 21st century, as they are not adequate enough to meet the needs of society (2). For this reason, Community-Based Education (CBE) is becoming popular for preparing future doctors to address real-world health challenges, particularly in developing countries like Bangladesh. It provides an unique opportunity to students to be acquainted with the social, cultural, and environmental factors of health and diseases in communities with diverse geographic locations and privilege levels (3).

Traditionally, medical education has been confined predominantly to the hospitals where students can learn a very narrow spectrum of community health problems. To fix this issue, WHO has come up with a strategy to foster community based medical education to orient future physicians with community level health issues which will be a significant stride towards achieving the goal of health for all. It would be most effective when the medical studies would be based largely in the community, or in any of a variety of health service settings including the tertiary care settings and carried out in close contact to the community people (4). It is imperative to produce future medical graduates to address the health needs of community people and work efficiently in the health care delivery systems (5).

Moreover, WHO denotes primary health care (PHC) as the foundation of the health system. Therefore, future health professionals need to learn PHC in practical. They need to go to the close to the community in both rural and urban.

Keeping in line with this, many countries are shifting towards community based educational programs through professional placement of undergraduate medical students at community level. In Australia, medical students are placed hundreds of kilometers away for a period of few weeks to several months at regional, rural and remote setting. These rural placements are funded by the Govt. of Australia through the University Departments of Rural Health (UDRHs). These setting offer standard facilities for accommodation and support rural health education programs for students from all medical professional backgrounds (6). Rural placements for undergraduate medical students at various levels of course curriculum are highly emphasized in countries like Canada, USA, UK and Thailand. In India, the National Medical Commission (NMC), former Medical Council of India, integrated rural placement of undergraduate medical students under the department of Community Medicine. The duration and activities of rural placement varies across states and medical colleges (7).

In Bangladesh, medical colleges conduct the Bachelor of Medicine and Bachelor of Surgery (MBBS) course, which requires academic studies for a duration of five years followed by an internship for one year. The first documented undergraduate medical curriculum followed by the medical colleges was developed in 1988, then subsequently it was revised and modified in 2002. In 1988, community based medical education (CBME) was initiated in the form of Residential Field Site Training (RFST) program under supervision of the department of community medicine of the respective medical college. The RFST was designed to be conducted at a specific Upazila Health Complex (UpHC) for a duration of two weeks. The RFST activities were further revised and reorganized in the MBBS curriculum of 2002 and was designated for the fourth year MBBS students and they had to participate in ‘community placement’ for one week and ‘primary care placement’ for another one week (8).

In 2012, undergraduate medical curriculum of Bangladesh was further revised and updated. According to that updated curriculum, MBBS course of five years’ duration was further divided into four phases (first phase for 1.5 years, second and third phase for 1 year each, and the fourth phase for 1.5 years) along with a logbook based rotatory internship for one year. CBME activities were practiced in the third phase of

MBBS curriculum for a duration of 30 days at different UpHCs under supervision of the department of community medicine of the respective medical college (5). Out of the 30 days, 10 days were allocated for RFST program, 10 days for day visits to different health centers and 10 days for the study tour. After passing final professional MBBS examination, students have to enroll in a logbook based rotatory internship programme for one year. Within this one-year internship, they have to provide health care services at a specific UpHC for a duration of 15 days under supervision of an Upazila Health and Family Planning Officer (UH&FPO) (9). The latest revision of the curriculum in 2021 included Community Medicine and Public Health in the third phase of MBBS course and Community-based medical Education (CBME) was mentioned as Community Oriented Medical Education (COME). According to this revision, the RFST program is an integral part of Community Medicine course for 4<sup>th</sup> year students. The head of the department of Community Medicine is designated to implement the program as a coordinator under the supervision of the principal of the respective medical college. Teachers of Community Medicine perform their responsibilities for successful implementation of the RFST program (10).

During the RFST program, students can learn about the socio-economic aspects of health, illness, and health services in the community context. They can acquire clinical skills by direct contacts with the patients as well as knowledge regarding the frequency and types of problems faced outside the traditional hospital settings. RFST helps the students to be motivated and prepared themselves as a future community physician to fulfill the community health needs (11). RFST program enables students staying in rural areas, becoming familiar with the surroundings and way of life of the residents of rural areas, identify health needs and problems of the community people and prioritize them, conduct survey based on health needs and problems of the community, understand Bangladesh's PHC level health care delivery system, and develop inter-sectoral coordination (10).

RFST provides real-life exposure and helps to develop generic skills of future doctors. It also requires a close collaboration between health and educational administration and should not be seen as a separate entity (6). It can be effectively implemented in undergraduate medical education by organizing, allocating resources for proper utilization, specifying teaching communities, acknowledging the support of community and stakeholders, increasing the service components in students' field practice and engaging the community people in planning, implementation and evaluation in these activities (11,12).

After completion of the RFST program, medical students expected to be able to become accustomed with the environment and lifestyle of peoples of rural community, identify and prioritize health needs and problems of the community people and be acquainted with primary level health care delivery system in Bangladesh. As a result, they will be able to provide need-based health care services to community people and conduct health service researches efficiently (10).

Diverse guidelines for conducting RFST activities are followed by different countries around the world. In Bangladesh, both public and private medical colleges are instructed to follow the common guidelines addressed in the MBBS curriculum of 2021 and the MPH curriculum developed in 2024. This hands-on approach enhances students' understanding of epidemiological methods and the primary healthcare delivery system in Bangladesh (4).

Despite its widespread implementation in medical colleges of Bangladesh, there are some significant obstacles in RFST program, including a high level of variation in the educational experiences at various communities as well as with multiple preceptors. Students often get demotivated due to negative attitudes of the community people (5). From teachers point of view, it's evident that poor set up of service places, lack of transport support, lack of fund, lack of accommodation facilities, lack of security reduce the effectiveness of RFST (13). Besides, budget constraints and shortage of oriented and dedicated teachers for RFST intensifies the challenges (14). There are limited studies regarding adaptation of students in a new environment, clinical practice context, language barrier, organization of the program, availability of

prerequisites both in medical colleges and UpHC, knowledge, group dynamics, and limited hospital resources, which need to be evaluated (15,16).

It is evident that the RFST program is not being conducted uniformly in a structured format by medical colleges of Bangladesh. Moreover, the effectiveness of the RFST program is not well-evident and activities are not well-documented in the country. So, it is worthwhile to assess effectiveness of the RFST program and its reinforcement for quality medical education in Bangladesh.

## Current Situation

### Background

Community-based medical education is a globally recognized strategy to bridge the gap between theoretical knowledge and practical skills about the healthcare delivery system in resource-limited settings like Bangladesh (14). Medical education must prepare future doctors to work effectively in such environments, where a significant portion of the population resides in rural areas with limited access to healthcare services. The RFST program was introduced to fulfill this need by engaging medical students in rural communities and facilitating experiential learning in public health, epidemiology, and the primary healthcare system (3).

The World Health Organization (WHO) has defined the “Social Accountability of Medical Schools” as “the obligation to direct their education, research, and service activities towards addressing the priority health concerns of the community, region, and/or nation they have a mandate to serve (17). RFST is a successful strategy to fulfill the recommendation of WHO through orientation and integration of medical education with the community more effectively, as well as promoting better relationships between medical students, community people, general practitioners, and hospital-based practitioners. It focuses on the community, where people live, and where most of the health problems can be prevented or treated. Transforming medical education means that all of us are developing a better understanding of community-based education (8). It also acts as a valuable platform for mutual learning of medical students and gaining real-life experiences (18). RFST is implemented typically during the community medicine phase of the MBBS program. RFST involves students staying in rural areas for a designated period, engaging with local populations, conducting health surveys, and participating in various public health interventions under faculty supervision (19).

The researchers around the globe found that RFST enhances motivation, develops a positive attitude of the serving doctors to fulfill the community health needs, and conducts community-based research (20–23). WHO recommends more comprehensive studies and precise methods of evaluation for a better understanding of the benefits of RFST for its future development to be determined and new benefits to be discovered (4). It is found that rural placement for sufficient duration in the form of RFST at the undergraduate level creates a positive attitude to take up rural medical practice among young physicians through familiarization with rural lifestyle and socialization (6). It can be an effective and sustainable solution to the ever-growing problem of shortage of medical practitioners in rural, underprivileged and hard-to-reach areas, particularly faced mainly by smaller and densely populated countries like Bangladesh. The WHO recommends study opportunities outside large hospitals and cities, clinical placements and internships in rural areas during undergraduate training, and a stronger orientation in curricula towards rural medical practice, ranging from outreach health promotion to the development of practical skills for medical care under resource-poor conditions. These measures will be helpful rural recruitment and retention of physicians and contribute towards achieving health for all (24). Besides, RFST boosts professional as well as soft skills like communication skills, teamwork, leadership, and developing empathy in medical professionals (7).

Considering these benefits, RFST is made compulsory in undergraduate medical education in Bangladesh for a duration of 10 days (8,9). RFST ought to be conducted at the UpHC, where the use of teaching facilities, access to different service points, and employment of staff are all under the control of the UH&FPO. Apart from the outdoor and emergency ward and laboratory areas, spaces are expected to be available for conducting teaching sessions. All categories of personnel involved in this program are given remuneration as per the WHO rules and regulations approved by the MOH&FW (10).

Despite widespread implementation of the structured RFST program in both public and private medical colleges, there are still disparities and mismatches between curriculum and practice in organizing RFST activities, community stay, proper utilization of funds allocated by the Government, transport facilities, and safety concerns. Evaluation of the current situation of RFST resources and practices is crucial for medical

graduates to be well-equipped for contributing to national health goals, including Universal Health Coverage (UHC) and Sustainable Development Goals (SDGs) (4).

The country needs skilled community physicians who will perform crucial roles in community diagnosis and treatment through community engagement. To ensure this agenda, community-oriented physicians need to be produced through organizing an effective RFST program. At present, medical education in all public and private medical colleges of Bangladesh is governed by the MBBS curriculum 2021 and directed to conduct the RFST program using uniform guidelines. But in reality, a lot of disparities and mismatches exist in the RFST practice across medical colleges of Bangladesh. It varies by duration of community stay, types of activities, remuneration of personnel, quality of training, structured implementation, involvement of stakeholders, and effective utilization of outcomes. Therefore, a nationwide study was conducted to assess the current situation of RFST practice in medical colleges of Bangladesh.

## Methods

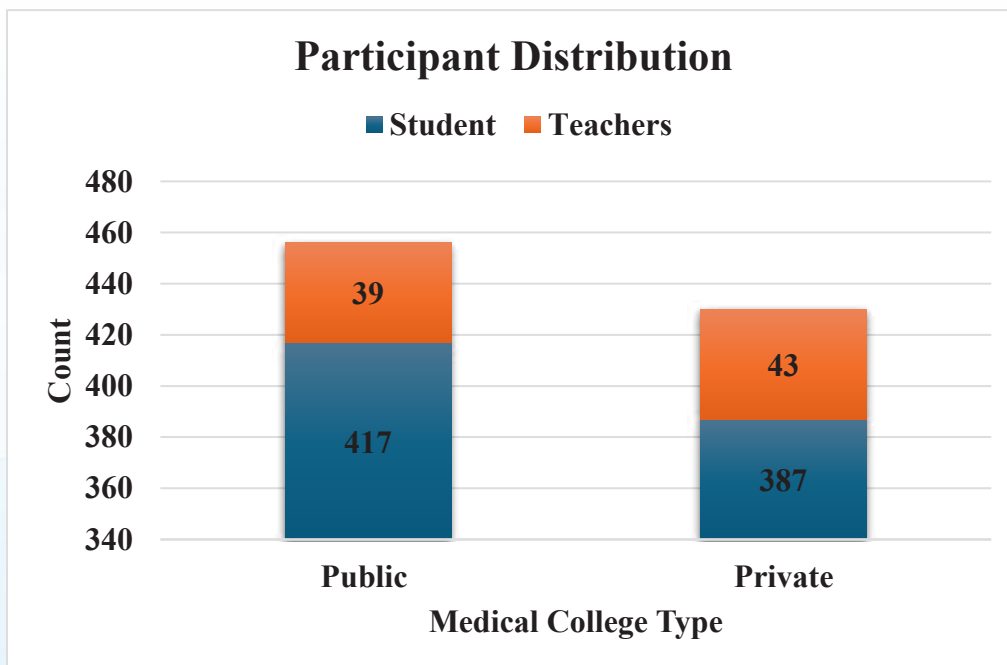


**Figure 1. Steps of the Study**

This study employed a mixed-methods cross-sectional design conducted nationwide from March to May 2025 to evaluate the effectiveness of the Residential Field Site Training (RFST) program for undergraduate medical students in Bangladesh. The research was conducted at 20 medical colleges (10 public and 10 private) across all divisions of Bangladesh, selected randomly from official lists of approved institutions. The study population included 4th/5th year MBBS students and community medicine teachers who had completed RFST programs, plus key informants from health and education directorates. Participants were selected through a multistage stratified sampling approach was used quantitative data collection was used. The sample size was calculated assuming 50% RFST effectiveness ( $p=0.50$ ), with 95% confidence interval and 5% margin of error, yielding 384 participants. After accounting for design effect and a 20% non-response rate, the target sample was 924 participants. The final sample included 804 students and 82 teachers. For quantitative data collection, a self-administered questionnaire for students and an interviewer-administered questionnaire for teachers, checklists to assess facilities at community medicine departments and UpHCs were deployed using Kobo Toolbox. For qualitative data collection, using interview guidelines, 27 key informant interviews (KIIs) were conducted with healthcare and education officials, and four focus

group discussions (FGDs) were conducted among 32 fifth-year students from selected colleges. Two workshops gathered additional teacher perspectives.

Quantitative data were analyzed using R Studio and presented as frequency (percentage), mean (standard deviation) or median (interquartile range) where appropriate. Qualitative data underwent thematic analysis using phenomenological reduction, with verbatim transcription and coding. The study received IRB approval from NIPSOM, obtained administrative permissions, and ensured informed consent, confidentiality, and voluntary participation throughout.



*Figure 2. Distribution of students and teachers by medical college type*

## Quantitative Results

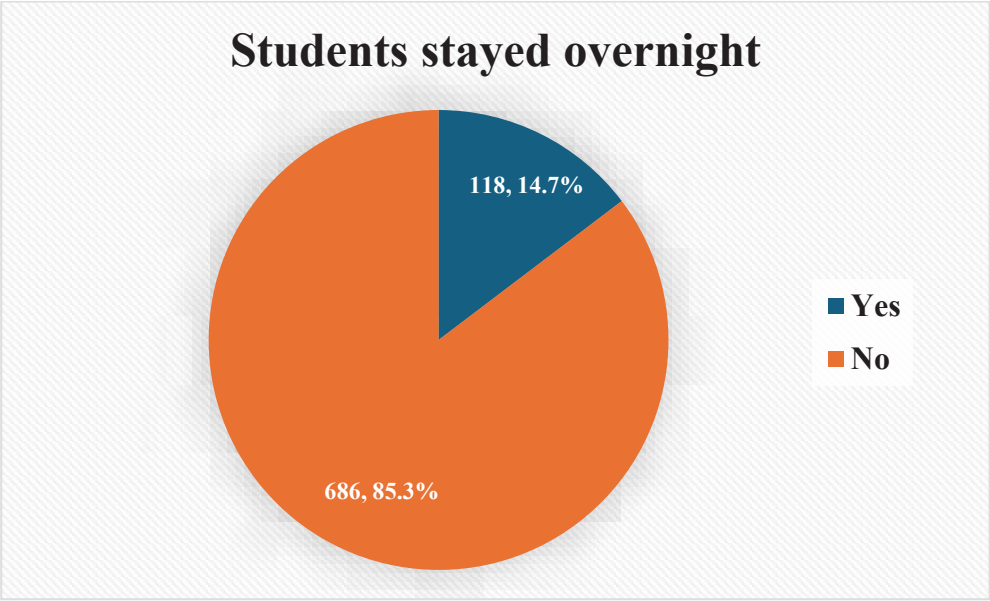
### Students' Perspectives on RFST

#### Sociodemographic profile of the students

The final analysis included 804 students from medical colleges across Bangladesh. The mean age of participants was 23.27 years (SD  $\pm$ 0.99). The sample demonstrated a female predominance with 478 (59.5%) female students compared to 326 (40.5%) male students. In terms of religious composition, the majority were Muslim (672, 83.6%), followed by Hindu students (121, 15.0%), with small representations from Christianity (8, 1.0%), Buddhism (2, 0.2%), and Shamanism (1, 0.1%). Most participants were fifth-year medical students (773, 96.7%) with only 26 (3.3%) from the fourth year. Regarding marital status, the vast majority were unmarried (728, 90.5%), while 74 (9.2%) were married, and minimal numbers were divorced or separated (1 each, 0.1%). Family structure analysis revealed that 696 (86.6%) students came from nuclear families, while 108 (13.4%) were from joint families. The median number of family members was 4.00 (IQR: 4.00, 5.00). A substantial proportion, 487 (60.6%), lived with their families. The median monthly family income was 50,000 BDT (IQR: 30,000, 70,000).

**Table 1. Sociodemographic characteristics of the students**

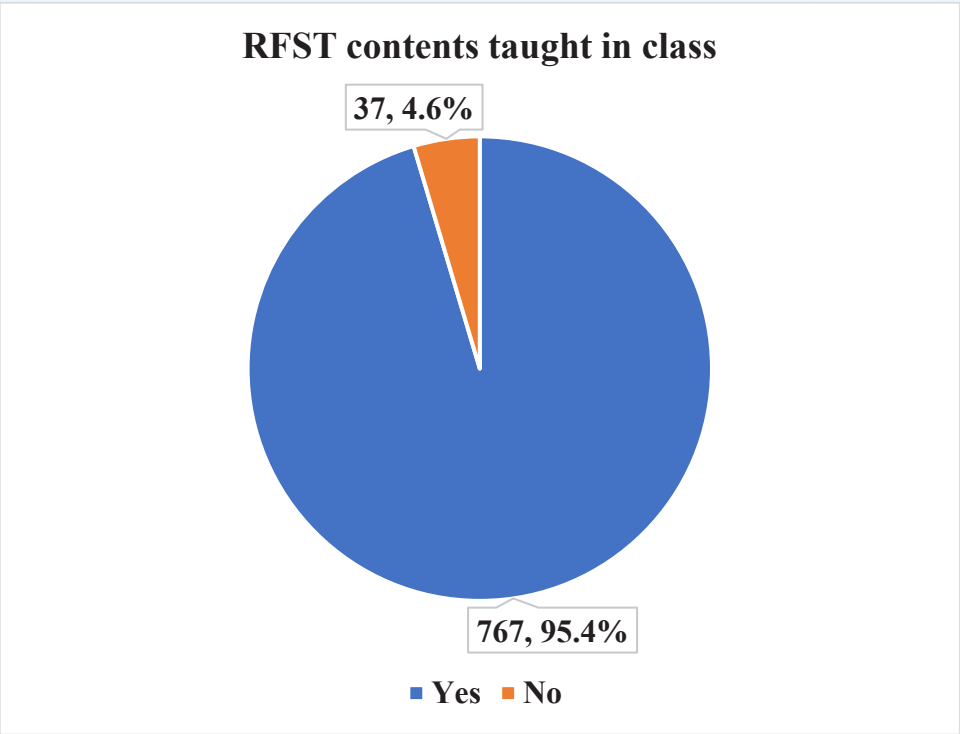
<b>Characteristic</b>	<b>Overall (N = 804) n (%)</b>
Age (years), mean (SD)	23.27 (0.99)
Sex	
Female	478 (59.5)
Male	326 (40.5)
Religion	
Islam	672 (83.6)
Hinduism	121 (15.0)
Christianity	8 (1.0)
Buddhism	2 (0.2)
Shamanism	1 (0.1)
Medical Year	
Fifth year	773 (96.7)
Fourth year	26 (3.3)
Marital Status	
Unmarried	728 (90.5)
Married	74 (9.2)
Divorced	1 (0.1)
Separated	1 (0.1)
Family Type	
Nuclear	696 (86.6)
Joint	108 (13.4)
Number of family members	4.00 (4.00, 5.00)
Lives with family	487 (60.6)
Monthly family income (BDT), median (IQR)	50,000 (30,000, 70,000)



*Figure 3. Distribution of students based on whether they stayed in the RFST site overnight*

**Students’ Overnight Stay**

The distribution of students based on overnight stays at RFST sites revealed that the majority (85.3%) had never participated in residential field training.



*Figure 4. Distribution of students’ responses on whether RFST contents were taught in class*

## RFST content taught in class

Of all students, the majority (95.4%) said that RFST contents were taught in the class.

## Reasons for Non-Participation in RFST

Among students who did not reside in the site during RFST, several key barriers were identified. The most significant constraint was the absence of residential facilities, reported by 399 students (58.2%). Departmental policies also played a major role, with 232 students (33.8%) indicating that their department did not consider staying overnight necessary. Safety concerns were substantial, affecting 217 students (31.6%). Financial constraints were evident, with 174 students (25.4%) citing inadequate funds for rent. Infrastructure inadequacy was reported by 11 students (14.4%) who found the available facilities unsuitable for overnight stays (Table 2).

**Table 2. Reasons for not conducting RFST according to students**

Characteristic	Overall
	(N = 804) n (%)
No residential facility	399 (58.2)
The department did not consider staying overnight	232 (33.8)
Safety concerns	217 (31.6)
No funds for rent of residence	174 (25.4)
The infrastructure is not suitable for staying overnight	11 (1.36)

## RFST Experience Among Participating Students

Among the 118 students who participated in residential RFST, the median time since participation was 18 months (IQR: 17-19). The typical duration of overnight stay was 3 days (IQR: 3-4). The overwhelming majority, 110 students (93.2%), conducted their RFST at Upazila Health Complexes, while 8 (6.8%) utilized other facilities including Sadar hospitals, sub centers, TB centers, or village locations. Regarding accommodation location, 66 students (55.9%) stayed within the UpHC campus, while 52 (44.1%) were accommodated outside the campus. Rental facilities were used by 68 students (57.6%). Most students participated in groups (113, 95.8%) with a median group size of 10 students (IQR: 6, 40). Teacher supervision was nearly universal, with 116 students (98.3%) accompanied by teachers, typically 5 teachers per group (IQR: 3, 6). Health educator accompaniment was common (107, 90.7%). All 118 students (100.0%) visited UpHCs during their training (Table 3).

Students received a comprehensive orientation to various health services. Maternal and child health services orientation was provided to 116 students (98.3%), identical numbers received family planning services orientation (116, 98.3%). Emergency services orientation reached 102 students (86.4%), while OPD services were covered for 105 students (89.0%). IPD services orientation was provided to 97 students (82.2%). DOTS services and EPI activities each reached 115 and 116 students respectively (97.5% and 98.3%). Laboratory facilities orientation was given to 95 students (80.5%). Other UpHC services were explored by 86 students (72.9%). Specialized corners had varying coverage: IMCI corner (62, 72.1%), breastfeeding corner (57, 66.3%), NCD corner (40, 46.5%), and adolescent corner (28, 32.6%). Limited exposure was noted for rabies corner (2, 1.6%) and VIA corner (1, 0.8%) (Table 3 continued).

Community engagement activities showed substantial participation. USC/UHFWC visits were conducted by 73 students (61.9%), with 66 (90.4%) receiving orientation about USC/UHFWC functions. Community Clinic visits were undertaken by 69 students (58.5%), with 67 (97.1%) receiving activity orientation. NGO visits were less common, involving 33 students (28.0%), though 22 (66.7%) received comprehensive orientation about NGO activities. Satellite clinic visits were limited to 16 students (13.6%), with 14 (87.5%) receiving orientation. Community surveys were conducted by 71 students (60.2%), with 67 (98.5%) collecting data primarily from households (60, 89.6%) rather than hospitals (7, 10.4%). The median number of survey participants was 8.0 (IQR: 5.8, 10.0). Report writing was completed by 67 students (94.4%), findings dissemination occurred for 58 students (81.7%), and 90 students (76.3%) participated in post-survey evaluation meetings (Table 3 continued).

**Table 3. RFST-related experience of the students who stayed overnight at RFST sites**

Characteristic	Overall (N = 118) n (%) or median (IQR)
How long ago participated in RFST (months)	18 (17 – 19)
Duration of overnight stay at the RFST site (days)	3 (3 – 4)
RFST sites	
Upazila Health Complex	110 (93.2)
Others (Sadar hospital, sub center, TB center, Village)	8 (6.8)
Location of the residential facility	
Within UpHC campus	66 (55.9)
Outside UpHC campus	52 (44.1)
Rented residential facility	68 (57.6)
RFST participation in groups	113 (95.8)
Students per group	10 (6, 40)
Accompanied by teachers	116 (98.3)
Number of teachers accompanying	5 (3, 6)
Accompanied by health educator	107 (90.7)
Visited UpHC	118 (100.0)
Services oriented with	
Maternal and child health	116 (98.3)
Family planning services	116 (98.3)
Emergency services	102 (86.4)
OPD services	105 (89.0)
IPD services	97 (82.2)
DOTS services	115 (97.5)
EPI activities	116 (98.3)
Laboratory facilities	95 (80.5)
Other services at UpHC	86 (72.9)
IMCI corner	62 (72.1)
Adolescent corner	28 (32.6)
NCD corner	40 (46.5)
Breast feeding corner	57 (66.3)
Rabies corner	2 (1.6)
VIA corner	1 (0.8)
Visited USC/ UHFWC	73 (61.9%)
Oriented with functions of USC/UHFWC	66 (90.4%)
Services of USC/UHFWC oriented with	
General patient services	46 (69.7%)

<b>Characteristic</b>	<b>Overall (N = 118) n (%) or median (IQR)</b>
Maternal health care	53 (80.3%)
Child health care	44 (66.7%)
Reproductive health care	44 (66.7%)
Preventive services	29 (43.9%)
Nutrition services	34 (51.5%)
Health education services	28 (42.4%)
Referral services	24 (36.4%)
Visited Community Clinic	69 (58.5%)
Oriented with activities of CC	67 (97.1%)
Services of CC oriented with	
General patient services	55 (79.7%)
Maternal health care	51 (73.9%)
Child health care	45 (65.2%)
Reproductive health care	39 (56.5%)
Preventive services	28 (40.6%)
Nutrition services	26 (37.7%)
Health education services	27 (39.1%)
Referral services	28 (40.6%)
Visited NGO	33 (28.0%)
Oriented with activities of NGO	22 (66.7%)
Services of NGO oriented with	
General patient services	17 (77.3%)
Maternal health care	19 (86.4%)
Child health care	15 (68.2%)
Reproductive health care	13 (59.1%)
Preventive services	13 (59.1%)
Nutrition services	12 (54.5%)
Health education services	11 (50.0%)
Referral services	7 (31.8%)
Visited satellite clinic	16 (13.6%)
Oriented with the activities of satellite clinic	14 (87.5%)
Services of satellite clinic oriented with	
Preventive services	12 (85.7%)
Others	2 (14.3%)
Conducted community survey	71 (60.2%)
Collected data during community survey	67 (98.5%)
Place of data collection	
Household	60 (89.6%)
Hospital	7 (10.4%)
Number of participants surveyed	8.0 (5.8, 10.0)
Wrote a report on the community survey	67 (94.4%)
Disseminated findings of the community survey	58 (81.7%)
Participated in an evaluation meeting after the survey	90 (76.3%)

## Student-Reported Challenges During RFST

Students who participated in residential RFST encountered various challenges. Financial difficulties affected 27 students (22.9%), primarily inadequate accommodation funds (23, 85.2%), followed by insufficient food funds (15, 55.6%) and transportation funds (13, 48.1%). Accommodation challenges were experienced by 34 students (28.8%), with uncomfortable residential conditions being the most common issue (23, 67.6%). Infrastructure problems included toilet issues (10, 29.4%), electricity problems (13, 38.2%), water supply difficulties (6, 17.6%), and cooking facility problems (12, 35.3%). Management-related challenges affected 22 students (18.6%), primarily due to inadequate staff (13, 59.1%) and insufficient teachers (10, 45.5%). Travel-related difficulties were reported by 17 students (14.8%), with long journey duration being the primary concern (10, 58.8%). Safety challenges affected 9 students (7.6%), mainly due to inadequate security personnel. Survey-related challenges were minimal (8, 11.3%), and logistics challenges affected 10 students (8.5%) (Table 4).

**Table 4. Challenges faced by the students during RFST**

Characteristic	Overall (N = 118) n (%)
Faced financial challenges	27 (22.9%)
Final challenges faced -	
Inadequate funds for accommodation	23 (85.2%)
Inadequate funds for transportation	13 (48.1%)
Inadequate funds for food	15 (55.6%)
Inadequate funds for sports activities	11 (40.7%)
Inadequate funds for cultural activity	10 (37.0%)
Faced accommodation challenges	34 (28.8%)
Accommodation challenges faced-	
No designated residential facility	20 (58.8%)
No designated residential facility	20 (58.8%)
Uncomfortable residential place	23 (67.6%)
Problems with toilet	10 (29.4%)
Problem with electricity	13 (38.2%)
Problem with water supply	6 (17.6%)
Problem with cooking facilities	12 (35.3%)
Faced management-related challenges	22 (18.6%)
Management-related challenges faced-	
Inadequate teachers	10 (45.5%)
Inadequate staffs	13 (59.1%)
Inappropriate planning	5 (22.7%)
Inappropriate supervision	6 (27.3%)
Faced travel-related challenges	17 (14.8%)
Travel-related challenges faced-	
No vehicle for RFST	3 (17.6%)
Inadequate number of vehicles	6 (35.3%)
Unfit vehicles	5 (29.4%)
No driver	3 (17.6%)
Long duration of journey	10 (58.8%)
Long distance from the medical college	8 (47.1%)
Costly travel	6 (35.3%)
Physical problem	5 (29.4%)
Faced safety challenges	9 (7.6%)

Characteristic	Overall (N = 118) n (%)
Safety challenges faced-	
Lack of security personnel	6 (75.0%)
Inadequate number of security personnel	5 (62.5%)
No safety measures are available	1 (12.5%)
Faced challenges during the conduct of the survey	8 (11.3%)
Survey challenges faced	
Unwillingness of community people to participate	3 (37.5%)
Community people were non-cooperative during the interview	4 (50.0%)
Social obstacles (e.g., obstacles from the people, law enforcement authority)	3 (37.5%)
Unavailability of respondents	2 (25.0%)
Faced logistics-related challenges	10 (8.5%)
Logistic challenges faced-	
Inadequate logistics	9 (90.0%)
Logistics were not provided in a timely	4 (40.0%)
Poor quality of logistics	3 (30.0%)

### RFST Participation by Institution Type (Students)

A significant disparity in residential RFST participation was observed between medical college types. Among private medical college students (387 total), 80 (20.7%) participated in RFST by staying overnight, while 307 (79.3%) did not. In contrast, among public medical college students (417 total), only 38 (9.1%) participated in residential programs, while 379 (90.9%) did not participate. This indicates a substantially higher residential participation rates in private compared to public medical colleges (Table 5).

**Table 5. Residential practice of RFST by students across medical college type**

Stayed overnight	Private (N = 387) n (%)	Public (N = 417) n (%)
Yes	80 (20.7)	38 (9.1)
No	307 (79.3)	379 (90.9)

### Activities Conducted Instead of RFST Described by Students

The analysis of student responses reveals that in the absence of residential field site training facilities, 4th-year MBBS students engaged in diverse alternative learning activities. These activities were predominantly structured as non-residential, day-visit programs spanning various durations from single-day excursions to week-long daily commuting arrangements. However, the day-to-day approaches encompassed comprehensive data collection and research activities focusing on prevalent health issues such as hypertension, tetanus immunization, metabolic syndrome, and dengue awareness. Students conducted community surveys, engaged in door-to-door health assessments, and performed blood pressure screenings in rural populations. Healthcare facility visits formed a substantial component, including systematic observations of Upazila Health Complexes, community clinics, union sub-centers, and specialized services such as EPI corners, DOTS centers, and maternal child health units. Students gained practical exposure to healthcare delivery systems through interactions with various health professionals and direct patient engagement (Table 6).

**Table 6. Activities conducted instead of RFST, as described by the students**

<p><b>Healthcare Facility Visits &amp; Observations</b></p> <ul style="list-style-type: none"> <li>• Visit to Upazila Health Complex (UpHC)</li> <li>• Community clinic visits</li> <li>• Union sub-center visits</li> <li>• Emergency services observation</li> <li>• Indoor and outdoor patient services observation</li> <li>• EPI (Expanded Program on Immunization) corner visits</li> <li>• DOTS (Directly Observed Treatment Short-course) corner visits</li> <li>• Mother and Child Health (MCH) services observation</li> <li>• Family planning services observation</li> <li>• NCD (Non-Communicable Disease) corner visits</li> <li>• EOC (Emergency Obstetric Care) visits</li> <li>• ORT (Oral Rehydration Therapy) center visits</li> <li>• Eye care center visits</li> <li>• IMCI (Integrated Management of Childhood Illness) corner visits</li> </ul> <p><b>Healthcare Professional Interactions</b></p> <ul style="list-style-type: none"> <li>• Introduction to UHFPO (Upazila Health and Family Planning Officer)</li> <li>• Meeting with RMO (Residential Medical Officer)</li> <li>• Interaction with various health workers and their service descriptions</li> <li>• Learning about healthcare delivery at the grassroots level</li> </ul> <p><b>Community Engagement Activities</b></p> <ul style="list-style-type: none"> <li>• Door-to-door health surveys</li> <li>• Village health awareness programs</li> <li>• Health education on hygiene, nutrition, and disease prevention</li> <li>• Blood pressure measurement for curious community members</li> <li>• Health problem consultations with villagers</li> <li>• Tetanus awareness campaigns</li> </ul> <p><b>Hospital &amp; Medical Institution Visits</b></p> <ul style="list-style-type: none"> <li>• Visit to ICDDR,B (International Centre for Diarrhoeal Disease Research, Bangladesh)</li> <li>• Infectious disease hospital visits</li> <li>• Saline bag manufacturing process observation</li> <li>• Various hospital visits to observe different diseases</li> <li>• Garment factory health services observation</li> <li>• Rehabilitation center visits</li> </ul>	<p><b>Educational &amp; Training Activities</b></p> <ul style="list-style-type: none"> <li>• History taking practice with patients</li> <li>• Basic examination skills practice</li> <li>• Learning about local development activities and community programs</li> <li>• Study of previous research methodologies</li> <li>• Academic professional preparation</li> <li>• Learning about healthcare facilities and their pros and cons</li> </ul> <p><b>Data Collection &amp; Research Activities</b></p> <ul style="list-style-type: none"> <li>• Community survey on hypertension and pre-hypertension risk factors</li> <li>• Data collection on tetanus immunization knowledge and practices</li> <li>• Research on metabolic syndrome among medical students and teachers</li> <li>• Dengue awareness survey</li> <li>• Blood pressure measurement and screening in rural areas</li> <li>• Sample collection from medical students, teachers, and staff</li> <li>• Research work on clinical topics</li> <li>• Data collection on family and community health</li> </ul> <p><b>Research Methodology &amp; Analysis</b></p> <ul style="list-style-type: none"> <li>• Questionnaire preparation and pre-testing</li> <li>• Data entry and processing</li> <li>• Statistical analysis using software like SPSS</li> <li>• Survey report preparation and submission</li> <li>• Data compilation and interpretation</li> </ul> <p><b>Rural &amp; Community Exposure</b></p> <ul style="list-style-type: none"> <li>• Village visits for health data collection</li> <li>• Rural health issue identification and understanding</li> <li>• Assessment of environmental status around healthcare institutions</li> <li>• Observation of primary healthcare delivery systems</li> <li>• Study of socio-economic factors affecting health</li> </ul> <p><b>Alternative Learning Approaches</b></p> <ul style="list-style-type: none"> <li>• Medical college campus-based research</li> <li>• Lecture gallery data collection sessions</li> <li>• Study tours to model villages</li> <li>• Site visits to understand organizational structures and activities</li> </ul>
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## Student Suggestions for RFST Program Improvement

Students' suggestions for enhancing the RFST program demonstrate a clear understanding of the fundamental requirements for effective community medicine training. The overwhelming consensus among students centers on the establishment of proper residential facilities, which they view as essential for meaningful community engagement and comprehensive data collection. Students consistently emphasized the need for increased government funding and budget allocation, recognizing that financial constraints significantly limit program effectiveness. Safety and security concerns, particularly for female students, emerged as critical priorities requiring immediate attention through enhanced protocols and dedicated supervision arrangements. Students advocated extended program duration beyond current single-day visits, suggesting minimum 5-7 day residential programs to allow deeper community immersion and more thorough data collection. Infrastructure improvements, including better transportation, accommodation standards, sanitation facilities, and meal services, were identified as necessary for student comfort and program sustainability. The recommendations also highlighted the importance of proper timing, with preferences for winter season implementation, smaller group sizes for individual attention, and better teacher supervision. Students demonstrated awareness of systemic issues by calling for improved inter-departmental cooperation, enhanced academic integration, and stronger government commitment to community medicine education (Table 7).

**Table 7. Suggestions made by the students to improve the effectiveness of RFST**

<p><b>Infrastructure &amp; Accommodation</b></p> <ul style="list-style-type: none"> <li>• Establish proper residential facilities for students</li> <li>• Improve accommodation infrastructure and hygiene standards</li> <li>• Provide clean and adequate washroom facilities</li> <li>• Ensure proper sanitation systems</li> <li>• Create separate buildings for students and teachers during fieldwork</li> <li>• Arrange safe and secure accommodation locations</li> <li>• Improve water facilities and environmental cleanliness</li> </ul> <p><b>Funding &amp; Budget</b></p> <ul style="list-style-type: none"> <li>• Increase overall budget allocation for RFST programs</li> <li>• Provide timely fund disbursement from the government</li> <li>• Adjust funding according to current economic conditions</li> <li>• Allocate separate funds specifically for accommodation</li> <li>• Reduce financial burden on students for RFST participation</li> <li>• Ensure proper budget distribution and utilization</li> </ul> <p><b>Safety &amp; Security Measures</b></p> <ul style="list-style-type: none"> <li>• Implement enhanced safety protocols, especially for female students</li> <li>• Assign female teachers to supervise female students</li> <li>• Ensure security measures for residential programs</li> <li>• Address safety concerns in peripheral and rural areas</li> </ul>	<p><b>Technology &amp; Data Collection</b></p> <ul style="list-style-type: none"> <li>• Introduce digital methods for data compilation and analysis</li> <li>• Provide laptops and research facilities</li> <li>• Use technology for improved data collection efficiency</li> <li>• Implement digital tools for better data management</li> </ul> <p><b>Community Engagement</b></p> <ul style="list-style-type: none"> <li>• Increase interaction time with local communities</li> <li>• Involve local health workers in the program</li> <li>• Conduct courtyard meetings with community members</li> <li>• Provide small gifts or incentives to survey participants</li> <li>• Inform communities about the importance of health surveys</li> </ul> <p><b>Teacher &amp; Staff Resources</b></p> <ul style="list-style-type: none"> <li>• Increase number of qualified teachers and supervisors</li> <li>• Ensure teachers stay with students during residential programs</li> <li>• Provide better teacher training for RFST supervision</li> <li>• Improve teacher enthusiasm and commitment to the program</li> <li>• Assign experienced and degree-holding doctors as supervisors</li> </ul> <p><b>Program Content &amp; Scope</b></p> <ul style="list-style-type: none"> <li>• Visit key population sites for emerging diseases (AIDS centers, etc.)</li> <li>• Include study tours and exposure to different healthcare facilities</li> <li>• Add more hands-on clinical exposure opportunities</li> </ul>
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- Provide adequate safety equipment and protocols

#### **Transportation**

- Improve transport facilities and vehicle quality
- Provide air-conditioned buses for student comfort
- Arrange institutional transport rather than relying on public transport
- Ensure comfortable and safe transportation options
- Address overcrowding issues in transport vehicles

#### **Program Duration & Timing**

- Extend RFST program duration beyond single-day visits
- Implement minimum 5-7 day residential programs
- Schedule programs during winter season rather than summer or monsoon
- Integrate timing more appropriately into curriculum
- Arrange multiple RFST programs per year (at least two)

#### **Academic & Training Components**

- Provide pre-field preparation and training sessions
- Conduct proper briefing about RFST objectives and procedures
- Include post-field discussion and feedback sessions
- Enhance teacher supervision and guidance during fieldwork
- Develop clear learning objectives for students
- Improve correlation with professional medical practice

#### **Food & Meal Services**

- Improve food quality and nutritional standards
- Provide adequate meal arrangements during field visits
- Ensure sufficient food supplies and snacks
- Arrange proper dining facilities at field sites

#### **Group Management & Organization**

- Divide large student groups into smaller, manageable units (15-20 students per group)
- Implement better coordination between participating entities
- Improve overall program management and organization
- Separate male and female groups for enhanced productivity
- Ensure proper team formation and leadership

- Incorporate patient interaction and communication skill development
- Include exposure to rural medicine and patient handling

#### **Weather & Seasonal Considerations**

- Schedule programs during appropriate weather conditions
- Avoid monsoon season due to data collection difficulties
- Plan for winter season implementation for better comfort
- Consider weather-related challenges in program planning

#### **Communication & Language**

- Develop student communication skills before field visits
- Address language barriers in different regions
- Improve interaction capabilities with rural populations
- Enhance overall communication effectiveness

#### **Evaluation & Feedback**

- Implement proper evaluation and feedback systems
- Conduct interactive sessions for program improvement
- Create mechanisms for student input and suggestions
- Establish monitoring systems for program effectiveness

#### **Government & Administrative Support**

- Ensure government involvement and inspection of procedures
- Make RFST programs mandatory from university level
- Improve departmental coordination and concern
- Provide proper administrative support and oversight

#### **Special Considerations**

- Provide physiological support and legal aid when needed
- Address specific challenges faced by students in rural areas
- Ensure proper introduction to field sites before data collection
- Create opportunities for recreational activities during residential stays

## Teachers' Perspective

### Teacher Demographics and Characteristics

The study included 82 teachers with a mean age of 41.73 years (SD  $\pm$ 8.50). The sample showed female predominance with 51 teachers (62.2%) compared to 31 males (37.8%). Religious distribution showed 75 teachers (91.5%) were Muslim, 6 (7.3%) Hindu, and 1 (1.2%) Christian. Educational qualifications revealed that 73 teachers (89.0%) held MBBS degrees, while 58 (88.4%) had MPH qualifications. Post-graduation completion rate was high at 69 teachers (84.1%), with public health being the predominant specialization (61, 88.4%). Most teachers were married (77, 93.9%) compared to unmarried (5, 6.1%). Nuclear family structure was more common (52, 63.4%) than joint families (30, 36.6%). The median number of family members was 4.00 (IQR: 4.00, 5.00), and 79 teachers (96.3%) lived with their families. Median monthly personal income was 65,000 BDT (IQR: 45,000, 93,000), while median monthly family income was 150,000 BDT (IQR: 100,000, 200,000) (Table 8).

**Table 8. Sociodemographic characteristics of teachers**

Characteristic	Overall (N = 82) n (%)
Age (years)	41.73 (8.50)
Sex	
Female	51 (62.2)
Male	31 (37.8)
Religion	
Islam	75 (91.5)
Hinduism	6 (7.3)
Christianity	1 (1.2)
Educational qualification	
MBBS	73 (89.0)
MPH	58 (88.4)
Diploma	4 (4.8)
MPhil	7 (8.5)
MSC	1 (1.2)
FCPS	1 (1.2)
MD/MS	4 (4.8)
PhD	2 (2.4)
DMU	1 (1.2)
M Med	1 (1.2)
MBA	1 (1.2)
Post-graduation completed	69 (84.1)
Discipline of post-graduation	
Public Health	61 (88.4)
Gynecology & obstetrics	3 (4.3)
Medicine	2 (2.8)
Pediatrics	1 (1.4)
Ophthalmology	1 (1.4)
Urology	1 (1.4)
Marital Status	
Married	77 (93.9)
Unmarried	5 (6.1)
Family Type	
Nuclear	52 (63.4)

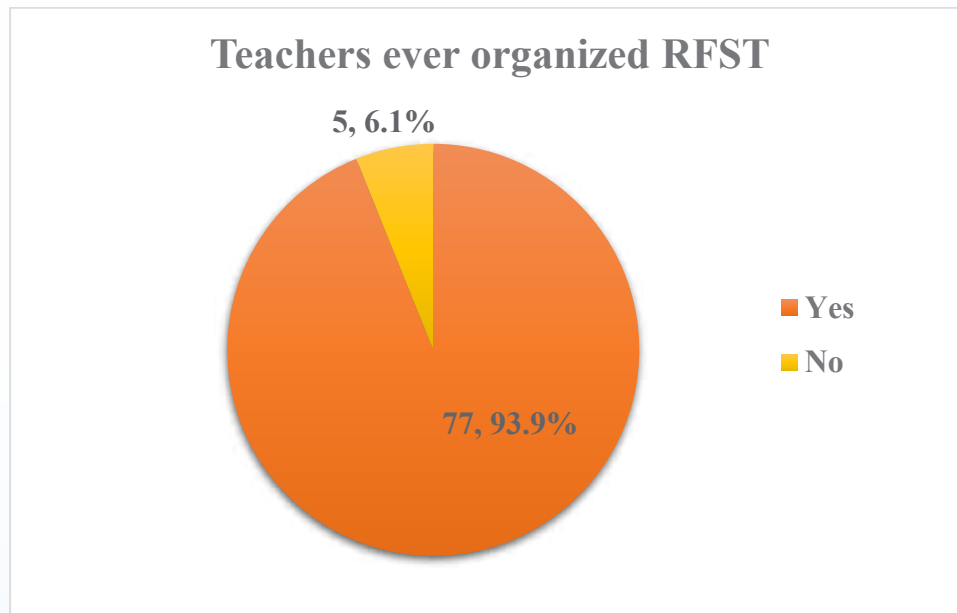
Characteristic	Overall (N = 82) n (%)
Joint	30 (36.6)
Number of family members	4.00 (4.00, 5.00)
Lives with family	79 (96.3)
Monthly personal income (BDT)	65,000 (45,000, 93,000)
Monthly family income (BDT)	150,000 (100,000, 200,000)

### Teacher-Reported Reasons for Non-Participation

Teachers identified several barriers preventing overnight stays at RFST sites. The most significant constraint was the absence of residential facilities, reported by 60 teachers (85.7%). Safety concerns were substantial, affecting 52 teachers (74.3%). Departmental policies played a major role, with 34 teachers (48.6%) indicating their department did not consider overnight stays necessary. Financial constraints were less prominent among teachers, with only 4 (5.7%) citing inadequate funds for rent. Some teachers felt day visits adequately covered educational objectives, making overnight stays unnecessary (4, 5.7%). Infrastructure inadequacy was reported by 3 teachers (4.3%), while food quality concerns (2, 2.9%) and transportation problems (2, 2.9%) were minimal (Table 9).

**Table 9. Reasons for not staying overnight at RFST sites**

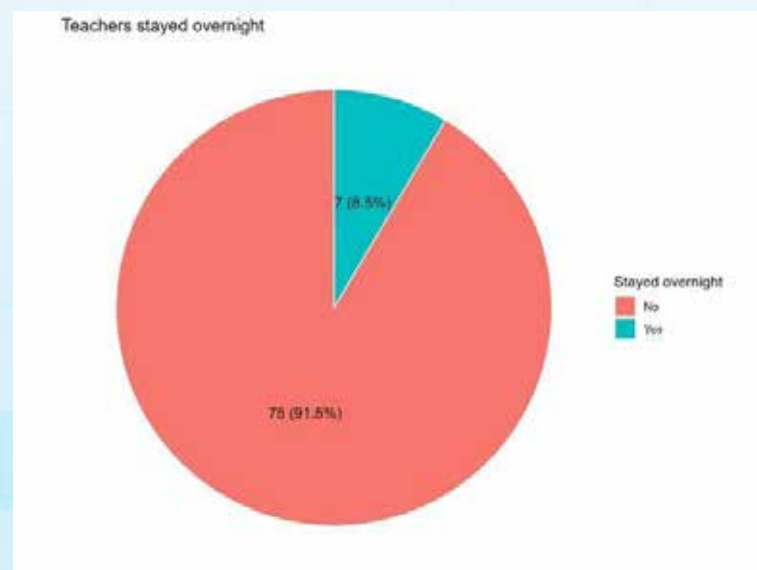
Characteristic	Overall (N = 82) n (%)
No residential facility	60 (85.7)
Safety concerns	52 (74.3)
The department did not consider staying overnight	34 (48.6)
No funds for rent	4 (5.7)
No need to stay at night as day visits cover the objectives	4 (5.7)
The infrastructure is not suitable for staying overnight	3 (4.3)
Low-quality foods	2 (2.9)
Transport-related problem (no driver, inadequate seats)	2 (2.9)



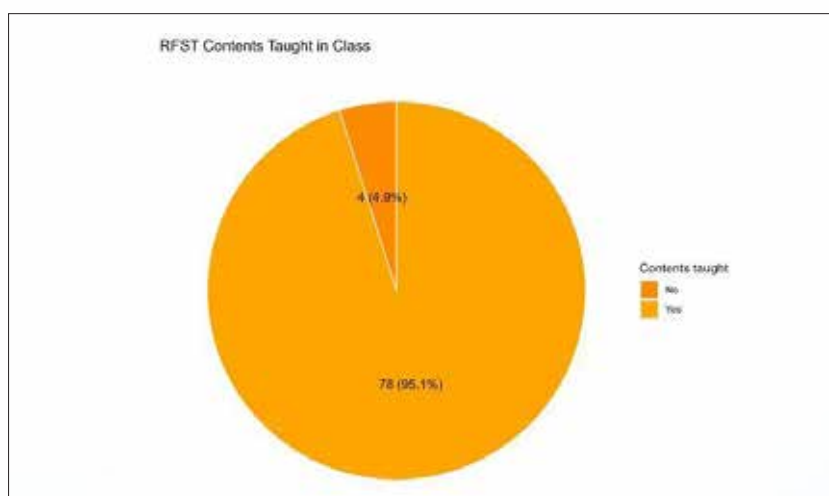
*Figure 5. Distribution of teachers based on whether they ever organized RFST*

### Teacher RFST Organization and Participation Experience

Among teachers surveyed, participation in RFST organization and overnight stays was limited. The distribution data shows that most teachers had never organized RFST programs (93,9%) (Figure 5), and had never stayed overnight at RFST sites (91.5%) (Figure 6). However, the majority indicated that RFST contents were taught to students in classroom settings (95.1%) (Figure 7), suggesting theoretical coverage despite limited practical implementation



*Figure 6. Distribution of teachers based on whether they stayed overnight at RFST site*



**Figure 7. Distribution of responses of teachers on whether RFST contents are taught to students in class**

### Teachers' RFST Experience Details

Among the 7 teachers who had residential RFST experience, the median duration of organizing experience was 6.0 years (IQR: 3.5, 11.5). Recent participation occurred a median of 18 months ago (IQR: 13, 18), with overnight stays typically lasting 5 days (IQR: 1, 8). All teachers (7, 100.0%) conducted RFST at Upazila Health Complexes. Accommodation was split between on-campus (4, 57.1%) and off-campus locations (3, 42.9%), with rental facilities used by 3 teachers (42.9%). Group participation was common (5, 71.4%) with larger student groups (median 45, IQR: 45, 80) and typically 4 accompanying teachers (IQR: 2, 4). No health educators accompanied teacher groups. All teachers visited UpHCs and received comprehensive service orientations. Community engagement included USC/UHFWC visits (3, 42.9%), Community Clinic visits (5, 71.4%), and limited satellite clinic exposure (1, 14.3%). All teachers conducted community surveys with household data collection, wrote reports, disseminated findings, and participated in evaluation meetings (Table 10).

**Table 10. RFST-related experience of teachers**

Characteristic	Overall (N = 7) n (%)
Duration of RFST organizing experience (years)	6.0 (3.5, 11.5)
How long ago participated in RFST (months)	18 (13, 18)
Duration of overnight stay at the RFST site (days)	5 (1, 8)
RFST sites	
Upazila Health Complex	7 (100.0)
Location of the residential facility	
Within the UpHC campus	4 (57.1)
Outside the UpHC campus	3 (42.9)
Rented residential facility	3 (42.9)
RFST participation in groups	5 (71.4)
Students per group	45 (45, 80)
Number of teachers accompanying	4 (2, 4)
Accompanied by health educator	0 (0.0)
Visited UpHC	7 (100.0)
Services with oriented with	7 (100.0)
Maternal and child health	7 (100.0)

Characteristic	Overall (N = 7) n (%)
Family planning services	7 (100.0)
Emergency services	7 (100.0)
OPD services	7 (100.0)
IPD services	7 (100.0)
DOTS services	7 (100.0)
EPI activities	7 (100.0)
Laboratory facilities	7 (100.0)
Other services at UpHC	3 (42.9)
IMCI corner	2 (66.7)
Adolescent corner	2 (66.7)
NCD corner	2 (66.7)
Breastfeeding corner	2 (66.7)
Visited USC/ UHFWC	3 (42.9)
Oriented with the functions of USC/UHFWC	3 (100.0)
General patient services	2 (66.7)
Maternal health care	2 (66.7)
Child health care	2 (66.7)
Reproductive health care	2 (66.7)
Preventive services	3 (100.0)
Nutrition services	2 (66.7)
Health education services	2 (66.7)
Referral services	2 (66.7)
Visited Community Clinic	5 (71.4)
Oriented with the activities of CC	5 (100.0)
Services of CC oriented with	
General patient services	5 (100.0)
Maternal health care	4 (80.0)
Child health care	4 (80.0)
Reproductive health care	4 (80.0)
Preventive services	5 (100.0)
Nutrition services	4 (80.0)
Health education services	5 (100.0)
Referral services	3 (60.0)
Visited satellite clinic	1 (14.3)
Oriented with the activities of the satellite clinic	1 (14.3)
Services of satellite clinic oriented with-	
Preventive services	1 (100.0)
Conducted a community survey	7 (100.0)
Collected data during the community survey	7 (100.0)
Place of data collection	
Household	7 (100.0)
Wrote a report on the community survey	7 (100.0)
Disseminated findings of the community survey	7 (100.0)
Participated in an evaluation meeting after the survey	7 (100.0)

## Teacher-Reported RFST Challenges

Teachers who participated in residential RFST faced various challenges. Financial difficulties affected 4 teachers (57.1%), particularly inadequate funds for sports and cultural activities (3 each, 75.0%). Accommodation challenges were most prevalent, affecting 5 teachers (71.4%), with all experiencing infrastructure-related issues, and 3 (60.0%) reporting uncomfortable residential conditions. Management-related challenges affected 2 teachers (28.6%), while travel-related, safety, survey-related, and logistics challenges each affected 1 teacher (14.3%). The challenges were generally more severe than those reported by students, with higher percentages experiencing accommodation and financial difficulties (Table 11).

**Table 11. Challenges related to RFST faced by teachers**

Characteristic	Overall (N = 7) n (%)
Faced financial challenges	4 (57.1)
Final challenges faced -	
Inadequate funds for accommodation	2 (50.0)
Inadequate funds for transportation	1 (25.0)
Inadequate funds for food	2 (50.0)
Inadequate funds for sports activities	3 (75.0)
Inadequate funds for cultural activity	3 (75.0)
Faced accommodation challenges	5 (71.4)
Accommodation challenges faced-	
No designated residential facility	2 (40.0)
No designated residential facility	5 (100.0)
Uncomfortable residential place	3 (60.0)
Problems with toilet	2 (40.0)
Problem with electricity	3 (60.0)
Problem with water supply	2 (40.0)
Problem with cooking facilities	3 (60.0)
Faced management-related challenges	2 (28.6)
Management-related challenges faced-	
Inadequate teachers	1 (50.0)
Inadequate staffs	1 (50.0)
Faced travel-related challenges	1 (14.3)
Travel-related challenges faced-	
Inadequate number of vehicles	1 (100.0)
Unfit vehicles	1 (100.0)
Long duration of journey	1 (100.0)
Costly travel	1 (100.0)
Faced safety challenges	1 (14.3)
Safety challenges faced-	
Lack of security personnel	1 (100.0)
No safety measures are available	1 (100.0)
Faced challenges during the conduct of the survey	1 (14.3)
Survey challenges faced	
Unwillingness of community people to participate	1 (100.0)
Faced logistics-related challenges	1 (14.3)
Logistic challenges faced-	
Inadequate logistics	1 (100.0)

## Teacher-Described Alternative Activities

The departmental response to RFST implementation challenges, as described by faculty members, demonstrates systematic adaptation while preserving educational integrity and learning outcomes. Teachers restructured traditional residential programs into organized day-visit arrangements, maintaining exposure to all essential components of community medicine practice. The alternative approach involved careful planning and questionnaire development, followed by structured visits to healthcare facilities including Upazila Health Complexes, community clinics, union sub-centers, and specialized service areas. Faculty members ensured students gained exposure to all critical health service components including EPI activities, non-communicable disease management, maternal child health services, DOTS implementation, family planning services, and emergency care protocols. The programs incorporated systematic data collection activities under close faculty supervision, with students divided into manageable groups for effective learning and guidance. Teachers maintained academic rigor through comprehensive data analysis sessions, report writing supervision, and presentation requirements. The alternative programs included visits to specialized facilities such as tuberculosis hospitals, autism centers, pharmaceutical industries, and one-stop crisis centers, ensuring broad exposure to different aspects of healthcare delivery. Despite infrastructure limitations, the faculty successfully delivered structured programs ranging from single-day intensive sessions to week-long day-visit arrangements, demonstrating flexibility while maintaining educational standards (Table 12).

**Table 12. Departmental activities instead of RFST, described by teachers**

<p><b>Program Planning &amp; Development</b></p> <ul style="list-style-type: none"> <li>• Topic selection for field studies</li> <li>• Questionnaire development and pre-testing</li> <li>• Planning day-long programs instead of residential stays</li> <li>• Curriculum integration and timing coordination</li> <li>• Selection of topics that eliminate need for overnight stays</li> </ul> <p><b>Healthcare Facility Visits</b></p> <ul style="list-style-type: none"> <li>• Upazila Health Complex (UpHC) visits</li> <li>• Community Clinic (CC) visits</li> <li>• Union Sub-Centre (USC) visits</li> <li>• UHFWC (Union Health and Family Welfare Centre) visits</li> <li>• Civil Surgeon Office visits</li> <li>• Satellite clinic visits</li> <li>• NGO health facility visits</li> </ul> <p><b>Specific Health Service Area Observations</b></p> <ul style="list-style-type: none"> <li>• EPI (Expanded Program on Immunization) activities</li> <li>• NCD (Non-Communicable Disease) corner visits</li> <li>• Indoor patient services observation</li> <li>• Outdoor patient services observation</li> <li>• MCH (Mother and Child Health) services</li> <li>• DOTS (Directly Observed Treatment Short-course) corner visits</li> <li>• Family Planning center activities</li> <li>• Emergency services observation</li> <li>• Breastfeeding corner visits</li> <li>• IMCI (Integrated Management of Childhood Illness) visits</li> <li>• ORT (Oral Rehydration Therapy) center visits</li> </ul> <p><b>Specialized Facility Visits</b></p>	<p><b>Student Supervision &amp; Guidance</b></p> <ul style="list-style-type: none"> <li>• Dividing students into manageable groups (typically 10 groups)</li> <li>• Supervising community survey activities</li> <li>• Guiding students through data collection processes</li> <li>• Providing communication support during field work</li> <li>• Assisting students in facility visits</li> </ul> <p><b>Academic Activities</b></p> <ul style="list-style-type: none"> <li>• Data analysis sessions with students</li> <li>• Report writing supervision</li> <li>• Presentation preparation and delivery</li> <li>• Dissemination of findings</li> <li>• Discussion sessions in Community Medicine department</li> <li>• Training sessions for students</li> </ul> <p><b>Organizational Structure Learning</b></p> <ul style="list-style-type: none"> <li>• Discussion of Upazila Health Complex organogram</li> <li>• Understanding healthcare delivery hierarchy</li> <li>• Learning about different departmental activities</li> <li>• Observation of healthcare facility management</li> <li>• Study of health system infrastructure</li> </ul> <p><b>Duration Variations</b></p> <ul style="list-style-type: none"> <li>• Single-day visit</li> <li>• 3-day day-to-day visits</li> <li>• 4-day day-to-day visits</li> <li>• 5-7 day day-to-day visits</li> </ul> <p><b>Non-Residential Program Implementation</b></p> <ul style="list-style-type: none"> <li>• Non-residential field site surveys</li> <li>• Non-residential field site training</li> <li>• Day-long monitoring of UpHC activities</li> </ul>
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- TB (Tuberculosis) hospital visits
- One Stop Crisis Center visits
- Autism center visits
- Pharmaceutical industry visits
- Cold storage facility visits (for EPI)

**Data Collection Activities**

- Community field surveys under teacher supervision
- Cross-sectional study implementation
- Data collection from community participants
- Supervised data gathering at healthcare facilities
- Community health assessments

**Community Engagement**

- Village visits for community surveys
- Direct interaction with community members
- Community health problem identification
- Local health needs assessment

- Community-based day programs

**Assessment & Evaluation**

- Report submission processes
- Data analysis and interpretation
- Student performance evaluation during field work
- Presentation assessments

**Administrative Coordination**

- Coordination with UpHC officials (UHFPO, RMO)
- Liaison with community clinic staff
- Collaboration with local health authorities
- Networking with NGO partners

**Teachers' Recommendations for RFST Program Improvement**

Faculty recommendations for RFST program improvement reflect deep institutional knowledge and systematic understanding of the complex challenges facing community medicine education. Teachers prioritize the establishment of comprehensive residential infrastructure, advocating for dedicated facilities at district-level UpHCs with proper accommodation, safety measures, and academic environments. Their funding recommendations are detailed and specific, calling for timely budget disbursement, increased teacher honoraria, and systematic allocation for different program components. Faculty members emphasize the critical need for enhanced staffing arrangements, including increased teacher assignments, supporting staff allocation, and cleaning/cooking personnel for residential programs. Safety and security concerns are addressed through comprehensive protocols, with particular attention to gender-specific requirements and night-stay safety measures. Teachers advocate for improved coordination with UpHC personnel, including orientation programs for health officers and establishment of formal cooperation frameworks. The recommendations include systematic approaches to program duration optimization, suggesting structured alternatives ranging from 3–10-day programs instead of current 30-day arrangements. Faculty members recognize the need for enhanced training and capacity building, both for teachers in supervision and data analysis, and for students in communication skills and research methodology. Their suggestions demonstrate understanding of policy-level requirements, calling for government commitment, inter-departmental cooperation, and institutional support systems that would ensure sustainable and effective community medicine education (Table 13).

**Table 13. Suggestions and recommendations by teachers to improve the effectiveness of RFST program**

<b>Funding &amp; Budget Management</b>	<b>Academic Environment &amp; Standards</b>
<ul style="list-style-type: none"> <li>• Increase government funding allocation for RFST programs</li> <li>• Ensure timely disbursement of allocated funds prior to program implementation</li> <li>• Provide specific budget distribution for different program components</li> <li>• Increase teacher honorarium for RFST supervision</li> <li>• Allocate budget for logistics and infrastructure improvements</li> <li>• Establish dedicated funding streams for each medical college</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure proper academic environment at field sites</li> <li>• Maintain focus on current burning health issues</li> <li>• Organize nationwide survey reports on alarming health issues</li> <li>• Reconstruct curriculum to balance syllabus with available time</li> <li>• Create academic atmosphere conducive to learning</li> </ul>

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**Residential Facilities & Infrastructure**

- Establish proper residential facilities at or near UpHC premises
- Create individual dormitories for each medical college within UpHC areas
- Ensure close proximity of residential facilities to medical college campuses
- Provide adequate accommodation infrastructure with modern amenities
- Establish designated RFST facilities in every district UpHC
- Renovate existing residential infrastructure to meet program standards

**Safety & Security Measures**

- Implement comprehensive safety protocols for students and teachers
- Enhance security measures specifically for night stay programs
- Establish separate security arrangements for male and female participants
- Address safety concerns that currently prevent residential programs
- Create safe environments conducive to learning and research

**Accommodation Standards & Amenities**

- Ensure proper sanitation and hygiene maintenance
- Provide safe drinking water supply at residential facilities
- Guarantee reliable electricity supply
- Maintain good food quality and prevent food poisoning incidents
- Establish separate toilet facilities for teachers and students
- Create clean and comfortable living spaces

**Staffing & Human Resources**

- Increase number of teachers assigned specifically for RFST programs
- Allocate cleaning and cooking staff for RFST sites
- Increase supporting staff numbers at UpHC facilities
- Provide adequate manpower for program supervision
- Ensure sufficient faculty coverage for extended programs

**Transportation Solutions**

- Improve transport facility arrangements and quality
- Provide dedicated transportation for Community Medicine departments
- Ensure safe and comfortable travel options
- Establish reliable transport systems for daily commuting when residential facilities unavailable
- Arrange institutional vehicles rather than relying on public transport

**Logistical Support Systems**

- Provide comprehensive logistics support for field programs
- Ensure availability of necessary items and supplies
- Establish strong supervision mechanisms
- Create adequate supply chains for program materials
- Develop systematic support structures

**Government Policy & Administrative Support**

- Increase government concern and willingness for RFST implementation
- Establish policy-level support for proper RFST implementation
- Create administrative frameworks supporting program objectives
- Develop nationwide standards for RFST implementation
- Ensure institutional cooperation across departments

**Food & Nutrition Services**

- Improve food quality and safety standards
- Prevent food poisoning incidents through better food handling
- Ensure availability of proper meal facilities
- Maintain hygienic food preparation and service
- Provide adequate nutrition during field programs

**Student Engagement & Motivation**

- Increase active participation of students in RFST activities
- Raise awareness among students about RFST importance
- Grow student interest and enthusiasm for community medicine
- Explain necessity of RFST and data collection to students
- Inspire students through early exposure (suggested for 1st year MBBS)

**Site Selection & Location**

- Choose appropriate and ideal locations for RFST programs
- Ensure large population availability for data collection
- Select sites with adequate infrastructure support
- Consider proximity to medical colleges when selecting sites
- Evaluate site suitability before program implementation

**Inter-departmental Cooperation**

- Improve cooperation from clinical departments for RFST duration
  - Address lack of consideration from other departments for 2-week programs
  - Establish institutional support across all medical college departments
  - Create collaborative frameworks for program success
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**Program Duration & Timing**

- Optimize program duration (suggestions range from 3-10 days instead of current 30 days)
- Increase time allocation for meaningful community engagement
- Ensure adequate time for proper data collection and analysis
- Balance program duration with curriculum constraints
- Allow flexibility in program timing based on local conditions

**Training & Capacity Building**

- Provide appropriate training for teachers in data collection and analysis
- Conduct orientation programs for UpHC officers dealing with medical students
- Enhance technical training for both students and teachers
- Develop communication skills training for better community interaction
- Establish pre-program orientation sessions

**UpHC Staff Cooperation & Coordination**

- Establish rules and regulations for UHFPO and UpHC officers to welcome students properly
- Improve motivation of UHFWC officers for student interaction
- Ensure proper briefing about UpHC activities to visiting students
- Address discrimination issues faced by private medical college students
- Create cordial working environment with UpHC staff

**Technology & Data Management**

- Use RFST data for nationwide piloting initiatives
- Implement systematic data collection and analysis procedures
- Establish data management protocols
- Create research frameworks for meaningful outcomes

**Program Structure & Organization**

- Establish RFST supporting units in each UpHC
- Create committees specifically for RFST program management
- Develop systematic organization of annual programs
- Implement structured approaches to program delivery

**Quality Assurance & Standards**

- Ensure programs meet educational objectives effectively
- Maintain academic rigor while addressing practical constraints
- Establish quality benchmarks for RFST implementation
- Create evaluation mechanisms for program effectiveness

## RFST Preparedness of the Community Medicine and Public Health Department

### Departmental Human Resources

Analysis of 20 community medicine and public health departments revealed significant organizational characteristics. The mean departmental duration was 29.80 years (SD  $\pm$ 17.89), with private colleges averaging 21.00 years ( $\pm$ 5.56) compared to public colleges at 38.60 years ( $\pm$ 21.74). Sanctioned posts median was 8.00 (IQR: 7.50, 10.00), with private colleges having 10.00 (IQR: 8.00, 10.75) compared to public colleges' 8.00 (IQR: 6.00, 8.00). Current teacher numbers showed a median of 8.00 (IQR: 6.50, 9.00) overall. Faculty composition included professors (median 0.00, IQR: 0.00, 1.25), associate professors (1.00, IQR: 1.00, 1.50), assistant professors (1.00, IQR: 1.00, 2.00), and lecturers (4.00, IQR: 2.75, 5.25). Health educator presence was different between college types, with 5 (55.6%) in public colleges compared to none in private colleges ( $p=0.011$ ). Half the departments (10, 52.6%) had teachers assigned for RFST, and a similar proportion had RFST committees. The current student median was 128.50 (IQR: 88.75, 230.00) with 5.00 batches per session (IQR: 3.00, 6.00) (Table 14).

**Table 14. Human resources of the community medicine and public health department**

Characteristic	Medical College Type		
	Overall (N = 20)	Private (N = 10)	Public (N = 10)
<b>Duration of the department (years)</b>	29.80 (17.89)	21.00 (5.56)	38.60 (21.74)
<b>Sanctioned posts</b>	8.00 (7.50, 10.00)	10.00 (8.00, 10.75)	8.00 (6.00, 8.00)
<b>Teachers</b>	8.00 (6.50, 9.00)	8.00 (7.25 – 9.75)	7.00 (4.00 – 8.00)
<b>Male teachers</b>	3.50 (2.00, 5.00)	4.00 (3.25, 5.75)	2.00 (1.25, 3.75)
<b>Female teachers</b>	3.00 (2.00, 6.00)	3.50 (2.00, 5.50)	3.00 (3.00, 6.00)
<b>Professors</b>	0.00 (0.00, 1.25)	1.50 (0.25, 2.00)	0.00 (0.00, 0.00)
<b>Associated professors</b>	1.00 (1.00, 1.50)	1.50 (1.00, 2.75)	1.00 (1.00, 1.00)
<b>Assistant professors</b>	1.00 (1.00, 2.00)	1.00 (0.25, 1.00)	1.00 (1.00, 2.00)
<b>Lecturers</b>	4.00 (2.75, 5.25)	4.00 (3.00, 6.00)	4.00 (2.50, 5.00)
<b>Medical officers</b>	0.00 (0.00, 0.50)	0.00 (0.00, 0.00)	0.00 (0.00, 1.00)
<b>Designation of the Head of the Department</b>			
Professor	7 (35.0)	6 (60.0)	1 (10.0)
Associate professor	9 (45.0)	4 (40.0)	5 (50.0)
Assistant professor	4 (20.0)	0 (0.0)	4 (40.0)
<b>Discipline of the Head of the Department</b>			
Community Medicine	12 (60.0)	7 (70.0)	5 (50.0)
Public Health	4 (20.0)	2 (20.0)	2 (20.0)
Epidemiology	1 (5.0)	0 (0.0)	1 (10.0)
Hospital Management	1 (5.0)	0 (0.0)	1 (10.0)
Reproductive and Child Health	1 (5.0)	1 (10.0)	0 (0.0)
Unknown	1 (5.0)	0 (0.0)	1 (10.0)
<b>Staffs</b>	3.00 (2.00, 3.00)	2.50 (2.00, 3.00)	3.00 (2.00, 3.00)
<b>Health educator (present)</b>	5 (26.3)	0 (0.0)	5 (55.6)
<b>Teachers assigned for RFST</b>			
Present	10 (52.6)	5 (50.0)	5 (55.6)
Absent	9 (47.4)	5 (50.0)	4 (44.4)
<b>A committee was assigned for RFST</b>			
Present	10 (52.6)	6 (60.0)	4 (44.4)
Absent	9 (47.4)	4 (40.0)	5 (55.6)
<b>Number of students (current)</b>	128.50 (88.75, 230.00)	112.50 (93.75, 129.25)	230.00 (97.50, 233.50)
<b>Number of batches per session</b>	5.00 (3.00, 6.00)	4.00 (2.25, 6.00)	5.00 (3.50, 6.00)

Data is expressed as n (%) / Mean (SD) / Median (IQR)

## Departmental RFST Infrastructure and Logistic Resources

Departmental preparedness for RFST varied considerably. Academic calendars for RFST existed in 75% of departments overall, with similar rates between private (8, 80.0%) and public (7, 70.0%) colleges. Implementation schedules were present in 75% overall, with private colleges showing higher rates (9, 90.0%) compared to public colleges (6, 60.0%). Pre-specified RFST duration median was 8.50 days for private and 7.00 days for public colleges. UpHC visits were universal in private colleges (10, 100.0%) compared to 77.8% in public colleges. MCH visits showed significant differences (private: 100.0% vs public: 55.6%,  $p=0.033$ ). Most departments included community surveys (95% overall). Report documentation was universal in private colleges but 88.9% in public colleges. Publication of survey findings differed significantly between types (private: 90.0% vs public: 30.0%,  $p=0.020$ ). Separate RFST rooms existed in approximately 75% of departments. Residential facilities at RFST sites were extremely limited (18.2% overall). Vehicle availability was around 35% with median capacity of 32-36 seats. Audio-visual equipment and sports materials were limited across both types. RFST funding was available in 65% of departments, with median amounts of 250,000 BDT for private and 700,000 BDT for public colleges (Table 15).

**Table 15. RFST related structural and logistic capacity of the community medicine and public health department**

Characteristic	Medical College Type	
	Private (N = 10) n (%)	Public (N = 10) n (%)
<b>Academic calendar for RFST</b>		
Present	8 (80.0)	7 (70.0)
Absent	2 (20.0)	3 (30.0)
<b>RFST implementation schedule</b>		
Present	9 (90.0)	6 (60.0)
Absent	1 (10.0)	4 (40.0)
<b>Pre-specified duration of RFST (days)</b>	8.50 (3.50, 10.00)	7.00 (1.50, 10.00)
<b>Contents of RFST schedule</b>		
UpHC visit	10 (100.0)	7 (77.8)
MCH visit	10 (100.0)	5 (55.6)
UHFWC visit	8 (80.0)	5 (55.6)
Community Clinic visit	9 (90.0)	7 (77.8)
Satellite clinical visit	3 (30.0)	1 (11.1)
NGO visit	5 (50.0)	3 (33.3)
Conducting a community survey	10 (100.0)	8 (88.9)
<b>Presence of -</b>		
Reports on the community survey	10 (100.0)	8 (88.9)
Reports on the RFST activity	10 (100.0)	8 (88.9)
Documents on RFST report dissemination	9 (90.0)	6 (60.0)
Publication of the survey findings	9 (90.0)	3 (30.0)
Separate room for RFST	7 (70.0)	7 (77.8)
Designated UpHC for RFST	5 (50.0)	6 (66.7)
Residential facilities at the RFST site	1 (20.0)	1 (16.7)
Separate accommodation for male and female students	1 (100.0)	1 (100.0)
Separate accommodation for male and female teachers	1 (100.0)	1 (100.0)
An alternate power supply that can be carried	1 (100.0)	0 (0.0)
Designated vehicle	4 (40.0)	3 (33.3)
Seats per vehicle	32.50 (25.50, 36.25)	36.00 (22.50, 44.00)
<b>Audio-visual instruments</b>		
Laptop	2 (20.0)	2 (20.0)
Laptop functioning	2 (100.0)	0 (0.0)

Characteristic	Medical College Type	
	Private	Public
	(N = 10) n (%)	(N = 10) n (%)
Overhead projector	2 (20.0)	1 (10.0)
Projector functioning	2 (20.0)	1 (10.0)
White screen	2 (20.0)	1 (11.1)
Flip chart with stand	4 (40.0)	2 (22.2)
Festoon	4 (40.0)	3 (33.3)
Poster	5 (50.0)	3 (33.3)
Banner	7 (70.0)	5 (55.6)
Flyer	4 (40.0)	1 (11.1)
Logistics (Marker, festoon, poster, banner, flyer, sufficient white paper, pen)	8 (80.0)	5 (55.6)
<b>Sports material</b>		
Football	3 (30.0)	0 (0.0)
Cricket	3 (30.0)	1 (10.0)
Chess	2 (20.0)	1 (10.0)
Carrom	1 (10.0)	0 (0.0)
Badminton	3 (30.0)	1 (11.1)
<b>Cultural materials</b>		
Guitar	2 (20.0)	0 (0.0)
Harmonium	1 (10.0)	0 (0.0)
Sound box	2 (20.0)	1 (11.1)
Hand Drums	1 (10.0)	0 (0.0)
Khonjoni	1 (10.0)	0 (0.0)
<b>Funds for RFST</b>	6 (60.0)	7 (77.8)
<b>Funds amount for RFST (BDT)</b>	250,000 (102,500, 1,342,500)	700,000 (695,000, 767,500)

### Upazila Health Complex RFST Facility Assessment

Two UpHCs were assessed for RFST readiness: Mirsharai UpHC and Sreepur UpHC (1 each, 50.0%). Both facilities were located within UpHC campuses and had been established for a median of 22 years (IQR: 20, 24). Each UpHC was affiliated with one medical college. However, both UpHCs completely lacked accommodation facilities for RFST participants, representing a significant infrastructure gap for residential field training implementation (Table 16).

**Table 16. Upazila Health Complex RFST checklist**

Characteristic	Overall (N = 2) n (%)
Name of the UpHC	
Mirsharai UpHC	1 (50.0)
Sreepur UpHC	1 (50.0)
Location of the RFST facility	
Within the UpHC campus	2 (100.0)
Number of medical colleges currently affiliated (one)	2 (100.0)
Duration since establishment (years)	22 (20, 24)
Accommodation facility: None	2 (100.0)

UpHC: Upazila Health Complex; RFST: Residential Field Site Training

## Qualitative findings

### Findings from workshops

#### Experience regarding RFST

##### Infrastructure & Accommodation

- Fixed infrastructure for residence was not available at field sites
- Private medical teachers lacked proper accommodation facilities
- Disproportionate gender accommodation existed with limited facilities for females
- Poor dormitory conditions were encountered where facilities existed
- Basic utilities were lacking with limited water supply and electricity at night
- Insufficient toilet facilities and general disrepair were commonly found
- Many UpHCs lacked dormitories entirely

##### Financial & Administrative

- Private medical colleges faced hassles in fundraising for programs
- Clear guidelines for fund management were absent
- Departments experienced problems with audit procedures
- Personal funds were frequently used to arrange necessities
- Departments outside CMPH provided minimal assistance to programs
- Management and local civil surgeons offered inadequate support
- Official orders (GO) were often required but proved difficult to obtain

##### Transportation & Logistics

- Multiple vehicles were needed, increasing transportation costs

##### Safety & Security

- Security concerns existed particularly for female teachers and students

##### Human Resources & Staffing

- Resource persons with adequate expertise were lacking
- Local support systems proved insufficient for program needs
- Female teachers often experienced family problems due to extended stays
- Female teachers often were not interested in overnight stays due to family commitments

##### Program Duration & Curriculum

- The duration of the night stay proved too long for practical implementation
- Insufficient time existed for visiting rural health sectors, gathering knowledge about job descriptions, and administration
- Frequent curriculum changes created instability in programs
- Compressed timeframes were faced when completing the curriculum, including RFST, within 6 months
- The number of medical students was increasing without an increase in the corresponding facility
- Programs during the summer increased health risks

##### Benefits of RFST

##### Healthcare System Understanding

- Students learn about rural healthcare delivery systems

- Understanding of existing health facilities and their limitations
- Understanding primary healthcare services

### **Community Exposure & Learning**

- Exposure to community health practice in real settings
- Direct observation of health-seeking behaviors in villages
- Exposure to village lifestyle and environmental conditions
- Learning about social determinants of health
- Particularly valuable for students from affluent backgrounds
- Learning epidemiological basics at the village level
- Community-based education through direct experience

### **Professional Development**

- Motivation for rural practice among students
- Development of sympathy, empathy, and enhanced communication skills
- Development of leadership and communication skills
- First research experience for many students
- Crisis management and adaptation to adverse situations

### **Academic Integration**

- Practical application of theoretical knowledge
- Increased awareness about public health issues
- Development of public health literacy among undergraduate medical students

### **Institutional Coordination**

- Coordinated use of sixteen UpHCs in Chittagong by different medical colleges
- Integration of both public and private medical colleges

### **Challenges of RFST**

#### **Infrastructure & Accommodation**

- Accommodation issues, including non-availability and insufficiency
- Severe accommodation problems in medical colleges with large student numbers
- Inappropriate placement of RFST sites

#### **Financial & Administrative**

- Budget allocation is insufficient and not specified
- Honorarium and remuneration of teachers is inadequate
- UpHC personnel do not receive any honorarium for participation

#### **Transportation & Logistics**

- Transport issues affecting the program
- Lack of logistic support for research including tools, software, and statisticians

#### **Safety & Security**

- Security issues particularly for foreign students and females

#### **Human Resources & Staffing**

- Lack of training for lecturers regarding RFST implementation
- Lack of public health personnel in community medicine departments
- Lecturers from other disciplines cannot contribute positively to RFST

- Lack of interest among lecturers from other disciplines in community medicine RFST programs
- UpHC doctors and staff are not oriented to the program

### **Program Duration & Curriculum**

- Ten days' duration as per the curriculum is often not manageable
- Data collection from the same places may lead to maturation bias
- Lack of motivation among private medical college owners for overnight student stays

### **Recommendations to make RFST effective**

#### **Infrastructure & Accommodation**

- Establish fixed RFST sites with proper accommodation and transport support
- Establish secure, well-equipped dormitories with proper logistic support
- Ensure basic utilities are consistently available
- Ensure each upazila health complex has a well-furnished dormitory with staff facilities

#### **Financial & Administrative**

- Collect the budget for study tours during admission for private medical colleges
- Change DDO to the community medicine department for budgetary issues in public colleges
- Provide fixed remuneration based on rank for everyone involved in RFST
- Allocate sufficient budget for RFST programs
- Provide appropriate and realistic teacher remuneration
- Ensure remuneration for all staff involved in programs
- Allocate an adequate transportation budget

#### **Transportation & Logistics**

- Guarantee transport facilities according to the medical college's capacity

#### **Safety & Security**

- Address security concerns through proper protocols and facilities

#### **Human Resources & Staffing**

- Ensure adequate faculty members for program supervision
- Engage key stakeholders, including Vice Chancellors and Civil Surgeons
- Arrange orientation for UpHC doctors and staff who deal with students
- Ensure posting of postgraduate teachers in community medicine departments

#### **Program Duration & Curriculum**

- Correct the course curriculum and duration appropriately
- Ensure clinical subjects allocate time for RFST
- Design RFST duration logically considering curriculum requirements
- Consider family assignment models for extended observation periods

#### **Coordination & Management**

- Improve coordination between medical colleges and UpHCs
- Implement systematic assignment of students similar to intern placements
- Create a central monitoring committee with visits during RFST periods
- Develop RFST survey database at the central level
- Develop RFST operation manual

## Motivation & Engagement

- Effective motivation of students and faculty members toward public health-oriented attitudes
- Conduct sensitization workshops with private medical college owners
- Implement community programs like mass deworming or iron supplementation during surveys

## Quality Enhancement & Innovation

- Institute the best RFST survey publication awards
- Learn from international RFST programs
- Provide international exposure for teachers to improve program delivery

## Key Informant Interviews (KII)

Analysis of the transcripts from KII revealed four themes and twenty subthemes as shown in figure. A short summary of the key points under each theme is presented below.

### Connecting medical education to community health realities

- Position of RFST in medical education
- Aims and objectives
- Activities
- Coordinated efforts
- Experiences

### Comprehensive capacity building

- Improving teamwork and interpersonal skills
- Developing practical health knowledge and skills
- First step to research
- Community engagement
- Developing managerial skills

### Challenges to effective implementation

- Budgetary and financial constraints
- Accommodation and infrastructure limitations
- Transportation insufficiency
- Security concerns
- Lack of motivation

### Effective strategies

- Infrastructure and facility development
- Timely resource allocation
- Collaboration among stakeholders
- Manpower and logistic support
- Orientation and motivation

*Figure 8. Themes and subthemes generated from KIIs*

### Theme 1: Connecting Medical Education to Community Health Realities

**Position of RFST:** RFST is an integral 10-day field training program for 4th-year MBBS students, supervised by Community Medicine and Public Health departments of respective medical colleges. It exposes students to rural health settings and primary care facilities unavailable in urban hospitals.

**Aims and Objectives:** RFST orients students to rural communities (70% of Bangladesh's population), familiarizes them with grassroots healthcare delivery, and prepares future physicians for community-level service.

**Activities:** Students conduct community surveys, visit health facilities (UpHCs, union sub-centers, satellite clinics), observe vaccination programs, interact with healthcare workers, and prepare reports for examination.

**Experiences:** Most participants lacked true residential experience (only 2-4 days stay). Many institutions conduct day visits due to accommodation limitations, with some sites abandoned during COVID-19.

## **Theme 2: Comprehensive Capacity Building**

**Teamwork and Interpersonal Skills:** Group-based activities foster collaboration, peer learning, and student-teacher relationships through shared challenges and problem-solving.

**Practical Health Knowledge:** Students gain exposure to primary healthcare systems, develop communication skills, understand rural health problems, and build confidence for future practice.

**Research Introduction:** RFST serves as students' first research experience through community surveys, data collection, and analytical thinking.

**Community Engagement:** Direct interaction develops cultural competency, empathy, and communication skills with diverse populations.

**Managerial Skills:** Students learn organizational capabilities through managing logistics, accommodation, and field activities.

## **Theme 3: Implementation Challenges**

**Financial Constraints:** Delayed funding, inadequate budgets, and complex funding transitions from development to revenue sectors. Students often pay out-of-pocket.

**Infrastructure Limitations:** Lack of proper accommodation, deteriorating facilities, insufficient capacity for growing student numbers, and poor basic amenities.

**Transportation Issues:** No institutional vehicles, reliance on expensive rentals, safety concerns, and difficult rural road access.

**Security Concerns:** Inadequate boundary walls, specific challenges for female and international students, and teacher reluctance due to safety issues.

**Motivation Deficits:** Poor student engagement, community resistance, healthcare worker unavailability, and changing student expectations.

## **Theme 4: Effective Strategies**

**Infrastructure Development:** Establish dedicated RFST centers with secure accommodation, proper facilities, and model UpHCs specifically for training.

**Resource Allocation:** Ensure timely, adequate funding with clear guidelines, early budget disbursement, and financial incentives for participants.

**Stakeholder Collaboration:** Integrate institutional levels, involve community leaders, enhance government cooperation, and improve inter-departmental coordination.

**Support Systems:** Increase teaching staff, provide essential equipment, arrange dedicated transportation, and improve logistical support.

**Orientation Programs:** Implement comprehensive student and community orientation, build motivation strategies, and integrate competency-based approaches.

## **Focused Group Discussion (FGD): Student Perspectives on RFST**

Four focus group discussions were conducted with 32 medical students (15 male, 17 female) from both public and private medical colleges who had completed RFST programs. The discussions revealed nuanced student perspectives on their understanding, experiences, benefits gained, challenges faced, and recommendations for program improvement. Four themes and 20 subthemes were generated from the

transcripts of the FGDs (Figure 10). A short summary of the key points under each theme is presented below.

## Students' understandings and experiences of RFST

- Understanding of RFST concept and purpose
- Program implementation and activities
- Duration and residential aspects
- Supervision and guidance issues

## Educational benefits and learning outcomes

- Knowledge and skill development
- Research methodology exposure
- Community engagement and communication skills
- Teamwork and leadership development

## Implementation barriers and challenges

- Resource and facility limitations
- Financial and funding constraints
- Infrastructure and accommodation deficiencies
- Transportation difficulties
- Academic supervision and guidance gaps
- Motivational and engagement issues

## Student recommended improvement strategies

- Financial transparency and resource allocation
- Transportation improvement strategies
- Systematic program organization and structure
- Student motivation and engagement enhancement
- Duration and logistical optimization

*Figure 9. Themes and subthemes generated from FGDs*

### **Theme 1: Student Understanding and Experiences of RFST**

**Understanding of RFST:** Students showed varied comprehension levels. Some understood RFST as comprehensive community-oriented medical education for "social accountability," while others viewed it merely as mandatory data collection for exams. Many lacked proper orientation about program objectives and research components.

**Program Implementation:** Students experienced diverse activities including visits to UpHCs, specialized hospitals (TB, infectious diseases), and community surveys. However, implementation was often rushed with inadequate preparation and resources (no laptops, projectors, or refreshments).

**Duration and Residential Aspects:** Most students experienced brief day visits rather than the intended 10-day residential training. Security concerns, accommodation shortages, and large student numbers (145+ students) prevented overnight stays. Daily travel for consecutive days negatively impacted student health.

**Supervision Issues:** Students consistently reported inadequate orientation, with only a single pre-program briefing about questionnaires. Many learned about RFST through self-effort rather than institutional guidance. Program management was frequently rushed and unsatisfactory.

## **Theme 2: Educational Benefits and Learning Outcomes**

**Knowledge and Skill Development:** Students gained communication skills, patient interaction abilities, and leadership development. RFST helped integrate theoretical knowledge with practical application and provided exposure to healthcare delivery systems.

**Research Methodology:** RFST served as students' first research experience, introducing data collection, analysis, and literature review concepts. Early exposure encouraged future research interest and analytical thinking.

**Community Engagement:** Students developed communication skills for diverse populations, learned to overcome language barriers, and gained understanding of community-level healthcare needs and gaps.

**Teamwork and Leadership:** Group-based activities enhanced collaboration, time management, and team coordination skills essential for healthcare delivery.

## **Theme 3: Implementation Barriers and Challenges**

**Resource Limitations:** Universal shortages of technology (laptops, computers), educational materials beyond basic questionnaires, and support facilities like refreshments or recreational activities.

**Financial Constraints:** Inadequate government funding, student financial burden (even for photocopying), budget transparency issues, and delayed fund availability affecting accommodation and food provision.

**Infrastructure Deficiencies:** Complete absence of residential facilities forcing daily travel, health impacts from continuous commuting, and disconnect between curriculum expectations and reality.

**Transportation Difficulties:** Daily travel challenges, inadequate vehicle capacity (students standing during journeys), poor quality buses without air conditioning, and complete absence of transportation support in some institutions.

**Supervision Gaps:** Lack of proper briefing, absence of feedback mechanisms, inadequate teacher support, and poor data collection guidance.

**Motivational Issues:** Exam-centric student mentality, community cooperation challenges, student disengagement from learning objectives, and data collection integrity problems.

## **Theme 4: Student-Recommended Improvements**

**Financial Transparency:** Increase budget allocation, ensure institutional funding support, and provide transparent budget sharing with students regarding expenditures.

**Transportation Improvements:** Provide adequate, air-conditioned vehicles with sufficient capacity and proper safety arrangements.

**Program Organization:** Establish dedicated RFST departments, optimize group sizes (75 students instead of 145+), implement pre-program research methodology training, and mandate post-program analysis participation.

**Motivation Enhancement:** Improve teacher guidance, provide academic presentation opportunities, focus on long-term learning rather than exam preparation, and conduct comprehensive pre-program orientation about objectives.

**Duration and Logistics:** Extend program duration beyond brief visits, enhance community access to inner villages, and provide digital tools like Google Forms instead of printed questionnaires.

## Conclusion

This comprehensive mixed-methods evaluation of the Residential Field Site Training (RFST) program across Bangladesh reveals a paradoxical situation where a well-conceived educational program with demonstrated benefits faces critical implementation barriers that undermine its core objectives. The most striking finding is the near-complete absence of the residential component that defines RFST, with only less than one-fifth of surveyed students actually experiencing overnight community stays. This fundamental gap between curriculum specifications and implementation reality represents more than a logistical challenge—it constitutes a systemic failure that transforms RFST from an immersive community-based learning experience into a series of brief facility visits. The study reveals that infrastructure deficits, particularly the absence of residential facilities at Upazila Health Complexes, represent the primary barrier to effective RFST implementation. However, the challenges extend beyond physical infrastructure to encompass financial constraints, safety concerns, inadequate supervision, and insufficient inter-institutional coordination. These barriers disproportionately affect public medical colleges, creating significant disparities in implementation quality and student experiences. Despite these challenges, the study confirms substantial educational benefits for students who do participate in RFST activities, including enhanced communication skills, research methodology exposure, community engagement capabilities, and professional identity development. The convergence of quantitative and qualitative findings demonstrates that RFST's educational model remains sound and valuable, supporting continued investment in community-based medical education while emphasizing the urgent need for systematic implementation improvements. The findings suggest that addressing RFST challenges requires coordinated intervention at multiple levels, from individual institutional capacity building to national policy reform and inter-sectoral coordination. The recommendations emerging from both student and faculty perspectives provide a comprehensive roadmap for transforming RFST from its current constrained implementation to an effective, impactful community-based medical education program that fulfills its intended role in producing socially accountable healthcare professionals.

## References:

1. Brown J. How clinical communication has become a core part of medical education in the UK. *Med Educ* [Internet]. 2008 Mar;42(3):271–8. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/18275414>
2. Islam N. Family Physician in Bangladesh Content. In: *Proceedings of National Workshop on Family Medicine and Undergraduate Medical Education in Bangladesh*. 2000. p. 22–6.
3. Ahmed SM, Hossain MA, Rajachowdhury AM, Bhuiya AU. The health workforce crisis in Bangladesh: shortage, inappropriate skill-mix and inequitable distribution. *Hum Resour Health* [Internet]. 2011 Jan 22;9:3. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/21255446>
4. World Health Organization. Community-based education of health personnel. In: *World health organization Technical report series 746*. Geneva: WHO; 1987. p. 1–91.
5. Mennin SP, Kaufman A, Urbina C, McGrew M. Community-based medical education: toward the health of the public. *Med Educ* [Internet]. 2000 Jul;34(7):503–4. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/10886627>
6. Smith T, Cross M, Waller S, Chambers H, Farthing A, Barraclough F, et al. Ruralization of students' horizons: insights into Australian health professional students' rural and remote placements. *J Multidiscip Healthc* [Internet]. 2018;11:85–97. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/29430183>
7. Johnson AR, Rathnakumari S, Fathima FN, Joseph B. Residential Rural Training Program in Undergraduate Medical Education: A Qualitative Evaluation of the Impact On Doctors and Medical Students. *South-East Asian J Med Educ*. 2020;14(2):93.
8. Bangladesh Medical and Dental Council. *Curriculum for Under-graduate Medical Education in Bangladesh*. 2002.
9. Bangladesh Medical and Dental Council. *Curriculum for Under-graduate Medical Education in Bangladesh*. 2012.
10. Bangladesh Medical and Dental Council. *Curriculum for Under-graduate Medical Education in Bangladesh*. 2021.
11. Choulagai BP. Community-based education in the Institute of Medicine, Tribhuvan University, Nepal: a qualitative assessment. *Adv Med Educ Pract* [Internet]. 2019;10:469–78. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/31303803>
12. Salam A, Yousuf R. Residential Field Site Training : Bangladesh Approach to Community Based. *Middle East J Nurs*. 2009;3(5):22–7.
13. Barua R, Khan MAW, Rahman MM, Tasnim NE, Talukder MAS, Alam KA. Teacher's view on current practices of 'community based medical education' related activities in undergraduate medical education of Bangladesh, 2021. *Bangladesh J Med Educ*. 2022;13(2):26–34.
14. 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 (London, England)* [Internet]. 2010 Dec 4;376(9756):1923–58. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/21112623>

15. Asaduzzaman A, Nargis T, Banu S, Kamal MKI. Views of the students of the selected non-government medical colleges of Bangladesh regarding community based medical education (CBME) practice in their institutes. *Bangladesh J Med Educ*. 2018;9(1):21–5.
16. Adefuye A, Benedict M, Bezuidenhout J, Busari JO. Students’ Perspectives of a Community-Based Medical Education Programme in a Rural District Hospital. *J Med Educ Curric Dev* [Internet]. 2019;6:2382120519886849. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/31799407>
17. Nurunnabi ASM, Hasan MJ, Quddush AR, Jahan S, Kaiser AM, Afrose T, et al. Community Based Medical Education: What, Why and How? *Community Based Med J*. 2024;13(1):119–29.
18. Mudarikwa RS, McDonnell JA, Whyte S, Villanueva E, Hill RA, Hart W, et al. Community-based practice program in a rural medical school: benefits and challenges. *Med Teach* [Internet]. 2010;32(12):990–6. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/20874029>
19. Haque M, Haque M, Islam M. Residential Field Site Training (RFST) as a tool for experiential learning: A study from a public medical college in Bangladesh. *Bangladesh J Med Educ*. 2017;8(2):25–9.
20. Ahmed SMM, Hasan MN, Kabir R, Arafat SMY, Rahman S, Haque M, et al. Perceptions of medical students regarding community-based teaching experiences: an observation from Bangladesh. *Rural Remote Health* [Internet]. 2019 Aug;19(3):4614. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/31400766>
21. Amalba A, van Mook WNKA, Mogre V, Scherpbier AJJA. The effect of Community Based Education and Service (COBES) on medical graduates’ choice of specialty and willingness to work in rural communities in Ghana. *BMC Med Educ* [Internet]. 2016 Mar 1;16:79. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26931412>
22. Okayama M, Kajii E. Does community-based education increase students’ motivation to practice community health care?--a cross sectional study. *BMC Med Educ* [Internet]. 2011 May 11;11:19. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/21569332>
23. Pagaiya N, Kongkam L, Sriratana S. Rural retention of doctors graduating from the rural medical education project to increase rural doctors in Thailand: a cohort study. *Hum Resour Health* [Internet]. 2015 Dec 1;13(1):10. Available from: <https://human-resources-health.biomedcentral.com/articles/10.1186/s12960-015-0001-y>
24. Holst J. Increasing Rural Recruitment and Retention through Rural Exposure during Undergraduate Training: An Integrative Review. *Int J Environ Res Public Health* [Internet]. 2020 Sep 3;17(17). Available from: <http://www.ncbi.nlm.nih.gov/pubmed/32899356>

# RFST Program Implementation Guidelines

Based on the comprehensive analysis of both quantitative and qualitative findings, the following specific recommendations are proposed to transform RFST into an effective community-based medical education program:

## Recommendations

### Short-term priorities

#### 1. Infrastructure Development Initiative

- **Establish dedicated RFST centers** at 5-10 strategically located Upazila Health Complexes with comprehensive residential facilities including dormitories, dining halls, recreational areas, and academic spaces. (See annexure I for a standard RFST set-up)
- **Implement pilot residential programs** at newly developed centers with proper accommodation for 30-50 students and 3-5 supervising faculty members
- **Ensure gender-appropriate facilities** with separate accommodations, safety protocols, and culturally sensitive arrangements for male and female participants
- **Install essential utilities** including reliable electricity, clean water supply, functional sanitation systems, and internet connectivity for academic activities

#### 2. Financial Management Reform

- **Establish dedicated RFST budget lines** in both public and private medical college funding structures with early disbursement at the beginning of each academic year
- **Implement transparent budget allocation** with clear guidelines for expenditure categories, including accommodation, transportation, meals, logistics, and personnel compensation
- **Provide honoraria and allowances** for both students and supervising faculty to reduce personal financial burden and encourage participation
- **Create emergency funding mechanisms** for addressing unexpected costs and ensuring program continuity

#### 3. Safety and Security Enhancement

- **Develop comprehensive safety protocols**, including emergency response procedures, communication systems, and coordination with local law enforcement agencies
- **Implement security infrastructure** at RFST sites, including boundary walls, lighting systems, and security personnel for 24-hour monitoring
- **Establish gender-specific safety measures** with female faculty supervision for female students and appropriate accommodation arrangements
- **Create risk assessment procedures** for site selection and ongoing safety monitoring throughout program implementation

### Mid-term priorities

#### 4. Systematic Program Organization

- **Establish dedicated RFST committees** at each medical college with representation from community medicine and public health faculty, administration, and student representatives
- **Implement standardized curriculum guidelines** specifying learning objectives, activity schedules, assessment criteria, and quality assurance measures

- **Develop faculty training programs** for RFST supervision including community engagement skills, research methodology guidance, and safety management
- **Create inter-institutional coordination mechanisms** between medical colleges and Upazila Health Complexes with formal agreements and shared responsibilities

#### 5. Duration and Scheduling Optimization

- **Implement flexible duration models** ranging from 7-10 days based on institutional capacity and resource availability, with gradual expansion from day-to-day activities to full residential programs
- **Establish seasonal scheduling guidelines** prioritizing winter months and avoiding extreme weather conditions that compromise student health and learning
- **Coordinate with academic calendars** ensuring adequate time allocation and inter-departmental cooperation for effective program implementation
- **Develop batch-wise implementation** with smaller groups (30-50 students) to ensure adequate supervision and meaningful learning experiences

#### 6. Community Engagement Strategies

- **Establish community partnerships** through formal agreements with local government & health authorities and community leaders
- **Implement community orientation programs** to enhance local understanding and support for medical student training activities
- **Develop community benefit initiatives**, including health education campaigns, screening programs, and service delivery improvements that demonstrate mutual value
- **Create feedback mechanisms** for community input on program design and implementation improvements

#### Long-term priorities

#### 7. Policy and Governance Reform

- **Update national medical education policies** to align resource allocation with curriculum requirements for effective RFST implementation
- **Establish quality assurance frameworks** with regular monitoring, evaluation, and accreditation procedures for RFST programs
- **Create inter-departmental coordination** between the health service division and the health education and family welfare division of the Ministry of Health and Family Welfare
- **Create inter-ministerial coordination** among the Ministries of Health and Family Welfare, Education, Public Administration and Finance for a comprehensive and successful implementation of RFST program
- **Develop legal frameworks** for medical college-health facility partnerships and shared responsibilities in community-based education

#### 8. Human Resource Development

- **Increase faculty allocation** specifically for community medicine and public health departments with dedicated RFST supervision responsibilities
- **Implement specialized training programs** for community medicine faculty in field-based education, research supervision, and community engagement
- **Establish career development pathways** for community medicine and public health faculties with appropriate recognition and advancement opportunities

#### 9. Technology and Innovation Integration

- **Develop digital data collection systems**, replacing paper-based questionnaires with mobile applications and online platforms
- **Implement electronic learning management systems** for pre-program preparation, ongoing communication, and post-program analysis

## Quality Assurance

### 10. Evaluation and Improvement Systems

- **Implement continuous monitoring systems** with regular feedback collection from students, faculty, and community partners
- **Establish outcome measurement frameworks** tracking learning objectives achievement, career choice influences, and long-term practice patterns
- **Create research and publication initiatives** documenting RFST experiences, innovations, and impact on medical education
- **Develop best practice sharing mechanisms** across institutions for continuous improvement and knowledge transfer

## Resource Mobilization Strategies

### 11. Funding Diversification

- **Explore international development partnerships** with organizations supporting medical education and rural health development
- **Establish public-private partnerships** leveraging private sector resources for infrastructure development and program support
- **Create alumni engagement programs** mobilizing medical graduate networks for financial and technical support
- **Develop research funding opportunities** linking RFST activities to funded research projects and publication outcomes

## **A. Standard Setup for Conducting the Residential Field Site Training (RFST) Program in Bangladesh**

### **Facilities at the Department of Community Medicine and Public Health**

To conduct RFST program effectively, Community Medicine and Public Health departments should be prepared following a standardized checklist.

**Department of Community Medicine and Public Health** of a medical college should have following facilities

#### **a. Health Workforce**

- Adequate number of teacher including male and females
- Adequate support staff including male and females
- A health educator
- Assigned teachers for the RFST program
- Assigned support staff the RFST program
- A RFST committee

#### **b. Students**

- Current session and total number of students
- Number of students in a batch / group
- Optimum student-teacher ratio (10-15:1)

#### **c. RFST Related Activities**

##### **1. Program Documentation**

- Academic calendar with RFST program
- RFST program implementation schedule
- Record of scheduled RFST program with duration in days

##### **2. Activities conducted in a RFST program**

- Visit to Upazila Health Complex
- Visit to MCH and FP facilities
- Visit to UHFWC (Union Health and Family Welfare Center)
- Visit to CC (Community Clinic)
- Visit to FEC and satellite clinic
- Visit to local NGOs
- Community health survey (*marked as important*)

##### **3. Documentation and Dissemination**

- Community survey reports
- RFST reports
- Dissemination documents
- Journal publications
- Separate RFST room/space

## **d. RFST Preparedness**

### **1. Field Site Information**

- Designated UpHC availability
- UpHC residential facilities
- If residential facilities present:
  - ✓ Accommodation capacity (number)
  - ✓ Separate male/female student facilities
  - ✓ Separate male/female teacher facilities

### **2. Transportation and Infrastructure**

- Alternative power supply at RFST site
- Designated RFST vehicle
- Vehicle seating capacity (if available)

### **3. Equipment: Audio-Visual Equipment**

- Laptop
- Overhead projector
- White screen

### **4. Health Education Materials**

- Flip chart with stand
- Festoon
- Poster
- Banner
- Flyer
- Logistics (white paper, pen, marker)
- Others (specify in text)

### **5. Recreational Materials**

- **Sports Materials:** Football, Cricket material, Chess, Carrom, Badminton, Others
- **Cultural Materials:** Guitar, Harmonium, Sound box, Others

### **6. Financial Support:**

- Availability of specific funds for the RFST program
- Amount of fund and its sources

### **7. Mandatory Document Review**

1. Academic Calendar
2. Staff List
3. RFST Guidelines
4. Budget Documents
5. Previous Reports
6. Journal Publications

## 8. Physical Infrastructure

1. RFST Room/Office
2. Equipment Storage
3. Vehicle Inspection
4. Material Inventory

## 9. Quality Control Checklist

- Verify availability of all relevant items including equipment, logistics, survey materials, sports and cultural materials
- Finalize the schedule for the RFST program
- Inform all concerned students, teachers and staff
- Communicate with the RFST site i.e. UpHC (UHFPO)
- Ensure transport facility
- Ensure security
- Ensure availability of fund for the RFST program

**10. Organizing:** Take permission from administrative head of the medical college and the department in a written format.

## B. Facilities at the Designated Upazila Health Complexes (UpHCs)

This part outlines the recommended standard infrastructure and operational framework for establishing effective RFST facilities at Upazila Health Complexes (UpHCs) across Bangladesh. These standards aim to ensure consistent quality, safety, and educational effectiveness of community-based medical education for medical and dental students.

### 1. Location and Infrastructure Requirements

#### 1.1 Site Selection

- **Location:** Within UpHC campus or within 1 km radius for security and accessibility
- **Land Area:** Minimum 0.5 acres for comprehensive facility development
- **Accessibility:** Direct road access with year-round transportation availability

#### 1.2 Building Structure

- **Total Floor Area:** Minimum 3,000 sq. ft. for accommodating 40-50 students
- **Construction Standard:** RCC structure with earthquake-resistant design
- **Floors:** Ground floor plus one upper floor recommended

### 2. Accommodation Facilities

#### 2.1 Student Accommodation

- **Capacity:** 50 students (expandable design)
- **Male Accommodation:** 25 beds in 5 rooms (5 beds per room)
- **Female Accommodation:** 25 beds in 5 rooms (5 beds per room)
- **Room Size:** Minimum 200 sq. ft. per room
- **Bed Specifications:** Single beds with storage lockers

## 2.2 Teacher Accommodation

- **Capacity:** 6 teachers (3 males, 3 females)
- **Male Teachers:** 2 separate rooms with attached bathrooms
- **Female Teachers:** 2 separate rooms with attached bathrooms
- **Room Size:** Minimum 150 sq. ft. per room with a study table

## 2.3 Essential Amenities

- **Bedding:** Complete sets including mosquito nets, pillows, bed sheets, blankets. Ensure adequate spare sets.
- **Storage:** Individual lockers for each student and teacher
- **Ventilation:** Ceiling fans and adequate windows for natural airflow
- **Lighting:** LED lighting with emergency backup

## 3. Utilities and Infrastructure

### 3.1 Power Supply

- **Primary:** Grid electricity connection
- **Backup:** 15 KVA generator with automatic changeover
- **Solar:** 5 KW solar panel system for daytime operations
- **UPS:** Battery backup for essential lighting and fans

### 3.2 Water and Sanitation

- **Water Supply:** Deep tube well with overhead tank (5,000L capacity)
- **Water Treatment:** Filtration and purification system
- **Sewerage:** Septic tank system with proper drainage
- **Waste Management:** Segregated waste collection and disposal system

### 3.3 Toilet Facilities

- **Student Toilets:** 6 units (3 males, 3 females) with modern fixtures
- **Teacher Toilets:** 4 units (2 males, 2 females) with attached bathrooms
- **Accessibility:** Ramp access and one disabled-friendly toilet
- **Supplies:** Continuous supply of soap, tissue, and sanitary materials

## 4. Educational and Common Facilities

### 4.1 Common Room/Classroom

- **Size:** 600 sq. ft. multipurpose hall
- **Capacity:** 60 persons with flexible seating
- **Furniture:** Modular tables and chairs, podium
- **Storage:** Built-in cabinets for materials

### 4.2 Audio-Visual Equipment

- **Projection System:** Ceiling-mounted projector with screen
- **Display:** 55-inch LED TV or interactive smart board with HDMI connectivity
- **Computing:** 2 laptops for presentations
- **Sound System:** Microphone and speaker setup

- **Connectivity:** High-speed internet (minimum 50 Mbps)

### 4.3 Teaching Materials

- **Writing Surfaces:** Whiteboards with quality markers
- **Flip Charts:** Mobile stands with paper supply
- **Stationery:** Adequate supply of pens, papers, folders
- **Reference Materials:** Medical textbooks and community health resources

## 5. Kitchen and Dining Facilities

### 5.1 Kitchen Setup

- **Size:** 200 sq. ft. with proper ventilation
- **Equipment:** Industrial gas stove, LPG connection, cooking utensils
- **Storage:** Dry and cold storage facilities
- **Safety:** Fire extinguisher and first aid kit
- **Staff:** Dedicated cook and helper

### 5.2 Dining Area

- **Size:** 400 sq. ft. adjacent to kitchen
- **Seating:** Tables and chairs for 50 persons
- **Hygiene:** Hand washing station at the entrance
- **Ventilation:** Exhaust fans and windows

## 6. Recreational and Wellness Facilities

### 6.1 Indoor Recreation

- **Game Room:** 200 sq. ft. with table tennis, carom, chess
- **Library Corner:** Reading space with journals and newspapers
- **TV Lounge:** Separate area for entertainment and news

### 6.2 Outdoor Recreation

- **Sports Ground:** Multi-purpose court for volleyball/badminton
- **Equipment Storage:** Secure storage for sports materials
- **Walking Area:** Paved walking path around the facility

## 7. Safety and Security

### 7.1 Safety Measures

- **Fire Safety:** Smoke detectors, fire extinguishers, emergency exits
- **First Aid:** Fully equipped first aid station
- **Emergency Contacts:** Displayed contact numbers for police, fire, medical
- **Lighting:** Adequate outdoor lighting for night security

### 7.2 Security Arrangements

- **Boundary Wall:** 6-foot boundary wall with main gate
- **Security Guard:** 24/7 security coverage
- **CCTV:** Basic surveillance system at entry points
- **Access Control:** Key card or controlled access system

## 8. Transportation and Connectivity

### 8.1 Vehicle Requirements

- **Mini Bus:** 20-seater for community visits and emergencies
- **Motorcycle:** 2 units for local transportation and surveys
- **Maintenance:** Regular servicing and fuel budget

### 8.2 Communication

- **Landline:** Direct connection to UpHC and medical college
- **Mobile Network:** Ensure good coverage in the area
- **Internet:** Fiber optic connection with WiFi coverage

## 9. Staffing Requirements

### 9.1 Core Staff

- **Site Coordinator:** Full-time administrative officer
- **Caretaker:** Residential maintenance staff
- **Cook:** Experienced in preparing meals for large groups
- **Security Guard:** 2 guards for 24/7 coverage
- **Cleaner:** 2 cleaners for facility maintenance

### 9.2 Academic Support

- **UHFPO Liaison:** Designated officer for program coordination
- **Community Health Workers:** 2-3 workers as field guides
- **Technical Support:** IT support for equipment maintenance

## 10. Operational Guidelines

### 10.1 Capacity Management

- **Standard Batch Size:** maximum 40 students per session
- **Duration:** 10-day residential program as per the curriculum
- **Scheduling:** Coordination with medical colleges for batch planning

### 10.2 Quality Assurance

- **Maintenance Schedule:** Regular upkeep and cleaning protocols
- **Equipment Checks:** Monthly testing of all electronic equipment
- **Safety Inspections:** Quarterly safety and fire safety audits
- **Feedback System:** Student and teacher evaluation mechanisms

## 11. Budget

The budget prepared for an RFST setup should consider the following

### 11.1 Initial Setup Costs

- Land acquisition/allocation and construction
- Furniture and equipment procurement
- Utilities installation and infrastructure development
- Vehicle purchase and setup costs

## 11.2 Annual Operational Costs

- Staff salaries and benefits
- Utilities and maintenance expenses
- Food, supplies, and program materials
- Transportation and communication costs

## 11.3 Funding Responsibility

- Capital Investment: Ministry of Health and Family Welfare through relevant departments
- Operational Costs: Shared between UpHC administration and medical colleges
- Program Implementation: Medical colleges in coordination with the Directorate General of Medical Education or the relevant directorate.

## 11.4 Budget Planning Considerations

- Multi-year budget planning with annual reviews
- Coordination between central and local government funding
- Potential for development partner and private sector support
- Cost optimization through standardized designs and bulk procurement

## 12. Implementation Strategy

### 12.1 Phase-wise Development

- **Phase 1:** Basic accommodation and classroom facilities
- **Phase 2:** Complete infrastructure with all amenities
- **Phase 3:** Enhancement with advanced technology and recreation

### 12.2 Quality Standards

- **Accreditation:** Develop national standards for RFST facilities
- **Regular Monitoring:** Quarterly inspections by DGME officials
- **Continuous Improvement:** Annual review and upgrade of facilities

## 13. Sustainability Measures

### 13.1 Environmental Considerations

- **Green Building:** Solar power, rainwater harvesting, energy-efficient design
- **Waste Management:** Composting, recycling, and proper disposal systems
- **Water Conservation:** Efficient fixtures and greywater recycling

### 13.2 Community Integration

- **Local Employment:** Prioritize hiring from local community
- **Community Services:** Provide health services during off-seasons
- **Partnership:** Collaborate with local organizations and leaders

## 14. Success Metrics

### 14.1 Infrastructure KPIs

- **Facility Utilization Rate:** Target 85% annual occupancy
- **Maintenance Score:** Regular facility condition assessments
- **Safety Record:** Zero major incidents annually

### 14.2 Educational Outcomes

- **Student Satisfaction:** Minimum 80% positive feedback
- **Learning Objectives:** Achievement of curriculum goals
- **Rural Career Interest:** Increased interest in rural practice post-RFST

## C. Format for Writing a Report on Visits to Community Health Facilities during the RFST Program

### Cover Page

**Title:** Report on Visit to Community Health Facilities

**Submitted by:**

Name of the Student  
Roll No. and Reg. No.  
Name of the Medical College  
Session

**Submitted to:**

Name of the Head of the Department  
Name of the Department  
Name of the Medical College

**Mirror Page: Index with List of Contents using**

Serial Number  
Topic / Name of the item  
Page number

**Introduction:**

Date of Visit  
Name of the health facility visited  
Address of the health facility

**Preface of the Health Facility:**

Type of the health facility: Private, Govt., Autonomous etc.  
History of establishment: When, Where, Why and How?  
Vision, Mission, Goals and Objectives of the health facility (As available).

**Ongoing activities of the Health Facility (as applicable):**

Preventive, Curative, Promotive & Rehabilitative activities with specific examples  
Department wise activities: Emergency, IPD, OPD, Laboratory etc.  
Discipline wise activities: Surgery, Medicine, Eye, ENT etc.  
Special activities: Research, Program, Intervention, Action oriented etc.

**Achievements of the health facility (as applicable):**

Awards / Rewards  
Innovative / Creative events or issues  
Special contribution at national and global

**Strength of the health facility (as applicable):**

Services available  
Manpower  
Specific resources  
Potential capabilities to perform specific activities  
In terms of different resources  
Skill and efficiency  
Research capacity  
Advocacy, leadership

**Instructions:**

*The report will be written based on followings:*

- *Font: Times New Roman*
- *Font size 12*
- *Line Space: 1.5 inch*
- *Page margin: 1 inch on above, right, and below. 1.5 inch on left side*
- *Headings and Sub-heading may be bold*

**Future plan of actions (as applicable):**

- Service delivery
- Expansion of ongoing services
- Employment
- Advancement
- Enforcement
- Research
- Teaching, Training

**Constraints with the health facility (as applicable):**

- Resource constraints in terms of adequacy of manpower, finance, equipment, infrastructure, space, furniture, ventilation, lighting, sanitation, Environmental hygiene, waste management.
- Production and service delivery
- Governance, reputation
- Management and administration
- Quality of service
- Supply of drugs, logistics, reagents, fuels, X-ray films etc.
- Sincerity of the employees
- Influence of pressure group
- Political stability (Both internal & external)

**Other special observation (If any):**

**Conclusion:**

Briefly focus on the visit comprising major features and findings of the health facility. It includes overall observations regarding health facility

**Recommendations: It should in respect of-**

- Activities and achievements
- Progress and prospect
- Public health importance
- Enhancement and enforcement
- Expansion of the activities
- National & international collaboration
- Resource allocation etc.

**Name and Signature of the Student**

**Date:**

**Name and Signature of the guide teacher**

**Date:**

## D. Standard Format of Protocol for Community Survey Conducted during the RFST Program

Students are expected to conduct a community survey during their RFST stays. They should try to prepare the protocol following the standard format outlined below. Teachers shall guide the conceptualization and development of the study. The protocol must be approved by the supervising teachers.

- Cover page (Follow the instructions provided earlier)
  - Title of the study
  - Submitted by
  - Submitted to
- Abstract
- Background/Introduction
- Justification/Rationale
- Objectives
  - General objective
  - Specific objectives
- Variables
- Operational definitions
- Methods
  - Study design
  - Study duration and period
  - Study place
  - Study population
  - Selection criteria (Inclusion and Exclusion criteria)
  - Sample size
  - Sampling unit
  - Data collection instrument
  - Data collection technique or procedure
  - Pre-testing
  - Data processing
  - Data analysis
- Ethical considerations
- Utilization of results
- References
- Time Frame/Action plan
- Budget (if any)
- Annexure
  - Consent forms
  - Questionnaire
  - Checklist (if any)

### **Instructions:**

*The protocol will be written based on followings:*

- *Font: Times New Roman*
- *Font size 12*
- *Line Space: 1.5 inch*
- *Page margin: 1 inch on above, right, and below. 1.5 inch on left side*
- *Headings and Sub-heading may be bold*

## E. Standard Format for the Report on a Community Survey

The community survey conducted during the RFST should be prepared in a standard way. Teachers shall guide and help in the analysis and interpretation. The report should be disseminated within and outside the department. An outline of the expected report format is presented below.

- Cover page
  - Title of the study
  - Submitted by
  - Submitted to
- Acknowledgements
- Executive summary
- Table of contents
- List of tables
- List of figures
- Abbreviations
- Introduction/Background
- Justification
- Objectives
  - General objective
  - Specific objectives
- Materials and methods
  - Study design
  - Study duration and period
  - Study place
  - Study population
  - Selection criteria (Inclusion and Exclusion criteria)
  - Sample size
  - Sampling unit
  - Data collection instrument
  - Data collection technique or procedure
  - Pre-testing
  - Data processing
  - Data analysis
- Ethical considerations
- Results
- Discussion including limitations & strengths
- Conclusion
- Recommendations
- Annexure
  - Consent forms
  - Questionnaire
  - Checklist (if any)

### ***Instructions:***

*The report will be written based on followings:*

- *Font: Times New Roman*
- *Font size 12*
- *Line Space: 1.5 inch*
- *Page margin: 1 inch on above, right, and below. 1.5 inch on left side*
- *Headings and Sub-heading may be bold*

## **F. Standard Format for a Manuscript on the Community Survey**

It will be prepared on the basis of the study conducted as community survey as a of the RFST program. It will be developed for publication in a peer-reviewed national or international journal. The contents of an ideal manuscript are as follows:

### **Cover Page**

1. Title: It must be smart, self-explanatory, concise, directional
2. Name of the authors with affiliations
3. Corresponding author with name, contact and email address

### **Second Page**

1. Abstract: It should include Background, Methods, Results, and Conclusion. It must be of adequate length (Words count) following the respective journal
2. Key Words: It will be relevant to the study (community survey) and of specific numbers following the respective journal.

### **Body of the Manuscript**

1. Introduction / Background
2. Methods / Materials and Methods
3. Results
4. Discussion
5. Conclusion and Recommendations
6. Acknowledgements
7. Conflict of interest (If any)
8. Data availability
9. Authors' contributions
10. Financial statement
11. References following specific style (Harvard / Vancouver)
12. Supporting files (If any)

