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Original Article

Teacher's view on current practices of 'community based medical education' related activities in undergraduate medical education of Bangladesh, 2021

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Abstract

'Community-based medical education' (CBME) consists of learning activities in the community settings where students, teachers and community members are actively engaged in the learning process of medical education relevant to community health needs. This cross sectional study was aimed to explore the current practices of CBME related activities in undergraduate medical education of Bangladesh. Data were collected from 108 teachers of eight medical colleges of Bangladesh from January to December of 2021 using a pretested self-administered questionnaire and analyzed by SPSS version 16. In this study, 61.1% were female teachers. Most of the teachers (69.4%) were agreed that CBME related activities motivate students to serve at community settings. About 74% teachers revealed that CBME develop student's positive attitude towards community people. Maximum (51.9%) teachers were satisfied for infrastructure of residential field site training (RFST) sites. The accommodation, transport and security of RFST sites were satisfied to 38%, 45.4% and 47.2% teachers respectively. About 31.6% teachers mentioned that poor set up of service place for CBME activities and 23.7% teachers revealed that less participation of community people as important constraints for CBME related activities. Conduction of CBME related activities as per curriculum objectives and motivation of local health authority were most important suggestions to overcome the constraints of CBME related activities mentioned by 12.6% and 11.3% teachers respectively. This study recommended to motivate the stakeholders, increase duration for RFST, and ensure necessary infrastructures, adequate transport, security, resource and supervision for effective CBME related activities.

Key words*: Community-based medical education, undergraduate medical education, residential field site training, Bangladesh.*

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Introduction

Traditionally medical education is predominantly believed as hospital based where students can learn a very narrow spectrum of community health problems. A significant reorientation undergone in medical education, that can help students to

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understand the health needs of community people in their social contexts[1]. Community based medical education (CBME) consists of learning activities that utilize the community settings throughout the learning experiences in providing medical education that is relevant to community needs[2]. CBME provides opportunities for the students to interact with community people from a wide range of social, cultural and ethnic backgrounds[1]. As the community people actively participate in the CBME related activities, they not only contribute but also get benefits from this process[3].

Though CBME related activities have very promising role in undergraduate medical education, these have various challenges for the implication in undergraduate medical education. Some significant challenges in CBME included: a high degree of variability of learning experiences at different community sites and with different preceptors; the time required to travel to community sites; and dealing with negative attitudes. The biggest challenge is to generalize successful aspects of CBME experiences. CBME can be integrated successfully with components of the curriculum such as clinical skills, doctor–patient–society, professionalism, epidemiology and public health[1].

By the approach of CBME, the contents of the curriculum are directly relevant to the community needs and to the population-based methods in which the students are trained[3]. In response to the diverse changes to the medical practice and the reorganization of health care systems, the curriculum of undergraduate medical education in many countries has undergone extensive revision[4]. To harness several benefits, CBME related activities were initiated in the curriculum of undergraduate medical education of Bangladesh since 2008 in the form of residential field site training (RFST) programme for the duration of two weeks. From 2012, the duration of CBME related activities is 30 days. Out of this 30days, 10 days are allocated for RFST, 10 days for day visit and 10 days for study tour[5,6]. By considering the curriculum, research should be conducted to evaluate the current situation of CBME related activities in undergraduate medical education of Bangladesh.

So, the aim of this study was to explore the current contents, extent of practices, challenges of CBME as well as the possible suggestions to overcome the challenges for CBME in undergraduate medical education of Bangladesh. It was expected that this research work would be helpful for policy makers to undertake necessary actions to improve the CBME related activities in undergraduate medical education of Bangladesh.

Materials and Methods

This cross-sectional study was conducted at Centre for Medical Education (CME), Dhaka from 1st January 2021 to 31st December, 2021. The study protocol was approved by Institutional Review Board of CME. Data were collected from 108 teachers of Community Medicine department of eight medical colleges of Bangladesh after taking informed consent from them. Out of eight, two government medical colleges (Shaheed Suhrawardy Medical College and Mugda Medical College) and two non-government

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medical colleges (Green Life Medical College and Bangladesh Medical College) were located in Dhaka and another two government medical colleges (Chattogram Medical College, Chattogram and Faridpur Medical College, Faridpur) and two non-government medical colleges (Gonoshasthaya Samaj Vittik Medical College, Savar and Diabetic Association Medical College, Faridpur) were located outside Dhaka. Medical colleges were enrolled following purposive sampling technique and convenience sampling technique was adopted to collect data from the teachers. Teacher's views were noted using a pretested, self-administered, semi-structured questionnaire on different aspects of CBME related activities. The questionnaires were distributed among the teachers and collected immediately after completion. Teachers' participation was voluntary. Confidentiality and anonymity were strictly maintained. The necessary permission was taken from respected medical colleges before the data collection. After collection, data were manually checked and edited then entered, verified and analyzed by using Statistical Package for Social Science (SPSS) computer software version 16.

Results

The present study showed that out of 108 participants, female teachers were predominant than their male colleagues (61.1% vs 38.9%) (Figure 1).

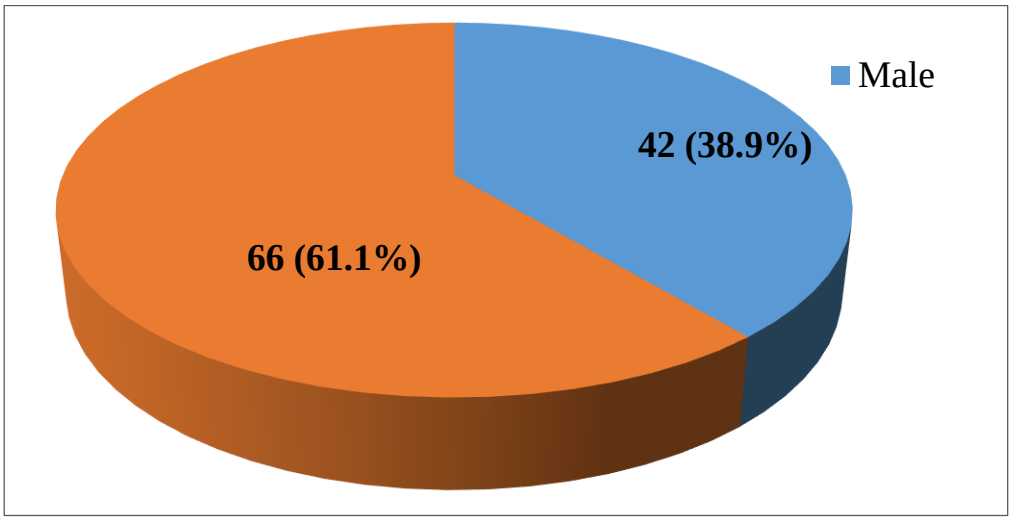

Figure 1: Distribution of the medical teachers according to their gender (n=108)

Most of the teachers (69.4%) were agreed that CBME activities motivate students for future rural retention as serving doctors. About 74% teachers were agreed regarding developing student's positive attitude to community people by CBME activities. CBME activities helped to orient students for community involvement were agreed by 68.5% teachers. 63.9% teachers were agreed regarding role of CBME activities in helping students for work in a team (Table 1).

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Table 1: Views of the medical teachers on the benefits of CBME related activities in undergraduate medical education of Bangladesh (n = 108).

Statement	Extent of agreement and disagreement					Total f (%)
	SDA	DA	NAND	A	SA	
	f (%)	f (%)	f (%)	f (%)	f (%)	
CBME helps to motivate students for future rural retention as serving doctors	3 (2.8)	7 (6.5)	8 (7.4)	75 (69.4)	15 (13.9)	108 (100)
CBME helps to develop student's positive attitude to community people	1 (0.9)	4 (3.7)	6 (5.6)	80 (74.1)	17 (15.7)	108 (100)
CBME helps to orient students with community involvement	1 (0.9)	1 (0.9)	7 (6.5)	74 (68.5)	25 (23.1)	108 (100)
CBME helps students to work in a team	1 (0.9)	0 (0)	4 (3.7)	69 (63.9)	34 (31.5)	108 (100)

NB. CBME = Community based medical education; RFST = Residential field site training; SDA= Strongly disagree, DA= Disagree, NAND = Neither agree nor disagree, A =Agree, SA =Strongly agree.

Majority teachers (51.9%) were satisfied for infrastructure of RFST sites. The accommodation, transport and security of RFST sites were satisfied to 38%, 45.4% and 47.2% teachers respectively. About 40% teachers were satisfied regarding transport for day visit. The accommodation, transport facility and security for study tour was satisfactory to 56.5%, 49.1% and 51.9% teachers respectively (Table 2).

Table 2: Views of the medical teachers on the practical situation of CBME related activities in undergraduate medical education of Bangladesh (n= 108).

Issue	Teachers' response					Total f (%)
	VD	D	NDNS	S	VS	
	f (%)	f (%)	f (%)	f (%)	f (%)	
Infrastructure of RFST sites	9 (8.3)	27 (25)	15 (13.9)	56 (51.9)	1 (0.9)	108 (100)
Accommodation for RFST	12 (11.1)	34 (31.5)	20 (18.5)	41 (38)	1 (0.9)	108 (100)
Transport for RFST	12 (11.1)	27 (25)	15 (13.9)	49 (45.4)	5 (4.6)	108 (100)
Security for RFST	10 (9.3)	19 (17.6)	24 (22.2)	51 (47.2)	4 (3.7)	108 (100)

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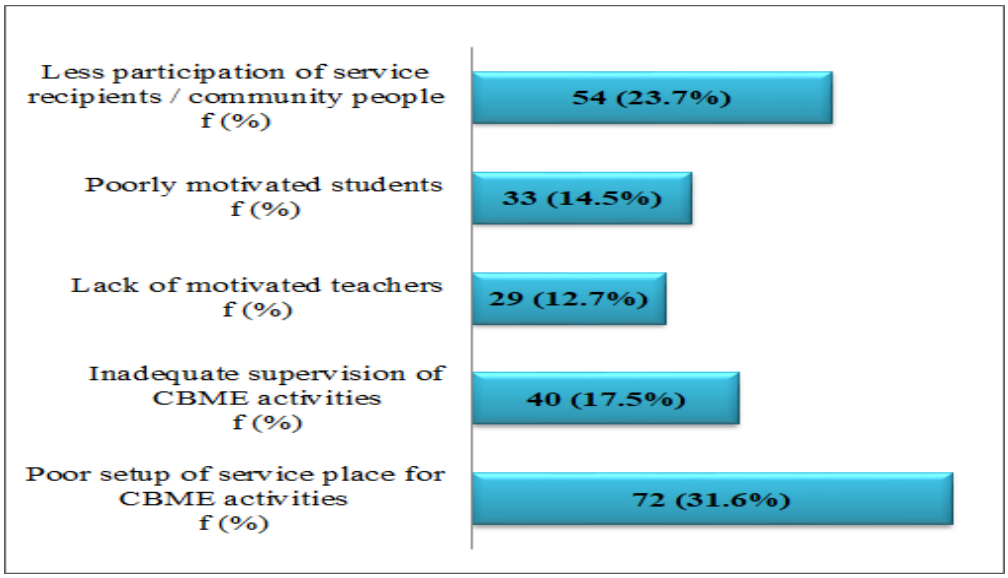
Transport for day visit	14 (13)	22 (20.4)	26 (24.1)	43 (39.8)	3 (2.8)	108 (100)
Accommodation for study tour	7 (6.5)	18 (16.7)	20 (18.5)	61 (56.5)	2 (1.9)	108 (100)
Transport for study tour	10 (9.3)	21 (19.4)	21 (19.4)	53 (49.1)	3 (2.8)	108 (100)
Security for study tour	6 (5.6)	25 (23.1)	18 (16.7)	56 (51.9)	3 (2.8)	108 (100)

NB. CBME = Community based medical education; RFST = Residential field site training; VD = Very dissatisfied, D = Dissatisfied, NDNS = Neither dissatisfied nor satisfied, S = Satisfied, VS = Very satisfied.

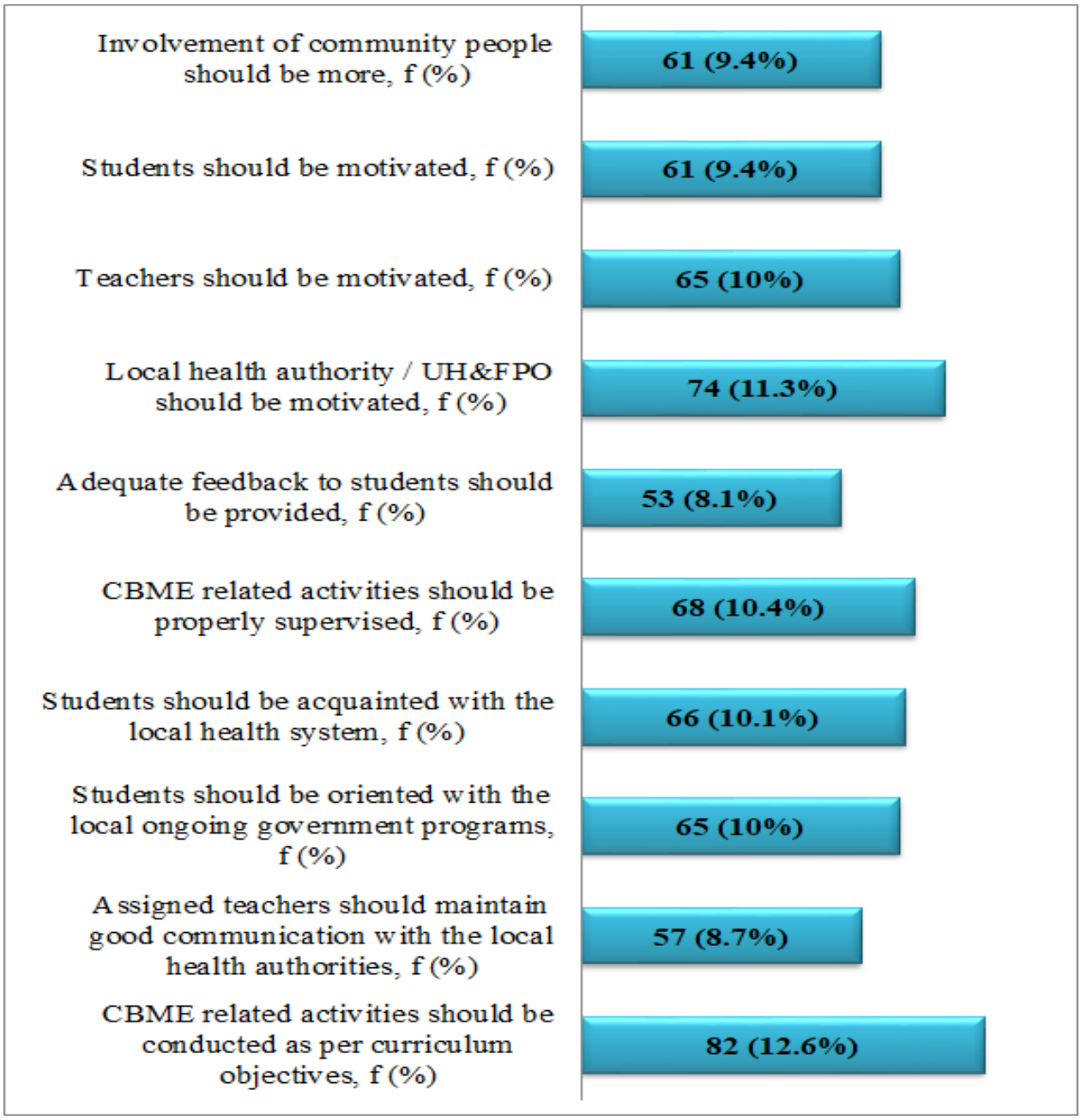
About 31.6% teachers mentioned that poor set up of service place for CBME activities and 23.7% teachers revealed that less participation of community people were was important constraint for CBME related activities (Figure 2).



* Multiple Reponse, **NB.** CBME = Community based medical education.

Figure 2: Responses of the medical teachers regarding the constraints of CBME related activities in undergraduate medical education of Bangladesh (n = 108).

The conduction of CBME related activities as per curriculum objectives and motivation of local health authority were most important suggestions to overcome the constraints of CBME related activities mentioned by 12.6% and 11.3% teachers respectively (Figure 3).



* Multiple Reponse, **NB.** CBME = Community based medical education.

Figure 3: Responses of the medical teachers regarding the suggestions to overcome the constraints of CBME related activities in undergraduate medical education of Bangladesh (n = 108).

Discussion

Community based medical education (CBME) is an important strategy of WHO for fostering the health professional education to achieve the goal of health for all. Such training programme is most effective when it would be based largely in the community[2].

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This present study showed that majority teachers (61.1%) were female. From this data the general trend of gender distribution among medical teachers in medical education of Bangladesh observed. The study conducted by Mahrous showed the different trend of gender distribution among teachers were 80% male vs 20% female[7].

Majority of the teachers were agreed that CBME related activities helped students in orientation for community involvement and learning by doing in a team. They also mentioned that CBME related activities help to utilize the limited resources for the best health services of the community. This findings were almost similar to the studies conducted by Mahrous, Amalba et al, Salam and Yousuf, revealed that majority teachers were agreed on enhancement of CBME related activities to increase the student's ability to work in the rural area in near future in a team[7,8,9]. Study conducted by Salam and Yousuf revealed that most of the teachers felt CBME related activities as an opportunity for students to be oriented regarding common rural health problems, created caring attitudes and developed their generic skills[9]. Mudey et al mentioned that CBME related activities provided practical exposure to all of the students, helped them to know the health and social status of the community[10].

Most of the teachers and students were satisfied on infrastructure, accommodation, transport and security for effective CBME related activities. This study findings were supported by the study conducted by Asaduzzaman et al revealed that majority students were satisfied to RFST activities[11]. This present study findings found to be dissimilar to the study conducted by Ahmed et al, showed that majority of the students were dissatisfied to different CMBE related activities[12].

In this study, majority teachers identified poor set up of service places and inadequate fund as important constraints for effective CBME related activities. These findings were supported by the studies conducted by different researchers. Asaduzzaman et al showed that most of the participants faced different problems in RFST programme, such as lack of transport support (52.6%), lack of fund (58.4%), lack of accommodation facilities (47.4%) and lack of security (32.8%)[11]. In a study conducted by Adefuye et al revealed different dimensions of the CBME challenges like learning in a new environment, clinical practice context, language barrier, poor organization of CBME programme, insufficient pre requisite knowledge, lack of group dynamics, limited hospital resources etc[13].

Majority of the teachers suggested the conduction of CBME related activities as per curriculum objectives, adequate budget allocation and motivation of local health authority to overcome the constraints of CBME related activities. These findings were almost similar to the study conducted by Salam and Yousuf that showed the respondents opinion as necessity of close collaboration between field and administration and giving emphasize on adequate resource allocation and utilization for an effective CBME related activities[9]. The similar results were also found in a study done by Adefuye et al that revealed the

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participant's suggestions to overcome the challenges of effective practice of CBME related activities were increased duration of training, improved organization of CBME, reviewed clinic visit, reviewed log book, providing more hands-on experiences to the students etc[13].

Conclusion

This study revealed that there are some gaps between expected and current practices of CBME related activities in undergraduate medical education of Bangladesh. Based on this study finding, following recommendations were made for effective CBME related activities in undergraduate medical education of Bangladesh: a) Continuous monitoring, providing feedback to the students, regular update of CBME related activities in curriculum and conduction of CBME related activities as per curriculum objectives, b) Increasing duration of CBME related activities, more for RFST programme, c) Ensuring establishment of necessary infrastructure, transport, security, improved accommodation and adequate allocation of fund, d) Need to motivate the policy makers, authorities, teachers, students and community people to implement and practice of CBME activities, e) For effective practice of CBME related activities, the authority can acquire knowledge, information and help by collaboration with other institutions in home and abroad.

Disclosure

The authors declare no conflict of interest.

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