Community Based Medical Education: What, Why and How?

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Abstract

Community based medical education has several definitions, but the core definition refers to learning that takes place is need based and in a community setting. Hence, community based medical education refers to medical education in which trainees learn and acquire professional competencies in a community setting based on the need of the community. This concept encourages medical colleges to produce not just highly competent professionals, but professionals who are equipped to respond to the changing challenges of healthcare through re-orientation of their education, research, and service commitments, and be capable of demonstrating a positive effect upon the communities they serve. Such social accountability of a healthcare cum academic institution demonstrates an impact on the communities served and thus, contribute to achieve a just and efficient healthcare service through mutually beneficial partnerships with other stakeholders. Community based medical education can make a difference in the country's health sector by supporting a community based healthcare delivery system within the concept of National Health Policy and thus, contribute to the overall national efforts in achieving meaningful, self-sustaining quality of life and environment. Besides, it helps bring about change in current educational trait by imposing need-based, flexible academic strategies specific to the rural community and quality of the medical doctors by grooming them as empathetically responsive and active towards patients, professionally competent and ethically sound persons of the society.

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Introduction

In recent times, many countries are shifting towards a community based education program to cover the role of doctors in community health. Community Based Medical Education, which is a style of medical education that places medical students and doctors into communities, has been

evolving globally for decades.¹ 'Community Based Medical Education' has several definitions, but the core definition refers to learning that takes place is need based and in a community setting. Hence, community-based medical education refers to education in which trainees learn and

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acquire professional competencies community setting.² However, to avoid confusion, it is necessary to remember that the terms 'community based medical education' and 'community oriented medical education' are sometimes used synonymously, they have different meaning though. 'Community Oriented Medical Education' may be defined as an integrated, innovative, and interactive teaching learning to empower students, faculty, and care providers towards responsive and relevant healthcare services focused on communities.^{3,4} Hence, we may assume that community based medical education is closely related to but not the same as community oriented medical education. Community oriented education is a type of training of health personnel that focuses on both population groups and individuals and that takes into account the health needs of the community concerned.^{5,6} Community based medical education, however, is a means of achieving educational relevance to community needs, shifting the learning environment to the community and, consequently, serves as a way of implementing a community-oriented education program.4 Moreover, it consists of learning activities that utilize the community extensively as a learning environment in which not only students, but also teachers, members of the community, and representatives of other sectors are actively involved throughout the educational experience. 4,7 We would simply describe it as medical education of the community, by the community and for the community. Changes to medical education are taking place every day internationally. Several government authorities as well as accreditation bodies called for a shift in medical education from its traditional contentbased approach to a community-based approach

so that students and educators could experience it.^{3,7,8} For an example, in UK, United States, Canada, Australia, Japan, Korea and Iran, current medical curriculum is trying to enhance community based education to create a positive impact on students by improving their skills and increasing their understanding and responsibility and thereby facilitate their health care systems through addressing the needs of stakeholders, cost-effective care requirements, quality improvement, and above all, community health improvement.^{1,9-14}

Social accountability is an old coin but has come to our recent discussion of medical education and it calls on the academic institution to demonstrate a visible impact on the communities they serve and thus make a better contribution to an efficient and equitable healthcare service, through mutually beneficial partnerships with other stakeholders.¹⁵ healthcare This concept encourages medical schools to produce not just highly competent professionals, but professionals who are equipped to respond to the changing challenges of healthcare through re-orientation of education. research and their commitments, and be capable of demonstrating a positive effect upon the communities they serve. 16,17

The Global Consensus for Social Accountability of Medical Schools made a declaration on the desirable scope of work required in order that medical schools have a greater impact on health systems performance and on peoples' health status; 18 it embraces a system-wide scope from identification of health needs to verification of the effects of medical schools on those needs. The list of 10 areas reflects this logical sequence, starting with an understanding of the social

context, an identification of health challenges and needs and the creation of relationships to act efficiently (Areas 1 and 2). Among the spectrum of required health workforce to address health needs, the anticipated role and competencies of the doctor are described (Area 3) serving as a guide to the education strategy (Area 4), which the medical school, along with consistent research and service strategies, is called to implement (Area 5). Standards are required to steer the institution towards a high level of excellence (Areas 6 and 7), which national authorities need to recognize (Area 8). While social accountability is a universal value (Area 9), local societies will be the ultimate appraisers of achievements (Area 10).18 All these areas have indicated the ultimate necessity of communitybased medical education for future healthcare. This review paper seeks to offer our collective viewpoint on community-based medical education focusing on its importance, different models of community based medical education, how it is integrated in our curriculum, challenges, and some recommendations.

Why Community Based Medical Education Is Important

The first obligatory direction is derived from our Constitutional Dictum on *'Universal Health Coverage'*, i.e., three Articles of our constitution namely 15(a), 16 and 18(1) have clearly defined the responsibility of the government to ensure "education and medical care" to all citizens irrespective of their location of residences; to improve public health "to remove disparity in the standards of living between the urban and the rural areas"; and to regard "the raising of the level of nutrition and the improvement of public health as among its primary duties". ¹⁹ Therefore, our

medical education, the backbone of healthcare, must be directed towards the rural and remote communities where the majority of the population are living.

Moreover, the World Health Organization (WHO) has defined the 'Social Accountability of Medical Schools' as "the obligation to direct their research and service activities education. towards addressing the priority health concerns of the community, region, and/or nation they have a mandate to serve. The priority health concerns are to be identified jointly by governments, healthcare organizations, health professionals and the public." 16 Hence, it has become an obligation for the government, policy makers, the state's accreditation authority, medical colleges and we as medical educators and citizens to implement community based medical education in medical curriculum.

Evidence suggests that traditional teaching methods often fails to address the needs, changes and problems of the communities; therefore, they are not fully effective to mobilize coanitive skills and abilities of medical students.20-22 As we have experienced in our recent times, challenges such as increase in emerging diseases, increase in chronic diseases, recent COVID-19 pandemic, aging population and advances in technology require medical doctors to have advanced and up-to-date knowledge as well as higher thinking skills such as critical thinking, problem solving and decision making. 20,23-25 Moreover, evidence also suggests that students who had training in community based settings performed as well as, or even better than their peers who had only traditional hospital based training in terms of clinical skills, abilities and attitudes, and similar professional or

licensing examinations.²⁶⁻²⁸ Involvement of the community in identifying community needs, setting priorities, establishing and evaluating new models of practice is seen as critical. 25,29 The roles of the medical colleges and their partner organizations to collaborate with the communities in education, research and service are also important. 16,17,29 It is articulated within the social accountability framework and an obligatory need for the medical community at large to understand and demonstrate the concept of duties and responsibilities (also professionalism). 16,17,30-32 That could also be seen as an example of collective efforts to ensure need based healthcare in the country.

To summarize from existing literature on teaching and learning through the community based medical education, several advantages have been identified including access to a wider variety of patients; more opportunity to develop and practise clinical skills; more continuity of care with patients; added relevance to learning; more experience with the determinants of health and the impact of social, economic and political events on the health of people; more enjoyable educational experiences; and teachers who were more likely to model positive teaching attitudes, show interest in students and provide feedback.32-36

Proposition and Implementation of Community Based Medical Education

Bangladesh's first Planning Commission (1972-1977) members and the then Health Secretary, Dr. T. Hussain played an important role in rapidly building Thana (now Upazila) Health complexes to comply with the intention of Articles 15(a) and 18(1) of Constitution of the country. In the late

70s, Colonel (Retired) M. Masudal Hug, a Trustee of Gonoshasthaya Kendra Public Charitable Trust and the then Minister of Health tried to introduce community based medical education and reform undergraduate medical education relevant to the country's needs and priorities.37 Soon after a proposition was made that Bangladesh Medical & Dental Council (BM&DC) will revise the MBBS Curriculum to reduce its duration from 5 years to 4 years and 6 months and enhance the internship program from 12 to 18 months of which 6 months is to be spent in Upazila Health Complexes (UHC) by the intern doctors. Those did not become a reality; however, some changes in the policy took place which ultimately could not sustain.³⁷

The undergraduate medical curriculum followed in the medical colleges was developed in 1988 through UNDP and WHO support by the Centre for Medical Education (CME) with an aim to produce community-oriented doctors who will be able to provide essential primary health care to the community. That was the first documented curriculum ever developed in the country.³⁸ But evaluation by Godfrey et al.39 revealed that it is neither community oriented nor competency based and there is room for much improvement. The need to develop a community-oriented and competency-based curriculum was felt by all concerned. For that series of workshops with specialists and experts from every discipline took place to develop a curriculum, which would reflect institutional, departmental objectives as well as subject-wise learning objectives. Thus, further revised and updated 'Curriculum Undergraduate Medical Education in Bangladesh 2002' and later 'Curriculum for Undergraduate Education - updated 2012' were Medical

published that addressed the importance of community involvement and included some measures in medical education and training.³⁸ Recently in 2021, BM&DC published a revised and updated 'Bachelor of Medicine & Bachelor of Surgery (MBBS) curriculum in Bangladesh'. 40 which asked for specifically one month out of sixty months of MBBS course for community oriented medical education. To promote a 'need based, community oriented and competency based' healthcare system in the country, this undergraduate curriculum "focus more on real life situation and learning, that is more community oriented as well as more community based".40 Specific community visits were part of the Community Medicine curriculum during the fourth year, of which at least 8 one-day visits are proposed around medical colleges in different health care facilities, health administration office, pharmaceutical industry, or any other place arranged by the respective medical college relevant to goals and objectives. Besides, another 10 days for Residential Field Site Training (RFST) was proposed that students will visit a convenient Upazila Health Complex (UHC) with specific tasks to be done. This training emphasized that Upazila Health and Family Planning Officer will assist teachers of the Department of Community Medicine to educate students: 1) to become accustomed with the environment and lifestyle of the people of the rural community, 2) to conduct surveys based on health needs and problems of the community, and 3) be acquainted with health care delivery system at PHC level in Bangladesh. 40 Although such training has been continuing over decades, it has been reported that the such curriculum design will not help students to understand our rural communities as a whole. Moreover, the term

'community based medical education' always remains silent in this perspective. Our neighbouring countries, e.g., Nepal, India, and Pakistan have already started community based teaching and learning in medical education in a small scale and somewhat experimental and they are continuously evaluating the changes in their medical education and achieved many success stories to date. 33,41-46

It is worth mentioning that for translating WHO recommendations⁴⁷ into action. many governments and regional medical education bodies along with the World Federation of Medical Education (WFME) called for worldwide changes in medical education. This call was to ensure that medical graduates are adequately and appropriately trained to improve the health of the populations they serve. Community based medical education is instrumental in translating this dream to a reality. 22,25,29 However, a paradigm shift is essential in the template for planning and designing medical curriculum. We would like to mention two framework for such changes in curricula: 1) the 'SPICES' model included community oriented content in medical education and demanded a reform in the concepts by adding student-centred, problem based and integrated as well as community based teaching and learning.48 and 2) the 'PRISMS' model which introduced community based pedagogy in medical education recommending the curriculum to be practicebased, inter-disciplinary, multisite and symbiotic with the health services and communities in which the health professionals serve. 49 However, WHO specifically described variations of activities of primary healthcare exposure for medical students and lessons learned from many

countries, to approach the health needs of the people in various regions of the world.⁵⁰ Meanwhile, Kelly tried to give some guidance for medical teachers to do a proper community based education program in different levels of a curriculum.⁵¹ Several other evidence also suggested guidance on curriculum design as well as learning strategies.^{7,9,12,13,52}

Challenges

Ours is a rural based country; therefore, our doctors must have the potential to be a powerful resource for creating a healthy population mostly living in rural areas and thus, help promote economic and social development in the rural and remote areas. However, lack of updated planning in medical education and weak policies remain as barriers community based medical education so as to primary care and community participation, which are central to creating a public health impact throughout the country. 2,11,34,39,53 Social participation is essential in prioritizing local and global health issues, particularly in poor resourcepoor countries like Bangladesh in which government often fails to provide adequate public services to citizens. Another challenge that has been addressed mostly by the medical educators and professionals is the power differential between those who are affected by the policy changes and higher management and political levels of the healthcare system who usually decide on what changes to implement. Those often create incoordination in the medical education sector (as a whole in healthcare sector). 37,38 The current medical curriculum is able to facilitate the student's entry into the doctor-patient relationship to some extent. However, researchers conclude that ward-based

teaching and learning and short-term community attachments, as prescribed by the curriculum. may not allow students to get to know either the patients or the community health needs. 8,20 An extended apprenticeship-style of community based attachment is essential where students would be able to gain a respected hands-on role in the health team mentored by their faculties as role models. It can give students a privileged welcome to real patients in the community and increase their clinical confidence. Ideally the learning should be from all members of the healthcare team working at the community level. 9,34,53,54 As with most educational innovations, community-based medical education requires a re-think in relation to resource allocation. Traditional medical education is often based in large hospital complexes, and therefore, any educational resources tend to be attached to hospitals. These resources may include seminar and tutorial rooms, laboratories, simulation room, libraries, and the clinicians and support staff members that implement the curriculum and assessment practices. 22.32 However, classroom teaching or hospital based teaching, community based medical education requires a large number community placement sites (camps/clinics), students' accommodation and logistic support.²² Medical institutions have their own limitations to arrange those facilities.^{34,37} We, medical teachers, are not well aware of community based medical education - its objective and how it works; we also lack guidance on assessment and evaluation strategies specific programme. Besides, shortage of to this dedicated teachers and unwillingness to change the teaching-learning strategy are also crucial barriers. 50,54 Moreover, in a low-income country

like Bangladesh, limited health budget is a barrier to implement such huge changes in curriculum, infrastructures and logistics.^{37,50}

Under the trying circumstances, some private colleges in the country Community Based Medical College, Bangladesh (CBMC,B), Gonoshasthava Samai Vittik Medical College (GSVMC), Rangpur Community Medical College, and Dhaka Community Medical College have been trying to transform medical education to be community based and people oriented, in which all students interact with community members during session periods and vacations, at sufficient lengths to be able to observe and exchange with the community and local families their perceptions. beliefs. experiences. knowledge, and problems focusing on health, nutrition and wellbeing issues in the students' field of study. The students get practical experience and bring those case materials into the tables for critical discussion and debate. Such social accountability of healthcare cum academic institutions demonstrates an impact on the communities served and thus, contribute to achieve a just and efficient healthcare service through mutually beneficial partnerships with other stakeholders.52 This is how we can make a difference in the country's health sector by supporting a community based healthcare delivery system within the concept of National Health Policy and thus, contribute to the overall national efforts in achieving meaningful, selfsustaining quality of life and environment.

Recommendations

We know that we have limited resources. However, we dream big and there is a growing expertise and evidence base related to the community based placement and training to reform future medical education. The institution may facilitate the following steps to achieve better results:

- Create a cultural norm within the medical institution that places value on prioritizing the health needs of the local community over personal gains and rewards.
- Implement learning objectives that emphasize the health needs of rural and remote areas.
- Foster strong intrinsic motivation among medical students and a desire to serve the needs of their community.
- 4. Ensure strong institutional support and planning for length of rotation, continuity of the clinical and teaching team and a welcoming professional environment which are key components in such learning environment.
- Encourage students to participate in public health programs, health promotion campaigns and advocate to change the social determinants of health within their communities.
- Try different assessment and evaluation procedures based on current evidence and best practice guidelines.
- 7. Last but not the least, as the national accreditation body, BM&DC needs to develop some metrics to measure the degree of professional identity among graduates of different medical institutions and hold these institutions accountable for the performance of their graduates.

Conclusion

Global changes are happening in medical education in accordance and conformity of tremendous advancements and changes in facilities and technologies. With the application of knowledge and skills of medical science, future doctors should satisfy their patients with the changing needs of the community. Community based medical education is a time-demanding approach that goes beyond cognitive capacities and encompasses the social and emotional aspects of learning. Community based medical education is an attempt to remold the future physicians to become more 'Humane Doctors' instead of traders of diseases.

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