

# Assessment of relevance and effectiveness of Community Health Workforce (CHW) development system in Bangladesh

M H K Talukder<sup>1</sup>, B H N Yasmeen<sup>2</sup>, R Nazneen<sup>3</sup>, M Z Hossain<sup>4</sup>, I J Chowdhury<sup>5</sup>

## Abstract

**Background :** Community Health Workforce (CHW) development has a rich history in South East Asian Region (SEAR). The first Community Health Unit was established in Sri Lanka in 1926 and then practiced over many of the regional countries like, Thailand, Myanmar and India. Community Health Workers are in the fore front workforce to bring about change through community health programmes to national levels. In Bangladesh, there are also different categories of health workforce serving in the health care delivery system.

**Objectives :** To assess relevance and effectiveness of community health workforce (CHW) development system in Bangladesh.

**Methods :** This cross sectional study was conducted from 1<sup>st</sup> November 2010-30<sup>th</sup> April 2011 by purposive sampling technique. Study population were directors, administrators, principals, teachers of different institutes/ organizations and community health workers working in different corners of Bangladesh. Study places were different divisional towns of Bangladesh. Previously developed questionnaire & checklist were used for the collection of data from the institutes/ organizations by data collectors. These data were edited, processed and was analysed by using SPSS soft ware and a small portion by manually. No strong ethical issues were involved in this activity.

**Results :** Study revealed that all the respondents (100%) are in favour of production of CHW in Bangladesh through formal academic institutional or pre service education (61.4%). Most of the respondents (56.8%) viewed that there are scopes of utilisation of produced CHW in rural areas and most of the respondents (63.6%) also viewed that terminal/marginalized/underprivileged peoples of hard to reach areas at least can be served by CHW. Regarding the competency of produced CHW few of the respondents (43.2%) viewed positively. Most of the respondents (86.4%) viewed that both govt. & non govt. sectors should produce CHW with a very good co-ordination and co-operation. Study revealed the institutional capacities or situations about physical facilities, ongoing course, audiovisual aids, library, manpower and assessment procedure.

**Conclusion :** Study revealed that there is strong & logical relevance present for the production of CHW in Bangladesh. So the existing Human Resource for Health (HRH) policy is to be revised & revisited as a time felt need to develop more competent CHW for Bangladesh to serve the marginalized, terminal, people of remote, rural & hard to reach areas.

## Introduction

In 1978 after the formal Alma Ata Declaration all most all the member countries are practicing many of the elements of the Primary health care (PHC). It has been already 31 years passed, since the Alma Ata Declaration on Health for All through PHC started to

execute. Community Health Workers were in the fore front workforce to bring about the change through community health programmes to national levels.

Community health workers (CHW) are the members of the communities who work either for pay or as volunteers in association with the local health care system in both urban and rural environments. They have been identified as community health advisors, health advocates, promoters, outreach educators, peer health promoters, peer health educators and community health representatives. CHWs offer interpretation and translation services, provide culturally appropriate health education and information, assist people in receiving the care they need, give informal counseling and guidance on health behaviors, advocate for individual and community health needs, and provide some direct services such as first aid and blood pressure screening. They are community members who serve as frontline health care professionals. Generally they work with the underserved and are indigenous to the community and play a pivotal role in meeting the health care needs of frontier communities.

They help to increase access to health services, improve quality of care, reduce health care costs, and contribute to broader social and community development<sup>1</sup>.

As "in-between people," CHWs "draw on their insider status and understanding to act as culture and language brokers between their own community and systems of care<sup>2</sup>.

CHWs may be paid or unpaid/volunteer, and have varying levels of job-related education and/or training. According to the National Rural Health Association, "the most significant commonalities of CHW programs are that:

- they are focused on reaching hard-to-reach populations;
- the workers usually are indigenous to the target population;
- their expertise is in knowing their communities rather than formal education<sup>3</sup>.

Despite the importance of CHWs, the challenges of providing them with high-quality training opportunities can be problematic. In an issue paper on community health advisors, the National Rural Health Association (NRHA) states, "training of Community Health Assistants (CHA) is variable in terms of quality and

<sup>1</sup> Prof. Dr. Md. Humayun Kabir Talukder  
Professor  
(Curriculum Development & Evaluation)  
& Course Director  
Centre for Medical Education

<sup>2</sup> Dr. B H Nazma Yasmeen  
Associate Professor  
Dept of Pediatrics  
Northern International Medical  
College, Dhaka

<sup>3</sup> Dr. Rumana Nazneen  
Associate Professor  
Obs & Gynae dept  
HFRC Medical College & Hospital

<sup>4</sup> Dr. Md. Zakir Hossain  
Registrar  
Sapporo Dental College Dhaka

<sup>5</sup> Dr. Ishrat Jahan Chowdhury  
MO, Dhaka Shishu Hospital

## Correspondence

Prof. Dr. Md. Humayun Kabir Talukder  
Professor  
(Curriculum Development & Evaluation)  
& Course Director  
Centre for Medical Education  
e-mail: hktalukder@yahoo.com

content" and considers it to be a major challenge to community health advisor programs<sup>4</sup>.

In Bangladesh there are different categories of health workforce serving in the health care delivery system named Family Welfare Assistant (FWA), Family Welfare Visitor (FWV), Health Assistant (HA), Skilled Birth Assistant (SBA) etc. But there are less formal academic institutes from where such types of different health workforces are produced. Within the last 3 years govt. approved 14 institutes to produce CHW through one year certificate course who will mainly serve in the non government sectors.

Usually most of the CHW get training after recruitment. The process of preparing the CHW is not need based as well as not institutionalized, therefore their function are not effective. Now it is very time felt need to assess the relevance and effectiveness of CHW development system in Bangladesh. Therefore this study was carried out to assess the relevance and effectiveness of community health workforce development system in Bangladesh.

**Objectives**

To identify the present status and to assess the strengths, weaknesses, opportunities & threats (SWOT Analysis) of community health workforce development system in Bangladesh in terms of infrastructures, logistics, teaching facilities and manpower for production of CHW.

**Methodology**

This study was a descriptive type of cross sectional study that took place in different districts of Bangladesh. Study places were Dhaka, Sylhet, Jokigong, Sunamgong, Moulovibazar, Chittagong, Bogora, Rangpur, Sirajgonj, Mymensingh, Comilla, Noakhali, Jhenaidah, Pabna, Gazipur, Rajbari. Participants were the directors, administrators, principals and teachers of different institutes, /organizations and also Community health Workers.

Available documents on CHW production & organization in govt. and non govt. sectors of Bangladesh were studied. Questionnaire & checklist for data collection were developed after literature review followed by consultation with the concerned persons and subject specialists. Purposive sampling was done and data were collected by getting back the questionnaire & checklist by courier service after telephonic communication. In this study, effectiveness means "doing the right thing" and relevance refers to the pertinence, or applicability of the activity of health workforce to the community.

The data were then edited, processed and was analysed by using SPSS soft ware and also by manually. Regarding ethical issues, prior permission was taken from the concerned authority. Confidentiality and anonymity were assured and maintained.

**Results**

This study revealed that all (44) the respondents (100%) are in favour of production of CHW in Bangladesh (Table – 1). This study also shows that the opinion regarding the time when the respondents feel for training to produce CHW through formal academic institutional or pre service education are 61.4% (Table – 2). In our study most of the respondents (56.8%) viewed that there are scopes of utilisation of produced CHW in rural areas and most of the respondents (63.6%) also viewed that terminal/marginalized/underprivileged/peoples of hard to reach areas at least can be served by CHW. Few of the respondents (43.2%) viewed positively about the competency of produced CHW (Table-3).

**Table– 1 : Distribution of the respondent by their opinion about production of CHW is essential for Bangladesh (through questionnaire)**

Opinion of the respondent about production of Community Health Workforce (CHW) is essential for Bangladesh	Frequency	
	Yes (%)	No (%)
	44 (100)	0

**Table – 2 : Distribution of the respondent by their opinion regarding the time when they feel for training to produce CHW n=25**

Opinion regarding the time when training to be imparted to produce CHW	Frequency	Percent (%)
Pre service education (Before job through formal academic institutes)	35	61.4
In service training (Just after recruitment)	14	24.6
In service training (Within job/during service time)	9	15.5

● Responses are more than 100% due to multiple response

**Table –3: Distribution of the respondent by their opinion regarding different events for production of CHW in Bangladesh**

Opinion regarding different events for production of CHW in Bangladesh	Different levels of opinion					Total
	Strongly agree (SA)	Agree (A)	Undecided (U)	Disagree (D)	Strongly disagree (SD)	
After recruitment of certain group of people for job as CHW training for them on different issues as before is sufficient for production of CHW in Bangladesh	14 (31.8%)	12 (27.3%)	6 (13.6%)	9 (20.5%)	3 (6.8%)	44
The system/process of production of CHW through Institutes of CHW is all right	16 (36.4%)	14 (31.8%)	1 (2.3%)	10 (22.7%)	3 (6.8%)	44
Scope of organization of CHW in Bangladesh is enough specially in rural areas.	25 (56.8%)	7 (15.9%)	7 (15.9%)	2 (4.5%)	3 (6.8%)	44
Terminal/marginalized/underprivileged/peoples of hard to reach areas at least can be served by CHW	28 (63.6%)	16 (36.4%)	-	-	-	44
Produced CHW in this country are competent enough to serve the targeted community.	7 (15.9%)	19 (43.2%)	5 (11.4%)	10 (22.7%)	3 (6.8%)	44

Most of the respondents (86.4%) of this study viewed that both govt. & non govt. sectors should produce CHW with a very good co-ordination and co-operation (Table –4). Our study revealed that distribution of physical facilities as per institutes shows that in half of the cases, the building is owned by the institutes, Total space of the Institute ranges from, 2000 to 6000 sq. feet mostly. Most of the institutes had class rooms, tutorial rooms, conference room, auditorium, Library, Audiovisual section and patients exposure facility<sup>16</sup>

. In most of the institutes , the course curriculum offered is for CHW, diploma in one institute and basic training for FWV in one institute. Minimum requirement for admission was SSC passed, average number of students / year / institute was 50-100 in all 16 institutes. Course duration is between 1-3 years, with permission and affiliation from Directoret General Health Services (DGHS)/Ministry of Health & Family Welfare (MOH & FW).

Majority of the institutes had minimum teaching aids, such as-computer, multimedia, over head projector, slide projector, film projector, black board/white boards etc.

Distribution of library as per Institutes space 300-1200 sq. ft. seats about 50, total No of books 2000-7000 with availability of Journals.

**Table –4: Distribution of the respondent by their opinion regarding sector which can produce CHW**

Opinion regarding sector which can produce CHW.	Different levels of opinion			
	Govt. sector	Non govt. sector	Both govt. & non govt. sector	Total
	5(11.4%)	1(2.3%)	38(86.4%)	44

Majority of the Institutes had manpower of average 10-15 per institute. Only NIPORT, Dhaka had 34 doctors and 22 nurses. Institutes of Chittagong, Sylhet, Pabna, Rajbari, Gazipur and Dhaka had formal assessment system (Table-5 ).

setting of public health policy, determining broad resource allocation and providing an appropriate regulatory framework. Governments need to be set public health services on population based research and surveillance systems. Current demand for public health skills reflects the diversity of related issues and the public health workforce, as well as the better understanding of the comprehensive range of competencies required to deliver appropriate and evidence-based services. For an improved services there is a need for more investment in this sector as because the present capacity to respond to public health priorities, we recognizes a greater range of opportunities for effective health education and training. More specifically opportunities of work present in research and development, information development, harmonisation of public health regulatory frameworks and stronger national monitoring and surveillance systems<sup>6</sup>.

**Table–5: SWOT Analysis in regards to the production of CHW in Bangladesh**

Strengths	Weaknesses	Opportunities	Threats
<ol style="list-style-type: none"> <li>1. Available personnel as trainees &amp; trainers</li> <li>2. Enough Facilities are available in both sectors</li> <li>3. MATS can also run CHW programmes.</li> <li>4. There are enough target population.</li> <li>5. Health infrastructures for CHW already exists at community clinics and in NGOs</li> <li>6. There are 20 govt. approved institutes &amp; 12 applied for permission</li> <li>5. One year course for CHW is running at different institutes under DGHS &amp; SMF</li> <li>6. Health facilities are up to grass root level where CHW can work</li> <li>7. Existing good GO-NGO collaboration</li> <li>8. Commitment of Govt. to provide health care services will help govt to increase &amp; improve health indicators</li> <li>9. At present about 905 person nel can be trained yearly by 20 training institute</li> <li>10. Having enough manpower to be trained &amp; also to run the CHW course</li> </ol>	<ol style="list-style-type: none"> <li>1. Training institutes are not properly equipped with manpower &amp; instruments</li> <li>2. Lack of co -ordination among institutes, DGHS &amp; DGFP</li> <li>3. Attitude of business rather than academic &amp; or social welfare.</li> <li>4. No standard uniform course curriculum.</li> <li>5. Poor teaching -learning or training</li> <li>6. Services for target population are not well defined</li> <li>7. Job descriptions for CHW is not nationally established and uniform</li> <li>8. Less number of institutions, no definite guidelines</li> <li>9. Lack of good planning of production &amp; utilization of CHW</li> <li>10. Less institutes for production of CHW as per demand</li> <li>11. No job guarantee for CHW</li> </ol>	<ol style="list-style-type: none"> <li>1. There is a developed curriculum by SM F</li> <li>2. The program can be coordinated easily by SMF, there are job opportunities, particularly in community clinics and urban slums</li> <li>3. Opportunities for self employment are there</li> <li>4. Need more production CHW in Bangladesh</li> <li>5. Existing institutes and infrastructures present</li> <li>6. The CHW producing training is institution based following uniform course curriculum of 1 year</li> <li>7. Literacy rate is increasing &amp; a lot of educated both male &amp; female are coming forward to join this CHW course</li> <li>8. Good GO -NGO collaboration</li> <li>9. In many organizations man power can be utilized to train as CHW among rural population</li> <li>10. Lots of scopes of primary health care, essential service packages &amp; family planning services by CHW</li> <li>11. Having enough educated man power for training</li> </ol>	<ol style="list-style-type: none"> <li>1. Heterogeneous way of production of CHW</li> <li>2. Ongoing different programs will deteriorate the quality of services of CHW</li> <li>3. If job opportunities are not ensured, future unrest may result</li> <li>4. No standard uniform curriculum</li> <li>5. Reduced quality of produced CHW</li> <li>6. Conflict of interest will be raised between old staff &amp; new staff by designation</li> <li>7. Problems of quality also in non govt. sectors</li> <li>8. No structured guidelines, no job assurance, no future planning</li> <li>9. Selection/ Recruitment variation of CHW.</li> <li>10. Institutional capacity development is not properly done</li> <li>11. Non co-operation from concerned authority &amp; lack of positive attitude for establishment of the centre</li> <li>12. If quality is not controlled &amp; government organization not involved in admission procedure, the programme will fail and people will not get good services</li> </ol>

DGFP-Directoret General Health Services ,MATS-Medical Assistant Training School, SMF-State Medical Faculty, GO-Govt Organization,NGO-Non Govt Organization.

**Discussion**

"Public health' is the organized response by society to protect and promote health and to prevent illness, injury and disability. The workforce involved in this enterprise ranges from those who identify as public health professionals to those who may undertake aspects of public health functions in the course of their health or other related work.

Public Health Services occur at a number of levels. Commonwealth, State and Territory governments are primarily concerned with the

Rural health care facilities include a wide variety of services along the continuum of care: nursing home, assisted living, home health, hospital, clinic, oral health, mental/behavior health, emergency, and pharmacy<sup>7</sup>

Recent trends make clear that the struggle to find employment is widespread and that people at the low-wage and less educated end of the employment spectrum face an increasingly uphill battle to find jobs that pay adequately. As the growth of the economy has slowed, job growth is concentrated in positions requiring skills that are hard to find

among the unemployed.<sup>8</sup>

In United States, the Bureau of Labor Statistics projected that between 2000 and 2010, the work force they will need is in shortage and accordingly the capacity building was planned. In contrary Bangladesh has managed to develop nation wide network of medical colleges, nursing and paramedical institutes. According to DGHS Health Bulletin 2009, there are 59 Medical colleges (41 of them are private), 13 nursing colleges (7 of them are private), 69 nursing institute (22 of them are private), 17 medical assistant training schools (10 of them are private), and 16 institute of health technology (13 of them are private). In spite of this growth to health workforce production, Bangladesh is still having health workforce shortage in number, skill and distribution.

The World Health Report 2006 identified Bangladesh among 57 countries with critical shortage of doctors, nurses and midwives (Compared to WHO identified threshold of 2.28 doctors, nurses and midwives per 1000 population, Bangladesh has 0.56 per 1000 population). The Nurses: Doctors' ratio is below 1:1, which is among the lowest group in the world.

Repeated assessments have shown that there are major quality gaps in the teaching learning process and environment in health workforce education institutes. The recent growth of the non-government health professionals' education sector has increased the need of having functioning health professionals' regulatory bodies, which can work closely with the related government agencies to ensure the quality of education and practice. There is no recognized body to ensure the quality of public health education and accredit the related courses.<sup>9</sup>

Over 80% of Bangladeshi's turn to non-govt. health care providers as a first port of call when they fall ill. These health care providers include traditional healers, traditional birth attendants, village doctors, drug stores and NGO trained community health workers. Community members often value informal providers as they only charge for the drugs, not the consultation. They also offer flexible payment schemes.

In Bangladesh there are only 5 physicians and 2 nurses per 10,000 of the population as opposed to 12 village doctors and 11 drug sellers. Therefore unqualified providers give drugs and advice to the community people but they rarely rely on laboratory testing or refer appropriately to the formal sector. This leads to problems related to the inefficient and improper prescribing of drugs which can lead to continuing ill health and impoverishment.<sup>10</sup> Health service that is often provided by informal health care providers are the first line health services therefore they should be trained to improve their skill and efficiency.

The shortage of qualified health workers, especially in low-income countries, has drawn attention in recent times, as it seriously threatens the attainment of the millennium development goals (MDGs).<sup>11</sup> Bangladesh is identified as one of the countries with severe health worker shortages. However, there is a lack of comprehensive data on human resources for health (HRH) in the formal and informal sectors in Bangladesh. This data is essential for developing an HRH policy and plan to meet the changing health needs of the population. This paper attempts to fill in this knowledge gap by using data from a nationally representative sample survey conducted in 2007.<sup>11</sup>

## Conclusion

Our study find out the strengths, weaknesses, opportunities & threats(SWOT Analysis)of community health workforce development system in Bangladesh in terms of infrastructures, logistics, teaching facilities and manpower for production of CHW. Study survey carried out in selected institutions of some district of Bangladesh. Therefore a nationwide survey should be carried out to provide data and informations to develop a national policy in CHW production.

We also conclude that the quality of health care-across the board in the public and private sectors needs improvement.

## References

1. Report of Regional Consultation of Strategic Plan for Health Workforce. Bali, Indonesia, 18-20 December 2006, World Health Organization, Regional Office for South-East Asia, New Delhi, May 2007
2. Training Community Health Workers. Using Technology and Distance Education. The Health Resources And Services Administration's Office Of Rural Health Policy With The Frontier Education Center Under Contract Number HSH250200436014C (April 2006)
3. Community Health Workers: Who they are and What they do Mary Beth Love, PhD: Health Education & Behavior, Vol. 24, No. 4, 510-522 (1997)
4. Dhaka declaration, Strengthening Health Workforce in countries of the South-East Asia Region. Dhaka, 22 August,2006
5. Accreditation Guideline for Educational/ Training Institutions and Programmers in Public Health. Report of the Regional Consultation, Chennai, India, 30<sup>th</sup> January-1 February 2002.
6. National Public Health Partnership Public Health Workforce Development Background Paper. Jun1998
7. Report of Regional Consultation of Strategic Plan for Health Workforce, Bali, Indonesia, 18-20 December 2006,WHO Regional Office for South East Asia, New Delhi, May2007
8. Policy Statement 31: Workforce Development Systems
9. Strengthened Health System, Human Resources for Health, World Health Organization, Country office for Bangladesh.
10. Institute of development studies. Health workforce in Bangladesh: Who constitutes the healthcare system?
11. Ahmed S.M, Hossain M A, Ahmed M, Chowdhury R, Bhuiya A U. The health workforce crisis in Bangladesh: shortage, inappropriate skill-mix and inequitable Vol - 9, Issue - 3, February - 2011