

Research Articles

Supporting the role and enabling the potential of community health workers in Bangladesh's rural maternal and newborn health programs: a qualitative study

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Background

In the global journey towards Universal Health Coverage (UHC), strong primary healthcare systems are essential. This includes the frontline health workers, the bedrock of which are community health workers (CHWs). In Bangladesh, this largely female workforce plays a critical role in health promotion and linking communities with the formal health care system. With the launch of the new national strategy on CHWs, and its ambitions around the implementation of harmonized systems of financing, certification, job harmonization, performance assessment and supportive supervision, it is important to reference the perceptions, experiences, needs and aspirations of CHWs themselves.

Methods

This qualitative exploratory study examines three UNICEF supported maternal and newborn health (MNH) programs in rural Bangladesh, with two districts sampled for each program. In-depth interviews were conducted with CHWs, community members, other health workers, and program managers. Data were analyzed using a thematic analysis approach, with a particular focus on the voice and experience of CHWs and the programmatic features that support them in serving their communities.

Results

Across all three programs, CHWs function as critical local agents for health promotion and referral whose recruitment from and support by the community, enhances their effectiveness. Regular communication and collaboration between CHWs and public-sector frontline workers were perceived as important in enabling their role in increasing the coverage of essential services. Support for structured systems of training, supervision and monitoring which encompass the support of referral decisions, was also apparent. Of particular note were the needs and aspirations of CHWs regarding work-life balance, job satisfaction and desire for professional development. These concerns emphasize the importance of flexibility in how the CHW workforce is configured such that roles, responsibilities and remuneration are keyed to experience and qualifications, and the dynamic needs and aspirations of CHWs over the life course.

Conclusions

As Bangladesh pursues its UHC agenda, CHWs are pivotal in linking underserved communities to the formal health system. Flexibility in the scope of CHW roles and responsibilities, as well as supportive supervision, regular training and fair remuneration, will optimize their contributions towards UHC and better MNH outcomes.

In the long journey towards Universal Health Coverage (UHC), the recent 40th anniversary of the Alma Ata Declaration served to refocus attention on the importance of strong primary healthcare systems.^{1,2} This includes the frontline health workforce, the bedrock of which are Community Health Workers (CHWs).³ With a history dating back to Chi-

na's barefoot doctors in the 1920s, the role of CHWs in promoting health at the community level through education, basic primary care and referral, remains essentially unchanged.⁴ CHWs today provide community-based services in a variety of specialized areas including maternal and newborn healthcare (MNH), family planning, eye care,

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Table 1. Description of MNH programs

Program	Description
MNHI	<ul style="list-style-type: none"> • Maternal Newborn Health Initiative founded by a consortium of UN organizations in 2009. • Focused on improving the continuum of MNH care, using Behavior Change Communication on the demand side, and the organization and implementation of referral teams on the supply side. • Implemented by selected local and national-level NGOs.
BRAC IMNCS	<ul style="list-style-type: none"> • Improving Maternal and Newborn Child Survival, a BRAC-UNICEF partnership project initiated in 2008 • Enhances the continuum of quality care for women and newborns by integrating maternal and newborn health education and awareness in the community, establishing local referral hubs, and instituting a workforce of Referral Program Officers in government hospitals who ensure that incoming patients receive appropriate delivery care services. • Implemented by BRAC.
MNCS	<ul style="list-style-type: none"> • Maternal, Newborn and Child Survival program established in 2008 by UNICEF in partnership with local NGOs. • Prioritized newborn care in hard-to-reach areas and indigenous populations. • Implemented by local NGOs.

tuberculosis treatment and Non-Communicable Diseases (NCDs)^{5–11} in both rural and urban settings worldwide.^{12,13}

In Bangladesh, CHWs are a heterogeneous but predominantly female workforce whose service in promoting family planning, immunization, and oral rehydration therapy has contributed importantly to the country's remarkable health improvements since the early 1980s.¹⁴ Of the more than 185,000 CHWs in Bangladesh, approximately 115,000 are informal workers recruited locally and supported by Non-Governmental Organizations (NGOs), some salaried, and some volunteer.¹⁵ The remainder are public sector employees based at community clinics, the lowest tier of the national health system. The Government's recently released CHW strategy is a first step towards more formally recognizing CHWs as key health systems actors whose effectiveness is critical to population health.¹⁵ In moving forward, issues of sustainability and quality need to be addressed, including financing arrangements, job certification and harmonization, performance assessment and supportive supervision. This study examines three NGO-implemented MNH programs in rural Bangladesh with a particular focus on the perceptions and aspirations of CHWs and the programmatic features that support them in serving their communities. We argue that ongoing institutionalization processes should accommodate the needs of CHWs as regards flexibility, recognition, supervision, remuneration and referral support. Such efforts would reinforce the credibility and effectiveness of CHWs both within their communities and the health system at large, and ultimately contribute towards improved MNH outcomes.

METHODS

STUDY DESIGN AND PARTICIPANTS

This exploratory qualitative study is part of a broader 2013 UNICEF-commissioned realist evaluation of three Maternal and Newborn Health (MNH) programs in Bangladesh; the BRAC-led Improving Maternal, Neonatal and Child Survival (BRAC IMNCS) program, the Maternal, Neonatal and Child Survival (MNCS) program, and the Joint Government of Bangladesh-UN Maternal Newborn Health Initiative (MNHI). Supported by UNICEF and its partners and implemented through NGOs, all three programs were motivated by the goals of improving neonate and child survival, reducing

maternal mortality and scaling-up Emergency Obstetric Care (EmOC) services (Table 1).

Common across all three programs was their reliance on CHWs for community-based outreach and implementation of basic MNH services including education about safe maternal practices, and referral for delivery care. To explore the attributes of effective CHW programming, interviews with CHWs, community members, government health workers and NGO managers were organized in six purposively selected districts where program implementation had been ongoing for a year or more: Thakurgaon and Jamalpur for MNHI, Nilphamari and Gaibandha for BRAC IMNCS, and Bandarbans and Gopalganj for MNCS (Table 2).

DATA COLLECTION

Two weeks of preliminary fieldwork were performed in several districts to facilitate greater contextual familiarity. Five experienced researchers with graduate degrees in anthropology followed CHWs in their work, and performed informal observations in local health facilities. These insights informed the development of in-depth interview guidelines with district level civil surgeons, doctors, government frontline health workers, NGO managers, community members and CHWs. Guidelines were piloted in two areas prior to the initiation of the main study.

The study was undertaken over an intensive 2-month period by the same team of anthropologists and supervised by three senior researchers (AA, SFR & MS) with medical and social science training. This paper refers to a sub-set of interviews (at least 12 per districts) that explore the role and experience of CHWs.

DATA ANALYSIS

Interview audio recordings were transcribed in Bangla and then translated into English. Final transcripts were imported into ATLAS.ti (Scientific Software Development GmbH, Berlin, Germany) and "a priori" codes relating to CHWs were defined and applied. Coded textual excerpts were assembled into a single file, and analyzed using a team-based thematic approach involving the systematic examination of emerging patterns and themes by multiple analysts, followed by group discussion and interpretation.¹⁶

Table 2. In-depth interviews conducted by program and site.

Program	Site	CHWs	Community members	Community clinic workers	Doctors	NGO managers
BRAC IMNCS	Nilphamari	5	3	2	1	1
	Gaibandha	7	4	2	2	3
MNCS	Bandarbans	6	4	2	1	1
	Gopalganj	5	3	2	1	1
MNHI	Thakurgaon	3	2	3	2	3
	Jamalpur	5	3	2	1	2
	Total	31	19	13	8	10

ETHICAL CONSIDERATIONS

The study was reviewed and approved by the Ethical Review Committee of the James P. Grant School of Public Health at BRAC University, Bangladesh. Prior to the interview, written informed consent was obtained from each respondent confirming their understanding about the purpose of the research, the measures undertaken to ensure confidentiality, and their right to withdraw from the interview at any time, for any reason. Permission was also sought for audio-recording. Arrangements for the place and time of interview were organized in advance according to the respondent's convenience and privacy.

RESULTS

Across all three programs, CHWs played an important role in supporting maternal and newborn health at the local level, although variations in recruitment, training, supervision and remuneration were apparent. Emerging from these diverse experiences are a number of key considerations relevant to current discussions on the attributes of effective CHW programming, and how to bring CHWs more squarely within formal health systems and the pursuit of universal health coverage.

RECRUITMENT FROM THE COMMUNITY

The large majority of CHWs in our sample were recruited from the community they served. Due to their familiarity with local residents, a relationship of trust and acceptance was nurtured, enhancing the uptake of MNCH messaging. As reported by one Thakurgon community member, "Why won't I trust? They are from our village.... I have to trust them!" The CHWs' reputation as someone who was approachable, knowledgeable, and "dependable" also fostered community acceptance. Local respondents appreciated the advice and support of CHWs and felt their questions "were listened to with attention" [MNHI Thakurgon]. According to one community respondent:

"...if CHWs were unfriendly they wouldn't be able to come or to say anything... I trust them; because they tell us so that we can be aware" [MNCS Gopalganj].

In return, CHWs felt the community's trust and willingness to engage:

"People listen and become compelled to take our advice...many people don't want to go to the hospital...but emergency services can't be provided at home. That is why we inform them" [BRAC IMNCS Nilphamari].

Exemplifying the cultural sensitivity of local CHWs were efforts to engage husbands and mothers-in-law, who are key decision-makers around pregnancy and delivery care in rural Bangladesh yet often resistant to messages about the importance of institutional delivery, reduced workload, and healthy nutrition for pregnant mothers. Yet many challenges remain. A CHW from Nilphamari joked about prevailing conservatism within their community "They (mothers-in-laws) say 'Why all the caesareans? Why less work? Does everybody not still eat rice?'" while another CHW in Gopalganj observed,

"the mothers-in-laws say it's too much: they were not harmed (when they had children), so their son's wife won't be harmed either" [MNCS Gopalganj].

Embracing these challenges, CHWs were recognized as valued facilitators of community awareness about healthy pregnancy and safe delivery care. One village respondent said:

"Yes, the community has changed a lot...I have been married 11 years, and in all these years I have heard of only two babies who died..." [BRAC IMNCS Gaibandha].

Another respondent concurred that improvements in maternal and newborn health outcomes in her community were palpable, providing her own pregnancy as an illustration:

"...the CHW urged me to go [to the hospital] immediately...doctors said if I had arrived any later, my baby would have died..." [BRAC IMNCS Gaibandha].

The credibility that CHWs command within the communities they serve is an important consideration when developing standardized recruitment criteria for the CHW workforce. Given continued cultural resistance to the uptake of safe MNH practices in Bangladesh, the need for local "translators" is even more important. For this reason, priority must be given to recruiting empathetic and caring local CHWs whom the community respects, based on shared backgrounds, language, local values and understandings, socioeconomic status and life experiences.¹⁷ This is even more important in situations where public hostility and lack of trust impede the delivery of public health interventions as experienced in recent Zika and Ebola outbreaks in Latin America and Africa. In these circumstances, community health workers are an important local ally. Their cultural competencies and communication skills can facilitate social mobilization, and contribute to the adaptive resilience of communities and health systems.¹⁸

COMMUNITY SUPPORT

In all three programs, various community groups were formed to support CHWs in ensuring safe pregnancy and delivery care for women in their community. Among their functions was to persuade reluctant families to take pregnant women for checkups, emphasize messaging around immunization and delaying marriage, raise funds to cover emergency transport for poor families, provide advice throughout pregnancy, and support the CHW around referral decisions in cases when women required emergency care. Comprised of influential “club leaders, teachers and religious leaders”, within these groups, CHWs were relied on to “share women’s concerns,” as many female members felt uncomfortable talking about intimate matters in the presence of men. As described by one community member from Gaibandha, these groups also provided guidance to CHWs: “CHWs stay with us during the meeting...[we] talk to them about their problems and advise them about what they should do.” The role of government community clinic committees in supporting CHWs in their work and keeping the clinic services accountable to community needs, was also acknowledged. Committee meetings were attended by government frontline workers, and in MNHI and MNCS programs, by the CHW’s immediate supervisors. In only a few cases, however, were they reported as regular occurrences. Several community members indicated their desire for more frequent meetings, while others were unaware that such groups existed in their part of the district [BRAC IMNCS Gaibandha].

When organized, community groups and clinic committees appeared important in supporting the role of CHW, and their presence at such meetings proved crucial in ensuring that the voice of women was heard. Results also suggest that greater female representation and regularity of meetings would enable the provision of appropriate and timely support to CHWs, and more active community monitoring of their work. As Perry and Zulliger pointed out in their review on the effectiveness of CHWs, for CHW programs to function well,

“communities need to be partners..., with the opportunity to participate in their design, in the selection of CHWs, and in providing oversight to CHW performance at the community level” (p.11).¹⁹

COMMUNICATION AND COLLABORATION WITH THE PUBLIC HEALTH SYSTEM

Among almost all of our respondents, communication and collaboration between the government’s community clinic and local CHWs was viewed positively. In rural Bangladesh, community clinics represent the lowest tier of the public primary care system, providing a variety of services including routine immunizations, nutrition, screening and risk assessment for NCD conditions, as well as MNCH services (ante and post-natal care, emergency newborn care, family planning and growth monitoring) to a surrounding population of approximately 6,000 persons. Community clinic staff noted the importance of task-shifting to CHWs particularly during busy periods. One government health worker recognized in particular their assistance with house-to-house visits:

“If I am under excessive work pressure, and I ask them, then they stay with me and give medicine...when I go for field visits, they also go” [MNHI Thakurgaon].

Other forms of cooperation related to the detailed information CHWs possess regarding pregnancy status and

medication or immunization needs, which they shared with community clinic staff regularly. According to a government health worker in Bandarban,

“We easily get information about any new pregnancy...If CHWs weren’t there, we would have to go from house to house and search for them” [MNCS Bandarban].

Another clinic staff member in Nilphamari noted that although the work of CHWs appeared to “overlap” with her duties “because BRAC CHWs work with fewer numbers of households...they don’t miss any information.”

Under MNCS, collaboration with the public system was integrated into the CHW’s daily routine, as they were expected to spend the first hour of their workday in the community clinic, prior to beginning house visits. According to a government health worker in Gopalganj, the community clinic relied on CHW assessments “in the field,” while another stressed the need to “cross-check” the information CHWs obtained in the field with community clinic records.

Interactions between BRAC CHWs and government health workers appeared far less structured, with collaboration mainly occurring around vaccinations, Vitamin A and polio days, and some informal record sharing:

“A government family welfare assistant comes here...I take the list of new pregnant mothers from her, and she also takes the list from me as well” [BRAC IMNCS Nilphamari].

In Gaibandha, collaboration between CHWs and community clinic staff was sporadic and sometimes fraught, especially when it came to deciding who should receive the government incentive for referral. However, in general, the household-level knowledge of BRAC CHWs was highly valued; according to a government health worker:

“They know better who is getting vaccinations in which households, and who aren’t... as they have greater manpower in a smaller working area” [BRAC IMNCS Gaibandha].

Regular communication and collaboration between CHWs and public-sector frontline workers are clearly beneficial in ensuring community coverage of critical services such as immunization, family planning and pregnancy care, and in minimizing duplication of services. At the same time, the public system needs to assure a regular supply chain supporting these services, described by one respondent as a “structural barrier” that hinders the quality of care that CHWs provide. As Puett et al. (2015) have shown in their study on community health worker perceptions in southern Bangladesh, CHWs feel constrained in their ability to provide effective services due to unreliable supplies of medicine and commodities from the community clinic, and by poor service quality in the public health system after referral.²⁰ Evidence in the literature also suggests that structural constraints in the public system can compromise community trust in the abilities of CHWs, highlighting the importance of effective linkages with and support by the formal health system.²¹

SUPERVISION AND REPORTING FOR SOCIAL ACCOUNTABILITY

In all three programs, strong systems of supervision and monitoring emerged as central to supporting CHW effectiveness. In addition to monthly supervisory visits under MNHI and MNCS, community support groups also monitored CHW performance and kept track of pregnancies oc-

curing in their area. By contrast, a singular and highly structured supervisory system was maintained in BRAC linking CHWs and their local supervisors, with Upazila managers, and ultimately, to managers at the district level. As one supervisor explained,

"monitoring means we observe and record...if the CHW makes any mistake then my duty is to tell them and help them to correct it [in the field]" [BRAC IMNCS Nilphamari].

Just as supervisors emphasized how regular review of work plans and registers hold CHWs accountable to the households they serve, CHWs consistently noted the critical input of supervisors around the management of risk factors, as well as referral decision-making and support. These findings are also reflected in literature which suggests that regular supportive supervision is linked with CHW motivation and performance, and that inadequate training of and support to supervisors leads to weaker CHW performance.²²

COMMUNITY-TO-HOSPITAL REFERRALS

A central role of CHWs in Bangladesh is facilitating community-to-hospital referrals. According to one NGO manager, two types of referral are common; one in which a CHW recognizes a risk factor and refers the patient to the hospital, and the second *"when there is an emergency"* and the CHW accompanies the patient to the hospital. However, across the sample districts, and similarly noted by Give and colleagues in Mozambique (2019), when the costs associated with transportation or delivery care are considered onerous, convincing families to accept referral for facility birth may be difficult.²³ In these instances, some CHWs chose not to disclose the full cost of delivery care viewing impoverishment as a preferred outcome to maternal death:

"a great deal of time is spent convincing the family to send the mother to the clinic...if [for example] the family needs to spend money on a C-section, and doesn't have any savings...they may be forced to sell their only cow."

As a consequence,

"CHWs are sometimes blamed and distrusted as they falsely promise that fees and other costs (do not exist) or will be reimbursed by government" [CHW supervisor, MNCS].

Under BRAC's MNH program, village *referral hubs* were designated as locations from which transportation services could be arranged and accessed by patients needing hospital care. While these arrangements served to mitigate some of the logistic and financial burden on families, they were most often used for emergency referrals. According to one CHW,

"we use the referral hub but not in all cases. We send some mothers, who are well enough, by pull cart...but if mothers suffer from bleeding and face difficulty with the placenta, we accompany them to the referral hub and they take it from there" [BRAC IMNCS Nilphamari].

Accompanied by the CHW, on arrival at government hospital patients are received by BRAC's referral program officer and assisted with the process of registering and receiving care. A number of BRAC CHWs acknowledged the help of referral officers in navigating facility delivery process and ensuring patients' right to free or subsidized care. These benefits have been quantified in a quasi-experimental pre-

post study of BRAC interventions which attributed greater equity in uptake of referral services for C-section than a comparison area.¹⁴

In our study, several reports of referrals averted to unqualified providers outside of the formal system, and referrals received too late by qualified providers, also emphasize the importance of monitoring mechanisms for follow-up and review that ensure the referral cycle between home and health care facility is working as intended.^{17,19,23} A recent qualitative study of CHW-facilitated referral in Mozambique further identified continuous communication between CHWs and their supervisors at the health care facility (i.e. via SMS) as essential to successful patient outcomes, including feedback on patient diagnosis and treatment so that appropriate post-partum support can be provided. Consistent across our findings and the literature is the need for greater investments in referral systems linking CHWs with formal delivery facilities, inclusive of supervisory support, free ambulatory services and affordable, high quality care. These investments in health systems functions and capacities are critical to increasing CHW effectiveness and maximizing their contribution to UHC.²¹

COMPENSATION AND INCENTIVES

The salary structure for CHWs across the three programs was inconsistent, creating confusion among implementers and donors, and dissatisfaction among CHWs. MNCS provided fixed wages varying from US\$3 to US\$17 (about BDT255 to BDT1443) per month, but only every 3 or 4 months. Incentives supplied by the government community clinics for C-section referral and facility delivery, varied by about US\$5 (about BDT424). Under the MNHI program, while a monthly salary was provided in Thakurgaon, in Jamalpur, CHWs were unpaid. In BRAC's MNH program, CHWs were unsalaried but provided with medical and non-medical products for sale with an unpredictable profit margin they could retain: *"...If I sell more medicine then I make more, if I sell less then I make less"*. Other forms of compensation included varying NGO-furnished incentives for services such as providing direct observed therapy treatment for tuberculosis, identifying a pregnancy, being present during delivery, or taking the baby's birth weight within 24 hours. Government service-related incentives were also reported, such as US\$4 (about BDT340) referral fee for permanent contraceptive procedures, and US\$0.30 (about BDT25) for other non-permanent methods, as well as Pay-for-Performance (P4P) program incentives for pregnancy identification and referrals. Intended to motivate performance and follow-up, these material incentives were appreciated by CHWs, but could not be counted on as a regular form of income support.

At the same time, CHWs noted non-material incentives such as respect and empowerment derived from serving their local communities. According to one CHW in Gaibandha, *"I... care [for and] get acquainted with people. Now if anything happens people come and call me."* Glenton et al. (2010) similarly identify the role of non-material rewards in motivating and retaining volunteer community health workers in Nepal.²⁴ Yet the importance of material compensation cannot be overlooked. In Ethiopia, recent studies indicate that compared with salaried workers, unpaid CHWs fare worse along various economic and psychosocial dimensions, reporting lower levels of empowerment and higher levels of psychosocial stress.^{25,26} The provision of standardized financial incentives based on qualifications, responsibility, experience and/or performance would value the foundational role CHWs play in promoting population

health and linking people to services.²⁷

FLEXIBILITY OF WORK SCHEDULE

For many of our respondents, the part-time and flexible nature of community health work permitted their participation, allowing them to simultaneously accommodate domestic and other responsibilities alongside household visits and community mobilization activities. Described by one CHW in Nilphamari: *"Although initially my family didn't agree...the advantage of this job is I can handle household activities simultaneously."* The need for flexibility was also a function of the periodic nature of MNH duties, where the number of pregnancies and timing of deliveries dictated work hours, and rarely required full-time work. Under MNCS, pregnancy and newborn care involved 2-3 days per week with responsibility for approximately 200-250 households. BRAC's CHWs also worked part-time, but twice as many days a month due to the larger set of health promotion activities for which they were responsible. In MNHI, several CHWs were students pursuing higher secondary studies who chose CHW work to gain income and experience while maintaining their academic schedule. As one CHW explained, *"If I become a CHW then I can help people voluntarily...besides as I am still a student...I can do this job while studying."* She further noted the advantage of CHW work over tutoring:

"[While] tutoring students 6 days per week for 1 to 2 hours will yield approximately US\$6 (about BDT509) per day...as a [CHW] I can earn the same by working 2 days a week."

In efforts to institutionalize CHWs more formally into health systems, offering flexible options of part-time and full-time work will accommodate the needs of its largely female workforce, and the challenges of balancing work and family responsibilities²⁴ given that family pressure is an important driver of CHW attrition.¹³ It is also important to recognize that family responsibilities change over time. Taking women's needs and aspirations into the planning and implementation of CHW programs will increase job satisfaction and retention, and ultimately improve the equity and effectiveness of health systems.²⁸

CAREER ADVANCEMENT

When asked about opportunities for career advancement, few CHWs viewed this as realistic. Instead they noted the limitations of not possessing an education beyond secondary school, and the absence of a structured career track permitting advancement beyond their current role. While BRAC offered a limited form of promotion, from CHW to supervisor status, it was confined to those with *"higher secondary"* education qualifications. Under BRAC IMNCS and MNHI, some CHWs were trained as Community Skilled Birth Attendants (CSBAs), allowing them to broaden their portfolio of expertise and assist in home births. In Jamalpur, it was reported that 18 CHWs working with MNHI trained for six months as private community skilled birth attendants and assumed responsibilities for referral and family planning. Similarly, in BRAC IMNCS, a number of CHW supervisors were trained to be private community skilled birth attendants, but according to a worker in Gaibandha, only when there were gaps in coverage by government skilled birth attendants. The informality of these arrangements, and apparent interest in taking on additional responsibilities, points to the need for a structured system of promotion that adapts to the needs and career aspirations of CHWs.

Just as the option of part-time or full-time work is important to maintain, a range of opportunities for professional advancement should be available to CHWs depending on their experience, education and motivation. For example, educational investments in high-performing CHWs might allow them to engage in training opportunities that would qualify them for community clinic positions thereby filling gaps in local government health services.¹⁷ Simultaneously, structured systems of promotion within the CHW workforce that recognizes experience, initiative and job performance would offer room for professional growth and leadership and mitigate the widespread and growing issue of CHW attrition.^{21,29}

TRAINING

There was considerable variation between the three programs in the length of initial CHW training (from 5 to 18 days), and the frequency of refresher training (every 3 to 6 months). We also noted apprehension from some providers about the capacity of CHW to perform assigned duties due to inadequate training, with one BRAC manager noting that, *"...CHWs need to be more skilled...and if their training was more practical and less theoretical, they could be even more effective."* In particular, several respondents suggested that training pedagogy be revised to include more opportunities for the practical application of key skills and concepts to situations encountered in the field.

At the same time, demands by CHWs for additional training beyond maternal and neonatal health, were widespread: *"I want [more] training...I cannot do anything if someone is ill. If I could help them then it would be better"* [MNCS, Banderbans]. Some of the additional skills desired by CHWs included blood pressure and body weight measurement, giving injections and providing contraceptive and nutrition counseling. In the context of workforce shortages in a community clinic in Gopalganj, one provider suggested that CHWs be trained to take on more responsibility regarding pregnancy care such as calculating the expected delivery data. Concerned about the large number of women coming into the hospital with eclampsia, another provider noted that this complication could be effectively prevented and managed by CHWs. Training CHWs on the appropriate use of misoprostol tablets for home birth was also suggested as a means of preventing post-partum hemorrhage.

Our findings resonate with current global discourse on expanding the role of CHWs to fill critical local-level gaps in healthcare and to avert epidemic threats through prevention, detection and response.^{17-19,30} In their discussion of the future of community-based strategies in South Asia, for instance, Bhutta et al. (2018) advocate for an increased role of CHWs in tackling the unmet need for NCD prevention and treatment services, mental health care as well as sexual and reproductive health.¹⁷ Additionally, Boyce and Katz (2019) see a role for CHW in pandemic preparedness: *"increasing access to health products and services, distributing health information, and reducing the burden felt by the formal healthcare system"* (p.4) before, during and after infectious disease outbreaks.¹⁸ In their view, CHWs are particularly suited to expand community-level adaptive resilience by increasing social mobilization, performing surveillance activities, and filling health service gaps created by the outbreak.¹⁸

CONCLUSIONS

At the heart of UHC is equity in healthcare access. This involves connecting people to facilities and enabling the uti-

lization of services by those in need. The role of community health workers in this effort is fundamental, particularly in low and middle-income countries where workforce challenges constrain national efforts to reach remote or vulnerable populations. At the same time, greater global attention to community-based and “people-centered” approaches to healthcare, and related investments in the expansion and transformation of the global health workforce are apparent.³¹ The contributions of CHWs are a crucial part of this transformation given their role as intermediaries motivating and creating community demand for health and healthcare.

Classified as a country in the early stages of UHC, Bangladesh faces “daunting challenges” in responding to the needs of the healthcare workforce and ensuring healthcare coverage of its population.³² As apparent in our study, CHWs play an important role in the country’s UHC agenda, linking rural women to MNH services, and enabling equitable access to health promotion and disease prevention especially in remote and underserved areas.³³

However, in many settings, an interplay of financial, infrastructural, programmatic and socio-cultural factors constrain the potential contribution of CHWs.^{20,34,35} Many of these were identified in this study, such as lack of training and adequate remuneration, weak referral systems, and conservative cultural norms. Literature emphasizing the benefits of local recruitment,³³ and community engagement to CHW effectiveness and accountability,³⁶ also resonate with study findings. Similarly supported in the literature is the need for continuous training and supportive supervision, and stronger coordination and referral with the formal healthcare system.^{14,17,22,23}

While there is growing consensus about the features of successful CHW programming, nuanced insight on how CHWs themselves perceive their engagement is critical. Of particular note in this study was the value that CHWs placed on flexibility and growth within and beyond their professional role, and relationship of both to personal fulfillment and job satisfaction. For some, the part-time nature of CHW work was essential, allowing tasks to be scheduled around other family responsibilities. For others, CHW work was perceived as a stepping-stone towards future career opportunities in the health sector. In both scenarios the need for flexibility was emphasized, whereby a spectrum of part-time and full-time work arrangements could be accommodated, and where career progression to higher level positions and/or entry into training for other healthcare roles was possible.^{28,32} Fundamental in any effort to institutionalize CHWs into health systems is responsiveness to the diverse needs of the CHW workforce, and the provision of training opportunities such that changing aspirations can be enabled, and emerging community health needs can be addressed.³⁷

Connected to the process of institutionalization is remuneration. Over the past several decades, the value of women’s time, and the opportunity costs associated with volunteerism have grown.²⁷ Global calls for greater pay equity for women in the health workforce further emphasize the need for fair compensation commensurate with CHW workload and agreed standards.³² Findings from this study support this policy direction. While many respondents spoke to the social motivations and rewards of community service, frustration with insufficient and inconsistent sys-

tems of incentives was also expressed. Given the importance of this predominantly female workforce in supporting healthcare at the grassroots level, standardized compensation is needed that is keyed to performance and level of responsibility. In addition, due attention should be given to the appropriate costing of a CHW program and if large scale implementation is planned, how these costs might be supported on a sustainable basis.⁴

A final reflection relevant to policy reforms supporting the institutionalization of CHWs is the need for rigorous context-specific research that assesses workforce needs, capacities and performance.³⁷ Recent conclusions from the WHO Gender Equity Hub indicate the disproportionate focus of workforce-related research on physicians, followed by nursing, midwifery, pharmacy and academe compared to community, mid-level, and informal health workers.³⁸ As this study demonstrates, in efforts to strengthen this evidence-base, the rich narratives of CHWs are an indispensable source of insight for responsive policy change.

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