


# BMJ Open Supporting community health workers in fragile settings from a gender perspective: a qualitative study

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## ABSTRACT

**Objective** To explore how gender influences the way community health workers (CHWs) are managed and supported and the effects on their work experiences.

**Setting** Two districts in three fragile countries. Sierra Leone—Kenema and Bonthe districts; Liberia—two districts in Grand Bassa county one with international support for CHW activities and one without: Democratic Republic of Congo (DRC)—Aru and Bunia districts in Ituri Province.

**Participants and methods** Qualitative interviews with decision-makers and managers working in community health programmes and managing CHWs (n=36); life history interviews and photovoice with CHWs (n=15, in Sierra Leone only).

**Results** While policies were put in place in Sierra Leone and Liberia to attract women to the newly paid position of CHW after the Ebola outbreak, these good intentions evaporated in practice. Gender norms at the community level, literacy levels and patriarchal expectations surrounding paid work meant that fewer women than imagined took up the role. Only in DRC, there were more women than men working as CHWs. Gender roles, norms and expectations in all contexts also affected retention and progression as well as safety, security and travel (over long distance and at night). Women CHWs also juggle between household and childcare responsibilities. Despite this, they were more likely to retain their position while men were more likely to leave and seek better paid employment. CHWs demonstrated agency in negotiating and challenging gender norms within their work and interactions supporting families.

**Conclusions** Gender roles and relations shape CHW experiences across multiple levels of the health system. Health systems need to develop gender transformative human resource management strategies to address gender inequities and restrictive gender norms for this critical interface cadre.

## INTRODUCTION

Achieving Universal Health Coverage and the Sustainable Development Goals (SDGs), rests on the efforts and actions taken in fragile and conflict-affected settings (FCAS), where approximately two billion people are estimated to live.<sup>1</sup> These settings are often

## Strengths and limitations of this study

- This study is a gender analysis of the interplay between community health workers (CHWs), their communities and the health systems in fragile and conflict-affected settings.
- Gender roles, norms and expectations in fragile contexts affected selection, retention and progression as well as safety, security and travel of CHWs.
- The gender transformative potential of the CHW policies in the three study contexts is limited; health systems need to develop gender transformative human resource management strategies to address gender inequities and restrictive gender norms for this critical interface cadre.
- As the study focused on the perspectives of CHWs, decision makers and manager, the perspectives of the community and patients were missed; only in Sierra Leone, CHWs were included in the research process.

characterised by weak health systems, acute human resource shortages and poor health indicators. Access to equitable and quality healthcare services is central to strengthening health systems and the social fabric in these contexts.<sup>2</sup>

Human resources for health underlay the expansion of, and access to, quality health services. Sierra Leone, Liberia and Democratic Republic of Congo (DRC) all have a low density of higher cadre healthcare workers. Thus, the support of close-to-community care providers, such as community health workers (CHWs), drug distributors, village midwives and traditional birth attendants, can bridge the gap between poor, marginalised and underserved households and the health system.<sup>3</sup>

CHWs are embedded within their communities and make critical contributions to health systems in FCAS.<sup>4</sup> In the drive to achieve the SDGs, there is renewed focus on the contribution of CHWs.<sup>5</sup> To support



their contribution, CHWs should be integrated into the overall health system, with effective human resource management (HRM) systems and supporting strategies.<sup>4,6</sup> HRM strategies are influenced by context, socio-cultural factors and gender norms.<sup>7-9</sup> Gender roles and relations are context embedded and dynamic, shaping the social determinants of health and the experiences of CHWs.

CHWs are strategically placed—if managed and supported effectively—to also serve as change agents, addressing harmful sociocultural and gender norms from within communities.<sup>3, 10, 11</sup> There is emerging evidence that explains the gender dynamics that they are working within<sup>9, 12, 13</sup> as well as increasing evidence on gender inequities within higher levels of the health workforce.<sup>14, 15</sup> To date, there is limited context-specific gender analysis of the interplay between CHWs, their communities and the health system in FCAS. Understanding this interplay is critical to the development and implementation of HRM strategies that will support CHWs.

In this paper, we present three FCAS case studies on CHWs—from Sierra Leone, Liberia and DRC—to explore and understand the gendered dimensions of HRM, from the perspectives of key stakeholders and CHWs (the latter in Sierra Leone only). All three countries have experienced conflict, fragility and epidemics, which have disrupted their health systems. In Sierra Leone and Liberia (both postconflict), the 2014–2016 Ebola outbreak exposed weaknesses in the health system and lack of trust between communities and health system.<sup>16-19</sup> DRC has recently experienced an Ebola outbreak; and all three countries are currently affected by the COVID-19 pandemic.

Health workers identified that during and after the Ebola outbreak, there was a need to build links and trust between health systems and communities and that CHWs were crucial to this.<sup>16</sup> CHWs played a critical role during the Ebola outbreak in managing the spread of the virus.<sup>17, 20</sup> This was the impetus for new CHW policies to support their integration into the wider health system, which were rolled out in Liberia<sup>21, 22</sup> and Sierra Leone.<sup>23</sup> However, there is limited evidence from these settings on how gender influences health workers' experience to guide new policy development. Developing the evidence base here from a gender and equity perspective is, therefore, critical. DRC too suffers from a severe shortage of healthcare personnel and CHWs play an important role in providing health services to communities in insecure areas; they are often the only healthcare workers who stay in communities in times of crisis.<sup>24</sup>

Following dialogue with key stakeholders, this research explores how gender influences the way CHWs are managed and supported and the effects on their work experiences. This study offers recommendations for more gender equitable and transformative HRM strategies that support CHWs within FCAS.

## METHODS

### Study design

We used qualitative research methods to explore how gender influences the way CHWs are managed and supported, and the effects on their work experiences in three countries. This generated in-depth, contextual information about CHWs', managers' and decision-makers' experiences and perceptions.<sup>25, 26</sup> In Sierra Leone, the in-depth study, we used four methods: document review, key informant interviews with decision-makers and managers, life history interviews and photovoice with CHWs. In contrast, the research in Liberia and DRC was designed as a rapid appraisal of the current situation in these two settings, which included policy review and interviews with key staff knowledgeable about the CHW programmes. We used four methods of data collection, which allowed us to compare and contrast what is written about management of CHWs (document review) and what actually happens in practice drawing on the different perspectives of CHWs, decision-makers and managers (key informant interviews, life history interviews and photovoice). This helped with triangulation and ensuring the trustworthiness of the data.

### Research team

The research was led by the lead author, an experienced qualitative researcher with a PhD in health systems research, working with teams in DRC, Liberia and Sierra Leone who are experienced at qualitative data collection and analysis and working with CHWs' health managers and decision-makers. By involving all authors, with different professional, personal and geographical backgrounds, we ensured that different interpretations and perspectives were incorporated in the analysis.

### Study setting

In each country context, we purposively selected two districts to capture diversity of settings and to include contexts where we had pre-existing relationships. In Sierra Leone, this was Kenema in the Eastern Province with urban and rural areas and heavily affected by the Ebola outbreak and Bonthe in the Southern Province, which is hard to reach, riverine with several islands and less affected by the Ebola outbreak. In Grand Bassa county in Liberia, two districts were selected one with international support for CHW activities, and one without. As DRC has decentralised health management to the provinces, we conducted the study at provincial level and in two districts—Aru which is mainly rural, and Bunia which is urban.

### Data collection

The data were collected over a period of 6 months between October 2017 and April 2018.

Document review: we reviewed key documents from the Ministries of Health in each country including CHW policies, guidelines and training materials to answer key questions: Are gender considerations included in the

**Table 1** Participants for key informant interviews

	Sierra Leone	Liberia	DRC	Total
Decision makers at national and provincial level	4 (2F; 2M)	3 (3M)	2 (1F; 1M)	9 (3F; 6M)
District level managers	4 (1F; 3M)	3 (3M)	3 (1F; 2M)	10 (2F; 8M)
Facility and community level managers	10 (3F; 7M)	4 (2F; 2M)	3 (1F; 2M)	17 (6F; 11M)
Total	18	10	8	36 (11F; 25M)

F=female; M=male.

documents? If yes, how? How are female and male CHWs managed and supported in their work? We extracted, summarised and synthesised text for each question.

Key informant interviews with decision-makers and managers: Using topic guides adapted for each country (see online supplemental file 1), we explored how CHWs are managed and supported. We selected decision-makers (representatives of government departments and Non Governmental Organisation programmes who make decisions about how the CHW programmes are run, and how CHWs are managed and supported) and managers based on their involvement in developing community health policies, knowledge of community health programmes and managing CHWs. Details of the decision-makers and managers included in each setting are provided in [table 1](#). In Sierra Leone, which is the in-depth study, we conducted 18 key informant interviews. In the rapid situation analysis of DRC and Liberia, we conducted between 8 and 10 interviews. The research teams in each country conducted the interviews in the participants' workplaces, in English or Liberian English (Liberia), French (DRC) and English or Krio (Sierra Leone). The interviews lasted between 40 and 90 min and were recorded following consent of the participants.

Life history interviews with CHWs (Sierra Leone only): men and women CHWs (from different villages, with a range of ages and length of experience as a CHW ([table 2](#))) provided a personal account of their life and career over time.<sup>27 28</sup> Researchers then explored their career with probing questions around their gendered experiences as a CHW, support and HRM strategies, relationships with existing cadres in the health system and coping strategies (see online supplemental file 1 for the topic guide). The interviews were conducted in Krio, in private rooms in the health facilities.

Photovoice: each CHW selected for the life history interview was included in the photovoice method. CHWs were trained on how to use a camera to take photographs

of their work, work environment and interactions with the health system over a 3-month period, and on how to take verbal consent. The CHWs took photographs of people and their possessions after gaining their verbal consent. CHWs were encouraged to take photographs that did not reveal the identity of the people being photographed. In a reflective meeting, CHWs discussed the photographs they took with the research team and peers and selected those that best reflected their work and context. All CHWs then came together to present their photos to the group guided by the questions: What is happening in the photo? Why did you take this photo? How does this photo affect us? and What can we do about it? This generated group discussion and problemsolving. The discussion was recorded following permission.

### Data analysis

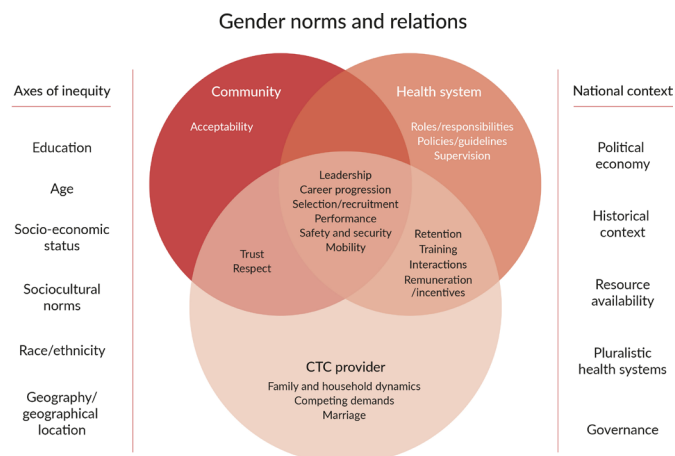
The country teams transcribed the recordings verbatim and where necessary translated into English. They checked the verbatim transcripts and recordings with the English transcript which minimised loss of meaning.

We used the thematic framework approach to analyse the qualitative and document review data.<sup>29</sup> All authors participated in the analysis, which brought diverse perspectives and interpretations. We developed one coding index (online supplemental file 2) from the topic guides, research objectives, emerging themes and domains from Steege *et al's* conceptual framework ([figure 1](#)). This framework shows how gender roles, relations and norms shape, and, in turn, are shaped, by the individual, community and health system levels, the relationship between them and the complex interplay within the broader health and political environment.<sup>7</sup> The country teams applied the framework to the transcripts and data and developed charts for each code. The lead author then identified the initial themes through review of the initial analysis in each country and then shared these with the other authors to interrogate and refine. Consensus on key themes (eg,

**Table 2** Participants for life history interviews

	Sex		Age (years)			Experience (years)			Total
	Female	Male	20–29	30–39	40+	<5	6–10	10+	
Kenema	4	4	2	3	3	5	3	0	8
Bonthe	5	2	0	3	3	1	5	1	7
Total	9	6	2	6	6	6	8	1	15





**Figure 1** How gender shapes CHWs interface between community and health system. CHW, community health worker; CTC provider, Close to Community provider.

selection and recruitment, retention and remuneration, safety, security and travel, community norms and preferences and addressing community gender norms) across contexts was reached through iterative reflection, which involved the authors reviewing the themes, checking that the data support the themes and adapting them. This was done by dialogue through in-person meetings, e-mail and Skype, over a period of several months and consolidated in an analysis and writing workshop in Sierra Leone with all country teams present.

### Patient and public involvement

Patients and/or the public were not involved in the design, conduct, reporting or dissemination plans of this research.

### FINDINGS

The results are informed by Steege *et al's* framework<sup>7</sup> (figure 1) and link to the key concepts in this framework. They begin with an overview of the evolution of the CHW policies to provide the contexts in which the findings are situated. We then move onto key HRM functions (selection and recruitment, retention and remuneration, safety, security and travel provision), an overview of CHW and community relationships and CHWs' agency in challenging gender norms.

### Summary of CHW policies in Sierra Leone, Liberia and DRC

In Sierra Leone, the CHW programme was rolled out nationwide and 15 000 people were trained to provide a basic package of services at the community level with a focus on gender.<sup>23</sup> Services included—reproductive, maternal, newborn and child health, integrated community case management of sick children and infection prevention and control.

In Liberia, the policy focused on the development of Community Health Assistant cadre (CHAs—a type of CHW) trained to deliver a package of preventive, curative, promotive, rehabilitative and palliative services as well as

health surveillance. CHAs are supervised by Community Health Services Supervisors—a cadre of health worker who have been formally trained, for example, a nurse, physician assistant or midwife. Previous cadres of community health volunteers (CHVs), for example, community drug distributors remain in operation and were supervised by CHAs.<sup>21</sup>

In the DRC, there is no overarching CHW programme, but CHWs are organised into three categories: site CHWs (providing a package of community activities, such as distribution of Ivermectin and contraceptives, case management of malaria, diarrhoea and respiratory infections), promotional CHWs (providing health education to communities) and disease-programme CHWs (providing specific services for the programme such as the Expanded Programme on Immunisation).<sup>30–32</sup>

We use the term CHW to include CHWs in Sierra Leone and DRC and CHAs in Liberia. None of these CHWs are salaried, but they receive allowances. In Sierra Leone, CHWs should receive 100 000 Leones plus 50 000—80 000 Leones for transport and other logistics per month (equivalent of US\$20–US\$24); the minimum wage is 500 000 leones per month (equivalent of US\$67). In Liberia, each CHA should receive US\$70 per month, which is based on provision of a package of healthcare at the household level through a minimum of 4 hours of work/day; the minimum wage is US\$75. In DRC, CHWs receive some financial compensation if they work for specific programmes, go to training events or from sales of health products such as bed nets. Table 3 provides a summary of the key findings from the policy review.

### Selection and recruitment of CHWs

CHW policies were launched post-Ebola in Sierra Leone and Liberia to prioritise the selection of women as CHWs or CHAs. In both settings, this is due to the scope of CHWs' work, which largely focuses on women's health, maternal, new-born and child health.

All things being equal preference should be given to women, especially those who have worked with pregnant and new mothers (National Community Health Worker Policy, Sierra Leone, p21)<sup>23</sup>.

In Liberia, this prioritisation was further described by some key informants as being linked to gender roles within communities.

Men are always on the move, but women are the ones who stay home to look after home and family (National decision-maker, man, Liberia).

In DRC, there are perceived equal opportunities for women and men in the CHW selection process. Human resource policy as set by the Economic and Social Council of DRC in 1995 states that at least 30% of health worker posts, including CHWs, should be occupied by women.<sup>33</sup> However, the policy does not state how this can be achieved in practice.

**Table 3** Summary of findings from policy review

	Sierra Leone	Liberia	DRC
CHW programmes	<ul style="list-style-type: none"> <li>▶ Rolled out nationwide</li> <li>▶ 15 000 CHWs trained to provide basic package of services at community level</li> </ul>	<ul style="list-style-type: none"> <li>▶ CHAs trained to deliver a package of preventive, curative, rehabilitative and palliative services</li> <li>▶ CHAs are supervised by CHSS</li> <li>▶ Previous cadres of community health volunteers remained in operation and were supervised by CHAs</li> </ul>	<ul style="list-style-type: none"> <li>▶ No overarching CHW programme</li> <li>▶ Three categories: site CHWs; promotional CHWs; disease programme</li> </ul>
Selection and recruitment	Women prioritised in selection process.	Women prioritised in selection process. Literacy was a requirement for CHWs	Equal opportunities for women and men in the CHW selection process. Literacy was a requirement for CHWs
Remuneration	Each CHW should receive: 100 000 plus 50 000 to 80 000 Leones for transport and other logistics per month (equivalent of US\$20–24)	Each CHA should receive US\$70 per month through a minimum of 4 hours work per day	Financial compensation for work on specific programmes, attend training, or from sales of health products

CHA, Community Health Assistant; CHSS, Community Health Services Supervisors; CHW, community health worker; DRC, Democratic Republic of Congo.

Policies in Liberia and Sierra Leone support the selection of women, nevertheless, there are many more male CHWs than female CHWs in both settings. In contrast, there are more women taking on the CHW role in DRC (table 4).

Policy ideals in terms of selection, attraction and recruitment were mediated in practice by societal and gender norms. In Liberia, it was reported that community-based selection processes favoured men. Some informants described this as difficult to change as it was viewed as a community norm or preference to prioritise men over women.

What satisfies the community...and if the community bring a male and I tell them no, they won't feel good because it's the person they feel comfortable with (facility manager, woman, Liberia).

In Sierra Leone, some participants believed that this correlates with men's greater capacities due to having more education, more physical stamina and greater availability to work because they are not expected to do domestic labour.

Men can work harder than some of the women, especially walking long distances (community manager, man, Sierra Leone)

In both countries, it was reported that male partners and husbands did not want their wives to be employed, or to engage in community work. This was said to be a reason for the low numbers of women CHWs. Women experience limits on their mobility, often due to fear of sexual or gender-based violence.

In DRC, there are more women CHWs, where there were women's associations. These associations advocate for women and influence husbands' and relatives' attitudes towards granting women permission to join the CHW programme.

Here in our health district, where you find nearly half of CHWs are female, there are women associations, but where there are no women associations, you find that there are more male community health workers (district manager, man, DRC).

Literacy was a requirement for CHWs in DRC and Liberia. In general, men were more literate, highlighting how the education of boys is prioritised due to entrenched patriarchal preference. County and district-level informants in Liberia described how:

In the interior...boys' education is prioritised over girls', with girls remaining in the kitchen (community manager, woman, Liberia).

**Table 4** Female and male CHWs in Liberia, DRC and Sierra Leone

Country	Total number of CHWs	Number of female CHWs (%)	Number of male CHWs
Liberia (Grand Bassa County)	101	10 (10%)	91 (90%)
DRC (Ituri Province—Bunia District)	480	288 (60%)	192 (40%)
DRC (Ituri Province—Aru District)	840	403 (48%)	437 (52%)
Sierra Leone (country)	13 935	3283 (24%)	10 652 (76%)

Sources: CHW Hub at Ministry of Health and Sanitation, Sierra Leone; Ministry of Health, Grand Bassa County Health Team, Community Health Department Records; Central Office of Bunia Health District; Central Office of Aru Health District. CHW, community health worker; DRC, Democratic Republic of Congo.



Literacy challenges are compounded in FCAS, where education has historically been disrupted due to conflict. This places women at an even greater disadvantage. To overcome these challenges, and to try and continue to prioritise women in CHW selection, informants in Liberia and Sierra Leone described working with women (and some youth) to try and increase their literacy levels.

Where women and youth have been unable to read and write they have been encouraged to join the elders' educational programme so that they can be incorporated into the programme (national decision-maker, man, Liberia).

This has helped to some degree with, '*some women who as a result of literacy support linked to the CHA programme have completed school and are in midwifery school*' (community manager, woman, Liberia). Informants believed that embedding literacy programmes within CHW training would support the participation of women and other people with literacy challenges.

### Retention and remuneration

Key informants from all three settings and CHWs in Sierra Leone reported that retention of CHWs is shaped by gendered norms within households and communities.

As reflected in CHW selection processes, women's ability to work can be constrained by patriarchal hierarchies within the family. In many settings, women have domestic responsibilities, including housework and care for children and relatives. They juggle these roles with their CHW work, limiting the time they can spend at work and affecting their performance and retention.

As for female CHWs, especially married women, due to their family responsibilities, in most of the cases they arrive late, as they need to make sure they have covered home need. If they have a child who is unwell, that also affects their presence as they need to care for the child. To overcome it, we just make sure that we understand them, as when they are there, they are really productive (district manager, man, DRC).

In many settings, men have the final say in how women allocate their time to household work and CHW work, and ultimately whether women stay in the role of CHW.

Sometimes, their husbands are not happy as we engage their wives for volunteer work for a long time (facility manager, woman, DRC).

Male CHWs are more likely to find a paid job and leave their role as CHW. They are expected to be the breadwinners of the family (and sometimes multiple families), and, therefore, seek paid work. This is more frequent, where there are more employment opportunities such as in the gold mining areas of Sierra Leone. On the other hand, woman CHWs were seen as being more stable, as '*they don't go away*' (facility manager, man, Sierra Leone).

Demonstrating how gender intersects with marital status to determine the need for income-generating

opportunities, women in female-headed households sought additional work, as they were, '*without a man to support*' (CHW, woman, Sierra Leone).

Some felt that women, especially those who have worked as traditional birth attendants, were willing to provide care with no or ad hoc financial incentives.

If a woman chooses to become a CHW, she can do it genuinely. They don't disobey. Some had [worked] as TBAs (Traditional Birth Attendants) and have not been receiving anything (money) in the past, but they were still happy to do the job (facility manager, man, Sierra Leone).

To overcome the issue of attrition among men, respondents reported trying to replace them with new recruits. One facility manager (a woman) in DRC reported taking a different approach and providing income to male CHWs in the hope of assigning some value to the work that they do, '*I just have sometimes to use my own money to give them [male CHWs] so that they realise the expected work*'. This approach, while innovative and pragmatic, reinforces the gender norms that exist within the community, suggesting that men's labour is worthier of payment than women's.

In many cases, women have limited opportunities for career progression due to literacy and mobility issues and gendered roles, which can be demotivating and result in attrition. As one respondent from the DRC noted:

Something surprising is that females are the majority, but men seem to be more active, and are more available to serve, and there are males who occupy responsibility positions (facility manager, woman, DRC).

This was also seen in Sierra Leone, where most peer supervisors (CHWs with additional training, allowances and responsibilities) are men, and women rarely perform this role because of lower literacy, lower education levels and gendered expectations and norms around leadership.

### Safety, security and travel

Gender dynamics influence how CHWs travel around their communities and access households. In all settings, key informants and CHWs reported that women found it difficult to travel long distances for their work. This was due to social expectations of women and, '*a reluctance of husbands to let their wives walk outside the community*' (national decision-maker, man, Liberia).

These gendered expectations and restrictions lead women to different roles during campaign activities. One supervisor in Liberia described the ability of men to travel these longer distances unescorted and completing more work.

But maybe when it comes to distances, maybe there is a gender issue, because the female we are not strong to walk longer distances. So, when there is a campaign there are some distance and some hard-to-reach areas we will assign a male there because the female won't go. That's a gender issue. I think is reasonable



because ... females are much lesser in strength than males. Males can cover a longer distance and feel normal, but female don't cover that distance and remain normal (facility manager, man, Liberia).

Long distances may require CHWs to stay in communities overnight. One manager in Liberia described that sometimes when she reached supervision locations, she had to stay overnight as it was dark and not safe for her to return.

We go in the field, we sleep in the field. I have to walk on seven hours distance to go for supervision, and then I have to supervise the CHAs on two hours. Before I come back, darkness will catch me and I will sleep there. No compensation. I spend more time in the field, so they should see about compensating me for accommodation and feeding. These are things that can really affect performance (community manager, woman, Liberia).

CHWs attend women during childbirth and sick children and adults during the night. This raises security concerns; in Sierra Leone and Liberia, male CHWs or relatives tended to escort the woman CHWs to households at night.

Transport costs incurred during CHW work may inadvertently favour men who have more income-generating opportunities. As one facility manager, a man, in DRC explained:

You know, sometimes they have to use their own means of transport even their money to organise activities, you know, this a bit challenging, and that might affect their performance.

### Community norms and preferences

Key informants from all contexts, and CHWs from Sierra Leone, reported that gender norms shape both CHW and service acceptability. In all contexts, concerns were expressed about women's/communities' readiness to accept men working on sexual, reproductive and maternal health. In Liberia, many key informants reported that men CHAs find some health areas difficult to discuss with women, for example, pregnancy, sexual health or feminine hygiene and that community members would hide these issues.

For a man to go into detail about pregnancy with a woman, they will find it difficult. When [a man] comes she will just say I am not feeling well. But if she has any danger sign, maybe she has sore between her leg, she will [show the] female, but she will not be able to show it to the male (facility manager, man, Liberia).

In the DRC, key informants reported that women were perceived to be more able to counsel both men and women about health matters than men.

Well, female community health workers, we have them, yes because as I said before they have very good communication skills as far as dealing with women is concerned, they can better understand themselves. They are also able to communicate to men without any problem (Facility manager, man, DRC).

Key informants in Sierra Leone felt that some community members were suspicious of men CHWs and their motives for caring for women in the community. They were often accused of ulterior, sexual motives if talking to women in communities. This led to men and women CHWs being deployed in pairs.

Complaints from men that male CHWs are talking with pregnant women - thought they were wanting to have sexual relationship with her. If female CHWs do this there is no problem. [It's a] common problem. There was a time we held a meeting and decided that the men should not go alone but should be accompanied by a female so that all of us can do the work together; and go in the day and not at night (community manager, man, Sierra Leone).

### Can CHWs address gender norms in the community?

Gender norms within the community shape communities' views of CHWs and service acceptability. We found emerging evidence of CHWs strategising and working together to address harmful gender norms that restrict health and well-being. They had not been formally trained to take on this role. Only in Sierra Leone did training include a limited focus on how gender shapes community norms and how gender should be considered during community entry and relationship building. In Sierra Leone, a district health manager reprimanded a man CHW for beating his wife as this contradicted the ethos of the programme.

In all contexts, it was believed that CHWs were well positioned to relay community concerns and health conditions to the health system, and that this could address negative gender norms. Key informants in DRC explained how CHWs were able to act as intermediaries to give women's voices a platform and to encourage women to express their concerns.

CHWs' willingness and ability to interact with and challenge harmful gender norms emerged most clearly through the photovoice methodology, which was used in Sierra Leone. Via their photos and facilitated group discussions, CHWs demonstrated agency in negotiating and challenging gender norms within their work. They supported each other in generating solutions to address gendered challenges. For example, CHWs discussed how to speak with community leaders and families about bed nets, so that they were not just used for men or for fishing but also for women and children. They explored approaches that encourage women to generate income for their family such as rearing poultry. They considered ways to support women who had been abandoned by partners and families, or grandmothers who were looking after Ebola orphans.



## DISCUSSION

### Summary of key findings

Our study has focused on the HRM areas of selection, attraction, retention, career progression, roles and responsibilities, remuneration, safety, security and mobility. These are not isolated areas, but interrelated and shaped by context, trust, community acceptability, family and household dynamics and responsibilities (figure 1). In Liberia and Sierra Leone, new CHW policies were developed following the Ebola outbreak in recognition of the critical role this cadre plays. Policy preferences to select women CHWs evaporated in practice, when mediated by gender norms at the community level and patriarchal expectations surrounding paid work. Literacy was a requirement for CHWs in DRC and Liberia. In general, men were often more literate, highlighting how the education of boys is prioritised. Literacy challenges are further compounded in FCAS, where education has historically been disrupted due to conflict, placing women at an even greater disadvantage.

In FCAS, CHWs play an important role in bridging communities with the health system. Much of the role of CHWs focuses on reproductive health, and some individuals and communities prefer these services to be provided by a specific gender—with women providing services for women—as seen in other studies.<sup>12 13 34</sup> Concerns and gendered norms and expectations around safety, security and travel, particularly evident in FCAS, can potentially limit selection of women into the CHW role and affect retention and progression too. This has been found in other studies.<sup>7 35–38</sup> In FCAS, where livelihoods are often fragile, CHWs rely on the financial incentives provided for their role. However, these were unreliable, with men more likely to leave and seek better paid employment, while women remained as CHWs despite no or ad hoc provision of the allowances. Similar dynamics have been found in Mozambique.<sup>9</sup> Women are less able to gain paid employment, and this is particularly the case in FCAS where education has been disrupted and options can be limited. In DRC, CHWs' remuneration is limited to ad hoc programme work, training allowances and sales of health commodities. This reinforces the view that unpaid CHW work is 'voluntary' and feminised labour.<sup>7</sup>

### Health systems reflect and build gender norms

The health system is a creator of gender norms and is not just a reflection of them.<sup>39</sup> Our analysis shows the limitations of the gender transformative potential of the CHW policies in the three study contexts. The absence of strong guidance and recommendations about gender transformation meant that new policies had limited utility in practice. There is a clear need to build on context-specific gendered norms and African feminisms and approaches here. Liberia, Sierra Leone and DRC are no strangers to conflict and the relation between male control of political and economic arenas is evident.<sup>40</sup> Failing to take note of this complex political and feminist history, while developing health policy and specifically HR policies, is likely to sustain existing patriarchal dominance.

Understanding the particularities in FCAS conflicts is essential in order to be able to equitably, efficiently and effectively address gender issues within policies, management and support of CHWs. Health workers, and, in particular, CHWs, are in a key position to mediate many gender norms, which impact on health and well-being, as they are embedded and understand the context in which they work and live.<sup>39</sup> CHWs cannot support gender transformation unless support, and space is provided to enable them to reflect and imagine a better world in which they can safely rock the boat. The photovoice method created that space and gave insights into what is possible. Photovoice illustrates how CHWs were strategising and working individually and together to address harmful gender norms that restrict health and well-being. This approach showed that CHWs were well positioned to feedback communities' realities, concerns and priorities to the health system and form a feedback loop.<sup>41</sup> This has been seen in other photovoice projects, for example, strengthening group dynamics as well as individual empowerment among women in a low-income districts of Madrid; and better understanding water, sanitation and hygiene behaviours and catalysing community-led solutions to change behaviours in Kenya.<sup>42 43</sup>

### Gender transformative HRM

To be gender transformative, strategies to manage and support CHWs must address gender disparities in selection, retention, remuneration, performance and career progression (table 5).

### Limitations

There are several limitations to the study. The focus on CHW, decision-makers and managers, means that perspectives of the community and patients were missed. Only in Sierra Leone, CHWs were included in the research process through life histories and photovoice and expanding these methods to understand CHWs (and community voice and perspectives) would be important going forward. Despite this, the range of methods and contexts included, and the gender analysis framework deployed, mean that generalisable findings that unpack how gender, power and hierarchy manifest in health systems and communities and recommendations in an under-researched area have been developed.

## CONCLUSION

CHWs are a critical cadre that bridges the gap between communities and health systems, particularly in FCAS. A better understanding of their management through a gender lens is key for maximum impact and sustainability. There is a need for ongoing monitoring, evaluation and learning as CHW programmes continue. The COVID-19 pandemic, like other health systems shock before, has demonstrated the value of CHWs and their importance in responding, offering advice, support and care. This study provides the perspectives and voices of CHWs, managers and decision-makers and offers recommendations for gender equitable



**Table 5** Gender transformative HRM strategies: suggestions and learning from our study

HRM area	Strategies
Selection and recruitment	<ul style="list-style-type: none"> <li>▶ Partnerships and role modelling at community level to support women to come forward to become CHWs and communities to endorse that this is important.</li> <li>▶ Ensuring women's active participation in community dialogue via the creation of spaces where women are listened to and feel comfortable to talk.</li> <li>▶ Training with community leaders and communities on gender and power relations, roles of CHWs to ensure women have equal opportunity for selection<sup>9</sup>.</li> <li>▶ Ensuring that there is preferential hiring of women CHWs until gender parity is reached.</li> </ul>
Remuneration	<ul style="list-style-type: none"> <li>▶ Commitment of governments to reliably provide allowances for all CHWs is important—there is a need to consider the financial package to remunerate CHWs as a part of the overall health system planning<sup>44</sup>—but this is challenging in some FCAS settings where health workers on the payroll are not being regularly paid.</li> <li>▶ In the meantime, local level initiatives are critical in supporting women and men CHWs, such as support for income generation through farming collectives, seed funding for enterprises as seen in Sierra Leone with rearing poultry.</li> </ul>
Training	<ul style="list-style-type: none"> <li>▶ Flexible module-based training processes that are close to CHW homes to avoid long periods of time away from family and other responsibilities, which may be particularly challenging for women.</li> <li>▶ Embedding literacy skills as part of the CHW training programme (eg, Liberia) can help address the literacy gaps which disproportionately affect women (this is also likely to improve recruitment parity).</li> </ul>
Promoting safety and security	<ul style="list-style-type: none"> <li>▶ Male–female CHW pairs to support safety when travelling far or at night can be a helpful 'sticking plaster' in the short term and may also help support community acceptability. However, there are risks that need to be carefully thought through, as this may leave female CHWs vulnerable to abuse.</li> <li>▶ Creation of safe spaces in/near health facilities for CHWs to stay overnight when attending delivering women at night.</li> <li>▶ Longer term solutions are required too that should focus on community sensitisation and multi-sectoral action to address gender based and violence<sup>9</sup>.</li> </ul>
Career progression	<ul style="list-style-type: none"> <li>▶ Support for female CHWs who are juggling multiple responsibilities, so that they can undertake further professional development such as literacy or health topics training.</li> <li>▶ Support through mentorship, that can potentially lead to senior CHW roles and other roles in the health system.</li> <li>▶ Preferential hiring of female supervisors until gender parity is reached—so women can see themselves in positions of authority/leadership.</li> </ul>
Supervision	<ul style="list-style-type: none"> <li>▶ Ongoing regular supportive supervision processes that include space to reflect and problem solve on how gender norms shape CHWs own experiences and those of the communities they serve.</li> <li>▶ Development of peer support strategies which have strong potential as demonstrated by the group discussions in photovoice.</li> <li>▶ Sustained reflective practice: It takes time to challenge gender norms, to learn about what works, and how to respond to changing contexts.</li> </ul>
Contracts	<ul style="list-style-type: none"> <li>▶ Contracts should be issued to formalise labour rights for CHWs, such as maternity and paternity leave<sup>9</sup>.</li> <li>▶ These contracts could also provide a framework to recognise flexible working approaches that support CHWs to balance community health work with domestic responsibilities.</li> </ul>

CHW, community health worker; FCAS, fragile- and conflict-affected settings; HRM, human resource management.

and transformative HRM strategies that support community health systems.

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## Supplementary File 1: Topic Guides

### Contents

Tool 1: Key informant interviews at national level (Sierra Leone) .....	2
Tool 2: Life history interview with community health worker (Sierra Leone) .....	4
Tool 3: In-depth interview with manager and supervisor of CHWs (Sierra Leone) .....	7
Tool 4: Key informant interview with decision makers and managers (DRC and Liberia).....	10



## Tool 1: Key informant interviews at national level (Sierra Leone)

### Topic guide

#### Objectives:

- To map out the range of community health workers
- To understand the actors and processes that drive the CHW policy, and how the policy fits with the existing health care system in Sierra Leone
- To explore key informant perceptions and experiences of the CHW policy, its development, implementation and any factors facilitating or hindering implementation.

**Introduction:** Introduce the project, the scope of the interview

**Informed Consent Process:** Ensure participant has read the information sheet, ask if she / he has any questions or areas for clarification, explain about confidentiality including recording the interview, complete consent sheet.

Interviewee ID		Job title and cadre of interviewee	
Date of Interview		Place of work	
Time of start of interview		Gender	Male <input type="checkbox"/> Female <input type="checkbox"/>
Time of end of interview		Age	
Name of interviewer			
Name of transcriber			

#### 1. Key informant background

- What is your role in the health system?
- How long have you been in this role?

#### 2. Range of CTC providers

- What are the different types of community health worker working in Sierra Leone?

#### 3. CHW cadre in the health system

- How does the CHW cadre fit within the existing health care system? What are the challenges or opportunities with this?
- Do CHWs bring any added value? In what way?
- What are the costs (opportunity cost and financial) of using CHWs?

#### 4. Actors and processes that drove the CHW policy

- When was the CHW policy developed?
- How is the policy financed?
- Who was involved? Were you involved, if so, how?
- Why was this policy developed? What factors drove the development of the policy (e.g. political, post Ebola, donor funding)



- What informed the policy? Any research? Any evaluation of programmes?
- In what ways does the policy address any gender issues?

**5. Perceptions and experiences of CHW policy and, its implementation**

- What do you think of the policy?
- In your view, how has the policy been implemented so far? Successes? Challenges?
- What implementation plan is in place?
- What M and E plan is in place? Could you show us this document?
- What has helped implementation?
- What has hindered implementation?
- We would like to know a little bit more about the structures in place:
  - What does the CHW steering committee do? How often do they meet? Is there an integration strategy?
  - What does the national technical working group do? How often do they meet?
- What would you change in the policy?
- What would you change in the implementation?
- How have any gender issues been addressed in the implementation in the policy?

**6. Sustainability**

- How do you think this policy can be sustained? What are the challenges with this?
- What about financing of this programme?

**7. Recommendations**

- What recommendations do you have for the CHW programme?

**8. Is there anything else you would like to add?**

**Closure and thank you.**





## Tool 2: Life history interview with community health worker (Sierra Leone)

### Topic Guide

#### Objectives:

- To understand CHW motivations to become a CHW
- To explore CHW experiences of working as a CHW
- To explore CHW experiences of the management and support strategies being implemented, including their coping strategies
- To describe CHW relationships with other health workers and managers

**Introduction:** Introduce the project, the scope of the interview

**Informed Consent Process:** Ensure participant has read the information sheet, ask if she / he has any questions or areas for clarification, explain about confidentiality including recording the interview, complete consent sheet.

#### Details of participant:

Interviewee ID		District	
Date of Interview		Community	
Time of start of interview		Length of time as CHW	
Time of end of interview		Gender	Male <input type="checkbox"/> Female <input type="checkbox"/>
Name of interviewer		Age	
Name of transcriber			

#### Topic guide

Script: I would like to understand about your life as a Close to Community Provider and a CHW. A close to community provider is when you were working as a TBA or drug distributor etc; and a CHW is after you have received the government training on becoming a CHW.

Can you draw me a line, starting with your birth and leading to the present day? What are the major events that you would put on it? You can include: marriage, births, training, different jobs. Describe them to me.

Now I would like to explore these areas with you and I will ask some more questions.

#### 1. CHW motivations

- What were your reasons for becoming a close to community provider e.g. TBA, drug distributor, contact tracer during Ebola?
- What were your reasons for becoming CHW? (prompts: route into becoming formal health worker; nominated by community; role model; some were TBAs or other cadre before; financial reasons; serve their community)



- How were you selected? Were you approached to be a CHW or did you initiate it? Were you interviewed? Did you have to do any tests?
- 2. CHW experiences of working as a CHW**
- What does your day to day work involve?
  - What type of work do you do?
  - How often do you work and for how many hours?
  - How does your work affect your daily life?
  - What do you like about your work? And why?
  - What do you dislike about your work? And why?
  - How accepted do you feel in this community? Please give some examples.
  - What recommendations would you like to make that would improve your experiences of being a CHW?
- 3. CHW experiences and perceptions of training to become a CHW (new CHW policy)**
- **Tell me about the training that you received**
    - When did you receive the training? Where did you receive the training? How long was it? Who facilitated it? What did it cover?
    - What did you like about the training?
    - What did you not like?
    - What happened after the training? (e.g. did they go straight to work, or did they have training in the community setting)
    - Now that you are working in the community, has this training equipped you with the knowledge and skills needed for your job? Please give examples of where it has, and where it has not
    - What recommendations do you have about this initial training? (content, duration, location etc.)
  - **Additional training**
    - Have you received any additional training since the initial training? How did this happen? (i.e. I requested more training or, the DHMT decided, or national level decided)
    - Please describe the training: who provided it, where it was, what it covered, how long, and how useful it was
    - What recommendations do you have about any additional training? (content, duration, location etc.)
- 4. CHW experiences of management and support**
- What management structures are in place now?
  - Who actually manages you now? (prompts: community leaders or structures; health facility staff; other CHWs; donors/ NGOs)
  - What do they do to supervise or manage you?
    - Reporting: Who do you report to? How often? In what format? Please can you show an example. What do you think of this?
    - Meetings: how often do you meet with your manager? Individually or as a group? What do you think of these meetings?
    - Supervision visits: how are you supervised (who and what do they do)? How often? What do you think of this?



- Drugs and medical supplies: how often do you get drugs and supplies? What is the system with obtaining drugs and supplies? what do you think about this system? How do you overcome any challenges?
  - Equipment (e.g. bicycles, uniform, bag, reports): when did you receive these items? How do you report when there are issues with your equipment? How do you overcome any challenges?
  - Support: Are there other people who support you in your job? Who are they and what do they do to support you? (prompt: community support, international partners support, local NGO support)
  - What do you think about this support?
  - What recommendations do you have for managing and supporting you in your role?
- 5. Financial incentives**
- CHW policy states that you receive a monthly allowance. What do you think about that?
  - Probe: do they receive regularly, method of payment, their perceptions of the amount and whether it is commensurate with their workload and scope
  - Do you receive any other financial rewards? If so, where do they come from, on what basis do you receive them, are they fair?
  - What recommendations do you have for financial incentives that would encourage you to work better and harder, and continue longer as a CHW?
- 6. CHW relationships with other health workers and managers**
- Does your role involve working with other health workers (other than CHWs)? Describe these relationships
  - How do you see your role as fitting in the overall health structure at the community level? And at the district level?
  - Could this be improved? If yes, in what way?
- 7. Is there anything else you would like to add?**

**Closure and thank you.**





### Tool 3: In-depth interview with manager and supervisor of CHWs (Sierra Leone)

#### Topic guide

**Objectives:** to explore managers' and supervisors' perceptions and experiences of managing CHWs

**Introduction:** Introduce the project, the scope of the interview

**Informed Consent Process:** Ensure participant has read the information sheet, ask if she / he has any questions or areas for clarification, explain about confidentiality including recording the interview, complete consent sheet.

#### Details of participant:

Interviewee ID		Job title and cadre of interviewee / position in community	
Date of Interview		Gender	Male <input type="checkbox"/> Female <input type="checkbox"/>
Time of start of interview		District	
Time of end of interview		Facility / community name	
Name of interviewer		Age	
Name of transcriber			

#### 1. Background of the manager

- What is your job in the health sector? How long have you been in this job?
- For peer supervisor only: how did you become a peer supervisor?

#### 2. Role and responsibilities of CHW

- What is your understanding of the role and responsibilities of CHWs? Do they have a job description? Please show us the job description. What differences are there in the roles and responsibilities of male and female CHWs?
- What services / type scope of work should they provide? What workload should they have? What should their working hours be? How and to whom should they report?
- How many CHWs in your district? What proportion are women?

#### 3. Their role in managing / supervising CHW

- What is your role in managing the CHWs? (prompt for: monitoring CHW activities, provision of enablers, supervision, performance appraisal, training, rewards and sanctions)
- How do you do this? Describe this in detail – frequency of interaction, reporting, visits,
- In the last week or month, how have you managed a CHW?
- Who do you report to? And what do you report?

#### 4. District technical working group



- Tell me about the district technical working group: what does it do, how often does it meet, who sits on this committee
- In your opinion, how effective is this committee?
- Do you have any recommendations for this committee?

#### **5. Training / guidance on managing / supervising CHWs**

- What training have you received for managing CHWs? Please describe the training (where it was, who provided and facilitated it, what did it cover, when did you do it).
- What do you think about this training? How did it equip you with necessary skills and knowledge to manage CHWs?
- What guidance / documents on managing CHWS are available? How useful are these?

#### **6. HRM Strategies**

##### **Selection and recruitment**

- How are CHWs selected? What is the process? What are the criteria for selection? Probe about community involvement
- What are the challenges? How do you overcome these challenges?
- What could be improved?
- What gender issues do you consider? (e.g. do more women than men apply? Why? Are more women than men likely to be recruited?)

##### **Attraction and retention**

- What are the strategies in place to attract CHWs into their role and retain them? What do you think attracts CHWs to the job? And what keeps them in the job? Are there any differences between men and women CHWs?
- What are the challenges? How do you overcome these challenges?
- What could be improved?
- What gender issues do you consider?

##### **Provision of equipment, supplies, drugs and tools**

- How do you ensure that CHWs receive what they need to be able to carry out their activities?
- What do you think of this?
- What are the challenges in ensuring this? How do you overcome these challenges?
- What could be improved?
- What gender issues do you consider? Any challenges men and women face in having the supplies etc?

##### **Supervision**

- How do you supervise the CHWs? What do you do? How do you monitor the activities of the CHW? What reports/ tools help you do this? can you show us some report templates?
- What do you think of this process?
- What are the challenges?
- What could be improved?
- What gender issues do you consider? Any specific issues or challenges in supervising female and male CHWs?



- Are there any other ways that the CHWs are supervised? By whom? How often? What do they do? How does this link to your management/supervision?

#### **Training**

- What training do you organise or provide for CHWs?
- How do you identify training needs?
- What do you think of the training?
- What are the challenges in identifying, providing or organising training?
- What could be improved?
- What gender issues do you consider? Accessing training? Willingness for training? Training topics?

#### **Rewards and sanctions**

- Are there guidelines on measuring performance for CHWs? What does this say about what well performing CHW is? If so, could we have a copy.
- How are well performing CHWs identified? How are they encouraged to continue to practice well? Give examples e.g. exemption from communal work, career pathway, awards
- How are poorly performing CHWs identified? How is better performance encouraged? How are they sanctioned? Please give examples.
- What are the challenges in providing rewards and sanctions?
- What could be improved?
- What gender issues do you consider?
- What is the career pathway for CHWs?

#### **7. Community ownership and engagement**

- What community structures or people support the CHWs? In what way?
- How effective is this support?

#### **8. Challenges in managing CHWs**

- Are there any other challenges that you face in managing and supervising CHWs? Please describe. How do you overcome them?
- Are there any particular challenges that you face in managing female and male CHWs? How do you overcome them?

#### **9. Recommendations for managing and supervising CHWs**

- Are there any other recommendations that you would like to make that could help manage and support CHWs? Please describe.
- If you could choose one recommendation that is the most important, what would that be and why?

#### **10. Is there anything else you would like to add?**

**Closure and thank you.**



## Tool 4: Key informant interview with decision makers and managers (DRC and Liberia)

### Topic guide

#### Objectives:

- To map out the range of CHWs
- To understand the actors and processes that drive CHW policies, programmes, and how the policy fits with the existing health care system in DRC/ Liberia
- To explore key informant perceptions and experiences of how CHW policies are implemented, how CHWs are managed and supported including challenges and supporting factors

**Introduction:** Introduce the project, the scope of the interview

**Informed Consent Process:** Ensure participant has read the information sheet, ask if she / he has any questions or areas for clarification, explain about confidentiality including recording the interview, complete consent sheet.

Interviewee ID		Job title and cadre of interviewee	
Date of Interview		Place of work	
Time of start of interview		Gender	Male <input type="checkbox"/> Female <input type="checkbox"/>
Time of end of interview		Age	
Name of interviewer			
Name of transcriber			

#### 1. Key informant background

- What is your role in the health system? / What is your role in the NGO?
- How long have you been in this role?

#### 2. Range of community level health providers

- What are the different types of community level health providers working in Liberia /DRC?

#### 3. CHW (CHA/gCHVs) cadre in the health system

- How does the CHW (gCHV/CHA) cadre fit within the existing health care system? What are the challenges or opportunities with this?
- Do CHWs (gCHV/CHA) bring any good things/added value? In what way?

#### 4. Actors and processes that drove the CHW policies

- What are the policies about CHWs (gCHVs/CHAs)?
- When were these developed?



- How is the policy financed?
  - Who was involved? Were you involved, if so, how?
  - Why was this policy developed? What factors drove the development of the policy (e.g. political, post Ebola, donor funding)
  - What informed the policy? Any research? Any evaluation of programmes?
  - In what ways does the policy address any gender issues?
- 5. Perceptions and experiences of CHW policy or policies and, implementation**
- What do you think of the policy or policies?
  - In your view, how has the policy been implemented so far? Successes? Challenges?
  - What implementation plan is in place?
  - What M and E plan is in place?
  - What has helped implementation?
  - What has hindered implementation?
  - What would you change in the policy?
  - What would you change in the implementation?
  - How have any gender issues been addressed in the implementation in the policy?
- 6. Sustainability**
- How do you think this policy can be sustained? What are the challenges with this?
  - What about financing of this programme?
- 7. Managing / supervising CHWs**
- What is your role in managing the CHWs (CHAs/gCHVs)? (prompt for: selection and recruitment; monitoring CHW activities, provision of enablers, supervision, performance appraisal, training, rewards and sanctions)
  - How do you do this? Describe this in detail – frequency of interaction, reporting, visits,
  - In the last week or month, how have you managed a CHW?
  - Who do you report to? And what do you report?
  - Are there any other challenges that you face in managing and supervising CHWs? Please describe. How do you overcome them?
  - Are there any particular challenges that you face in managing female and male CHWs? How do you overcome them?
  -
- 8. Recommendations**
- What recommendations do you have for the CHW (CHA/gCHVs) programme?
  - What recommendations do you have for managing and supporting CHWs (CHA/gCHVs)?
- 9. Is there anything else you would like to add?**

**Closure and thank you.**



**Supplementary File 2: Coding Index**

1. Background of participant
2. Range of CTC providers
3. CHW policy
  - 3.1. Development of policy (when, who and why)
  - 3.2. Research informed policy
  - 3.3. Policy addresses gender
4. Implementation of CHW policy
  - 4.1. Successes in implementation
  - 4.2. Challenges in implementation
  - 4.3. Recommendation for changes in policy
  - 4.4. Recommendation for changes in implementation
  - 4.5. Sustainability of policy
5. Reasons for becoming a CHW
6. Role and responsibilities of CHW
  - 6.1. Scope of work and services
  - 6.2. Workload
  - 6.3. Working hours
  - 6.4. Number of CHWs
  - 6.5. Gender differences
7. Perceptions of being a CHW
  - 7.1. Positive
  - 7.2. Negative
  - 7.3. Effects on family life
  - 7.4. Acceptance by community
8. Training / guidance on managing / supervising CHWs
  - 8.1. Training / guidance received
  - 8.2. Effectiveness of training / guidance
9. Selection and recruitment
  - 9.1. Process of selection
  - 9.2. Effectiveness of selection
  - 9.3. Challenges in selection
  - 9.4. Recommendations
  - 9.5. Gender considerations
10. Attraction and retention
  - 10.1. Attraction and retention strategies
  - 10.2. Effectiveness of A and R strategies
  - 10.3. Challenges in attraction and retention
  - 10.4. Recommendations
  - 10.5. Gender considerations
11. Provision of equipment, supplies, drugs and tools

- 11.1. Ways that equipment etc are supplied
  - 11.2. Effectiveness of provision of equipment etc
  - 11.3. Challenges in provision
  - 11.4. Recommendations
  - 11.5. Gender considerations
12. Supervision
- 12.1. Peer supervision (how, effectiveness, challenges, improvements)
  - 12.2. Community supervision (how, effectiveness, challenges, improvements)
  - 12.3. PHU supervision (how, effectiveness, challenges, improvements)
  - 12.4. DHMT supervision (how, effectiveness, challenges, improvements)
  - 12.5. Central level supervision (government and NGO)
  - 12.6. Gender considerations
13. Training (new policy)
- 13.1. Training needs – what and how identified
  - 13.2. Training provided (description – who, where, length, topics)
  - 13.3. Effectiveness of training (what they liked, disliked, links to job)
  - 13.4. Challenges in training
  - 13.5. Recommendations
  - 13.6. Gender considerations
14. Training (other)
15. Rewards and sanctions
- 15.1. How CHW performance is assessed (identify good performers and poor performers)
  - 15.2. How CHWs are rewarded
  - 15.3. How CHWs are sanctioned
  - 15.4. Challenges in assessing and responding to performance
  - 15.5. Recommendations
  - 15.6. Gender considerations
  - 15.7. Career pathway for CHWs
16. Monthly allowance
- 16.1. Amount and frequency
  - 16.2. Perceptions
  - 16.3. Recommendations
17. Community ownership and engagement
- 17.1. Community structures or people supporting CHWs (who and how)
  - 17.2. Effectiveness of community engagement
  - 17.3. Recommendations
18. District technical working group
19. CHW integration into health system
- 19.1. Relationships with other health workers
  - 19.2. Views on integration
  - 19.3. Recommendations for better integration
20. Other