**Factors influencing motivation and job satisfaction of community health workers in Africa and Asia – a multicountry study**

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# **Abstract**

As key stakeholders continue to affirm the relevance of community health workers (CHWs) in universal health coverage, there is a need for a commensurate focus on their motivation and job satisfaction especially in low-and middle-income countries (LMICs) where they play prominent roles. Despite the wealth of literature on motivation and job satisfaction, many studies draw on research conducted in high-income settings. This study explored factors influencing motivation and satisfaction among CHWs in LMICs.

Thirty-two focus group discussions and 116 key informant interviews were conducted with CHWs, programme staff, health professionals and community leaders in Bangladesh, India, Kenya, Malawi and Nigeria. Data were analysed using thematic analysis.

Overall, CHWs desired: 1) CHW programmes with manageable workload; work schedules that address concerns of female CHWs on work-life balance; clear career pathway; and a timely, regular and sustainable remuneration. However, no remuneration type guaranteed satisfaction because of an insatiable quest for additional financial reward. 2) Relationship with stakeholders that enhances their reputation. This was more important for unsalaried CHWs. 3) Opportunities to support community members. This was popular among all cadres as it resonated with their altruistic values.

This study provides insights for developing a "comprehensive motivation package" for CHWs.

# **Background**

Following the acknowledgment of health workforce shortage in 2006, stakeholders have continued to affirm the relevance of community health workers (CHWs) for the achievement of universal health coverage (Tulenko *et al.*, 2013). Particularly in low-and middle-income countries (LMICs) with a triple challenge of poor national health expenditure, low density of health worker and high disease burden thereby necessitating reliance on CHWs (WHO, 2005, 2014b, 2020). With the renewed focus on the use of CHWs as healthcare providers, it is critical to ensure that these providers are motivated and satisfied such that the investment in their capacity building and remuneration is not lost to poor performance and retention (Rahman *et al.*, 2010). Expectedly, there has been continued debates and discussions about the type, scope and combination of incentives that would best influence CHW motivation and satisfaction (Daniels *et al.*, 2019; Ormel *et al.*, 2019).

For this study, we describe job motivation as a driving force that directs and sustains a worker's behaviour to apply efforts towards achievement of organisational goals (Franco, Bennett and Kanfer, 2002; Armstrong and Taylor, 2014) while satisfaction is "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experience" (Locke and Latham, 2004). Many theoretical and empirical evidence on motivation and job satisfaction are from high-income settings involving individuals from high socioeconomic group (Kumah, 2017). There are concerns that factors influencing motivation may differ in LMICs because of the unique socioeconomic and cultural context (Agyei-Baffour *et al.*, 2011; Munar *et al.*, 2018). Furthermore, popular theories of motivation have been largely critiqued for the excessive focus on individuals and the assumption that individual behaviour is predictable irrespective of context (Carver, Sutton and Scheier, 2000; Locke and Latham, 2004; Steel and König, 2006). These concerns and critiques have been addressed, at least partially by a framework that draws primarily on literature from LMICs to describe the multiple layers of motivation to transcend the individual level. This framework argues that motivation towards achieving organizational goal operates at individual level but shaped by the organizational and cultural context. An understanding of these levels and their interactions may provide an insight into how motivation and satisfaction may affect performance and retention (Franco, Bennett and Kanfer, 2002). As literature on motivation of workers in LMICs continues to grow (Willis-Shattuck *et al.*, 2008; Kok *et al.*, 2015; Ormel *et al.*, 2019), this study sought to add to the existing knowledge by exploring motivation and satisfaction of CHWs who provide maternal and newborn health (MNH) services which is a key priority in many of the LMICs, (WHO, 2005, 2014b; USAID, 2018; WHO, 2020).

Hence, this was a unique opportunity to create a shared understanding of job motivation and satisfaction of workers at the other extreme of the socioeconomic and job spectrum who receive nominal pay but have diverse MNH roles within poor work environment in low resource settings.

# **Method**

## **Study design, sites and population**

*Study design*: This qualitative study was part of a larger study that used a multiple-case study design to explore the characteristics of CHWs providing MNH services, their scope of practice and the factors influencing their service delivery. Specifically, this part of the study focused on the various factors that influence motivation and satisfaction of these CHWs.

*Selection of study sites*: Using multistage sampling (Stewart, 2016), five study countries were selected from sub-Saharan Africa and South-east Asia. All countries in each subcontinent were included in the first-stage sampling while countries with health workforce shortages, high maternal mortality ratios and high neonatal mortality rates were identified from WHO documents (WHO, 2014a; WHO and GHWA, 2014) and included in the second-stage sampling. These included 42 countries in sub-Saharan Africa and five in South Asia. The third stage sampling was based on a comparison of the 47 countries identified in the second-stage sampling with 11 countries where the Centre for Maternal and Newborn Health at the Liverpool School of Tropical Medicine (authors' institution) was implementing the "Making it Happen" programme to reduce maternal and newborn mortality and morbidity. Eleven countries were identified. The last stage of the sampling entailed a limited literature review to identify countries with a high density of CHWs who provide MNH services. These included Bangladesh and India (South-east Asia) and Kenya, Malawi and Nigeria (sub-Saharan Africa).

### *Study population*: In each country, the main cadres of CHWs providing MNH services were identified by purposive sampling and included: Community Health Care Providers (CHCP), Community Skilled Birth Attendants (CSBA), Family Welfare Assistants (FWA) and Health Assistants (HA) in Bangladesh; Accredited Social Health Activists (ASHA) and Auxiliary Nurse Midwives (ANM) in India; Community Health Volunteers (CHV) in Kenya; Health Surveillance Assistants (HSA) in Malawi; Community Health Extension Workers (CHEW) and Junior Community Health Extension Workers (JCHEW) in Nigeria.

*Sampling*: To explore the factors affecting CHW motivation and job satisfaction, participants were purposively sampled. The sample entailed CHWs, community health committee members, CHW programme staff and health professionals who are healthcare providers with 3-6 years of health-related study in a higher educational institution. These included doctors and nurse-midwives. The details of the sampling technique and other aspects of the methodology have been described previously (Olaniran *et al.*, 2019). Table 1 shows the study countries, study locations, CHW cadres and data collected in each study country.

## **Data collection**

A topic guide was developed to address key research questions relating to CHW characteristics, scope of practice in MNH care and factors influencing service delivery including motivation and job satisfaction. Relevant revisions were made after pretesting the guide and obtaining inputs from in-country partners. The "Making it Happen" programme offices in the study countries obtained relevant permissions from national and subnational ministries of health and

purposively selected study participants from community and formal health system stakeholders who either affect or have been affected by the CHW programme. They were initially contacted over the phone or by email. An information sheet was provided to each participant and the content discussed before asking for written consent for a face-to-face interview. Participants were encouraged to review the information sheet, seek clarification, and ask questions relating to the study and implications for agreeing to participate in the study. They were allowed adequate time (a few hours to a few weeks) to consider their decision to participate in the study.

Between August 2015 and March 2016, programme staff involved in CHW programme, CHWs, health professionals providing MNH care in primary healthcare facilities where CHWs either provide services or collect supplies were interviewed. We conducted 116 Key Informant Interviews (KIIs) and 32 Focus Group Discussions (FGDs) with 361 individuals across the five countries asking the participants to describe the factors influencing CHW motivation and job satisfaction. Data were collected until saturation was reached when additional data did not provide new information. Saturation was established through an iterative process of preliminary data analysis during data collection in which it was noted that data from additional interviews continued to confirm emerging themes (Hennink, Kaiser and Marconi, 2017).

Additionally, CHW-related policy documents were reviewed to explore and characterise each CHW in relation to the remuneration type, primary workstation and duration of pre-service training.

## **Data analysis**

Data analysis builds on Franco et al's framework (Franco, Bennett and Kanfer, 2002) which describes the multiple layers of motivation as individual, organizational and cultural. Using thematic analysis, we identified, analysed, and reported patterns (themes) within the study data through the research aim and framework lens.

Transcripts were read several times for familiarisation with data and to understand how differences in remuneration type, primary workstation, duration of pre-service training influenced motivation and job satisfaction. Following familiarisation, a preliminary thematic map was developed and entered into Nvivo 10 software (QSR, 2014) for data management and coding. Constructs within the data that explain any of the themes were noted in generating the initial set of codes that were applied to the data on subsequent readings. The recurring patterns across congruent codes informed the subthemes (Ritchie *et al.*, 2014). To illustrate the themes and sub-themes, excerpts of quotes (in italics and within quotation marks) are embedded within the narrative, while the illustrative quotes are shown in Table 2.

AO conducted coding and preliminary data analysis with regular discussions with BM, SBZ and NvdB to ensure validity. Additionally, analysis workshops were held with a larger team of researchers at the authors' institution.

## **Ethical approval**

Liverpool School of Tropical Medicine, Liverpool, United Kingdom granted full ethical approval (LSTM 15.007). Additionally, approvals were obtained from each of the study countries: Ethical Review Committee, Centre for Injury Prevention and Research, Bangladesh; Institutional Research Ethics Committee (IREC) of The Foundation for Research in Community Health (IREC/2015/11/4/2) Kenyatta National Hospital and University of Nairobi, Ethics and Research Committee, Nairobi, Kenya (P485/07/2015); The College of Medicine Research and Ethics Committee, College of Medicine, Blantyre, Malawi (P.07/15/1765); Federal Capital Territory Health Research Ethics Committee, Abuja (FHREC/2015/01/52/24-08-15).

# **Results**

## **Profile of study participants**

Table 1 describes the characteristics of the study participants across the five study countries. CHWs providing MNH services in the Asian study countries were mostly or exclusively female, whereas the gender distribution of CHWs in the African countries was more mixed (male and female). Gender difference between CHWs in Africa and Asia may be partly explained by CHW selection criteria (Table 3). Similarly, the health professionals were mostly females apart from Malawi. Community health committee members were mostly male except in India.

CHWs included in the study had at least four years' experience providing services within the community with CHWs in Malawi having the longest work experience of 11 years. Among the other stakeholder groups, the programme staff had spent the longest duration working with CHWs except in India where health professionals who participated in the study had worked with CHWs for 16 years.

## **Characteristics of CHWs**

Table 3 draws on CHW-related policy documents in study countries (CHPRBN, 2006; Government of Kenya, 2013; Indian Nursing Council, 2013; Ministry of Health Kenya, 2013; MoHFW, 2013; SURE-P, 2013; UNICEF, 2014; Government of Bangladesh, 2016; NHM, 2021) and transcript data (Quote 1-9) to illustrate the characteristics of the CHW cadres in the five study countries. Overall, all the CHW cadres were selected based on secondary education and additional demographic criteria that varied with role and country. For example, only female candidates were selected for some roles in the Asian countries.

The duration of CHW pre-service training in study countries was between eight days and three years with the training duration being associated with other characteristics. In contrast to cadres with shorter pre-services training, CHWs with longer training tended to be salaried, had their primary workstation in the health facility, and had a clearer career path. Similarly, CHWs with longer training had more technical MNH roles, such as providing skilled birth attendance and administering contraceptives injections.

## **Perceptions of factors influencing motivation and job satisfaction**

Figure 1 shows that factors contributing to CHW motivation and job satisfaction operate within three thematic areas: programme structure and resources, relationship with programme stakeholders, and CHW values and beliefs.

### ***CHW programme structure and resources***

Across study countries, participants emphasised the need for CHW programmes with a timely, regular and sustainable remuneration; clear roles and career path; and availability of work tools. As described below, the degree of influence of these factors depended on the situation or context:

Remuneration: CHWs in the study countries were either salaried (receive a base salary) or unsalaried (receive either performance-based incentives or allowances/stipends) while some such as ANMs in India received both salary and allowance (Table 3). Overall, study participants described CHW's lack of motivation and satisfaction with remuneration; the underlying cause varying with the remuneration type. Salaried CHWs expressed dissatisfaction about delays in the payment of salary (Quote 10). Unsalaried CHWs such as volunteer JCHEWs in Nigeria, CHVs in Kenya and ASHA in India expressed the need for a monthly base salary to cater for their basic living expenses (Quote 11). This shaped their motivation to continue to invest time in providing CHW services as this time could otherwise be channelled into other activities that would earn them an income and/or address the domestic needs of their families. Consequently, unsalaried CHWs reported being pressured by their family members to quit their roles as CHWs (Quote 12, 13). An ASHA in India lamented, "*… we should get fixed monthly money, let it be 2 rupees, we all have families and they ask us that you haven't got any rupee in the last 6 months, why are you still working?"* CHWs on performance-based incentives such as ASHAs considered this remuneration type motivating when increased efforts translated to increased earnings and consequently willing to invest their time but expressed dissatisfaction in converse situations (Quote 14). Especially in situations when only coverage outcomes such as client health facility visits earn the incentive, while the various CHW home visits that led to the client facility visit do not attract any incentive (Quote 13). Particularly dissatisfying were time-consuming activities that do not attract any incentive (Quote 15). Participants also questioned the fairness of allocating performance-based incentives to an individual when a team effort achieved the outcome as this tends to cause dissatisfaction among other team members. In India, either the ANM or ASHA is rewarded for facilitating the uptake of a permanent method of contraception despite the efforts of other CHW cadres in producing this outcome (Quote 16). In contrast, there were no concerns about family planning-related incentives in Bangladesh as all health team members involved in facilitating the uptake of a permanent form of contraception receive an incentive (Quote 17).

Irrespective of remuneration type, CHWs expressed the need to have remunerations that are comparable to those of other CHWs or health professionals. Comparisons in remuneration were often based on either similarity in qualification or scope of practice. For example, ANMs in India on contract appointment despite having the same qualification and scope of practice as ANMs on regular appointment had a significant difference in allowance. This resulted in dissatisfaction among ANMs on contract appointment. An ANM on contract appointment complained, "…*permanent ANMs gets 2,000 rupees and we get 300 rupees as travel allowance; I get very angry"*. Similarly, ASHAs (India) perceived significant overlap in their scope of practice with ANMs (India) and were also dissatisfied with the incentives received (Quote 18). Other CHWs such as HSA (Malawi) considered they had a higher workload than clinical officers but receiving a relatively small salary and viewed this as unfair preferential treatment of the health professionals (Quote 19). Furthermore, the sustainability of remuneration affected satisfaction of CHWs. CHWs whose allowance or salaries depended on short-term projects lasting a few years such as CHVs (Kenya) and CHCPs (Bangladesh) were concerned that the completion of the project often meant an end to their remuneration (Quote 20). Relatedly, CHWs employed on contract basis such as some ANMs in India complained about yearly contract renewals. Especially as renewal of contracts depends on achieving performance targets that are considered difficult to accomplish (Quote 21).

Workload, work demand and availability of resources

CHWs from study countries described lack of motivation and dissatisfaction with the content and demands of their work, especially when they considered targets that are difficult to achieve or a non-enabling or stressful work environment.

i. Workload: Across the study countries, CHWs expressed dissatisfaction from working day and night as they are more accessible to community members because they live in the community (Quote 22). Others complained of an excessive workload because of their facility and community-based roles which was often exacerbated by transportation challenges. This was the case for facility-based CHWs such as ANMs who are responsible for large spread-out populations in hilly regions of India (Quote 23).

ii. Work demand affecting family life: CHWs expressed the need for a work-life balance and explained that the demands of family life constrain work life. A major concern among these CHWs was the desire to carry out their domestic chores, the timing of which may conflict with early morning home visits which are expected of CHWs (Quote 24). Similarly, these CHWs expressed dissatisfaction with spending an extended period away from families because of residential training held far away from the community. An ASHA stated, "*women generally do not like to leave their houses and go so far".* Consequently, they expressed a preference for training courses delivered within or close to the community (Quote 25). Overall, dissatisfaction and lack of motivation because of the tensions between work and family life were largely expressed by CHWs in India who are exclusively females.

iii. Work performance targets and job security: CHWs working on a contract basis such as contract ANM (India) complained of pressure to achieve unrealistic performance targets which determine annual renewal of government contracts. Such unrealistic performance targets include government expectation of a high number of facility-based deliveries (Quote 26) ignoring that the success of family planning campaigns has resulted in a falling fertility rate in the community. Further, these targets also ignore the scanty population in hilly regions with fewer women in the reproductive age group and accordingly, fewer deliveries. CHWs generally reported significant stress and anxiety about job insecurity regarding continued contracts (Quote 27, 28, 29).

iv. Availability of tools and commodities: CHWs across study countries expressed dissatisfaction regarding not having requisite tools and commodities to provide services, thereby making them lose respect in the community. They opined that providing health education to service recipients without providing requisite commodities such as bed nets to complement health messages means they *"work empty-handed"* and only *"help by word of mouth alone"*. Further, they feel incapacitated when first aid care is needed before referral. One of these CHWs in Kenya queried, *"…without a first aid kit, how can you give a patient first aid assistance?"* He lamented that they are *"like soldiers without guns".* Furthermore, unsalaried CHWs feel frustrated when pressured to incur out-of-pocket expenses when caring for their service recipients (Quote 30). In contrast to these unsalaried CHWs, some salaried CHWs resort to out-of-pocket purchase of needed supplies when they have not been provided by the government (Quote 31). A CHEW in Nigeria explained, *"I used my own money to buy suture. Although nobody forced me, I cannot just send the person away. Because by tomorrow if she sees me outside she will look at me as if I am not competent".*

Career advancement

CHWs often expressed frustration at an upper age limit for promotion which prevents career advancement (Quote 32) and/or the lack of clarity regarding promotion criteria. Especially when CHWs with lower qualifications are promoted ahead of those with higher qualifications (Quote 33). However, concerns about career advancement were only reported among CHW cadres with relatively clearer career paths (shown in table 3).

### ***Relationship with programme stakeholders***

CHWs were desirous of a supportive relationship with stakeholders within the formal health system and the community. Overall, CHWs expressed satisfaction or motivation from supervisors' support, recognition and reward, and reputation within the community.

Relationship with supervisors

CHWs across the study countries were desirous of supervisory approaches that support them in service delivery and addressed their work-related challenges rather than focusing on the achievement of performance-based targets (Quote 34). Further, clinical supervision by health professionals was considered necessary by CHWs who have more specialised roles such as ANMs who conduct deliveries in India. More so, the presence of these health professionals during clinical procedures helps to boost the confidence of CHWs and those of their service recipients as they are assured of prompt assistance of health professionals in the case of clinical complications (Quote 35).

Recognition and reward from supervisors

CHWs who receive positive feedback and public commendations from senior colleagues tended to be better motivated, committed and dedicated to discharging their duties (Quote 36). Other forms of recognition entail nominating high-performing CHWs to attend in-service training as a reward for meritorious performance at work. One of the HSAs in Malawi explained, "*When you are a hard worker, the bosses can send you to attend training as a way of appreciation".* However, there is a sense of relativity in how recognition is perceived. Recognition was only gratifying if a CHW perceives that undue credit was not going to another CHW cadre performing similar roles within the community (Quote 37). Overall, while recognition was often motivating for unsalaried community-based CHWs such as CHVs in Kenya, it is largely unclear whether salaried facility-based CHWs were motivated by recognition without complementary financial reward. For example, a salaried CHW from Bangladesh while discussing the award of certificates suggested that recognition without commensurate financial reward may not be worthwhile as award certificates alone cannot be used *"to buy food in the market"*

Social recognition and reputation within the community

CHWs emphasised the importance of social recognition in enhancing motivation, especially as *"…you cannot work where you are not recognised."* This was particularly important for CHWs whose primary work station is the community such as CHVs in Kenya and ASHAs in India. CHVs expressed motivation from being *"recognised and accepted"* by the community, as evidenced by getting special invitations to *"meetings in schools and churches".*

CHWs expressed satisfaction from having a good reputation but clarified that reputation often depended on diverse factors. On the one hand, CHWs had a good reputation in the community if: i) perceived as knowledgeable (Quote 38); ii) they have visible links to formal health system but this was more important for non-uniformed community-based CHWs (such as CHVs in Kenya) in which supervisory visits from district programme office was often their sole visible link to formal health system (Quote 39); iii) they are regularly seen with community leaders which was often perceived as a symbolic endorsement of CHW activities by their local leaders (Quote 40, 41). On the other hand, CHWs' reputation was often tarnished by i) perceived dishonesty when they lacked commodities as community members would often consider that CHWs misappropriated the items (Quote 42, 43); ii) provision of services (such as contraceptives) that do not align with sociocultural norms (Quote 44); iii) poor health outcome of service recipients which was often attributed to CHW negligence. Worse-affected were community-based CHWs who are more accessible to family members of the affected recipient (Quote 45). An ASHA in India explained, *"…we feel guilty because we stay in the villages and the people see us daily*".

# ***Individual values & beliefs***

Irrespective of remuneration type, CHWs across the study countries expressed the motivation and satisfaction they get from working for their community's well-being and seeing positive outcomes from their health service delivery (Quote 46, 47, 48). Salaried CHWs who are driven by altruistic goals sometimes reported "*going the extra mile"* to provide financial assistance to service recipients from low economic backgrounds emphasising that *"life is more important than money"*. Some unsalaried CHWs such as CHVs in Kenya expressed motivation and satisfaction from providing services to the community on a voluntary basis. They emphasised that they are *"like pastors"* who may not expect financial rewards for services, that "*God who sees their hard work"* would reward them.

# **Discussion**

## **Main Findings**

This study explored and identified factors associated with motivation and job satisfaction among CHWs providing MNH services in Africa and Asia. It notes how motivation and job satisfaction were shaped by CHW programme structure and availability of work tools; relationship with and perception of programme stakeholders; and CHW values and beliefs. It clarifies that these factors may have diﬀerential impacts on various cadres of CHWs depending on remuneration type, primary workstation and gender. Overall, CHWs derive motivation and satisfaction from manageable workload; altruistic values and adequate, fair, timely and sustainable remuneration especially in a work environment with cordial relationship with programme stakeholders as exemplified by recognition, reward and good reputation.

## **Relation to other literature on motivation**

Findings from this study largely align with theories on motivation drawn from high-income settings. This study highlights important links between remuneration and the ability to meet physiological needs. Additionally, recognition and reputation described in this study largely align with ego/ self-esteem described in Maslow's hierarchy of needs (Maslow, 1954). Furthermore, it supports the motivation-hygiene theory which acknowledges the roles of career advancement, recognition for achievement, working conditions, salary, supervision and interpersonal relations in motivation and preventing dissatisfaction (Herzberg, 2002). Nonetheless, our study builds on these popular theories to illustrate how contextual factors relating to CHW remuneration type (salaried or unsalaried [allowance/stipend]), primary workstation (community or facility-based) and gender act on other factors in determining if a factor will motivate and lead to job satisfaction or otherwise.

**Implications for policy and practice**

To lend insights to planning, implementation and evaluation of CHW programmes, our study highlights the implications of the findings for policy and practice:

### ***a. CHW programme structure and resources***

This study shows that many CHWs implicitly desire a base salary that guarantees a constant flow of income to address their basic needs and this may influence job retention. This finding validates concerns that the huge investments in selecting and training CHWs may be lost to poor retention or underperformance when CHWs are unsalaried (Alam, Tasneem and Huq, 2014). Programme implementers utilising unsalaried CHWs for health service delivery may be guided by a study which suggests regular financial compensation to CHWs who are given heavy workloads which take away their autonomy and time for income-generating activities (B-Lajoie, Hulme and Johnson, 2014).

Performance-based incentives seem to be a key motivator for improved performance among the remuneration types while other factors primarily address dissatisfaction. However, performance-based incentives are motivating only when the targets are seen as achievable. There are concerns about CHW programmes relying solely on performance-based incentives and rewarding outcomes alone. Noteworthy is a tendency for CHWs to replace their social values and altruistic motivation with opportunistic and coercive behaviours to earn the incentive. As shown in this study, only outcomes (such as a pregnant woman accessing ANC services) attracted an incentive while the processes which produced the outcome (frequent home visits) do not attract an incentive. The above findings corroborate a qualitative study exploring factors influencing CHWs' service delivery in India, illustrating how financial incentives improve service delivery of incentivised activities but limit their participation in non-incentivised activities (Saprii *et al.*, 2015). Hence, community health programme planners may draw from principles in human resource management which suggest that performance-based incentives should accommodate intangible inputs and processes that are not often measured but critical to achieving the outcomes (Pilbeam and Corbridge, 2010; Gilmore and Williams, 2012).

Furthermore, our study contrasts findings from Bangladesh and India to illustrate the tendency for conflicts among CHWs when activity-based incentives (relating to permanent contraception) are paid to a health team member rather than shared among all team members. While this multi-country study underscores the benefit of team-based performance incentives in enhancing teamwork and preventing rivalry and conflicts among team members, human resource management principles acknowledge the above assertion but point out that team-based reward discourages individual innovation and creativity (Pilbeam and Corbridge, 2010). Hence, there are suggestions of team-based rewards with recognition of individuals with exemplary performance (Dieleman, Gerretsen and Van Der Wilt, 2009; Pilbeam and Corbridge, 2010). This may entail rewarding high-performing teams while identifying high-performing individuals within the team should be left to the team members through anonymous vote or nominations within the group. It is anticipated that this approach will guarantee consensus within the group and strengthen the team spirit while encouraging self-motivation and individual creativity (Redman and Wilkinson, 2009).

Regardless of the remuneration types, however, all remunerated CHWs had an insatiable quest for additional financial reward and were often demotivated by delayed salary and had the perception that their remuneration may not be commensurate to their level of effort especially when compared to other CHW cadres or health professionals. This aligns with theoretical and empirical views on motivation which suggest that motivation from financial reward are subjective and the effect are person-dependent, shaped by comparisons made with colleagues (Adams, 1965; Ormel *et al.*, 2019). In line with this view, a systematic review assessing the sustainability of CHW programmes found poor job retention among CHWs who perceived their remuneration package as inadequate or unfair (Pallas *et al.*, 2013). Accordingly, CHW remuneration should be competitive and reflect their level of competency, job demands, complexity, number of work hours, training, and roles that they undertake (Pallas *et al.*, 2013; Cometto *et al.*, 2018). Furthermore, the impact of short contracts and time-bound projects on motivation and job satisfaction should inform policy review especially because of its broader implication on performance and retention. More so, the anticipation of a potential job loss may be a stressor to workers and consequently lead to a poor attitude to work (Nella *et al.*, 2015).

Asides remuneration, CHW motivation and satisfaction are also influenced by excessive workload, demands that constrain work-life balance, unreasonable performance target that threatens job security, non-availability of tools and limited opportunity for career advancement. Our finding on excessive workload and unrealistic work-related targets that ignore current realities should elicit policy review on performance targets. Policy makers may draw on human resource management principles and a global guideline on CHW programmes which emphasise context-sensitive targets (Pilbeam and Corbridge, 2010; Gilmore and Williams, 2012; Cometto *et al.*, 2018). Accordingly, policy review on CHW targets should be regular at the sub-national level to reflect changing context rather than depending solely on national benchmarks. Furthermore, in line with our study which showed limited availability of tools, literature on health workers emphasise the need for a system-wide support structure to enhance achievement of targets (Franco, Bennett and Kanfer, 2002).

While career advancement was often a source of motivation and satisfaction among CHWs with a clear career pathway, the lack of consistency and transparency in applying promotion criteria often led to a perception of unfairness among affected workers. Our finding is consistent with the findings of a study in rural Nepal in which health workers were critical of a policy that offered sponsorship for higher education abroad without linking the opportunity to the performance of the workers (Henderson and Tulloch, 2008). Hence, there is a need to strengthen communication channels between employers and employees to enhance transparency and trust on issues relating to career advancement.

# ***b. Relationship with stakeholders***

CHWs in the study countries were motivated by cordial relationship between them and their supervisors, community leaders and members. Especially when they are recognised by their supervisors and trusted, respected and accepted by the community they serve in a way that earns them recognition and enhances their reputation. However, unsalaried CHWs residing in the community placed more importance on their reputation in the community than their facility-based salaried counterparts. This may be explained in part by the former's social embeddedness within the community. More so, the role of social prestige in CHW motivation and satisfaction is well documented in literature on unsalaried CHWs providing services in LMICs (Alam, Tasneem and Oliveras, 2012; Kok *et al.*, 2015).

In contrast to unsalaried community-based CHWs, salaried facility-based CHWs may place less emphasis on awards or recognition that lack complementary monetary reward, emphasising that these awards lack market value. The above findings corroborate those of studies comparing paid workers and volunteers in which incentives such as recognition and status were more rewarding for volunteers (Fallon and Rice, 2011; Ormel *et al.*, 2019). Hence, programme planners may consider harnessing the social capital from community recognition and awards to foster CHW commitment to service delivery. For salaried CHWs, human resource management principles suggest inclusion of recognition for meritorious performance as part of a "total reward system" that includes tangible rewards such as allowance and performance-based incentives (Pilbeam and Corbridge, 2010). As human resource management principles tend to draw from different work sectors and countries, future research may explore the effectiveness, efficiency and sustainability of different combinations of tangible and intangible rewards for both salaried and unsalaried CHWs in different settings.

Further, this multi-country study illustrates how supervisory visits highlight CHW's link to the formal health system, especially among community-based CHWs who lack a visible link to the formal health system. Consequently, this enhances CHW respect and social acceptance within the community. This finding broadly aligns with those of a trial assessing factors influencing the acceptability of CHWs providing MNH care in rural Uganda. This trial clarifies the role of supervisory visits in fostering community respect for CHWs. It notes that this is more important for volunteer CHWs who reside within the community and lack any symbolic link to the health system such as uniforms (Singh, Cumming and Negin, 2015).

# ***c. Individual beliefs and values***

Irrespective of remuneration type, CHWs were driven by altruistic goals and consequently more likely to navigate work-related challenges to improve the health status of their community members. Self-motivation of CHWs has been highlighted by other authors (Ormel *et al.*, 2019) and may be a reflection of their social values which are socially constructed and entrenched in the individual's local context, life experiences and social embeddedness in religious or non-religious groups. Therefore, these social values may be a key driver of CHWs' altruism (Ramirez-valles, 1998). CHW social ties to the community may be viewed as a reinforcement of their "psychological contract" (Handy, 1993) with the community in which they, as fellow community members, are expected to be committed and driven largely by altruistic goals rather than financial gains. In return, these CHWs may expect recognition and enhanced reputation. Our findings, therefore, suggest that CHW altruistic goals and community recognition may be mutually reinforcing. Programme planners working with community-based CHWs may consider harnessing recognition and awards emanating from the community to foster this psychological contract and commitment to service delivery.

# ***Strengths and limitations***

To our knowledge, this is the first multi-country qualitative study exploring the motivation and job satisfaction of CHWs. Furthermore, CHWs were categorised based on training duration, remuneration type and primary workstation to objectively compare the different CHW cadres. However, we are careful to point out that our findings may not be generalisable to all CHW cadres for various reasons. First, this study focused on CHWs providing MNH services and our findings may not be generalisable beyond this group, although many of the key findings appear to be consistent with literature on CHWs providing other services. Second, despite reviewing the policy documents of study countries and holding discussions with in-country partners while developing the study proposal, CHWs with less than secondary education were inadvertently left out. While this omission may affect the generalisability of the study findings to CHWs with less than secondary education, the diversity of views from various stakeholder groups across five countries may be broadly representative of all CHW cadres irrespective of education. Nonetheless, future research may explore the factors influencing motivation and job satisfaction of CHWs with lower educational qualification.

**Conclusion**

The impact of CHWs should be maximised through policy revision and implementation that takes a holistic approach to motivation and job satisfaction. Findings from this study provide a useful roadmap to guide the development of a "comprehensive motivation package" that includes adequate financial reward, a manageable workload, a clear career path, and promotion of altruistic values.

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**References**

Adams, S. J. (1965) 'Toward an understanding of inequity', *Journal of Abnormal and Social Psychology*, 67, pp. 422–436.

Agyei-Baffour, P. *et al.* (2011) 'Willingness to work in rural areas and the role of intrinsic versus extrinsic professional motivations - A survey of medical students in Ghana', *BMC Medical Education*, 11(1), pp. 0–7. doi: 10.1186/1472-6920-11-56.

Alam, K., Tasneem, S. and Huq, M. (2014) 'Reservation wage of female volunteer community health workers in Dhaka urban slums: a bidding game approach', *Health Economics Review*, 4(1), p. 16. doi: 10.1186/s13561-014-0016-4.

Alam, K., Tasneem, S. and Oliveras, E. (2012) 'Performance of female volunteer community health workers in Dhaka urban slums', *Social Science & Medicine*, 75(3), pp. 511–515. doi: 10.1016/j.socscimed.2012.03.039.

Armstrong, M. and Taylor, S. (2014) *Handbook of Human Resource Management Practice*. 13th edn. London: Kogan page limited.

B-Lajoie, M.-R., Hulme, J. and Johnson, K. (2014)' Payday, ponchos, and promotions: a qualitative analysis of perspectives from non-governmental organization programme managers on community health worker motivation and incentives.', *Human Resources for Health*, 12(1), p. 66. doi: 10.1186/1478-4491-12-66.

Carver, C. S., Sutton, S. K. and Scheier, M. F. (2000) 'Action, emotion, and personality: Emerging conceptual integration', *Personality and Social Psychology Bulletin*. SAGE Publications Inc., pp. 741–751. doi: 10.1177/0146167200268008.

CHPRBN (2006) *Curriculum of Community Health Practitioners*. Abuja, Nigeria.

Cometto, G. *et al.* (2018) 'Health policy and system support to optimise community health worker programmes: an abridged WHO guideline', *The Lancet Global Health*, (18), pp. 1–8. doi: 10.1016/S2214-109X(18)30482-0.

Daniels, K. *et al.* (2019) 'Incentives for lay health workers to improve recruitment, retention in service and performance', *Cochrane Database of Systematic Reviews*, 2019(12). doi: 10.1002/14651858.CD011201.pub2.

Dieleman, M., Gerretsen, B. and Van Der Wilt, G. J. (2009) 'Human resource management interventions to improve health workers' performance in low and middle income countries: a realist review', *Health Research Policy and Systems*, 7(1), p. 77. doi: 10.1186/1478-4505-7-7.

Fallon, B. J. and Rice, S. M. (2011) 'Investment in staff development within an emergency services organisation: comparing future intention of volunteers and paid employees', *The International Journal of Human Resource Management*, 26(7), pp. 1–16. doi: 10.1080/09585192.2011.561222.

Franco, L. M., Bennett, S. and Kanfer, R. (2002) *Health sector reform and public sector health worker motivation: a conceptual framework*, *Social Science a Medicine*. Available at: https://pdfs.semanticscholar.org (Accessed: 26 December 2018).

Gilmore, S. and Williams, S. (2012) *Human Resource Management*. 2nd edn. Oxford University Press.

Government of Bangladesh (2016) *Bangladesh Essential Health Service Package*.

Government of Kenya (2013) *A National Framework and Plan of Action for implementation of Integrated Community Case Management (iCCM) in Kenya, 2013-2018*. Nairobi.

Handy, C. (1993) *On the motivation to work. In: understanding organisations*. 4th edn. Edited by Harmondsworth. London, UK: Penguin books.

Henderson, L. N. and Tulloch, J. (2008) 'Incentives for retaining and motivating health workers in Pacific and Asian countries.', *Human resources for health*, 6, p. 18. doi: 10.1186/1478-4491-6-18.

Hennink, M. M., Kaiser, B. N. and Marconi, V. C. (2017) 'Code Saturation Versus Meaning Saturation: How Many Interviews Are Enough?', *Qualitative Health Research*. SAGE Publications Inc., pp. 591–608. doi: 10.1177/1049732316665344.

Herzberg, F. (2002) *One More Time: How Do You Motivate Employees?* Available at: https://www.thealexandergroup.com/static/uploads/photos/2012-04/HBR\_One\_More\_Time.pdf (Accessed: 26 December 2018).

Indian Nursing Council (2013) *Amendments for Auxiliary Nurses and Midwives syllabus and regulation*. Available at: www.indiannursingcouncil.org/pdf/amendments-anm-syllabus.pdf (Accessed: 20 September 2016).

Kok, M. C. *et al.* (2015) 'Which intervention design factors influence performance of community health workers in low- and middle-income countries? A systematic review', *Health Policy and Planning*, 30(9), pp. 1207–1227. doi: 10.1093/heapol/czu126.

Kumah, E. (2017) 'Which Motivational Factors are of More Relevance to the Rural Health Worker? Evidence from a Ghanaian District Hospital', *Journal of General Practice*, 05(02). doi: 10.4172/2329-9126.1000299.

Locke, E. A. and Latham, G. P. (2004) *What Should We Do about Motivation Theory? Six Recommendations for the Twenty-First Century*, *Source: The Academy of Management Review*. Available at: http://www-2.rotman.utoronto.ca/facbios/file/17 - Locke & Latham AMR 2004.pdf (Accessed: 26 December 2018).

Maslow, A. H. (1954) *Motivation and Personality*. Harper & Row,Publishers, Inc.

Ministry of Health Kenya (2013) *Community Health Volunteers (CHV): Basic Modules Manual*.

MoHFW (2013) *Annual report 2013-14*. Available at: http://nrhm.gov.in/images/pdf/media/publication/Annual\_Report-Mohfw.pdf.

Munar, W. *et al.* (2018) 'Team- and individual-level motivation in complex primary care system change : A realist evaluation of the Salud Mesoamerica Initiative in El Salvador [ version 1 ; referees : awaiting peer review ] Gates Open Research', *Gates Open Research*, (0), pp. 1–19.

Nella, D. *et al.* (2015) 'Consequences of Job Insecurity on the Psychological and Physical Health of Greek Civil Servants', *BioMed Research International*, 2015.

NHM (2021) *About Accredited Social Health Activist (ASHA)*, *Ministry of Health and Family Welfare, Government of India*. Available at: https://nhm.gov.in/index1.php?lang=1&level=1&sublinkid=150&lid=226 (Accessed: 5 February 2021).

Olaniran, A. *et al.* (2019) 'The role of community health workers providing maternal and newborn health: case studies from Africa and Asia. Manuscript submitted for publication', *British Medical Journal Global Health*.

Ormel, H. *et al.* (2019) 'Salaried and voluntary community health workers: Exploring how incentives and expectation gaps influence motivation', *Human Resources for Health*, 17(1), p. 59. doi: 10.1186/s12960-019-0387-z.

Pallas, S. W. *et al.* (2013) 'Community health workers in low- and middle-income countries: What do we know about scaling up and sustainability?', *American Journal of Public Health*, 103(7), pp. 74–82. doi: 10.2105/AJPH.2012.301102.

Pilbeam, S. and Corbridge, M. (2010) *People Resourcing and Talent Planning: HRM in Practice*. London: Financial Times Prentice Hall.

QSR (2014) *Qualitative Research | Data Analysis Software | NVivo*. Available at: http://www.qsrinternational.com/default.aspx (Accessed: 2 December 2014).

Rahman, S. M. *et al.* (2010) 'Factors affecting recruitment and retention of community health workers in a newborn care intervention in Bangladesh', *Human Resources for Health*, 8(1), p. 12. doi: 10.1186/1478-4491-8-12.

Ramirez-valles, J. (1998) 'Promoting health, promoting women: The construction of female and professional identities in the discourse of community health workers', *Social Science & medicine*, 47(11).

Redman, T. and Wilkinson, A. (2009) *Contemporary Human Resource Management*. 3rd edn.

Ritchie, J. *et al.* (2014) *Qualitative Research Practice: A Guide for Social Science Students and Researchers*. 2nd edn. London: Sage Publication.

Saprii, L. *et al.* (2015) 'Community health workers in rural India: analysing the opportunities and challenges Accredited Social Health Activists (ASHAs) face in realising their multiple roles', *Human Resources for Health*, 13(1), p. 95. doi: 10.1186/s12960-015-0094-3.

Singh, D., Cumming, R. and Negin, J. (2015) 'Acceptability and trust of community health workers offering maternal and newborn health education in rural Uganda', *Health Education Research*, (2), pp. 1–12. doi: 10.1093/her/cyv045.

Steel, P. and König, C. J. (2006) 'Integrating theories of motivation', *Academy of Management Review*, 31(4), pp. 889–913. doi: 10.5465/AMR.2006.22527462.

Stewart, A. (2016) *Basic Statistics and Epidemiology: A Practical Guide*. 4th edn. Boca Raton, Florida: CRC Press, Taylor and Francis Group.

SURE-P (2013) *Community Health Extension workers*. Available at: http://www.surepmch.org/spmch\_hw\_chew.php (Accessed: 20 October 2015).

Tulenko, K. *et al.* (2013) 'Community health workers for universal health-care coverage: from fragmentation to synergy.', *Bulletin of the World Health Organization*, 91(11), pp. 847–52. doi: 10.2471/BLT.13.118745.

UNICEF (2014) *Summative report on the external evaluation of the Catalytic Initiative ( CI )/ Integrated Health Systems Strengthening ( IHSS ) programme in Malawi*.

USAID (2018) *Newborn Health — MEASURE Evaluation*. Available at: https://www.measureevaluation.org/prh/rh\_indicators/womens-health/nb (Accessed: 16 January 2021).

WHO (2005) *The World Health Report 2005 - Make Every Mother and Child Count*. doi: 10.5144/0256-4947.2005.516.

WHO (2014a) *Accountability for women's and children's health 2014: Progress report*. Available at: http://www.who.int/woman\_child\_accountability/about/COIA\_report\_2014.

WHO (2014b) *PMNCH Countdown to 2015 report: 'unfinished business' on maternal, child health*. Johannesburg, South Africa: World Health Organization. Available at: http://www.who.int/pmnch/about/governance/partnersforum/countdown/en/index1.html (Accessed: 11 January 2015).

WHO (2020) *Nursing and midwifery*. Available at: https://www.who.int/news-room/fact-sheets/detail/nursing-and-midwifery (Accessed: 19 December 2020).

WHO and GHWA (2014) *A universal truth: No health without a workforce*. doi: ISBN 978 92 4 150676 2.

Willis-Shattuck, M. *et al.* (2008) 'Motivation and retention of health workers in developing countries: A systematic review', *BMC Health Services Research*, 8(1), pp. 1–8. doi: 10.1186/1472-6963-8-247.

**Footnotes**

**Contributors** AO and NvdB conceived the study with contributions from BM and SB-Z. AO collected and analysed the data and drafted the PhD thesis which informed the manuscript. NvdB, BM and SB-Z reviewed the thesis and contributed to interpretation of the results. AO drafted the initial version of the manuscript while NvdB, BM, SB-Z and AB-T reviewed it. NvdB, BM, AB-T and AO drafted the final version of the manuscript.

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**List of tables and figures**:

1. Table 1: Summary of data collection in study countries
2. Table 2: Supplementary quotes
3. Table 3: Characteristics of CHWs
4. Figure 1: Factors affecting CHW motivation