

Review Article

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Financial incentive for community health workers, a necessity for achieving universal health coverage: integrated literature review

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ABSTRACT

Community health workers (CHWs) are vital to achieve universal health coverage (UHC). They have been identified as effective workforce to improve access to primary health care particularly for underserved and hard to reach populations. Lack of appropriate incentives, with resulting high rates of turnover are common challenges in large-scale CHW program. Debates about paying community health workers typically focus on the trade-offs between reliance on volunteerism underpinned by intrinsic motivation of volunteers and the need to recognise and remunerate work fairly. Financial payment for CHWs will also help in increased employment, and women's economic empowerment, tackling gender-based inequities, as seventy percent of CHWs globally are women. This study reviewed existing literature-published peer reviewed articles and grey literatures on financial incentives for community health workers and program considerations for effective implementation. Synthesis from the relevant studies revealed four relevant themes: need for financial incentives, categories of financial incentives, funding mechanisms for financial incentives and program considerations for effective implementation of financial incentives. The study provides program considerations for effective implementation of financial incentive for community health workers. There is need for countries to review their community health worker program design and establish enabling policy environment and implementation mechanisms for realistic and appropriate financial incentives for the community health workers based on their workload, responsibilities, and local context. Appropriate tools should be used to model the community health workers working hours which will guide in determining fair and commensurate renumeration and effective monitoring system established.

Keywords: Financial incentives, Community health workers, Universal health coverage, Motivation, Necessity

INTRODUCTION

Community health workers (CHWs) are vital to countries' strategies to achieve universal health coverage (UHC). They have been identified as effective workforce essential to improve access to primary health care particularly for underserved and hard to reach populations.¹ Their roles are critical for the achievement of UHC and the sustainable development goals (SDGs) especially in low-income and middle-income countries (LMICs).^{2,3}

They serve as the bridge between the formal health system and the community to address unmet needs for health services, promote health-system resilience, foster continuation of essential services and support effective emergency responses.¹⁻⁵ Recently, CHWs have become increasingly important in health systems as they are considered essentials to complement the skilled health workforce especially in settings with scarcity of health personnel low-income and middle-income countries.^{5,6} The role of CHWs in the West Africa Ebola outbreak and

during the ongoing COVID 19 pandemic has been highlighted to advocate for increasing the numbers of CHWs globally.⁷⁻⁹

CHWs in this study are health care providers who live in the community they serve and receive lower levels of formal education and training than professional health care workers such as nurses and doctors and differ both within and across countries, in terms of their recruitment, training, supervision, type and amount of work, and form of remuneration.¹⁰ They have enormous potential to extend health care services to vulnerable populations, such as communities living in remote areas and historically marginalized people, to meet unmet health needs in a culturally appropriate manner, improve access to services, address inequities in health status and improve health system performance and efficiency.^{10,11} Lack of appropriate incentives, with resultant high rates of turnover and the type of financial remuneration that is fair, appropriate, and sustainable are common challenges in large-scale CHW program.¹²⁻¹⁴

Debates about paying community health workers typically focus on the trade-offs between reliance on volunteerism underpinned by intrinsic motivation of volunteers and the need to recognize and remunerate work fairly. Financial payment will also help in increased employment, and women's economic empowerment, tackling gender-based inequities, as seventy percent of Community Health workers globally are women.¹⁵⁻¹⁷

Various studies tend to imply that using volunteers is the best approach for CHWs and argue that offering financial incentives is not always an effective or desirable strategy, as this may undermine the volunteering spirit.^{18,19} There are also concerns that providing financial incentives for CHWs either as salaries or other modalities of payment are not sustainable.²⁰ However, the reality is that most CHWs especially in low-income countries are usually poor people and should be compensated to commensurate with the time invested in providing services for their communities.^{21,22}

Studies have reported financial incentive as a critical factor for sustaining CHWs and many countries have moved to professionalize and institutionalize their community health worker programmes away from dependency on volunteers.¹²⁻¹⁶ The new WHO guideline on CHW programme support also recommends that CHWs should receive financial incentive package appropriate to their workload, training, number of hours and responsibilities.⁵

The study examined existing literature on financial incentives for community health workers and identified program considerations for effective implementation.

METHODS

Integrative literature review of published peer reviewed articles and grey literatures which included policy briefs, program evaluation and technical reports.

Search strategy

A systematic search of published articles was conducted from main electronic databases (PubMed, PsycINFO, Hinari, Scopus, Africa journals online and direct search from Google Scholar). Searches of the grey literature were also conducted which included policy briefs, programme evaluation and technical reports of organizations. The lists of selected full texts were also screened for additional relevant articles. Searching was restricted to studies conducted in low and middle -income countries and published in English from earliest available date to June 2023.

In addition to the above, specific key words, such as "financial incentives; 'payment', 'salary' 'motivation' 'retention' community health workers' low and middle -income countries' etc. were used to retrieve studies for the review.

Inclusion criteria

The inclusion criteria applied for the selection of the study included: peer-reviewed studies or grey literatures which used all study designs with clear methodology conducted in low and middle income countries and published in English from earliest available date to June 2023.

Exclusion criteria

Conference abstracts, personal commentaries and studies conducted outside the scope of the research were excluded.

Data quality control

After the first selection of studies was completed, methodological quality control measures using a designed critical appraisal checklist to evaluate the methodological rigorousness of the identified studies and to avoid inclusion of irrelevant studies into the review. Clarity of the study aims and justification; appropriateness of the methodology, study design used; how rigorous the data analysis is, explicitly of the results findings and relevant of the study aims etc. were used as quality assurance techniques to minimize inclusion of irrelevant documents into the review were undertaken by two authors independently.

During the quality assessment any disagreements were solved through discussion and consensus.

Data synthesis

Thematic analysis was used to synthesize the data and four themes identified.

RESULTS

Figure 1 shows the analysis of the articles included in the study. A total of 193 articles were included in the initial

search. After removing duplicate articles and excluding other articles based on the inclusion criteria, 113 full texts were assessed for eligibility. 68 articles were finally included in the study following the quality control exercise conducted.

Synthesis from the relevant studies revealed four relevant themes: need for financial incentives, categories of financial incentives, funding sources for financial incentives and program considerations for effective implementation of financial incentives.

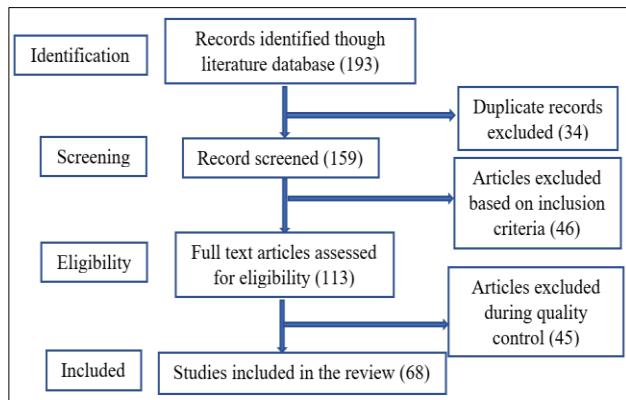


Figure 1: Number of articles eligible for the study.

Theme 1: Need for financial incentives for CHWs

Financial incentives have been linked to CHWs' motivation and retention and has become more necessary especially as expectations in the form of tasks and workload expand.^{10,14,23-25} Reichenbach and Shimul reported that 86% of the respondents in their study claimed they had become CHWs "to contribute to the income of their households".²⁶

Several studies on CHWs motivation in LMICs highlighted monetary incentives as valued income on which they could depend on to support their households especially in situations in which CHWs have no other source of income and a significant portion of the day is needed to meet the job requirements.^{14,20,27,28} In addition, the reality is that majority of the CHWs recruited are poor and require income to compensate them for the work done and there is now an emerging consensus that CHWs should be paid.^{5,29}

In a study in Bangladesh, the dropout rate for CHWs was between 31-44% and the reasons cited for attrition were household chores and participation in other socio-economic activities which appeared more profitable.²⁰ Similar findings were reported in Tanzania where majority of CHWs had the satisfaction of serving their community, but inadequate financial remuneration was the most reported challenge while working as CHWs and the reason why majority of them dropped off.¹² A study in Kenya reported a statistically significant difference in attrition rate between CHWs' receiving monetary incentives and

those not receiving monetary incentives with higher attrition rates (13%) among those not receiving any form of monetary incentives compared to those receiving monetary incentives (4%).²⁷ A systematic review found that CHWs getting financial incentives performed better than CHWs receiving in-kind incentives.²⁸ However, the study reported performance-based incentives focused CHW efforts towards remunerated tasks.²⁸

Studies have reported that monetary rewards would 'crowd in' intrinsic motivation by making CHWs feel more supported, confident, and less restricted in their work rather than financial incentives decreasing or 'crowding out' intrinsic motivation which has been regarded a negative consequence of paying CHWs.^{12,20} However a comparative analysis of qualitative studies of CHWs motivation and performance in six countries (Bangladesh, Ethiopia Kenya, Indonesia, Malawi, and Mozambique) concluded that intrinsic rewards are important for both volunteer and salaried CHWs, but they do not compensate for the demotivation produced by a perceived low level of financial reward.¹⁶

Relatedly, there is good evidence that non-financial incentives (social recognition, trust, respect, and opportunities for growth and career advancement) can improve community health workers' performance and reduce attrition.^{30,31} However, CHWs in many low incomes to middle-income countries feel they are underpaid and poorly compensated for their workload, time, and effort.³²

In the context of task-shifting health services to community providers to fill human resource gaps, there has been an expansion of CHW role and workload. WHO guideline for optimizing health system and policy support for optimizing the contribution of CHWs recommends remunerating practising CHWs for their work with a financial package commensurate with the job demands, complexity, number of hours, training and roles that they undertake.⁵ The WHO guideline expressed concern that reliance on voluntary CHWs is "inconsistent with the international agenda on decent work and particularly with sustainable development goal (SDG) 8, promoting decent work and economic growth".^{5,33,34} This recommendation was bolstered by the fact that continued reliance on voluntary work from CHWs could perpetuate gender disparities in access to employment and income opportunities and be inconsistent with SDG 5, achieving gender equality and empowerment of all women and girls as seventy percent of community health workers globally are women.^{33,34} A study in India on payment of incentives in motivating CHWs revealed that incentives contributed to financial empowerment to the accredited social health activists (ASHAs) who are female CHWs and their families.³⁵ Earning income and contributing to the household's financial wellbeing was reported to inspire a sense of financial independence and self-confidence for them, especially with respect to relations with their husbands and parents-in-law.³⁵

The WHO guideline does not rule out the use of volunteer CHWs, but it does express concern about the use of volunteer CHWs who do not have any other source of livelihood.⁵ Volunteers in wealthier countries generally have other incomes, such as pensions, spousal income or part-time employment, and find it a meaningful way to occupy their time or contribute to society unlike in lower income countries.¹⁸ Studies have suggested that if a CHW programme is to remain voluntary, and especially in areas of rural poverty, incentive packages need to be defined that can alleviate the burden of volunteerism on families by including such components as income generating activity or any form of financial incentives.^{12,18} A study in Madagascar which assessed the livelihood of the CHWs reported that CHWs responsibilities interfered with their ability to make a living.³⁶ The study recommended that programs should make realistic demands of CHWs based on their broader livelihood context, and design structures that balance job expectations with appropriate livelihood support through remuneration or more limited hours and responsibilities allowing CHWs to pursue other activities and meet their basic needs.³⁶

A recent policy paper from the World Bank calls for a new approach by governments to the support of CHWs in the face of the COVID-19 pandemic and advocated for steady wages for them.³⁷ Some authors have argued that not paying CHWs who work in externally funded disease-control programmes such as polio programme, fair living wage is to be considered exploitation.³⁸ However, it is estimated that nearly 60% of community health workers in low-income and lower-middle-income countries received no salary, and as high as 85% on the continent of Africa.³⁴

Theme 2: Categories of financial incentives

The categories of CHW remuneration differ according to the purpose of the CHW programme, the context in which it operates, commitment by the government and the funds available. Various types of financial incentives have been implemented for CHWs and varies from program to program. These include monthly salaries or stipends, performance-based incentives, adhoc cash award, reimbursement of cost of travel, income generating activities such as loans and the selling of health-related products.^{32,33,39} Monthly salaries are paid to formally employed or full term community health workers while monthly stipends are paid to volunteer community health workers who work mostly part time.^{32,33}

Table 1 shows the categories of financial incentives paid to community health workers in various country community health worker programs.

Salaried financial incentives

The CHWs (Behvarzs) in Iran, Pakistan's lady health worker programmes, health extension workers in Ethiopia, Agente Comunitário de Saúde (ACS) in Brazil and Guardian de Salud in Guatemala, Family welfare assistant

(FWA), health assistant (HA) and community healthcare provider (CHCP) in Bangladesh are examples of well-known and documented paid full-time CHW programmes.^{32,33,39} Others are India auxiliary nurse midwives/multipurpose health workers, CHWs in Malawi, Agent de Santé Communautaire (ASC) in Niger, community health extension worker (CHEW) in Nigeria, CHWs in Tanzania, community-based health and planning services (CHPS) community health officer (CHO) in Ghana and Zambia's community health assistants.^{32,33,39}

However, the amount paid varies from country to country and on the job responsibilities of each CHW cadre. Ethiopia's health extension workers (HEWs) received regular monthly salary of \$84 with benefits and India's auxiliary nurse midwives/multipurpose health workers received US\$ 280 per month. Bangladesh's family welfare assistant received a government salary of US\$ 132–318 per month, Health Assistants, US\$ 135-327 per month, and CHCPs, US\$ 150–362 per month. Agente Comunitário de Saúde (ACS) in Brazil received between \$ 281-\$472 monthly, Zambia community health assistant agents received a salary of \$390 per month, community health extension worker (CHEW) in Nigeria, CHWs in Tanzania and community-based health and planning services (CHPS) community health officer (CHO) in Ghana received \$281, \$143 and \$140 per month respectively.^{32,33,39,40} Guardian de Salud in Guatemala received \$50 per month, community health workers in Malawi and ASC in Niger received \$63 per month and \$100 per month respectively.^{32,33}

Non-salaried financial incentives

Many programmes provide their CHWs with monthly payment but call this incentive rather than salary that a regular, full term employed person would receive. As such, this income lacks the associated benefits that government employees normally receive. The community health agents in Liberia, ASHA and Anganwadi workers in India, CHWs in Kenya, Sierra Leone, and Belize are volunteers who usually receive monthly stipends as incentives.^{32,38-41} Others who received one form of non-salaried financial incentive include Agentes Polivalente Elementare (APE) in Mozambique, ward-based primary healthcare outreach team (WBPHCOT) in South Africa and village health volunteer in Thailand.^{32,33,39}

The amount paid varies across the various countries and programs from \$20 to \$290 monthly. Community health volunteers in Kenya are paid between \$20-\$60, the Anganwadi workers in India are paid between \$50-\$130 monthly, the ward-based primary healthcare outreach team (WBPHCOT) in South Africa are paid between \$150-\$290 monthly, while the village health workers in Zimbabwe receive a quarterly allowance of US\$ 42 which is often irregular.^{32,33}

Performance-based incentives (PBI)

This is another payment modality being used in a number of countries for CHWs. Some are paid exclusively using PBI while some benefit from PBI in addition to monthly stipends. India's ASHA and Iran's Behvarzs receive performance-based bonuses in addition to their monthly payment.^{32,33,39} Payments to Rwanda's CHWs are partly based on performance related to indicators for nutrition, antenatal care, facility deliveries, family planning services, and engagement with HIV and TB control.^{32,33} The payment approach in Rwanda is also unique with thirty percent of the payment goes to individual CHWs, and the remaining 70% to the cooperative and aimed to encourage teamwork as well as high individual performance.^{32,33}

Bangladesh rural advancement committee (BRAC) CHW programme called *Shasthya Shebikas* receive incentives for good performance that is based on achieving specific objectives during that month, such as identifying a certain number of pregnant women during their first trimester in addition to selling of commodities.^{32,33}

Many studies have however raised concerns about CHW programmes relying solely on performance-based incentives and rewarding outcomes alone because of the likelihood of CHWs neglecting responsibilities that are not incentivized.^{5,42} Although performance-based payment increases the quantity of health services delivered, it may also have unintended economic effects, such as distortion (neglect of important tasks that are not rewarded with financial incentives), gaming (improving or cheating on reporting rather than improving performance), corruption, cherry picking (serving easy-to-reach patients).^{28,35} The WHO guideline specifically recommended against paying CHWs exclusively or predominantly using performance-based incentives.⁵

A study on predictors of CHW attrition in Kenya found that although there was a relationship between payment for performance and retention of CHWs, there was no relationship between performance-based incentives and quality of care or even health outcomes.⁴³ Other studies also argued that reliance on performance-based incentives alone does not provide CHWs with financial security and may ultimately impede CHW rights and that performance-based incentives are motivating only when the targets are seen as achievable.^{15, 28}

Income generating activities

Nepal's female community health volunteers (FCHVs) are supported through a local endowment funds that are controlled by village development committees from which FCHVs can draw from to support income-generation activities.^{18,32,33} Likewise, the lower-level cadre CHWs in Bangladesh rural advancement committee (BRAC) CHW programme called *Shasthya Shebikas*, who are also members of women's savings and loan groups also engage in a variety of income-generating activities such as raising chickens, producing milk, and making handicrafts.^{18,32,33} Similarly, one of the world's pioneers CHW programs in

India, the Jamkhed comprehensive rural health project, also support the volunteer CHWs with income generating activities and the volunteers are reported to be highly stable with many serving in this capacity for 20 or more years.⁴⁴ This approach has been reported to have made it possible for these CHW programme to grow without dependence on external funding.^{18,44}

Selling of commodities

Bangladesh rural advancement committee (BRAC) community health volunteer (CHV) programme sell health commodities such as drugs for minor illnesses, contraceptives, feminine hygiene supplies, iodized salt, oral rehydration solution, safe delivery kits to make a small profit and charge a small service fee for antenatal care.³² On average, the income from these sales amount to US\$10–20 per month. Studies have reported that when compensation is tied to drug sales, CHWs tend to focus on curative care and fee-for-service schemes and the practice is open to abuse by placing the profit motive over the real needs of villagers which often result in an increase of curative over preventive activities and the over prescription of medications.^{20,39} Too much reliance on community financing can exacerbate inequities since the poorest communities will likely have the greatest health problems but have also the least capacity to pay for services.^{20,39}

Theme 3: Funding sources for CHWs financial incentives

The sources of funding for the payment of financial incentives for the CHWs range from the national government to a combination of co-sharing between national and subnational government, contribution from the communities and external donors.^{32,33,39} The payment for the India auxiliary nurse-midwives, community health workers in Brazil, Thailand, Belize are from the national government while the payment for the India's Anganwadi workers is co-shared with 90% from the national government and 10% from the state budget.^{32,33,39,41} The monthly salary for the CHWs in Iran is paid from the national budget while the lady health workers in Pakistan are paid largely by the government who contributed 89% and 11% were from the donors during the first phase of the project.^{32,33,45}

The salaries for the family welfare assistant (FWA) and health assistant (HA) in Bangladesh are solely funded by the government while the salary for the community healthcare provider (CHCP) in Bangladesh is funded mostly by donors and the government.^{32,33} The CHW program in Ethiopia is funded by the national and subnational entities and support from donors while the CHWs incentives in Sierra Leone in largely funded by development partners.^{32,46} The community health volunteers in Kenya are paid by the counties and the amount being paid varies from county to county.³²

The monthly incentives of the community health agent, a category of the CHWs in Liberia are paid by the county health team with fund from the county health budget with support mostly from the government and contribution from some donors.⁴⁰

Several NGOs have tried to create community revolving drug funds or other types of community-based credit funds specifically for health incentives.²⁰ The funding support for the female community health volunteers (FCHVs) in Nepal is from local endowment funds controlled by village development committees which FCHVs can draw from to

support income-generation activities.^{32,33} The concept of community financing is an attractive one, but unfortunately has proved to have serious limitations. Programs that relied primarily on community financing, such as fees for services, place greater burdens on poor communities and the sick and didn't lead to consistent and regular payment of CHWs.^{20,39}

Table 2 shows the various funding sources for community health workers' financial incentives in various country CHW programs.

Table 1: Categories of financial incentives for community health workers.

S. no.	Categories of financial incentives	Community health worker cadre and countries
1.	Salaried financial incentives	Community health workers (Behvarzs) in Iran
		Agente Comunitário de Saúde (ACS) in Brazil
		Pakistan's lady health workers
		Health surveillance assistants (HSAs) in Malawi
		India auxiliary nurse midwives/multipurpose health workers
		Guardian de Salud in Guatemala
		Zambia community health assistants
		Agent de Santé Communautaire (ASC) in Niger
		Community health extension worker (CHEW) in Nigeria
		Community health workers in Tanzania
2.	Non-salaried	Community-based health and planning services (CHPS) community health officer (CHO) in Ghana
		Family welfare assistant (FWA), health assistant (HA) and community healthcare provider (CHCP) in Bangladesh
		Malawi CHW
		Community health volunteers in Kenya
		Ward-based primary healthcare outreach team (WBPHCOT in South Africa
3.	Performance-based incentives (PBI)	Anganwadi workers in India
		Accredited social health activist (ASHA) in India
		Agentes polivalente elementare (APE) in Mozambique
		Community health agents in Liberia
		Community health workers in Sierra Leone
4.	Income generating activities	Community health workers in Belize
		Community health workers in Rwanda
		Accredited social health activist (ASHA) in India
		Community health workers (Behvarzs) in Iran
5.	Selling of commodities	Bangladesh rural advancement committee (BRAC) CHW (Shasthya Shebikas)
		Nepal's female community health volunteers (FCHVs)
		Bangladesh rural advancement committee (BRAC) CHW (Shasthya Shebikas)
		Jamkhed comprehensive rural health project CHW program in India
		Bangladesh rural advancement committee (BRAC) community health volunteer (CHV) programme

Table 2: Funding sources for community health workers financial incentives.

S. no.	Sources of fund	Community health worker cadre and countries
1.	Domestic fund (National government)	Agente Comunitário de Saúde (ACS) in Brazil
		Auxiliary nurse-midwives in India
		The lady health workers in Pakistan
		Community health workers in Nigeria
		Community health workers in Tanzania
		Continued.

S. no.	Sources of fund	Community health worker cadre and countries
		Community health workers in Belize
		Family welfare assistant (FWA) and health assistant (HA) and in Bangladesh
		Community health workers in Iran
2.	Domestic fund (National and subnational government)	India's Anganwadi workers
3.	Domestic and donor fund	Community health agents in Liberia Community healthcare provider (CHCP) in Bangladesh Health extension workers in Ethiopia
4.	Domestic (Local endowment fund)	Female community health volunteers (FCHVs) India
5.	Domestic (county)	Community health volunteers in Kenya Afghanistan community health workers;
6.	Donor fund	Village health worker in Zimbabwe Community health workers in Guatemala Community health workers in Sierra Leone

Theme 4: Program considerations for effective implementation of financial incentives for community health workers

Payment to be fair and commensurate to CHWs roles

A major issue from The Lancet global health commission on financing primary health care on the payment of community health workers was how to pay community health workers.⁴⁷

Some of the major considerations identified for effective implementation of financial incentives include fairness of the incentives being paid, how equitably they are distributed, how consistently they are provided, and how they relate to the local labor market and economic.^{5,39} Studies suggested that even though not all CHWs may be made into salaried employees, they should however be provided with financial incentive that is commensurate with their works demand in terms of expectations regarding type and number of tasks, training, as well as expected time investment.^{5,48} It has also been advocated that depending on the type of outcomes intended for the CHW program, and the context, planners might choose one type of remuneration over another, however part time models should not place unrealistic expectations on the CHW's time or capacity.^{18,33} Programs should make realistic demands of CHWs based on their broader livelihood context, and design structures that balance job expectations with appropriate livelihood support through remuneration or more limited hours and responsibilities allowing CHWs to pursue other activities and meet their basic needs.³⁶

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.^{5,42,43}

While introducing financial incentives is motivating, adequate expectation management is needed to prevent

frustration as a result of broken promises either as a result of failure to provide the incentives or delays in providing them.³³ Unmet promises related to incentives and remuneration, delayed release of payments, and having to spend out of pocket to meet one's responsibilities were identified as sources of demotivation for CHWs and creates mistrust towards the health system.^{33,49} Incentives do not have to be equal across all sub-categories of CHWs but should be introduced equitably and reliably in a manner sensitive to expectations and program priorities.^{5,33,42}

The payments should be locally benchmarked and comparable to other government and non-governmental organization (NGO) positions with similar responsibilities to ensure equity and acceptability.^{33,50} CHWs should be provided financial incentive based on their roles, responsibilities and workload and the amount paid, the modality of payment or other incentives to be provided to each type of CHWs should be transparently determined and communicated so as to avoid fueling conflict among the various categories of CHWs.^{5,42,51,52}

Government and program planners should use appropriate and available tools to model the community health workers working hours which will guide in determining fair and commensurate renumeration and effective monitoring system established. The tools help to model options for CHW program design with respect to CHW time allocation, workload, and targeted population coverage of interventions, among other variables.^{53,54}

In the new Sierra Leone CHW policy of 2021, CHWs in hard-to-reach areas (at a distance of over 5 km radius from the nearest primary health facilities called peripheral health units (PHU) or within 3-5 km with difficult terrain) provide all services as per the scope of work of CHWs and ICCM plus services are paid 25 USD monthly. The CHWs in easy to reach areas (within 3-5 km radius areas of the nearest PHU) who provide only scope of work for CHWs are paid 15 USD while the peer supervisors are paid 30USD monthly.⁴⁶

In Liberia, a cadre of the community health workers called the community health agents are paid \$70 per month, commensurate with the 20 hours of work they are expected to perform each week. The other CHW cadres are provided with other form of both monetary and non-monetary incentives depending on what activities they are engaged to perform.⁴⁰

Sustainable funding

Securing sustainable financing for community health worker programmes can be a challenge particularly in countries that rely solely on external funding.^{32,33} Funding from government has important advantages, most notably job security for the individual CHW. However, one of the inherent problems with government funding is the lack of strong political support to continue funding levels for CHW programs in the face of competing demands which causes cutbacks in funding when there are government shortfalls. Therefore, CHW programs are commonly one of the first budget items to be cut when budget pressures arise.^{39,45}

Governments face formidable challenges in giving formal recognition and salaries to CHWs as highlighted by some studies.^{45,55} One of such is that the provision of salary carries with it the inherent risk of CHWs unionizing and demanding higher salaries and more benefits.^{45,55} This can however be addressed by implementing one of the recommendations in the WHO guideline by having a written agreement specifying role and responsibilities, working conditions and remuneration which can include that they are not formal employee and not able to join association and the condition for possible increasing their salaries specified.⁵ The Liberia's community health policy clearly stated that even though the community health agents are paid monthly incentives by the county health teams they are not civil servants.⁴⁰

In addition, even though individual salaries are low, the financial implications of these pressures are considerable given the large number of workers involved. However, establishing functional and institutionalized national georeferenced CHW master list (CHWML) and use of other community health worker program planning tools will help the government in being able to identify and plan for the required number of CHWs that government can engage and pay.⁵³⁻⁵⁶ The use of these tools is important to help each country or program determine how many CHWs to deploy relative to the population size because global benchmarks are difficult to identify, given variability in context and the number and types of services that CHWs may offer which are specific to each county or program.⁵³ A further challenge in many countries is that the entry-level nurse cadre salary is the country's minimum wage. This prevents the country from hiring CHWs as full-time employees because it would require that entry-level nurses—and perhaps several lower-level nurse cadres as well be given a raise. Thus, there is a potential ripple effect up the entire health worker

pyramid.⁴⁵ Stakeholder engagement and appropriate legislation will be needed to ensure this is addressed as successfully done in some countries which have included CHWs and their entry level into the scheme for service for civil servants.

There has been suggestions and recommendations for communities to bring other resources to bear to support community health workers based on flexible local needs.⁵⁷

Long-term financing plans should be developed for payment of community health workers and all elements of a community health program including leverage existing initiatives and donor funding. Realizing the critical role of donor funds in ensuring financial incentives for CHWs, stakeholders at a workshop in Ghana on financing community health worker systems at scale in Sub-Saharan Africa in 2015 strongly urged donors to pool their CHW program resources into a few pooled funds. The pooling of the fund is to provide additional financing for CHWs in a flexible and timely manner including payment of incentive for CHWs.⁵⁸

Improved private sector funding was one of the ten principles recommended at the workshop to ensure sufficient and sustainable financing for institutionalizing of the community health systems and countries are to explore or scale up partnership with the private sector.⁵⁸ In June 2021, the U.S. President's malaria initiative (PMI) changed its policy to allow for the payment of CHW salaries and stipends with PMI funds, while advancing efforts to catalyze other donors and work with partner governments on a sustainable approach for governments to assume primary responsibility for health worker salaries over time.⁵⁹ Similarly, The Monrovia Call to Action, following the 3rd International community health workers (CHW) symposium held in Liberia in March 2023 advocated for improved investment in community health programs as an integral path to universal health coverage through appropriately and incrementally increase domestic budget allocations and private sector financing for primary health care and CHWs including payment of fair wage for CHWs.⁶⁰

Investing in CHWs provides a return on investment in terms of lives saved, productivity, and jobs created of up to 10:1 which is essential to achieving universal health coverage with community health being the equity arm of primary health care.^{57,60}

CONCLUSION

The study reviews existing literature on financial incentives for community health workers and provides program considerations for effective implementation. There is need for countries to review their community health worker program design and establish enabling policy environment and implementation mechanisms for realistic and appropriate financial incentives for the community health workers based on their workload,

responsibilities, and local context. Appropriate tools should be used to model the community health workers working hours which will guide in determining fair and commensurate renumeration and effective monitoring system should be established. Political will, long-term and sustainable financing, appropriate legal framework and removal of barriers and restrictions on financial incentives are essential for institutionalization of payment for CHWs and other essential components of the community health system strengthening.

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REFERENCES

1. Swider SM. Outcome Effectiveness of Community Health Workers: An Integrative Literature Review. *Public Health Nursing.* 2002;19(1):11-20.

2. Lewin S, Munabi-Babigumira S, Glenton C, Daniels K, Bosch-Capblanch X, van Wyk BE, et al. Lay health workers in primary and community health care for maternal and child health and the management of infectious diseases. *Cochrane Database Syst Rev.* 2010;3:CD004015.

3. Baatiema L, Sumah AM, Tang PN, Ganle JK. Community health workers in Ghana: the need for greater policy attention. *BMJ Glob Health.* 2016;1(4):e000141.

4. John A, Newton-Lewis T, Srinivasan S. Means, motives and opportunity: determinants of community health worker performance. *BMJ Glob Health.* 2019;4:e001790.

5. World Health Organization. WHO guideline on health policy and system support to optimize community health worker programmes. 2018. Available at: <https://www.who.int/publications/item/9789241550369>. Accessed on 12 September 2023.

6. The Lancet Global Health. Community health workers: emerging from the shadows? *Lancet Glob Health.* 2017;5(5):e467.

7. Miller NP, Milsom P, Johnson G, Bedford J, Kapeu AS, Diallo AO, et al. Community health workers during the Ebola outbreak in Guinea, Liberia, and Sierra Leone. *J Glob Health.* 2018;8(2):020601.

8. Perry HB, Dhillon RS, Liu A, Chitnis K, Panjabji R, Palazuelos D, et al. Community health worker programmes after the 2013-2016 Ebola outbreak. *Bull World Health Organ.* 2016;94:551-3.

9. Goldfield NI, Crittenden R, Fox D, McDonough J, Nichols L, Lee Rosenthal E, et al. COVID-19 crisis creates opportunities for Community-Centered population health: community health workers at the center. *J Ambul Care Manag.* 2020;43:184-90.

10. World Health Organization. What do we know about community health workers? A systematic review of existing reviews. 2020. Available at: <https://www.who.int/publications/item/what-do-we-know-about-community-health-workers-a-systematic-review-of-existing-reviews>. Accessed on 12 September 2023.

11. Lehmann U, Sanders D. Community health workers: What do we know about them? The state of the evidence on programmes, activities, costs and impact on health outcomes of using community health workers. Available at: <https://chwcentral.org/wp-content/uploads/2013/07/Community-Health-Workers-What-do-we-know-about-them.pdf>. Accessed on 12 September 2023.

12. Greenspan JA, McMahon SA, Chebet JJ, Mpunga M, Urassa DP, Winch PJ. Sources of community health worker motivation: a qualitative study in Morogoro Region, Tanzania. *Human Resources Health.* 2013;11:52.

13. Alam K, Oliveras E. Retention of female volunteer community health workers in Dhaka urban slums: A prospective cohort study. *Human Resources Health.* 2014;12:29.

14. Owek C, Abong'o B, Oyugi H, Oteku J, Kaseje D, Muruka C, Njuguna J. Motivational factors that influence retention of community health workers in a Kenyan district. *Publ Health Res.* 2013;5(3):109-15.

15. Ballard M, Westgate C, Alban R, Choudhury N, Adamjee R, Schwarz R, et al. Compensation models for community health workers: Comparison of legal frameworks across five countries. *J Glob Health.* 2021;11:04010.

16. Ormel H, Kok M, Kane S, Ahmed R, Chikaphupha K, Rashid SF, Gemechu D, et al. Salaried and voluntary community health workers: exploring how incentives and expectation gaps influence motivation. *Human Resources Health.* 2019;17:59.

17. Daniels K, Odendaal WA, Nkonki L, Hongoro C, Colvin CJ, Lewin S. Incentives for lay health workers to improve recruitment, retention in service and performance. *Cochrane Database Syst Rev.* 2019;12:CD011201.

18. Singh D, Negin J, Otim M, Orach CG, Cumming R. The effect of payment and incentives on motivation and focus of community health workers: five case studies from low- and middle-income countries. *Human Resources Health.* 2015;13(1):58.

19. Glenton C, Colvin CJ, Carlsen B, Swartz A, Lewin S, Noyes J, et al. Barriers and facilitators to the implementation of lay health worker programmes to improve access to maternal and child health: qualitative evidence synthesis. *Cochrane Database Syst Rev.* 2013;10:CD010414.

20. Bhattacharyya K, Winch P, LeBan K, Tien M. Community Health Worker Incentives and Disincentives: How They Affect Motivation, Retention, and Sustainability. Published by the Basic Support for Institutionalizing Child Survival Project (BASICS II) for the United States Agency for International Development. Arlington, Virginia. 2001. Available at: <https://www.socialservice-workforce.org/resources/community-health-worker-incentives-and-disincentives-how-they-affect>

motivation-retention. Accessed on 12 September 2023.

- 21. Mukherjee JS, Eustache FE. Community health workers as a cornerstone for integrating HIV and primary healthcare. *AIDS Care.* 2007;19(1):S73-82.
- 22. Strachan DL, Kallander K, Ten Asbroek AH, Kirkwood B, Meek SR, Benton L, et al. Interventions to Improve Motivation and Retention of Community Health Workers Delivering Integrated Community Case Management (iCCM): Stakeholder Perceptions and Priorities. *Am J Trop Med Hygiene.* 2012;87(5):111-9.
- 23. Appleford G. Community health workers—motivation and incentives. *Development in Practice.* 2013;23(2):196-204.
- 24. Vareilles G, Pommier J, Marchal B, Kane S. Understanding the performance of community health volunteers involved in the delivery of health programmes in underserved areas: a realist synthesis. *Implementation Science.* 2017;12(1):22.
- 25. Mbachu C, Etiaba E, Ebenso B, Ogu U, Onwujekwe O, Uzochukwu B, et al. Village health worker motivation for better performance in a maternal and child health programme in Nigeria: A realist evaluation. *J Health Serv Res Policy.* 2022;27(3):222-31.
- 26. Reichenbach L, Shimul S. Sustaining health: The role of BRACs's community health volunteers in Bangladesh, Afghanistan and Uganda. *BRAC Research Monograph Series.* 2011;49.
- 27. Mbugua GR, Oyore J, James M. Role of monetary incentives on motivation and retention of community health workers: an experience in a Kenyan community. *Public Health Res.* 2018;8:1-5.
- 28. Kok MC, Kane SS, Tulloch O, Ormell H, Theobald S, Dieleman M, et al. How does context influence performance of community health workers in low- and middle-income countries? Evidence from the literature. *Health Res Policy Syst.* 2015;13:13.
- 29. Ballard M, Bonds M, Burey J, Dini HSF, Foth J, Furth R, et al. Community Health Worker Assessment and Improvement Matrix (CHW AIM): Updated Program Functionality Matrix for Optimizing Community Health Programs. 2018. Available at: <https://chcentral.org/resources/community-health-worker-assessment-and-improvement-matrix-chw-aim-updated-program-functionality-matrix-for-optimizing-community-health-programs/>. Accessed on 10 December 2022.
- 30. Kok MC, Dieleman M, Taegtmeier M, Broerse JE, Kane SS, Ormell H, et al. Which intervention design factors influence performance of community health workers in low- and middle-income countries? A systematic review. *Health Policy Plan.* 2015;30(9):1207-27.
- 31. Oladeji O, Brown A, Titus M, Muniz M, Collins A, Muriuki J, et al. Non-financial Incentives for Retention of Health Extension Workers in Somali Region of Ethiopia: A Discrete Choice Experiment. *Health Serv Insights.* 2022;15:11786329221127151.
- 32. Perry HB. Health for the People: national community health programs from Afghanistan to Zimbabwe. Washington: United States Agency for International Development. USAID/Maternal and Child Survival Program. 2020. Available at: https://chcentral.org/wp-content/uploads/2021/11/Health_People_Natl_Case%20Studies_Oct202. Accessed on 10 December 2022.
- 33. Colvin CJ, Hodgins S, Perry HB. Community health workers at the dawn of a new era: 8. Incentives and remuneration. *Health Res Policy Syst.* 2021;19:112-25.
- 34. Ballard M, Odera M, Bhatt S, Geoffrey B. Payment of community health workers. *The Lancet Global Health.* 2022;10(9):E1242.
- 35. Wang H, Juyal RK, Sara A, Fischer E. Performance-Based Payment System for ASHAs in India: What Does International Experience Tell Us?, 2012. Available at: <https://www.intrahealth.org/sites/ihweb/files/files/media/performance-based-payment-system-for-ashas-in-india-what-does-international>. Accessed on 10 December 2022.
- 36. Brunie A, Mercer S, Chen M, Andrianantoandro T. Expanding Understanding of Community Health Worker Programs: A Cross-Sectional Survey on the Work, Satisfaction, and Livelihoods of CHWs in Madagascar. *Inquiry.* 2018;55:46958018798493.
- 37. Khemani S, Chaudhary S, Scot T. Strengthening Public Health Systems: Policy Ideas from a Governance Perspective. *World Bank Group Policy Research working papers.* 2020. <https://openknowledge.worldbank.org/entities/publication/ade68a5f-d5be-55e7-ab36-ecafdbbd93e9>. Accessed on 10 October 2023.
- 38. Closser S, Rosenthal A, Justice J, Maes K, Sultan M, Banerji S, et al. Per diems in polio eradication: perspectives from community health workers and officials. *Am J Public Health.* 2017;107:1470-6.
- 39. Colvin CJ. What Motivates Community Health Workers? Designing Programs that Incentivize Community Health Worker Performance and Retention. 2013. Available at: https://www.mchip.net/sites/default/files/mchipfiles/10_CHW_Incentive.pdf. Accessed on 10 October 2023.
- 40. Republic of Liberia. Ministry of Health (MOH). The National Community Health Services Strategic Plan 2016–2021. 2015. Available at: <https://www.afro.who.int/sites/default/files/2017-06/National%20Policy%20and%20Strategic%20Plan%20on%20Health%20Promotion%2C%20Liberia%2C%202016%20-%202021.pdf>. Accessed on 10 October 2023.
- 41. Castillo PJ. Evaluation of the Community Health Extension Programme in Belize. MOHW/PAHO. 2013. Available at: <https://docs.bvsalud.org/biblioref/2017/12/875959/hrh-evaluation-chw-august29-final.pdf>. Accessed on 10 October 2023.
- 42. Cometto G, Ford N, Pfaffman-Zambruni J, Akl EA, Lehmann U, McPake B, et al. Health policy and system support to optimise community health worker

programmes: an abridged WHO guideline. *Lancet Global Health.* 2018;6:e1397-404.

- 43. Ngugi AK, Nyaga LW, Lakhani A, Agoi F, Hanselman M, Lugogo G, Mehta KM. Prevalence, incidence and predictors of volunteer community health worker attrition in Kwale County, Kenya. *BMJ Glob Health.* 2018;3(4):e000750.
- 44. Perry HB, Rohde J. The Jamkhed Comprehensive Rural Health Project and the Alma-Ata Vision of Primary Health Care. *Am J Public Health.* 2019;109(5):699-704.
- 45. Perry HB, Crigler L, Hodgins S. Case Studies of Large-Scale Community Health Worker Programs. USAID Maternal and Child Health Integrated Program (MCHIP). 2017. Available at: <https://www.exemplars.health/-/media/files/egh/resources/community-health-workers/ethiopia/case-studies-of-largescale-community-health-worker-programs.pdf>. Accessed on 10 October 2023.
- 46. Ministry of Health and Sanitation. Republic of Sierra Leone, National Community Health worker policy. 2021. Available at: <https://portal.mohs.gov.sl/download/33/publications/1674/national-chw-policy-2021.pdf>. Accessed on 10 October 2023.
- 47. Hanson K, Brikci N, Erlangga D, Alebachew A. The Lancet Global Health Commission on financing primary health care: putting people at the centre. *The Lancet Global Health.* 2022;10:5.
- 48. Lajoie M-RB, Hulme J, Johnson K. Payday, ponchos, and promotions: a qualitative analysis of perspectives from non-governmental organization programme managers on community health worker motivation and incentives. *Human Resources Health.* 2014;12(1):66.
- 49. Daniel M, Maulik PK. Incentivizing community health workers for scaling up mental health care in rural communities in India: A critical look at principles that work. *Front Health Serv.* 2023;3:1119213.
- 50. Campbell C, Scott K. Retreat from Alma Ata? The WHO's report on Task Shifting to community health workers for AIDS care in poor countries. *Glob Public Health.* 2011;6:125-38.
- 51. Cataldo F, Kielmann K, Kielmann T, Mburu G, Musheke M. 'Deep down in their heart, they wish they could be given some incentives': a qualitative study on the changing roles and relations of care among home-based caregivers in Zambia. *BMC Health Serv Res.* 2015;15:36.
- 52. Musoke D, Ndejjo R, Atusingwize E, Ssemugabo C, Ottosson A, Gibson L, et al. Panacea or pitfall? The introduction of community health extension workers in Uganda. *BMJ Glob Health.* 2020;5(8):e002445.
- 53. Maternal and child Survival program (MCSP): User Guide for the Community Health Worker Coverage and Capacity Tool. USAID. 2019. Available at: <https://mcsprogram.org/resource/user-guide-for-the-community-health-worker-coverage-and-capacity-tool/>. Accessed on 10 October 2023.
- 54. UNICEF and MSH. Community Health Planning and Costing Tool (Version 2.0) Handbook. 2020. Available at: <https://www.unicef.org/sites/default/files/2020-04/Community-Health-Planning-and-Costing-Handbook.pdf>. Accessed on 10 October 2023.
- 55. Masisi L, Gichaga A, Zerayacob T, Lu C, Perry HB. Community health workers at the dawn of a new era: 4. Programme financing. *Health Res Policy Syst.* 2021;19(3):107.
- 56. Ballard M. Implementation Support Guide: Development of a National Georeferenced Community Health Worker Master List Hosted in a Registry. *J Public Health Africa.* 2022;13:76.
- 57. Dahn B, Woldemariam A, Perry H. Strengthening primary health care through community health workers: Investment case and financing recommendations. 2015. Available at: <http://www.healthenvoy.org/wp-content/uploads/2015/07/CHW-Financing-FINAL-July-15-2015.pdf>. Accessed on 10 October 2023.
- 58. Financing Community Health Workers Systems at Scale in sub-Saharan Africa: Workshop Report. 2015. Available at: http://1millionhealthworkers.org/files/2015/09/1mCHW_SSC_Workshop_Report_External_2015-09-10_Final.compressed-1.pdf. Accessed on 10 October 2023.
- 59. USAID: President's Malaria Initiative Community Health Worker Payment Policy. 2021. Available at: <https://d1u4sg1s9ptc4z.cloudfront.net/uploads/2022/01/FAQs-PMI-Community-Health-Worker-Payment-Policy.pdf>. Accessed on 10 October 2023.
- 60. The Monrovia Call to Action – 3rd International Community Health Worker Symposium. Available at: <https://chwsymposiumliberia2023.org/the-monrovia-call-to-action/>. Accessed on 10 October 2023.

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