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Title: Remuneration for Community Health Workers: Recommendations to the World Health Organization

Abstract: The question of remuneration for community health workers (CHWs) in low-income countries remains contentious. Programs use a variety of monetary and non-monetary incentives to motivate CHWs. The most successful programs, however, pay their workers, and there is little evidence to suggest that volunteerism in low-income countries is sustainable over the long term. Adequate compensation improves health worker motivation, retention and performance. Additionally, fair and consistent wages ensure a stable income and livelihood for CHWs. Although paying workers requires a modest investment of resources, cost should not be a significant barrier if governments and donors prioritize primary care. The World Health Organization (WHO) has consistently recommended that CHWs receive adequate wages in addition to other incentives. At the same time, they suggest that more research is needed to assess the effectiveness of paid versus voluntary workers. This paper reviews the literature to date in order to advise the WHO on how to provide stronger guidance on remuneration for CHWs. Specifically, the WHO should recommend that CHWs receive fair and consistent wages commensurate with workload and national standards, and governments should be responsible for regulating wages to ensure uniform payment across programs. Finally, the WHO should advocate for research that will inform best practice by addressing remaining gaps in the literature.

Key words: community health workers, incentives, remuneration, volunteer, World Health Organization

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REMUNERATION FOR COMMUNITY HEALTH WORKERS

Recommendations to the World Health Organization

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"If we work for free at the clinic, then we can't work for pay in the fields. If we don't work in the fields, we can't earn money to feed our family. When we can't feed our family, we must borrow from our neighbors who ask, 'Why do you work for free when your children are hungry?' We are embarrassed by this question for which we have no good answer."

This is the story I was told by the community health workers I worked with while serving in the Peace Corps in Madagascar. I had asked them to volunteer at our community clinic a few mornings each month to educate mothers on safe pregnancy, child wellness and family planning. It was a small commitment – or so I thought. But for the poorest of the poor, even "small" commitments can be a significant challenge.

INTRODUCTION

Most low-income countries face a severe shortage of skilled health care workers, particularly in rural areas (1). Many countries address this shortage by delegating tasks to community health workers (CHWs) (2). Growing evidence shows that CHWs can improve a variety of health outcomes related to maternal and child health, as well as chronic disease management (3). The question of remuneration, however, remains contentious (CHWs range from unpaid volunteers to salaried government employees) (4). As programs are scaled up, having an answer to this question becomes increasingly urgent. Countries want to know: to pay or not to pay?

Many countries look to the World Health Organization (WHO) for guidance on evidence-based public health programing. The government of Liberia, for example, plans to reconsider their current policy of not paying CHWs (5). Despite a wealth of information on CHW programs, the WHO continues to suggest that more research is needed on the effectiveness of paid versus voluntary workers (6). Like many low-

income countries, Liberia may not have the capacity to determine best practice on payment for CHWs. Thus, the WHO has a responsibility to provide strong leadership whenever possible.

This paper reviews the literature to date on remuneration for CHWs. First, I will provide some background on CHW programs, followed by an overview of the monetary and non-monetary incentives programs use to motivate workers. Next, I will discuss the incentives used by successful programs in low- and middle-income countries, and outline common arguments for and against paying CHWs. Finally, I will advise the WHO on how to clarify their recommendations on payment to provide stronger guidance for countries implementing CHW programs.

WHO IS A COMMUNITY HEALTH WORKER?

As defined by the WHO, "community health workers should be members of the communities where they work, should be selected by the communities, should be answerable to the communities for their activities, should be supported by the health system but not necessarily a part of its organization, and have shorter training than professional workers" (1). Specific qualifications vary from program to program. CHWs can be male or female, young or old, literate or illiterate (although most programs require a certain level of literacy) (1).

HISTORY OF CHW PROGRAMS

CHWs first captured the international spotlight during the 1978 Alma Ata Declaration (7). China's 'barefoot doctor' program was one of the earliest programs to gain recognition (1). In 1965, the Chinese government began deploying doctors to train community members as paramedics; in 1968, the program became national policy (8). Barefoot doctors received three to six months of training and an annual salary paid by the Cooperative Medical System (6,9). Rural health improved significantly, and the WHO

regarded the program as highly successful (8). Following Alma Ata, many countries sought to initiate or scale-up CHW initiatives, modeling programs after China's barefoot doctors (10,11). In the early 1980s, China's Cooperative Medical System collapsed (8). Barefoot doctors necessarily adopted a fee-for-service scheme in order to earn a living, which led to a decline in preventative services (9). By the early 1990s, interest in CHW programs began to wane, and many other national programs disappeared (1,10,12,13). Over the past decade, the health workforce crisis along with growing evidence of effectiveness has helped CHW programs regain international attention (13,14).

WHAT MOTIVATES CHWs?

CHW job satisfaction, motivation and performance depend on a number of factors (15). Common motivators include monetary and non-monetary incentives, desire for skills, professional development and advancement, hope of future salaried employment, community recognition, social prestige, relationships with beneficiaries, and supportive supervision (13,16–19). Several studies mention financial incentives as a primary motivating factor for retention (13,16–18). Lack of remuneration, recognition and support from the formal health system and community are common disincentives (1,2,13,14,16,19). Other reasons for dropout include heavy workload, lack of time, family disapproval and the need to earn a living wage (1,14,19,20). See **Box 1** for factors influencing CHW retention and motivation in Kenya.

Box 1. Factors Influencing CHW Motivation in Kenya

Kenya launched their CWH program in 2006 as part of the national Community Health Strategy (21). CHWs in Kenya are unpaid volunteers, although some workers receive a bicycle. In 2012, Boston University conducted a quasi-experimental evaluation of Kenya's CHW program in Kimana Health District (21). Results of the evaluation show high attrition overall (47%), with dropout rates ranging from 4 – 22 dropouts per year (22). Thirty-one percent of volunteers identified lack of payment as a key frustration. Some inactive volunteers said they faced criticism from their families and the community for accepting an unpaid position. Other major factors influencing motivation included lack of transportation (28%), community support (23%), and supplies (16%) (22). The study concluded that CHWs should receive both monetary and non-monetary incentives in order to improve motivation and retention (21).

MONETARY VS. NON-MONETARY INCENTIVES

Programs use a variety of monetary and non-monetary incentives to motivate CHWs (see **Table 1**) (11). Monetary incentives include money paid for labor or services, or cash reimbursement for work/volunteer-related expenses. Non-monetary incentives include goods, commodities or services paid in lieu of cash for labor or services. See **Box 2** for a definition of terms.

Table 1. *Monetary and Non-monetary Incentives Used in CHW Programs*

Monetary incentives	Non-monetary incentives
• Salaries or stipends • Fee-for-service • Per diems, travel allowances and "sitting fees" • Cash from income-generating activities • Performance-based payments	• In-kind payments • Access to loans, grants or savings programs • Free or first-in-line health care • Opportunities for professional advancement

Adapted from *Source*: (11)

Monetary Incentives

Monetary incentives include salaries or stipends, fee-for-service schemes, per diems, travel allowances and "sitting fees" for attendance at training sessions, cash from income-generating activities, and performance-based payments. Many CHW programs offer monetary incentives (11). In several countries (including Brazil, Ethiopia, Iran, Malawi and Pakistan), CHWs are full-time employees of the national health system and receive a salary or monthly stipend (7,23). In India, CHWs are compensated through a fee-for-service system (3). Many programs provide per diems, travel allowances and/or sitting fees for trainings, meetings, field visits and other mandatory activities (11). Monetary incentives may also be tied to the sale of goods (11). In Bangladesh, CHWs earn income by selling medications and other health commodities for a small mark-up (6). They also receive incentives for performance-based tasks, such as pregnancy identification, referrals, and providing essential newborn care (6).

Non-monetary Incentives

Non-monetary incentives include in-kind payments, access to loans, grants or savings programs, free or first-in-line health care, and opportunities for professional advancement. CHWs may be paid in-kind with food, housing and help with agricultural work or childcare (11). Non-governmental organizations (NGOs) often provide items that CHWs can use both on and off the job, such as backpacks, t-shirts, hats, raincoats and boots, cell phone credit, and bikes (11). Several programs provide preferential access to microloans or grants for income-generating activities, or priority inclusion in savings programs (11,24). In Ghana, members of village health committees receive identity cards that allow them to jump the queue at health clinics, and CHWs in Thailand receive free health care for themselves and their families (6,11). CHWs generally live in rural areas where there are few opportunities for professional development (11). Trainings, workshops and literacy classes allow CHWs to learn new skills and can be a stepping stone for future employment (11). Additionally, a few programs offer career advancement opportunities (6). While non-monetary incentives are important motivators, evidence from Brazil, Iran and Pakistan shows that the most successful programs pay CHWs.

Box 2. Definition of Terms

- *Fee-for-service* – fees charged for specific services rendered
- *In-kind payment* – goods, commodities or services paid in lieu of money for work or services
- *Per diem* – daily cash allowance, usually in connection with travel for work
- *Performance-based payment* – fixed sum of money paid for the completion of specific tasks
- *Salary* – a fixed sum of money paid for regular work or services
- *Sitting fee* – cash allowance for attending trainings
- *Stipend* – see "salary"
- *Travel allowance* – cash allowance for reimbursement of travel expenses
- *Wages* – money paid for work or services, especially on an hourly, daily or weekly basis

Adapted from *Source*: (25,26)

SUCCESSFUL CHW PROGRAMS: COUNTRY CASE STUDIES

Table 2 outlines current CHW programs in nine low- and middle-income countries. This table was

adapted from a systematic review conducted by the WHO in 2010 (6). All country programs were included in the original WHO report with the exception of Iran and Nepal. The WHO program score reflects overall program functionality on a scale from 0 – 36 (0 = non-functional; 36 = highly functional)[1]. The WHO incentive score evaluates the use of monetary and non-monetary incentives on a scale from 0 – 3 (0 = no incentives provided; 3 = best practice)[2].

Table 2. *CHW Programs in Low- and Middle-Income Countries*

Country	Year started	# of CHWs	Government/ NGO	Paid/ Volunteer[3]	Training[4]	Supervision	Health system	WHO program score	WHO incentive score
Brazil	1994	246,000	Government	Paid	Short	Strong	Relatively Strong	34	3
Haiti	1985	>1,600	NGO	Paid	Medium	Relatively strong	Weak	31	3
Ethiopia	2004	30,000	Government	Paid	Long	Relatively weak	Relatively weak	29	2
Pakistan	1994	92,000	Government	Paid	Long	Relatively strong	Relatively weak	28	2
Iran	1979	31,000	Government	Paid	Long	Strong	Relatively strong	N/A	N/A
Bangladesh	1977	78,000	NGO	Volunteer	Short	Relatively strong	Relatively strong	25	2
Thailand	1970	80,000	Government	Volunteer	Short	Relatively weak	Relatively strong	20	2
Uganda	2003	7,000	Government	Volunteer	Short	Relatively strong	Weak	20	1
Nepal	1988	49,000	Government	Volunteer	Short	Relatively strong	Relatively weak	N/A	N/A

Sources: (6,7,12,27–31)

As seen in Table 2, programs with paid CHWs have higher program scores, whereas programs with volunteer CHWs have lower program scores. This trend suggests that stronger programs provide a

[1] Program score was calculated by summing the scores of 12 program components: recruitment, CHW role, initial training, ongoing training, equipment and supplies, supervision, performance evaluation, incentives, community involvement, referral system, professional advancement, and documentation/information management (6)

[2] 3 = highly functional (financial and/or non-financial incentives are partly based on good performance, incentives are balanced and in line with expectations placed on CHW); 2 = functional (some financial or non-financial incentives provided); 1 = partly functional (no formal incentives provided, community recognition is considered a reward); 0 = non-functional (no financial or non-financial incentives provided) (6)

[3] paid = salary/stipend; volunteer = no salary/stipend (CHWs may receive a variety of other monetary and non-monetary incentives such as those included in Table 1)

[4] short = 0 – 2 months; medium = 3 – 11 months; long = 1 year or more

regular salary or stipend rather than rely on volunteer labor. Brazil, Iran and Pakistan have particularly successful CHW schemes; these programs are worth examining in more detail as they are all medium to large government programs lasting 20 years or more. Nepal also has a long-standing volunteer program that merits consideration. The remaining programs will not be discussed as they are either NGO-based (Bangladesh and Haiti) or have not been adequately evaluated (Ethiopia, Thailand and Uganda) (6).

Brazil

Brazil has one of the largest and most successful CHW programs in the world (32). The program began in 1987 in the state of Ceara, and was integrated into the national Family Health Plan by the Ministry of Health in 1994 (1). The program covers roughly 120 million people (60% of the population), and has expanded from 6,000 CHWs in 1987 to more than 246,000 today (6,12). Brazil's CHWs work in teams with doctors, nurses and other health practitioners to provide primary health care (12). Each team is in charge of a specific geographical area, with CHWs covering 750 individuals (150 households) (6,12). CHWs are selected by representatives from their community (6). They must be 18 years or older, have a minimum of eight years of schooling, and have lived in their community for at least two years (6,12).

Once selected, CHWs undergo eight weeks of training, four weeks of supervised field-work, and receive refresher trainings at monthly and quarterly meetings (6). Trainings are led by nurses with the assistance of staff from the State Health Secretariat (6). Nurses are also responsible for supervising CHWs in the field (1). CHWs are considered employees of the Ministry of Health and receive a salary of US$ 112 per month (the national minimum wage), which is about twice the average local monthly income for rural workers (6). Several ecologic studies suggest that CHWs have contributed to significant improvements in infant and child mortality in Brazil (6,12). One study found that the Family Health Program was associated with a 13 – 22% reduction in infant mortality between 1996 and 2004 (33).

Another independent study found a 20% and 25% decrease in infant and child mortality, respectively, during the same period (34). Program strengths include regular replenishment of stock, consistent payment of salaries, strong supervision and training, and regular attendance at monthly meetings (6).

Iran

Iran's CHW program was established in 1979 in response to the Alma Ata Declaration (7). The program employs over 31,000 CHWs (called *behvarz*), and covers an estimated 28 million people (39% of the population) (27). Behvarz are full-time employees of the Iranian government (7). They earn up to US$ 400 - 600 per month (the national minimum wage is US$ 300 per month) and are subject to standard employment rules and disciplinary procedures (7,35). Behvarz work in village health houses that serve 1,500 people (7). There are usually two behvarz in each health house, one male and one female (all houses have at least one female) (6). Behvarz must have a high school diploma and be a resident of their community for at least a year (7). They are selected by their community and receive weekly supervisory visits from a physician at the local health center (6,28). District health officers also conduct supervisory visits once or twice a month (28).

Behvarz undergo an initial two-year training that includes theoretical and practical classes, as well as clinical placements (6,7). They also receive regular refresher trainings (7). Behvarz are required to serve their community for at least four years after their initial training (7). In addition to receiving a salary from the government, the program also offers a training allowance and personal loans (7). Since the program began, Iran has experienced dramatic reductions in maternal, child and

Table 3. *Maternal, Child and Infant Mortality Rates in Iran*

	1976	2010
Maternal mortality ratio (per 100,000 live births)	255	21
Child mortality rate (per 1,000 live births)	156	20
Infant mortality rate (per 1,000 live births)	103	18

Sources: (36,37)

infant mortality (see **Table 3**) (7). Although there are likely other factors (including economic growth and increasing literacy) contributing to these declines, studies suggest that Iran's CHW program was highly influential (7,37,38).

Pakistan

Pakistan launched their CHW program in 1994 as part of the Program for Family Planning and Primary Health Care (39). The program covers over 70% of the rural population, and has expanded from less than 20,000 CHWs in 1995 to more than 92,000 CHWs today (6). Pakistan's CHWs (called Lady Health Workers) work from home but are attached to a government health facility where they receive training, supervision, and medical supplies (39). Each Lady Health Worker (LHW) serves 1,000 individuals (200 households) (6,39). LHWs are females between 20-50 years old (preferably married), and must be a local resident with a minimum of eight years of schooling (6,12,39). LHWs are selected by committees that include health facility staff, community members, and a locally elected representative (6,12). They receive 15 months of training (three months of classroom training followed by 12 months of practical on-the-job training), and monthly refresher courses from facility-based staff (12,39). LHWs are initially contracted for one year and receive monthly supervisory visits from Lady Health Supervisors (6).

LHWs are paid considerably less than workers in Brazil and Iran. Incentives include a salary of US$ 30 per month, small annual raises (US$ 1), and income from selling contraceptives (US$ 0.03 per cycle of pills and US$ 0.01 per condom) (6). The total cost of the program, including salaries, is US$ 745 per LHW per year, or approximately 75 cents per beneficiary per year (39). External evaluations have found that communities served by LHWs have substantially better health indicators, including lower infant mortality, improved immunization coverage, and increased use of antenatal care, skilled birth attendants and family planning services (6,12,23,39,40). See **Box 3** for key results from the most recent

evaluation in 2009. Despite its success, the program still faces stock-outs, irregular payment of salaries, and a lack of sustained motivation (6,40). Suggested solutions include salary increases, timely contract renewal and promotion, expansion of responsibilities, and integrating LHWs into the government health system for more job security (40).

Box 3. Key Findings from the 2009 Lady Health Worker Program Evaluation

Study design:

- Quasi-experimental impact evaluation conducted by Oxford Policy Management
- Experimental group: Randomly selected households served by LHWs
- Comparison group: Randomly selected households not served by LHWs

Key findings on households served by LHWs:

- *Compared to previous evaluation in 2000:*
  - Tetanus toxoid coverage (5^+ doses) increased from 14% to 31%
  - Skilled birth attendance increased from 27% to 48%
  - Proportion of children fully immunized increased from 57% to 68%
  - Women receiving at least one antenatal visit increased from 58% to 76%
- *Compared to comparison group:*
  - 11% more likely to use modern family planning method
  - 13% more likely to have had tetanus toxoid during pregnancy
  - 15% more likely to have had a neonatal check-up and fully immunized child

Source: (41)

Nepal

Nepal's Female Community Health Volunteer (FCHV) program was established in 1988 by the Ministry of Health and Population (6). There are currently over 49,000 FCHVs serving the rural population of Nepal (about 24 million people) (12). Each FCHV works an average of five hours per week, covering 100-150 households (12,30). Volunteers must be female, married, and selected by their community (12). Literacy is not required (12). FCHVs receive 18 days of initial training and a five day refresher course every five years (29). Volunteers are supported and supervised by full-time, paid Village Health Workers (most of whom are male) (12). Nepal has experienced significant reductions in child mortality over the past two decades despite civil war, political strife and slow economic growth (12,30). FCHVs are

considered a key contributor to these outcomes, primarily through Vitamin A and deworming campaigns (29,30). Their precise impact, however, is difficult to determine.

When the program began, FCHVs received a stipend of 100 Nepalese Rupees (about US$ 1) per month (30). This practice was discontinued after a year due to insufficient funds, which led to confusion and unfulfilled expectations among FCHVs and communities alike (30). Salaries were never reintroduced because stakeholders saw them as financially unfeasible and worried that they would threaten volunteerism (30). Today, FCHVs are considered volunteers but receive some monetary and non-monetary incentives, including travel allowances for training and access to microloans (30). Volunteers may also receive in-kind incentives from Village Development Committees and/or performance-based payments from NGOs (30).

Nepal's FCHV program merits consideration because it has existed for more than 20 years with only 4% annual attrition overall (14,29). Studies have found that FCHVs are primarily motivated by religion and a sense of obligation to their community, both of which may contribute to high retention (30). Even so, there is evidence of growing discontent among FCHVs over incentives. Seven districts (out of 75) have dropout rates as high as 40-55%, and FCHV associations have started demanding salaries in recent years (14,29,30). Furthermore, some argue that the 4% attrition rate may be misleading (42). For example, if researchers focus exclusively on dropout, estimates may not capture FCHVs who work intermittently. Some FCHVs temporarily stop working when they feel overburdened with tasks, but may return to their duties once other priorities have been satisfied (42). While these volunteers have not technically "dropped out", this does call into question the efficacy of the program.

Finally, some experts claim that paying volunteers is inappropriate in Nepalese culture; they argue that wages undermine FCHV's "moral status" and may cause communities to lose respect for volunteers (30). Citing culture as a justification of non-payment is unconvincing because other CHWs in Nepal (e.g. Village Health Workers) remain highly respected by their communities despite being paid wages (12,43). It seems reasonable to assume that communities would rather have paid workers and see visible changes than have volunteers who feel overburdened and stop working altogether (42). Overall, Nepal's program has had some success, particularly with Vitamin A and deworming campaigns. If the program is to continue in the future, however, the government will need to rethink the incentive scheme to include more tangible benefits (42).

Summary of Country Case Studies

Brazil, Iran and Pakistan have successful CHW programs that have experienced impressive scale-up over the last two decades. In all three countries, CHWs work for and are paid by the government, which ensures standard benefits and rates of pay for all workers. Of the three programs, Pakistan pays the lowest salaries and also appears to have the most challenges with CHW motivation. Nepal's volunteer program has also been relatively successful, however not all volunteers seem satisfied with the status quo. Evidence suggests that true volunteerism (no financial compensation) is not sustainable in low-income countries (32,44). While volunteers can contribute on a short-term or part-time basis, adequate wages and other appropriate rewards are necessary for program sustainability (32).

TO PAY OR NOT TO PAY?

Programs use several justifications to avoid paying CHWs for their work. This section will begin by addressing common arguments against using monetary incentives, and conclude with an overview of the arguments in favor of payment.

Analysis of arguments against paying CHWs

- **Donors and governments won't pay.** The most common argument against remuneration is that donors and governments are unwilling or cannot afford to pay salaries for CHWs (11,17,44). While not inexpensive, CHW programs are a solid investment for low-resource countries (12,32). A report by the Earth Institute at Columbia University estimates the cost of deploying full-time, paid CHWs to provide comprehensive maternal and child health services to the entire rural population of sub-Saharan Africa[5] by 2015 at US$ 2.62 per capita per year[6] (12). This equates to only 5% of what the Commission on Macroeconomics and Health estimates that primary health care in low-income countries should cost (US$ 54 per capita), and is well within the budgetary constraints of governments and donors (12).
- **Inconsistent remuneration reduces motivation.** One problem with salaries or stipends is that payment is often irregular and might stop altogether if funding runs out (the latter is especially likely with short-term, donor-funded programs) (11). CHWs may become resentful when payment is delayed, which can impact motivation, performance and retention (13). Similarly, payments made to CHWs during former programs may cause distrust or heighten expectations in the community when a new program is initiated (11). While ad hoc payments are a challenge for many CHW programs, examples from Brazil and Haiti prove that timely disbursement of wages is not only possible, it can be the norm (6).
- **Comparisons of benefits causes tension between paid and unpaid CHWs.** If only some CHWs are paid, comparison of benefits between groups may lead to demands for regular compensation, salary increases or additional incentives (11). Programs may or may not have the financial resources to satisfy such demands, resulting in tension between paid and unpaid groups (11). While this could be problematic in a system of parallel programs, hiring CHWs as

[5] Assumes a ratio of 1 CHW per 650 rural inhabitants
[6] US$ 6.56 per beneficiary per year; US$ 2.3 billion per year total

salaried employees of the national health system or standardizing rates of pay across programs should eliminate this concern.

- **Monetary incentives discourage altruism.** Some experts claim that payment discourages altruism and "volunteer spirit," arguing that CHWs should be more interested in serving their community and less interested in remuneration (13,17). Others contend that payment replaces intrinsic motivation with extrinsic goals, and that financial gain may undermine community mobilization efforts (30). If anything, salaries should help *encourage* altruism, because how can you think of anyone else when your family is hungry? Furthermore, volunteer programs rest on the assumption that impoverished communities are full of people willing (and able) to work for free (44). Underlying this assumption is the question of whether volunteer spirit is simply a "veneer for labor exploitation" (44). Researchers who have taken the time to speak with volunteers understand their discontent: unemployment, lack of reliable income, low social status, and an inability to meet household needs (44). Refusing to pay people for their labor can exacerbate poverty and economically paralyze communities. By contrast, paying regular wages allows people to purchase goods and services, thus encouraging economic development.
- **Compensation often comes with unintended consequences.** Research suggests that when compensation is tied to selling medications, CHWs tend to focus on curative care (11). Fee-for-service schemes also favor treatment over prevention, and may result in over-prescription (11,45). On the other hand, studies show that salaried CHWs continue both preventative and curative activities (11). When CHWs receive a steady income, they may be less inclined to over-prescribe in order to boost profits. If CHWs receive reliable wages and sell primarily preventative health commodities (e.g. contraceptives, nutritional supplements, etc.), this may help maintain the balance between treatment and prevention. Another argument is that even small allowances may reinforce community perceptions that CHWs are paid health workers,

leading to unrealistic expectations and demands on volunteer time and resources (11). Although this can be a problem for volunteers who only work a few hours per week, it may be less of a concern for full-time, salaried workers.

Arguments for paying CHWs

- **CHWs deserve fair wages and a secure livelihood.** Experts have debated the ethics of using volunteer labor in low-income countries for years (20,43,44). Indeed, "where else but in the impoverished Third World would anyone expect people to work without pay?" (46). Kim and Farmer argue that CHWs have a right to fair monetary compensation (17,47). Listening to experts is one thing; if we want to understand the true costs and benefits of volunteering, we should hear what CHWs have to say (44,46). Many studies report that CHWs desire some form of payment and often feel exploited when they receive little or no compensation for their work (2,10,11,13,17–19). One CHW in Mozambique felt it was unfair that her superiors gained elite status and material benefits as a result of her work, while her desires for socio-economic advancement were ignored (17). In Pakistan, Nepal and South Africa, CHWs have organized and advocated for better working conditions (17). CHWs want and deserve steady employment and a stable income. Furthermore, payment builds economic equity among disadvantaged populations and stimulates the economy (11).
- **Adequate remuneration increases retention of CHWs.** Inadequate compensation is a significant cause of attrition among CHWs (32). CHWs are generally poor with few opportunities to earn a living wage. Many programs do not provide appropriate payment for the time required, forcing CHWs to choose between helping their community and supporting their family (4,16,17,32). As a result, CHWs often abandon their responsibilities in search of other income, leading to high drop-out rates which can impact program effectiveness, cost and sustainability

(1,11,14,19,20,45). Admittedly, more research is needed on the causes of attrition and ways to reduce it (13,14,30). Nevertheless, evidence shows that cash allowances to cover expenses and non-monetary incentives are not sufficient; CHWs require adequate wages to ensure their livelihood (32,44).

- **Programs can demand more of paid CHWs.** Payment gives more leverage for supervision and quality control. Full-time, salaried workers can be asked to work longer hours and take on more responsibilities (11). Paid workers can also be required to adhere to professional norms and can be held accountable for their performance (11,12). Programs often place too many demands on volunteer CHWs, expecting them to take on more and more duties without adequate supervision or support (48). If given too many tasks, CHWs may feel overwhelmed and stop working altogether (48). Service quality may suffer as a result (48).

To summarize, there is little evidence to suggest that volunteerism in low-income countries is sustainable over the long term (32). Paying CHWs does require a modest investment of resources, but cost should not be a significant barrier if governments and donors prioritize primary care. Furthermore, countries can avoid many of the problems associated with payment by hiring CHWs as salaried employees of the national health system or standardizing rates of pay across programs. Clearly CHWs desire more for their efforts and feel exploited when they are asked to work for free. Adequate remuneration reduces attrition and can increase service quality. Occasional in-kind and per diem payments are not enough; CHWs need fair and consistent wages to make a living, and programs should offer nothing less.

RECOMMENDATIONS TO THE WHO

The WHO has consistently recommended that CHWs receive adequate wages in addition to other

incentives (6,32,49). At the same time, they suggest that more research is needed to assess the effectiveness of paid versus voluntary workers (6). As the primary authority in global health, the WHO should provide stronger guidance for CHW policies and programs worldwide, especially in light of the compelling evidence in favor of payment. Equivocating on this critical debate shifts the decision to individual programs, many (if not most) of which lack the data to determine which option is more favorable: paying salaries or recruiting volunteers. If given the choice, programs are likely to fall back on volunteerism, which may result in more failed programs and frustrated volunteers.

Liberia's Ministry of Health and Social Welfare plans to reconsider payment for CHWs due to trouble retaining and motivating volunteers (5). The Earth Institute at Columbia University estimates that a fully functional CHW program in Liberia would cost US$ 2.15 per capita per year (about US$ 10 million per year total), assuming a salary of US $80 per CHW per month (roughly 30% of the total cost per year) (12). This equates to only 4% of total health expenditure per capita in Liberia, which is reasonable given the health benefits the program would provide (50). Paying wages will likely improve CHW motivation and retention without significantly affecting total health expenditure. On the other hand, if the Ministry of Health decides against payment, the program will continue to face high dropout rates, resulting in little impact and wasted money. Without strong guidance, Liberia may decide that paying CHWs is too costly, when in fact it is almost too costly *not* to pay them.

Therefore, I recommend that the WHO clarify their recommendations in order to provide stronger guidance regarding payment for CHWs. Specifically, CHWs should receive fair and regular wages in addition to other incentives, benefits and rewards. Both part-time and full-time workers should receive payment commensurate with workload and national standards. Governments should be responsible for regulating wages to ensure fair and uniform payment across CHW programs, whether managed by

Ministries of Health, NGOs or other civil society organizations. To maximize consistency, governments should hire CHWs as employees of the national health system as Brazil and Iran have done. Governments should also standardize rates of pay for CHWs based on national wage and labor standards. For example, they might require all organizations using CHW labor to pay workers an official minimum wage; NGOs and other civil society organizations would then be responsible for abiding by these standards. This will ensure that payment for CHWs is equitable and in-line with national labor codes, which may help curb feelings of exploitation and frequent demands for higher salaries.

I also recommend that the WHO amend their call for more research. While gaps in the literature remain, more research on paid versus unpaid workers is redundant; the evidence clearly favors payment. What programs need to know now is what combination of payment and other incentives maximizes cost-effectiveness, performance and sustainability (45). Health agencies and economists have already started conducting randomized controlled trials to evaluate mixed incentive schemes on CHW performance (17). Poverty Action Lab, for example, is currently working on a pilot study with the Government of Zambia to examine the most successful methods of recruiting and compensating CHWs (51). Another question worth examining is how to sustain financial support for CHW programs over the long term (4). Finally, studies should also examine CHW attrition. Although dropout is a key challenge among many programs (rates range from 3% to 77%), few studies disaggregate data by attrition type or evaluate retention across different incentive schemes (14,19,20). Research that addresses these gaps will inform best practice and help the WHO further clarify their guidelines on payment and other incentives for CHWs.

CONCLUSION

Payment is a necessary component of successful CHW programs. Adequate remuneration improves

health worker motivation, retention and performance. Additionally, fair and consistent wages ensure a stable income and livelihood for CHWs. Governments and donors can afford to compensate CHWs for their efforts; given the wealth of evidence in favor of consistent wages, refusing payment is no longer acceptable. CHWs have a right to fair monetary compensation. Asking the poorest of the poor to work for free is unjustifiable, no matter how "small" the commitment may seem. In the words of one Nicaraguan volunteer, "Love doesn't give anyone anything to eat. Love isn't there in your stomach" (52).

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