



## UvA-DARE (Digital Academic Repository)

### Towards Promotion of Community rewards to Volunteer Community Health Workers? Lessons from Experiences of Village Health Teams in Luwero, Uganda

Turinawe, E.B.; Rwemisisi, J.T.; Musinguzi, L.K.; de Groot, M.; Muhangi, D.; Mafigiri, D.K.; de Vries, D.H.; Pool, R.

**DOI**

[10.22158/rhs.v1n2p85](https://doi.org/10.22158/rhs.v1n2p85)

**Publication date**

2016

**Document Version**

Final published version

**Published in**

Research in Health Science

**License**

Other

[Link to publication](#)

**Citation for published version (APA):**

Turinawe, E. B., Rwemisisi, J. T., Musinguzi, L. K., de Groot, M., Muhangi, D., Mafigiri, D. K., de Vries, D. H., & Pool, R. (2016). Towards Promotion of Community rewards to Volunteer Community Health Workers? Lessons from Experiences of Village Health Teams in Luwero, Uganda. *Research in Health Science*, 1(2), 85-97. <https://doi.org/10.22158/rhs.v1n2p85>

**General rights**

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

**Disclaimer/Complaints regulations**

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

# Towards Promotion of Community rewards to Volunteer Community Health Workers? Lessons from Experiences of Village Health Teams in Luwero, Uganda

Emmanuel Benon Turinawe<sup>1,2\*</sup>, Jude T. Rwemisisi<sup>1</sup>, Laban K. Musinguzi<sup>1,2</sup>, Marije de Groot<sup>1</sup>, Denis  
Muhangi<sup>2</sup>, David K. Mafigiri<sup>2</sup>, Daniel H. de Vries<sup>1</sup> & Robert Pool<sup>1</sup>

<sup>1</sup> Department of Anthropology, University of Amsterdam, Amsterdam, The Netherlands

<sup>2</sup> College of Humanities and Social Sciences, Makerere University, Kampala, Uganda

\* Emmanuel Benon Turinawe, E-mail: tbenoni@gmail.com

## **Abstract**

*In the debate regarding volunteer Community Health Workers (CHWs) some argue that lack of remuneration is exploitation while others caution that any promise to pay volunteers will decrease the volunteer spirit. In this paper we discuss the possibility of community rewards for CHWs. Ethnographic fieldwork that lasted 18 months utilised methods including participant observation, FGDs, in-depth interviews and key informant interviews to gain insight into the dynamic relationship between volunteer CHWs known as Village Health Teams (VHTs) and the community. Contextual transcription was done and data was thematically analysed. Findings show that community members are willing to reward volunteer CHWs with cash, material and symbolic rewards in appreciation for their help. Factors crucial for this gesture included: care and recognition of the VHTs' work by medical staff, fulfilment of the promises made to the community by government and exemplary behaviour by CHWs. Therefore, effort should be made to facilitate volunteer CHWs to be seen as helpful to their communities. Especially, there needs to be a smooth operation at the intersection between the VHTs, local government and medical structures. Community rewards could be a more sustainable way of motivating CHWs while a solution to health personnel shortage is sought.*

## **Keywords**

*community rewards, village health teams, Uganda*

## **1. Introduction**

Over the last 50 years, the use of community health workers to provide certain basic health services has been identified as one strategy to address the growing shortage of health workers, particularly in low-income countries (Brenner et al., 2011). Throughout the world, there have been innumerable experiences with CHW programmes ranging from large-scale national programmes to small-scale community-based initiatives (Lehmann & Sanders, 2007a). The term “community health worker”

embraces a variety of selected community based health aids, who are given basic short-term training to work in their communities (Lewin et al., 2010). It is widely acknowledged that CHWs must respond to local societal and cultural norms and customs to safeguard community acceptance and ownership of them (Lehmann & Sanders, 2007a). CHWs have been assigned diverse roles and activities throughout their history, both within and across countries, targeting a wide range of preventive, curative and/or developmental interventions (Gilmore & McAuliffe, 2013). CHWs are seen as pivotal in increasing accessibility to Primary Healthcare (PHC) services (Osawa, Kodama, & Kundishora, 2010).

The CHW enterprise was thought to be affordable since external donors would pay the start-up costs, while national governments would bear their maintenance costs financed through expected savings from reduced medical care costs and communities' cash and in-kind contributions (Lehmann, Friedman, & Sanders, 2004). By the 1990s, CHW programmes had declined due to perceived problems including poor management, policy shifts that saw economic restructuring and evidence of ineffectiveness (Mburu, 1994). The UN 2010 report on the progress of achieving the Millennium Development Goals (MDGs) highlighted the need for social interventions and thus reinvigorated the necessity for CHWs (World Health Organization, 2010).

Subsequently, many sub-Saharan countries have scaled-up CHW interventions especially in rural and remote areas (Maes & Kalofonos, 2013). The Ugandan government began implementing its CHW strategy in 2001 through Village Health Teams (VHTs)—a group of volunteers at the village level trained to become the “vehicle” through which interventions would reach local communities. The VHT strategy was part of the 1999 Decentralized Act which made VHTs the lowest but a quintessential aspect of the health system structure (Ministry of Health, 2010). With the goal of maximizing community ownership and community support (Sekimpi, 2006), VHTs are selected by their communities through popular vote following guidelines that emphasize gender balance (Ministry of Health, 2010).

Though initially CHWs showed the potential to eliminate health disparities between rural and urban areas, most currently present mixed results (Cherrington et al., 2010). On one hand, many studies show that CHW programmes perform dismally due to numerous problems including: shortage of supplies, poor selection, limited supervision and poor remuneration among others (Gilmore & McAuliffe, 2013; Lehmann, Friedman, & Sanders, 2004b; Stekelenburg, Kyanamina, & Wolffers, 2003). On the other hand, some studies show that if well planned and executed, CHW interventions can be effective and affordable especially in PHC activities (Komakech, 2007; Tumwebaze, 2011).

Most CHW programmes seldom produce sustainable interventions owing to large populations covered and the introduction of many services that exceed their management and financial capacity (Rohde & Wyon, 2002). Also, initial success is often undermined by problems related to donor fatigue, leading to the suggestion that to achieve sustainability, CHW programmes should utilize approaches that promote community support (Komakech, 2007; Perry, Zulliger, & Rogers, 2014).

Indeed, one of the critical issues in sustaining CHWs is remuneration (Maes, 2010; Watt, Brikci,

Brearley, & Rawe, 2011). While it was initially expected that CHW programmes would appeal to mass voluntarism, in practice many programmes have financially rewarded CHWs, even hiring them as salaried assistants (Bloom & Standing, 2001; Hongoro & McPake, 2004). However, such financial incentives lead to high attrition (Kironde & Klaasen, 2002; van Ginneken, Lewin, & Berridge, 2010), especially since they often consist of small token allowances (Eng & Parker, 2002; Hadi, 2003). Although no sustainable form of remunerating CHWs has been found, many scholars still argue that relying on voluntarism is a form of exploitation that perpetuates marginalization (Lehmann et al., 2004a). Thus, while the usefulness of CHWs cannot be over-emphasized (Fritzen, 2007), what remains to be seen is how the volunteer CHWs can be rewarded satisfactorily and sustainably especially in poor countries like Uganda (UNICEF, 2009).

Contributing to this knowledge, this study asks, what are VHTs' experiences of getting rewards and appreciation during their service to the community? Exploring VHTs' experiences of rewards, we contribute to the quest for sustainable ways of motivating volunteer CHWs especially in rural Ugandan communities.

## **2. Methods**

### *2.1 Study Setting*

The study was carried out in Luwero, a sub-county in central Uganda with an ethnically mixed population though most small ethnic minorities have assimilated to the Ganda culture. Being a rural population, the main source of livelihood is peasant agriculture, complimented by petty trade in agricultural and other household items. The Uganda's decentralized health system requires each district to be served by a general hospital with Health Centre IV, III, II and I at the County, sub-county, parish and village levels of administration respectively (Government of Uganda, 2005). Luwero district lacks a general hospital and Luwero sub-county lacks a HC III which means that people have to travel approximately four miles to be served at the Health Centre IV which doubles as the main district health facility. With such a deficient health structure, typical of many rural communities, CHW volunteers, such as VHTs, are a valuable resource.

### *2.2 Data Collection*

The data collected for this study was part of a larger project, which explored how to develop sustainable community health resources in rural poor communities (CoHeRe). Between July 2013 and March 2014 three researchers carried out ethnographic fieldwork in the villages of Luwero sub-county to gain in-depth understanding of everyday community processes. Ten FGDs were conducted with the VHT members and four with other community members in which they discussed the work and rewards for VHTs. In-depth interviews were conducted with 13 VHT members, and three other key informants including two local government officials and an African Medical Research and Education Fund (AMREF) official; The AMREF funded the initiation of the VHT strategy in Luwero district.

### 2.3 Data Analysis

Data collection and analysis was done concurrently in the field to identify and rectify errors during interviews and FGDs. Field notes were shared weekly among the research team to identify verification needs. Member checks were carried out to ensure narrative accuracy and interpretive validity. Tape-recorded data were contextually transcribed into English and together with field notes entered into Nvivo 10 software. A query was conducted using the search terms “VHTs”, “VHT”, and “Reward”. This query led to the identification of 107 usages of these terms in 10 FGDs, 13 in-depth interviews and 6 field notes. For each of these 29 documents the broad context of these search terms were analysed and coded using an inductive coding strategy. Coding trees were created forming the following structure: a) VHTs expectations and financial benefits, b) Cash and in-kind benefits, c) Community appreciation of VHTs, d) Working relationship between VHTs and other health staff, e) Promises unfulfilled through VHTs and its influence on their reputation. These codes provide the main narrative and argument for this manuscript.

### 2.4 Ethical Considerations

The University of Amsterdam’s ethical advisory board provided ethical clearance for the study. Local approval was obtained from the institutional review board of Makerere University School of Public Health Higher Degrees, Research and Ethics Committee and the Uganda National Council for Science and Technology registered the study [number SS3420]. All data are saved in password-protected files only accessible by members of the research team. Pseudonyms are used in the manuscript to maintain the respondents’ anonymity.

## 3. Findings

### 3.1 VHTs’ Expectations: Financial and Non-Financial Benefits

The VHTs in Luwero were recruited as volunteers but they still expected some incentives. Initially, AMREF, the non-governmental organization that initiated the VHT strategy in Luwero, provided allowances. However, at the time of our fieldwork, AMREF’s project had ended and the VHTs lost the allowances since the local government had no budgetary allocations for them. A lot of disappointment resonated around the termination of allowances, as Kasozi, a male VHT member, age 45, said:

Initially AMREF gave us some allowance every quarter to facilitate our lunch, transport. We spared some [of these allowances] to buy some household items like soap. We knew we were volunteers, and we had no problem with that, except, in our work, we incur food and transport expenses. Each time we visited homes, we spent 1000 Uganda shillings (0.3 USD) for lunch. When we raised this issue with the sub-county officials, they promised to allocate some funds for VHTs but never followed through.

Likewise, another male VHT member, age 60, reflected on the “good times” when they used to get allowances:

When AMREF used to give us some allowances, we worked with enthusiasm around the villages on foot. When AMREF left... don’t you think it demoralized us? If the government was to continue giving

some allowance, I can only imagine what we would have accomplished. We cannot continue spending our money to do volunteer work.

VHTs had to spend their own resources with the hope of negotiating some remuneration from the government. Their patience run out when they realized that the government was not going to offer any financial support and their motivation diminished.

Ironically, despite the loss of financial allowance, VHTs still expressed appreciation for other benefits they received. Kitale, a male VHT member said:

Through the training and work, we gained skills and knowledge, which we can use to improve our lives. Besides, we formed a group of VHTs, through which we received training by the National Agricultural Advisory Services. Those who could afford it were given a variety of improved banana crops. I managed to plant about 100 stems of bananas. Exposure through village visits is itself a learning experience.

Being VHT members also provided opportunities to access services that were otherwise not accessible. As VHTs they were a ready grouped structure that complied with the requirements to receive agricultural supplies from another state agency. They were able to tap into that, but only those who could afford the required contributions.

Another male VHT member, John, aged 45, expressed gratitude for the opportunities he acquired from his VHT position:

Once in a while, other government and NGO projects give us mobilization assignments with some allowances. Besides, I received a bicycle as a VHT drug distributor which I use for my private business. Even without financial benefits, becoming a VHT member makes one responsible and respectable in the community, especially if you behave well.

This relates to what, Rehema, a female VHT member, 59-years-old, said:

I learnt a lot about interpersonal relationships with community members. The responsibility of being a VHT member compels me to behave responsibly and avoid behaviours like quarrelling. In addition, I was trained in how to give first aid, treat malaria, keep my home clean, and eat healthy foods. I may fail to fulfil all I learnt, but at least I know...

Discontinuation of monetary allowances may have reduced their morale, but evidently, it did not demotivate them completely. They still appreciated the non-monetary benefits that they received. Things like bicycles, feeling responsible, learning interpersonal skills, feeling respected and acquiring knowledge became a source of pride.

### *3.2 Direct Cash and in-Kind rewards from Community Members*

Besides the benefits from agencies, some helped community members rewarded them with both cash and in-kind. As John, a 45-year-old male VHT member narrated:

After training, I thought of a man whose health had deteriorated. I visited and counselled him about HIV/AIDS. He went with me to the health centre and was found positive. He was put on treatment and improved greatly. Later, one day he gave me a gift of a hen. He said, "because of you I am here today".

We have become friends, and our families rely on each other. I have helped many other people in this way and they continue to appreciate me in various ways; maybe with a 1000 Uganda shillings (0.3 USD) note or they allow me to buy from their shop with credit...

This exemplifies how VHTs benefited from good will and appreciative rewards from those they helped. In an FGD in Dekabusa village, when we relayed this scenario to discussants, one female participant validated this phenomenon alluding to Universalist values:

All people know that if you do good things, even if you are not called upon to do it, there is a way in which you are rewarded afterwards.

Another female member of the VHT seemed to validate this when she said:

Today, our work has largely dissipated but once in a while we counsel some members in the community and influence them to seek some services such as TB screening, HIV testing, antenatal care and others that many people would not usually go for. After they have received help from those services, they appreciate us and behave well towards us. You cannot borrow sugar or salt from such a person and they refuse. It keeps our relationships with community members good.

Though the above statement may be essentialist, it at least points to a well-understood social norm that permeates communities where solidary exchanges are an everyday survival strategy.

### *3.3 Frosty Relationship between VHTs and Medical Staff*

As described in the introduction, VHTs are intended to link the communities to the health facilities. Unfortunately, we learned that the VHTs felt that the medical staff had a condescending attitude towards them and by extension the community members they referred. This tended to prevent VHTs from doing their work arguing that they were treated as system outsiders. As Sarah, a 60-year-old female VHT member noted:

We encourage people to go to the health centre only for them to be insulted. It makes us lose face. The people think that you plotted with the medical workers to insult them. The nurses do not recognize the effort we make to send people.

Similarly, in an FGD with women, one participant's response illustrates the attitude that indirectly shapes the relationship between VHTs and medical staff:

VHTs are supposed to refer us to the health centres. However, when we reach there and report that the VHT has referred us, the nurses look at us as if they don't know what we are talking about. At the community, the VHTs send us to the health centre, but no one knows them there! Who trained them?

The helpfulness of VHTs can only be realized if they work well with medical staff. Without a good working relationship and mutual recognition, the VHTs work morale and reputation among their community peers is greatly hurt.

The above quote further speaks to the ambiguous position that VHTs occupy between the community and health facilities. As two male VHTs in an informal conversation explained:

R1: I do not know whether the government knows that we [VHTs] are part of the health structure. We have been completely forgotten.

R2: “Where do we belong?” We are definitely under the local government... but clearly, they have forgotten us since we cannot even refer patients to them!

The VHTs felt frustrated and unrecognized by the system they served. This invariably makes it difficult for the VHTs to help their community and hurts their reputation among peers whom they refer.

#### *3.4 Unfulfilled Promises and VHTs' Failure to be Exemplary: The Dilemma*

VHTs are helpful if what was promised to the community is delivered through them. One such promise was that VHTs would distribute medicines for treatment of minor illnesses, especially malaria. The failure to deliver this particular promise impacted the decorum of VHTs and tarnished their reputation. In an FGD with men, their disappointment was apparent:

R3: Nobody knows when and what they [VHTs] are doing.

R2: What do you expect of them when they are not paid?

R3: They are paid! They have T-shirts and bicycles. They used to receive money. It is only medicine they do not bring.

R1: They [VHTs] would have been useful if they had the medicine that we were promised. The health facility nearest to our parish is 8km away. They gave us a lot of hope by promising medicine. And all the VHTs did was tell people to build toilets!

Failure to fulfil promises left the communities disappointed and uninterested in VHT projects. Talking about this failed promise, one VHT member said:

The government failed to fulfil the most important promise that had brought a lot of excitement to the community. We were trained to treat minor cases of malaria which excited the people. Had we achieved this, people would have listened to us when we sensitized them about sanitation and hygiene.

However, damage to VHTs' reputation was partly due to their own failure as examples in their community. In an FGD with VHTs, one participant could not mince words to express her disappointment:

We were walking around the villages teaching about sanitation... but some of us, who are supposed to be good examples, are completely the opposite. Some don't even have clean clothes! We need to evaluate ourselves.

The failure of some selected VHTs to be exemplary models became more evident when another participant in the FGD said:

We made it hard for people to respect us or even value the information we were giving them because we do not practice what we preach. One of us does not even have a latrine at home! It is a shame that we were supposed to guide others yet some of us do not even have toilets.

Clearly, some of the VHT members failed to live up to their teachings. Though this may be a structural problem given the prevalence of poverty, their failure denigrated their potential as role models and compromised their reputation.



#### 4. Discussion

Though CHWs are widely believed to be useful in delivering basic health services (Watt et al., 2011), questions remain concerning their remuneration (Lehmann & Sanders, 2007a). Though there is an overwhelming consensus among scholars about the need for incentives for CHWs, innovative ways are needed to incentivize and realize CHWs sustainably (Bigirwa, 2009; Singh, Negin, Otim, Orach, & Cumming, 2015). Initially, protagonists of CHW programmes expected that local communities would incentivize volunteers but this has materialized (Lehmann & Sanders, 2007a). In this paper, we use the experiences of rural VHTs to argue that community rewards can indeed be feasible and a good strategy to motivate volunteer CHWs. We illustrated how various factors reinforced each other to influence the respect accorded to the VHTs in the community and ultimately affected how the VHTs were rewarded in appreciation. The interrelated issues that affected the reputation, and thus the work of VHTs are discussed below:

Firstly, though it has been argued that to strengthen CHWs, financial remuneration in a predictable fashion should be considered (Maes, 2010), it is equally recognized that other non-monetary benefits can play a big role in motivating CHWs (Brunie et al., 2014). Indeed, VHTs showed great appreciation for the symbolic rewards they received for being volunteers such as social respect and other interpersonal relationships. Noteworthy, is also that community members can actually give gifts in terms of cash and other valuable materials. Such rewarding gestures are inevitably tied to the ways in which the VHTs had offered help or were perceived as an important community resource. Therefore, the need to ensure that VHTs are able to refer community members to the health facilities cannot be over emphasized. Besides it being for access to health, it ultimately affects how VHTs are viewed in the community and thus whether they deserve any rewards as had been previously anticipated when CHW volunteers were being promoted (Lehmann & Sanders, 2007a). The willingness of the community to reward cannot be divorced from the reputation of the VHTs in their communities and this reputation heavily relies on them being seen as helpful. The promises made through the VHTs must therefore be fulfilled, guaranteeing that VHTs can respond to community needs.

Secondly, we can infer that there is a need to strike a balance between important and urgent services while planning the implementation of VHT interventions. As has been observed, for most rural populations, curative services are a matter of more urgent need than preventive ones (Stone, 1992). In our findings, VHTs' promise to treat minor illnesses among children and women created much anticipation commensurate with the resultant disappointment when this promise later failed to materialize. It was unsurprising that these failed promises were linked to bad response to the VHT led sensitization campaign. It is logical that VHTs' delivery on urgent needs might increase their social prestige and augment their reputation, better positioning them to deliver, equally important but less urgent, preventive health messages (Swidler & Watkins, 2009). The dichotomy of preventive and curative interventions may be easily seen as an oversimplification but they undoubtedly shape community's appreciation of any interventions and certainly those through their peers—the volunteer

CHWs (Biehl, 2011). The overwhelming need for curative services may discount the community's urge to respond to preventive interventions.

Thirdly, we elucidate the challenge of expectation management in CHW programmes. By partnering with NGOs (in this case AMREF), the selection, recruitment and initial implementation of VHT activities in Luwero raised expectations by providing financial allowances that could not be sustained. When the AMREF project ended, the VHTs became demoralized and interpreted the government's failure to continue the financial allowances as disregard for their work. This greatly influenced their performance and their relationship with the community (Turinawe et al., 2015). Well-intentioned partnerships may undermine the sustainability of the structures they introduce by initiating incentives which cannot be sustained beyond the lifespan of the NGO projects.

Fourthly, VHTs are positioned in a highly complex socio-political environment that places them precariously and ambiguously at the intersection between health professionals, government, NGOs and the local communities. VHTs have to negotiate the differing contours determined by the various players in order to serve the community. Each of the actors present peculiar challenges regarding financing, respect and relevance of VHTs in the community. Though interlinked, the cooperation of these actors is uncoordinated: while attitudes of medical staff towards CHWs are wanting (Fleming, 1994), governments could not support VHTs due to funding shortfalls (Ministry of Health, 2010); communities have difficulties trusting the actors in the healthcare assemblage (Amooti-Kaguna & Nuwaha, 2000; Lehmann & Sanders, 2007b; Ministry of Health, 2010; Perry et al., 2014). There is need to clarify the position of VHTs to reduce this ambiguity and put them in control of the factors they have to navigate, factors that influence their respectability and appreciation in the community.

## 5. Conclusion

Interest in CHWs, especially in an environment dictated by poverty, means that the sustainability question must be urgently and innovatively answered. Discussions of the sustainability of CHW programmes, like the VHTs in Uganda, have dwelt on challenges, of which remuneration is key. Evidence presented here shows that though various incentivizing strategies are available, communities are able and willing to reward helpful VHTs. This should be key in informing policy on VHTs and other CHW programmes as far as incentives are concerned. NGO nor government funding may not be sustainable to fund volunteer CHWs' regular remuneration. We suggest that local and international actors supporting CHW programmes should ensure that the volunteers respond to the needs of the community. To do this, the intersections between medical staff, government, including NGOs, and the community should be managed to facilitate the role of VHTs as a link to necessary healthcare, and thus improve their reputation in the community. When communities appreciate VHTs through symbolic and material rewards they may be able to sustain these volunteers, providing a way to sustain VHTs in the short and medium term until governments are able to deploy sufficient medical personnel in all communities. The management of the intersections between medical structures, the local administration

and NGOs should place the needs and aspirations of volunteers at the centre. It is at this intersection that the resilience of VHTs can be sustained by empowering them to better serve their communities and attract community support and appreciation. Financial remuneration by the government is currently unsustainable (Biehl, 2011). We contend that emphasis should be put on facilitating the interaction between medical workers, local governments and VHTs in order to create an environment in which communities see VHTs as valued helpers deserving of support and respect. Ensuring this may go a long way in ensuring the sustainability of VHTs in rural Ugandan communities.

## 6. Limitations

This study is carried out in a specific geographical area in Uganda; when extrapolating the findings of this study to other areas the role of different actors and the organization of the health system should be taken into account. Although this study was carried out in one area, this area is comparable to many rural areas in different African countries and the findings are derived from a detailed and rich study with a long and intense fieldwork period. Detailed qualitative studies of CHW programmes are necessary and prove insightful in informing efforts aimed at strengthening such interventions (Glenton, Lewin, & Scheel, 2011).

## Acknowledgements

This work was made possible by support from “Developing Sustainable Community Health Resources” in Poor Settings in Uganda (CoHeRe) project at the Center for Social Science Research on AIDS (CeSSRA), Makerere University School of Social Science and University of Amsterdam grant number W07.45.2009.014 from The Netherlands Science Organization, WOTRO Science for Global Development office.

## References

- Amooti-Kaguna, B., & Nuwaha, F. (2000). Factors influencing choice of delivery sites in rakai district of uganda. *Social Science & Medicine*, 50(2), 203-213. [http://dx.doi.org/10.1016/S0277-9536\(99\)00275-0](http://dx.doi.org/10.1016/S0277-9536(99)00275-0)
- Biehl, J. (2011). When people come first: Beyond technical and theoretical quick-fixes in global health. *Global Political Ecology*, 100-130.
- Bigirwa, P. (2009). Effectiveness of Community Health Workers (CHWs) in the provision of basic preventive and curative maternal, newborn and childhealth (MNCH) interventions: A systematic review. *Health Policy and Development*, 7(3), 162-172.
- Bloom, G., & Standing, H. (2001). *Pluralism and marketization in health sector: Meeting health needs in context of social change in low and middle income countries*. IDS working paper 136. England: University of Sussex.
- Brenner, J. L., Kabakyenga, J., Kyomuhangi, T., Wotton, K. A., Pim, C., Ntaro, M., ... Kayizzi, J.

- (2011). Can volunteer community health workers decrease child morbidity and mortality in southwestern Uganda? An impact evaluation. *PloS One*, 6(12), e27997.
- Brunie, A., Wamala-Mucheri, P., Otterness, C., Akol, A., Chen, M., Bufumbo, L., & Weaver, M. (2014). Keeping community health workers in Uganda motivated: Key challenges, facilitators, and preferred program inputs. *Global Health, Science and Practice*, 2(1), 103-116. <http://dx.doi.org/10.9745/GHSP-D-13-00140>
- Cherrington, A., Ayala, G. X., Elder, J. P., Arredondo, E. M., Fouad, M., & Scarinci, I. (2010). Recognizing the diverse roles of community health workers in the elimination of health disparities: From paid staff to volunteers. *Ethnicity & Disease*, 20(2), 189-194.
- Eng, E., & Parker, E. (2002). Natural helper models to enhance a community's health and competence. *Emerging Theories in Health Promotion Practice and Research* (pp. 126-156). San Francisco, CA: Jossey-Bass.
- Fleming, J. R. (1994). What in the world is being done about TBAs? An overview of international and national attitudes to traditional birth attendants. *Midwifery*, 10(3), 142-147.
- Fritzen, S. A. (2007). Strategic management of the health workforce in developing countries: What have we learned? *Human Resources for Health*, 5, 4. <http://dx.doi.org/1478-4491-5-4pii>
- Gilmore, B., & McAuliffe, E. (2013). Effectiveness of community health workers delivering preventive interventions for maternal and child health in low- and middle-income countries: A systematic review. *BMC Public Health*, 13, 847-2458-13-847. <http://dx.doi.org/10.1186/1471-2458-13-847>
- Glenton, C., Lewin, S., & Scheel, I. B. (2011). Still too little qualitative research to shed light on results from reviews of effectiveness trials: A case study of a Cochrane review on the use of lay health workers. *Implement Sci*, 6(1), 53.
- Government of Uganda. (2005). *Health sector strategic plan II 2005/2010* (Unpublished manuscript).
- Hadi, A. (2003). Management of acute respiratory infections by community health volunteers: Experience of Bangladesh Rural Advancement Committee (BRAC). *Bulletin of the World Health Organization*, 81(3), 183-189.
- Hongoro, C., & McPake, B. (2004). How to bridge the gap in human resources for health. *The Lancet*, 364(9443), 1451-1456.
- Kironde, S., & Klaasen, S. (2002). What motivates lay volunteers in high burden but resource-limited tuberculosis control programmes? Perceptions from the northern Cape province, South Africa. *The International Journal of Tuberculosis and Lung Disease*, 6(2), 104-110.
- Komakech, I. (2007). The village health team strategy is a "most innovative community practice" award winner: The experience of a village volunteer programme in Yumbe district, Uganda. *Health Policy and Development*, 5(1), 23-29.
- Lehmann, U., & Sanders, D. (2007a). Community health workers: What do we know about them? *Organización Mundial De La Salud, Ginebra*, 21-22.
- Lehmann, U., & Sanders, D. (2007b). 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. *World Health Organization*, 2, 1-42.
- Lehmann, U., Friedman, I., & Sanders, D. (2004). *Review of the utilisation and effectiveness of community-based health workers in Africa* (pp. 1-4). Global Health Trust, Joint Learning Initiative on Human Resources for Health and Development (JLI), JLI Working Paper.
- Lewin, S., Munabi-Babigumira, S., Glenton, C., Daniels, K., Bosch-Capblanch, X., van Wyk, B. E., ... Zwarenstein, M. (2010). Lay health workers in primary and community health care for maternal and child health and the management of infectious diseases. *Cochrane Database Syst Rev*, 3.
- Maes, K. (2010). Examining health-care volunteerism in a food-and financially-insecure world. *Bulletin of the World Health Organization*, 88(11), 867-869.
- Maes, K., & Kalofonos, I. (2013). Becoming and remaining community health workers: Perspectives from ethiopia and mozambique. *Social Science & Medicine*, 87, 52-59.
- Mburu, F. (1994). Whither community health workers in the age of structural adjustment? *Social Science & Medicine*, 39(7), 883-885.
- Ministry of Health. (2010). *Village health teams: Strategy and operational guidelines*. Kampala: Ministry of Health.
- Osawa, E., Kodama, T., & Kundishora, E. (2010). Motivation and sustainability of care facilitators engaged in a community home-based HIV/AIDS program in masvingo province, zimbabwe. *AIDS Care*, 22(7), 895-902.
- Perry, H. B., Zulliger, R., & Rogers, M. M. (2014). Community health workers in low-, middle-, and high-income countries: An overview of their history, recent evolution, and current effectiveness. *Annual Review of Public Health*, 35, 399-421.
- Rohde, J. E., & Wyon, J. B. (2002). *Community-based health care: Lessons from bangladesh to boston Management Sciences for Health in collaboration with the Harvard School of Public Health*.
- Sekimpi, K. D. (2006). *Experience of the Village Health Teams (VHT) strategy in Uganda*. World Congress on Public Health, Rio de Janeiro.
- Singh, D., Negin, J., Otim, M., Orach, C. G., & Cumming, R. (2015). 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 for Health*, 13(1), 58.
- Stekelenburg, J., Kyanamina, S. S., & Wolffers, I. (2003). Poor performance of community health workers in kalabo district, Zambia. *Health Policy*, 65(2), 109-118.
- Stone, L. (1992). Cultural influences in community participation in health. *Social Science & Medicine*, 35(4), 409-417.
- Swidler, A., & Watkins, S. C. (2009). "Teach a man to fish": The sustainability doctrine and its social consequences. *World Development*, 37(7), 1182-1196.
- Tumwebaze, M. (2011). *Village Health Teams (VHTs) and the attainment of health MDG's in Uganda* (1st ed.). Waldshut-Tiengen, Germany: VDM Verlag.

- Turinawe, E. B., Rwemisisi, J. T., Musinguzi, L. K., de Groot, M., Muhangi, D., de Vries, D. H., ... Pool, R. (2015). Selection and performance of Village Health Teams (VHTs) in Uganda: Lessons from the natural helper model of health promotion. *Human Resources for Health, 13*, 73-015-0074-7. <http://dx.doi.org/10.1186/s12960-015-0074-7>
- UNICEF. (2009). *A situational analysis of village health teams in Uganda*. Kampala: United Nations International Children's Emergency Fund.
- van Ginneken, N., Lewin, S., & Berridge, V. (2010). The emergence of community health worker programmes in the late apartheid era in South Africa: An historical analysis. *Social Science & Medicine, 71*(6), 1110-1118.
- Watt, P., Brikci, N., Brearley, L., & Rawe, K. (2011). *No child out of reach*. London: Save the Children.
- World Health Organization. (2010). *Increasing access to health workers in remote and rural areas through improved retention: Global policy recommendations World Health Organization*.