

Training and Supervision in Task Shifting; the Solution to Human Resource Crisis in Kenya?

Beverly M. Ochieng, Dan C.O Kaseje

Great Lakes University of Kisumu, P.O Box 2224-40100, Kisumu, Kenya

ABSTRACT

Introduction: Task shifting has been recommended as an approach to reduce the impact of human resource shortages. Upgrading the skills of community health workers (CHWs) to rapidly impact on the health of the population needs an innovative approach. There are real opportunities to educate, train, and deploy health workers on a large scale through the community health strategy approach. This provides enormous scope to support rural and remote health workers and to ensure that the latest knowledge is available locally. Training of this nature is critical to be scaled up using new and innovative modes of training delivery for CHWs in simple curative health care. Developing capable, motivated and supported health workers at all levels of the health system are essential in ensuring the delivery of accessible and effective health care across Africa. With the knowledge that the poorest communities in Kenya often do not seek health care outside of the home. Objective: The objective of the study was to describe the perspectives of various stakeholders on training and supervision in tasks shifted to CHWs. Methodology: The study was analytical, comparative in design using qualitative methods of data collection. The study compared task shifting and motivational strategies in three different sociodemographic sites: Peri-urban, nomadic, and rural agrarian sites. Results: Common tasks shifted were promotive, preventive, and simple curative services. Common motivation strategies were supportive supervision, means of identification and training. The nomadic and peri-urban sites, CHWs had assumed curative services beyond the range provided for in the Kenyan task shifting policy. This was explained to be influenced by lack of access to care due to the distance to health facilities, population movement, and scarcity of health providers in the nomadic setting and the harsh economic realities in peri-urban setup. All the respondents emphasized the need to train and supervise CHWs on the tasks already assumed especially on curative. Conclusion: Task shifting from health-care professionals to lay health workers can potentially reduce the costs of health-care provision without compromising health outcomes for patients through effective training.

Key words: Community health worker, effectiveness, task shifting, training

INTRODUCTION

hile some progress has been accomplished in mitigating the health workforce crisis, more has to be done to improve coverage, enhance motivation and improve competence of health workers. A major challenge is lack of resources to achieve these. CHWs have an important role to play in providing services to the poorest and most vulnerable communities. In many countries, the skills of limited and expensive professionals such as doctors are not well matched to local health needs. In almost all

Sub-Saharan countries there are far higher concentrations of workers situated in urban areas than in rural areas.^[1]

Many rural facilities are served by untrained or less skilled workers. It is the poorest and most vulnerable communities in Africa who bear the brunt of the health worker crisis. The low numbers, limited skills and lack of support for health workers in rural and marginalized parts of Kenya contribute significantly to the gap between communities and formal health systems which mean that people are often unable to access the health services they need.

Address for correspondence:

Beverly M. Ochieng, Great Lakes University of Kisumu, P.O Box 2224-40100, Kisumu, Kenya. E-mail: beverly_ochieng@yahoo.com

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Problem statement

The health worker crisis is particularly acute in rural and hard to reach areas, where 80% of the population in lives. The resultant low capacity at the peripheral level of the health system is a crucial barrier to good health. Developing capable, motivated, and supported health workers at all levels of the health system is essential in ensuring the delivery of accessible and effective health care. With the knowledge that the poorest communities in Kenya often do not seek health care outside of the home. The importance of appropriate training, task shifting to lower cadres of worker, and training and supporting community health workers (CHWs) is key to bring health care closer to communities. It is important to recognize strategies to improve the performance of health workers must ensure that workers are provided with appropriate training to equip them with the skills necessary to provide relevant preventative and curative health care at community level.

Objectives

This paper seeks to describe the perspectives of various stakeholders on training and supervision in tasks shifted to CHWs.

METHODOLOGY

The study was analytical, comparative in design using qualitative methods of data collection. The study compared task shifting and motivational strategies in three different sociodemographic sites: A high density peri-urban informal settlement (slum), a sparsely populated nomadic, and a rural agrarian site.

The setting

The study was undertaken in 4 health units in rural agrarian, 9 in peri-urban, and 2 nomadic sites purposively selected. The four rural agrarian community health units (CHUs) included in the study were situated in Butere district, Western province, while peri-urban and nomadic sites were situated in Kisumu town Nyanza Province and Garissa, North Eastern Province, respectively. All selected CHUs were part of the community health strategy scale-up program in partnership with the Ministry of Public Health and Sanitation.

Study sites were purposively selected to represent contrasting areas of Kenya: Nomadic, agrarian rural, and peri-urban,

Data collection involved focus group discussions (FDGs) and key informant interviews (KIIs). 10 KIIs were undertaken at the national level, four in each of the three study districts, eight with service providers in the rural site, and two in nomadic and urban sites. Focused group discussions comprised two youth, two female health consumers, two male health consumers, and two CHWs for each of the eight health facilities included in the study from the three different study

contexts. Purposive sampling method was used to identify the knowledge-rich individuals, usually heads of various structures in the health sector from national to local levels.

A common set of guiding questions was used at all the sites. The qualitative data from the FDGs and KIIs were transcribed, anonymized, and coded using content analysis framework as described by Miles and Huberman. From the themes and sub-themes, common emerging issues and concerns were identified, and narratives were constructed. Transcripts were read and reread to identify emerging issues and themes by site-specific teams first. Thereafter cross-site comparisons were made. Responses were compared across type of respondents (consumers, CHWs, health providers, and managers), and study sites. Narratives were constructed on views of various stakeholders on what tasks can be shifted to CHWs and what strategies are appropriate for motivating them in their work.

Findings Description of task shifting

Policy makers and partners described task shifting as "the process in which certain services that ought to have been offered by the superior persons are delegated to less qualified persons" as was stated by a policymaker at the national level. Managers viewed it as tasks that can be performed by lower cadres such as CHWs. CHWs described it as "tasks performed by nurses lowered to be performed by community health workers" stated a CHWs FDG. Training needs to equip workers with the skills they need to deliver effective health care, including leadership and management skills. If training of this nature is to be scaled up then new and innovative models of training delivery needs to be revised.

Tasks taken up by CHWs beyond current policy quidelines

The study found that there were a number of tasks that were being performed by CHWs which were beyond the range provided for in the current policy guidelines. There were similarities and differences in the types of such tasks and the reasons the CHWs were performing them at the three sites.

In the nomadic site, it was evident that CHWs were undertaking some curative tasks such as treatment of malaria and pneumonia, and dispensing of medicines. This was in response to demand. In this context, health service accessibility was limited by both geography and civil unrest for large segments of the population. CHWs described the necessity of modifying their care package for hard to reach populations, a consumer in Garissa had this to say "at times we try to access the [government health] services but the resources are not there and so we have to opt for other health care alternatives rather than die."

Similarly, in peri-urban site, the CHWs had expanded their care package. The reasons for doing so were different from

the nomadic site. Although the respondents felt that they were responding to the demand from the community, they were more strongly driven by a desire for income, and people were more willing to pay them for curative rather than preventive services. They argued that their levels of education were adequate for them to be trained for such curative skills that they could sell to the community. A peri-urban CHW said "life is too expensive and working for free is not working for us, we need to compliment the free services with the skilled curative services for a certain fee."

Training and career path progression

Respondents expressed the need for in-depth training on selected curative services some of which they were already undertaking but for which they have not been trained.

The CHWs emphasized the need for formal training as part of the motivation to ensure their retention. "New cadre to be created CHWs should be trained and should have their own cadre." "Supervision should be reinforced by the person who is the in charge of the facility, meeting CHWs and discussing the topics they have." The consumers agreed with the need for frequent in-service trainings. Policymakers supported the idea of career path that requires that CHWs are admitted for further training based on guidelines of professions of interest, criteria for recommendation to progress, based on performance which is measured by the data they collect.

Managers supported the idea of a career path. A district health management team member said "There should be a chance for them to climb up. They have desire to grow up so they should be allowed. A scheme of service that provides for career progression for community health workers. This can be done through looking at their work, those people who are working hard should be given that priority so that may be motivated. Community health workers have expressed a strong desire to grow so they should be given an opportunity." They further suggested that the government should provide a scheme of service that provides for career progression for CHWs. This can be done through looking at their work, improvement in health indicators that they have brought about, based on regular household data collected, to give priority to the champions. They felt that financing of the community health strategy at the county level is crucial for the success of the program. Another remarked "financing of the community strategy at the municipality is key."

Respondents found training as key. "You know in the world of today you just need to know your job well if you don't you are ridiculed in the society, that means you loose the respect and you loose market, it is good if we are trained then people respect our jobs, they know we are experts in it, it feels good when you are known to do your job well" stated a rural respondent. It emerged that in the peri-urban CHWs wished to acquire skills to sell, because of hard economic times in

the country. The respondents in both the peri-urban and the nomadic sites said it was important to be trained frequently and given refresher courses given that new trends and disease patterns emerge frequently.

The respondents insisted that training was the backbone of the task shifting concept. A respondent from Garissa (Nomadic) said "because of the critical work we are forced to do then it is mandatory that we are offered training as new things emerge especially in our area where access to health services is very hard, when we are trained we are able to save lives especially of mothers and small children, without training we offer services of lower quality that endangers peoples lives, so it is important when we trained frequently."

The respondents from the rural context stressed that because of the low literacy levels, health workers at the community level needed frequent training. The community health extension workers strongly recommended the frequency of the training of health volunteers because this made them confident in carrying out their duties hence earning respect from the community. One consumer said "when I know that the community health workers are trained frequently on their job, then appreciating their advice on health issue becomes a little easier, if they are not trained and they start giving health education and some of them have not gone to school, I really doubt the expertise, so it is good if they are trained then we as a community we are able to believe them."

The study has highlighted particular challenges facing health workers in hard to reach areas and the resultant impact on communities in the peri-urban, nomadic, and the rural agrarian. Challenges include the lack of skilled CHWs, poor community engagement with health systems, low motivation and retention of workers where they are needed most, and a lack of appropriate training and training institutions.

Supervision

Service providers mentioned that close supportive supervision by health professionals and the community health committees was a critical component in their hardship context. Support supervision and linkage emerged strongly and they reported that they are proud when they are linked to a health facility "we are able to learn a lot and people respect that our work is credible, but if you are not supported by anyone or linked to any recognised body people especially our clients don't recommend your work to the community, so it is important to be supervised, supported and linked to a recognised body in the process of service delivery to the community."

The rural respondents emphasized on the need for close supervision. "Most of us are primary drop outs so this things require a lot of close supervision and support in order to offer quality service especially in research work, it needs a lot of reasoning." They suggested that the Ministry of

Health should improve infrastructure up to the dispensary to strengthen the CHUs.

Recognition and identification

Respondents expressed that badges, uniform, card, and certificates' depending on the skill acquired were a crucial motivation component in task shifting of health services. In addition, educating the community on the benefits of CHWs' work will help.

In the nomadic site, the respondents said that when "we have the badge that has been certified by the Ministry of Health then it becomes easier to offer curative services in particular." Having a badge will regulate the service provision of the CHWs at the community level, this will ensure that the work is done only by those who have been trained and have qualified to do the job, by making them recognizable by the households and authorities. This was strongly supported by the community health extension workers, the health facility committees, and the community health committees. They viewed it as an effective regulatory mechanism in ensuring quality.

The peri-urban CHWs expressed the need to regulate the market by awarding certificates depending on the level of training and not just a general one. They expressed the need of the badge especially when they are selling their skill to the market. Their emphasis was on the curative services. On data management tasks they said that they would be motivated more if they received a recognition that they have gone through the training in data collection, analysis interpretation, and dissemination of findings. They said the community normally wants to verify if indeed they are collecting data that will be of any use to the community.

The rural CHWs' views were not much different from the other contexts. They felt that having badges and certificates was a strong motivator. They said that it would boost their selfesteem and morale for work. The health facility committee supported the view by saying it would control the attrition rates. They explained that certificates should only be given to those workers who have been patient enough to complete the course and were regularly involved in household registration and dialogue that deserves recognition. Community health extension workers recommended the badges especially when CHWs are referring patients to the health facility or when they are tracking immunization, tuberculosis (TB), and antiretroviral defaulters. "When they go out there to do such kind of work, it boosts their confidence and they do with authority because they have been certified by recognized authorities" said a respondent. They added that the certificates and the badges should be awarded strictly be by the Government of Kenya through the Ministry of Health.

They mentioned the importance of support especially from the Government side "You know when you're supported by the Government that is security on its own, you earn respect for whatever kind of job you do, but if it is not there like the way sometimes we experience it, there is no much respect from the community sometimes you are even harassed by the community itself."

DISCUSSION

Our findings suggest that all categories of respondents are agreed promotive, preventive, and simple curative tasks can be shifted to CHWs, as provided for in Kenyan policy guidelines. The difference is in the range of curative tasks. The policymakers see the need to expand the role of CHWs to include some curative tasks, especially home-based care for the chronically ill, as well as community-based data management. CHWs and consumers from peri-urban and nomadic settings suggested the inclusion of curative care. This view is supported by research and experience from other countries in Africa and beyond. The health systems report further indicated that evidence on CHWs from The Gambia, South Africa, Tanzania, Zambia, Madagascar, and Ghana was not only cost-effective but also enhanced the performance of community-level health programs.

The expansion of the service package provided by CHWs in the hard to reach nomadic households, to include health promotion, disease prevention, basic curative care and referrals, monitoring of health indicators and creating vital linkages between community and formal health systems, where the human resource crisis is at its worst and has been supported by many researchers.[1,5,6] Thus, their role emphasizes their technical and community management function WHO.[7] Therefore, CHWs can play a crucial role in broadening access to and coverage of health services in remote areas. An evaluation conducted by Pakistan's Ministry of Health's enumerated the successes of the lady health workers in line with health improvement.[8] Hence, renewal of interest prompted by AIDS epidemic and the failure of the formal health system to provide adequate care for people with chronic illnesses Maher et al. 1999.^[9]

In this study, district health managers were unconvinced about the need to expand the tasks of CHWs to curative. Their view was consistent with the views of rural CHWs and consumers. They were content with the policy as is mainly preventive and promotive tasks, but with the treatment of minor ailments, and first aid for which they need to be well trained, supported and supervised. Yet, there is a lack of equity and efficiency in the provision of health services that would have been able to prevent deaths caused by preventable diseases. [10] There is evidence that CHWs can play an important role in helping to achieve the Millennium Development Goals for health, particularly for child survival and treatment of TB and HIV/AIDS if allowed to take on some curative tasks, [6,11,12] supported by appropriate regulatory mechanisms.

In this study, nomadic CHWs and consumers viewed the expansion of tasks to include curative aspects beyond what is provided for in the current policy guidelines as inevitable, given the great unmet demand, and grossly inadequate access to essential care. In their view expansion is a must not a choice, as supported by other workers.[13] The emphasis for the inclusion of curative care among CHWs tasks in nomadic areas is supported by the fact that this area lags behind in improved geographic access to health-care services. An analysis of health-care coverage in Kenya by Noor et al., [14] demonstrated that over 80% of the population in Nomadic area live beyond the 5 km distance of a health facility, required by the Ministry of Health. A systematic review by Chopra et al. concur with the findings of this study supporting the role that lay health workers CHWs may play in extending essential health services to "hard to reach" groups and areas; and in substituting for health professionals for a range of curative tasks Chopra et al.[15]

In the peri-urban site, the CHWs tended to have higher levels of education than the other two sites. They tended to be more interested in career development, and hence their desire to develop into professional health workers with competencies and services to sell to their consumers, given the harsh economic realities in urban slums.

Policymakers in this study stressed the importance of supervision and regulation of the work of CHWs by establishing regulatory, technical, and logistical support mechanisms at county levels. Other workers have concluded that to carry out their tasks successfully, CHWs need regular training and supervision and reliable logistical support. [16] Further, policymakers recommended an accreditation framework, based on specific tasks, required competencies backed by certification, and licensing mechanism. Important constraints included inadequate supervision, insecure funding for incentives, equipment and drugs, failure to integrate CHW initiatives with the formal health system, poor planning, and opposition from health professionals. [17]

Policymakers recommended devolution of responsibility for CHWs to the county and ward, for them to get their own CHWs, which provided for in the new Kenyan constitution. [18] The Nomadic area respondents were of the view that if these structures were adequately supported they would facilitate the work of CHWs in their work especially in the nomadic site where circumstances have forced them to offer curative services. When the structures are put in place and are functioning, then they would provide proper regulatory mechanism for CHWs. In the peri-urban setting, they strongly supported the need for regulatory structures to guide the process of task shifting services particularly curative and data activities. CHWs felt that recognition by both the health facility and the community was very important, to prevent misuse of their name by other non-trained individuals.

These findings strongly suggest an urgent need for contextspecific regulatory mechanisms to be put in place, including accreditation of training, registration, and licensing. Unmet needs, a huge demand for health-care services attract suppliers such as CHWs, some of whom could turn into quacks. Data collection, analysis, and reporting offer a mechanism of regular contact with the service system as well as a framework for regulation, hence the need for urgent policy review. Other studies have demonstrated that increased demand either due to increased population, distance or prevalence of disease tends to lead to task shifting, formally or informally. In Uganda, task shifting in HIV/AIDS has been widespread with the involvement of CHWs in the care and support of patients. This has been a success particularly where tasks are shifted from the health facility to patients' relatives and community workers.[19]

Peri-urban CHWs had strong feelings that they live in economically precarious context since inhabitants have moved away from subsistence economy in the villages and must earn their livelihood from what they do, in the urban cash economy. In their context, volunteering is not a viable option. Given the population density, they realize that there is a demand for curative services that they can respond to. They see their role in data collection as a means to an end. It gives them the information they need to identify clients and to gain access to households.

Nonformal task shifting has been described in other settings. Swaziland, for example, does not have a national policy on task shifting, yet task shifting occurs informally throughout the country. Communities have reported positive results, including increased uptake of prevention of mother to child transmission services, increased immunization coverage, and a reduction in the number of defaulters on treatment for TB.^[20]

Studies have shown that continuous training is a powerful motivating factor, as mentioned by CHWs and consumers in this study, as described by Kaseje and Kaseje. [21] They found out that in a rural setting that volunteers thrive when they are regularly given training, life-long, in addition to supportive supervision, as well as being given tools required for their work.

Appropriate skill mix for CHWs

Appropriate skill mix and training at the community level workers are a key factor in the good performance of CHWs. There is clear evidence that incentives are one of the main factors influencing health worker performance; opportunities for professional development and continuing education represent positive, motivating incentives and should, therefore, be prioritized and strengthened. To tackle the immediate health worker crisis, it is important to find alternative models which can quickly deploy and

retain workers and ensure they get appropriate training and support.

There is need to have comprehensive and cost-effective training, tailored to the specific health needs of the population in Kenya, and takes less time than regular training. Ensuring the carde of CHWs are provided with appropriate continuing professional development boosts their motivation and morale. National policy reforms need to put more emphasis on training, training curricula, and improvements in CHWs' environments and motivation.

Upgrading the skills of CHWs to rapidly impact on the health of the population needs an innovative approach. There are real opportunities to educate, train and deploy health workers on a large scale through the community health strategy approach. This provides enormous scope to support rural and remote health workers and to ensure that the latest knowledge is available locally. While consumers understood it to mean "shifting activities from the health facilities to the community" A female consumer FDG interpreted task shifting as activities carried out by CHWs.

Training curricula must be revised to ensure they equip health workers with the specific competencies they need to deliver health care in Africa, particularly basic clinical and community-based competencies. In many countries, training strategies have tended to focus on highly skilled health workers such as doctors and nurses, for the purpose of disease treatment rather than health promotion and disease prevention, and to prioritize initial training over continued professional development.^[9] It takes at least 5 years to train a doctor and 3 years to train a nurse, yet there is an urgent need for greater numbers of health workers, particularly in post-conflict situations. Task shifting to lower cadres of the worker is a feasible response to this and can serve as a key motivator for lower level workers by giving them more responsibility and scope for professional development. There is much divergence between countries regarding which tasks it is acceptable for health workers of different levels to carry out. Task shifting to lower cadres of workers is often limited by national level policies and those of professional medical or nursing councils. Getting health care to those who need it most; task shifting to lower and middle-level workers to deliver health care it is imperative that strategies focus on matching the skills of workers to the local profile of health needs. This includes delegating work to, and effectively training and supporting, lower and mid-level cadres of formal workers to deliver health care at the community level.

The lack of skilled health workers in remote and hard to reach areas has resulted in high infant and maternal mortality. Communities hard hit like the nomadic are forced to offer this sensitive services with no adequate training. Concerns have been raised about the safety of services provided by lower and middle-level cadres of health workers; however, the majority of evidence concerning the quality of care shows that with appropriate training and support, this level of health worker can respond effectively to most emergency problems in general. In Garissa, the lack of doctors combined with the urgent need for emergency surgical care and skills for maternal health necessitated a reorientation of the training of health staff. Task shifting to lower cadres of health workers has proved a feasible way of ensuring and improving the delivery of health services in weak and under-resourced health systems. Training can be delivered at a lower cost and more quickly than training new professionals. Providing appropriate supervision and support are in place, evidence suggests that there are no reductions in the quality of care. Donors should support policies which enable task shifting to make essential health services more widely available.

Barriers preventing people using health facilities include user fees, long distances to health centers, community knowledge and beliefs on illness, and attitudes and skills of health workers. As the disease burden is felt most strongly in the home and many illnesses are easily preventable, highly specialized skills are not always necessary for health promotion. Unless the barriers to preventative and curative care are addressed, and care is brought closer to communities, then poor populations will not be reached. Making the most of the community CHW have real potential to provide the vital link between communities and formal health systems as they know and understand the health needs of the communities within which they live and work. Moreover, they can be trained and deployed quickly and are unlikely to emigrate.

In the short term and at a local level, CHW can improve health outcomes if they are provided with appropriate support and training. However, there needs to be thorough and robust research into how the potential of CHW can be scaled up effectively at a national level. CHWs are a part of the solution to the health worker crisis and should be integrated into overall assessments of health worker requirements. However, there needs to be far greater recognition that CHWs are currently playing a crucial role in the support and delivery of services such as health education, and that they will be critical in efforts to tackle the health worker crisis. This recognition must be combined with policymakers' consideration of training and incentives. Formal health-care providers and African governments must recognize and prioritize the role of CHW and contribute to significant research and investment to scale up CHW.

African countries need long-term solutions to address the health worker crisis, and this includes increasing the absolute numbers of health workers. As an immediate priority, however, African countries should be supported, both financially and technically to develop national plans which

focus on matching the skills of health workers to local needs. This should involve increasing the numbers, responsibilities and skills of lower and middle level cadres of health workers such as clinical officers, empowering and supporting CHWs to deliver preventive and curative care at community level, and ensuring that workers are provided with appropriate training and support to help motivate and retain them where they are needed most. Focusing on health workers and CHW at this level addresses barriers to preventative and curative care locally, where it is most needed. Evidence suggests that the poorest households in Africa do not often seek health care outside of the home.

Moreover, many illnesses are easily preventable through education and health promotion, which do not require specialized skills. CHWs, therefore, have real potential to provide the vital link between communities and formal health systems. Fully assessing how to scale up CHW interventions is an urgent requirement. Determinants of success will vary from place to place, however, investing in greater research into this potential is essential, as is ensuring political commitment to providing CHW with the necessary training, support, and incentives. Appropriate and accessible African curricula tailored to local health needs and the challenges that health workers face should be scaled up. It is vitally important that serious consideration is given to the testing and scaling up of technological innovations. Given the necessary investment, technological innovations can provide health worker training almost anywhere at a lower cost and at a much quicker rate than traditional classroom-based methods. Such innovative and cost-effective technologies make training materials more accessible, particularly in remote and hard to reach areas, and are especially important in providing continuing in-service training that is relevant and accessible.

CONCLUSION AND RECOMMENDATIONS

From these findings, task shifting and motivational strategies need to be context specific, hence the need to devolve the responsibility and resources to local government levels. The training of the CHWs should address the required context specific competencies but should be appropriately accredited, certificated, and recognized. Invest in CHW and provide them with appropriate training, incentives, and on-going support and in the process and ensure the development of strong referral links and integration into formal health systems, including health planning and budgeting.

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REFERENCES

- The World Health Organization. The World Health Report 2006: Working Together for Health. 1. Geneva: The World Health Organization; 2006.
- Miles MB, Huberman AM. Qualitative Data Analysis: A Sourcebook of New Methods. Beverly Hills: C. A: Sage; 1994.
- Ministry of Health–Government of Kenya–Health Sector Reform Secretariat. "The National Health Sector Strategic Plan (NHSSP II) 2004–2010 – Reversing the Trends". Nairobi: Ministry of Health–Government of Kenya–Health Sector Reform Secretariat; 2005.
- Health Systems Report. Community Health Workers in Africa. IDS Health and Development Information Team. 27th Feb; 2008.
- Hermann K, Van Damme W, Pariyo GW, Schouten E, Assefa Y, Cirera A, et al. Community health workers for ART in Sub-Saharan Africa: Learning from experience – capitalizing on new opportunities. Hum Resour Health 2009;7:31.
- Schneider H, Hlophe H, van Rensburg D. Community health workers and the response to HIV/AIDS in South Africa: Tensions and prospects. Health Policy Plan 2008;23:179-87.
- World Health Organization. Role of Community Health Workers in Improving Child Health Programmes in Mali; 2007a. Available from: http://www.biomedcentral.com4/11/009. [Last accessed on 2018 Jul].
- Haq Z, Hafeez A. Knowledge and communication needs assessment of community health workers. Hum Resour Health 2009;7:59.
- Maher D, van Gorkom JL, Gondrie PC, Raviglione M. Community contribution to tuberculosis care in countries with high tuberculosis prevalence: Past, present and future. Int J Tuberc Lung Dis 1999;3:762-8.
- UNDP (United Nations Development Programme). World Bank Energy Sector Management Assistance Program—India: Access of the Poor to Clean Household Fuels. New York: UNDP; 2003. Available from: http://www.worldbank.org/esma. [Last accessed on May 2018]
- Chen L, Evans T, Anand S, Boufford JI, Brown H, Chowdhury M, et al. Human resources for health: Overcoming the crisis. Lancet 2004;364:1984-90.
- Heins HC Jr. Nance NW, Ferguson JE. Social support in improving perinatal outcome: The resource mothers program. Obstet Gynecol 1987;70:263-6.
- 13. 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. 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. Geneva: Evidence and Information for Policy, Department of Human Resources for Health, World Health Organization; 2007.
- Noor AM, Alegana VA, Gething PW, Snow RW. A spatial national health facility database for public health sector planning in Kenya in 2008. Int J Health Geogr 2009;8:13.
- Chopra M, Munro S, Lavis JN, Vist G, Bennett S. Effects of policy options for human resources for health: An analysis of systematic reviews. Lancet 2008;371:668-74.
- Kahssay H, Taylor M, Berman P. Community Health Workers: The Way Forward. Geneva: World Health Organization; 1998.
- 17. Walt G. Community Health Workers in National Programmes: Just Another Pair of Hands? Community Health Workers in National Programmes: Just Another Pair of Hands? England: Open University Press; 1990.
- 18. Kenya Constitution; 2010.

- Dambisya Y. The USAID|Health Policy Initiative, Task Order
 Uganda: The East, Central, and Southern Africa (ECSA)
 Health Community and ECSA College of Nurses, Carried out Case Studies; 2010.
- 20. Mehlomakhulu M: Task Shifting in Swaziland: case study. [http://www.healthpolicyinitiative.com/Publications/Documents/1111_1_Swaziland_Task_Shifting_Case_Study_FINAL 05 05 10 acc.pdf].
- Kaseje MA, Kaseje DC, Spencer HC. The training process in community-based health care in Saradidi, Kenya. Ann Trop Med Parasitol 1987;81 Suppl 1:67-76.

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