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Motivational Factors that Influence Retention of Community Health Workers in a Kenyan District

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Abstract Retention of Community Health Workers is important for continuity of health services at the Community level. The study assessed the motivational approaches that determine the retention of community health workers in Busia, Kenya. Both quantitative and qualitative approaches were used to collect data from the CHWs and other stakeholders. A total of 300 questionnaires were administered to the CHWs in while six key informants and seven focus group discussions were held. The study revealed that among the CHWs interviewed, about 30% had served for at least 3 years. Only 2% of the CHWs who had been retained considered recognition as being able to motivate them to be retained, while 40% perceived recognition by the community as a determinant that would retain them. Currently 88 % of them acknowledge reimbursements as motivation factor for them to continue serving as CHW. The current motivational determinants are recognition by the community members, skill development, provision incentives and supervision. The perceptions of the CHWs on retention include; community support and health care system support. Prompt provision of the working materials for the CHWs like bags, CHWs kit, and reporting materials; harmonize the workload for the CHWs in order to improve on quality of care.

Keywords Community Health Workers, Motivation, Retention, Kenya

1. Introduction

The World Health Organization[1] defines Community Health Workers (CHWs) as workers who live in the community they serve, are selected by that community, accountable to the community they work within, receive a short, defined training and are not necessarily attached to any formal institution. They act as agents of community development[2]. They deliver a variety of community-based health care services, and are important in areas where the utilization of facility-based services is low. In some instances, CHWs have been trained for specific interventions like malaria control[3-6] and acute respiratory tract infections management with great impact.

In 1978, in Alma Atta declaration, CHWs were viewed as a cornerstone to primary health care and agents to stimulate community participation in health prevention and promotion, especially in the remote areas[7]. There has been a growing concern by both the programme implementers and the health care system on the approaches towards motivation and retention of CHWs. WHO, in 2006 recognized the shortage of health care professionals and it is in this context that the concept of "task shifting" and using CHWs has gained momentum.

According to the Kenya National Health Sector Strategic Plan II, which revitalizes the need to involve communities in participation of their own health care, there is no doubt that CHWs play an important role for this linkage between the community and the health care system. CHWs act as a link between the community or household members within their catchment areas and the other health care providers mostly at the health facilities[8]. Their roles are to participate in basic promotive, preventive and even rehabilitative health care. The CHWs, therefore act as some of the focal persons at the community level. The other structures in the community include community health committees, health facility committees and the village health committees[8].

In Busia district there have been CHWs since the early nineteen eighties through the primary health care (PHC) initiatives following the Alma Atta declaration. Currently, the highest numbers of CHWs in the district are concentrated in the largest two divisions, Funyula and Butula, which also have the highest population in Busia district[8].

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Retention of community health workers has been a major challenge all over the world. Ethiopia and Kenya[9] in Africa are examples that have faced the challenges of retention of community health workers since they look at the work as an opportunity to climb a ladder to other challenging and rewarding tasks. However, countries like Brazil[10] and Pakistan[11] have institutionalized and mainstreamed CHWs and community health committees such that they are part of municipal services and therefore participation is not an alternative but an integral part of the states' responsibility in health care services delivery.

This study investigated motivational factors among community health workers contributing to their retention in Busia district in western Kenya.

2. Methods and Materials

i) Study area

The study area was Busia district. Two divisions were selected for the study, namely Funyula and Butula divisions. Busia district is one of the 20 districts in Western province, Kenya, with an estimated population of 452,468[8]. Only 16.4% of the population lives in urban area compared to the national average of 32.3%[12]. It has six administrative divisions namely; Busia Township, Nambale, Budalangi, Matayos, Butula and Funyula and borders the Republic of Uganda to the west, Bungoma and Butere districts to the east, Teso district to the north and Siaya district to the south. The two divisions (Butula and Funyula) have the largest area of 526km^{2,} 13 locations, 49 sub-locations and 312 villages with a total population of 215,384.

Most of the population engages in small-scale agriculture and fishing. According to the Kenya Integrated Household Budget Survey 2005-2006, 69.8% of the population in Busia lives below poverty line (less than US$ 1.00 per day). The literacy level among males is about 76% while that of females is 55.3%[13]. The school dropout rate among the boys is 10% while that of girls is 12%[13]. Only 13.5% of those aged between 15 and 64 years are in wage employment[13].

The major causes of under-five, maternal and infant mortality are malaria (29%), HIV/AIDS (14%), anaemia (14%), diarrhoeal diseases (10%) and pneumonia (7%)[8]. There are a total of 16 health facilities in the study area and the distance to a health facility is averagely 4 km.

Community health workers can play a vital role in facilitating reduction of poor health indicators through improvement of community participation[8] and hence the need to motivate and retain the CHWs by all partners including the community members. The community health workers in Butula and Funyula divisions are supported by various implementing agencies including Medicines san frontiers (MSF) Spain, Academic Model Providing Access to Healthcare (AMPATH), Ministry of Health and AMREF. They are motivated differently by each of these agencies and their attrition rates also vary. AMREF, AMPATH and MSF Spain have supported training of community health workers in the two divisions. Therefore, this study has investigated, which approach of motivation and supervision would enhance retention in community programs.

A total of 910 CHWs were trained by Ministry of Health in the programme areas in Funyula and Butula divisions in 2005. The drop-out rate among these CHWs one year after their training was 17.3 %[8].

ii) Study design

This was a cross-sectional study whereby structured questionnaires were administered to 300 CHWs. A total of 6 key informant interviews were also done. They included one member of the District Health Management Team, 2 community leaders (Chief of a location and Health facility committee member), 1 health worker supervising CHWs in their respective locations and 2 project officers from MSF Spain and AMREF. Seven focus group discussions were conducted, three for health workers, opinion leaders and community leaders. The other four consisted of community health workers, with 2 FGDs for each sex. A total of 32 CHWs were interviewed in groups of eight for each FGD. The FGDs were also stratified according to age, consisting of those below 35 years and those above 35 years for both sexes.

Informed consent via writing was obtained from the respondents and the study was approved by the Research Ethics Committee at Great Lakes University of Kisumu. Consent for entry into the area of study was obtained from the DMOH (District Medical Officer of Health), Busia district and the local government administration. SPSS version 16 was used to analyse the data. This was for descriptive and cross tabulation. Thematic analysis was done for qualitative data.

iii) Sampling design

The study used both stratified and simple random sampling design. Stratified sampling was used to get the number of units from each division to constitute the overall sample size using the proportional allocation pegged on the population size of CHWs in each of the two divisions through the application of a uniform sampling fraction. The same was done at the locational level. Simple random sampling was then carried out at the sub-locational level to select the individual community health worker to be interviewed.

Purposive sampling was done to identify the study area where CHWs were trained within the two divisions. Since there were 480 CHWs in Funyula and 383 CHWs in Butula divisions; stratified sampling was used to determine the number to be interviewed using this formula:

Funyula: N1 = (480/863 x 270) = 150

Butula: N2 = (383/863) x 270 = 120

Table 1. Stratification in Funyula and Butula

Division	Location	Number of CHWs	Number of CHWs to be sampled	Number of CHWs interviewed
Funyula	Bwiri	146	46	51
	Ageng'a	180	56	61
	Nambuku	154	48	53
Butula	Bujumba	75	23	25
	Marachi central	102	32	36
	Elugulu	100	32	36
	Marachi East	106	33	37
		863	270	300

All the community health workers were selected randomly and then interviewed. An initial 270 with additional 30 distributed all over the study area, totalling to 300 CHWs. The sample frame was determined by a list of all the number of community health workers who had been trained by the Ministry of Health to participate in community health programmes. Simple random sampling was used to identify the number of CHWs to be interviewed in each location.

ANNEX A: MAP OF PROJECT AREA (BUTULA AND FUNYULA DIVISIONS)

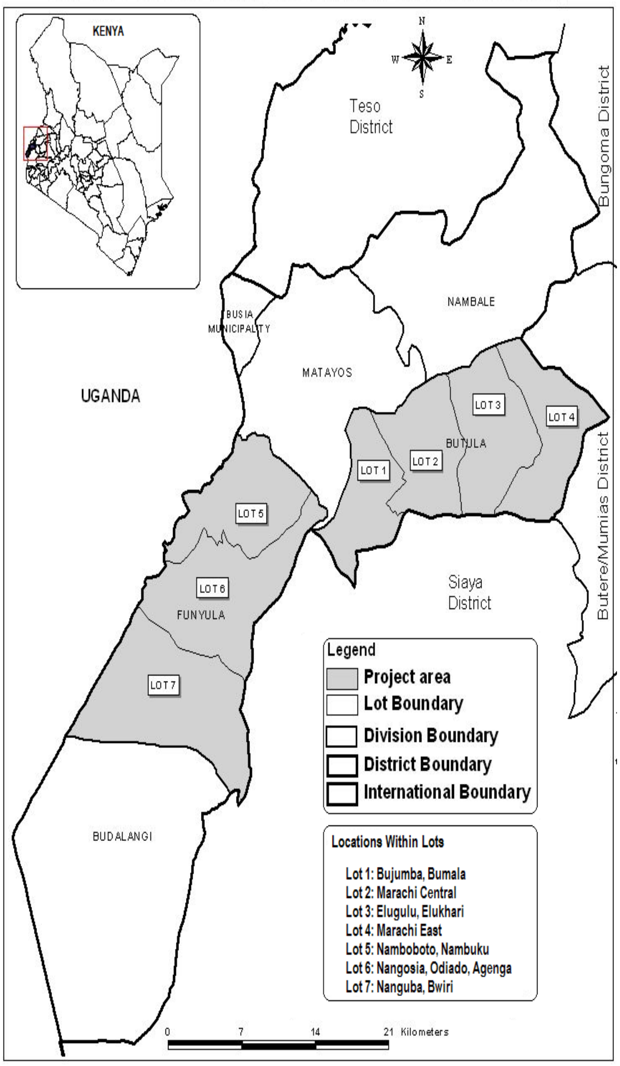

Figure 1.

The CHWs who were included in the study were those trained by Ministry of Health and were still active and continuing with their work as volunteers. A total of 18 enumerators participated in data collection. The enumerators were members of the community with high school education and with previous experience in conducting surveys. They were trained for two days on how to administer the questionnaires followed by pre-testing in Matayos division, Busia district.

3. Results

The mean age of the CHWs was 36 years, the youngest being 18 years and the oldest 59 years. One area chief commented that *"the CHWs were recruited as long as they had attained an age of 18 years and above"*.

Females comprised 57% and males 43% of the CHWs, and 30% of the CHWs had served for at least 3 years. An estimated 96% of the CHWs had attained a primary level of education with over half of the CHWs having attained a secondary level of education and 2.4% tertiary level of education. The main source of livelihood was agriculture as cited by 75% of the CHWs followed by 20% in self employment. One CHW leader stated *"most of us are not employed and therefore we need regular support"*.

Majority of the CHWs were selected by the area chief and local leaders (46%) and community members (38%). Only 4% were selected by health workers. Upon being recruited, 23% of CHWs expected to be paid money, 19% material incentives, 30% trainings and regular updates, 25% to assist the community and 3% to acquire recognition. One key informant stated that *"Usually the CHWs have a lot of expectations at the beginning, most of them expected to gain on trainings, but if they are not met then some of them drop out from their work as CHWs"*.

The CHWs who had served more than 3 years were twice likely to cite being motivated to assist their community (50%) compared to those who had served less than 3 years (25%). An estimated 62 % of the CHWs felt that their working relationship with the health facility staff was good, and among the services which they offered that were most appreciated by the community were health education (68%), linkage to health facility (20%) and home based care (12%). About 27% of the CHWs felt they were recognized by the community they serve. Recognition entailed validation from the community members. One CHW stated *"We are usually given opportunity to teach at the baraza (public gathering) and I feel happy about it, especially when some of the villagers refer to me as "daktari" (doctor).* The community also recognizes them especially when they go to chlorinate water sources in the community during cholera outbreaks. In the focus group discussion, CHWs who had worked for at least 3 years acknowledged that some of the factors that have motivated them to continue working include support from their spouses, opportunity to give health education in the chief's public gathering, involvement in outreach services by the health workers and positive attitude by the community members. They also said the training that they had received from the Ministry of Health gave them the confidence in what they were doing. Service and information demand on health issues from community members was also cited as a motivational factor.

Table 2. Distribution of households covered by CHWs

Number of households	% of CHWs serving
1-20	15.4
21-40	42.3
41-60	15.4
61-80	19.2
81-100	7.7

An estimated 87% of CHWs catered for more than 20 households (Table 2). When asked how they perceived their workload, 31% of CHWs felt they were seeing too many clients while 62% felt they were seeing the right number of clients. One health worker said that one of the challenges the CHWs are facing is that they are covering a large area and hence there is need to train more CHWs to minimize workload per CHW. The CHWs also found the community quite demanding as aptly stated by one health worker: *"They think the CHWs are given a lot of handouts to take to them but are not reaching them."*

The major incentives received by CHWs were reimbursements of transport related costs and lunch allowance when they attend meetings outside their villages. This was cited by 85% of CHWs and another 38.5% cited material incentives. These include t-shirts and insecticide-treated nets. Some CHWs were being supported by NGOs like MSF with drug kits, bicycles and a monthly bicycle maintenance allowance of one thousand shillings (12 dollars). In one FGD, some CHWs are given short term work as stated by one nurse *"During the national, provincial or district health campaigns, we also consider the active CHWs to participate and hence they get some allowances."* One chief said that the community members are so poor that they are not able to give the CHWs any incentives. The CHWs in the focus groups discussions acknowledged that they receive the above mentioned incentives and that peer support has also contributed in motivating them. When asked how they wished to be supported, 76% of CHWs stated they be provided with working materials, 65% with reimbursements, 40% with recognition, 32% with trainings and 8% with supervision and means of communications. When being recruited 23% of CHWs interviewed expected to be paid; 30% expected trainings; 19% material incentives and 25% expected community support.

Of the CHWs who had served for more than 3 years, 96% had attended refresher trainings compared to 70% among those who had served less than 3 years. In the FGDs with CHWs, trainings were cited as one of the ways that have motivated them since it improves their knowledge and skills on health issues. One CHW said that *"trainings have enabled us to have confidence while serving the community members since we have insight of what we are doing but where we are not sure, we consult the health workers".* According to one NGO project officer, the trainings have been scheduled in modules, which are spread over two years. The community leaders stated that trainings are a motivation to CHWs but added *"frequent updates are needed rather than being updated once a year the way NGO X is doing".* CHWs are supervised by volunteer leaders, who have been trained for a week and each leader supervises 10 CHWs. In turn, one health worker supervises 12 such supervisors. The trends of supervision among CHWs by their supervisors was 23.3% of CHWs are supervised weekly, 38% monthly, 4.8% quarterly and 32% rarely by their supervisors compared to 43% of CHWs who are rarely supervised by health workers and 36.2% have never had a meeting with the health workers manning the health facility serving their catchment area (table 3). In the FGDs with health workers, they said they are not able to visit the CHWs in the villages regularly as they are overwhelmed by work at the health facility with one health worker stating *"Occasionally, I visit the CHWs especially when there is an outbreak of a disease like cholera or to follow up measles cases."* When asked to rate their working relationship with the health workers, 15.3% of CHWs rated it as poor, 34.5% as fair and 44.9% as good.

Table 3. Frequency of supervision of CHWs by health workers

Frequency	% of CHWs supervised
Weekly	7.7
Monthly	33.9
Quarterly	4.7
Biannually	8.0
No supervision	45.6

4. Discussion

The dropout rate among CHWs after one year was 17.3%. Since the study was done after 3 years, the drop out is estimated to have been slightly over 50%. This could explain why only 30% of CHWs sampled had served for 3 years and above. Thus it may be assumed that the retention rate of CHWs was 30% after 3 years. In Bangladesh, the dropout rate for CHWs was between 31-44% and the reasons for attrition were due to household chores, other socio-economic activities which appeared more profitable and high targets set by the supervisors (Winch et al., 2000). In Bhutan,[14] the attrition rate of the Village Health Workers was between 50–55% in most districts after a period of five years' implementation of community health programs. The main reasons cited were interference with personal work (70%), family pressure (12%), too hard job (9%) and nothing to be gained (6%). Bhattacharyya et al[15] reported an attrition rate of 68% between one to three years of implementation of a health project. An attrition rate of 85% was reported in Ethiopia for a child survival programme[15], after the first year of implementation and the reasons that were given were due to; lack of training on supervision for health workers, no transport for supervision and lack of awareness of the community members on the roles of the CHWs.

The Kenya National Health Sector Strategic Plan II (2005-2010) states that a CHW should visit twenty households each having an average of 5 members, thereby adding up to a total of 100 people at least on a monthly basis. The majority of CHWs (85%) were covering more than this. This means they may have covered a wide area and not be able to frequently visit all the households regularly (at least once a month). The linkage between the CHWs and the health facilities was weak, given that 36% of CHWs have never met the health workers. This could stem from the fact that the health workers were marginalized right from the recruitment of CHWs, with only 4% of health workers involved. The chiefs and the health facility committee members may have selected their friends and close associates, given their influence. These CHWs might have had motives which were incongruent with the programme's goal e.g. to earn an income. The study showed that 23% of CHWs during recruitment expected monetary gains. If their motives are not realized, they are likely to drop out. In India between 54% and 93% of the CHWs were selected by the public health midwives[16] and the experience in India of health worker involvement in the recruitment had better results on performance and retention[17]. Recognition of CHWs by the community was low given that 73% of CHWs felt they were not recognized since the community members and the local leaders did not provide them with incentives.

A major shortcoming is that the programmes did not put in place community health committees. These play a key role in motivating CHWs, and they comprise of members of the community who have been selected to co-ordinate community health activities on behalf of their members[8]. They provide an appropriate and supportive social environment for the work of CHWs and health workers by taking responsibility for governance at the community level and mobilizing communities for involvement in health promotion activities. These entail preparing a community Annual Operational Plan (AOP) on health-related issues; networking with other sectors e.g. agriculture; resource mobilization for implementing the community work plan and ensuring accountability and transparency; facilitate negotiations and conflict resolution among stakeholders at the community level; monitoring and evaluation of the community work plan including the work of the CHWs through monthly review meetings; and holding quarterly consultative meetings with health facility management committee[8]. In Ghana[7], the Village Health Committees (VHCs) supported the community health programme by and even providing transport for health workers supervising the CHWs. In Gongola State in Nigeria[7] the support of the VHCs played an important role in job satisfaction of the Village Health Workers (an equivalent of CHWs). The CHWs in Busia district were supervised by volunteer supervisors who had undergone one week training. One volunteer supervisor was in charge of 10 CHWs. One health worker was in charge of 12 supervisors and by extension 120 CHWs. This could explain why four out of ten CHWs reported to having never met a health worker. Inadequate staffing of health workers may have increased the workload at the health facilities, leaving little time for supportive supervision of CHWs. There was also the lack of supervision checklist and competing tasks. This is similar to Malawi's situation[17] where regular supervision was one of the main challenges.

The CHWs were not being given any financial incentives. When asked what would motivate them to continue working as CHWs, 75% of the CHWs mentioned the working materials (bags, IEC materials, notebooks, pens) and 65% financial incentives. This is an increase from their pre-recruitment expectations where only 43% of CHWs expected financial and material incentives. Financial incentives have been linked to CHW retention. In Bangladesh, CHWs who joined with the expectation of income were almost twice as likely to remain as CHWs since it they felt it improved their social status, and the poorest CHWs were significantly more likely to stay in the programme than the richest, since they felt that by working hard, incentives are likely to be improved[18]. In one program volunteers who were paid less tended to leave the programme even earlier (1-2yrs) while those paid more left between 1.5–3.2 years[15].

Majority of CHWs engage in farming as a means of livelihood. This could be due to the fact that majority of the population lives in the rural area and given the high levels of poverty, majority of the residents are likely to engage in subsistence farming. The Government of Kenya has no funds to pay the CHWs a monthly incentive. Some CHWs can be involved in short term work like immunization campaigns where they are paid some allowance. A more sustainable option would be to start income generating activities for the CHWs. Since farming is their main source of livelihood, it may be feasible to start agro-based income generating projects for the CHWs. These may include bee keeping, fish farming; poultry keeping or rearing dairy goats. The CHWs would be encouraged to form groups which will be registered with the social services department as community based organisations (CBOs) since this contributed to motivate CHWs in Bangladesh[14]. These will also be eligible to apply for the various devolved government funds e.g. YEF (Youth Enterprise Fund), Women Enterprise Fund and HIV/AIDS-related funds. These may motivate CHWs and in the long run improve on their retention.

Nearly all the CHWs received regular training updates courtesy of three NGOs. These were MSF Spain, which is supporting the implementation of home-based care for people living with HIV, AMREF, which is supporting the implementation child survival programme and AMPATH, which is involved in out-reach activities on HIV prevention and control. These NGOs had agreed to recruit different CHWs, but a few CHWs ended up working for more than one NGO. This could be so as to get more incentives. Incentives offered by these NGOs varied and the study did not look at these and their impact on motivation. In Nepal, four NGOs pooled their resources together with Nepalese Ministry of Health and collaborated to strengthen pneumonia treatment through community health volunteers[19]. This also motivated the CHWs and they were able to identify with the community and the Ministry of Health and not necessarily with an NGO. This would be a better strategy towards sustainability of community health worker programmes.

5. Conclusions

The study sought to find out what contributed to the retention of the CHWs in Busia district as this could inform similar community programmes to emulate this experience. The study concluded that both material incentives like T-shirts, Insecticide Treated Nets, bicycles and financial incentives among others, contribute to retention of CHWs. Other incentives that are essential for retention of CHWs include continuous trainings, working materials and supervision. Recognition by the community members and family support plays an important role towards motivation and hence retention of the community volunteers. When the CHWs were recruited, incentives and financial gain was not what they expected but as they continued with the work, they realized that they required them as a motivation to continue on supporting the communities effectively. It is therefore, recommended programmes engaging CHWs should consider for continuous material incentives and regular remunerations to enable retention

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