



Utilization and Satisfaction with Community Health Worker Services amongst Caregivers of Children under Five in Mwea West, Kirinyaga County

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Abstract

CHWs provide a possible solution for delivery of promotive and preventive interventions which have the potential to improve child health. Studying the satisfaction of individual users is important for improving and strengthening health systems. A cross-sectional study was conducted in Mutithi and Thiba in Kirinyaga County to determine uptake and satisfaction with CHW services amongst caregivers of children under 5. Data was collected using a semi-structured questionnaire and through 3 FGDs. Respondents interacted with CHWs mainly for preventive and promotive services. These include information on child health (n=230), appointment reminders (n=11), one-on-one counselling (n=46), information on community resources (n=47). 101 (23%) respondents had not received any services from CHWs in the 3 months preceding the study. Satisfaction was assessed using a 5-item Likert scale that included satisfaction with range of services, competence, information given by CHWs, interpersonal skills, follow-up and overall satisfaction.

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55% of the respondents reported satisfaction with CHW services. Overall satisfaction was found to be related to such factors as receiving drugs from the CHWs (Chi square=89.752, p=0.001), home visits (Chi square=193.064, p=0.001), agreement with the choice of CHW (Chi square=218.3, p=0.001), involvement in the choice of CHW (Chi square=63.606, p=0.001) community unit (Chi Square=25.536, p=0.001) and awareness of the existence and roles of the CHWs (Chi square=73.577, p=0.001). Greater community involvement of community members during selection of CHWs, carrying out home visits and targeted education on CHW roles may increase satisfaction with CHS and strengthen CHS especially because CHWs still have a role to play in interventions that could prevent deaths amongst children under 5.

Keywords: Child Health; Client Satisfaction; Community Health Strategy; Community Healthcare Worker; MDG 4; Primary Health Care

1. Introduction

Community health workers have the potential to contribute to child survival in resource limited settings [1, 2]. The CHS approach, in which CHWs are utilized to support delivery of Kenya Essential Package for Health (KEPH) at the community level began implementation in 2007 [3]. 7 years in, there is a dearth of information on satisfaction with services provided by CHWs. Limited research has examined the perceptions of the Community Health Strategy's services for child health, particularly from the perspective of the caretakers of children receiving care. Client satisfaction is an important element to consider when improving health systems. The caretakers of children under 5 are an especially important source because they are frequent users of health system services for their vulnerable children [4, 5].

In Kenya, the under-five mortality was estimated at 74 per 1000 by the 2008-2009 KDHS[6]. Central Region of Kenya has an estimated under-five mortality rate of 51 per 1000 which is above the target of 30 per 1000 by 2015 set in MDG 4 [7]. There is an estimated shortage of 4.3 million midwives, nurses, doctors and support workers worldwide [8]. Sub-Saharan Africa is the most severely affected by this shortage; only 3% of the global health workforce is found in sub-Saharan Africa, yet this region accounts for almost half of the 7.7 million child deaths globally [9]. It has been estimated that 65-91% of childhood deaths from preventable diseases could be prevented if these interventions are delivered at scale to low income countries[10]. The promotion of community and household health practices using CHWs is one of several strategies aimed at improving child health. In different African countries and Kenya specifically, CHWs have been successfully been utilized to improve child health using different strategies including, preventive and promotive services and community case management of illnesses [11, 12, 13, 14]

Following the Alma-Ata declaration of 1978, governments began to develop national programmes of Community Health Workers in a bid to achieve Health for All. Reviews of the programmes in the 1980s and 1990s arrived at similar conclusions: quality of care was poor mainly because of poor financial support and logistical problems [15, 16, 17, 18]. The increasing acknowledgement of the critical shortage of human resources within the health system led to renewed attention to the potential roles of CHW within Primary Health Care. PHC was the main subject of the 2008 World Health Report; with the endorsement of World Health

Organisation's Director-General Margaret Chan [19]. There is a low probability of meeting MDG 4 given the current high child mortality rate in the context of a human resource shortage in the health sector. New evidence is needed from caregivers who have utilized the services of a CHW concerning their child's health. The study sought to determine uptake of CHWs services for improving child health and to establish caregiver satisfaction with these services.

2. Materials And Methods

2.1 Study area

The study was conducted in Mutithi and Thiba locations of Mwea West division of Kirinyaga County (see Figure 1). Mutithi has a total population of 28,174 people with 2250 households while Thiba has a population of 43,105 with 2500 households[20]. Each of these locations has 1 community unit with several trained CHWs providing services for the households. The community units in Mutithi and Thiba locations are linked to Mutithi Health Center and Thiba Health Centers respectively. The community unit in Mutithi was established in 2007 while that in Thiba was established in 2011 [21]. The population was accessed to determine what their experience has been with the implementation of community strategy. The area also has rice fields, feeder canals, temporary rain pools, run-offs and overflowing canals [22]. The canals are also the main source of water for household use. These pose a risk to child health in the area due to the potential for transmission of fecal-oral illnesses. In addition, the area has high smear positivity rate amongst tuberculosis clients, which puts contacts of these smear positive clients. These may be children under five at risk of contracting tuberculosis. Disparities in child health persist within countries with the poorest regions bearing the greater burden for preventable illnesses. Mutithi and Thiba are rural regions where sections of the population work as casual labourers in the rice fields. The CHWs in this area mainly carry out health promotion activities which include offering health information to families on water, sanitation and hygiene factors, encouraging and mobilizing families to attend health outreach activities, supporting families with ill children, followup of children who are recovering from illness and giving first aid.

2.2 Study Population

The study population comprised of caregivers (parents or guardians) of children under five within the selected household in the community units served by every one of the CHWs.

2.2.1 Inclusion criteria for participants in the general survey

1. Caregivers who have lived in the study area for a period of more than 6 months
2. Caregivers who consent to participate in the study

2.2.2 Inclusion criteria for participants in the focus group discussion

1. Caregivers of children under five who have lived in the study area for a period of more than 6 months

- Caregivers who consent to participate in the study

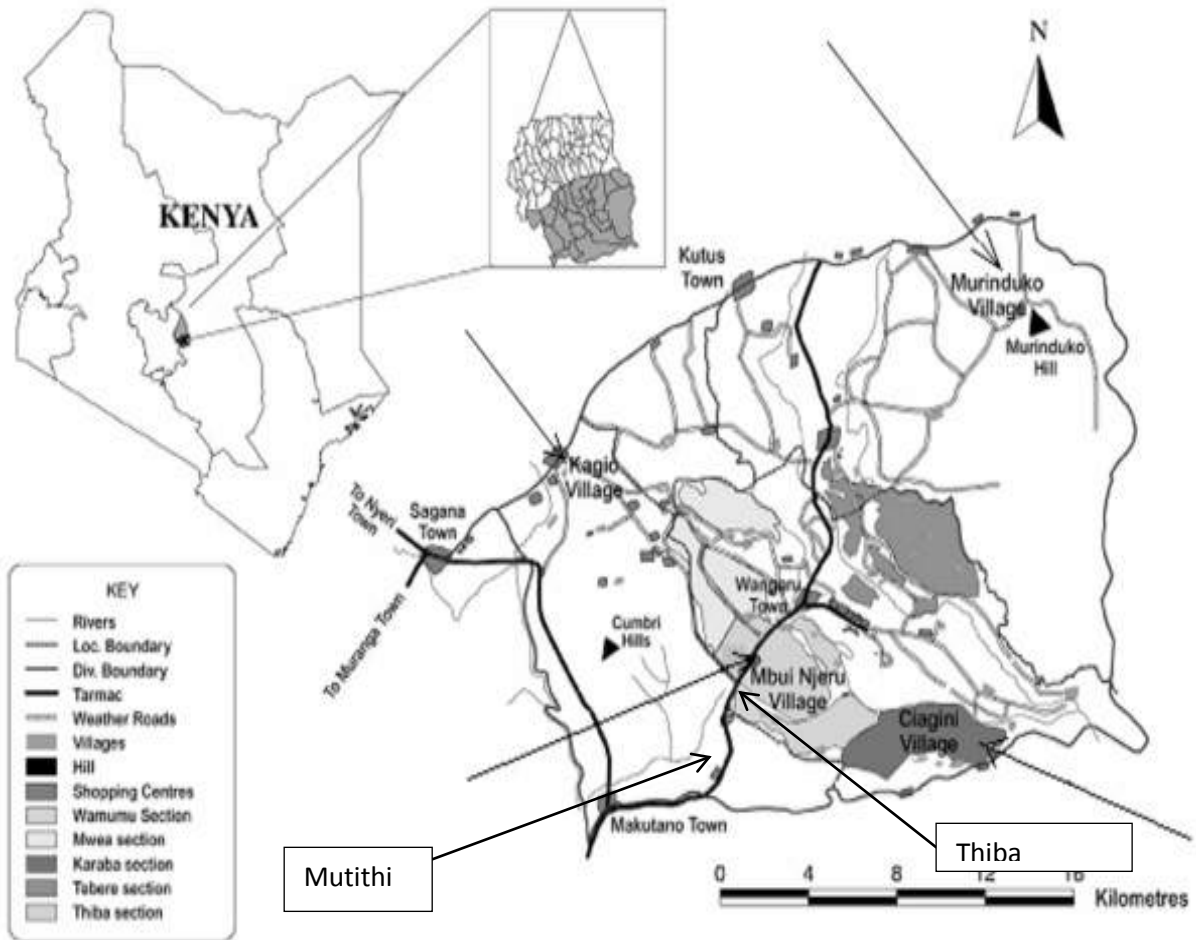


Fig 1: Map of Kirinyaga County showing Mutithi and Thiba locations

2.2.3 Exclusion criteria for participants in the general survey

- Caregivers who have lived in the study area for a period less than 6 months
- Caregivers who decline to participate in the study

2.2.4 Exclusion criteria for participants in the focus group discussion

- Caregivers who have lived in the study area for a period of less than 6 months
- Caregivers who decline to participate in the study

2.3 Study Design

A cross-sectional study was undertaken. Qualitative and quantitative information was collected regarding CHW activities amongst the caregivers at household level.

2.4 Sampling

A sample of 442 respondents was selected from the population of Mutithi and Thiba locations. The sample size was determined using Fischer's formula after allowing for a non-response rate of 15%. 431 questionnaires were analysed in total. 9 questionnaires were excluded from analysis due to missing and inconsistent data. Purposive sampling was used to select Kiratina and Kiangegwa community units (in Thiba and Mutithi respectively). Thiba has 17 villages in its community unit, of which 12 were randomly selected. Mutithi has only 5 villages in its community unit, and all of these villages were selected to participate in the study. The individual households were selected by random walk method through the villages.

2.4.1 Sampling Procedure for Focus Group Discussion

Participants from every community unit were selected by convenience sampling for participation in the focus group discussion with the help of the CHEWs in the community units. The participants were put in 3 groups of 6-10 participants to encourage active participation. In total, 26 community members participated in the FGD.

2.5 Data collection

Data collection for the study took place between July and August 2014.

2.5.1 Household Survey

The questionnaire administered to caregivers of children under five years of age was composed of 3 main sections: 1) socio-demographic information of the child caregiver, 2) knowledge and practices of the caregiver concerning home management of the sick infant, 3) Utilization of CHW services. The questions used a combination of multiple-choice and open-ended response formats. The tool was also translated to Kikuyu and Kiswahili and back translated to Kikuyu and Kiswahili to ensure accuracy of translation. The survey team was composed of 6 interviewers who spoke the Kikuyu language well and had previously worked on field surveys. They were supervised by 2 public health technicians, one from each community unit. The completed questionnaires were verified by the supervisors and data was entered into a database in SPSS throughout the survey. Prior to analysis, missing data was checked against the survey forms. Quantitative and categorical data was entered and analysed in IBM SPSS statistics 20.

2.5.2 Focus group discussion

3 focus group discussions were conducted to collect data on perceptions of the activities of CHW. The focus group guide was composed of 2 main sections: 1) sociodemographic information (age and gender) and 2)

perceptions on the activities of CHWs. The FGDs were carried out in Mutithi and Thiba health centers where the 2 community units are linked.

2.6 Ethical Considerations

Authorization to carry out the survey was obtained from the KEMRI ERC and the County health administrators. Verbal informed consent was obtained and confidentiality was assured for all the participants.

3. Results

3.1 Sociodemographic characteristics of survey respondents

The sociodemographic characteristics of the study sample are presented in table 1. The mother is the most important care giver (86.7%). The mean age of the population was 31.7 years. Most of the population had a primary school education or less (68.2%). The overall average number of children in each household was 2.4 and that of children under five was 1.24.

3.2 Characteristics of FGD participants

The average age of the FGD participants was 33.6 years, with 23 (89%) of the participants being female. All the participants had children under 5 years.

3.3 Health seeking behavior

A description of the actions taken when a child is sick is illustrated in Table 2. Regarding the first action caregivers took when a child was sick, 390 (89.7%) of the population took their children to government hospitals (see Figure 1). 10 respondents (2.3%) called upon the CHWs for advice on what to do. Most of the respondents, 420 (96.6%) were aware that the drug a child should be given when they had fever was paracetamol. The health facility was the most common place where paracetamol was obtained (86% of respondents). Only 6 respondents reported obtaining paracetamol from a CHW. 45 respondents (10%) obtained medication from other sources such as chemists and shops. Majority of the study population reported that they give their children ORS when they have diarrhea (66.2%). The remaining, 33.8% were distributed between respondents who gave either sugar and salt solution or both ORS and SSS or did nothing when their children had diarrhea. Of 228 respondents who had reported an incident of diarrhea amongst their children, 84.2% of the respondents sought help in a health facility. 30 respondents, (13.2%) either stayed at home or bought medication at a shop.

Out of 233 respondents who reported cases of cough in the last 3 months, 206 (88.4%) sought help for the child at a health facility. Only 3% (7) sought out the CHW first. 20 respondents (8.7%) sought for help outside the government formal system (chemists, shops). Only 20% (86) of the respondents reported having an episode of DIB in the last 3 months. Of these, 86, 71 (82.6%) sought help at a government health facility. Results of other indicators that influence child health such as duration of exclusive breastfeeding (EBF) and age of complete

cessation of breastfeeding showed that the average duration for EBF was 5.5 months while the average of complete cessation of breastfeeding was 19.2 months. Ownership of mosquito nets was high with up to 400 (92%) of the respondents reporting ownership. Most of the nets (70.5%, 282) were issued at a health facility. The next close source of nets was buying at shops (92, 23%) while few 25 (6.3%) were issued by CHWs. Comparative analysis of the two community units revealed that there were some differences in the community units regarding practices such as EBF and cessation of breastfeeding. The respondents from Kiandegwa tended to breastfeed for longer ($t=3.53$; $p=0.001$) than the women from Kiratina community unit.

Table 1: Sociodemographic characteristics of survey respondents

Marital status		Frequency	Percent
	Married	290	70.4
	Single	77	18.6
	Other	45	10.9
Education		Frequency	Percent
	Never been to school	18	4.4
	Primary	238	57.8
	Secondary	141	34.2
	Tertiary	15	3.6
Occupation		Frequency	Percent
	Housework	52	12.6
	Business	100	24.3
	Salaried Employment	15	3.6
	Farming	219	53.2
	Casual	22	5.3
Housing		Frequency	Percent
	Permanent	115	27.9
	Semi-permanent (wooden)	78	18.9
	Temporary (mud walls, grass roof)	218	52.9

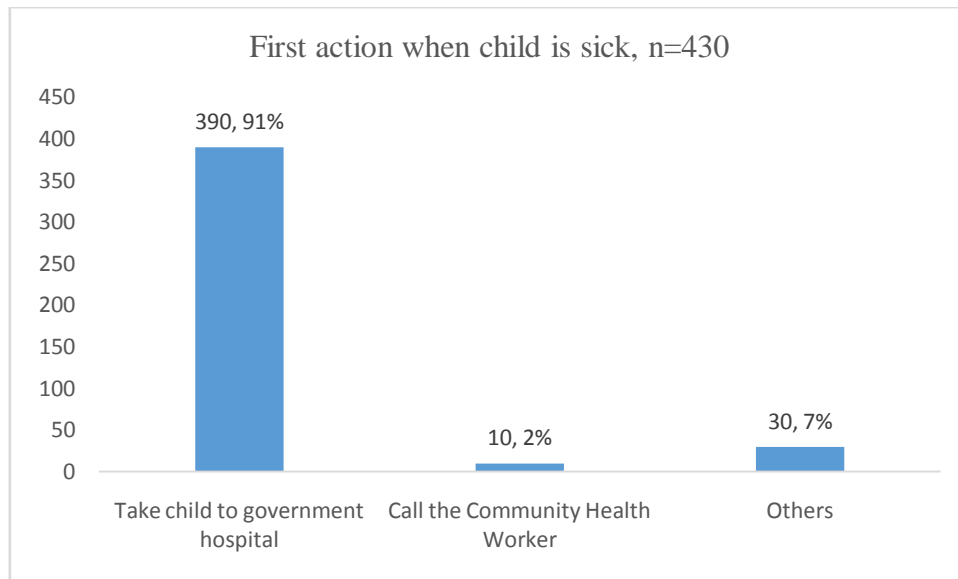


Figure 2: First action when child is sick

Table 2: Health Seeking behavior

	Government health facility	CHW	Others
First action when child is sick, n=430	390	10	30
Cough, n=233	206	7	20
Diarrhea, n=228	192	4	32
DIB, n=86	71	2	13

3.4 Uptake of services provided by CHWs

CHWs in the study area mainly play a role of demand creation through promotion and preventive services such as providing information on health (n=230), providing information on community resources (n=47), appointment reminders (n=11) and one-on-one counselling (n=46). They also carry out defaulter tracing of TB clients and link OVC to supportive structures within the community. CHWs interacted with the participants in various locations: at home (171, 39.3%), within the community (67, 15.4%), at a health facility (118, 27.1%), at the workplace (1, 0.2%) and via telephone (10, 2.3%). Individual interventions generally occurred in the home (112, 68.7%) and a few over the telephone (10, 6.1%). Group interventions occurred mostly in the health facility (88, 42.9%) and community (54, 26.3%).

242 (56%) of the respondents had received a home visit from the CHW in the 3 months preceding the study. Of the 242 respondents who had received home visits, 199 (82.2%) had received a home visit one month preceding the study. A comparative analysis of the 242 respondents revealed that 147 (60%) of those who had had a home visit from the CHW (Chi Square=13.626, p-value=0.001) were from Kiratina community unit in Thiba.

There was generally low utilization of CHWs for consultation and referral services by the caregivers across both community units. 140 (32.6%) of the respondents had reported seeking a consultation with the CHW within the last 3 months preceding the survey. The issues for which the CHW was consulted are represented in the graph in Figure 2. The consultation rate for CHWs was 34% and 31% respectively for Kiangdegwa and Kiratina community units (p=0.205). Few participants reported ever being referred by a CHW. 38% of respondents from Kiangdegwa and 39% of the respondents from Kiratina reported ever having been referred to a health facility by the CHW. Of those who had reported being referred by the CHW, 169, (96.4%) reported adhering to the advice to seek healthcare in health centre. Figure 2 illustrates the issues for which CHWs were mostly consulted for. 108 (24%) of the respondents had called the CHW at least once in the month preceding the study. Of those who called the CHW, 80, (74%) got a response from the CHW on the same day, 25% got a response the following day and only 1 respondent did not get a response at all. 116 respondents (27.5%) reported receiving drugs from CHWs. Figure 3 details the drugs commonly issued by the CHWs.

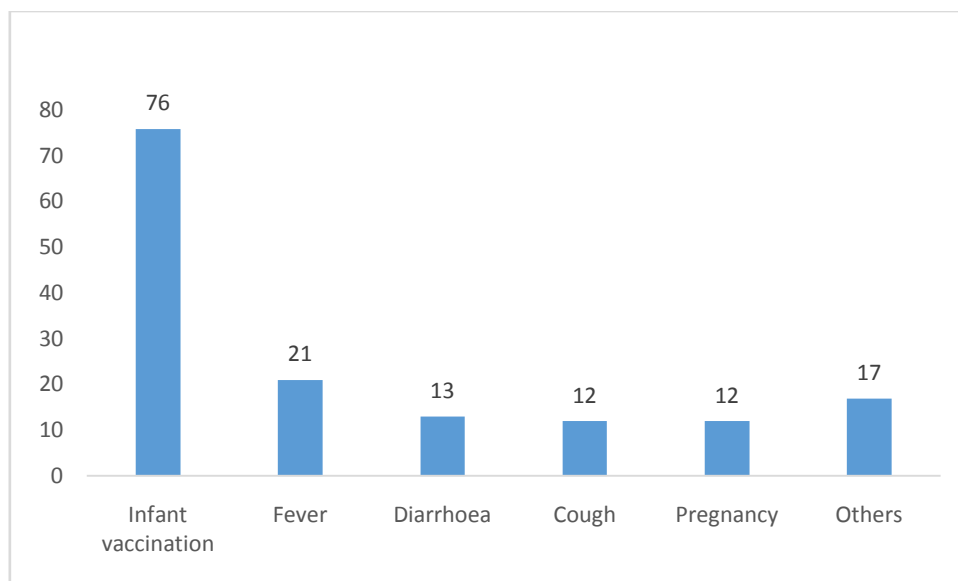


Figure 3: Issues for which CHWs were consulted, n=151

3.5 Perceptions on services provided by CHWs

367 (84.4%) of the respondents were aware about the existence of CHWs. A comparison of respondents from the 2 community units showed there was no significant difference in awareness (Chi Square=4.093; p=0.12). The participants in the focus group discussions held in both community units revealed awareness of the existence of CHW, however there seemed to be a gap in the knowledge of the roles of the CHWs. Some of the participants in the FGD confused the CHWs with PHOs. One participant said, “I do not know what their

specific roles are but they are just known as the health persons for the community.” Another participant declared, “They help children who do not have parents, who have problems. But as for me she cannot come to my home”.

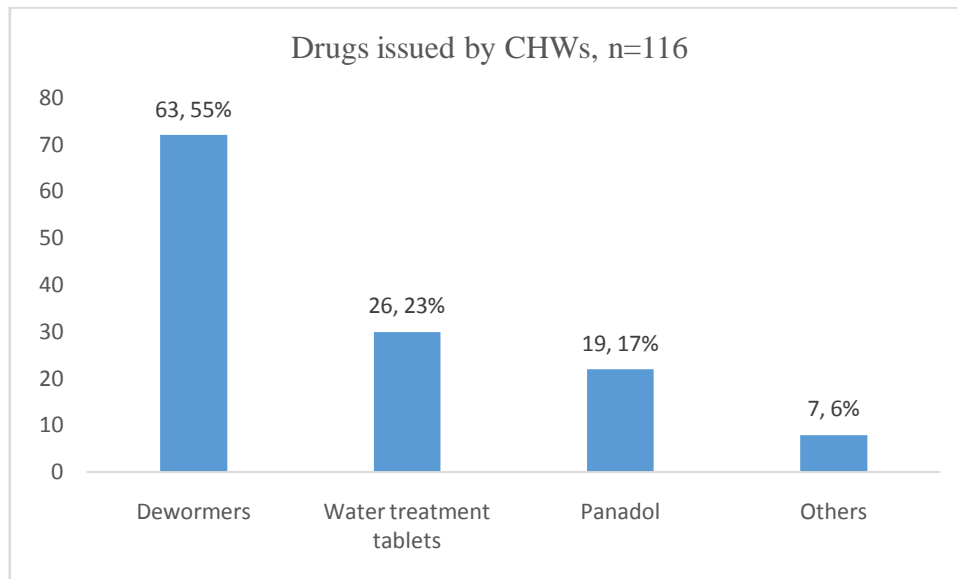


Figure 4: Drugs issued by CHWs

There was low involvement of the respondents in selection of the CHWs in both community units 70%, (299) of the respondents reported that they were not involved in the selection process of the CHWs. In spite of the low involvement in the choice of the CHW, most respondents agreed with the choice of the CHW (63.2%, 275). Some of the reasons reported for lack of agreement with the choice of CHW include: the respondents did not know the person chosen, the selection was done in secret, the participants were not informed during the selection process.

With regard to satisfaction with the services of CHWs, slightly over half of the respondents (55%) reported overall satisfaction with services offered by CHW (see figure 4). 19 respondents declined to answer the question on overall satisfaction. These 17 participants were all from 1 area, Kiratina community unit. Only 2 of the 19 respondents reported involvement in the selection of CHWs, 11 reported that they were not aware of the existence of CHWs. However, all of them apart from 1 would still consult a CHW if they were made aware of their roles and existence.. Only 3 of these respondents reported receiving any information from CHWs. 2 of these consulted CHWs about infant vaccination and fever. The 19 respondents had also never been referred by the CHW to a health center or received any medication from the CHW. The clients who declined to answer on satisfaction with their interaction with CHWs had similar characteristics with the respondents who reported that they were very dissatisfied with the CHWs services.

Out of 122 clients who reported they were dissatisfied, 109 (89%) reported no involvement in the choice of CHW, 98 (81%) had not received a home visit. 91 (74.6%) of these respondents also reported that they did not

agree with the choice of CHWs (see Table 3). Further, 110 (90%) had not received any drugs from the CHW. 105, (86.1%) had not consulted with the CHWs in the 3 months preceding the study.

Conversely, amongst those who reported overall satisfaction, 201 (88%) had received a home visit from CHWs (n=229), 220 (96.1%) agreed with the choice of CHWs and 108 (47.2%) had received drugs from the CHW. 109 (47.6%) of the respondents who reported overall satisfaction reported involvement in the selection of CHWs while 119 (52%) had consulted a CHW in the 3 months preceding the study. Generally, there was low involvement of the community in selection of the CHWs. 27% and 32% respondents in Kiandegwa and Kiratina community units reported involvement respectively.

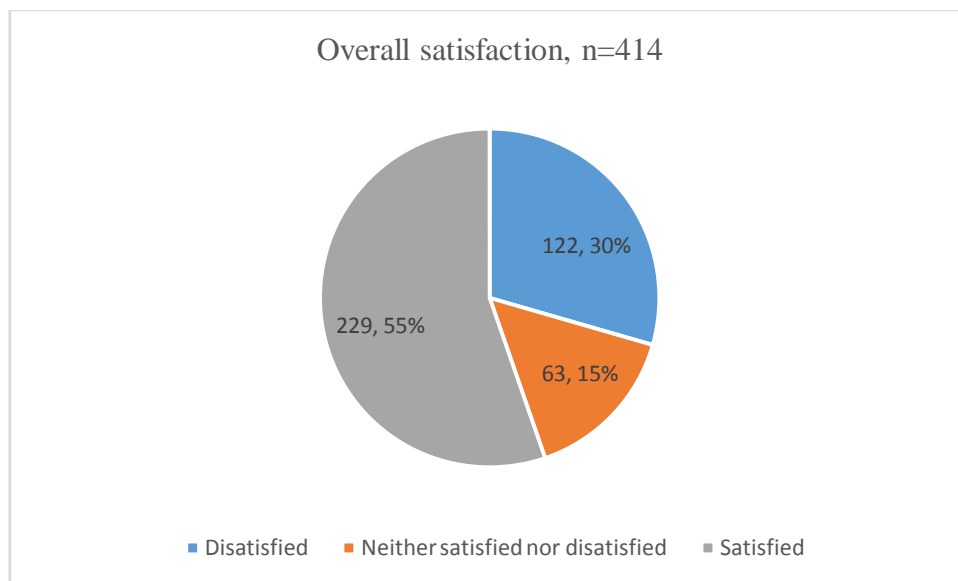


Figure 5: Overall Satisfaction with CHWs services

152 respondents reported disagreement with the choice of CHW. Of these 152, 64 (42%) disagreed with the choice of CHW because they were not aware of their roles, 17 (11%) reported not being involved in the selection process. The gaps in knowledge regarding what the CHWs work was emphasized by a comment by one of the FGD participants, “We don’t even know their jobs. Maybe you tell us, then we can tell you if they are credible.” However, participants who knew what the roles of the CHWs were reported them to be credible sources of information based on the facts that the CHWs, do follow-up of the information they give and they brought reports to the health facility. This finding is in line with the results of the survey where 215 (52%) of the reported satisfaction with the competence of the CHW, while 247 (60%) of the respondents were satisfied with the information given by CHWs (see figure 5-8).

Regarding supervision of the CHW, gaps in the knowledge of the community members were evident with some participants of the FGD declaring that they do not know how the CHWs are supervised. Some participants knew that the CHW is linked to the health facility through health care professionals. Some participants however expressed dissatisfaction with the CHWs and supervision and support of the HCWs for example, “I am not very satisfied with the service because their job is sometimes not supported by the HCW for example they report

something going wrong in the community but no action is taken. For example they report poor waste disposal and the doctor does not do anything”. The participants also felt that the village elder had a role to play in the supervision of the CHWs and that “the village elder is the one who increases the strength of the CHW”. However there was no mention of Village Health Committees by the participants.

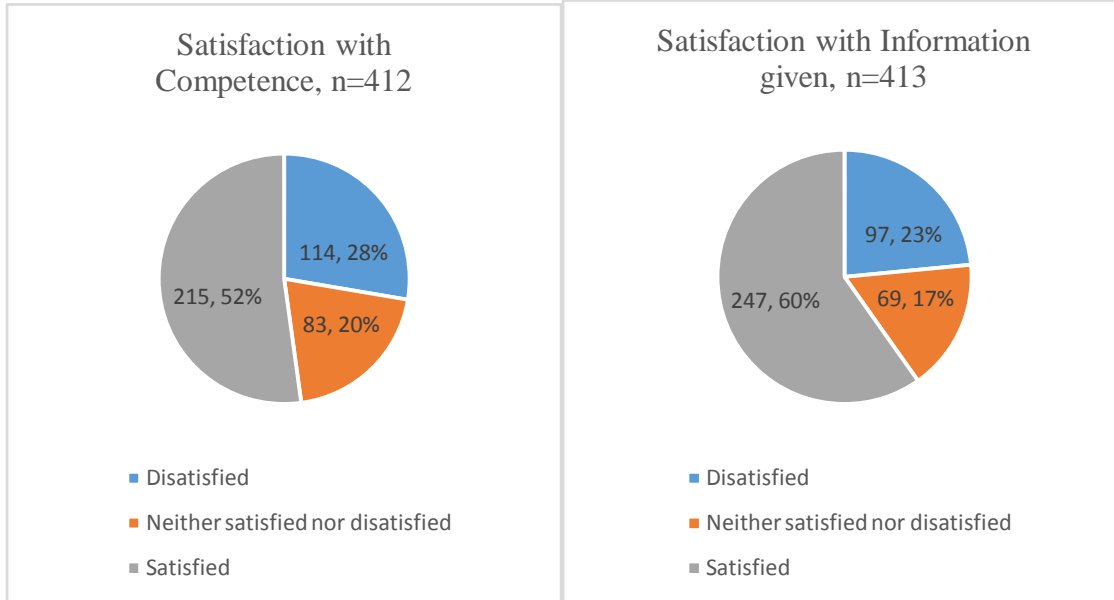


Fig6: Satisfaction with competence of CHWs

Fig7: Satisfaction with information given by CHWs

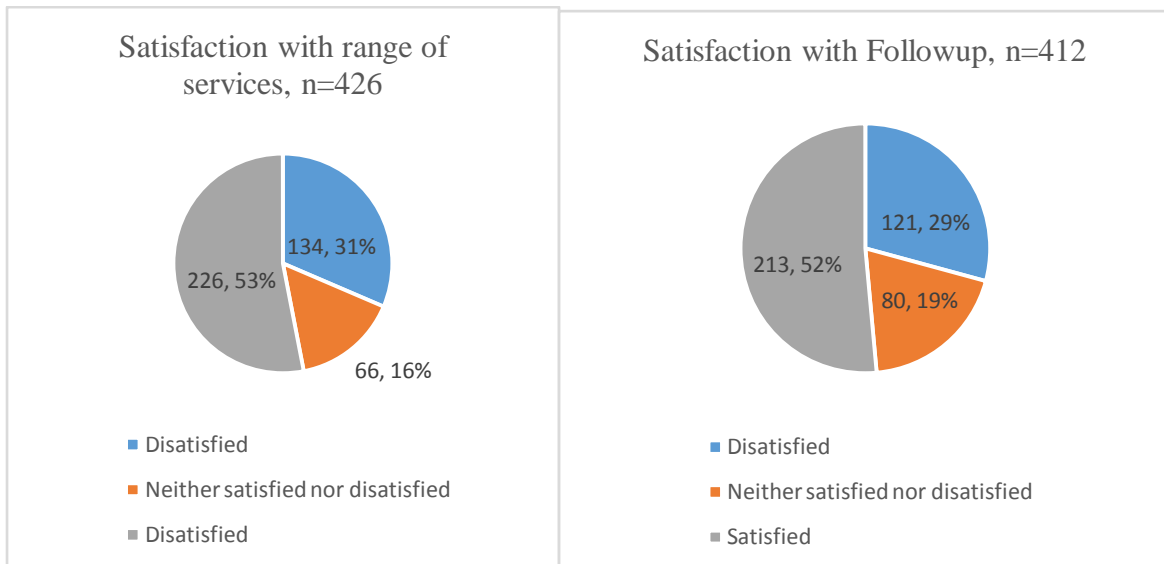


Fig 8: Satisfaction with range of services

Fig 9: Satisfaction with Follow up

Table 3: Factors affecting overall satisfaction with CHWs

		Overall satisfaction			Total	Pearson Chi-Square value	df	Asymp. Sig. (2-sided)
		Dissatisfied	Neither satisfied nor dissatisfied	Satisfied		218.331 ^a	2	.001
Choice of CHW	No	91	44	9	144			
	Yes	31	17	220	268			
Total		122	61	229	412			
		Overall satisfaction			Total	Pearson Chi-Square value	df	Asymp. Sig. (2-sided)
		Dissatisfied	Neither satisfied nor dissatisfied	Satisfied		193.064 ^a	2	.001
Home Visit	No	98	49	28	175			
	Yes	24	12	201	237			
Total		122	61	229	412			
		Overall satisfaction			Total	Pearson Chi Square value	df	Asymp. Sig. (2-sided)
Given drugs by CHWs		Dissatisfied	Neither satisfied nor dissatisfied	Satisfied		89.752 ^a	2	.001
	No	114	60	121	295			
	Yes, which one	8	1	108	117			
Total		122	61	229	412			
		Overallsatisfaction2			Total	Pearson Chi-Square value	df	Asymp. Sig. (2-sided)
		Dissatisfied	Neither satisfied nor dissatisfied	Satisfied		63.606 ^a	2	.001
Involvement t in CHW choice	No	109	54	120	283			
	Yes	13	7	109	129			
Total		122	61	229	412			

The participants did not have much knowledge regarding how the CHWs are supported to do their work. Most participants reported that the CHWs worked for free which they said is what the CHWs told them. Participants in the FGD felt that no one should work for free. They made comments like, “We do not know how they are supported but they must be supported perhaps through the hospital/HCWs because people cannot work for free.” “If they are not supported they should be supported because it is difficult to work for free.”

The FGD participants felt that the CHWs should continue to serve the community because they are closer to the community than the health professionals in facilities. However, one participant declared, “the ones who were chosen a long time ago are good but others should be chosen again with a clear agreement on their roles because some of the CHW have stopped working over time.” With regard to improvements on the work of the CHW, the FGD participants suggested that the CHWs should be paid a monthly stipend and get other benefits such as being fast-tracked for care when they went to a health facility. Further, the participants stated that the community should be informed on what their exact roles are so that the community members can know what to expect from them. Other suggestions included providing them with working tools so that they could be easily identified and therefore taken more seriously. Some of the working tools they mentioned included aprons, gum boots and/or overalls.

4. Discussion

Failure to achieve MDG 4 in Kenya has been attributed to among other factors, low coverage of some of the interventions targeted at child survival [23]. These interventions include but are not limited to breastfeeding, complete immunization, Vitamin A supplementation, children sleeping under ITNs, care seeking for symptoms of pneumonia, malaria treatment, oral rehydration therapy with continued feeding, improved drinking water sources and improved sanitation facilities. The use of plain water, sugar and salt solution (SSS) and failure to feed by some of the respondents during incidence of diarrhea (33.8%, 140), low service coverage for 4 ANC clinic visits (44.7%, 193) and home deliveries among 35 (8.1%) of the respondents indicates that there is still room for improvement with regard to increasing awareness and behavior change on child survival interventions. CHWs can be used to deliver or increase the demand for these interventions. Further, with the shortage of HCWs, the roles carried out by CHWs may not be adequately fulfilled by doctor-nurse teams or even mid-level HCWs [2].

The reported satisfaction levels reflect a need for strengthening the implementation of CHS. Respondents from Kiratina reported greater overall satisfaction than the respondents from Kiandegwa (Chi square=26.536, d.f. 2, p=0.0001). Factors such as more respondents from Kiratina reporting home visits by the CHW (Chi square=18.59, d.f.2, p=0.0001), more respondents reporting agreement with the choice of CHW (Chi square=5.897, d.f. 2, p=0.015) and more respondents from Kiratina also reported receiving drugs from CHWs (Chi square=8.174, d.f 2, p=0.004) could have contributed to the higher overall satisfaction among Kiratina respondents. The Kiratina unit was established 4 years (2011) after the Kiandegwa unit (established in 2007). It is likely that the Kiandegwa unit and perhaps the Kiratina community unit has experienced attrition of the CHWs. This was reported by some FGD participants who reported that their villages had CHWs but they stopped working a while ago. Nkoki, Cliff and Sanders (2011) report that attrition was a problem in the early

CHW programmes of the 1980s and current programmes in various settings viz; a tuberculosis intervention programme in South Africa (92% attrition rate over a year), a lay health worker programme in Bolivia (43% attrition rate) and a programme implementing interventions for improving newborn care (32 out of 43 CHWs lost in 4 years) [24].

The mean distance between CHWs households and respondent's household was 0.7km. This close proximity of suggests that the CHS has the potential to meet its goal of bringing health services for children under 5 as close as possible to their homes. However the low utilization of CHW for consultation, relatively few home visits and just barely above half satisfaction levels indicates that over time there may have been a disconnect between caregivers expectations and the actual roles of CHWs. When asked where the respondents interacted with CHWs, 118 (27%) respondents reported interacting with CHWs in a health facility even though CHWs are expected to work mostly in the community. Some of the reasons caregivers did not utilize CHW services include lack of drugs, perception that they did not need the services of CHWs not being aware of the roles of CHWs in the community and the fact that in some villages some of the CHWs had stopped working. These reasons indicate that community support may not be adequate for the implementation of CHS in the study area. Community support has been reported by [25] to be an important motivator of performance for CHWs. It depends on how the community accepts, cooperates with and appreciates the services offered by CHWs in communities [26, 27]. In this study, the low involvement of community members may have affected the acceptance, cooperation and satisfaction with CHW services. Lack of awareness that CHWs are trained and how they are linked to the formal health system, may also have contributed to the perception amongst some respondents that CHWs services are not needed in the community. Further, with a satisfaction rate of 52% with the competence of the CHW, there is room for improvement on how credible the community perceives the CHWs to be. The study findings support other studies that have found that communities tend to consult CHWs on health issues when they believe they are trained and linked to the formal health system [28].

Some of the limitations identified by the study include low involvement of community members in the selection of CHWs, the process of selection and the roles of the CHWs not being completely understood by most of the participants in the FGD. For the respondents to the questionnaire, amongst those who reported not agreeing with the choice of the CHW (n=152, 35%), 64 (42%) were unhappy with the choice of CHW because they were not aware of their roles while, 17 (11%) reported not being involved in the selection process

In spite of the problems identified with processes and implementation of CHS 55% of the respondents reporting overall satisfaction (55%), and 30% reporting dissatisfaction with CHWs services, indicates a fairly positive evaluation of the CHS. Additionally, the respondents reported that they would consult a CHW, if they were informed about the roles and existence of CHWs. The participants in the FGD had several recommendations such as selecting new CHWs especially in the areas where attrition had occurred, greater involvement of community members in the next selection of CHWs in which the community members would know what to expect from the CHWs and support for CHWs to conduct home visits and supply drugs within the community whenever possible. As health services increasingly get strengthened and coverage improves, the roles of CHW will need to be carefully defined and refocused. Even when services are available they may not be accessible to

the poorest in a community. This may enhance inequities. In the area studied, particularly in Kiratina community unit, there are pockets of slum areas which may benefit from targeted CHW interventions.

In Nyeri County, there are 36 Community Units (CUs) established against the government's target of 139 and of these 36 only 10 are active [29]. Kiambu East in Kiambu County has had CHWs since the implementation of the community strategy approach in 2007. However, 30 community units were mapped at the time of initiation of the Community Health Strategy but only 13 are active [30]. While the study examined a local scenario, some of the findings may be generalized to the perceptions of caregivers in Kenya. Key differences in CHS experiences may involve different disease profiles, different partners and institutional capacities within every area. In most areas of Kenya, there still remain some challenges in the implementation of community strategy.

4.1 Methodical Considerations

Recall bias was a potential problem in this study with caregivers being asked to remember things that happened in the past about an event that may not have been a major event in the home. This was minimized by limiting the recall period to one month for some details, and three months for more general questions about incidence of disease in children under 5. Caregivers responsible for under-fives and not just anyone in the household, were interviewed. Education level, occupation and type of housing were used as measures of socioeconomic status. These measures were selected as they reflect long-run household wealth or living standards. They may however fail to take account of temporary interruptions or shocks to the households. In spite of this, the approach used was considered a reasonable alternative for a rural community with a large informal sector. Interview bias was a possibility during the data collection process. This was minimized by using research assistants who were not involved in the implementation of CHS. CHWs did not participate in the data collection process nor were they present during data collection.

5. Conclusion

Drivers of overall satisfaction with the CHWs include receiving drugs from the CHWs, home visits, agreement with the choice of CHW and involvement in the choice of CHW and awareness of the existence and roles of the CHWs. In this study, CHWs roles have been mainly promotive and preventive. The study has found that some of the components have been up taken and sustained over the years. However as new members join communities there is need to include them in the community dialogue days to clarify the roles of CHWs and rationale for their presence in the community. Further, for areas where there has been attrition of CHWs, there may be need to put in place mechanisms of replacing the CHWs. Generally, there should be continuous supervision and close linkage between County Health management Teams (CHMTs) , the health workers at the facility level, CHEWs, Village Health Committees (VHC) and CHWs at the community level for the sustainability of the community strategy activities.

Our findings allow for the development of measures to assist in re-engineering CHS while promoting key activities that may increase patient satisfaction and contribute to reductions in the incidence and severity of some of the major diseases affecting children under five in Kirinyaga County.

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