ROLES AND CHALLENGES OF COMMUNITY HEALTH VOLUNTEERS IN COMMUNITY MIDWIFERY PRACTICE IN SIAYA COUNTY, KENYA

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ABSTRACT

Introduction: One of the objectives of the United Nations Millennium Development Goals (MDGs) was to reduce MMR by an average of 5.5% every year over the period between1990–2015. As a result, the first international meeting focusing on scaling up of the midwifery workforce at community level, drafted a Call to Action for all countries with high Maternal Mortality Rate to embark on intensified action to scale up midwifery care at the community level. Community health volunteers have been increasingly recognized as integral members of primary health care teams, especially in poor and underserved communities. The objective of this study was to evaluate the contribution of community health volunteers in promotion of skilled birth attendance in Siaya County.

Methods: This was a cross-sectional study that used both quantitative and qualitative data in six sub-counties of Siaya County. The study involved facilities as well as sampled mothers who had given birth within the previous year and who were served by the four sampled health facilities. It also involved skilled birth attendants working at the health care facilities of the primary levels of the health care system as well as the CHVs attached to the selected health care facilities.

Findings: The services of the CHVs contributed to the improved skilled birth attendance in Siaya County. Their roles include record keeping, follow-up care, health education, facilitating referral and promoting skilled birth attendance. They are however faced by insecurity, health infrastructure gaps and client related challenges.

Conclusion and Recommendations: The CHVs may be relied upon to promote skilled birth attendance at the primary level of the health system.

Key words: Community midwifery, Community health volunteers, Skilled birth attendance, Sustainability

Introduction

In spite of considerable progress in many countries in achieving the Millennium Development Goals (MDGs) for health, progress was inadequate, stalled, or even worsened in a number of countries, particularly in Africa. Community Health Volunteers (CHVs) were recognized by the World Health Organization and the Global Health Workforce Alliance as an integral component of the health workforce, needed for the progression of the then health-related MDGs (Perry and Zulliger, 2012). They were increasingly recognized as integral members of primary health care teams especially in poor and underserved communities. The umbrella term "community health workers" referred to people alternatively known as outreach workers (Rosenthal, Brownstein et al, 2010). All types of CHVs carry out one or more functions related to health care delivery, and are trained in some way in the context of the intervention, but usually have no formal professional or paraprofessional certified or degreed tertiary education (Lehmann, Friedman et al., 2004). In low and middle income countries, skilled health workers are essential for the delivery of health interventions. However, inadequate skilled health-worker performance is a very widespread problem ((Rowe, de Savigny et al., 2005)

Pregnancy and childbirth are still the leading causes of death, disease and disability among women of reproductive age in developing countries (Liambila, 2012) with over 90% of deaths occurring in South Asia and sub-Saharan Africa, and less than one per cent in more developed regions (Pettersson, Sherratt, & Moyo, 2006). Seventy-five percent of maternal deaths occur during childbirth and the postpartum period, and the vast majority of the deaths and injuries are avoidable when women have access to skilled health care before, during and after childbirth (van Eijk, 2000; WHO, 2005).

One of the objectives of the United Nations Millennium Development Goals (MDGs) was to reduce MMR by an average of 5.5% every year over the period 1990–2015. The two key indicators for monitoring the progress towards the first target were maternal mortality ratio and the proportion of births attended to by skilled health personnel. As a result, the first international meeting focusing on scaling up of the midwifery workforce at community level drafted a Call to Action for all countries with high Maternal Mortality Rate to embark on urgent and intensified action to scale up midwifery care at the community level (Health, 2005).

Skilled attendance at delivery had been recognized as one of the most important factors in preventing maternal death. However, more than 50% of births in Kenya still occurred in non-institutional locations supported by family members and/or traditional birth attendants (TBAs) (Kawakatsu, Sugishita et al. 2014)). In Siaya, the proportion of deliveries attended by skilled birth attendants in the year 2013 was 58%. This was still lower than the MDG5 requirement of 75% (DHIS, 2013).

The 'community midwifery approach' was one of the innovations introduced and implemented in Kenya in an attempt to address the existing low levels of skilled

attendance at birth (Liambila 2012). Community Midwifery means, "taking maternal services to pregnant women living in the community to assist them during pregnancy, childbirth and the postpartum period in their homes and facilitate prompt referral when necessary l (WHO 2007).

Findings from a study done in Kenya by Liambila *et al*., (2013) indicated that the expanded community midwifery model improved clients' access to a comprehensive package of family planning, reproductive health and HIV services at the community level. However, the intervention was less successful in improving the provision of a continuum of care by community midwives (Liambila, Obare et al., 2013).

The objective of this study therefore, was to evaluate the contribution of community health volunteers in the promotion of skilled birth attendance at the Primary level of the health syatem in Siaya County, for the success of the community midwifery practice.

Methods

The study was carried out in Siaya County of Western Kenya. It concentrated on four conveniently selected sub-counties namely Ugenya, Ugunja, Gem and Siaya, because of their proximity to each other. This was a cross-sectional study that used a three prong approach that used questionnaires for quantitative data, complemented by key informant interviews and focus group discussions for qualitative data. The sample size was 374 women who had given birth in the previous one year and all facility midwives who worked in the sampled facilities (n=49). Four focus group discussions were also held with the community health volunteers. To establish more and to supplement information on the roles of community health volunteers, information was also obtained through key informant interviews with the sub-county public health nurses and the facility administrators with whom they work.

A multi-stage convenient sampling method was used to sample the women and the sample size for each sub-county was proportionately calculated according to their target population. Data was analysed using SPSS version 17. The techniques used for analysis included descriptive statistics for quantitative and thematic analysis for qualitative data, and the results were presented as appropriate.

Results

A total of twenty three (23) facilities were sampled for the study and all the facilities were government owned with 48% being health centres serving a population of between 5,000 to 10000 people and 46% dispensaries. The skilled workforce consisted of registered midwives (29%), registered community health nurses (40%), enrolled community health nurses (27%) and other cadres (0.4%). All the 23 administrators confirmed the availability of maternity, family planning and child health services. In addition, 2% of administrators reported the availability of maternity services at night and weekends. Table 1 below shows the summary of the demographic characteristics.

Table 1: Facility and Mothers' Information

	Information	Facilities (n = 23)	Proportion (%)
Facility type	Hospital	1	4
	Health Centre	11	48
	Dispensary	11	48
Population per facility	< 5000	4	18
	5000 - 10000	10	46
	>10000	8	36
ANC attendance (%)	< 50	8	35
	50 -99	11	48
	> 100	4	17
Delivery Coverage (%)	< 50	6	26
	50 -99	15	65
	> 100	1	4
No. of Beds	0-5	11	48
	6-10	7	30
	11-20	3	13
	>20	2	9
Staffing	From health centres	36	75
	From dispensaries	12	25
	Information	**Mothers (n=373)**	**Proportion (%)**
Age in Years	< 18	19	5
	18 - 25	171	46
	26 - 35	152	41
	36- 50	26	7
Parity	0-2	169	45
	3 - 5	166	45
	6 - 7	33	9
	> 7	2	1
ANC Attendance	Facility by a midwife	356	95
	TBA	9	2
	None	8	2
Birth Attendance	Skilled	307	82
	Non-skilled	66	18
Age of baby at first Post Natal visit by CHVs	< 1 week	89	24
	1week - 1 month	195	52
	1month - 6 months	75	20
	6 months - 1 year	3	1
	Can't remember	3	1

Role of CHVs

Generally it was necessary to establish the roles of the CHVs. The thematic analysis of the information obtained from the FGDs revealed their roles as expressed in the following extracts include record keeping, follow-up care, health education, facilitating referral and promoting skilled birth attendance.

Record Keeping: one of their roles is that of keeping community health records which they present to the facility as appropriate.

"We keep records according to the referral book. We remain with the duplicate and take other copies to the facility" (FGD1)

"We have big hard books where we register occurrences then we have referral forms" (FGD4)

"Yes, that is how we were taught. That we give them referrals".

Follow-up Care: They are also involved in following up clients after before and after birth.

"We visit the mothers as soon as they deliver" (FGD3)

"We do a follow-up by visiting them every month. This helps us identify those who are pregnant whom we visit weekly to find out how she is so that when she gives birth then I will visit her frequently to find out when she delivers. I also have a form to track who has delivered or not" (FGD1).

"We follow them up to encourage them to go to the clinic and to attend ANC four times" (FGD4)

Health education: During home visits, they interact with the families on a one-to-one basis and carry out activities as expressed in some of the extracts for example educating them on various health issues. Health education concentrated on the issues pertaining to maternal and child health as contained in the following extracts:

"*I start educating her early; we tell them that when they notice signs of labour, they should go to the facility they do not have to wait" (FGD1).*

"*When we visit them after delivery we find out about immunization and educate them on the importance. We also advise on exclusive breastfeeding and minor disorders as well as how to identify bleeding whether excess or normal. We check the cord and give advice on care. We also tell them to eat well". (FGD4)*

"When they have HIV we also educate them on PMTCT of HIV". (FGD4)

We encourage skilled attendance and discourage home/TBA delivery. We tell them to go to trained personnel. (FGD3)

Facilitating referral: They also refer the mothers to the facilities and even escort them to the facility.

"In case of any medical problem we refer them to the facility using our referral forms" (FGD4)

"When someone is sick and is far, you can be called even at night" (FGD4)

"Many a times we escort the mothers to the facility" (FGD1, 2, 3, 4)

Promoting Skilled Birth Attendance: Findings on Ante Natal Care showed that 95% (n=356) of the mothers received care from a midwife, 2% (n=9) were attended to by TBAs while 2% (n=8) did not receive any care.

As part of evaluating the activities of the CHVs, the mothers were also asked whether they were visited at their homes by CHVs. The visits were then compared with the skilled attendance. This was to establish whether the improvement in skilled care was as a result of the interactions between the mothers and the CHVs. The findings showed that of the 272 (73%) women visited, 57% delivered in the hospital while of the remaining 101(29%), 24(24%) had skilled birth attendance.

In order to measure the mothers' level of satisfaction with the performance of the CHVs, the mothers were asked to rate their level of satisfaction with the work of CHVs on a Likert scale. Figure 2 shows that 82% were generally satisfied with the CHVs' services while 17% were not.

This was confirmed by the FGDs' findings as evidenced by the following extract:

"Like now if you yourself would go, they would tell you no we want our CHV (FGD2)"

"They must see their CHV before they are treated or tested (FGD4)".

This showed that the community members had identified with them and had a lot of trust and confidence in their CHVs.

Challenges Encountered by CHVS

The challenges faced by the CHVs were obtained mainly from the qualitative data and included insecurity, health infrastructure gaps and client related challenges.

Insecurity: They noted that their work was affected by insecurity especially at night. This was evidenced by the following extracts:

"You are called but the distance to the mother may make it difficult thus the mother may deliver on the way. Sometimes it is at night. The motorbike may not reach the police post for fear of being arrested. This forces you to walk to the hospital in vain (FGD1).

"That is now administrative and health. They are both government. They should be talked to. There is a patient and thugs. The way the pikipiki operators are treated scares them.

They tell you that after I leave you in the hospital nobody will believe that I brought a patient.

They will need something to show that they are from the hospital. Sometimes they carry a pregnant woman in labour yet the police continue to question them. The woman would give birth on the way before reaching the hospital. They should be left to go and be asked when they come back. But they should be given a note to show that they are from the hospital" (FGD2).

Health Infrastructure Gaps: The Midwives leave outside the facilities due to lack of accommodation within the facilities making it difficult to have 24hours services.

"The difficulty is that sometimes sister resides far therefore transport will be expensive and sometimes the terrains will not allow because no vehicle may reach at night and there is no transport. It will therefore be difficult to refer the mother to another hospital because of the distance". (FGD2)

They expressed lack of equipment to facilitate community services but also noted that they lack knowledge on how to deal with emergencies.

"Sometimes you are called to attend to a mother at night by the time you reach, the baby is almost out. She may be HIV positive yet we have no protective. How to handle the baby becomes a problem so we use paper backs (for bread) (FGD1).

Preparedness, we as community workers we should be aware and accompany ourselves with gloves. I have had such cases but I did not go bare handed. I carried gloves" (FGD2).

Their scope of operation is wide yet they have no means of transport making their mobility within the community during home visits and transporting mothers to facility difficult. They have to use their own money even to get the women on the motorcycles to the hospitals. This is evidenced by the following extracts:

"It is not easy because sometimes one is required to cover many villages yet she hasn't even a bicycle to cover all of them. I'll get so tired that makes it difficult to cover all. There is need for bicycle. Sometimes you want to go and give a health talk. The place may be too far yet you should spend your own money to get onto a motorbike. Sometimes you are called urgently to the facility to present a report. It may be raining and you have no umbrella, there is mud. It makes it difficult to reach the facility and bring a lot of stress" (FGD4)

"We do a lot of work outside our homes. Walking is difficult due to lack of transport" (FGD2).

Client Related Challenges: These included lack of male involvement, poverty and community misconceptions.

Lack of male involvement as evidenced in the extract below:

"*Those men, there are those we talk to. We mostly talk to individual men whose wives you care for. A few respond but most of them may appear to understand but when you go you realize that there is nothing he can do. So we concentrate on the woman to advise her how she should be in order to survive" (FGD1)*

Poverty in the community:

"Another one is poverty. Sometimes you find that even after advising, a woman cannot afford even sanitary pads. If she delivers on the way it may be difficult to help her especially given that her status is not known. When you investigate you find that even the man is not around and not responsible. So the woman fends for herself FGD1).

Community expectations and misconceptions:

"Sometimes you are called. She is aware that she should prepare for delivery. But sometimes it is expected that you get a motorbike and even pay for transport. Her stay in hospital is also on you (FGD1).

Discussion

This study set to establish the contribution of the community health volunteers in the improving skilled birth attendance. In general, the roles of CHVs are to act as agents of health promotion and health development. They also provide local outreach of health services that might otherwise be unavailable and often provide a link between communities and formal health services (Lehmann, Friedman et al. 2004). In this study their roles were very well stipulated as evidenced by the extracts from the FGDs held by them which replicated the roles by Lehman (2004). The CHVs performed their roles as expected. Given the cost of employing more personnel, the CHVs in this study have shown that they can promote skilled birth attendance, as evidenced by the improved uptake.

They would encourage women to deliver in the facilities at a low cost for both the government and the community, because they would not be paid salaries equivalent to the professionals thus giving cheap labour. This would be sustainable because of the community involvement and the community acceptability of the CHV and midwifery services. The facilities would subsequently employ fewer midwives who would practice in the facilities rather than in the community while the CHVs would take the role of referral.

From the FGDs it was noted that they were able to educate the mothers on MCH issues as well as what the midwives would have done, in terms of creating awareness and encouraging the mothers to deliver in the health facilities. This was supported by the fact that the skilled birth attendance improved and that they were relied upon to refer mothers to the facility, documement community events and present their reports to the authorities in the county health systems. This also showed the level of acceptability by both the facility and the community. This was a replication of the Zambian safe-motherhood action groups in 2003 where the groups were meant to mobilize communities to improve the health of women, men and children and reduce the number of human immunodeficiency virus infections (Johri, Ridde et al. 2014). Without being accepted one may not be able to mobilize or work in and with a community.

According to a study done in Malaysia (2017) lack of means of transport and job aids are factors that can influence CHVs' motivation and subsequently affect their performance while the cost of travel and replenishment of the supplies, material, and equipment are important determinants of their performance that should be taken into consideration (Chung, Hazmi et al. 2017). This was also replicated in the qualitative findings of this study. The CHVs have no means of transport to move around the community or even to transport their clients. They therefore have to use their own money or they may not be able to reach their clients thus affecting their performance. Looking at the challenges, it may be observed that the same challenges noted in this study were also observed in a

study done in Kenya earlier by Mannah et al. (2014) where the same challenges were faced by the community midwives (Mannah, Warren et al. 2014). As observed by Nanyonjo et.al, in Uganda, this study also noted that the problems of CHVs do not only stem from the community itself but also from the health system. This therefore indicates that the problems persist and solutions should be sought if the health indicators are to be improved.

Conclusion and Recommendations

Community Health Volunteers (CHVs) are effective in the promotion of skilled birth attendance and therefore effective in community midwifery practice. The CHVs should be recognized as part of the health systems, but based in the community and their terms and conditions be reviewed as appropriate for better remuneration and sustainability of community midwifery.

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