The Role of Community Members in the Skilled Delivery Program in Rural Northern Ghana

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Abstract

Following independence, Ghana had a policy of extending accessible and affordable health services to all her citizenry. The Community-Based Health Planning and Services program was introduced in 2000 to bring health services to the doorsteps of the people through partnership between rural communities and health professionals. The community midwives and community members collaborate to promote skilled attendants at birth in rural areas. Using an intrinsic case study design with qualitative data collection technique, we found that community volunteers and TBAs help to provide education on skilled delivery care and they also refer or accompany their clients for skilled delivery care, especially where there is strong community participation. The political authorities, traditional leaders and community members provide resources for the skilled delivery program. In community participation, both financial and non-financial incentives are necessary to boost the morale of volunteers and TBAs. Communities are a resource for the skilled delivery program in rural areas.

Key words: Community-Based Health Planning and Services, Community participation, Ghana, Maternal mortality, Skilled Attendants at Birth.

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Background

In Ghana, between 1,400 and 3,900 women and girls die each year due to pregnancy related complications.[1] An estimated two-thirds of these deaths occur in late pregnancy through to 48 hours after delivery.[2] Recent estimates show that maternal mortality ratio[1] (MMR) in Ghana is estimated at 350 per 100,000 live births. This ratio is high when compared to that of other sub-Saharan African countries, such as Namibia, which has a MMR of 180 per 100,000 live births.[3] These deaths occur disproportionately in Ghana's rural areas.

Ghana's percentage of deliveries supervised by skilled attendants (55%) is higher than the average for sub-Saharan Africa, it is lower when compared to some countries in the sub-region with similar economic profiles such as Namibia (75%).[4] In the Upper East region, skilled delivery care is 52%[5] with a notable level of rural/urban disparities (30% in rural vs. 80% in urban). [6] The Ghana Health Service and rural communities are collaborating to promote skilled attendants at birth in rural areas to bridge the rural/urban gap.

Community Participation in Health Program

Community participation is an essential part of health service delivery in developing countries. Community health volunteers have been used in a number of programs ranging from large to

[1]The maternal mortality ratio (MMR) is the number of maternal deaths during a given time period per 100,000 live births. MMRatio is a measure of the risk of death once a woman has become pregnant.

small scale initiatives to encourage community involvement and to compensate for the severe shortages of health professionals in the health sector.[7, 8,9,10] The Alma-Ata Conference in 1978 reiterated the goal of 'Health for All by the Year 2000' and approved primary health care (PHC) as key to achieving this goal[11] and community participation was identified as the best strategy to engage communities in PHC. [7, 8,9,10]

The Danfa Comprehensive Rural Health and Family Planning project in the Greater Accra region of Ghana demonstrated that village health workers could be successfully used for delivery of PHC services in Ghana.[9] Social research has revealed an improvement in the health of children in areas where volunteers (teachers) were used to provide malaria chemoprophylaxis therapy compared with health centre-based care for pre-school children.[9] The Bamako Initiative designed to increase access to PHC implemented the minimum integrated health package and based on the concept of community involvement, village committees were actively engaged in health delivery management. The program resulted in improved child health, mostly in West Africa.[12] Kuhn and Zwarestein in their study reported an increase in polio immunization coverage, but a drop in measles immunization coverage, where volunteer health workers were involved in promoting immunization and breastfeeding.[12] In a study on the role of community participation in tuberculosis treatment delivery in South Africa, Korande and colleagues reported that one-third of TB patients treated by lay volunteers in communities was equivalent to those who received treatment through health workers[14] The conclusion of this study was that community volunteers play a significant role in TB patient treatment in South Africa. Dudley et al program on community involvement to tuberculosis control in Cape Town, South African revealed that community health workers contribute greatly to TB control program performance.[15] Health authorities have recognized the key role community members play in service delivery in sub-

Saharan African countries and engage that in implementing health programs. Community participation remains a useful tool in accelerating the attainment of the MDGs and they should be engaged to greatly help make progress towards MDG five, to improve maternal health.

Another study on the use of safe motherhood promoters (SMPs) to encourage early and complete antenatal care visits and delivery with skilled attendants in Tanzania revealed increase in skilled deliveries and antenatal attendance in that country.[16] A study on the reduction of maternal and perinatal mortality in rural Burkina Faso showed that the use of health professionals and community members in providing maternal and child care significantly increase institutional births and reduce maternal and perinatal deaths.[17] These programs impact have distinctively shown how communities could contribute to women access and use of maternity services and indicated how communities could be involved in health service delivery. Haines et al cited how evidence-based interventions have demonstrated community health workers contributions to high child survival coverage and other health programs and suggested evaluating the role community participation plays in increasing coverage of essential interventions.[18] Doctor in his paper mentioned that the shared contribution of community volunteers and CHOs to health delivery care motivated communities preference for smaller families, which indicated a change in reproductive behavior.[19] A review of the literature demonstrated how the combined efforts of communities and CHOs in providing community health and family planning services led to reduced fertility by 15%, equivalent to one birth in the general population. The success of this project led to the implementation of the CHPS Program aimed at improving access to health care and family planning services in rural areas of Ghana.[10] Community participation is gaining grounds in sub-Saharan Africa, hence communities should be encouraged to continue to get involved in the design, implementation, evaluation and

dissemination of health programs to improve their health status, claim ownership and guarantee the continuity of programs.

In 2000 the Ghana Health Service began training a subset of middle level health care providers known as CHOs to offer skilled attendance at delivery to women in rural areas through the CHPS program. The Initiative emanated from the Navrongo experiment known as the Community Health and Family Planning (CHFP) project designed as a community-based model for providing integrated health services to rural communities. The CHPS program is jointly implemented by the Ghana Health Service and the communities in Ghana. The communities collaborate with the health sector in areas such as provision of land and labor for building CHPS compounds. Community members also assist in providing basic health services to the people in their communities. The volunteers participate in health education and provide basic health services for minor ailments.[7] Community Health Officer-midwives (CHO-midwives) in collaboration with community members provide skilled delivery services to rural women. As the program seeks to ensure that all women in remote villages have access to skilled professionals during and after delivery, it seeks to build strong partnership between TBAs and health professionals and between all community members and the CHO-midwives.[7] Designed with full participation of communities, the program addresses the sociocultural, geographical and economic factors that limit access to basic health care by making health services *available* through close proximity to rural families, socially *accessible* through wide community participation, and *affordable* through free delivery system. This study sets out to examine the extent to which community residents and leaders participated in the implementation of the skilled delivery program.

Study Setting

The study is conducted in the Kassena-Nankana East, Kassena-Nankana West and Bongo Districts of the Upper East Region of Ghana. Located in the north-eastern Ghana, the region is bounded by Burkina Faso to the north and the Republic of Togo to the east. It covers an area of 8,842 sq. km. With an annual population growth rate of 1.2%, the region's population estimates for the 2010 census was 1,046,545. The population is predominately rural (79%) with 21% urbanization. The Kassena-Nankana East district is located within the Upper East Region in the north-eastern Ghana with an estimated population of the district is 109,944 and a growth rate of 1.2%. There are two major ethnic groups: the Kassena who inhabit the central corridors of the district while the Nankana are located in the eastern and southern part of the district. A third minority group known as the Bulisa also resides in the southern part of the district. The three ethnic groups share a homogeneous social and cultural system.[20] The Kassena-Nankana West district is newly carved out of the Kassena-Nankana District in the Upper East Region. The estimated population in the 2010 was 70,667 with the population growth rate of 1.2%. [20] The Bongo district is located in the Upper East Region. With an annual population growth rate of 1.2%, the district population estimates for the 2010 census was 84,545. The district inhabitants are predominately Frafra speaking group.[20]

Research Question

To what extent has community residents and leaders participated in the implementation of the skilled delivery program?

Objectives

To assess the extent to which communities know and use the skilled delivery care and other programs in the CHPS context; identify key roles the communities played in the implementation

of the skilled delivery program; assess the benefits and challenges of community involvement in the skilled delivery program; and identify lessons learned from the skilled delivery program.

The Study Design and Methods

We employed an intrinsic case study design with a qualitative methodology. We conducted in-depth interviews with key informants such as chiefs, TBAs, community volunteers, women leaders and elders and health professionals (CHO-midwives) to (1) assess the extent to which communities know and use the skilled delivery services, and (2) identify contributions community residents made to the program and to explore successes, challenges and lessons learned. We also reviewed district and regional annual reports of the Ghana Health Service.

Sample size and technique

We included 11 CHO-midwives and 15 community stakeholders in our interviews in the three districts: In the Kassena-Nankana East, Kassena-Nankana West districts, and Bongo districts, we randomly selected 4 CHO-midwives from each of the district to participate in the in-depth interviews. A total of 12 were to be interviewed, but 10 CHO-midwives participated in the interviews. The other two participants were not available for interview after several attempts to meet and interview them. A total of 15 community stakeholders were recruited for the in-depth discussions: They include chiefs (N=3), elders (N=3), traditional birth attendants (N=3), and community volunteers (N=3); and women leaders (N=3). We recruited the community stakeholders through speaking with key community members such as opinion leaders, chiefs, and elders. We gathered names of those in each group, (chiefs, elders, women leaders, community volunteers, TBAs) who were most knowledgeable about the program. Among those identified as

potential interviewees, we randomly selected one in each group to approach for an interview in each district. In each district, we included 5 community stakeholders and a total of 15 stakeholders were interviewed. In all, a total of 25 (10 CHO-midwives and 15 community stakeholders) key stakeholders were interviewed.

Data Collection and analysis

Data collection started January 13, 2012 and ended on April 30, 2012. The analysis of narrative data on similar topics from multiple sources allows for comparison of perspectives and triangulation of reports. We first sorted the interview narratives by source (CHO-midwives and community members), and conducted multiple readings of the interviews. As we did, we noted in the margins topics discussed by each respondent per question, identifying those that were recurrent across interviews as well as those that appeared to be atypical or "outliers" in response to each question. In the second stage, we re-read the narratives, discussing larger themes that emerged across the respondents and across items. Through this two-stage process we developed a coding scheme consisting of larger themes (concepts) and specific topics. Members of the analytic team then went back to code each interview transcript based on the coding scheme, using qualitative data software (QSR NVIVO software version 8). Collaboratively, we discussed our codes with other members of the team, particularly areas of in the text where each person was not certain about. We all coded a randomly selected set of interviews (N=3) for reliability purposes. Upon completion of coding, we generated and read reports for each code. We generated reports that allowed us to describe the thoughts and opinions within interviewee group (e.g., community stakeholders) as well as compare responses between groups (e.g., community stakeholders and health professionals).To gain a more in-depth understanding of the

data, we formulated larger questions based on the literature or impressions in the community to guide the analysis.

Content Analysis of Documents

Content analysis of program documents helped provide current and historical context in which the skilled delivery care has been implemented through the CHPS program. The documents were sorted by type (the Annual Reports of the three districts and the Ghana Health Service). We described the contents to achieve the stated objectives, and analyzed by objective across each document.

Study Limitations

This study focused specifically on community participation in skilled delivery program in the context of the CHPS program and might not be generalizable to other contexts because of the uniqueness of the design and implementation of the CHPS program. However, community-based programs of any contexts could still adapt the strategies to involve communities in their health programs.

Results

Community leaders knew about the CHPS program and they were in close consultations with health professionals in the planning and construction of Community Health Compounds (CHCs). They also help to implement the program and they often sought skilled delivery care and treatment for minor ailments from the health professionals. The community leaders described their involvement in the CHPS program:

…"Yes, I know about the existence of the small hospital [Community Health Compound-(CHC)]. When the health professionals first came to Kandiga chief's house they called all the elders; all sectional elders from Nindagsi, Kruba, Bembisi---in fact elders from all the sections to meet at the chief's house and they told us how they wanted to establish the small hospitals [CHC] to help us. They did not just come to start it all alone; they did it in consultation with the community members, the chief, his elders, and opinion leaders before they started" **(Community Volunteer, Kassena-Nankana East District)**

Contributions of family and other community members towards the transportation of pregnant women for skilled delivery services and the welfare of the CHO-midwives

Community members contributed in diverse ways to support the skilled delivery program. They often transported pregnant women by vehicles or motorbikes to the CHCs for skilled delivery services and contributed money for their delivery expenses. Both the CHO-midwives and the community volunteers confirmed that community members referred or accompanied pregnant women to the CHCs for skilled delivery services and they also reported events on pregnancy to the community volunteers or TBAs, mobilized and participated in durbars. Some communities have instituted bylaws on antenatal attendance and supervised delivery, so any woman who delivers at home is fined and the penalty varies across communities.[21, 22] Communities have also been involved in the management of the CHCs to make life better for the CHO-midwives, and they have always supported development programs that are likely to have positive impact on society.

……"You know everything is about money so when a pregnant woman has a problem and may not have money, we have a brother here in the community when such situations arise; we contribute money, go to the man and ask for help. We buy petrol and put it in his vehicle to take the woman to the big hospital. The man is called [name withheld]. Anytime there is a problem in the night, wherever a motorbike or a bicycle cannot go to and we cannot also walk there, we run to him. The community members also contribute some money for him to take the woman to the hospital." **(Community Volunteer, Kassena-Nankana West District)**

The CHPS program is one of those programs that rely on community involvement to implement and use the services and this has been successful in many CHPS zones in Ghana. In their own words, interviewees gave examples of how they work for the program and what it meant to them.

Donation of land and other logistics and provide communal labor towards the building the CHC

Rural communities in the Upper East region are no longer mere recipients of health services, but they also donate to the CHPS program. Key informants reported that communities provided land, labor, funds, and other logistics for the building of CHPS compounds. The discussants have these to say:

...."*When they were going to build the CHPS compound they [district assembly] only brought a tipper truck and the community members came out and collected sand for the building of the project, the community members donated the land free of charge and they picked stones for the project. During the construction, digging of the foundation, fetching water; they call it communal labor, whenever they announced all members of the community came out to work at the small hospital [CHC]."* **(Community Volunteer, Kassena-Nankana West District)**

Communities' supervision of the CHO-midwives

In some areas, community members often visited the CHPS compounds to observe the activities that go on there and to offer support to the CHO-midwife when necessary. A discussion with community key informants revealed that elders, teachers and women groups' leaders on many occasions visited the CHCs to oversee the work of the CHO-midwives. This is necessary to keep the midwife in company and to show concern and support for the CHPS program activities. Here is a quote from a respondent:

..."*There are elders who go there to see what goes on there in the CHPS compounds and assist the nurses if necessary. The compound is near a school and the teachers also see how the nurses work and women's groups leaders also go there to see what the nurses are doing and see whether they could be of help to her."* **(Community Volunteer, Kassena-Nankana West District)**

An important aspect of the CHPS program is community entry and sensitization. Community entry is the process of introducing a program to community leaders and that offers a platform for dialogue and support for implementing the program.[23,24] Community sensitization process involves meeting with community members through durbars to discuss a new program and ask for their views to implement the program.[24] A durbar is a gathering of community members for a discussion pertaining to their health or other development issues.[24] The CHO-midwives followed the due process of community entry and sensitization before engaging community leaders and other community members in the skilled delivery program. This was a platform for communities to interact with health workers to establish partnership for the skilled delivery program. In Ghana, community entry and sensitization are integral parts of introducing dialogue and encouraging communal support and cooperation for health programs.

Contributions of community volunteers to the skilled delivery program

Community members usually select community volunteers and the Ghana Health Service trains and deploy them to provide basic health services in their communities. A discussion with community members and health professionals' showed that volunteers took part in a variety of health activities that included weighing of children, health education, and community-based surveillance, administration of drugs for minor ailments. The discussants said communities also referred or accompanied pregnant women to the CHPS compounds for skilled delivery care. Community volunteers have always assisted in providing health services in rural communities, so they should be commended for their active participation in the skilled delivery program. Example responses included the following:

…..“I am involved in weighing in the CHPS compounds or during outreach programs. We hold talks with the women about the importance of skilled delivery care and we often refer or accompany pregnant women to the small hospital [Community Health Compound] for the skilled delivery services.” **(Community Volunteer, Kassena-Nankana East District)**

….“Whenever a woman delivers and I do not hear quickly the TBA brings the date to me to report, I also report to the people at the research centre so that they can get a birth certificate for the baby. So we work hand in hand to help the community.” **(Community Volunteer, Kassena-Nankana West District)**

A review of the CHPS operational policy document revealed that the community/village health volunteers are the core support persons to the CHOs in the communities.[24] Communities usually select their volunteers based on their own criteria and guidance from the health professionals. The qualities of a potential volunteer included being a member or a leader of existing social group(s) and network(s) in the community, a proven record of active participation in communal work; have a good character, possess the spirit of voluntarism, trustworthiness and honesty; long term residence in the community and above all one must be ready to work under the supervision of the community leaders and the sub districts health teams.[25]

Contributions of Traditional Birth Attendants to the skilled delivery services

Health professionals and community stakeholders affirmed that TBAs provided health education to women on the importance of skilled attendants at birth. They also referred or accompanied their clients to the CHPS centers for skilled delivery services. The statements of a CHO-midwife, a Chief, and a TBA capture this transition in the role of TBA’s in birthing:

……“You know, this time we do not even allow TBAs to conduct deliveries. Their duty is to identify and ask the women to come or to accompany women in labor to the facility to deliver. But where the baby is coming and there is no way, when they [TBAs] call we rush there to conduct the delivery and they have been bringing the women to the CHPS Compound for delivery services.” **(CHO-Midwife, Kassena-Nankana West District)**

……. *"I help the nurses by saving women in labor in the night by accompanying them to the CHPS compound for delivery services. During the day, I also take any woman in labor to the small hospital [CHPS compound] to deliver. If a woman is not able to deliver they take the woman and I on a motorbike to "Fari yeri" [Catholic Mission Health Centre] to deliver her. "***(TBA, Kassena-Nankana East District)**

Although some TBAs refer their clients to the CHO-midwives for skilled delivery services, others still provide delivery services, but when they detect a complication, they quickly refer or accompany the women to the CHPS compounds for professional care. Key informants also reported that some TBAs provide delivery services for traditional or cultural reasons. Here are discussants views:

....."*I have delivered so many women; I have also talked to pregnant women to go to the small hospital [CHPS compound] for weighing and also for delivery. Many women now go there for weighing and delivery services."* **(TBA, Kassena-Nankana District)**

....."*There is a man, who is a TBA; it is a tradition in their family since time immemorial. There is juju in their family and if a woman cannot get pregnant goes to that house, they can treat her to get pregnant and deliver a child. Any woman who is in labor and cannot deliver, if they call that man he will come and deliver her."* **(Elder, Bongo)**

Incentives for trained Traditional Birth Attendants and Volunteers

Both the community stakeholders and health professionals said CHO-midwives gave soap or money to trained TBAs and volunteers, who referred or accompanied pregnant women to the CHPS compounds for supervised delivery. Communities also accorded TBAs and volunteers "respect" and "recognition", which is an incentive to them. These issues are highlighted by key stakeholders in the following extracts:

……"*I have used a percentage of the delivery fee to purchase soap and the soap is here; when a TBA or a volunteer accompanies a woman to this place to deliver we give them the soap, they are happy and so, they continue to refer the women."* **(CHO-midwife, Kassena-Nankana East District)**

……"*As a volunteer my community members know that I am also a human being [Community members give her respect] because whenever there is any problem, they come to me. They have raised[honored] me and I now know I am also useful to the community through*

the help I give to people whether a woman is in labor or someone falls sick in the night." **(Community Volunteer, Kassena-Nankana West District)**

….."*For volunteers who bring the women to the CHPS compounds to deliver, instead of giving them soap, we write the volunteers names and at the end of the month we give them two (2) Ghana Cedis. We calculate base on the number of women each person brings and give them the money. So they are actively involved in bringing pregnant women in their first trimester and women in labor."* **(CHO-midwife, Bongo District)**

However, a traditional leader revealed that some TBAs and older women still provide delivery services for a fee. Key informants listed chicken, soap, money, and other items as payment for their services. The following comments illustrate these points:

……"*You know if a woman delivers in your family, you just do not say, "fara, fara" (thank you) to the TBAs or older woman who came and delivered her. No, you have to give her what is traditionally given to her. Some people take chickens and some add other things. But now that the nurses have talked to people and everyone knows the importance of soap, after delivery, one give soap and then add a little money for her to use for other things. That makes them happy."* (**Chief, Bongo District)**

Contributions of traditional leaders: paramount and sub chiefs

The CHO-midwives reported that traditional leaders are involved in the health program activities by providing health education in the communities to ensure that every woman receives skilled care at birth. The chiefs also put bylaws to punish women and their families who refuse to deliver in health facilities.

…"*The chief donated the land for the building of the small clinic [CHPS compound]. We are most grateful for that because we can now send our pregnant women for skilled delivery services without transportation problems." (***Women's Leader, Kassena-Nankana East District)**

……"*If they have any problem that concerns the community and there is need for me to help them get the discussions going, I do it. Especially meetings if they inform me, I also ask the smaller chiefs to announce to their people to come out on the stipulated day to hear what the nurses have for us.-Yes, I do the announcement and then ask the smaller chiefs to also announce to get the information to every section.*" **(Chief, Kassena-Nankana West District)**

….."*The chiefs also educate their people. We held a durbar here and the chief of Katui said any woman who delivers at home will be sanctioned. So the women are very careful not to deliver without the supervision of the trained midwife." (***CHO-midwife, Katui, Kassena-Nankana East District)**

Contribution of the district assemblies to the skilled delivery program

A review of the documents revealed that the district assemblies and constituency representatives have collaborated with the Ghana Health Service to provide infrastructure, social amenities, materials and logistics support to the CHPS program. The District Health Administration has collaborated with the District Assembly for electrification/water source for CHCs without lights and water.[22] Community leaders and health staff confirmed that the District Assemblies built some of the CHCs and assisted in acquiring land and other logistics such as tipper trucks to carry sand, stones, equipment and logistics for the building. Occasionally, the assembly members assisted in organizing the communities for health programs.[22] Key informants stated:

…"*It was the district assembly that gave us the tipper truck to carry sand to the site of the community health compound building and they gave us the masons to work.*" **(Community Volunteers, Kassena-Nankana West District)**

…."*Any time the community had a health issue or it was time to hold a durbar, they gave him [Assemblyman] a letter and he went round to inform stakeholders, opinion leaders and even organize drummers and dancers to perform. He is also responsible for drawing the agenda for the occasion. They also helped in getting land and materials for the building of the CHPS compound.*"**(Elder, Kassena-Nankana East District)**

….."Let me say that I have been able to convince the District Assembly and they have also seen the need to improve on the structure. They have constructed a CHC at Nyangua; there is ANC, delivery, rest room separate from the OPD. They have also provided staff accommodation; so it is a big structure. Now they have finished and handed over to us. The same structure they have put at Korania and they are in the process of handing over to us." **(Head, District Health Management Team, Kassena-Nankana East District)**

Achievements from community involvement in the skilled delivery program

Successful in promoting skilled attendants at birth

Community stakeholders indicated that most pregnant women no longer deliver at home through the collaborative efforts of community members and health professionals. A significant impact of the program is that community members do accompany or refer pregnant women to CHO-midwives for skilled delivery services. The CHPS program is being used to achieve skilled attendants at birth in rural areas of the Upper East region because it has been designed for collaboration among stakeholders with diverse skills and knowledge to promote the program. Both the health authorities and the community members attested that they collaborate to ensure that every woman receives skilled care at birth in rural areas.

....."*Kai!! I do not think there is any woman in the whole of our community who gets pregnant and will not go to the small hospital [CHPS compounds]. No pregnant woman will stay home with her pregnancy."* **(Community Volunteer, Kassena-Nankana East District)**

....."*Women no more deliver at home, they also come for ANC and I have been able to counsel people; education has been improved and people's attitudes have changed. First when I came here a woman won't come to clinic; when it was left with one month for her to deliver, then you would see her coming. Now we have educated them, when a woman misses her period she has to come to the clinic for antenatal care."* **(CHO-Midwife, Kassena-Nankana West District)**

……"At first when a woman was in labor, we got men or women here who would try by all means to bring the baby out, but after the baby came they would not know how to deal with problems associated with the delivery. With the nurses here, after they have delivered a woman, they allow her to rest in the facility till the following day to see if she has any problem. It is now better than when our own people were assisting the women to deliver. So pregnant women no longer have so many problems, it is so helpful since they go to the nurses to deliver." **(Community Volunteer, Kassena-Nankana West District)**

Success in preventing complications or deaths

One important reason for implementing the skilled delivery program is to ensure that every woman delivers safely. In all the three districts, community stakeholders emphasized that a huge benefit from the skilled delivery program was that women no longer suffer complications or die from pregnancy related causes. Here are discussants views:

.....“E!! The biggest benefit is, women used to die during labor, but now because of the help they get from this CHPS program, women no more die during delivery because once the nurses get there, by God’s grace the baby comes out without any problem. It is a benefit, they save lives; they also hold discussions with the women on how to keep themselves until they deliver. It is very beneficial.” **(Community Volunteer, Kassena-Nankana West district)**

*....“Since the trained midwife delivers women in this community, the women are healthy; the nurse gives pregnant women medicine so they deliver safely without any problem. At first it was not so, pregnant women used to suffer during delivery, but now if a woman delivers, they give her and her baby medicine so they are healthy. “***(TBA, Kassena-Nankana East district)**

Success in health education and in addressing the problem of distance

Another achievement is that the CHPS program has solved the distance problem to some extent. A discussion with community and health stakeholders shows that most pregnant women no longer have to travel far to access skilled delivery services. Also health education has helped community members to appreciate the need to seek skilled birth attendants rather than administer potentially dangerous herbal preparations to pregnant women for “safe” delivery. The aim of the CHPS program is to bring health services to the doorsteps of communities to address the distance problem and encourage many more rural folks to access and use health services and this goal is helping to achieve results. Stakeholders discuss the importance of having CHO-midwives in the communities:

……“Whenever a pregnant woman was in labor we did not know how to send her to Bongo health center because of the long distance, but that is no more. Now any time a pregnant woman is in labor, whether day or midnight we can get her to the small hospital [CHPS compound]. If they can deliver her they do it and she goes home; but if they cannot, they call the staff of Bongo health center to come here and send her with a vehicle to Bongo to deliver.” **(Women Leader, Bongo District)**

….“They call meetings and talked to us; they told us we should not keep pregnant women at home and give them concoctions[potentially dangerous herbal preparations] *to drink and we should not prevent our women from going to the hospital. That period is past; we were ignorant, we used to prevent our pregnant women from going to the hospital and we gave them concoctions to drink until she delivered. That is no more done, these days any woman in labor is quickly sent to the small hospital [CHPS compound] to deliver.”* **(Elder, Kassena-Nankana West District)**

Challenges facing the skilled delivery program

Long distances and lack of transportation to CHPS compounds for delivery services

Notwithstanding the successes, the skilled delivery program is still confronted with many challenges. Discussants cited lack of transportation as a major barrier to referring clients to the CHCs, health centre or the district hospital for care. Some community stakeholders mentioned long distances to CHCs as a reason for their non-involvement in the skilled delivery program. Key informants stated:

…… "*It is a problem here during rainy season, how to cross to this place is a big problem; even if you are going to Bongo, there is another river at Balungo. When the river gets full we are cut off. It is only during the dry season we are free. That is why the facility has been sent there. By God's grace we will construct one here. if you want to travel from here; you will sweat [struggle] before you go. There are no vehicles; Bongo which is even bigger has only one vehicle which sometimes breaks down. Our road is also not good. That is the problem so if communities have small hospitals [CHPS compound] it will be helpful to people. Then if it is beyond the nurses they can refer to the big town [District hospital]."* **(Chief, Bongo District)**

Although CHPS brings health services to the doorsteps of the people, some communities are very remote and far from the CHCs so, those affected expressed that CHCs be built in their areas to help them access health care. Though the ideal is to establish a CHC in every village, the cost involved in bringing that about makes the idea impracticable in the short run for the government. This makes it absolutely necessary for community members to curtail their ambitions when making demands on the government. It is not practical to put a CHC in every village, but it is possible to make health services available and accessible to most rural communities.

Lessons learned from community contributions to the skilled delivery program

We wanted to know stakeholders' views about the pilot program that could be useful during the scale up of the program to other parts of the country so we asked them what they see as lessons learned from community participation in the skilled delivery program. Community leaders stated that community members are not "empty vessels", hence they should be involved in solving their own health problems and the only necessary ingredients for strong collaboration among stakeholders are respect, dialogue and cooperation. Discussants believe that community members are the best agents to promote skilled delivery and should be actively involved in the roll out of the program. Community stakeholders described the lessons they have learned from this program:

….."Community members are not "empty vessels" and so should be encouraged at all times to contribute to their health or development needs. The key issues are respect, dialogue and cooperation on the part of communities and health authorities to guarantee community involvement in health programs." **(TBA, Kassena-Nankana East District)**

……"I have learned a lot; when I was a child I saw how women suffered and died during pregnancy and now that the nurses are here, they save the lives of pregnant women." **(Community Volunteer, Kassena-Nankana West District)**

Discussions

Community Participation

This study reinforced and elaborated on findings of numerous studies set in sub-Saharan Africa (and elsewhere) showing the significant contribution community members make to success of community health programs. [16, 26,27,28] Several other authors from Burkina Faso, Tanzania, and Peru have written previously about the decisive role communities play in increasing skilled attendants at birth and reducing maternal deaths in rural areas. [16, 26,27,28] Haines et al demonstrated

how community health workers contributed to high child survival coverage and other health programs and suggested assessing the role community participation play in improving important interventions outcomes.[18]

Traditional birth attendants

Traditional birth attendants have been an integral part of the health system in Ghana. TBAs were initially trained to provide delivery services in rural communities to augment the work of the few skilled professionals in the system. [29, 30] The advent of the CHPS program in rural communities strengthened the collaboration between TBAs and health professionals for the former to refer their clients for skilled attendance at birth. Our results revealed that TBAs do refer or accompany their clients to CHCs for delivery services. This is in line with the findings that if health workers were trained to collaborate with TBAs, the latter would refer or accompany many more pregnant women to health facilities for skilled delivery care.[31] Yousuf et al also reported that a trained TBA will refer a pregnant woman for skilled delivery care after an abnormal presentation, prolonged labor, obstructed labour and excessive blood loss. This is consistent with our results that some TBAs will only refer when there are complications.[30] However, our study is in contrast with a study on the impact of TBAs on delivery complication in Ghana that found that training of TBAs was not associated with client referrals.[30] TBAs in the Upper East region play a significant role in providing skilled delivery care and they should be encouraged to continue to participate in maternity care in rural areas.

Community Volunteers

Community voluntarism is an essential part of health systems in Ghana because volunteers have been used in a number of programs ranging from small to large scale initiatives to compensate for the severe shortages of health professionals and to offer communities the opportunity to contribute to their health needs[7-10-12-14]Our findings indicated that volunteers took part in a range of health activities in the communities that included weighing of children, drug administration for minor ailments, health education as well as referring or accompanying pregnant women to the CHCs for skilled delivery services. Much previous research also underscores the contributions of community health volunteers to health programs. [7-10-12-14] Community volunteers have always play a key role in service delivery in Ghana and should be motivated to continue to partner with health professionals to provide maternity services in rural settings.

Incentives for TBAs and Volunteers

Attempts have been made to motivate trained TBAs and health volunteers for their services in rural communities. The results showed that health volunteers were delighted that community members recognized and respected them for their contribution to the skilled delivery program. The health authorities also gave some trained volunteers bicycles to help them provide the services and that is an incentive to them. In almost all the communities, the CHO-midwives used a percentage of funds generated from the deliveries to purchase soap to motivate women who delivered in health facilities and for trained TBAs and health volunteers, who accompanied pregnant women to the CHCs for skilled delivery care. The results also revealed that in some communities, volunteers are given money as incentives for referring pregnant women for skilled delivery services. Sakeah et al also indicated that volunteers were compensated in kind for rendering services to their communities.[32] The Ghana Health Service and rural communities

should continue to reward trained TBAs and volunteers as partners in health service delivery because these associates are "professionals" in their own right, who provide the services for a fee. Thus, failing to motivate them to provide the services could jeopardize the program. In most instances, these stakeholders weigh the benefits over the losses before they participate in health delivery services. However, incentives for volunteers and TBAs should be in accordance with the traditional tenets of the people and inexpensive to sustained the program. Incentives for volunteers and TBAs should be a collective effort between health professionals and communities. The impact of incentives has been found to positively influence efficiency of public health centers in Ghana.[33] Nevertheless, remunerating community health workers is sometimes difficult for people to do.[34] In many parts of the world, community volunteerism are short-lived because volunteers usually expect compensation for their work, but in most instances the communities they work for are very poor to afford these incentives.[34] The Ghana Health Service, the community volunteers, TBAs and other community members could be engaged in discussions to come up with innovative and sustainable ways to reward the TBAs and volunteers without compromising the implementation and sustainability of the program.

The traditional leaders

Chiefs and elders wield considerable influence in their communities. They are heads of the traditional set up and therefore mediate, arbitrate and supervise development programs in their areas of jurisdiction. The traditional leaders contributed significantly to the execution of the CHPS program because they serve as development advisors by soliciting community support and cooperation for the implementation process. They also served as philanthropists by donating land

and logistics for constructing the CHCs, organized community members for communal labor and also contacted health authorities for assistance for building the CHCs. In most cases, they informed community members to attend meetings and contributed to the discussions at durbars. We believe that community participation was vibrant as a result of the active involvement of these traditional leaders and that confirmed that these leaders are active agents of change in their communities. Our findings revealed that most of the time, traditional leaders initiated the activities of the CHPS program before other community members got involved. This is consistent with a study on ANC coverage and skilled attendance in rural Tanzania that revealed that the Maasai and the Watemi families would not readily accept the need for skilled delivery care without the approval of traditional leaders.[35] In the Upper East region, traditional leaders are the supreme decision makers, who initiate and preside over development projects in their localities. Therefore, it came as no surprise that these leaders contributed both human and financial resources to the CHPS program. Traditional leaders are "agents of change" for the skilled delivery program and should be engaged at every level of the program implementation. The Ghana Health Service should strengthen their relationship with these leaders and engage them to promote the use of maternal health services in rural areas; after all they are the custodians and brokers of their communities.

The political leaders

The political leadership played a key role in implementing the maternal health program. The government has introduced a policy of free medical care for pregnant women under the National Health Insurance Scheme (NHIS) aimed at offering rural women the opportunity to seek skilled

attendance at birth. Majority of women in rural areas have already benefited from this initiative.[36] Also, the CHPS program mostly relied on the district assemblies for support to construct the CHCs and mobilize communities for health programs. Our study reported that the district assemblies built some of the CHCs for the CHPS program and helped in constructing others by some of the resources for the buildings. They also constructed boreholes for clean and safe drinking water for the midwives and connected some of the CHCs to the national electrification program. In many instances, the assembly members organized communities for health talks and also presided over the durbars. It is important that the government is investing in health care in rural areas. This informs the importance of political commitment in promoting health programs and also confirms the need for the Ghana Health Service to continue to involve district assemblies in health programs design, implementation, evaluation and dissemination.

Successes

Health professionals in a collaborative effort with communities provide skilled delivery care to pregnant women to prevent injuries or death of women during delivery. In our conversation with key stakeholders, it was revealed that women no longer suffer complications or die during delivery in rural areas because of the presence of the skilled attendants coupled with community involvement. These results are consistent with findings from an evaluation of community participation in a skilled delivery program in the Upper East region that showed that in areas where community-based agents assisted in supervised delivery, the percentage of deliveries significantly increased and institutional maternal mortality reduced.[37] A study on the reduction of maternal and perinatal mortality in rural Burkina Faso showed that the use of health professionals and community members in providing maternal and child care significantly

increased institutional births and reduced maternal and perinatal deaths.[26] While we need further evaluation to understand the extent to which community participation has impacted on maternal mortality and morbidity in the CHPS zones, based on the results of our study, we still could say that community mobilization is a significant strategy for improving maternal health in Ghana. The presence and services of the midwives in villages coupled with community active role in the program has improved use of skilled attendants at birth and averted many deaths that would have occurred in the hands of unskilled "professionals". Therefore, health professionals must continue to work with local institutions and community members to implement the skilled delivery program to achieve the MDGs 4 and 5 to reduce maternal and infant mortality.

Challenges

The main barrier to skilled attendance at birth was accessibility. Skilled delivery care is free, but community members, who reside far from the CHCs, cited lack of transportation as the reason for not accessing the services and inadequate drugs in the health facilities as a barrier to accessing health care. Mills and colleagues and Abdul et al also observed that lack of transportation and inadequate medicines are obstacles to accessing health care in Ghana and Yemen respectively.[38, 39] However, evaluation of a program on transportation for maternal emergencies in Tanzania demonstrated how the participatory problem solving approach helped to empower communities to solve their transportation problems. Cooperative for Assistance and Relief Everywhere (CARE) and the Centers for Disease Control and Prevention (CDC) worked to build the capacities of villagers to establish their own transportation systems that became a success.[40] We believe that any collaborative efforts among the Ghana Health Service, Non-

Governmental Organizations and rural communities could generate innovative ideas to address the transportation problem.

Conclusion

Community participation is vital in the skilled delivery program in CHPS zones. Community volunteers and TBAs refer or accompany their clients for skilled delivery care, especially where there is strong community participation. The political and traditional authorities, community members, NGOs and other stakeholders provide resources for the skilled delivery program. In community participation, both financial and non-financial incentives are necessary to boost the morale of volunteers, TBAs and other key players, but these incentives should be affordable and culturally acceptable.

Recommendations

- All community members should be encouraged to get involved in the skilled delivery program, but this will only be effective if the different community stakeholders (women and men's groups, traditional leaders, TBAs, community volunteers, political leaders, opinion leaders, religious leaders, etc.) are identified and assigned responsibilities.

- Health professionals should be trained to engage TBAs and community volunteers in collaborative efforts for the latter to refer or accompany pregnant women to health facilities for skilled delivery care.

- Untrained TBAs and older women should be identified and encouraged to refer or accompany their clients to the health centres or CHPS compounds for skilled delivery care and they should be motivated as and when they accompany their clients for the skilled

delivery services.

- The Government of Ghana should improve the transportation system, communication, health infrastructure, personnel, and drugs and strengthen the monitoring and referral system to improve health service delivery in rural communities.

- Rural communities should be encouraged to establish their own transportation systems to convey pregnant women to CHPS compounds and health centers for maternity services.

- The Ghana Health Service should assign vehicles to the CHPS program to ensure that pregnant women with complications are promptly referred to the next level for care.

- Volunteerism is free, but both the health authorities and community members could provide incentives to motivate volunteers for their services.

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