Community-Based Health Planning and Services: 
An Investigation into Community Involvement and Participation -
The Case of Volta Region, Ghana

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ABSTRACT

The Ghanaian health system over the past two decades has gone through a series of reforms since the declaration of Alma Ata in 1978 in order to cope with the challenge of ensuring a healthy and productive population that reproduces itself safely (5 Year Programme of Work of POW), 2007 – 2011) with dwindling health care professionals. Notable among these reforms is decentralisation of health care services to the community level. The purpose of this study was to improve geographic access to health care to the majority of the population of the country through community involvement and participation in planning and delivery of services with the view to ensuring sustainability. Hence the adoption of the Community-Based Planning and Services (CHPS) Initiative in 1999 by the Ministry of Health from the Navrongo Health Research Centre. The purpose of this study was to investigate the utilisation of CHPS services. Explorative qualitative method was employed in this study. Target population were providers and health care managers from the public sector at the sub-district, district and regional levels. Two districts Akatsi in the south and Jasikan in the northern sector of the region were purposively selected, whilst the CHPS zones were randomly selected. Sample size was 23 service providers and health care service managers who were purposively selected. Findings were lack of community involvement in the planning and service delivery, inadequate and irregular supplies, inexperienced staff, poor quality of service and weak supervisory system. Recommendations are that, Community involvement and participation should be included in their curriculum of training, female community health nurses should have post basic midwifery training to help address poor quality service and supervisory system should be strengthened at the periphery.

Keywords: Community-Based Health Planning and Services, Community involvement and Participation, Community Health Nurse, Sustainability

1. BACKGROUND

At the base of the healthcare system, the Ministry of Health, Ghana through its agency, the Ghana Health Service, runs a system of “close-to-client” health services based on a strategy dubbed “Community-Based Health Planning and Services (CHPS). The CHPS initiative was adopted from an experimental study by the Navrongo Health Research Centre into a programme of national community health care reform that sought to improve the geographic accessibility, efficiency and quality of health care and family planning (Binka, Nazzer & Philip, 1995).
Both the Navrongo experiment and the CHPS programme were response to the longstanding policy originating from the 1978 Alma Ata Declaration of “Health for All by the year 2000”. Since the declaration, the Ghanaian health system had experienced a number of reforms in a bid to reducing the high infant and maternal deaths. However, improving access to health care delivery to majority of the population which still remains a central goal of the country’s health sector, seemed to be eluding the Ministry of Health and its agency, the Ghana Health Service. Various campaigns had been launched in the mid1980s to early 2000 with the view to promoting childhood immunization, disease eradication or to mobilize community volunteers to support the efforts of the frontline health workers. Unfortunately, none of these activities had been integrated into more general policies of reform, and the provision of sustainable community health services had not progressed in the country (Nyonator et al., 2005). The CHPS programme is therefore, yet another attempt to mobilizing community action for sustainable Primary Health Care (PHC) concept.

Community-Based Health Planning and Services (CHPS) is defined as a process of strategic planning and implementation of PHC activities within a community with full involvement and participation of community members. The process emphasized preventive health care and education through effective communication and community mobilization. It is the mobilization of community leadership, decision-making systems and resources (both human and material) in a defined geographic area, placement of re-oriented frontline health workers, known as Community Health Officers (who are mostly Community Health Nurses), with logistics support and community health volunteer system to provide services according to PHC principles of Equity, Accessibility, Effectiveness and Efficiency (MOH, 2005).

CHPS is said to have a great potential for improving the health status of majority of Ghana’s population that reside in the rural, hard-to-reach and peri-urban settings and also maximising the investment of the health sector, if not liberating the oppressed so to speak, if the community’s input in planning and implementation of health programmes that concern them is recognized by both policy makers and implementers of such programmes at the community level and handled as such.

2. PROBLEM STATEMENT

Majority of stakeholders believed that CHPS is a good strategy that provides services in rural and hard-to-reach communities in the country and that it should be sustained. However, ever since the operationalization of the concept was started in the Nkwanta District of the Volta Region in 2001, the principle of community involvement and participation for sustainable health care services for the targeted sectors of the population has not been visible in addition to issues of funding, logistics, human resource deployment and skill mix for the CHO’s that are of relevance to basic health needs of the community as well as capacity building of CHOs in midwifery, which need review and re-examination in scope and content to help carve out solutions to the health needs of the rural dweller.

Over a two-decade period of adoption of CHPS strategy, the question is, how well has the principle of community involvement and participation for sustainability of quality health services to the people in deprived areas of the country been implemented. This study therefore sought to investigate the level of community involvement and participation component of the CHPS programme in the Volta Region of Ghana.
2.1. Purpose of the Study
Purpose of the study was to investigate the level of community involvement and participation in CHPS programme in Dzogadze and Guaman CHPS zones in Akatsi and Jasikan Districts of the Volta Region of Ghana in order to provide evidence for policy decision-making.

2.2 Objectives of the study
The main objective of the study was to investigate the level of community involvement and participation by the Ghana Health Service in CHPS programmes in the Dzogadze and Guaman CHPS zones.

The specific objectives were to:
1. Assess the level of community involvement and participation in the planning and implementation of CHPS programmes in Dzogadze and Guaman CHPS zones
2. Assess the effects of non-involvement and participation for sustainability of CHPS in the Dzogadze and Guaman CHPS zones.

2.3 Significance of the Study
• The findings of the study might provide avenue for improvement of healthcare services communities
• Improve general health status of the population at the community level by involvement and participation of communities in community-based programmes.
• Provide evidence for policy review and implementation of community-based programmes for the greater benefit of communities in future.

3. METHODOLOGY

3.1 Research Design
Mixed method approach was used for explorative qualitative strategy and descriptive quantitative strategy. The qualitative strategy was used to gather information from the direct service providers, healthcare managers at CHPS zones, sub-district, district and regional levels in a purposive sample. The descriptive quantitative method was used for the quantitative aspect of the research. Therefore; in the current study, descriptive quantitative method was employed to gather data from the mothers of children under five years of age. In this method the researcher gathered data using a structured questionnaire about the utilisation of Community-based Health Planning and Services (CHPS) in Dzogadze and Guaman zones in Akatsi and Jasikan Districts in the Volta Region of Ghana.

3.2 Research Contexts
The current study was conducted in a community-based setting (Appendix A). The Volta Region, one of the ten administrative regions in Ghana, is located in the eastern part of Ghana and it is divided into fifteen administrative districts with Ho as its capital. It shares boundary with the Northern Region to the north, Brong Ahafo, Ashanti and Eastern Regions to the west and Greater Accra Region to the south-western part, the Gulf of Guinea to the south and the Republic of Togo to the east. It has coastal savannah type of vegetation in the south, rainforest in the middle belt and the northern savannah type of vegetation in the northern part. It has two main seasons; rainy season and dry season.

The rainy season has two peaks. The heavy rains come off between April and July with the peak in June. The second peak comes off between August and November. The dry season is preceded by the dry Harmattan winds, which are very severe in the northern part of the region and starts from the latter. It starts from the latter part of December to January and terminates into the dry season which lasts till March.
The Volta Region has a population of 1,901,179 (GHS, 2008). Women in fertility age formed 23.3 percent (442,975) of the total population; expected pregnancies and infants 0-11 months old form 4 percent each (GHS, 2008). It has 340 healthcare facilities made up of 24 hospitals (including mission and private); 157 health centres; 76 clinics; 20 maternity homes; 2 polyclinics and 61 CHPS compounds (GHS, 2008).

3.2.1 Dzogadze CHPS Zone
The Dzogadze CHPS zone is a cluster of eleven villages situated in the northern part of the Akatsi District. It is about twelve kilometers away from the District capital where the District Hospital is located (Appendix A). It is one of the nine CHPS zones of the District. It is made up of eleven communities namely Dzogadze, Kuigba, Dafornyame, Agbanukofe, Gilkome, Mamedo, Glamatame, Akukorme, Torgodo, Fetoesime and Glagokofe. The Dzogadze community is the centre for the zone. The vegetation of the area is mainly savannah grassland interspersed with shrubs. The zone is poorly served with road network. The only road is an untarred feeder road which becomes immotorable in the rainy season. The means of transport in the community is motor bike.

The population of the zone is 117,085; expected pregnancies are 4,684 (4 percent) women, children 0-11 months are 4,684 (4 percent) and under-fives were 27,061 (23.3 percent) [GHS, 2008]. The people are mainly subsistence farmers. The major food crops are tubers such as cassava and sweet potato, maize, legumes and vegetables. There are also a few formal sector workers who are mainly teachers. The zone has four primary schools and two junior high secondary schools. Their sources of water were mechanised borehole, shallow wells and stream. The people are Ewes and language spoken in the area is Ewe.

3.2.2 Guaman CHPS Zone
The Guaman CHPS zone is one of the six CHPS zones of the Jasikan District. It is located in the north eastern part of the district. It shares boundary with the western part of the Republic of Togo to the east, and Kadjebi District to the north and to the south is Jasikan. It is about seven kilometers away from the district capital, Jasikan. The zone is made up of four communities thus: Guaman, Attakrom, Guaman Odumase and Krorokpa. Its vegetation is forest interspersed with savannah grassland. The people are mainly farmers who practice subsistence farming. Crops cultivated are cash crops which are cocoa, sheanuts and cola nut, food crops such as tubers (cassava and yam), cereals such as maize, sorghum, guinea corn, millet rice, plantain, legumes, and vegetables. Their sources of water supply are borehole, shallow well and stream. There are three basic schools (two primary schools and one junior secondary school in Guaman); The people are Guans, Ewes and Kotokoli. The main languages spoken in the area are Ewe and Guan. The district had a population of 134,332. Women in fertility age formed 23.3 percent (31,300) of the total population; expected pregnancies formed 4 percent (5,374); 0-11 months 4 percent (5,374) and under-five years formed 23.3 percent (31,300) [GHS, 2008 and 2009].

3.3 Target Population
These are mothers of children under five years old, CHO (direct service providers in the programme), Community health volunteers and community health committee members and health care managers of both district and regional levels. The CHO is a Community Health Officer who is a Community Health Nurse who has been re-oriented to provide essential health care services at the community (rural) level and he/she is resident in the CHPS compound (Botma, Greeff & Wright, 2010: 124).
3.3.1 Sample Size and Sampling Technique
The two CHPS zones and mothers of children under five-years old were randomly selected by use of random sampling. The CHPS zones were selected by balloting thus: names of the CHPS zones were listed on a sheet of paper on district basis. Each district list of CHPS zones was then written on small pieces of paper. The pieces of paper were folded and mixed and tossed separately and selected by using balloting, whilst the mothers were selected by using the multi-staged sampling as illustrated in 3.4.2 below. However, a non-probability purposive sampling method was used for the selection of the following participants: Regional Director of Health Services, Deputy Director of Nursing in charge of Reproductive and Child Health, Regional CHPS Co-ordinator, District Directors of Health Service, District Public Health Nurses, District CHPS Co-ordinator, Sub-district Health Team Leader, Community Health Committee Members and Community Health Volunteers in the programme and Community Health Officers. A total of 588 participants including 565 mothers of under five-year old children and 23 health care providers and mangers.

3.3.2 Sample Size Calculation of Healthcare Consumers and Pregnant Women
The sample size for healthcare consumers and pregnant women was calculated using the formula (Daniel, 1999; Cochran, 1977) below. 
Thus:

\[
 n = \frac{Z^2 \cdot p(1-p)}{d^2 \cdot \text{deff}}
\]

Where: 
- \( n \) = sample size 
- \( Z \) = z score at \( 1-\alpha/2 \) confidence level 
- \( P \) = the estimate of the proportion of the population that has a particular characteristic. 
- \( d \) = largest difference of the estimated proportion that could be accepted in the research 
- \( \text{deff} \) = design effect which is always between 1 – 2.

The study assumed that at least about 90% of the inhabitants of Dzogadze CHPS zone in Akatsi used CHPS services. Hence p was assumed to be 90%. The study also assumed a confidence level of 90% and acceptable margin of error was 5%. Since the population size is large that is 117,085 (projected population of the district of 2008 using a growth rate of 4.4%) no adjustment was made.

Thus:

\[
 n = \frac{(1.6445)^2 \cdot 90\% \cdot (1-90\%) \cdot 2}{(5\%)^2}
\]

\[
 = \frac{(1.6445)^2 \cdot 0.9 \cdot (1-0.9) \cdot 2}{(0.05)^2}
\]

\[= 194.7 \approx 195\]

Therefore Dzogadze zone: 194.7\( \times 1.9 = 369.9 \); approximately 370, Guaman zone: 194.7\( \times 1.7 =330.99 \); approximately 331. However for purposes of generalisation, the sample size was rounded up to 370 and 331 for Dzogadze and Guaman, but the study was able to interview 292 and 273 respondents for Dzogadze and Guaman respectively. In addition 23 service providers and health care managers at both district and regional level who were involved in the CHPS programme. Therefore, the total sample size was 724, but the coverage was 588 (81.2%). (iSTEAMS, 2016 ).
3.4 Data Gathering Procedure
The method used for the data gathering was by self-reporting and review of existing data on maternal and child health record. Each respondent was given a detailed explanation of purpose, objectives and relevance of the study. They were also informed about benefits that would accrue to them as community members. They were assured of anonymity and confidentiality of information given including the voluntary nature of participation in the study. Thereafter, they were made to sign informed consent as and when they agreed to participate in the study and the researcher also signed as well. Structured questionnaires were administered to the mothers; whilst interview guides were used for community health volunteers and community health committee members in Ewe; which is the local language, but the CHO's and management were interviewed in English. After each interview the responses were read out to check on correct response and completeness.

A multistage approach was used for the data gathering. With the community level data gathering, the houses were numbered and listed. The numbers so listed were each written on a piece of paper. The pieces of paper were then mixed and tossed and one picked out of the lot. The number picked this way became the first house started with. Thereafter, keeping to the right direction of the first house, the subsequent houses were selected in a concentric manner. This procedure was used throughout the whole data gathering process in the two zones. However, the service providers, volunteers, committee members, sub-district leaders, District and Regional level respondents were purposively selected.

3.4.1 Data Gathering Tools
Structured questionnaire was used for the mothers. It was made up of four sections thus: Section A: Demographic characteristics of the respondent; Section B: Knowledge of CHPS initiative in the respective community, Section C. Utilisation of CHPS services and Section D. Community participation. Interview guides were used to collect data from community health volunteers, community health committee members, CHO's, Sub-district Health Team leaders, District CHPS Co-ordinator, District Public Health Nurse, District Director of Health Services, Regional CHPS Co-ordinator, Deputy Director of Nursing Services in-charge of Reproductive and Child Health Service and Regional Director of Health Services.

3.4.2 Inclusion and Exclusion Criteria
Mothers with under-five year old children who reside in the study communities not less than six months at the time of the study and were willing participate were selected. Healthcare service managers and staff who were technical staff and managers at the regional, district, sub-district, CHPS zone at post time of the research and were willing to participate were selected. Then only members of community health committees and community health volunteers the study communities who were willing to participate were selected.

3.5 Ethical Consideration
The research proposal was submitted to the Ethical Review Board of Noguchi Memorial Institute of Medical Research, College of Health Sciences, University of Ghana, Legon for ethical clearance. Permission was also sought from the Volta Regional Director of Health Services and the two District Directors of Health Services through School of Nursing to allow the study to be undertaken in the two selected CHPS zones. A written informed consent of the respondent was sought after explaining the purpose of the study what should be expected as a participant to them. This was done after permission was sought from the respondent’s spouse or landlord/landlady where necessary. At the end of each session the questionnaire was checked for correct response and completeness by reading the responses out to the respondent. She was then thanked for her co-operation and participation.
The quantitative data gathered from the mothers, were entered and sorted out in Excel and imported into Statistical Package for Social Sciences (SPSS) version 16.0 for analysis. Percentages were computed for utilisation of the various maternal and child health services and displayed in frequency tables and graphs. Additionally, cross tabulations and statistical testing were done to find associations between variables. The second part of analysis was the qualitative data analysis. Qualitative data were coded was used on the data gathered using the guiding questions. The data were grouped according to the interview guide and organised into themes. They were then analysed using content analysis approach and according to thematic areas and quotes made accordingly to reflect the emphases of the respondents. It is worth noting that this article is based on the qualitative data.

3.6 Validity and Reliability
To ensure validity and reliability of the data collection tools were subjected to peer review, review by supervisors, other lecturers who were experts in the content. Pre-testing of the data gathering tools was done. Ambiguities detected were corrected to clarify understanding of the tools.
4. RESULTS AND DISCUSSION

4.1 Lack of community involvement and participation in the establishment of CHPS in both communities

This study revealed that Dzogadze and Guaman communities were not involved in the decision of the establishment of the CHPS zones. Therefore they did not have any input in the decision-making concerning their health needs.

One Community Health Committee member said

“.....The DHMT brought us the news of construction of clinic which is to be funded by the District Assembly made us happy, this encouraged us to embrace the CHPS programme. We also supported the construction of the CHPS compound with communal labour and workmanship was paid by the Assembly. The beginning of the CHPS programme was the construction of the clinic.”

4.2 The idea of CHPS was imposed on the communities by the DHMTs (ISTEAMS, 2016).

One of the respondents at the District level said:

“...........We have asked the Dzogadze community to complete the CHPS compound; which was started by the District Assembly, they are also looking up to the Assembly to complete it for them.”

This study revealed that community members of Dzogadze and Guaman CHPS zones were not involved in the decision-making process for the establishment of the CHPS zones. They did not have any input the decision-making concerning their health needs. Studies have shown that involving community members in health programmes at community level enhances utilization of community-based programmes. It is said that assumption of responsibility by community for their socio-economic development needs and well-being and resolution to get involved in developing the capacity to contribute to solving their own health and health-related problems is paramount (Chekki, 1979). Ultra-modern health facilities were left to rot because of the non-involvement of communities in the planning stage of such projects to sensitize them before they were put up (Bautista, 2001). Similarly, Dzogadze CHPS compound might be left to rot as a result of not involving the community to participate in the decision-making and planning and implementation. The same applied to the Guaman CHPS zone which the community was not willing to maintain the building and even support the CHOs. On of the respondents said:

“......the community did not want to see to the maintenance of the building any time we approach them. The building is deteriorating”.

The Guaman CHPS compound would be left to rot because the community was not involved in the decision-making just as it happened in the case of Dzogadze. Bottom-up approach adopted in community-based programmes was the most important contributing factor in the success of such health programmes as revealed by other studies in Sub-Saharan Africa (Kipp et al., 2001).

1. A segment of community’s health needs not being met by the CHPS programme.

Additionally, it was observed that; in Dzogadze they were perceived as not being impressive in their performance. They intimated that services provided by them were mother and child focused, to the neglect of other potential healthcare service users in the community. This implied that they were not satisfied with the services of the CHOs’. One of the respondents in Dzogadze said:
“....The nurses were very young so they could not help with the health needs of the community. They only concentrated on the children by giving immunisation and weighing them.” “.......It is the adults who take care of the children, yet they are not cared for in the CHPS programme. The adults would have to work to get money to care for the children, where would the money come from to care for them when the adults fall sick and cannot be cared for in the community? We also need to be attended to in the CHPS programme, at least if nothing at all we should be educated on what to do not fall ill unnecessarily. We need nurses who would care for us not only children” One of the CHO's said:

“............We only provide growth monitoring, Family Planning and immunisation to the children in the communities. So I think we do not meet their needs to their expectation.”

In Guaman CHPS zone, the CHO's said that they were not taught in school during their training to involve communities they served in planning of health programmes, let alone giving feedback to them on their work performance. This was corroborated by their managers who were involved in the management of the programme in the region. Services provided by the CHO's to the community did not meet their needs as such the services were perceived as poor. This finding is in agreement with those of a study conducted in Assin District, in the Central Region of Ghana (Aniteye, 1998).

One of the respondents in Dzogadze

“....The nurses were very young so they could not help with the health needs of the community. They only concentrated on the children by giving immunisation and weighing them.” This finding was identified as an important predictor for health service utilisation and community support for the programme and sustainability, where there is an element of ownership. Studies conducted in Vietnam and Western Uganda were supported by this finding (Hong, Dibley and Tuan, 2003; Kipp et al., 2001). Bottom-up approach adopted in such programmes is the most important contributing factor in their success. (Kipp et al., 2001). This situation could be problematic for the future of the programme (Adeyemo, 2005; Egboh, 2005; Adah et al. 2008).

4.3 The CHO's did not involve community members in health programme planning and service delivery.

4.4 No feedback to communities as to progress of work

One of the CHO's said:

“.......We have not been taught to do that; even if we do it at all I don't think they will understand.”

Another respondent said:

“.......In fact, to tell the truth, we have never made any attempt at doing it, because we were neither taught in school nor on the job by the DHMT. It did not even occur to us that this could be done.”

Community involvement is said to be a great challenge to health professionals as facilitators. However, it is the way to effect community self-determination, which is essential to human dignity and growth. On this premise, therefore, initiation, planning and organization of services, programmes and encounters be designed at community level for every member to assume a meaningful role (Chekki, 1979) towards success and sustainability of such programmes and ownership of it and support in the spirit of self-reliance. (Kipp et al., 2001). This had not been the case in the two CHPS zones; even though the Dzogadze zone was supposedly said to be started on this concept, it was not sustained. This could be problematic for the future of the programme. In Guaman CHPS zone, the CHO's said that they were not even taught in school during their training to involve communities they served in planning of health programmes and even giving them a feedback on their operations in the zone.
This was corroborated by the regional managers who were involved in the CHPS programme in the region. It was said that the programme was taken to the communities without involving them. This finding agreed with the findings of a study in the Assin District in the Central Region of Ghana (Aniteye, 1998). According to Adeyemo (2005), utilisation of community-based health care could be enhanced by harnessing local knowledge and resources to complement those provided by the formal healthcare system. That community-based healthcare utilisation impacted positively on the overall health sector investments as a result of community involvement in health and health-related decision-making at the community level. Additionally, health education of the community on services available through involvement of community members had been described as one of the strategies that facilitated utilisation of the services. This invariably informed decision-making with regard to the healthcare with active community involvement, and participation in healthcare programmes. In furtherance to this observation, it was concluded that through the community’s involvement, it would be well positioned to monitor the quality of services being provided. Active community involvement and participation in healthcare programmes would invariably be brought by informed decision-making with regard to healthcare.

According to Adah et al (2008), advocacy and community mobilisation were found to be the most important strategies which led to the increasing and sustained utilisation of the services in Gidiri Comprehensive Health Centre, in Nigeria. In summary, for at community level by community members called for bottom-up approach which required vigorous sustained community mobilisation and advocacy to build up a sense of ownership among the people and allowed it to work by always involving them to give an input in the decision-making and planning processes in their health needs instead of the traditional top-down approach to policy-decisions regarding the health needs of the community. Community involvement promoted participation and a sense of ownership which led to sustainability and facilitated utilisation of healthcare services in some countries in sub-Saharan African countries and some South-east Asian countries (Adah et al., 2008; Egboh, 2005; Baustista, 2001; Kipp et al.). This study had therefore, revealed that community involvement and participation had been neglected in the CHPS programme in both zones.

In conclusion, this study has revealed: Neglect of community involvement and participation in the CHPS programme, Community input is necessary for decision-making in CHPS, Improvement in the health status of the rural and hard-to-reach communities called for bottom-up approach, Sustained community involvement and participation, and advocacy to build up a sense ownership is paramount, The traditional top-down approach to policy-decisions is not working in CHPS, there is therefore, the need for change. Key element in the success of CHPS is the recognition of the community needs and existing community resources in relation to policy-decisions and approach to implementation and monitoring. Community involvement promotes participation and a sense of ownership, sustainability of health programmes and projects.

5. RECOMMENDATIONS

1. Community involvement and participation be undertaken from start of health programme at community level
2. CHOs be well equipped with requisite skill mix relevant to the needs of the people
3. Community involvement and participation be included in the curriculum for training the public Health Nurses and Community Health Nurses
4. Public Health Nurses with midwifery background be deployed to sub-districts to supervise service providers in CHPS zones.
6. LIMITATION OF THE STUDY

The results of the study cannot be generalized to cover the whole of the Volta Region, because only two districts out of fifteen were covered. However, the results could be used to inform management and policy decisions across the region.

REFERENCE
