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Seeking new understanding of primarycare policy constraints: A qualitative assessment of health workers and community perspectives on the role of communication in the implementation of Ghana's national community health policy

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Seeking New Understanding of Primarycare Policy Constraints: A Qualitative Assessment of Health Workers and Community Perspectives on the Role of Communication in the Implementation of Ghana‘s National Community Health Policy

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Dedication

I dedicate this work to my wife, Gifty Johnson and our two children Harry Nbobe Aboba and Ndaanama Elise Aboba. They gave me the strength and motivation to complete this project. The last two semesters of my graduate school (Fall semester, 2020 and Spring 2021) which I spent working on the proposal and then the rest of the study were particularly difficult times for them because of COVID-19. When the whole world was virtually under lockdown and we had to redesign the house for all purposes, teaching from home, taking classes and conducting this study meant that I needed the house to be quiet and less distractive most of the time. This deprived them of space and play time. Through their patience and support however, we made things work.

I am grateful for their sacrifice!

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ABSTRACT

Ghana has been implementing the Community-based Health Planning and Service (CHPS) initiative as a national health policy for over twenty years. The CHPS program is designed for delivering Primary Health Care services to under-served populations who mostly reside in economically poor and hard to reach locations. Over the years studies looking at various aspects of the operation of the policy have found that community members and other stakeholders lack proper understanding of the program. This study analyzed qualitative data collected in two districts in Northern and Volta Regions of Ghana to assess health workers and community members' perspectives on the role of communication in the implementation of the CHPS policy. The study utilized Airhihenbuwa (1989) PEN-3 cultural model as the framework to evaluate the cultural relevancy of communicating and delivering the program. The study found that CHPS is framed around the relationship and expectations domain of the PEN-3 model and that communication plays a significant role in CHPS implementation as core activities for initiating decisions, planning and delivery of health services involve communication processes including community engagement and participation and dissemination of best practices. The study makes key contribution to the PEN-3 cultural model for evaluating community based health interventions. For advancing policy and program development it recommends the strengthening of communication processes in CHPS scale up for sustainability and effective implementation of the policy.

1. INTRODUCTION

I.1. Background on Community-based Health Planning and Service Program

The Community-based Health Planning and Service (CHPS) program currently being implemented in Ghana was adapted in 1999 as a national health policy designed to address health care access challenges in economically poor and geographically inaccessible locations (Awoonor-Williams et al., 2013; Nyonator et al., 2005). CHPS aims to provide integrated primary health care services such as immunization, treatment of diarrhea diseases and non-complicated malaria as well as education on good nutrition, family planning although maternal and child health services makes up the greatest proportion of the services delivered at the CHPS facilities (Akazili et al., 2011; Binka et al., 2007; Nyonator et al., 2003; Pence, 2002). The CHPS policy has a long history that links back to the 1978 Alma-Ata Global Health Conference – which culminated in the declaration of "Health for All" by 2000 (Awoonor-Williams et al., 2013). In the years that ensued after the declaration of Alma-Ata, Ghana began looking for an appropriate health system model for supporting the delivery of community-based primary health care services to the rural population (Agyepong &Marfo, 1992). Despite having made a lot of progress in increasing access to health care services to many parts of the country through CHPS in the last two decades (Labhardt et al., 2010), Ghana still ranks poorly in a number of important health care indicators. For example, the country's maternal mortality rate is 319 per 100, 000 live births and the neonatal mortality rate stands at 25 deaths per 1000 live births (Lozano et al., 2011).

In 1994, a field unit of the Ministry of Health's research division located in Navrongo in the Northern part of Ghana, launched a pilot study called, "The Community

Health and Family Planning project" (CHFP), to understand factors accounting for the persistent failure of government programs to provide effective reproductive health and family planning services. The findings of that investigation included a criticism of the culturally inappropriate communication themes such as the connotation of "limiting" births contained in the concept of family translated when translated into local dialects (Binka et al, 1995). As a society that places a lot of value on large family size community members did not embrace the concept of family planning. Additionally, the investigation also led to a call for a community-based integrated health service model that provided more information on all aspects of health care services (Binka et al, 1995). For example, women did not like the idea of visiting the care provider solely for family planning; they wanted an integrated service model that allows them to access multiple services when they visited care providers. Participants in the study were also concerned that distributing family planning products as stand-alone services through village health volunteers made the service not attractive to potential users. By distributing family planning products as stand-alone services through village health volunteers it was easier for family members and neighbors to predict which woman was accessing family services in the community. Considering that there was community resistance to family planning (with a lot of men not wanting their wives to use FP) leading to stigma, the idea of the village volunteer being the main provider of the services made family planning all the more unattractive to women.

In this regard participants thought family planning was poorly promoted. The lack of cultural sensitivity in messaging about family planning fostered apprehension towards utilization of family planning products and services among the local people. As remedy,

participants suggested integrating family planning services with other health care services such as Ante-Natal and Postnatal, immunization and other services being provided directly by trained health officers. Clarifying the messages and integrating the services it was thought would make family planning attractive to the community members and increase utilization of other services. Additionally, for women who may need to hide their intentions to use family planning from their spouses, accessing these services with other health services made it easier for them to maintain their agency, privacy and safety (Binka et al., 1995).

The pilot Community Health and Family Planning project (CHFP) which later became known as the Navrongo Project was successful in meeting its fundamental objective i.e., to contribute to the Ministry Health's efforts towards finding a strategy for delivering primary health care to rural communities, especially family planning services (Nazzar et al. 1995). The project's results led to re-organization of clinic-based family planning services for rural communities. For example, clinical nurses were reoriented into community health care nurses and placed in the rural areas to reside and collaborate with the community members in planning, organizing and delivering healthcare services as a way to improve community acceptances of the services provided. Three years after the district-wide scale of the pilot program, Debpuur et al (2002) reported that the activities of the CHFP led to a significant increase in awareness among community members not only about the benefits and types of family planning products but also about where to obtain them. According to Debpuur and colleagues the CHFP program also influenced a shift in women's decision and interest in limiting the number of births. The study also reported a 15% overall reduction in fertility in the area where CHFP provided

services. The adoption of the CHPS strategy as a national primary health care policy followed the rate of success of the CHFP pilot and the equally successful subsequent plausibility trial (Nyonator, 2005 & Krumholz et al., 2015).

Following the success of the CHFP and its subsequent pilot in addressing culturally inappropriate communication themes previously used under different programs by the ministry in the promotion of family planning services (Binka et al, 1995), CHPS program was developed. CHPS uses an integrated approach for providing community care services and incorporates community values and collaboration in the promotion of health services. This included strong community involvement and participation, and the training and equipping of Community Health Volunteers (CHVs) to work with trained community-resident frontline health staff called Community Health Officers (CHO) (Binka., et al 1995). Since CHPS rolled out as a national policy, many studies have documented the program's successes including its ability to increase geographic coverage and decrease economic barriers. Such expansion in access to health care has contributed toward improving the health of the rural population (Awoonor-Williams et al., 2004; Awoonor-Williams et al, 2005; Nguyen, Rajkotia, &Wang, 2011). At the same time, other evaluations have reported some challenges in the policy's implementation. For example, Kushito (2019) found that community members across various districts in the Northern and Volta Regions (See fig 1&2 for map of Ghana show regions) had poor understanding of what the policy covers. Some participants in study called for an overhaul of the program by posting trained medical officers at CHPS zones in order to provide medical services such as blood transfusion, caesarean operations and other advanced medical services. Similarly, Awoonor-Williams et al. (2011; 2019) found

evidence of lack of proper understanding of the CHPS policy by some District Health Directors. Awoonor and others (2011; 2019) also noted concerns of financial resources gaps, management gaps as well as technical gaps in delivering the program. Other assessments of the CHPS program found that in some places, implementation of the policy after the scale up, produced contrary findings compared to the Navrongo experiment from which the CHPS policy took its roots (Awoonor-Williams et al., 2013; Awoonor-Williams, Vaughan-Smith, & Phillips, 2010; Binka et al., 2007; Nyonator, Awoonor-Williams et al., 2005& Phillips et al., 2006).

Figure 1: A previous map of Ghana when the country had ten administrative regions. Ghana now has sixteen regions following a re-demarcation of regions in 2018.

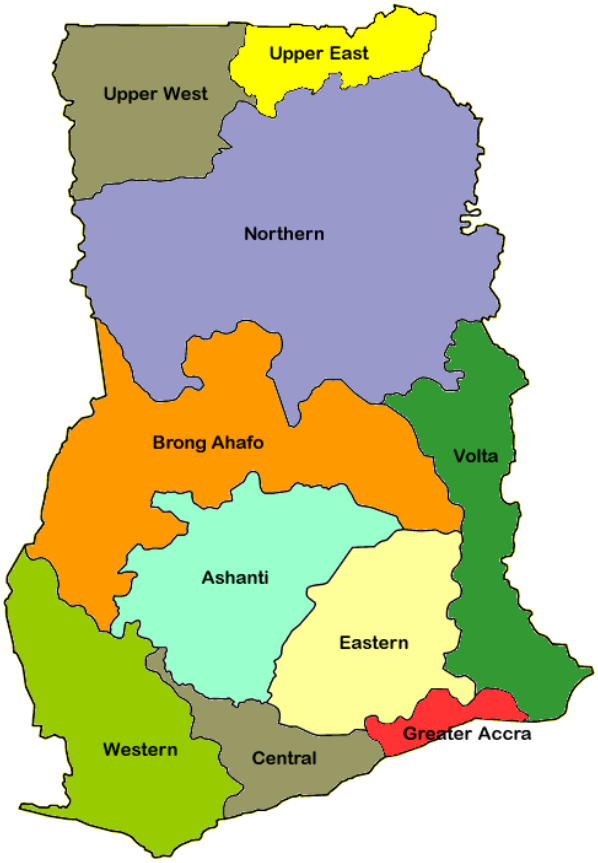


Figure2, a new map of Ghana showing names of regions and capital cities of the current sixteen regions.

1.2. CHPS and Gaps for Communication Research

Although CHPS policy is said to be built on cultural sensitivity and appropriateness communication strategies (Nazzar et al, 1995), there are hardly any publications that examine CHPS from a communication perspective. In health communication, Kreuter (2003) notes that health programs should foreground sociocultural systems to assess the cultural appropriateness of a program by embracing the norms and beliefs of the community when messages are developed about a particular service or health issues. For example, the CHPS policy is designed essentially as a shared initiative that relocates health care services from urban and suburban locations to rural locations where the life and socio-economic activities and interactions of the people are governed largely by the social institutions and traditional systems and cultural beliefs (Krumholz et al, 2015; Phillips et al, 2012; Nazzar et al, 1995). That means that the appropriate cultural-based health communication strategies are necessary in the design, implementation and evaluation of the intervention. This omission of exploring the essential role of communication in the CHPS policy design and implementation may be an indication that designers and implementers of the policy conceived it as simply a public health activity. In other words, family planning messages become more important than how these messages are communicated and how they are delivered to the community. This is one of the major areas that point to the relevance of communication theory and practice in the program. Secondly, since CHPS is a policy that serves to deliver integrated primary healthcare including family planning services, antenatal and delivery services, postnatal services as well as immunization among some other services in rural Ghana (Adongo et al., 2005; Adongo et al., 2012; Akazili et al., 2011; Bawah et

al., 1999; Bawah et al., 2010; Bawah et al., 2019; Debpuur et al., 2002; Doctor et al., 2009; Philips et al., 2006), the strategies used to reach out to communities and stakeholders, the quality of interactions and relationship between health workers and mothers is dependent on communication processes. In this regard, ultimately programs such as CHPS which seeks to deliver primary healthcare including family planning services, antenatal and delivery services, postnatal services functions similar public health communication that uses campaigns to disseminate health information, education and health promotion the difference being that here health providers are the main sources for transmitting the information through their routine public and community engagement activities (IOM, 2006).

In further demonstration of the relevance of health communication theory and practice in CHPS, the policy recognizes the critical role of culture, social networks and community relations building through the recruitment, training and deployment of community volunteers whose duty it is to assist the community health nurses by serving as the bridge and facilitators of cordial relationship between the local people and health staff. CHVs play an important communication role in delivery of CHPS services due to their linguistic abilities as natives of the communities they live and work in as well as their knowledge of the local context (Afulani et al, 2012; Afari-Asiedu et al, 2018; Kweku et al, 2020). This integration of CHV is also indicative of ensuring cultural appropriateness of the program. Volunteers conduct follow up meetings and discussions with targeted groups such as mothers, men and youth mainly because they live close to the community members and have existing relationships with them, and this allows for a good degree of trust and credibility in the community volunteer and the messages they

carry. Further, CHPS also embraces the involvement of existing community-based social groups such as traditional women and men music groups to promote health messages. Similarly, traditional leaders such as local chiefs are often used as strategic agents of goodwill to communicate and promote acceptability and validation of the policy during community forums (Nazzar et al, 1995). Despite these apparent communication aspects, and ones that draw on local cultural connections built within the program, the role of culture and especially communication in the development and implementation of CHPS as a policy and its related impact on the success and challenges of the policy has hardly been explored.

1.3. Culture in Public Health Communication Programs

Communication theories and methodologies can have a significant role in public health communication program development, implementation and evaluation. For example, behavior change communication theory and approaches adapted in the design and implementation of an integrated health and family planning program in Nigeria showed that this strategy was effective for promoting the adoption and use of modern contraceptives (Krenn et al, 2014). In their evaluation, Krenn et al (2014) established that the Nigerian Urban Reproductive Health Initiative (NURHI) - a six years public health campaign - aimed at improving the use of modern contraceptives by women in reproductive life and addressing the unmet family planning needs significantly contributed to major shift in the demand for family planning services. Results from this evaluation indicated that without being exposed to NURHI activities demand for family planning in the population of women who were not using modern contraceptives at baseline only grew by 19.1% while in the communities where NURHI activities were

carried out the demand grew by 43.4% during the same period. This highlights the critical influence of communication theory and strategies in the design and implementation of health behavior related programs.

However, scholars have argued that behavior change communication interventions have traditionally emphasized the individual over their cultural context (Airhihenbuwa 2010; Basnyat, 2011; Dutta, 2007 & Dutta and Basnyat, 2008). Looking at the role of culture in public health communication, Kreuter and McClure (2004) noted that while concepts such as sensitivity and appropriateness have become common among public health professionals the use of models for explaining and operationalizing these terms have been less than ample. Furthermore, Airhihenbuwa (2010) notes that the culture of a people matters when analyzing a health related behavior, and such cannot simply be an individual behavior change focused program. To illustrate his point, Airhihenbuwa (2010) pointed out that the global ideas we know and many hold in high esteem such as strategies for addressing human behaviors in particular health challenges that emerge from someone's local perspective, and may not be similar across other cultures. Similarly, other health communication scholars (i.e., Basnyat, 2011; Dutta, 2007 & Dutta and Basnyat, 2008) also underscore the importance of culture in designing and delivering health interventions. For example, Basnyat (2011) found that Nepalese women living in rural communities re-constructed their reproductive health needs and behavior, in contrary to the biomedical understanding of reproductive health as simply an individual choice but in relation to local Nepalese culture and socioeconomic factors that provided guidance to health seeking and decisions. In addition, this study highlighted that rural women's health behavior and decisions are largely influenced by the availability

and acceptability of health care services as well as the material and social costs the woman have to be responsible for. The study further showed that cultural context and traditional perspectives rather than the biomedical and individualized worldview are the most significant determinants of local reproduction health seeking behaviors and decisions.

Thus, this study seeks to evaluate and document the role of communication and cultural relevance in the design and implementation of Ghana's primary health care policy (CHPS). Specifically, drawing on Collins Airhihenbuwa (1989) Pen-3 Cultural Model, the current study aims to understand how communication of CHPS is connected with Ghana's social, cultural and economic contexts of the community. In other words, the study aims to understand how and if CHPS focus on cultural context in designing and communicating their program. The Pen-3 Cultural Model advocates for developing a culturally appropriate tool for assessing context factors associated with or relatable to a health behavior.

Furthermore, this thesis aims to identify fundamental concepts, structure, elements and major stakeholders of communication and make policy recommendations as well as suggestions for guiding future research. The findings can be useful lessons in supporting the government of Ghana plans of using the CHPS policy implementation to drive the country's strategy for the achievement of the Sustainable Development goals (SDG) 3.1 (reduce maternal mortality) and 3.2 (end all preventable deaths under 5 years of age) by 2030. The findings will also be an important contribution to communication scholarship in the area of community-based health program design, implementation and evaluation as well as guide future research in the field.

1.4. Thesis Structure

In the chapters 2, 3, 4, 5 and sub-sections that follow, the following parts of the study are presented. Chapter two provides an overview of relevant scholarly literature on various elements related to this study namely CHPS, the PEN-3 model and by extension culture, health and communication. In Chapter three, I present the method applied in this study and detail the processes utilized to analyze the data. The findings of the study are reported in Chapter four, while chapter five covers the discussion, implications for research and policy, limitation and conclusion.

2. LITERATURE REVIEW

2.1. Cultural Approaches in Community-Based Interventions

As discussed in the previous chapter, CHPS policy was conceived as a culturally sensitive and people-centered strategy for providing affordable and accessible health care services to people residing in remote and rural areas of Ghana (Binka et al. 1995; Nazzar et al. 1995). By specifying the importance of community collaboration in the primary care delivery the CHPS policy allows and accommodates the contribution of local resources such as the construction and donation of structures built with local materials which are sometimes adopted for health staff to stay in or it could be added to the service space. As a program seeking to meet culturally appropriateness, CHPS emphasizes both the mobilization and involvement of traditional social and cultural institutions in the planning and provision of health care services (Doctor, Phillips & Sakeah, 2009). The policy prioritizes relationships between health staff and community members using collaboration between District Health Management, CHOs, volunteers, community leaders and residents as the foundation of the strategy for providing people-centered services (Afulani et al., 2012). Evaluation of the Navrongo program indicated that in order to enhance the legitimacy of the program, local community chiefs and other traditional leaders were mobilized to talk about health care service delivery. One of the ways through which leaders are able to play key roles in communicating about CHPS is through durbars and other community-based public functions (Nazzar et al., 1995). In his discussion of the framework for analyzing interventions seeking to address health from a cultural perspective, Dutta (2007) notes that efforts to draw attention from culturally sensitive interventions emerges from the realization that the cultural characteristics of the

focus population needs to be the priority of every health intervention. Cultural sensitive efforts are defined as the development of health interventions and messages based on the unique identified cultural characteristics of the target population or community (Dutta 2007). In comparison to culturally sensitivity applied in CHPS, Dutta and Basnyat (2008) show a need for a culture-centered approach (CCA) in health communication programs. CCA is defined as the commitment to adhere to cultural theories and practices in the design, implementation and evaluation of community health interventions (Dutta 2007).

Dutta (2007) makes a distinction between the twin approaches: culture-centered approach and cultural sensitivity approach. Dutta (2007) arguing that that CCA takes a radical approach to health communication program design and implementation by developing health messages and interventions integrating the communities values, norms and practices as identified by them; whereas CS is seem to adopt only identifiable cultural markers such as language, food, clothing etc. to design and deliver health and community programs. CS thus locates health communication within the dominant approaches to health promotion which emphasizes the individual cognitive or behavior changes process (Dutta, 2007). Therefore, in application culture sensitive approaches are critiqued to map people to identifiable cultural attributes in an attempt to represent or make a claim to meet the cultural expectations or identities (Dutta, 2007). While CCA envisions culture as complex, non-static and beyond cultural markers, and such argues for the community members to be part of the problem identification and designing relevant health solutions (Basnyat 2011; Basnyat & Dutta, 2008).

The voice of the community members to define their perspective and identities in relation to the health communication interventions becomes central (Dutta, 2007). For

example, using CCA in assessing a radio communication project (RCP) that promoted family planning in Nepal, Basnyat and Dutta (2008) argued that culture-centeredness is not a mere wording/naming exercise but rather a practical concept that must meet the basic test of ensuring voices of the local population being fully involved in program design and implementation. Their study found the RCP expected the local people to initiate a series of behavior changes around family planning conceived by the program designers but at times in contrast to the traditional views around reproductive health and use of modern family planning methods. The Western RCP funders, together with local elite policy makers defined the problem and in doing so failed to include the voices of local people related to reproduction and family planning, and instead promoted the idea of having many children to be unreasonable - in line with the Western discussion of limiting families for modernization and development (Basnyat & Dutta, 2008). They also failed to appreciate the social practices of the people that privilege the role family in reproduction, and instead focused on the couples engaging in open discussion regarding their plans on having children (Basnyat & Dutta, 2008). By failing to include voices of the local people in the program design both CHPS and the radio communication project from a CCA analysis fails to be truly culturally grounded community-based interventions. Basnyat and Dutta (2008) advise that it is necessary to re-examine culturally sensitive health programs to ensure full participation of the community is included in the program design and implementation, rather than simply using for example local chiefs and community volunteers to deliver the health messages as seen in CHPS.

2.2 Community Health Volunteers (CHV) as Communication Strategists

One of the key features of CHPS is the involvement and utilization of community health volunteers. Unfortunately, not a lot of time and space has been devoted to the conversation of volunteers' specific roles, especially their communication role in CHPS delivery and implementation. When community-based volunteers are enlisted to support nurses, midwives and other health staff in the planning and provision of health care services, these volunteers play a crucial role of serving as a link between the community and health workers. Nevertheless, their role remains simply as a carrier of the messages contrary to a CCA perspective which requires such participants to be integral in the program messaging itself. Because of their cultural and linguistic knowledge as well as skills, volunteers are good communication resource personnel for health workers. As local and native members of the communities CHVs often have the advantage of speaking the same languages, sharing the same life experience with the rest of the community members, this makes it much easier for volunteers to act as good communication agents for the health services staff. However, when the role of volunteers was exemplified assessed by (Afari-Asiedu et al. 2018) much emphasis was placed on how they fill the shortage in health staff rather than the communicative and cultural roles they play in delivering the program.

The activities of volunteers continue to be viewed as important for community mobilization, organization and service delivery (Bhiri, 2014; Glenton et al, 2010). Furthermore, CHVs are regularly used in general community development and poverty reduction. For example, Bhiri et al., (2004) found that Non-Governmental Organizations (NGOs) in Zimbabwe utilized community volunteers to support and facilitate the delivery

of critical community-based services to rural areas. Similarly, Glenton et al., (2010) documented the crucial role of female community volunteers who have been playing significant roles in health service delivery in Nepal dating far back as the 1980s, in particular delivering vaccines to children in least accessible locations. In Tanzania, a recent study (Greenspan, 2014) showed that community volunteers' contribution to health services delivery remains really significant, and agencies that need the service of volunteers are being encouraged to find ways to compensate them in order to increase their motivation to continue assisting and supporting community programs. However, none of these conversations includes the CHVs as central in program and message design, and simply are a medium through which messages are communicated to their communities.

2.3. Conceptual Framework

The current study is guided by the Pen-3 Cultural Model, developed by Collins Airhihenbuwa (1989) to emphasize centering culture in the development, implementation and evaluation of community health service initiatives and programs. Airhihenbuwa (1989) through the Pen-3 model makes the case that rather than focusing on the individual level, behavior change related to health issues and programs should focus on the culture of the individual. For example, Airhihenbuwa and Webster (2004) argued that in African communities, people's actions and behavior are informed by sociocultural and religious beliefs, norms and value, and not simply on individual behavior. For example, in their study assessing the role of health care in childbearing decisions of women living with HIV/AIDS, Sofolahan-Oladeinde et al (2017) found that women living with HIV/AIDs maintained the desire to have children despites knowledge of the risk due

primarily to their intention to keep and their roles as wives and mothers who are expected by to bear their husband children. The desire to have children here is influenced greatly by the sociocultural norms and values rather than the individual behavior or attitude. Thus, a Pen-3 cultural model stresses that every community health intervention that wishes to succeed in contributing to address the public health issues needs to first acknowledge both the positive and negative influences of traditional sociocultural point of views and interpretations of the world and events occurring around that behavior.

Furthermore, Airhihenbuwa (1989) posits that since every community has some beliefs, set of norms and practices which have positive values to the people, it is important for these values to be recognized, highlighted and utilized alongside whatever negative beliefs and cultural practices may be part of the lives of the people. For example, in a study in Tanzania, Olufowote (2020) sought to understand the contextual factors that enhanced health communication in HIV/AIDS prevention and treatment. Olufowote (2020) reported that in order to enhance health education and promotion about HIV/AIDS, it was critical to acknowledge and endorse positive cultural practices such as male circumcision, HIV/AID testing before marriage and ending female genital mutilation in order to promote HIV/AIDS prevention and treatment. Further, Olufowote (2020) argued these positive cultural and relational factors should be considered alongside negative cultural practices such as female genital mutilation, widow inheritance, early and arranged marriage of girls and the taboo against parents discussing sex education with their children when addressing HIV/AIDS. Thus, community-based health programs must endeavor to look for the positive and negative side of the culture

and cultural practices in order to promote relevant and culturally centered health behavior changes.

Specifically, the PEN-3 model identifies three core domains and three sub-domains (as shown in figure A). The core domains consist of Cultural Identity (CI), Relationship and Expectations (RE) and Cultural Empowerment (CE) (Airhihenbuwa, 1995; Blackstone et al., 2019; Iwelunmor, Newsome & Airhihenbuwa, 2014). Cultural identity in the model is associated with interpersonal spaces and family relationships known as the entry points of an intervention. Relationship and expectations on the other hand is linked with people's perception towards a behavior, the resources that can enable and support the behavior. The third domain, Cultural empowerment, is associated with the contextual issues related to a behavior in a negative, neutral or a positive light.

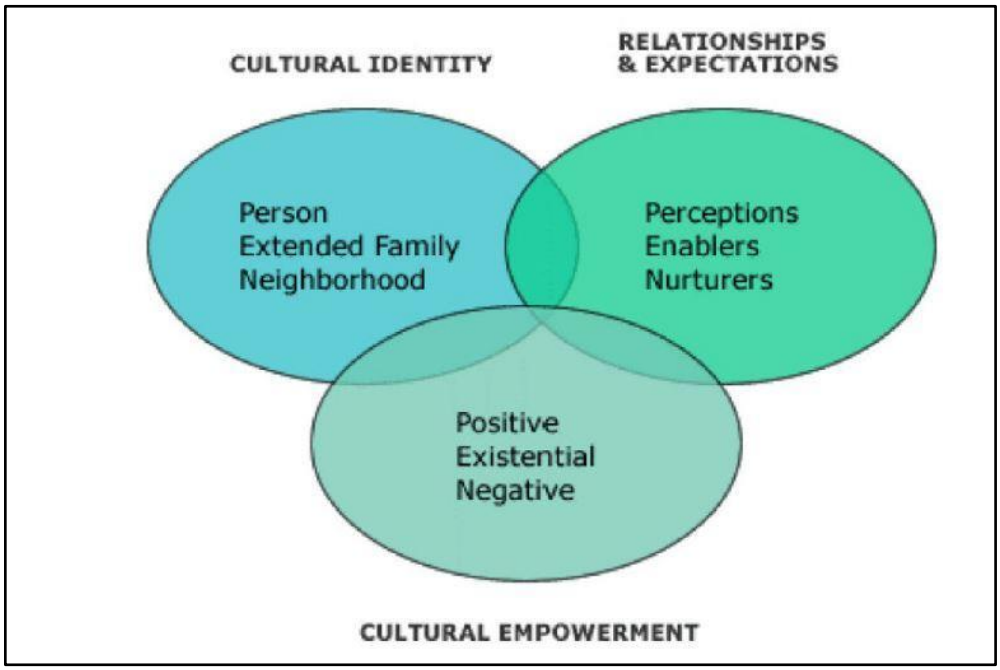


Figure 3, *Pen-3 Cultural Model*

The Pen-3 Cultural Model has been used in several studies to examine contextual health behaviors. For example, Chemuru and Srinivas (2015) used the Pen-3 Cultural

Model to assess factors affecting adolescent pregnancies in Rural Eastern Cape, South Africa and found that perceptions about contraceptives held by teenage girls, cultural beliefs about premarital sex, availability of health care providers and parental and friends support were major determiners of decision to adopt contraceptives or not. In effect, the interplay of cultural identity, relationships & expectations as well as cultural empowerment influenced behaviors of adolescent girls. In another study conducted to understand factors that can promote or affect healthy diet and physical activities for young children in the city of Lima in Peru, Trejo and Shaw-Ridley (2019) applied the Pen-3 Cultural Model to guide their analysis of qualitative interview data with families in five school districts. The researchers based their analysis of the study data on two constructs of the model and identified positive enablers of healthy nutrition to include parents' views about their roles as the authority to choose food options that support the good nutritional needs of their children. Similarly, Sofolahan-Oladeinde et al. (2017) used the Pen-3 Cultural Model in their evaluation of factors that influenced decisions and intentions of Women Living HIV/AIDS (WLHA) when having children. From their findings, the authors made recommendations to provide not only medical care and support for WLHA in Nigeria but also to improve communication strategies to reduce the negative perception such as fears and uncertainties of the health system, and to increase trust among WLHA to accept and work with the professional treatment and clinical advice of health workers. These studies highlight the importance of the Pen-3 Cultural Model and its use in assessing, designing and implementing community-based health interventions. The interactions between cultural identity, relationships and expectation and cultural empowerment ensures that the cultural context is centered in the design and

delivery of health programs. It also enables the centralizing of communication processes to assess and recommend effective strategies. Thus, this study asks the following research questions:

RQ1: What are the ways in which communication plays a role in CHPS?

RQ2: What are the ways in which CHPS is culturally framed?

3. METHODOLOGY

In this section, I present an overview of the method used in the study. I begin with a brief description of the sources of the data, the categories of participants before discussing the types and number of interview-transcripts selected for analysis. Next, I discuss important decisions I have had to make in determining which data set to include in my secondary analysis and the brief explanation of the reasons why I arrived at that decision. I describe the volume of the data in an attempt to show the length of the interview and the number of pages of data that were analyzed for this study. In the next sections I discuss the data analyzing steps, and I describe the processes I followed and outcome I arrived at the end of the process in order to answer my research questions.

3.1. Accessing Data

I analyzed qualitative data collected at two phases, i.e., baseline and midline, of a five years health intervention program implemented in Ghana. The health intervention program is called the National Program for Strengthening Implementation of the Community-based Health Planning and Service (CHPS) policy known as CHPS+ in short. CHPS+ is a multi-partner initiative implemented by the Ghana Health Service in four districts termed systems learning districts (SLDs). The four SLDs comprise of two districts each in Northern and Volta regions of Ghana. Ghana Health Service led implementation of CHPS+ in collaboration with three Ghanaian universities: University of Ghana Regional Institute for Population Studies (RIPS), University of Development Studies (UDS), University of Health and Allied Sciences in partnership with Columbia University based in the United States of America. The Ghana Health Service selected the Northern and Volta regions and the four districts to implement CHPS+ based on their

relatively high fertility rates as well as high Maternal and Under-Five Mortality rates. RIPS served as the lead research and evaluation partner on the program and carried out the baseline and midline data collection.

The qualitative systems appraisal data was collected as part of a broader CHPS+ program's research and evaluation undertaken by RIPS. The data is stored by RIPS in a cloud storage system with password protection, and only the research team has the access rights. To obtain the data for this study – my master's thesis - I wrote to the leaders of the research team explaining the objectives of my research and my interest in using the data. After several months of follow-up correspondence, I was finally granted permission to access the data. Part of the data sharing agreement includes ensuring the continuation of secure protection of the data by maintaining a security password known by me and only on the computer used for this research as well as a non-disclosure, non-distribution agreement of the data to any third party.

3.2. Data Sources: Baseline & Medline Data

The baseline and midline qualitative systems appraisal interviews were conducted with health workers and community members in the four CHPS+ SLDs two districts each from Northern and Volta regions (see fig 1&2 for map of Ghana) namely Gushegu Municipal and Kumbungu District (Northern Region) and Central Tongu and Nkwanta South (Volta Region-now Oti Region).

Table 1: Summary of participants' categories, types and number of interviews

Gushegu District Northern Region				**Central Tongu District, Volta Region**		
Participants	In-depth Interviews (IDS) or Focus Group Discussion (FGD)	# of Interviews		Participants	In-depth Interviews (IDS) or Focus Group Discussion (FGD)	# of Interviews
District Managers	IDS	4		District Managers	IDS	4
CHOs Supervisors	FGD	1		CHOs Supervisors	FGD	1
Health Workers at CHPS zone	IDS	2		Health Workers at CHPS zone	IDS	5
Fathers	FGD	2		Fathers	FGD	2
Mothers	FGD	2		Mothers	FGD	2
Community Elders	FGD	2		Community Elders	FGD	2
Community Health Volunteers	FGD	2		Community Health Volunteer	FGD	2

For this study however, out of the four SLDs I included data from only two districts, one each from Northern and Volta Regions. This was because the sheer volume of the data did not make it feasible in reading and conducting proper analysis within the time frame I had to complete this project. In each of the two districts, interviews were conducted with district health leaders, sub-district health leaders and Community Health Nurses (CHOs) at the CHPS health facilities. The community members' interviews were also conducted in the two communities where CHOs were also interviewed. Based on relevance to my research questions, three categories of participants' interviews transcripts from the districts selected were not included in this study. These were transcripts of

interviews with the District Disease Control Officers, District Nutrition Officers and the transcripts from interviews with adolescent boys and girls at the community level. Fieldwork for the baseline qualitative systems appraisal (QSA) was conducted between April and May 2017 and fieldwork for the midline QSA was conducted in 2019 between February and March.

3.3. Data for the Thesis

In all, 66 (33 transcripts each from the baseline and midline) transcripts were coded. However, of the 66 transcripts coded, only 33 transcripts from the midline study are analyzed and reported in this study. The decision to focus only on the midline data was arrived after a close reading of the transcripts during the first round of open coding. I found that the midline interviews were not only far richer and more detailed but also that the participants' often repeated the baseline responses in the midline interviews. This is to say that participants most talked about their experience with CHPS in terms of before and after the introduction of the funding support obtained for CHPS implementation through the CHPS+ intervention. Considering that the intention to analyze data is for the purpose of identifying representing salient information that helps provide more insights and answers to research questions, the repetitions in the data was seen to have reduced any variations in views. Even the community members interviews where most participants could not make direct references to the CHPS+ program, there was a high consistency in participants' responses that pointed to the past and present situation of CHPS implementation. It was based on these indications of sufficiency within the midline data that I opted to leave out the baseline data and proceeded to work with the interview transcripts from only the midline.

Fifteen (15) of the midline interview transcripts were In-depth Interviews (IDS) and eighteen (18) were Focus Group Discussions (FGD). The longest IDS transcript (Health Manager IDS) was twenty pages and the shortest seven pages. For the FGDS, the longest transcript was forty pages and the shortest six pages. All the 33 transcripts from the midline data yielded 481 single spaced pages.

Table 2: A breakdown of interview participants by region and district

Interview Participants from Volta Region/Central Tongu District
Health Workers
● District Health Managers ● CHPS level staff ● CHOs supervisors
Community Members
● Fathers ● Mothers ● Community Elders ● Community Health Volunteers
Interview Participants from Northern Region/Gushegu Municipal
Health Workers
● District Health Managers
● CHPS level staff
● CHOs supervisors
Community Members
● Fathers ● Mothers ● Community Elders ● Community Health Volunteers

3.4. Ethical Consideration

Approval for this study was granted by James Madison University Institutional Review Board. The board following my application determined that as a study based secondary data analysis the project does not meet the definition of research with human subjects. The study was therefore approved to proceed.

3.5. Data Analysis

Both the In-depth Interviews and Focus Group Discussions were coded manually to identify salient themes. Using the thematic analysis approach, I proceeded to code the data going by Braun and Clarke's six-phases of thematic analysis (Maguire & Delahunt, 2017). These include: 1) familiarizing yourself 2) generating initial codes 3) searching for themes 4) reviewing themes 5) defining and naming and 6) producing the report (Braun & Clarke, 2006).

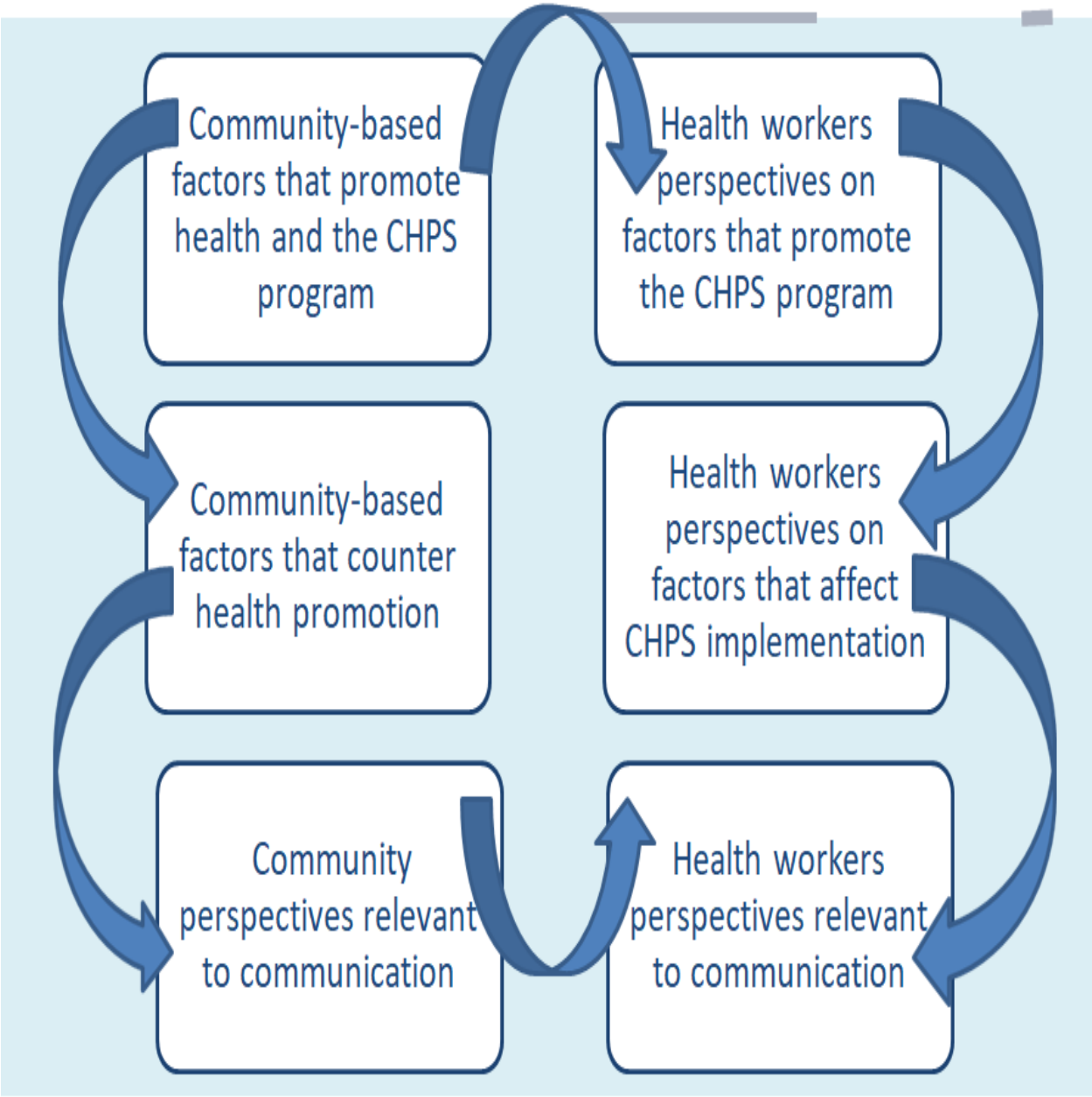
First, I familiarized myself with the text by selecting ten transcripts and reading them multiple times closely. According to Braun and Clarke (2006) this step involves reading and re-reading the data. I did this while noting down my initial thoughts about the data. Second, I open coded ten of the transcripts to generate initial codes. According to Braun and Clarke (2006) this step involves coding the data--a process that allows you to select the interest feature of the data in a systematic manner. Thirdly, I applied the initial codes to all the transcripts and proceeded to collate all the codes. This helped to yield the first set of thirteen (13) themes as noted in Table 3. According to Braun and Clarke (2006), this step involves gathering all the data related to the various potential themes. These basic themes were reviewed in the fourth phase and defined in the fifth stage.

According to Braun and Clarke (2006), the fourth and fifth steps involves checking to ensure that the themes work in relation to the coded extract before proceeding to the fifth stage to continue to analyze refining the themes. The review in phase four led to a reduction in the number of themes from thirteen to six major and final themes as noted in Table 3. During the fourth and fifth steps, similar themes were merged and those that did not appear to be relevant to the research questions were removed while others were rephrased either entirely into new themes or partially changed to better represent the themes. After this, I proceeded to write them down in step six. This final step according Braun and Clarke (2006) involves the selection of compelling extract to support your scholarly report.

Figure 4: Themes

Initial themes
❖ Activities that underscore good communication in CHPS implementation ❖ Roles of Community Health Nurses ❖ Community beliefs and Perceptions related to health ❖ Capacity building for health workers, CHMCs and volunteers ❖ Perceptions about what can help improve CHPS ❖ Perceptions and activities focusing on community needs ❖ Community level practices/factors that are counter to health promotion ❖ Health Service side factors contributing to improvement in CHPS ❖ Factors /practices demonstrating Community understanding and support for CHPS ❖ Perception/factors demonstrating community lack of understanding of CHPS policy ❖ Challenges/factors from the health sector that affect CHPS functioning ❖ Challenges/factors at the community level that affect health care ❖ . Positive attributes of health workers and volunteers
Final themes
❖ Community-based factors that promote health and the CHPS program ❖ Community-based factors that are either counter-health-promotion or the well-functioning CHPS or pose no hindrance to health promotion and the CHPS program ❖ Health workers perspectives on factors that promote community health and well-functioning of the CHPS program ❖ Health workers perspectives on factors that affect community health and CHPS functionality ❖ Community perspectives relevant to communication and ❖ Health Service side perspectives relevant to communication

Figure 5: Final themes:



4. FINDINGS

This study focused on health workers and community members' perception of CHPS from existing data to understand how these perceptions shaped the understanding of communication in the implementation of the CHPS program (Refer to appendix A for the interview protocol). Furthermore, I explored how cultural systems of local communities were captured and fostered in the policy design and implementation activities of CHPS. Thus, the following two research questions served to guide the study and are answered in this chapter.

RQ1: What are the ways in which communication plays a role in CHPS?

RQ 2: What are the ways in which CHPS is culturally framed?

In this Chapter (chapter 4) and subsections I present a report of my findings from the data analysis. I did this by selecting a few quotes from my data and using them to demonstrate how the interaction with the study participants relate directly or indirectly to different themes drawn in relations to the research questions and study objectives. Therefore, each of the six themes as shown in table 3 are presented separately-each supported by a brief description showing what participants are saying with the appropriate quotes to demonstrate.

4.1. Health workers perspectives on factors that promote the CHPS program

In the midline QSA health workers provided insightful details about the state of health care services and the performance of CHPS. In responding to questions about experience and perception of changes in their districts and health facilities following the funding support provided by the CHPS+, the interview data showed that the key issues health workers mostly pointed out were about improvement in the availability of

transport logistics, capacity building for health staff, medical equipment as well as supplies for service delivery. For example, a health manager said:

> Through the support of the CHPS+ and PPME, we were able to have a maternity wing attached to it and with equipment like delivery bed, couch for antenatal, a fridge to store her drugs other things provided. They [clinical sites] now also have two motor bikes, one for the midwives to go for outreach [work], one for the RCH [Reproductive and Child Health Services] and then there is a motor king ambulance for referrals.

The manager notes the significance of equipping CHPS zones to be able to meet the health needs of communities. The health workers in acknowledging the provision of basic logistics to support health care services underscored the importance of resources in ensuring that these services delivery activities could be better planned and executed. A district health manager shared the following insight:

> They [clinical sites] have motorbikes and they have the modified motor king ambulances that are used for transporting cases during referrals. We've [also] identified communities or zones that telecommunication network connectivity is not good, so through the CHPS+ program we've been able to support them [Community Health Nurses, CHO] with mobile phones that they can easily use to call the nurses at the next level there are referring the case.

CHPS services largely involve CHOs visiting the homes of community members and other outreach locations, a situation often far from the CHPS service sites. Home visits are conducted regularly to follow up on children or pregnant mothers who fail to attend

scheduled appointments. A health manager describes the role of CHOs in the following words:

> So where we placed them they have a responsibility to go to the various homes and not just the way they like but there is a procedure they will have to follow. It tells you where to go and when to go. For example, a CHO has to visit eight houses, a week and all that.

Besides their routine home visiting, CHOs also undertake home visits when they receive referral notices from the hospital or information from a volunteer about a newborn in the community. Home visits encounters are often used as an opportunity by CHOs to provide health education and information on environmental sanitation, the use of bed-nets against mosquitoes and nutrition. For example, a Community Health Nurse explained:

"I provide health care service at the doorsteps of the community. I go for home visits and I do family planning for the clients. I provide services over here and in the community".

The CHOs here describe his work to be based at both the community level and at the CHPS zone.

In addition to home based services, CHOs also treat minor ailments at the CHPS clinical sites or at home. When visiting the community a CHOs is prepared to manage any typical health situation and make decisions about the next steps to follow. They also hold sessions for immunization on a scheduled basis at community locations usually referred to as Child Welfare Clinics (CWC) for mothers who live far from the compound locations. Further, immunization, screening and education services are also provided by CHOs (School health) in basic schools in the communities. CHO explained this as following:

> When I go for home visiting, let's say when I go for home visit and there is a client with a wound, I do wound dressing for the client. If there is someone with a serious illness, I advise the person to come to the clinic for treatment and or referral.

CHOs are multidisciplinary health staff capable of managing diverse health conditions and taking critical decisions to promote the health of their patients.

Similarly, maternal health services such Ante-Natal Care (ANC) and Post-Natal Care (PNC) services are also provided on site at the CHPS clinical sites, and for women located far from these services CHO's conduct scheduled outreach in the communities. Community health services delivered through home visit, outreach ANC/PNC activities CWC and School Health depend on functional motor bikes and availability of fuel and home visit bags. For example, a manager said:

> Yes, so we have delivery beds, veronica buckets, BP apparatus, home visit bags, a couch; that is the bed used for examining pregnant women, and thermometers. [And] with the data (management training), the capacity of the CHOs we can say now has been built in the data entry and then analysis and then they can use their own data for decision making.

CHOs need health service registers for accurate recording of logistics like delivery beds, thermometers, and BP apparatus, which are considered critical for general services delivery. As noted by the health manager above, availability of logistics and medical supplies are essential to the functioning of CHPS. This point is well articulated in the following comments by a manager: "*So, the home visit figures that we have seen now improving, is because they can now move to even the most difficult to reach community*

and provide services to these households." His comment demonstrates the impact that the recording and availability of logistics has made on community health services delivery. Managers also talked about facilitating service delivery and providing the supplies for health services delivery in order to project their duties and responsibilities as managers, who are expected by their staff to make resources available to carry out service delivery. For example, health manager explained this as following:

> We can now meet our link providers (Retired Traditional Birth Attendant regularly) and then educate them to know they don't need to conduct deliveries at home, they have to refer them [the women] to us and then at least we support them, involve them in our activities

Health managers sought to confirm the fulfilment of the CHPS policy as a community-based health service intervention and often chose to talk about resource needs of CHPS and their role in facilitating the provision of these resources. A health manager shared the following:

> Since CHPS+ and CRS came in to support this zone, people [health facility workers] have made it a part of their objective to have 100% facility delivery. No woman has delivered at home for the past two years. And apart from the facility delivery our CWC and ANC services have been on the increase.

Other aspects of improvement in community health services as mentioned by participants came through the introduction of the modified tricycle ambulance. In addition, CHPS+ support has been leveraged for community engagement and participation through formation and training of groups based in communities located far from facilities that have the modified motor king ambulance to operate and manage what they call

Community Emergency Transport Systems (CETS). For example, a CHO supervisor (sub-district leader) said the following as significant changes they have experienced in their district with respect to CHPS implementation. He explained:

> Coming from a facility that is the primary referral center, I think I would talk about improvement in the referral system. Before now, we used to have headaches when we were referring to a case. Sometimes the patient's relatives would tell you that they can't go to the facility you have referred them to simply because there's no means of transport. But now, with the introduction of the Modified Tricycle Ambulance, it has solved that problem. There was an incident where a pregnant woman was bitten by a snake and needed to be taken to the hospital quickly but her husband did not have money. When the Community Emergency Transport Systems learned about this, they offered to lend the family money to get the woman to the hospital and that saved her.

The support of the emergency referral system as explained by CHO supervisor above has helped to address challenges with referring patients who require high level of medical care from the CHPS zones to the health centers or the district hospital. Besides pointing out various logistics and supplies that districts obtained directly from CHPS+ national implementation office or procured by districts from funds received through CHPS+, health managers also talked about the various capacity building seminars and workshops organized for health staff. The University for Development Studies and the University of Health and Allied Science were partners of the CHPS+ program responsible for providing capacity training for health workers. A health manager said the following:

> I can say that with the training they are receiving our CHOs perception about CHPS is good. Actually, they have received a series of capacity building training including some from UDS. Yeah, so, I think it looks like the CHOs have been enriched. So their perception, I feel like it's ok. Now they know everything about their work. But like they always say, we still have some challenges about the equipment, and other things. But in my point of view, their capacity has been built. Yeah.

Capacity building for CHOs as pointed by the health manager in the quote above was seen as essential for multiple reasons: for strengthening their knowledge and skills, and for improving their understanding and perception about CHPS. The CHO comment is evidence that the workshops and training are important avenues of learning the things that are not taught in their training school curriculum. This training has contributed towards improving the health managers and workers knowledge, information and skills. Some participants also mentioned peer exchange learning trips made by the districts to another region-the Upper East Region to learn about CHPS. For example, a CHO acknowledged:

> What I have to add is that, the CHPS+ program has helped a lot especially in this community. When we went to Upper East, we learnt many things, which included how to do community mobilization to get community members actively involved in health services. And since we came [back] it has been about a year now [and] we [are] always try to tell the community members about what we learnt there. We always encourage them to also do the same.

The peer exchange learning trips embarked by CHPS+ SLDs to the Upper East Region is part of the CHPS+ program are learning trip designed for the health managers and workers to learn from other districts that were part of the implementation of the Ghana Essential Health Intervention Program (GEHIP), a similar community health systems strengthening program. CHPS+ is replicating some of the interventions that were piloted under GEHIP and were found to have contributed towards improving health systems and service delivery in the Upper East Region.

The above theme discusses health workers experience with CHPS, the improvements, and their perspectives factors accounting for this improvement. In the following theme I look at how health workers describe challenges in CHPS implementation.

Under this theme the major findings are that logistics and medical supplies as well as human resources were available at the CHPS zones. These ensured the delivery of health care service to community members. In the PEN-3 model (Airhihenbuwa, 1989) these factors are known as Enablers of an action or in this case enablers of the policy. Airhihenbuwa refer to enablers as the resources and institutional based factors that can facilitate or hinder action by people with respect to behavior towards a health condition or in this case the functioning of a health intervention (Mieh, Iwelunmor and Airhihenbuwa, 2013).Health managers talked a lot about making available logistics and supplies at the CHPS zones to enable the delivery of health services. They also recounted the training and capacity building workshops organized for CHOs to equip them to be able to perform their duties well. These factors are enablers of the CHPS policy.

4.2. Health workers perspectives on factors that affect CHPS implementation

One of the questions in the midline QSA asked health workers was about challenges affecting health service delivery in their districts and various facilities. Key points noted among the challenges included the shortage of staff at CHPS zones. The shortage of staff was said to be affecting the hampering operationalization of new zones and affecting the running of existing CHPS programs. A health manager shared:

> So some key things slowed us down. Even as a district, the rate at which we were moving from the past years up till now, we realized 2016, 2017 and 2018 most of our non-functional zones have not been made functional as we [have] wanted because we don't have adequate staff, I mean CHOs who are key [need] to be placed in these zones. Okay, because for you to make a CHPS zone functional there should be a CHO that should be assigned to that zone to provide the services, now we don't have the CHOs.

CHPS zones are usually staffed by Community Health Nurses (CHO) and by Midwives and Enrolled Nurses (EN). Staff numbers at CHPS zones often range from two to four or more. There may still be districts where some CHPS zones are manned by only one staff, however it is not widespread. For example, a health manager explained this:

> We don't have adequate staff, CHOs who are key to be placed in these zones. Okay because when you make a zone functional there should be a CHO that should be assigned to that zone to provide the services, now we don't have the CHOs

In recent years the government of Ghana with private sector support has been able to increase the number of schools for the training of Community Health Nurses and

Enrolled Nurse and Midwives. This has helped to increase enrollment, graduation and subsequent recruitment of staff needed for staffing CHPS zones. In spite of the steady growth in community health staff production, Ghana still faces an acute short supply of health staff at these lowers. For example, a health manager explained this:

> We don't have the staff in our district that will manage these facilities. At least in every CHPS zone we (are) supposed to have at least two people to work in the CHPS zone and then the staff that is supposed to work in the CHP zone is the CHN or a midwife. We should have a mix of staff in the CHPS zone for service to go on successfully. This is the case here we don't have them (staff). Because of the lack of staff most of our CHPS zones are manned by enrolled nurses (clinical nurse not originally trained to work at CHPS zones) that we have trained on the job and somebody who you have trained on the job may not get the actual training itself may not function as somebody who had the actual training itself but some of them are doing very well even more than the community health nurses

This shortage, which some have described as artificial, has been attributed to poor distribution of available staff. The poor distribution of health staff results from staff preferring posting to facilities located closer to major cities, towns and urban areas. Some say this development is a result of the failure of the government to provide basic social amenities such as good roads, portable drinking water, electricity and educational facilities to all parts of the country. For example, CHO explained this:

> **Interviewer:** Okay we have now come to the end of our interview please is there any other thing you will like to add

Respondent: There is one thing I didn't (mention earlier). I will even put that one (concern) as the first (among our) three problems. That is the water problem in this community

Interviewer: Okay

Respondent: Especially at the CHPS compound, we have a water problem here so I think I will rather put it on the first three problems.

CHPS zones are supposed to have their own source of water but as pointed out above, some do not have and health workers have to depend on the community sources. The non-availability of such facilities in most rural and remote communities where CHPS facilities are located make such places unattractive to many health workers.

In addition to staffing challenges, infrastructure challenges were also noted by the health workers. The views of participants on infrastructure deficit for CHPS services reveal that while a range of services are provided and continue to be expanded, the physical structures (space) available for the services remain limited. A sub-district leader and midwife shared her frustration about the lack of space for more services, especially maternal care services such as ANC/PNC and deliveries in the following lines.

The biggest challenge that I have seen that probably CHPS+ should think about is infrastructure. The infrastructure is woefully, woefully, woefully, inadequate! In fact, this morning, I had three labor cases at a go. And my labor room is virtually- in fact I have been saying it, that I want to convert my bedroom into a labor room. That is because my bedroom is bigger than the labor room. And when I went and saw how the midwives were working, I was very sad. They were attending to two women in labor on the bed, and the third woman was on a mat on the floor.

Maternal health care (ANC/PNC) and delivery services have recently been added to some CHPS zones. Although districts made preparations including ensuring that an additional space was created before adding on midwifery services, challenges of limited resources faced by district health directors often meant that such spaces provided are still inadequate or not appropriately equipped. For example, a sub-district leader said: *"Most of our CHPS compounds are designed in a way that they don't have spaces for providing ANC and supervised delivery services that's one of our biggest challenges."* At CHPS zones even with compounds, the infrastructure challenges identified were inadequate space for service delivery.

Among other factors affecting community health and CHPS operations, some health workers talked about challenges with essential supplies and logistics. As noted earlier the availability of logistics and supply was said to have significantly improved in the SLDs. However, since SLDs were responsible for budgeting and procurement of the logistics for service delivery, it was possible for them to have different experiences regarding the availability of logistics. But with respect to the challenges reported by health staff, it goes to emphasize the importance of these resources in the provision of community health care service. One of the references to logistics being unavailable was made by a CHO in Gushegu Municipal. The statement is captured in the follow words:

> [For the community] when you have a problem and you inform them; they usually try and see how best we can solve it. They sometimes try. They try helping us. But in terms of logistics and maybe things that we need for service provision, it's a general problem. Even the health center, the one responsible for the whole sub districts lacks basic equipment such as weighing scale, BP

> apparatus. If you are going for outreach service, you have to compete for weighing scales and other logistics with somebody else in a different zone. If you are not lucky and the person has taken it [weighing scale or home visiting bag or other logistics] for outreach service, you won't get it. You have to either postpone it or reschedule or you wait for the person to come so that you take it.

One other challenge health workers discussed was the operations of NGO that support health service delivery in communities. NGOs supporting health service delivery at the community level are common in many districts across all regions in Ghana. NGOs activities must be in line with the Health Service and Ministry of Health regulations. As to be expected of governance of large state institutions, some weaknesses may be expected, especially on region-by-region basis in terms of how NGOs operate. One of the issues with respect to NGOs operation discussed as a challenge was by a sub-district leader (CHO Supervisor) in the follow extract:

> So I can say 99% of my volunteers are illiterates. Yet some of our collaborators (NGOs) come and give drugs to them to go and manage diarrhea and malaria in the communities when the health facilities are there. That can contribute to some of the complications we see.

However, it is important to indicate that in the entire data this was the only instance a negative issue with respect to NGOs operations surfaced in the discussion reported in the health workers interview. Considering the fact that the issue sits at the heart of health services and connects with community health volunteers who are viewed as one of the main pillars of CHPS operation, it was important to highlight. The CHO supervisor in the quote above points to a communication gap due partly to the multiplicity of partners in

the delivery of health services at the community level. Nevertheless, NGOs are often seen as collaborators and partners operating independently from the Ghana Health Service in the communities. For example, a health manager explained this:

"I have also mentioned the pavilions, the pavilions we constructed actually came from sponsorship from the REDEEM (a local NGO) and other partners like CRS (Catholic Relief Services). Now we also have partnership with Catholic Relief Services".

As can be seen from the theme above, health workers pointed to many factors constraining the smooth implementation of CHPS. Most of these are logistics related. In the next theme, I discuss the community level factor that supports healthcare in or words CHPS implementation.

The constraints to CHPS implementation as discussed under theme here also fall within the "Relation and Expectations" domain of PEN-3 (Airhihenbuwa, 1989). These factors include the inadequate numbers of Community Health Nurses who health managers say are the most appropriately trained health staff for CHPS service. There were also concerns about inadequate infrastructure for service delivery and staff accommodation at CHPS zones. Community Health Volunteers low levels of education was also thought to be impacting their work negatively and affecting CHPS implementation. Within the relationship and expectations domain of PEN-3 constrains to any behaviour come under enablers. Enablers are described as community based resources or external factors which could either serve to promote people's ability to undertake expected action or an intervention's ability to respond to community needs.

4.3. Community-Based Factors that Promote Health and the CHPS Program

Both the health workers and community members' interviews yielded significant data that provided an opportunity to understand community level factors and perspectives about health, and how those perspectives support the CHPS program being implemented. For example, community members' perspectives about health issues contained positive and negative attitudes or factors. These factors related to issues of community members' interests in engaging with health staff to learn about ways of promoting and improving their health. In acknowledging community members, especially women's relationship with the health worker, women have availed themselves for health information and education on a wide range of services that included good environment health and sanitation and modern contraceptives. The willingness of community members to accept the information and education provided by the health workers has been beneficial to families. A community member shared:

> We are getting enlightened. We have learnt about the benefits of good sanitation practices. We have learnt about birth control. We used to give birth with one-year intervals. We now use contraception to space our children up to five years. This brings happiness to the home. You buy less medicine for children.

Health workers also discussed experiences related to community members' willingness and efforts to support community based activities aimed at enhancing the operation of CHPS and promoting health. A health manager shared the following view about his assessment of community members' perception about CHPS.

> I think for my CHPS zones [communities] really know what CHPS is all about, they really understand because the facility itself was even put up by them

> [community members]. Currently they are making effort to expand the facility to add a maternity block because they need a midwife

The health manager went on to talk about the high commitment of some communities in the district. For example, the health manager further explained:

> The community understanding is there, I will cite examples okay, when you go to Mafi Avedo after training and orienting their CHMC, they have been able to mobilize the community and they are building accommodation for the health staff to stay in the communication so they don't need to be traveling up and down. When you go to Mafi Zongo and other place it is the same

The efforts and contributions towards health care delivery included mobilizing local resources to construct additional room to increase space for service delivery. Another CHO shared a similar view about community support for CHPS adding further that in addition to demonstration of support for CHPS activities, health service utilization by community members has also been significant. He said: "*They are just waiting and eager to see the CHPS compound. I can say that the people are receptive. When you go for home visits and outreach services, they come out in their numbers for the service".*

Family planning education and the promotion of modern contraceptives remain one of the key activities carried out by CHOs at the CHPS level. Since the launch of the CHPS program a little over twenty years ago family planning has been an integral part of CHPS. Notwithstanding these accomplishments, but due to local sociocultural and economic systems and practices, family planning acceptance rate remains relatively low in many districts across the country.

This theme looked at community perceptions, beliefs and local practices which serve to promote CHPS. Under PEN-3 (Airhihenbuwa, 1989) this is the "Perception" variable situated within the Relationship and Expectation domain. Perceptions according to Blackstone, Nwaozuru and Iwelunmor (2018) are "beliefs and values held by people about a condition" (Pg.117)-in this case the beliefs and values community members hold about a CHPS initiative. Health workers and community interviews revealed there were several important community values and beliefs that supported the objectives of CHPS. Community members have confidence and trust in health workers and accept education and health information from them. They also have confidence in the CHPS policy as a program capable of helping meet their basic health care needs. Thirdly, they are interested in supporting the program so it can continue delivering health care services to them.

4.4. Community-based factors that that counter health promotion

The data also revealed that there are some community-based factors that undermined community health and do not offer support to the CHPS system. At the same time, there were other community-based factors related to health which neither support community needs nor pose any major hindrance to the health service delivery systems.

One of the factors which were discussed which participants perceived to pose challenges to community health was community members' poor understanding of CHPS and some other factors linked to negative community-based traditional, cultural and daily social practices. While sharing her views about education and health information received from health workers on contraceptives use, a mother lamented on the risk of contracting STIs citing the local cultural and religious practice of polygamy. This practice provides

grounds for men to engage with multiple sexual partners but limits married women to one sexual partner, i.e., husband. For example, a community member explained:

> We were taught about contraception because of STDs. A woman might be faithful, but her husband will get intimate with other women. When he meets you after that, you may contract a disease he got from the other lady. We hear about contraception from the volunteers in this community.

This sociocultural practice of multiple sexual partners presents a high risk for the transmission of STIs and HIV/AIDS, and can undermine health. Another community-based traditional cultural practice discussed by participants was the patronage of traditional healing or use of herbs. These are methods of treating a sick person at home and without the use of western medication - a common practice in communities across many parts of Ghana. For example, a community member explained:

> Yes. When someone is sick, we send the person to an elder first. The elder will diagnose the sickness and give herbs that will cure the sickness. The person will bath, eat and drink the herbs and get well without going to hospital,

The use of traditional herbs and knowledge for treating various illnesses has long been accepted as alternative medicine practiced alongside western medicine in Ghana. However, people may dispute this cultural practice as a negative based on the reliance on western medicine. Parents' desire for their children was another community practice that came up in the discussion. For example, a community member explained:

> We always receive information from the radio and we learned from people that we should reduce the number of children. Actually, I cannot be specific about the

> number of children I can have. Because in case I may have many wives, each would want to have about four children or five.

Having many children is still a common desire by parents in some communities. Historically, Ghana is one of the countries in sub-Saharan Africa that has had to introduce national population policies at different stages of development to manage the country's fertility rate .The fertility rate in Ghana varies across regions. Presently, the national fertility rate is 3.9 (GMHS, 2017). One of the reasons the two regions-the Northern and Volta regions were selected for the CHPS+ program implementation was because of the relatively high fertility rates and high Maternal and Under-Five Mortality rates. According to the 2017 Ghana Maternal Health Survey the Northern had the highest total fertility 5.8. The total fertility rate of the Volta region was 4.1 (GMHS, 2017).

A few more community-based factors that undermine health were identified. For example, challenges with potable water was said to be a major problem in some of the communities. These affected health workers and the community members alike. Another factor was the inaccessibility of some communities during the raining season due to lack of access roads to some of the communities.

Finally, the non-acceptance of scientific explanation as causes of some disease and health conditions was discussed. Some community members held opposing views from health workers' professional explanations about some health conditions. For example, a health worker explained:

> For instance [is the impact of] malnutrition. Sometimes they [community members] believe it is not a result of malnutrition that is affecting the child's health. They may believe that there are some spirits harming the child. They

> usually keep those cases at homes and give local treatment. Unless you do home visits or somebody comes and hints you about it, you won't be able to know until later [when] the situation gets worse and then may come to the facility.

A behavior that is deemed to be undermining health promotion and health education efforts could be important to the community members' reason for objection of health workers' professional opinions on the causes of the health condition of children. These differences can be a major source of worry that can negatively impact health. A CHO worker revealed another community-based practice that undermines health system development. He noted:

> Currently, I am having problems in one of my communities where the volunteer has died, and the family has nominated his young son to take his place. We wanted to get another older person from the community because this guy is very young but this family wouldn't agree and it is becoming a problem and we are still negotiating. They don't understand it.

"They don't understand it" refers to whether it is right for any person or family to lay claim to a volunteer title to the extent that a family would want a young son to inherit his late father's volunteer position. Volunteers play an important role in CHPS activities. Often they make personal sacrifices in serving in the role of volunteering which also accords them some prestige in the community.

In addition to community-based factors, health managers referred to certain communicative practices of local politicians as being negative and undermining the smooth operation of CHPS. These practices include political decisions involving pledges to provide health facilities that are sometimes done without consulting with the district

health administration. This usually results in conflict between communities and the health service providers.

> Politicians are also part of the problem. During political campaigns, they promise to build CHPS compounds. And some of them do it without consulting the DHMT [District Health Management Team]. Sometimes where they [politicians] promise the project will not be [at] where the GHS [Ghana Health Service] plans to put one which brings about conflicts.

Local politicians are key stakeholders in CHPS implementation. They contribute resources and provide ideas. However, as revealed by a participant during the interviews, the extent to which the relationship with local politicians can benefit CHPS is contingent on good coordination in the collaboration.

The findings under this theme (community values and practices) are related to the "perception" construct in the PEN-3 model (Airhihenbuwa, 1989). Some of the community values were found to be positive, in that they promote health and support the objectives of CHPS. Some of the beliefs and practices however have negative health consequences and counter health promotion. For example, the cultural practice of polygyny which is linked to multiple sexual partners presents a high risk for contracting STD. Again, religious beliefs that lead to rejection of medical explanation and solutions for malnutrition pose a threat to the health of children. In addition, the communicative practice of local politicians that violates laydown rules of engagement and collaboration affect CHPS implementation. On the other hand beliefs that encourage having more children and the use of traditional and herbal medicine and treatment may have both positive and negative health consequences.

Whichever way you look at it perceptions i.e. community values and local practices can impact individual and community response to a health situation. In the case of CHPS implementation some of the factors have negative effects while others will depend on context.

4.5. Health workers perspectives relevant to communication

Health workers in discussing their roles, the services they provided and their experiences working with community members described various activities that related directly and indirectly to the role of communication in CHPS. One of those activities they discussed that is relevant to communication is community engagement. A CHO described community engagement and its importance to CHPS implementation in the following abstract:

> In the past two years, we have been able to intensify our community engagement; we have been consistent both at the district level and then the sub-district level engaging the stakeholders more to support CHPS implementation and for that matter service delivery.

What the health worker reveals as community engagement is an important communication activity, and is often used as an opportunity for interaction among stakeholders in health in CHPS implementation. However, it isn't always talked about as a communication activity. Community engagement activities bring health workers and community members together to deliberate on health issues. It also suggests this is an activity usually initiated by health workers and it is not a one-time activity but rather something that is undertaken regularly. Another health worker also described community

engagement in terms of a communication activity and indicated that her sub-district has benefitted from such stakeholders' engagement:

> Actually, a lot has changed in my sub-district. Now we are able to have full support from the communities. [That is] because now, we do a lot in terms of community engagement and the community people have now really accepted whatever we are bringing to them through CHPS. Unlike before, it was very difficult to get the support of the community to plan health activities. They didn't think of the facility, and everything is for them and they have to support it. But now, they have come to the realization that they really own CHPS. So they are supporting it, in many ways like building projects through community contribution. But initially, it wasn't like that. But currently, a lot has changed, yeah.

From the shared view of the health worker above, it is obvious that communication processes such as community engagement contributes to improvement in relationship building, collaboration and participation of communities in CHPS programs and implementation. Besides reaching out to communities to communicate about CHPS and the roles they are expected to play, health service providers also recognize the need to market their success story in the implementation of CHPS to attract more support from partners. A health worker shared this view in the following abstract.

> I think that as a district, we have `to sell ourselves more for others to know about these things that we are doing. So they can come to our aid, we have to be able to project ourselves more and then show it by data per the results we are achieving and then that is one key thing that we are doing now.

It is clear from the comment above that the health service engages varied communication activities, and for the different purposes. Health worker's interaction with communities is useful in helping them understand the importance of CHPS and the roles they are expected to play in the program. At the same time, the district health service engages in communication processes that allow them to share their performance and achievement in CHPS implementation in the hope of attracting funding support from donor partners. The communication processes and experiences in CHPS described by health workers were not only in positive terms. Health workers also shared experiences that depicted negative communication. For example, a health worker shared the following negative communication experience:

> When we came here the other day, they thought that like Systems for Health, CHPS+ was also coming to build CHPS compounds and also provide staff quarters. So, when they see CHPS they are thinking something new is going to happen. I am not sure they have a different mindset. They think CHPS+ is here to helping them to get a CHPS compound.

The health worker here is referring to a negative communication experience because of different expectations of the community members related to the program. This situation also communicates that community members are not able to tell the difference among multiple health partner-organizations and their programs. As a result of the communication gap, community members think that CHPS+ program is sponsoring CHPS compound construction when indeed the program was not. In other instances a communication gap reflected in community members' generally poor knowledge and

lack of understanding of what CHPS provides, what it can and cannot do and what it is not. The following comment by a community member is an example:

> As he said, good drinking water is one. Secondly, this hospital [CHPS] should be expanded [upgraded]. Thirdly, there should be an ambulance in the hospital. Fourthly, there should be more nurses made available so that they can run shifts successfully.

The community member here shows a complete lack of understanding of CHPS and focuses on upgrades of the hospital and the compound and for nurses to run a shift duty. Health workers acknowledged that if communication gaps are addressed it improves trust and promotes good relationships between community members and health workers. This is supported in the following health worker comments:

> I want to add something about communication. Actually, now in terms of communication there is improvement. Because initially, it was difficult to see community members come to the health staff at the CHPS zone to confirm a bad report they hear in the community about health workers. In the past, people just spread false information about the health workers but nowadays when some community members hear anything bad about the clinic they quickly come to ask the staff and with that we are able to resolve some of the problems.

The comment reveals that health worker and community relationships depend largely on effective communication. The same can also be said about the relationship between supervisors and frontline health workers as is seen in the following comment by a CHO concerning how some supervisors' speak to subordinates:

> **Interviewer:** Okay, they [referring to supervisors] start accusing people?

> **Respondent:** Yes, when they come, that's the first thing they do. "You people are just here and look at how your place is dirty. Look at the walls, you can't even paint". And then you would begin to ask them, am I the one who buys paint? And so from the beginning there's give and take.

Here the CHO shares that the supervisors are not communicating in the appropriate way when they are on supervision duties. This shows that health workers want their superiors to communicate with them in a respectful manner instead of accusations. Another health worker shared similar experience in the comment below:

> Motivation is not necessarily cash. Sometimes when someone does something well, you really need to make the person feel that he/she has done well. And when that same person makes a mistake, don't let it look like they have never done anything good. Mostly that's how we feel. You keep doing well. Then you just make a mistake once and they would just let you look stupid. They make you feel that you've never done any good thing in your life. So at least, it is also a form of motivation. You have done very well, if you have done it this way, this wouldn't have happened; you correct us in a moderate way instead of always saying it in a very harsh way. That sometimes dampens the spirit.

The comments above showed that health workers at the lower levels desire and expect from their superiors a positive and encouraging communication that acknowledges their efforts and speaks to them with respect. Similarly, when mistakes are made to provide encouragement rather than making them feel bad about it and in turn negating everything else they have done. CHOs see comments from their superiors that are not respectful as a

failure to appreciate their dedication and sacrifices in their work as community health workers but also it demotivates them and discourages them.

From the finding reported here it could be seen that health workers have experiences that provide important insights on the role of communication in CHPS implementation. For example they understand that when the communication processes that support CHPS implementation are conducted well it yields good results in community members understanding and support for CHPS. They also demonstrate appreciation for good interpersonal communication with their superiors. In the next section I present the findings on community members' perspectives relevant to the communication theme.

Under the theme above, I discussed the effects of communication from health workers perspectives. The findings under this theme are related to the relationships and expectations domain in PEN-3 (Airhihenbuwa, 1989). Health workers perceived communication and communication related activities to contribute to building good relationships and ensuring effective collaboration among partners for CHPS implementation. Improving community engagement, effective dissemination of best practices and transparency between health workers and community members were all perceived to enhance relationships, trust among health workers and communities. These factors are capable of attracting resources and support for CHPS. On the other hand unprofessional communication from health managers to subordinates, poor community engagement and ineffective communication strategies are believed to affect the morale of health workers and community members' knowledge and understanding of CHPS. In

effect communication factors in CHPS implementation embody relationships and expectations.

4.6. Community members' perspectives relevant to communication

The community members' interviews yielded a significant amount of communication related themes for example good communication was found to promote healthy relationships and the opposite was largely true. Thus, communication experiences included both negative and positive outcomes. A mother shared this positive communication experience and community members and health worker relationship:

> Actually, the doctors and nurses are trying their best in their work. They educate us about our health problems, what to do and what to stop so the sickness can go or so that we can reduce sickness here. Again, they educate us concerning the type of food we should eat to improve our health. In fact, we cannot say everything about what they do. But they always bring in new workers and take others away. So first, we are praying that those incoming new workers would continue with the good works. We also pray that they bring in those we can stay with peacefully. That is what I have to say.

In the opinion of this mother, some of the CHOs have a great relationship with community members and that is a result of good communication. She is impressed and satisfied with the health education provided by the health workers. Among other things the mother is mentioning some of the major health education themes provided through the good communication skills of the CHO(s). This demonstrates how community members value good communication and relationship with the health workers. Once the communication is good and the relationship is healthy, community members trust health

workers and willing to work with them for the promotion of their health and the health of their families. In the following quote, another mother confirms this perception: *"Some people believe that using contraception, injection or lube, makes you barren, that's why they won't use it. But the nurses say it is not true. So, we believe the nurses*". In the view of this mother, there is misinformation or negative perception about contraceptives however due to the trust between the women and the CHOs they choose to go by the education provided to them to make their choices about family planning methods.

Communication reflected in community members' discussion is their perception of the performance of the CHOs and about the CHPS compound serving them. Some community members had concerns about the attitude of some CHOs. . The abstract here is an example.

> Actually, the health workers in the big hospitals are different from those here. In the big hospitals they hold your hand and teach you everything. For instance, when they are going to give you medicine, they take the time and talk to you and teach you how to take it; what time and the number of tablets you should take. But here, when they give you medicine sometimes it is you the patient who has to ask them how you take it. But we are not blaming them, the fact is, the time is insufficient for them, so we are grateful for all their services.

Although, the community member fell short of calling the CHO out for bad communication, invariably they succeeded in establishing there are concerns about poor communication and thus bad relationship between community members and some CHOs. What the participants pointed out here indicated inadequate communication with the health workers in the community as compared to being at a hospital. The comparison

made by the participant helps to explain their expectation of good communication even in the simplest tasks. This view received further explanation from another community member:

> First, the hospital that admits patients is different; the health workers do monitor and assist patients. However, here the patients only come and go, so health workers need to follow them to their house to give such directives from the hospital, upon receipt.

The community members revealed that sometimes bad communication existed between the health workers and themselves. However, while some community members demonstrated their understanding of the roles of health workers when speaking about the health system, others expressed views in the discussion that displayed lack of understanding of the CHPS policy. A father shared his view on his expectations of CHPS:

> The communities in this area are so many, so we would have wished that this hospital was bigger than its current state. We know all those people from other communities also come to this facility for health care. So, it is not good for them to come only for you to refer to go farther. In this case, our suffering has not been alleviated. So, our wish is that this facility will be expanded more than its current state, because some sicknesses sometimes require surgery. Anti-venom for snakebites is also not available here. These are all our suggestions for you.

Men/fathers often get to represent and speak for their family or community. As opinion leaders, the voices of men carry weight. This father was advocating here for his community. However, his information was not aligned with what CHPS actually does in

the community. A community that well sensitize and community members have good knowledge about understand that CHPS services do not include blood transfusion or providing anti-snake medicine.

> What I have to say is that we are facing some particular issues in the facility. As he said, the facility lacks antivenomous for snakebites. It is not that the health workers lack the expertise, but the required materials are not available here. Blood transfusion and other services are also not available. It is our wish that all those things are made available. People come in here with those related issues, but whenever they come, they have to be referred [elsewhere]. We wish that those services are made available here.

These are clear examples of lack of understanding of the CHPS policy as a program that aims to provide basic health care services with the mandate to refer to health cases viewed as complex or requiring higher level care to go to the next level. This misinformation also stems from lack of clear communication about the program and with the health workers.

Similar to the theme of communication that emerged through health workers interviews, the theme “Community members’ perspectives relevant to communication” is also related to the relationship and expectations domain of the PEN-3 model (Airhihenbuwa, 1989). Community interviews revealed that health workers are to improve the relationship and trust between them and community members through improvement in communication. In the midst of negative perceptions about certain health services such as family planning health workers were successful in their health messages if they maintained good communication and health relationships with mothers.

Community members' experiences related to communication as shown in the theme above were largely indirect or implied in meaning. Knowledge and information about CHPS is provided to community members by health staff, volunteers and Community Health Management Committees. These bodies collaborate in their activities and their work impacts each group. Their efforts are supposed to complement each other and at the same time challenges faced by one of them could impact the others negatively. For example, when health workers face logistics problems and are unable to mobilize and support the activities of volunteers, it can lead to them becoming inactive. Similarly, if a community based challenge affects CHMCs or volunteers and they are unable to volunteer their time and efforts, the plans of the health workers cannot be implemented. The poor knowledge and understanding of community members could rest at the feet of these bodies with the health workers taking most of the responsibility for community sensitization and mobilization.

In effect, the interactions with the various participants provide an insight to the health workers and community perspectives on the roles of communication as it relates to the implementation of CHPS. In addition, health workers demonstrated their understanding of factors that enhance CHPS functionality and those that constraint the program.

The views of health workers and community-based factors that enhance CHPS services lend meaning to the various ways in which CHPS design and implementation respond to the local cultural context of health and expectations. On the hand, health workers and community perspectives attributed to the communication theme help to respond to the role of communication in the policy’s implementation.

5. DISCUSSION

5.1. Overview of the Findings

Major findings from the data analysis revealed that the CHPS policy created and maintained a system of health care delivery focused on community health needs. District health managers spoke about their roles as being coordinators of health planning, supervision monitoring, and evaluation. They oversaw the distribution of resources, welfare and training of staff and ensured the flow and quality of services. The CHOs based at the CHPS zones on the other hand, described their responsibilities to involve the day-to-day provision of health care services to community members. They provided services such as immunization, Ante-Natal/Post Natal Care and family planning to the community members. CHOs also educated community members on malnutrition, hygiene and other healthy living behaviors. CHOs revealed that they provided these services through both home visits and at designated locations in the community.

Health managers described CHOs as being the heartbeat of CHPS operations. Their training, capacity building and supervision were perceived as the biggest priority of the district health managers in order to ensure the success of the program. The CHPS+ program was acknowledged for running several training and capacity building workshops and peer learning trips for CHOs. Such post-graduation training and capacity building initiatives were seen as essential for equipping CHOs with the requisite knowledge and experience for effectively carrying out their duties. When talking about major changes in their districts following the introduction of the CHPS+ program, health managers touted the CHOs capacity gap training and emphasized that those workshops contributed in improving the performance of CHOs. However, in both Central Tongu District and

Gushegu Municipal, there were major concerns about the low numbers of CHOs; a situation health managers noted was affecting the running of existing CHPS zones and their ability to activate new zones. In addition, health managers also talked about gaps in equipment for community health volunteers and community health management committees. The CHPS+ program was said to have contributed immensely towards improvement in the supply of medical equipment and essential logistics in order to carry out the program successfully. These were provided at the CHPS zones to support and enhance health care services delivery. The provision of these equipment and supplies went to support CHOs to increase home visitations and carry out outreach work such as immunization, referring patients who needed advance care, providing family planning and contraceptives, carrying out education on malnutrition and treating malaria along with other illnesses. These logistics and supplies however need regular stocking and maintenance. This concern touches on the importance of sustainable funding to support effective scale up of CHPS. The availability of funding supported by prudent resources management is critical in maintaining community trust in CHPS and support for the program.

The findings also further revealed that there are community level factors that influence health and health care service activities. These consisted of both positive and negative sociocultural and religious beliefs and practices. In Gushegu one of the religious and cultural practices that appeared to have a potential negative impact on health is the practice of polygyny, which embraces a man marrying more than one wife at a time and was seen to pose potential health risks. Community member interviews revealed that some women had concerns over the possibility of contracting sexually transmitted

diseases (STIs) from their husbands who are either legally married to other women or may decide to keep multiple sexual partners with others whom they may be planning to marry. This could be a legitimate fear faced by women given the evidence suggesting that having multiple sex partners increases one's probability of being exposed to a person infected with a sexually transmitted disease such as STI and HIV/AIDS (Buvé et al., 2001).

In addition, some health workers reported encountering parents who are hesitant to accept medical diagnosis of malnutrition in their children, and attributing it to religious beliefs of spiritual attacks. Health workers were concerned that the alternative belief in the cause of illness sometimes delayed the decision by parents to seek and access early intervention for children suffering from malnutrition and other medical conditions. On the other hand, high communal spirituality and the practice of providing care and support for the sick at home were among some of the cultural practices found to be instrumental in promoting health and CHPS implementation in communities from both districts. Health workers reported that the spirit of communalism - an old tradition in rural communities across Ghana - was still high in many places. However, they also noted that once a community leadership was properly consulted, community members were willing to come out in their numbers to support a health project by way of donation of local resources or free labor. Some CHPS zones were said to have already benefited immensely from community support in the construction of local residential facilities for health staff or additional space for service delivery. The commitment of community members included getting involved in the planning and execution of health related activities including meetings and durbars. Concerning community members' support and

willingness to care for sick people at home was reported as a continued cultural practice that allowed community members to seek and receive support from family and neighbors when they are sick and needed assistance. From both districts, mothers in particular indicated that they sometimes sought help from neighbors who have knowledge in herbs when they are sick. Complementary and alternative medicine consumption has long been noted to have a potential for making health care accessible (Kuunibe & Domanban, 2012) as many people especially those living in remote and hard to reach communities find these sources accessible and beneficial.

5.2. Using the PEN-3 Cultural Model to understand the cultural relevance of the CHPS policy: Relations and Expectations domain

Taking inspiration from the example of researchers not adopting the PEN-3 Cultural Model in its entirety (Mieh, 2013 & Olufowote, 2020), the findings of this study highlights the significance of the relationship and expectations domain of the Pen-3 Cultural Model. The relationships and expectations domain in the PEN-3 cultural model directs attention to three key aspects of the culture: perceptions, enablers and nurturers (Airhihenbuwa, 1995).

Perceptions refer to the knowledge or attitudes that individual community members have or the lack of it and it affects a stated behavior or health intervention. For example, the findings showed that in both districts (Central Tongu and Gushegu Municipal) community members have certain perceptions, beliefs and practices that put them at health risk as well as supported better health outcomes, and other beliefs and practices that affected the way the CHPS program and any other health intervention functioned. The community-based beliefs and practices found to affect CHPS operations

included practice of polygyny, religious and cultural beliefs that objected to medical diagnosis of illness, some community volunteers insisting on passing on their volunteer roles to their children contrary to conventional practice that allowed new volunteers to be nominated by community elders and approved through consensus. In addition, it was found that local politicians often acted contrary to health planning guidelines in the district level. These guidelines required stakeholders who are interested in donating or constructing a CHPS compound to consult with the District Health Administration and the District Assembly for decisions about the site for the project to synchronize with existing plans.. This common practice sometimes resulted in projects being located outside the existing plans and when efforts were made to align the planning as planned it resulted in conflict.

Enablers relate to the resources and support systems within the family and community level which could make it possible for the performance of the suggested role or behavior (Mieh, 2013 & Olufowote, 2020). The findings of this study showed that through CHPS, the government and its partners in health and development created CHPS compounds, trained, recruited and posted staff, provided logistics and medical supplies as well as facilitated health care delivery to community members in collaboration with the district health administration office and the district assembly and communities. It was also found that CHPS provided immunization services, treatment of minor ailments, emergency referral service, family planning and contraceptives promotion as well as health promotion and education. At the community and family levels, it was found that husbands wanted more children and expressed their commitment to supporting their wives in providing for their families health, education and other needs. In addition, health

workers testified that communities were not only supportive of health care planning but they demanded the services that were being provided.

Nurturers according to Olufowote (2020) refers to the influences from family, community and other relations that impacts behavior whether encouraging or discouraging to the individuals or groups in performing a behavior (especially things related to cultural practices). The finding showed that there is a high spirit of communalism in communities in both the districts. Related to the high communal spirit is the commitment of individual community members who are willing to present themselves as health volunteers. These men and women were revealed to have offered their services free of charge, working with CHOs in the planning and delivery of health care services (Afari-Asiedu et al., 2018). Further, once the community leadership is properly consulted, people are willing and able to sacrifice their time and other resources at no cost to support community-driven initiatives. For instance, community health workers observed that their CHPS zones received and continued to enjoy a lot of community support. Some communities provided free labor for projects initiated by the District Assembly and others have mobilized resources locally to build and donate accommodation facilities for health staff to stay and work.

Apart from the community health volunteers who work on a daily basis with CHOs, health workers also talked a lot about another group of volunteers called community health management committees (CHMCs). The CHMC is also a volunteer group but its members are not involved in the day-to-day activities of health services delivery. It is a community-based technical group comprising between seven to fifteen members (Nyonator, 2005) whose duties include helping to recruit volunteers, raise

funds, procurement and supervising of projects carried out by the community to support health services. The CHMC is the main body that leads and drives all community-based initiatives on health and development. Another important nurturer is the willingness of major stakeholders to collaborate and support health services. Through strong stakeholder engagement, the district health management authorities are said to have succeeded in establishing a comprehensive local network of active collaborators who are happy to work together in assisting with initiatives geared towards the health and development in the districts.

In the table below, I demonstrate how the findings of this study reflect the theoretical domains of the relationship and expectations of the PEN-3 Cultural Model. On the left column of the table are the three elements of domain i.e., perceptions, enablers and nurturers and on the right column are the study findings matching the cultural elements in the model.

Figure 6: The relationships and expectations domain of PEN-3 in the findings

Enablers: Available resources for health care	• CHPS zones • CHOs/Midwives • Equipment and supplies for health services • Transport for referral • Transport and fuel for community outreach • Health registers • Data capture and management systems • Training and capacity building for CHOs and Midwives • Training and resourcing of Volunteers and Community Health Management Committee
Perceptions: Community based beliefs, attitudes and practices that affect health	• Multiple sex partners dues to the practice of polygyny and other negative cultural-based factors that influence sexual behaviors • Traditional and other religious beliefs that object to science based explanations for the causes of illness (e.g. refusal to accepted nurses explanation that a child is suffering from malnutrition and instead belief that the child is under the attack of evil spirits) • Some volunteers wish to pass on their roles as volunteers to their children as an inheritance even if the child in question is too young to play the role of a volunteers • Some local political leaders make promises to provide health facilities for communities without consulting with the District Health Office to know the planning priorities
Nurturers:	• Prevalence of communal spirit, ownership and responsibility • Willingness of stakeholders to collaborate in supporting health service delivery • Community members offer to serve as health volunteers and committee members collaboration in health care.

5.3. Understanding the role of Communication in CHPS implementation

The revised National CHPS policy (Ministry of Ghana, 2016) emphasized that the District Health Management Team (DHMT) in conjunction with the District/Municipal Assembly are responsible for leading the planning and management of primary health care services, especially in rural Ghana. The DHMT role in CHPS scale up includes the sensitization of communities to the CHPS policy and to obtain their support and participation in the planning and provision of health care services. In this study, stakeholder engagement was perceived and described largely as communication activities by health workers. Communities through communication activities are sensitized about the activities and types of services CHPS provides, the role of government and the need for community involvement and participation in the planning, development and delivery of health services.

With the support of regional and national leadership, the DHMT is expected to lead the stakeholder engagement processes with the District and Municipal Assemblies as well as other state, private and non-governmental organizations. Although sensitization of communities about CHPS is an ongoing process, the GHS mainly carried out communication and outreach activities during the demarcation of a new CHPS zone. Community mobilization and engagement mostly involved consultation with chiefs, elders, opinion leaders and major identifiable groups in the community (Nyonator, 2005). Sensitization on CHPS is usually undertaken by the DHMT members with support from staff at the sub-district level and those staff based at the CHPS zones. The processes of community sensitization are varied such as meetings with a larger or small teams of people selected from the key stakeholders mentioned above. Consultations during

demarcation of new zones are undertaken to provide education about the CHPS policy, explain the roles and expectation, and to solicit their buy-in support and collaboration. During this phase, decisions about where to situate/locate the zone the compound and structure need are also made. Further, community leadership is also consulted to help select people to serve as community health volunteers.

Selection and training of community health volunteers (CHVs) play a crucial role in CHPS implementation (Kweku et al., 2020). CHVs are selected, trained, supported to serve the communities in which they come from and work directly with health staff in planning and carrying health service activities. CHVs also have extensive responsibilities that include but are not limited to mobilization of resources, helping disseminate information about periodically scheduled services such as vaccinations, outreach child welfare clinics, school health, nutrition and growth monitoring sessions. CHVs also work with health staff during national vaccination campaigns and during insecticide bed-net distribution. Additionally, they often keep registers for reporting vital community events such as deaths, birth and diseases outbreaks. Depending on the health care service needs in a district, some CHVs also provided basic medical supplies such as drugs for treating waters, diarrhea and deworming to community members.

CHMC members on the other hand are not involved directly in health care service delivery. The committee members are a select group of opinion leaders usually consisting of seven to eleven people. Their duties include holding periodic meetings to discuss issues bordering on health in the community and explore opportunities and ideas for helping improve health care service delivery in the community in collaboration with the CHOs. Their responsibilities involve communications skills in negotiations, public

relations and resources mobilization as well as conflict management, grant writing and project management. Besides health staff, the CHMC have the most direct and permanent role in educating community members and leadership about the CHPS policy and the role of the community.

District Health Management Teams and the all the health staff working at the health centers and CHPS zones have the leading roles in sensitizing communities about the CHPS policy. DHA and health staff direct involvement community sensitization however peak with certain cycles in CHPS development. For example community engagement activities are highest during the demarcation of new zones. Project-based activities also afford districts opportunity to embark on community engagement and activities such as durbars which present opportunity to address large community gatherings on health issues including the CHPS program itself. The next prominent body when it comes to helping driving the community and health services is the Community Health Administration. The CHMC performs a major function supporting health care service delivery in the role of leading community efforts in local resources mobilization. This is, notwithstanding the fact that as a community-based body its members themselves may have limitations, when it comes to their experience with the health system. It is important therefore that CHMCs are provided adequate education and training and training on CHPS to help them perform their roles effectively. Durbars, however, often have specific agenda which sometimes may not include direct messages on sensitization about policy. Notwithstanding the activities, deliberation and interactions at durbars (community forums) make them the avenue to both directly and indirectly communicate initiatives and help increase community members' knowledge and understanding of

CHPS. A number of factors may influence how a durbar serves to provide avenues for community sensitization through communication. These may include planning, main health agenda (e.g. family planning, malaria, menstrual health, water and sanitation, oral health etc.) for the durbar, the health staff that address the durbar and the community members attending the durbar.

In both health workers and community members' interviews, the term communication occurred in several places. Health workers used the term or implied communication when referring to interactions and other forms of exchange of meaning between health workers and their supervisors, and between health workers and communities and other stakeholders. In other instances, the communication was used in reference to tools and mode of communication such as the districts providing a mobile phone and call credit at the CHPS zones to support the work of CHOs when they needed to call and speak with staff at the next high-level facility when referring a patient for care. However, there were no direct questions in the interview guide referring to communication and as such, communication is understood through meanings conveyed both directly or implied by health workers as well as through meaning making implied in the participants' discussions.

One thing that is abundantly clear from the data analyzed for this study and the literature on CHPS implementation is that the term communication and its application is integrated in the CHPS policy design and implementation. The effect this has had on the programs implementation is the missed opportunity to understand the communication process and tap into the potentials communication theory (Fishbein & Cappella, 2006) and its application (Kreuter et al., 2003 & Lee, 1983) for improving program

effectiveness. Fishbein and Cappella (2006) notes that although health promotion, health education (behavioral) theories can help us identify a health behavior, communication theories hold the biggest potentials for helping us target and modify the identified behavior. To communicate effectively, Lee (1983) notes that one must know the factors involved in the communication process. Acknowledging, understanding and appropriately applying any of the models of key models communication would be instrumental in supporting and enhancing CHPS implementation.

Similarly, according to Kreuter et al (2003), cultural appropriateness can be achieved with effective use of communication strategies and cultural tailoring techniques. The CHPS policy implementation would benefit immensely from communication theory and application once the program endorses the right framing. For example, CHPS literature variously referred to its sensitization process as community engagement, participation and involvement. These are key concepts situated in communication for development and social change (Servaes, 2007). The policy also borrows a concept like dialogue which is a dominant theory in Public Relations, Communication and Philosophy. The effect of adopting concepts without typically applying the theories behind them is the possible misapplication (Paquette, Sommerfeldt, & Kent, 2015). Identifying this challenge is a new definition to the factors containing the implementation of the policy and needs addressing through the recommendations contained in this study.

5.4 Implications for Future Research, Policy and Intervention

The findings in this study have implications for further research and health policy program development, implementation and evaluation. Future research should consider exploring the perspectives of health managers and policy makers from the regional to national level within the Ghana Health Service, the Ministry of Health and its key stakeholders to further understand their perceptions about the role of communication in CHPS scale up. Understanding seniors and policy managers' perceptions on the role of communication could influence support for strengthening health systems that impacts the role of communication in CHPS implementation. It will also draw attention for the involvement of the new Health promotion Division of the Ghana Health Service providing advice and direction for the rightful application of communication strategies in CHPS scale up activities. The Health Promotion Division of the Health Service which was inaugurated in 2019 contains units for social mobilization, advocacy and health communication (Ghana News Agency, 2019). The role of the division could help set CHPS scale up processes on the right course.

Health workers saw communication processes including community engagement, empowerment and dissemination of best practices to attract partners as being very vital to the enhancement of CHPS operation. Thus, primary health care service should prioritize these activities in order to strengthen CHPS scale up efforts. For example, health workers realized that there is a direct link between communication activities and improvement in community engagement, community support and participation in CHPS implementation. As a result of good communication, communities mobilizing local resources and expanded space to help in increasing service, and accommodation facilities for health

staff to live and work in the community so that they do not have to commute daily due to lack of accommodation provided at the CHPS zones. CHO supervisors speaking on challenges facing CHPS activities in their sub-districts expressed concern that lack of CHPS compound and or accommodation for CHOs to stay and provide services was affecting CHPS operationalization.

Intensifying and sustaining sensitization was believed to be necessary for reaching more people and improving community members' understanding of CHPS. The CHPS policy is designed as a health care system that relies on the mutual collaboration between the government (the Ghana Health Service and Ministry of Health) and communities in the provision of health care service. The role of government involves the training, recruitment and posting of community health workers, district health management staff, provision of medical supplies and logistics, and contribution in the construction of health facilities. Communities are major stakeholders who are required and expected to collaborate and contribute resources such as land and labor among other things in supporting initiatives for health care services. The policy actually stipulates that communities are to lead the way for organization of health activities. Health workers believe that when community leadership is properly sensitized about the role of the community in CHPS, it increases their involvement and ownership. It also helps to improve trust and enhances good relationships between communities and health workers. The term, communication, is not commonly used and such labels as "communication activities" as well as "communication processes" should become central in the delivery of health programs. In doing so, this might influence processes and activities utilized by health staff.

Finally, the role of the community health management committee in helping the community fully understand their roles in CHPS scale implementation was noted to be instrumental. The effectiveness of CHMCs however was directly linked with the training and support they received for the health service. Similar observations about CHMC effectiveness can be found in the revised National CHPS policy (Ministry of Health, 2016. Pg. 21). The revised policy notes that even though CHMCs have been found to be instrumental in CHPS scale up process a lot of the time, it is either that they are constituted and left untrained, ill-equipped and unsupported or that their activities are not properly coordinated. It is commendable therefore that the CHPS+ program and other interventions are supporting volunteers and CHMC training to ensure the discharge of their duties appropriately in supporting CHPS implementation.

5.5. Limitations

Analyzing existing data for this study came with a lot of benefits including the opportunity to save cost both material and related challenges involved in visiting the field, recruiting participants, handling logistics, arranging and conducting interviews. However, that was also something I consider as a limitation to this study. First, I think that if I were to conduct an interview for this study, I would have had the opportunity to ask participants direct questions related to communication activities and processes. Even though in the absence of such direct questions, I was still able to explore communication themes but with additional primary data collection, it could have been a far richer conversation to assess health workers and community members' perceptions on the role of communication.

Second, conducting my own interviews would have allowed me the opportunity to interact directly with the participants. Analyzing existing data is not any less interactive with the data but the human connection between a qualitative researcher and their community cannot be recreated in a secondary data analysis. I am very fortunate to be familiar with the culture, the communities and the health systems where the data was collected, and was able to analyze with that in mind. My knowledge of the communities and the background of the health system helped me to focus on the data and try to visualize the interactions and locations which helped me to better appreciate the data than if I had lacked that background knowledge and experience.

Third, my inability to conduct interviews limited the opportunity to probe and ask follow up questions in the directions that would have been different from a communication research and would have elicited different responses leading to insights that would have been more applicable to communication scholarship. The circumstance of the global COVID-19 pandemic, curtailed my opportunity to travel due that the existing secondary data presented the best opportunity to conduct this study without having to change my research topic or method.

5.6. Conclusion

The findings from this study show that health workers and communities believe communication play a key role in CHPS implementation. Key areas in CHPS implementation that communication plays a significant role include health managers' interactions with CHOs especially during monitoring and supervision. Communication experiences shared by CHOs indicate a need for more training in respectful and professional communication for health managers who are involved in monitoring and supervision duties. Other areas of CHPS implementation that have significance for communication are health workers and community member relations. There is the need for detail, clear and respectful communication by health workers to community members. This is necessary to maintain trust between them. Therefore health workers communication competence is critical. Engagement with communities and local partners such as the District Assemblies and NGOs involved in health were some of the other activities in CHPS implementation where communication is relevant. Unfortunately, these areas outlined above do not seem to have been identified and prioritized as important areas for strengthening communication to enhance CHPS implementation. Health workers interviews reveal that intensifying communication processes such as community engagement and mobilization through sensitization meetings, durbars and the activities of CHMCs greatly improved community members' knowledge and understanding of the policy. It is not clear what intensifying these activities mean. It is clear however that developing the communication competencies of people tasked with facilitating CHPS scale-up could increase communication effectiveness. Also, adopting specific communication theories and strategies will allow for better identification of the

communication challenges and development of appropriate steps for addressing them. Good understanding of the program's provisions, allows communities to acknowledge and accept their expected roles leading to high commitment to participate and collaborate with the Ghana Health Service and partners for planning and development of health activities for enhancing service delivery. Health workers made it known that community participation, contribution of resources including donation and construction of accommodation facilities for health staff increased with greater community engagement. Even though this study did not set out to explore the role of communication in other stakeholder participation in CHPS, it came out that enhanced communication with the District, Municipal Assemblies improved their involvement and support for CHPS.

The absence of effective communication was seen to impact negatively on communities and health workers relationship and collaboration as well as between and among health workers (subordinates and superior). Communication was broadly perceived as information dissemination, sensitization, quality interaction and relationships building as well as the provision of telecommunication resources to support referral. These processes and resources must be considered essential in CHPS implementation and given the need to help improve CHPS performance and contribute to addressing the challenges of access, quality and equity in primary health care services.

CHPS reflects the relationships and expectations domain of the PEN-3 cultural model (Airhihenbuwa, 1989). The values and local practices of communities (Perceptions) have an effect on community members' health and CHPS implementation. These values include positive perceptions such as trust between health workers and community members and negative values such as religious beliefs that influence parents

to reject medical opinions. The two other constructs under this domain are enablers and nurturers. These variables in the model refer to community based or external supported resources (enablers) that either promote or hinder the intervention and the role of social support in community members' attitude and behavior regarding the CHPS policy. These two constructs in the model are supported by the findings in my analysis such as the availability of logistics and medical supplies and HR (enablers) at CHPS zones for ensuring the delivery of health services. The Nurturers construct is supported by the study findings such as the communal and commitment of communities in supporting the operation of CHPS.

On this note I would conclude that by effectively adopting culturally appropriate techniques of communication CHPS will be able to optimize the opportunities in positive cultural attributes such as strong communal spirit, volunteerism, and collaboration for service delivery whilst health workers and community members would be able to work together to address negative attributes of local beliefs sociocultural practices.

Appendix A.

Midline Data Collection Interview Guide:

Managers – District Directorate Members in SLDs Guide (IDI)

1. Walk me through the changes that have taken place in your district in the past two years.
2. Can you tell me about how and why these changes have occurred?
3. Tell me about the CHPS zones that have become functional in this district in the past two years? (Probes: what things helped with CHPS scale-up; what problems occurred to slow down the process or got in the way of a CHPS zone becoming functional; what are proposed solutions to these problems)
4. Overall, what do you think about the progress of CHPS scale up made in your district?
5. What improvements have you seen in service delivery at the various health facilities in your district? (Probe about CHPS specifically)
6. What has been done in your district through the CHPS+ program?
7. How are the CHPS+ interventions and the distribution of resources being informed by health information data?
8. Can you tell me about any lessons learned from peer exchange learning visits to the Upper East?
9. What are some challenges to the smooth implementation/running of CHPS and service delivery provision in the district? [Out of the challenges stated let us rank the top three.]
10. What changes need to be made to solve these challenges? (Probes: How best can we make these changes? How can the improvements be sustained?)
11. Tell me about frontline workers' perceptions of the CHPS+ program.
12. What about community health volunteers' perceptions of the CHPS+ program?
13. What about community members' perceptions of the CHPS+ program?
14. How has existing community programmes fed into the CHPS+ initiative for some of the zones in your district?

15. We have come to the end of the interview, is there anything else you would like to mention?

CHO Supervisors'/SDHMT members' Guide (FGD)

1. Tell me about your role as a CHO supervisor in this district/sub-district.
2. Tell me about any changes that have taken place in the district/sub-district in the past two years.
3. You mentioned [….] changes in the district/sub-district in the past two years, which of these changes are related to the CHPS+ initiative? Mention any more related to the CHPS+ initiative.
4. What are the CHPS+ program activities that are taking place in the district/sub-district?
5. How are things working generally at CHPS facilities in this district/sub-district? (Probe: What is working well? Which areas have challenges? What more needs to be done?)
6. Can you tell me about any lessons learned from peer exchange learning visits to the Upper East?
7. Tell me about any challenges your CHOs are facing? [Out of the challenges listed please rank the top three]
8. What challenges are your volunteers also facing? [Out of the challenges listed please rank the top three]
9. What are community members' perceptions of CHPS at this time?
10. How often are the facilities used by community members?
11. What are CHOs' perceptions of the CHPS+ program?
12. What are volunteers' perceptions of the CHPS+ program?
13. What are community members' perceptions of the CHPS+ program?
14. Tell me about the CHPS+ training offered by UHAS/UDS you've received so far? How has it impacted your work? What more would you need to do better?
15. What more needs to be done to improve the quality of health care you provide?
16. How has existing community programmes fed into the CHPS+ initiative for some of your zones in the district/sub-district?

17. FOR SUB-DISTRICT ONLY: Tell me about the ways the DHMT have supported your activities?
18. We have come to the end of the discussion, is there anything else you would like to mention?

Frontline Workers' (CHOs) Guide (IDI)

1. Tell me about your role(s) as a CHO? (Probe: How many communities are you assigned to? What work do you do in each of these communities?)
2. Describe the situation at your CHPS facility now. (What can you say is working well? Which areas have challenges? What more needs to be done?) [Out of the challenges you mentioned rank the top three]
3. What are the changes that have taken place at your CHPS facility in the past two years?
4. Tell me about any of these changes you mentioned that are related to the CHPS+ initiative?
5. What are the CHPS+ program activities that are taking place that you have been a part of?
6. Can you tell me about any lessons learned from the peer exchange learning visits to the Upper East? (If not undergone visit: What are some of the lessons your colleagues have learned from peer exchange visits)
7. Describe your current involvement with the community.
8. What are your thoughts on community members' participation in CHPS?
9. How is your view about the support from supervisors at the sub-district and district levels?
10. What are your perceptions of the CHPS+ program?
11. What are your community health volunteers' perceptions about the CHPS+ program?
12. What are your community members' perceptions about the CHPS+ program?
13. Tell me about the CHPS+ training offered by UHAS/UDS you've received so far? How has it impacted your work? What more would you need to do better?
14. What more needs to be done to improve the quality of health care you provide?
15. How has existing community programmes fed into the CHPS+ initiative?

16. We have come to the end of the interview, is there anything else you would like to mention?

Frontline Workers' (Volunteers) Guide (FGD)

1. Tell me about your role(s) in this community? (Probe: What communities have been assigned to you? What work do you do in these communities).
2. Describe the situation at your CHPS facility now. (What can you say is working well? Which areas have challenges? What more needs to be done?) [Out of the challenges you mentioned rank the top three].

3. What are the changes that have taken place at your CHPS facility in the past two years? (Probe: based on resource allocations at the zone)
4. Are any of these changes you mentioned related to the CHPS+ initiative?
5. What are the CHPS+ program activities that are taking place that you have been a part of?
6. Describe your current involvement with the community.
7. What are your thoughts on participation in CHPS from community members?
8. What do you think about the support from the CHPS staff?
9. What are your perceptions of the CHPS+ program?
10. What are your community members' perceptions about the CHPS+ program?
11. Tell me about the training/orientations you've received so far? How has it impacted your work? What more would you need to do better?
12. What more is needed to be done to improve the quality of your work?
13. How has existing community programmes fed into the CHPS+ initiative?
14. We have come to the end of the discussion, is there anything else you would like to mention?

Community Members'/Leaders' Guide (Functional CHPS zone)

1. Can you describe how community members have been accessing healthcare within the last year? What have people been doing when they are sick? Why?
2. What does the community think about the CHPS facility?
3. Tell me about any changes that have taken place at your CHPS facility in the past year?

4. Tell me about any changes that have been made to the health care you have been receiving within the last year?
5. Have you heard of the CHPS+ program? What are the community's thoughts on the program?
6. What are some of the things you learn from your CHO (nurses)?
7. What are some of the things you learn from your volunteers?
8. What more would you want them to teach you?
9. In terms of health care, what more do you need in your community?
10. MEN ONLY: How has male involvement with CHPS been since CHPS was established in your community? (Probe: How have men directly benefited from CHPS?)
11. MEN ONLY: Have there been any changes to male involvement over the years? What can be done to improve the involvement of men in CHPS operations?
12. What are some of the reasons community members do not use the CHPS compound in the community?
13. Where do families in the community prefer women give birth? Why?
14. Where do families in the community prefer to get medical attention? Why?

Rating

15. On a scale of 1 to 10, how would you rate the CHPS facility in your community? Why?
16. On a scale of 1 to 10, how would you rate [name of health facility] which you mentioned earlier? Why?
17. What would the CHPS/health facility need to change to serve you better?
18. On a scale of 1 to 10, how would you rate your CHOs in your community? Why?
19. On a scale of 1 to 10, how would you rate your volunteers in your community? Why?
20. What would they need to do or how would they need to change to serve you better?

Family planning

21. What are people doing to avoid getting pregnant in this community?
22. How did people get to learn about these methods you have mentioned?
23. What do people think about family planning in the community?

24. What have your community volunteers/health care workers told you about family planning?
25. What are some of the reasons people use or don't use family planning/contraception?
26. What is the ideal number of children families would like to have? What are reasons for having this number of children?

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