UNIVERSITY OF CAPE COAST

FACTORS INFLUENCING COMMUNITY PARTICIPATION IN EXPANDED PROGRAMME ON IMMUNIZATION IN ELMINA SUB-DISTRICT

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BY

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DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Signature …….. Date…….

Name: Mercy Yawson

Supervisors' Declaration

We hereby declare that the preparation and presentation of this thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Principal Supervisor's Signature:…… Date:……..

Name: Dr. Joseph K. Ogah

Co-supervisor's Signature …….. Date……..

Name: Dr. Benhard L. Boateng

ABSTRACT

The purpose of this study was to find out the factors influencing community participation in Expanded Programme for Immunization (EPI) in Elmina sub-District of Ghana. In this survey data were collected from 15 purposively selected community health nurses and 279 conveniently chosen community members. Five research questions and two hypotheses guided the study. Two questionnaires; health worker questionnaire and community members, were utilized for data collection.

The results indicated that community members participated minimally in EPI programmes. Using ANOVA, the results revealed that there was a significant difference in members' participating in EPI according to educational status; F (3, 275) = 3.3, $p < .05$. Scheffe follow up test indicated that community members without formal education were better in participation in EPI programme (M = 4.87; SD = 6.27) than those with tertiary education (M = 1.60; SD = 3.66). In addition, regression analyses indicated that community-based factors (*beta* = -6.23, t = -3.28, $p < .05$) and health worker factors (= -6.29, t = -4.02, $p < .05$.) were significant determinants of community participation in EPI programmes.

Educational level of the community members influences community participation in EPI programmes. Moreover, EPI programmes in Elmina Sub-district may not be achieving its goals due to low participation by the community members. The health workers are encouraged to enhance collaboration between them and community members to increase community participation in EPI programmes.

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DEDICATION

To the memory of my parents; Mr. Robert Kwesi Yawson and Mary Kwaatemaa Mensah

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CHAPTER ONE

INTRODUCTION

Background to the Study

Community participation now appears to be the "software" in community development programmes. Community participation as a developmental approach is an essential cog in the wheel of ensuring that community programmes are well thought out, executed, monitored, evaluated, maintained, managed, financed, using human, natural and man-made resources for the benefits of the present generation and posterity (Putman, 2000).

There is no single definition of participation by communities, rather a potpourri of definitions varying mostly by the degree of participation. In this continuum "Participation" ranges from negligible or "co-opted" in which community member serve as token representation with no part in making decisions to "collective" action in which local people initiate action, set agenda, and work towards a commonly defined goal.

Community participation is often narrowly defined as simply asking community about their health needs. Opinions are often confined to prepacked formulas and delegating the actual planning implementation and pretesting programmes are crucial components of planning (Brunner, 2001).

Community participation is a proven approach to addressing healthcare issues and has been utilized in the Expanded Programme on Immunization activities. However, the quality of participation varies from programme to programme. Moreover, in spite of the failure of many health programmes

designed without participation of target communities or groups, some professionals also continue to question the value of community members' participation in programmes designed, implementation and evaluation (Adinku, 2000).

It is thus, proposed that participation be strengthened along two dimensions: creating realistic expectations between communities and health services in their contributions towards health, and in the governance of health systems. Dialogue between health services and communities on their mutual roles and the technical, resource and social inputs needed to fulfill those roles. Ambiguous or vague roles, limited authority, weak information access, weak representativeness, among other factors, have undermined the practical implementation of meaningful forms of participation (Green & Ottoson, 1999). Participation is often directed at management and implementation of systems, when the major claim being made by many social groups is for policy making and its execution to be accountable to the public. The term 'participation' has been loaded with many meanings and aspirations. To some it implies a mechanism for increasing the efficiency or reducing the costs of programme implementation, improving sustainability of programmes and building local skills and experience useful for future interventions. This form of participation is a means to other development 'ends', a way in which goals and objectives may be better achieved. Participation is however also conceived of as an end in itself, building networks of solidarity and influences the decisions which affect their lives, legitimizing policy and practice, ensuring that they relate more closely to perceived public need and strengthening the incorporation of local knowledge (Marmot & Wilkinson, 1999).

Despite this, and the common inclusion of participation as both means and ends in health policy, participation is poorly operationalized, both in governance and accountability in health and in technical health interventions, so that there is little systematic analysis of its specific contribution to health and health systems outcomes (Green & Ottoson, 1999).

Theories of community participation explain the collective action on community members. The theories indicate that community programmes involve some collective action on the part of target group. The determinants of people participations constitute to a big set of determinants of collection of action or subset. Some of the theoretical approach to collective action development was studied by Oslon (1991), Buchanan and Tullock (1995), and McClusky (1990).

Theory and practice in community health suggests that planning is best done by those individuals who will be recipients of, or will be affected by the resulting programmes, policies or services. Various examples demonstrate a direct relationship between community participation and control in health outcomes. These indicate that enhanced prevention, compliance with treatment and rehabilitation demand participation. Participation of communities of both organized and unorganized public groups is widely argued to be an important factor in improving health outcomes and the performance of health systems for public and professional concern over declining quality, access and equity in health services and increasing demand on people to finance and contribute to health services (Green & Ottoson, 1999). Rattray, Brunner and Freestone (2002) designed a framework that explains the ladder of community participation which gives health managers a framework for planning, evaluating, adapting and expanding their community participation approaches in health programmes.

The year 2008, marked the 30th year of Primary Health Care (PHC), the health care policy of all member nations of the World Health Organization (WHO). Community participation was one of the key principles of the policy. According to MacQueen et al. (2001) "community" is important with public health context that demonstrate that

1. Prevention and intervention take place at the community level
2. Community is an important determinant of health outcomes.

Immunization is defined as the development of immunity to disease by artificial means. The injection of an antiserum produces temporary passive immunity, while active immunity is produced by making the body generate its own antibodies. This is done by the use of treated antigens (vaccination or inoculation). Vaccines stimulate the body's own immune system to protect the person against subsequent infection or disease. Vaccines are used for immunization and it may be derived from live bacteria or viruses or dead organisms or their products (Geddes & Grossette, 1997).

Immunization coverage is therefore a key performance indicator of the entire health sector. A number of factors contribute to, or influence effective community participation on the EPI programme. Some of these factors include; Community-based factors such as formal education, perception, attitude and religion, programme-based factors and health-worker factors. Again it is important to investigate the processes which influence participation in a community wide intervention. Ghana EPI Review (2004) revealed that in Central Region protection of children at birth from neonatal tetanus rate was very low with total regional performance at 12.6%. Tetanol Toxoid card conservation was also 39.2% with vaccine dropout rate at 12.8%. These poor indicators were attributing to poor community participation due to

unwillingness of community members to fully support the EPI programme. A study carried out in Kano University in Nigeria revealed that, during the past decade, immunization in African countries has been as low as 30% in some districts on the programme (National Programme on Immunization, 2007).

Again the existing immunization schedules of the health system and the lack of capacity building in interpersonal skills for health workers were found to be critical inhibitors to a successful immunization programme. MacQueen et al. (2001) identified three reasons why integrating community participation into health programme was so difficult. These reasons include:

1. The parading planning tool for participation as an intervention;
2. The lack of depth analysis of the perceptions of community members regarding the implementation of health programme for example, Expanded Immunization Programme (EPI).

MOH (2002) also identified three categories of obstacles to community participation in EPI namely: obstacles with the programme (or agency), obstacles within the community and obstacles with the society. Furthermore these obstacles can be viewed as physical, biological, economic, political, social, cultural and historical. Immunization is often perceived in the public health intervention in terms of availability and cost of vaccines, their storage and handling, and the ability to prevent, control, and monitor preventable diseases. Recommendations from Ghana EPI Review (2004a) revealed that for achievement on complete immunization programme, communication efforts should be inextricably linked to and complement the other immunization technical components, including them provision and quality of services, health worker capacity-building and skills, and disease reporting and surveillance experts and communication specialists who work with immunization

programme at global, regional, national, and sub national level. One challenge facing programme planners is how to evaluate community participation. In particular, what should be evaluated in health programme? Community participation needs to be able to facilitate a process rather than to direct it. Programme managers or implementers should be able to seek local expertise and build on it bolstering knowledge and skills as needed.

One of the strategies put in place to help achieve targets set on the EPI programme at Komenda-Edina-Eguafo-Abrem (KEEA) sub-District levels is community participation by community members. It will be important for programme managers also to identify and measure indicators of participation. One of the goals of the EPI programme is to achieve high community participation towards the EPI programme. Therefore it is important for health planners on the EPI programme to measure changes in community self-efficacy or changes in local capacity to identify and solve problems (Green & Ottoson, 1999).

Despite the enormous support enjoyed by the EPI programme from various governmental and private organizations, such as the WHO, Global Alliance on Vaccines, World Bank, Vaccine Industry and others, there exist some challenges with respect to community participation in EPI programme in Elmina sub-District (Clements, Greenough & Shull, 2006).

Statement of the Problem

Over the years, the District Health Management Teams (DHMTs) and the Regional Health Management Team (RHMT) have been trying to get communities to be actively involved in health care activities. At two successive District Annual Review Meetings held at Elmina in 2007 and 2008, it came out clearly during discussions that communities do not participate in EPI

programmes as expected. The complaint from a majority of health services providers was that communities do not patronize immunization services. Effective community participation from community members towards the EPI services would help service providers to reach every eligible child to be fully immunized on childhood immunizable diseases in the EPI programme (Ghana Health Service, 2008). Reports from service providers in Elmina sub-District on community participation indicate that (a) community members do not come for EPI service during outreach services in communities, (b) pregnant women, mothers and care givers do not come for routine immunization services as expected even though, immunization service is free, (c) community members seem not to be ready to mobilize and organize the community in preparation for immunization sessions for both routine services and NIDs, and (d) The DHMT in KEEA has organized meetings with Elmina Sub-district Management Teams (SDMT), Unit Committee Members, Zonal Coordinators, Assemblymen, Chiefs, Religious Leaders, Leaders of Market Women and GPRTU members in order to promote the involvement of community in health programmes (Elmina Urban Health Centre, 2011; 2008).

Also, the DHMT (KEEA) and SDMT in Elmina have tried to mobilize the district assemblies, community development, area committee members and women wing and other sectors to improve community participation in EPI activities. To buttress this, a week is set aside every year (dubbed "Health Week") to raise the community's awareness on issues and programmes in health in the community through health education campaigns. The totality of all these efforts has not yielded the desired impact of getting on the communities to participate effectively in the EPI activities.

Purpose of the Study

The purpose of the study was to investigate the factors influencing community participation in EPI activities in Elmina Sub-District.

Research Questions

The following research questions guided this study

1. What is the level of community participation in EPI in Elmina Sub-District?
2. Do community members in Elmina Sub-District differ in their participation in EPI based on their educational levels?
3. What community-based factors influence community participation in EPI programme in Elmina Sub-District?
4. How do health worker factors influence community participation in EPI programme in Elmina Sub-District?
5. How do programme-based factors influence community participation in EPI programme in Elmina Sub-District?

Hypotheses

The following hypotheses also guided the study;

1. Educational status will be a significant determinant of community participation in EPI programmes.
2. Health-worker factors will be more significant in influencing community participation in EPI programmes than community based factors.

Significance of the Study

The EPI programme needs high community participation in order to achieve its expected goal. Therefore it is vital for health planners to measure changes in community self-efficacy or changes in local capacity to identify and solve problems facing the EPI programme. The findings may be useful to

stakeholders such as the regional director of health services, SDHMTs, DHMTs, communities and some policy makers like the public health division (GHS) for review and to be used to improve community participation on EPI activities.

This study will therefore add to the existing literature on factors that influence community participation in the EPI programmes. Again, the study will serve as a platform for further investigation on the community participation in EPI programmes in Ghana. Findings of the study would also serve as a guide for future researchers in the field of health in Ghana.

Delimitation of the Study

The study was delimited to community members aged 18 years and above and health workers in Elmina sub-District. In addition, this study involved only health workers such as State Registered Nurses and Community Health Nurses who were stationed at the health facilities in the district and are deemed to be directly involved in EPI programmes in the sub-district.

Limitations of the Study

The results of this study are from survey describing community participation and factors influencing it. Therefore, community participation may not be explored into detailed. Caution should also be taken in making generalization based on the results and findings from this study since data were collected from few community health workers such as nurses and not medical officers. Furthermore, the purposive and convenient procedures used for selecting the study participants called for careful interpretation of the study. In addition, data were collected from more females than males, more low educated participants than higher educated ones. Thus, the results and the

findings are likely to represent the views of females rather than that of the general population.

Definition of Terms

Community: This comprised a group of people with similar or near similar socio-cultural or ethnic identities, and values.

Community participation: Is the process by which individuals, families, or communities assume responsibility for their own welfare by contributing actively to planning, implementation of health intervention programmes in their communities (Burns, Heywood, Taylor, Wilde & Wilson, 2004).

Community health workers: These are the state (Ghana) registered community health nurses and other who perform most of the routine child immunization intervention programmes in communities.

Community-based factors: These include factors such as culture, religious beliefs, and attitude of community members that influence the planning and implementation of the routine immunization programmes.

Health worker-based factors: These are the attitude, collaboration or involvement of the community members by the health workers in the community health intervention programmes.

Programme-based factors: These factors include timing of the programmes, dosage of vaccines, the whole structure and implementation of the community health programmes.

Organization of the Rest of the Study

The rest of the study was organized under four chapters; two, three, four and five. Chapter two is a review of related literature on this study. The

review accordingly, was done under the following sub-headings; meaning and interpretations of participation, types of community participation, theories of participation, classification and analysis of participation, factors affecting participation, scope of EPI, factors influencing community participation and conceptual framework. Chapter three is a description of the methods used for conducting the study. This chapter addressed research issues such as the research design, population, sample and sampling procedure used, instruments and their validity and reliability, data collecting procedures and data analyses. In addition, chapters four and five presented the results and discussion; and summary, findings, conclusions and recommendations respectively.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

The purpose of this study was to find out the factors influencing community participation in EPI in Elmina sub-District of Ghana. This chapter examines the literature on community participation in the EPI programme. The review involved the systematic identification, location and analysis of documents containing information related to the research problem. The essence of this review was partly to provide a framework which constituted the basis for investigating factors influencing community participation on the EPI programme and drawing similarities and differences between the current study and those of other writers and researchers. It helps delineate some of the variables that form the bedrock of this study. Literature was reviewed under some selected headings. These headings were chosen because the research questions and hypothesis were formulated from them. The literature is organized around the following sub-headings;

1. Meaning and Interpretations of Participation
2. Types of Community Participation
3. Theories of People's Participation
4. Factors Affecting People's Participation
5. Classification and Analysis of Participation
6. Scope of EPI Programmes
7. Conceptual Framework.

Meanings and Interpretations of Participation

Participation is a broad concept and has been given diverse meanings and interpretation which have translated into various approaches in its practice (Bhuyan, 2004; Draper, Hewitt & Rifkin, 2010). Community participation is defined as the process by which individuals; families, groups and the entire community assume responsibility for their own health in developing the capacity to contribute to solving their own and the community health problems (Oakley, 1988). Community participation is therefore viewed as a set of group or people living together in a place with a common ideas, goals and objectives actively involving or being part in programmes pooling resource (Zakus, 1998), there is no single definition of participation by communities but, rather, a potpourri of definitions varying mostly by the degree of participation (Bhuyan, 2004; Draper et al., 2010).

There are mountains of challenges incorporating community participation into health promotion programmes. Rifkin (2009) outlined three reasons why integrating community participation into health programmes is so difficult. These reasons include (1) the dominance of the bio-medical paradigm as the main planning tool for programmes, leading to the view of community participation as an intervention; (2) the lack of in-depth analysis of the perceptions of community members regarding the use of community health workers; and (3) the propensity to use a framework that limits investigation into what works, why and how in community participation in health programmes. Additionally, some researchers have reported considerable difficulties in conducting community participation exercises (Cornwall & Jewkes, 1995; Glicken 2000; Zakus & Lysack, 1998). Accordingly, participation is time-consuming and communities often questioned the value of

investing time and effort in such programmes. Local people are often too busy going about their daily business to become involved in participatory activities, and the legitimacy of those who chose to participate with regard to representing the views of the wider community is unclear. Also, communities are not homogenous bodies and that they are often fraught with divisions, tensions and conflicts, and certain vulnerable groups may be unwilling or even unable to participate (Parry & Wright, 2003).

However, community involvement has a positive impact on the success of project development and implementation. Participation may also directly affect individuals by changing attitudes and actions towards the causes of ill-health, promoting a sense of responsibility and increasing personal confidence and self-esteem. Involvement in the policy process may decrease alienation among socially excluded groups and reorient power relationships with the ‘‘professional’’ decision-makers (Khwaja, 2004; Parry & Wright, 2003). Evidence again suggests that community participation has contributed to health improvements at the local level, particularly in poor communities, and will continue to be relevant to programme professionals and many communities (Draper et al., 2010; Rifkin, 2009).

Participation as a Means

The UN Economic Commission for Africa (1991) and UN Economic and Social Council (2000) define participation as a “voluntary contribution by the people in one or another of the public health programmes supposed to contribute to national development, but the people are not expected to take part in shaping of the programme or criticizing its content” (p. 24). In this definition, participation is seen as an input (voluntary contribution) or as a means necessary for the achievement of pre-determined objectives. According

to Oakley and Marsden (1984), participation here is examined from the point of view of government intervention in public health programme and in this respect; terms such as mobilization and coercion are used to characterize the nature of the participation.

In practice, participation is seen here as a voluntary contribution by beneficiaries, very often during the implementation stage or as mere end-users, but not in the decision-making process. This conception of participation is the most dominant in rural communities. Where participation is interpreted as a means it is essentially describing a state or an input into a community programmes (Oakley, 1998).

This form of participation undermines the goals of sustainability and self-reliance and produces outputs that do not persist once the programme ceases. Participation as a means stresses the results of participation in that the achievement of pre-determined targets is more important than the act of participation (Oakley, 1998).

Participation as an End

Loewenson and Chisvo (1994) on the other hand see participation as "people's involvement in decision-making processes, in implementing programmes, their sharing in the benefits of development programmes and their involvement in efforts to evaluate such programmes". This definition, which recognizes participation as a process, identifies decision-making, implementation, sharing benefits and evaluation as key elements in the process. As a process, it unfolds over time and strengthens the capabilities of beneficiaries to intervene more directly in community health initiatives.

This form of participation is described to be active and dynamic which enables people to play an increasing role in community activities (Oakley &

Marsden, 1984). Where participation is interpreted as an end in itself, it refers to a process, the outcome of which is meaningful participation (Oakley, 1988).

Participation as Empowerment

According to Pearse and Stiefel (1989), participation concerns the organized efforts to increase control over resources and regulative institutions in given social situations on the parts of groups and movements of those hitherto excluded from such control. This statement launches empowerment as another dimension of the concept of participation. Frankel and Dogget (1992), stated power is the central theme of participation and participatory social action entails widely shared, collective power by those who are considered beneficiaries. Through participation, people become agents of social action and power differentials between those who control and those who need resources. The underlying view is that participation must be a process, which is carried out from within, with the fundamental pre-requisite of a distribution of power, which allows individuals to influence all decision affecting their lives (Berkker, 1996).

According to Oakley (1988), this understanding of participation contains three main elements: (1) The sharing of power and scarce resources; (2) Deliberate efforts by social groups to control their own destinies and improve their living condition, and (3) Opening up opportunities from below. In practice, an empowering strategy is one which does not only allows for the resolution of an immediate problem, but also gives the 'partner' the confidence, skills and access to information to transform them from passive recipients into ' agents of change' in their own local environment (UN Economic and Social Council, 2000). From literature, it is discernible that

participation as an end is the inexorable consequence of the process of empowering.

Community participation is deemed very important to achieving the goals of community health programmes. A large number of potential benefits are attributed to participatory processes, including better addressing community needs through more locally adapted organizational processes and improvement in health outcomes (Zakus, 1998). For example, on studying community empowerment and participation on the basis of gender, Itzhaky and York (2000) studied a group of community activists in a low-income neighborhood in central Israel. They found different relationships between types of participation and empowerment by gender. In addition, their results indicated that gender did not have a significant main effect on empowerment, and its effects only became evident when it interacted with participation. Thus, probably community participation in programmes has is largely gender dependent.

Empowerment through participation takes place at different levels. According to Maton (2008), empowerment is a group-based participatory developmental process through which marginalized or oppressed individuals and groups gain greater control over their lives and environment. In addition, these groups acquire valued resources, basic rights, and achieve important life goals that reduce societal marginalization. Ideally, empowerment is both a process and an outcome of community engagement. Empowerment takes place at the individual, the organization or group, and the community levels (Hur, 2006).

Empowerment at one level can influence empowerment at the other levels. Furthermore, empowerment is multidimensional, taking place in

sociological, psychological, economic, political and other dimensions (Hur, 2006; Maton, 2008; Rich, Edelstein, Hallman & Wandersman, 1995). Community-level empowerment challenges professional relationships to communities, emphasizing partnership and collaboration rather than a top-down approach (Wallerstein, 2002).

Empowerment theory stresses that no external entity should assume that it can bestow on a community the power to act in its own self-interest. Rather, those working to engage the community should, offer tools and resources to help the community act in its own interest. This could include helping to channel existing sources of community power in new ways to act on the determinants of health. Kretzmann & McKnight, 1996) noted that communities are usually assessed in terms of their problems. However, they pointed out that this demeans and disempowers the community, relegating its members to the roles of dependents and recipients of services. They advocate for assessing communities in terms of tseir own assets, resources and resourcefulness (Kretzmann & McKnight, 1996).

Strategies for Community Empowerment as Participation

There several means community members can be empowered. Some of these include training and technology transfer, technical assistance, CBPR, empowerment approaches, community organizing/social action and authentic participation processes. For example, empowerment strategies seek to build community power, whereas community organizing emphasizes mobilizing the population. These two different approaches may be combined. Deciding which strategy is most appropriate should stem from a specific assessment of the causes of lack of capacity. The strategies also differ in who acts as agent for change, with training and putting more power in the hands of formal

institutions and empowerment approaches, and community organizing regarding the community itself as change agent.

Training and Technology Transfer: In this approach, lack of capacity is seen as a lack of information and interveners seek to supply that information and the technology to acquire and process the information (Trojan & Nickel, 2008). Examples of this approach include disseminating information about best practices, training programmes for community leaders, and the development of practice guides. Some of the problems identified with this approach are reaching agreement on the skills and information needed; assuring that trainees can use the new skills in practice settings, and the difficulty in including bottom-up perspectives in nationally driven training programs (Trojan & Nickel, 2008).

Technical Assistance: In this approach, communities and their organizations receive hands-on assistance from technical experts or more experienced peers to complete various tasks. Technical assistance can be tailored to meet the unique needs of a specific community and can address a wide range of needs. These may include help in designing a survey to monitoring environmental pollutants to designing a media advocacy strategy (Mitchell, Florin & Stevenson, 2002). Some evidence suggested that not all organizations or communities were willing or ready to receive technical assistance, perhaps requiring other kinds of support first (Muntaner, Lynch & Smith, 2001). And that some forms of technical assistance might be more likely to succeed than others.

Community-Based Participatory Research: CBPR is a collaborative approach to research that engages academic and community partners in both knowledge generation and intervention strategies that benefit the communities

involved (Israel, Schulz, Parker & Becker, 1998). By incorporating the experiences of community residents, CPBR improves the validity and interpretation of research findings. Israel and colleagues observed that CBPR further prepares a cadre of residents who ‘‘own’’ and can advocate for the implementation or application of their research findings. The challenges of CBPR include the time and resources it requires for effective implementation. Moreover, it can generate conflicts among participants, and some policymakers may resist in accepting the research findings (Freudenberg, Rogers, Ritas & Nerney, 2005; Minkler, 2005; O'Fallon & Dearry, 2002; Wallerstein & Duran, 2006). In addition, some researchers may employ the rhetoric of CBPR without its authentic practice, something that can create challenges for future collaborations by other researchers in the locations where this takes place.

Empowerment Approaches: Advocates for empowerment approaches to enhancing community capacity identify the primary problem as community residents' lack of power. Thus, increasing the power of community participants gives them a more equitable voice in defining the problem, devising and implementing solutions (Wallerstein, 2002). This new power can be used to gain needed resources, challenge vested interests and improve community environments. The overtly political dimensions of this approach make some researchers and policymakers uncomfortable and its frank acknowledgment of power differentials may elicit the opposition of more powerful constituencies, who might lose power if empowerment approaches succeed.

Community Organizing/Social Action: Community organizing is a highly related effort to overcome political imbalances by enabling vulnerable groups to participate more effectively in the political system as well as to transform power relationships. Community organizing has been used to improve health in

a variety of settings and includes coalition building, development of organizational and community capacity, leadership development, and community mobilization (Sadd, Pastor, Morello-Frosch, Scoggins & Jesdale, 2011). Like CBPR and empowerment strategies, community organizing requires time and human resources and may elicit opposition from more powerful constituencies.

Authentic Participation Processes: Authentic participation processes seek to improve community capacity through conscious and meaningful government-designed participation processes. Identifying communities with potentially low capacity in the early stages of planning and providing them with the resources and information to meaningfully contribute to the decision-making process can strengthen community capacity. To avoid paternalism, communities need to play a role in assessing their needs for capacity building (Freudenberg, Pastor & Israel, 2010). Because some communities may understandably have trouble trusting government agencies, given that some agencies have a history of not recognizing the expertise that communities bring to the table, outside facilitation may help with building trust. In addition, training agency officials in the modalities of authentic community participation can help them to overcome technocratic and bureaucratic approaches. Also, there is a need to insure that, at least in part, the policy decisions made reflect the input the community has provided.

Participation as an All-Embracing Concept

From a review of participation in a number of World Bank programmes, Sherradin (1991) attempted an all-embracing definition of (community) participation as an active process by which beneficiaries or client groups influence the direction and execution of public programmes with the

view of enhancing their well-being in terms of income, personal growth, self-reliance or other values they cherish. In this definition, it seems all the possible expectations of beneficiaries could derive from their participation, both the tangibles and intangibles. Participation is viewed here as both a means and an end in itself. Sherradin (1991) also recognizes self-reliance as part of the concept of participation.

Although Oakley and Marsden (1984) agree that the unity of participation as both a means and end is implicit in a number of national projects. They admit that contradictions still exist. This is because both positions reflect different ideological perspectives. Where “participation” is the means to achieving previously established objectives, its strategy is to reform and improve areas whereas where “participation” aims at achieving power in order to demand meaningful participation. It implicitly demands some kind of structural change. In such circumstances, it seems improbable that the divergence can be reconciled.

However, whatever the interpretation given to participation, at the heart of the concept is the need for the exchange of information between the target group and an external agent within a group of people in order to contribute to the resolution of problem or improve the quality of life of people.

Types of Community Participation

MacQueen et al. (2001) designed a continuum that provides a helpful framework for understanding community participation. In this continuum, "participation" ranges from negligible or "co-opted" in which community members serve as token representatives with no part in making decisions to "collective action" in which local people initiate action, set the agenda, and work towards a defined goal. McLeroy et al. (2003) explained a definition of

community participation within a public health context into types. In the study the researchers identified core dimensions of "community," as defined by people from diverse groups. Five core elements emerged: locus, sharing, action, ties, and diversity.

The study argued that there is no single definition of participation by communities but, rather, potpourri, of definitions varying mostly by the degree of participation. There was a continuum in their study which provides a helpful framework for understanding community participation. In this continuum, "participation" ranges from negligible or "co-opted" in which community members serve as token representatives with no part in making decisions to "collective action" in which local people initiate action, set the agenda, and work towards a commonly defined goal. According to MacQueen et al. (2001), youth from Burkina Faso offered a practical definition of type of community participation in an example of collective action with organizations in their communities to improve adolescent reproductive and sexual health. The study revealed that community participation occurs when a community organizes itself and takes responsibility for managing its problems. Taking responsibility includes identifying the problems, developing actions, putting them into place, and following through community participation.

Again, it was noted in the study that community participation has many direct beneficiaries when carried out with a high degree of community input and responsibility. Everyone benefits when participating in the activities. For example, adults and youth might participate in village committees to improve services. Everyone might watch a play or video and learn from presentations about local programs. Youth benefit from improved knowledge about contraception and HIV/AIDS or from increased skill in negotiating condom

use, and other community member's benefit, too. A truly participatory program involves and benefits the entire community, including youth, young children, parents, teachers and schools, community leaders, health care providers, local government officials, and agency administrators. Programs also benefit because trends in many nations towards decentralization and democratization also require increased decision making at the community level (Bhuyan, 2004).

According to Bhuyan (2004) participation or community participation can be classified as co-opted, cooperating, consulted, collaborating, co-learning and collective action. Co-opted participation is tokenism and/or manipulation where representatives are chosen but have no real power or input into the programmes planning, implementation and even evaluation. Cooperating, accordingly, is a process where tasks are assigned, with incentives proposed or added that aim to increase participation. In this model, outsiders decide agenda and direct the process. In consulted participation, local opinions are sought. Outsiders analyze data and decide on course of action. Participation in which local people work together with outsiders, to determine priorities is called collaborative (collaboration) participation. Responsibility remains with outsiders for directing the process but with the active input from the local leaders. Co-leaning participation is concerned with local people and outsiders sharing their knowledge to create new understanding and work together to form action plans with outside facilitating the project implementation. Finally, participation is said to be a collective action when the local people set the agenda and mobilize both human and material resources to carry it out, utilizing outsiders, not as initiators or facilitators, but as required by local people.

Also, it was noted that those promoting community participation need to be able to facilitate a process, rather than to direct it. Facilitators need to have genuine confidence in a community's members and in their knowledge and resources. A facilitator should be willing to seek out local expertise and build on it while bolstering knowledge and skills as needed. Key characteristics and skills important to facilitating community participation in their study include: (1) Commitment to community-derived solutions to community-based problems Political, cultural, and gender sensitivity; (2) Ability to apply learning and behavior change principles and theories; (3) Ability to assess, support, and build capacities in the community; (4) Confidence in the community's expertise; (5) Technical knowledge of the health or other issue(s) the programme will address; (6) Ability to communicate; (7) Well, especially by actively listening and (8) Ability to facilitate group meetings

Another aspect of community participation is evident in participatory research. For this, several funding agencies are soliciting health promotion/disease prevention programme proposals that require active community participation. Accordingly, because research to improve the health of communities benefits from the involvement of community members (Corburn, 2002; O'Fallon & Dearry, 2002). However, creating such collaboration is difficult. Communities often perceive conventional research as paternalistic, irrelevant to their needs, manipulative, secretive and invasive of privacy. Many institutions and researchers view community knowledge as lacking in value (Ahmed, Beck, Maurana & Newton, 2004). Community-based participatory research (CBPR) is a collaborative partnership approach to research that equitably involves community members, organizational representatives and researchers in all aspects of the research process. CBPR

requires the continuous exchange of knowledge, skills and resources and a commitment to having a sustained impact. According to Minkler and Wallersein (2003) CBPR is a new paradigm that represents alternative orientations to inquiry that stress community partnership and action for social change and reductions in health inequalities as integral parts of the research enterprise. The enterprise, CBPR process has proved useful for developing trust and mutual acceptance between researchers and communities, verifying research results and applying research results (Green et al., 1995). There is evidence that involvement of community members in the decision-making and planning process is more likely to produce meaningful change in the community (Stratford et al., 2003). For example, the success of CBPR projects in many different fields from sociology to applied anthropology in the US and abroad support CBPR as a legitimate process for conducting successful research in the community (Casswel, 2000; Krieger et al., 2002; Schulz et al., 2002; Gebbie, Rosenstock & Hernandez, 2003).

Categories of Participation

The term community-based participation has a wide range of meanings. Community–based participation may include 4 categories based on implicit constructions of community employed by investigators: community as setting, community as target, community as agent, and community as resource (McLeroy, Norton, Kegler, Burdine & Sumaya, 2003). Community-based often refers to community as the setting for interventions. As setting, the community is primarily defined geographically and is the location in which interventions, for that matter health intervention, are implemented. Such interventions may be citywide, using mass media or other approaches, or may take place within community institutions, such as neighborhoods, schools, churches, work sites,

voluntary agencies, or other organizations. Various levels of intervention may be employed, including educational or other strategies that involve individuals, families, social networks, organizations, and public policy. These community-based interventions may also engage community input through advisory committees or community coalitions that assist in tailoring interventions to specific target groups or to adapt programmes that aligned to community values and characteristics. However, the focus of these community-based projects is primarily on changing individuals' behaviours as a method for reducing the population's risk of disease. As a result, the target of change may be populations, but population change is defined as the aggregate of individual changes.

The term community-based may also have a very different meaning, that of the community serving as the target of change. The community as target refers to the goal of creating healthy community environments through broad systemic changes in public policy and community-wide institutions and services. In this model, health status characteristics of the community are the targets of interventions, and community changes, particularly changes thought to be related to health, are the desired outcomes. Several significant public health initiatives have adopted this model. For example, community indicators projects use data as a catalytic tool to go beyond using individual behaviours as primary outcomes (Coulton, 1995).

A third model of community-based is community as resource. This model is commonly applied in community-based health promotion because of the widely endorsed belief that a high degree of community ownership and participation is essential for sustained success in population-level health outcomes. These programmes are aimed at marshaling a community's internal

resources or assets, often across community sectors, to strategically focus their attention on a selected set of priority health-related strategies (McLeroy et al., 2003). Whether a categorical health issue is predetermined or whether the community selects, perhaps within certain parameters, its own priorities, these kinds of interventions involve external resources and some degree of actors external to the community that aim to achieve health outcomes by working through a wide array of community institutions and resources. Examples of major public health initiatives that have applied this model include "healthy cities" initiatives within several states in USA, (Duhl & Lee, 2000) the National Healthy Start programme of USA (Minkler, Thompson, Bell & Rose, 2001) and the federal Center for Substance Abuse Prevention Community Partnership programme (Yin, Kaftarian & Jacobs, 1996).

Finally, a fourth model of community-based, and the one least utilized in public health, is community as agent. Although closely linked to the model just described, the emphasis in this model is on respecting and reinforcing the natural adaptive, supportive, and developmental capacities of communities. According to Steckler, Israel, Dawson and Eng (1993), communities provide resources for meeting their day-to-day needs. These resources are provided through community institutions including families, informal social networks, neighborhoods, schools, the workplace, businesses, voluntary agencies, and political structures. These naturally occurring units of solution meet the needs of many, if not most, community members without the benefit of direct professional intervention. However, communities are defined as much by whom they exclude as whom they include, and the network of relationships that defines communities may be under stress.

The goal of community-based programmes in this model is to carefully work with these naturally occurring units of solution as units of practice, or where and how to choose to intervene. This necessitates a careful assessment of community structures and processes, in advance, of any health intervention. It also requires an insider's understanding of the community to identify and work with these naturally occurring units of solution to address community problems. Thus, the aim is to strengthen these units of solution to better meet the needs of community members, which promote their contribution to participation in health advancing projects. This approach may include strengthening community (members) through neighborhood organizations and network linkages, including informal social networks, ties between individuals and the organizations that serve them, and connections among community organizations to strengthen their ability to collaborate effectively towards advancing health of their populace (Norton, McLeroy, Burdine, Felix & Dorsey, 2002; Nyswander, 1956).

Theories of People's Participation

There is no universally valid theory of people's participation in programmes. What is presented here is a set of propositions stating the conditions under which people do or do not participate in collective action, such as participation in community health intervention programmes. Since all development programmes entails some collective action on the part of their target individual or group of individuals, and the professionals designing, implementing and possibly, evaluating programmes, one could argue that the factors affecting collective action might also influence people's participation. In other words, determinants of people's participation in community programmes constitute a big set of which determinants of collective action are

a subset. The salient points of the theoretical approaches to collective action developed by Olson (1991), Buchanan and Tullock (1985; 1995) and others are presented below.

Olson's Theory

Olson (1991) has challenged a generally held view that groups of individuals having common interest usually work together to achieve them. He argues that "unless the number of individuals in a group is quite small or unless there is coercion or some other special device to make individuals act in their common interest, rational, self-interested individuals will not act to achieve their common or group interest" (p. 45).

Olson (1991) contends that generally, the larger the group, the less noticeable the action of its individual members. This according to Olson explains why large groups frequently fail to provide collective action for their members. Using two simple tools of economic analysis, Olson has shown that certain small groups can provide themselves with collective action without relying on coercion or any positive inducements apart from the collective action itself. This is because in some small groups, each of the members, or at least some of them, will find that their personal gain from having the individual action far exceeds the total the collective action (Olson).

Olson (1991) does not specify the number of individuals that would make the small group, but he asserts that the group should be such that "the individual actions of any one or more members are noticeable to any other individuals in the group" (p. 34). An important implication of Olson's theory for managing collective goods is that if a group using the collective good is very large and heterogeneous, it should be divided into a number of small and homogenous subgroups and each subgroup randomly assigned a portion of the

collective action that should be as far as possible, proportionate to the size of the group.

Olson (1991) also discusses the possible role of promoting collective action. The promoter of collective action is an individual with a combination of such traits as leadership, the trust of the community or its fear, the ability to discern the motives of others, and the desire to organize the group for collective action. He suggests that the success of the promoter will be related to his ability to utilize selective incentives to motivate participation in collective action.

Buchanan and Tullock's Theory

Buchanan and Tullock's (1985) propounded a theory of collective choice similar to Olson's theory. In their words, their theory can perhaps be best classified as being methodically individualistic. They asserted that, in view of the fact that separate individual participate in collective action with often conflicting interests and purposes, any theory of collective choice must attempt to explain or describe the means through which the conflicting interest of individuals are reconciled.

Accordingly, a group would choose a collective mode of action when each of its individual members finds it profitable to act collectively rather than individually, that is, when perceived costs are less than perceived benefits from the collective action. Buchanan and Tullock (1985) adopted what they call a benefit approach in their analysis of collective choices and actions. The authors argue that, it is the existence of external benefits that rationally explains the origin of either voluntarily organized, co-operative, contractual arrangements or collective activity. They used two cost functions; an external cost function and a decision-making cost function to determine the "optimum" or most

"efficient" decision making rule for an individual. The external costs are envisioned to be a decreasing function and the decision-making costs as an increasing function both of the number of individuals required to reach an agreement. This means that the external costs are envisioned to decrease and the decision-making costs to increase as the number of members in a group increases. Minimizing the sum of expected external costs and expected cost of decision-making derives the optimum decision rule for an individual.

Buchanan and Tullock's (1995) approach is seen as an improvement over Olson's theory in that it explicitly relates the costs to the number of individuals in a group. Their theory makes it clear that what is important in determining the optimal rule or choice is the cost (external and decision-making) and not the size of the group. Thus Buchanan and Tullock's theory could explain successes in common pool resource management where large groups are involved. Besides, their theory is also helpful in identifying external costs that can be reduced through appropriate interventions or measures. However, according to Sherradin (1991), the cost functions employed by Buchanan and Tullock are simplistic to approximate the real world cost functions, where besides the number of persons in a group, there are many other variables such as the dispersal of the members in the group, stake of the group in the resource, that determine the external cost and the decision-making costs. But the framework provided by authors is generally broad and general enough to accommodate these details.

Theory of Margin

A theory of participative behavior (the theory of margin), which is very different from the above-mentioned theories, has been propounded by McClusky (1990). He defines margin as a function of the relationship of load

to the power. Load is defined as the self and social demands by a person to maintain a minimum level of autonomy and power is described as resources such as abilities, possessions, position, allies, services and so on, which a person can command in coping with the load.

From this characterization of load and power, Singh (2002), deprives a hypothesis to explain the lack of people's participation in activities in the third world. The hypothesis is that the majority of rural people in most of the third world have heavy load to cope there with and hence they are too preoccupied with mere survival to participate meaningfully in programme activities. In other words, the higher the margin between load and power, the lesser participation in development activities. If the hypothesis is true, a logical conclusion is that efforts to mobilize such marginal masses to participate in development activities must of necessity include reduction of load or rising of their power or both.

Veneracion (1994) asserts that although this hypothesis could explain the lack of people's participation in activities. It cannot explain why the same people who do not participate in some activities take part in other activities. There are many instances where poor or under-served people in developing countries adopt some technologies or participate in some other programmes but vehemently object to participating in other "equally" useful programmes. This means that there must be some technology-specific or programme-specific factors that affect people's participation. These factors, according to Makumbe (1996), include the expected returns and expected costs of participation, attitudes, values and skills of people, design and other characteristics of the programme and the political, legal, and institutional environment prevailing at the time.

The theoretical frameworks of Olson and Buchanan and Tullock (1995) adequately explain that people will participate in collective action when they are organized in small groups; when the expected private benefit from the collective action exceed the expected private costs of participation and when there is an assurance that the expected benefits would, in fact, accrue to the benefits of the participants. In other words, these explain why people participate in some programmes but do not participate in others.

Factors Affecting People's Participation

There are many factors that affect people's participation in programmes and projects. In the context of rural programmes, Richardson and Waddington (1996) identify three categories of obstacles to people's participation, namely, obstacles within the (programme) agency; obstacles within the community; and obstacles within the society. Richardson Waddington report identifies the following seven barriers to people participation: (1) Easy availability of grants and subsidies; (2) Prejudices and discrimination against women; (3) Illiteracy and lack of awareness; (4) Factionalism and heterogeneity of population; (5) Disparities in wealth and social status; (6) Interference by politicians, and (7) Misunderstanding about the motivation and objectives of people's organizations.

Mishra, Shama and Sharma (1984) on the other hand, classify the factors affecting people's participation into six categories, namely, physical and biological, political, social, cultural and historical. Oakley and Marsden (1984) are of the view that the identification of obstacles to people's participation is directly related to one's perspective on participation. In this respect the "means" or "end" dichotomy is illustrative. To view participation as a means suggests a set of obstacles usually associated with the operational

procedures of the task undertaken. On the other hand, to view participation as an end suggests obstacles that are more associated with structural and institutional relationships both at the national and local level.

The review here is centered on those factors as identified by Singh (2002) as this is detailed and captures the various perspectives of participation. The factors affecting people participation identified by Singh is grouped into the following four categories; (1) User community-specific; (2) Agency-specific; (3) Programme-specific and (4) Environment-specific factors

User Community-Specific Factors

The following user-community-specific factors were identified and their effects on people participation discussed by Singh (2002). He concedes that in many situations, local people do not participate simply because they are not aware about the seriousness of the problem and the need for intervention, and about the programme(s) of intervention, about their role in the programme, and about benefits from their participation in the programme. Dispersal of people over wide geographic areas, lack of transport and communication facilities, low literacy rate, lack of relevant literature/material in vernacular and lack of interest and enthusiasm on the part of the agency staff are among the obstacle to making people aware and thereby enlist their participation.

Values and Beliefs: Every community has a set of values and beliefs that are rooted in its culture, tradition and history. These values and beliefs govern the attitude and behavior of members of that community including the manner in which they relate to one another within the community and to outsiders, and their attitude towards nature, resources or resources products. Some values and beliefs promote reciprocity, cooperation and resource conservation whereas others engender competition, conflict and resource depletion. It is important to

note that obstacles to people's participation arising from their values and beliefs cannot be removed in the short term and hence development programme interventions should be designed accordingly. However, over the long term, most values and beliefs can be and have been changed as a combined result of education, demonstration, technological changes, economics forces and government policies.

Socio-Economic Structure: Homogeneity and heterogeneity of a community in terms of caste, class, ethnicity, assets, income, are important determinants of people's participation (Bekker, 1996). For communities so heterogeneous, their needs, aspirations and motivations are very different and often results in conflicts when attempts are made to facilitate their collective participation. Bekker is of the view that most of the obstacles of people's participation arising from the heterogeneous socio-economic structure of a community can be removed by an external entity that is a political, neutral and acceptable to the community by and large. In most cases, dividing the large heterogeneous community into small relatively homogeneous groups and then organizing them resolve such problems.

Organization and Leadership: Singh is of the view that formal or informal organization of the people concerned is a pre-requisite for people's participation. He further agreed that availability of good local leadership is essential for organizing people, mobilizing their resources, nurturing and sustaining the organization, insulating the organization from external threats, liaising with NGOs and government institution receiving the uncertainty from people's access to promised benefits the enforcing the organization's rules, regulations and sanctions against their violation.

Other researchers have recognized the importance of local leadership in promoting people's participation in community-based projects. Veneracion (1994) in a study in Sierra Leone attributed the successful completion of community-based project in some regions to the influence of local leadership. He concluded that for effective community participation to occur depends on the extents to which influential local leaders are prepared to use their influence to; (1) Broaden the decision-making process; (2) Mobilize local human and financial resources for development efforts; (3) Acquire outside resources to complement local resources and (4) Willingly use these to bring broad-based benefits to the community.

Economics Status: Both the level of per capital income as well as its distribution among the people affects people's participation. Lower level income generated people and other voluntary people in the community cannot afford to spend their time, energy and money if at all they have any to spare, on participation in community-based programmes and are not rewarded or paid, especially if the benefits from such participation are low and uncertain. Similarly, if there is a high degree of inequality in the distribution of income in a community, participation of the destitute and very poor along with the very rich and wealthy people would be difficult to enlist since real participation can occur only among the equals (UN Economic and Social Council, 2000).

Prejudices against Women: Women are known to be very closely associated with many activities relating to appropriation of natural resource and/or their products. For example mostly involve women are mostly involve in community organized programmes than men, and responsible for household activities such as collection of fuel wood and fetching water for household use. But most community-based programmes for the provision, usage and

management of these natural resources do not provide for enlisting women's participation. Besides, in many cultures, women are discouraged from participating in meetings and training programmes along with men. The exclusion of women tends to affect their participation in such programmes, which very often adversely affects the success of the programmes.

Acheampong (1992) in a study on women groups in the Brong-Ahafo region in Ghana, observed that most women are involved in community organized programmes on health than men. On the other view, most of the secretary positions are held by men since either the educational background of the women do not allow them to hold that position or are not interested due to the intense demand on their time from their domestic responsibilities.

Organization-Specific Factors

Most government organizations and departments involve in rural programmes came into being when people's participation was not a major consideration in community-based programme strategies (Cusworth, 1996). They were designed and staffed for centralized governance and control. Their structures, systems, norms and personnel policies own pose serious barriers to meaningful people's participation. Singh identified the following agency-specific factors:

Locus of Decision-making: Singh (2002) claims that for securing and sustaining people' participation, it is necessary that the people make all the operational decisions regarding the programme themselves or their own organizations right in their own communities and villages and not in cities far away. Singh is of the view that crucial decisions such as those relating to public health programmes such as immunization, health education and environmental health which require the information, skills and expertise, local

people should be made centrally involve because they are the same people who are likely to be affected by the decisions.

The failure of many attempts of many programmes in Sri Lanka was mainly due to the lack of people's participation. However, in the Minipe Project in which peoples at the local level were involved in health issues, Mutizwa-Mangiza (1997) reported that the committees on health related programmes proved very effective and had none of the drawbacks associated with traditional coordination by the bureaucracy. Thus, the state officers have accepted the new role of health representatives in decision-making process of the committees.

Devolution of Financial and Administrative Power: Singh (2002) asserted that or successful execution of programmes by any organization (government or non-government) there is the need for the devolution of administrative and financial power commensurate with the tasks and responsibilities assigned at various levels of the hierarchy of the organization. Participation is essentially concerned with redistribution of power in favor of those who do not have it, from government department and NGO's to people's organization. Singh cautions however, that the issues of how much financial and administrative powers should be given, to whom and at what time are very delicate and should be resolved after due study, analysis and consultation with the people concerned, so as not to kill their initiative or increase their dependence on external agencies.

Attitudes, Values and Skill of Agency Personnel: These three factors influence people's participation to a great extent. Centralized resources management programmes are based on the premise that the programme personnel know what is good for the people. Accordingly, they expect the

target group of people to passively accept whatever is offered to them without any suggestions or complains. Besides, the agency personnel may also lack that skill necessary for listening to the people, learning from them and working with them. All these impede effective people's participation.

Personnel Policies of Programmes: For enlisting and sustaining community's participation, health workers and community members must be in partnership of working together to help achieve the existing programme objective. Availability of sufficiently long time, perseverance and commitment to the ideology of participatory programme and skills, are required on the part of the health personnel. Where seeking people's participation is not a criterion for evaluating personnel performance, there is no incentive for personnel to go out to promote people's participation. Further, if the programmes pursues a target oriented approach, it forces the personnel to use agency resources over which they have no control and which takes a longtime and patience to mobilize.

To improve personnel policies of agencies to promote people's participation, Singh (2002) suggested the following: (1) Shifting emphasis from inputs to outcomes; (2) Recognition of the work of building community capacity, development of local leadership and creating awareness; (3) Making the concerned authority accountable to the local people and (4) Evaluation by the local people.

Programme Design-Specific Factors

Programme design factors that influence people's participation include:

Programme Objectives: Singh argues that people or community participation should be one of the objectives of programmes such as the public health and also one of the criteria for evaluating and achieving the performance of such

programmes at community level. Unless this done, programme personnel would not seriously try to enlist community's participation.

Programme Instruments: Instruments used in participatory programmes and projects to enlist people's participation are numerous. The major instruments often used include education, training, provision of technical information, subsides, voluntary agreement and contracts, wage-for workers in programmes of common interest, organization of resources users and framing of rules and regulations for coordinating and controlling the resource use among others. Each of these instruments influences people's participation depending how it is used (Rifkin, 2009).

Programme Benefits and their Distribution: If people's participation is to be self-sustaining, then the expected benefits from participation in the programme should be substantially higher than the expected costs of participation. In addition, equitable sharing of both benefits and cost in participatory or common interest programmes is an important prerequisite for enlisting and sustaining people's participation.

Environment-Specific Factors

The major environment specific factors that influence people's participation are policy-related, political and legal factors:

Policy-related Factors: Using Indian Government policies on health issues like the National Policy on Health and the National Health Policy as examples. Singh (2002) asserted that whereas all the policy documents emphasize the need for people's participation, it is not clear as to who would try and involve the people, why and how. He argues that unless answers to such questions are clearly specified, all statements about people's participation would remain a mere rhetoric.

Political Factors: Participation is basically a process of redistribution of power and hence it is political in nature and is bound to lead to conflicts of interests of the people involved. The prevailing view about political participation is that it is positively correlated with the level of development, that is, the higher the level of development, the higher the degree of participation (Mishra et al., 1984). Political interference coupled with bureaucratic indiscretion is also known to act as a barrier to participatory management (Veneracion, 1994). Makcumbe (1996) suggests that to deal with political factors, it is important that both the programme agency and its programmes are not politicized. He concedes, however, that in some cases gaining the protection of the political party in power may help in enlisting people's participation, but noted that such programmes run the risk of being stultified after the political party that sponsored or supported it is no longer in power.

Legal Factors: As stated earlier, equitable sharing of cost and benefit in common interest programmes is a prerequisite to enlisting and sustaining people's participation. Singh (2002), however, is of the view that these need to be guided by laws or government resolutions about their access to benefits from participative management and enforcement of the laws is effective, they would not participate.

Classification and Analysis of Participation

In addition to participation being classified as a means, and an end, Reddy (1998) describe three other bases by which participation can be classified and analyzed. Firstly, Reddy classifies participation according to the scope of the arena in which it operates. Here, Reddy describes three arenas within which participation can exist. Participation can sometimes exist in a

small arena, like in the domestic affairs of a family, or may be confined sectorally to say education, agriculture. There could also be mass participation covering numerous aspects of life in society at large; political, health programmes, education, and collective labour and ideological education. Reddy argues that depending on the scope of the arena in which participation occurs, its impact on participation will vary accordingly.

Reddy, secondly classified participation according to the originating agent. He outlines three distinct sources of participation; participation induced from above by some authority or expect (very often by governments or its ministry, that is ministry of health); participation generated catalytically promoted by some external third agent (e.g. an NGO). As noted by Fox (1999), state promoted or participation from above usually aims at getting people to produce more or more efficiently; it focuses on inputs from those who participate. Here, the authorities view participation as a way of getting subordinates to help them achieve their own purposes

On the other hand, Reddy argues that participation generated from below by the non-expert populace is often spontaneous and comes about as a result of a crisis and in response to some threat to a community's identity, survival, or valves. Bottom-up participation may also result from deliberate initiatives taken by members of a "community of need" to obtain, or pressure others to obtain some benefit from society from at large or some particular group.

With participation emanating from catalytic action of a third agent, Reddy stated that very often, such change adhere to ideologies which view self-reliance in poor people as a desirable goal. The change agents thus see

their own activation of the masses as “facilitation” destined to disappear after the people awaken tot themselves.

Reddy maintains that although the first and the third types of participation both originate from outside the populace in question, they differ in two major respects;

1. Like the participation initiated from below, third party induced participation usually aims at empowering hitherto powerless people to make demands for goods, health services, rights; not to contribute their resources to someone else’s purposes.
2. External facilitators are, in most cases, not content to help a populace mobilize, they want it to organize.

Here, Reddy stressed that community mobilization and community organization as components of community participation that could serve also as a useful tool in the analysis of community participation. Community mobilization is seen by Redddy to lead to joint action around some discrete, limited objective seen as urgent or important. Community organization is a process by which the people of a community members, families and policy makers, individuals are to mobilize their own, the community’s own and other resources for the purpose of achieving, sustaining and improving issues about the community health (GHS, 2002). It is also seen as one of the areas that promote EPI programme under the PHC approach. The EPI programme provides substantive training to public health and community health workers, who identify and recruit parents of children at risk for delay in their immunization and involve in community participation in the programme (Burns et al., 2004). They should appreciate or commend community members who always help in the EPI programme.

Health workers simplify the process for parents, making it easier for them to track and maintain immunization records and adhere to the vaccination schedule. They educate parents about immunization requirements, encourage them to be proactive in requesting vaccinations, explain how to navigate the system, offer referrals, and provide one-on-one personalized follow-up. Because immunization promotion is nested within the organizational activities, it is therefore important to have strategy in place that would help mobilize community members for immunization. The outreach workers are programme staff very often residents of the community and often peers who have previously been programmed as participants.

In many instances, community level social mobilization for EPI and surveillance activities are integrated with other health activities such as bed net distribution. This is in spite of the country having a network of community health workers, an established administrative system at the village level. Community organization, on the other hand, is a long term pattern of collective action, which postulates the need to meet and build solidarity even in the absence of specific tasks to conduct. The broader purpose of organization is to make people conscious of their strength; actual or potential as a group. That strength is to be utilized not only to resist injustices, but also to gain deeper understanding of one's situation and consider alternative plans of action. Reddy concludes by stating that, "mobilization does not always lead to organization, although usually requires prior mobilization". Community organization is a process by which the people of a community, families and policy maker's individuals are mobilized their own, the community's own and other resources for the

purpose of achieving, sustaining and improving issues about the community (GHS, 2002). It is also seen as one of the areas that promote EPI programme under the PHC approach. The provision of most social services including health such as EPI and other public health programmes both often involves partnerships with various communities and sector organizations all of which have their own types and levels of resources they would wish to contribute. These may include technical expertise or personnel, money, vehicles and service equipment. The EPI programme provides substantive training to public health and community health workers, who identify and recruit parents of children at risk for delay in their immunization. Also there is a need for community members to assist health workers to simplify the process for parents with eligible children, making it easier for them to track and maintain immunization records and adhere to the vaccination schedule. They educate parents about immunization requirements, encourage them to be proactive in requesting vaccinations, explain how to navigate the system, offer referrals, and provide one-on-one personalized follow-up. Because immunization promotion is nested within the organizational activities, the outreach workers are program staff, very often residents of the community and often peers who have previously been program participants.

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Lastly, Reddy discusses participation according to the moment at which it is introduced. Reddy contends that different types of participation exist according to the time when they first occur. In a participatory action, a patterned sequence culminating in final action is discernible, in which at any point in the sequence, the non-expert populace may "enter-in" and begin to share in its dynamics. The sequential moments Reddy identified are: (1) Initial diagnosis of the problem or condition; (2) A listing of possible responses to be taken; (3) Selecting one possibility to enact; (4) Organizing or preparing oneself to implement the course of action chosen; (5) The several specific steps entailed in implementing the chosen programme; (6) Self-correction or evaluation in the course of implementation and (7) Debating the merits of further mobilization or organization.

Reddy asserts that the quality of participation on public health programmes depend on its initial point of entry which needs to be appreciated by personal or programme officials. Therefore, if one wishes to judge whether participation is authentic empowerment of the masses, or merely a manipulation of them, it matter greatly where in the overall sequence of steps the participation begins. From Reddy's typological analysis of participation, it can be argued that different kinds of programmes require different forms of appreciation on participation.

Scope of EPI Programme

The WHO initiated the Expanded Programme on Immunization in May 1974 through the World Health Assembly resolution (WHA 27.57) to build on the success of the global small pox eradication and to ensure that all children in all countries benefited from life – saving vaccines. Ten years later in 1984, the WHO established a standardized zeal for vaccination schedule for the original

EPI vaccines: BCG, DPT, OPV and MV. Increased knowledge of immuniologic factors of diseases led to new vaccines. The launching of the Expanded Program on Immunization in 1974, vaccination programs have been one of the world's most cost-effective public health strategies. These programs reduce the burden of infectious diseases globally and serve as a key building block for health systems in the developing world. Initially, immunization programs included vaccines against six diseases: polio, measles, neonatal tetanus, diphtheria, pertussis, and tuberculosis. Recently, many countries have introduced other vaccines (hepatitis B, yellow fever, Haemophilus influenza type B) based on several considerations such as the prevalence of specific diseases, the availability of new vaccines, and additional financial resources. Immunization was a story of both successes and failures. With the push to universal immunization in the 1980s, the world accelerated immunization coverage in an unprecedented fashion, reaching reportedly over 70 percent of children globally with the basic six vaccines by the end of 1990. Yet coverage has stagnated since then, leading to 2 million unnecessary deaths annually from vaccine preventable diseases (WHO/UNICEF, 1985). Global and regional averages also must lower local coverage, particularly in sub-Saharan Africa, where some 17 countries have immunization coverage levels under 50%. In fact, 30 million infants worldwide are still not immunized with even basic vaccines. In many countries, immunization services disproportionately miss the poorest and most excluded populations. Even when services are available, a substantial number of caregivers still fail to complete the immunization schedule. The stagnation in vaccination coverage is not without cause. Problems range from infrastructural problems of health delivery systems to funding pressures that divert resources away from routine immunization

programs are also affected by the interplay of local and national politics. Challenges have ranged from isolated episodes of non-acceptance (due to religious, ethical, medical attitude and perception considerations) to active political mobilization against immunization programs driven by political and conspiratorial arguments. This is of particular concern considering recent growing evidence of declining confidence in governments in developed and developing.

In 1999, the Global Alliance for vaccine and immunization (GAVI) was created with the sole purpose of improving child health in the poorest countries by extending the reach of the EPI. Today, nearly 85% of the world's children under one year of age have received these lifesaving vaccinations. Increasing numbers of countries, including low income countries are adding new and under used vaccines like Hepatitis B, Haemophilus influenza type B (HIB) and yellow fever vaccine to their routine infant immunization schedules.

However, one fifth of the world's children about 19.3 million infants are not immunized against these killer diseases. Nearly 70% of these children live in about ten countries. An estimated 1.7 million children died in 2008 from vaccine preventable diseases (WHO/UNICEF, 1985). However, the deadlines for eliminating maternal and neonatal tetanus and certification of global polio eradication by 2010 have not been met (WHO, 2012).

Sustainability is the key for the next phase of the drive towards full immunization. UNICEF is a leading partner in the Global Alliance for vaccines and immunization (GAVI), a far reaching public – private partnership dedicated to increasing children's access to vaccine in poor countries. The Alliance works to strengthen and expand routine immunizations services and support the introduction of new and under-used vaccines. The ultimate

objective of the EPI is to establish immunization programme that would run frequently throughout the year, and also year after year. Moreover, in spite of the failure of many health programmes designed without participation of target communities or groups some professionals also continue to question the value of community member's participation in programmes designed, implementation and evaluation (WHO, 2012).

EPI Programme Acceleration

The year 1977 was the onset of the implementation of the EPI programme. In 1982, the EPI programme progress towards the goal of Universal Child Immunization was noted to be slow by1990. Using the first Diphtheria, Pertussis and Tetanol Toxoid DPT vaccine as an indicator of access to immunization and 3rd DPT as an indicator of completion of immunization, only 31% of the children had across to immunization and 20% completed their immunization. To improve this dark picture the EPI Programme Acceleration was recommended using a five point approach:

1. The promotion of EPI within the context of Primary Health Care (PHC)
2. The investment of adequate human resources in EPI. These personnel should be sufficient in numbers, and conversant with appropriate managerial skills, as poor programme management appeared to be a severe constraint in health workers charged with looking after these programmes.
3. The investment of adequate financial resources in EPI, two thirds of which, is possible should be generated within the implementing countries.
4. Efforts to be made to ensure that community members are given immunization as that programmed under the EPI and continuously monitored, periodically evaluated and appropriately adapted.

5. The pursuit of research efforts, especially operational research, the result of which would assist in better programme management should be an in-built component of any EPI programme (WHO/UNICEF, 1985).

EPI in Ghana

Ghana launched the Expanded Programme on Immunization (EPI), shortly after the Alma Ata Declaration. The programme has been operational in all the regions of Ghana since 1985. Immunization coverage is therefore a key performance indicator of the entire health sector. In consonance with the National EPI policy, each eligible child in Ghana should receive one dose of BCG at Birth; three doses of PENTA (Five in one vaccine) at 6, 10, and 14 week; four doses of Oral Polio Vaccine (OPV) at birth 6, 10 and 14 weeks; one dose of measles at 9 months and one dose of yellow fever at 9 months. In addition, every woman of child bearing age (12-44 years) should receive 5 doses and every pregnant woman should have at least two valid doses of Tetanus Toxoid (TT). For the child to be protected, the mother must receive the second dose of TT at least two weeks before delivery (Ghana EPI Review, 2004b).

EPI in Central Region

The Ghana Expanded Programme on Immunization 2004 National Survey used the 1st first DPT vaccine as indicators of access to immunization and the third DPT as an indicator of completion of immunization. The survey indicated that in Central Region Only 31% of the children had access to immunization and 20% completed their immunization. The region median valid PENTA 3 coverage was 59% and Protection of Children at Birth from Neonatal Tetanus, (PCAB). Access for utilization of immunization was relatively poor in the region (Ghana EPI Review, 2004b).

The EPI programme was monitored by observing performance and other related activities on the programme over a period of time. The general objective of the EPI has been set within the corners of the five pillars of implementation. These include training, cold chain system, supervision, surveillance and health communications (MOH, 2012).

One of the strategies put in place to improve immunization and to help achieve targets set at the district and sub-District levels in the KEEA district and the sub district in Central region was effective community participation by community members on the EPI programme. Also health workers should involve community members in immunization programme, involving members in the community gives them self-belongingness which therefore makes them feel that they are part of the programme and would give their maximum support toward the EPI programme.

EPI Targeted Diseases

The target diseases under EPI programme are known as Childhood Preventable Diseases these include; childhood Tuberculosis, Measles, Poliomyelitis (infantile paralysis), Tetanus, Pertussis (whooping cough) Diphtheria, yellow fever, hepatitis B, and Haemophilus influenza. Currently Pneumonia and the Rotavirus have been added to the programme.

Community-Based Factors

There are many community variables which are deemed to have great influence on the community participation in community health interventions including EPI programmes. Some of these factors include formal education of the programme implementers and community members, perception, attitude and religion of the people to who such programmes are delivered. Others may

include community resources and community members' readiness to realize these materials for the project implementation.

Formal Education

One of the factors influencing community participation is formal education of the community members on EPI programme. The educational level of a person can have influence on how the individual does behave, reacts, adapts to a situation in certain conditions (WHO, 2012). With regards to the EPI programme, there are some basic information that community members should know or be aware of on the programme. These include diseases under EPI, the causes of those diseases, mode of spread, signs and symptoms and the prevention of the diseases under the Expanded Programme on Immunization. Also, the time and period that children and Women in Fertilized Age (WIFA) should be immunized against the diseases. Formal education and the knowledge of community members therefore plays important role in the acceptance of preventing childhood immunizable diseases through immunization (NPI, 2007).

The National Monitoring and Supervision Team on current NIDs revealed unawareness by women to take sick children for immunization, inadequate participation of men in immunization in spite of them being dominant decision makers, fear by women who did not attend Antenatal Care (ANC) clinic of being reprimanded by health care providers, and perception that children get sick when immunized, cultural and religious barriers, are identified as information gaps in the EPI programme. Many people may be unaware of the vaccine recommendations for the age groups, and its importance or may not have access to vaccine information (Richardson & Waddington, 1996).

Perception

Perception according to Classical Theory of perceptions advance by German psychologist and physicist, Herman Ludwig Ferdinard von Hemholt in the mid-19th century, is the individual's ability to continually synthesize past experience and current sensory cubes. Perception is a process by which sensory stimulation is organized into usable experience. All perception involves signals in the nervous system, which in turn result from physical stimulation of the sense organs (Woodford & Jackson, 2003). For example, vision involves light striking the retinas of the eyes, smell is mediated by odor molecules and hearing involves pressure waves. Perception is not the passive receipt of these signals, but can be shaped by learning, memory an expectation. Perception is viewed as individual's ability to continually synthesize past experience and current sensory cues. The National Immunization Programme (2007) in Nigeria on NIDs revealed that most common childhood diseases are attributed to factors such as bad food, bad water, weather conditions and poor environmental sanitation.

Even though, communities are aware of childhood illness and their preventive measures, they don't know the actual causative organism, mode of spread, incubation period, and period of communicability. Again, community members perceive that the frequency rounds of NIDs, non-payment of charges on immunization, and numerous doses a child acquires can make a child more overdosed with vaccines thereby reducing the immunity previously acquired which can expose the child to more severe childhood diseases that are not with the EPI targeted programme (NPI, 2007). Again, community members believed that administering more than four doses of polio vaccine (at routine and outreach service) is harmful to a child, more additional vaccines (NIDs)

to children, can have other effects on the child. The personal and philosophical beliefs of the parents are the most influential in the immunization decision. The complexity of the immunization schedule has posed challenges for both families and providers, resulting in missed opportunities in children by the age of 2 years (WHO/UNICEF & USAID, 2002). Even though immunization programmes have had a dramatic impact on reducing the number of severity of communicable diseases outbreak, they also believe that, vaccine preventable diseases persist and in some cases have increased in prevalence because of lowered immunity in the general population. Childhood immunizations do much to provide lifetime immunity to certain diseases in the EPI programme

Attitude

Another community based factor that influence community participation towards immunization programme is attitude. Attitude is defined as the way you think and feel about something. Attitude can also be defined as a feeling or opinion about something or someone or a way of behaving that is caused by a person (Woodford & Jackson, 2003).

NPI (2007) revealed that some beliefs influence community member's attitude. Community members believe that subsequent immunization administration have adverse effect on the child. Also, some community members attributed childhood illness to evil spirits a female spirit or a god in one's family and therefore cannot be prevented through any immunization (NPI, 2007). This study revealed that some beliefs influence community members' attitude.

EPI Review (2004b) study also revealed that unawareness of the need to send a child for immunization, different doses of incomplete immunization scheduled by mothers and caregivers, mother's age and place of residence,

caregivers and mothers households' economic level, and mothers educational level, influence the attitude of community members on EPI activities. According to EPI Review (2004a) in Ghana, changing of immunization regime that a child can be immunized through routine services with card, mass campaigns, and house to house visits without cards was assumed to influence parent's health seeking behaviours.

Accessibility to vaccine services is another factor influencing community participation in EPI programmes. For instance, the distance and time taken to reach the nearest services outlet are impeding participation and child immunization as many of the service centers are far to reach in the rural area in the developing nations (EPI Review, 2004b). Quality of services , vaccine quality (implies valid and effective vaccines), staff qualification (implies technically qualified and expert staff), staff behaviour during vaccination and convenient place of waiting before having the vaccine can be valued as good service indicator to measure attitude toward utilization of immunization services on community participation in the EPI programme (WHO, 2012).

Again, community members believed that administering more than four doses of polio vaccine (at routine and outreach service) is harmful to a child. Or more additional vaccines (NIDs) to children can have other effects on the children. Again, the personal and philosophical beliefs of the parents are the most influential in the immunization decision. The complexity of the immunization schedule has posed challenges for both families and providers, resulting in missed opportunities in children by immunization at clinical preventive service (NPI, 2007). Even though immunization programmes have had a dramatic impact on reducing the number of severity of communicable diseases outbreak, they also believe that, vaccine preventable diseases persist

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Religion

Religion is one of the factors that can influence community members on community participation. The word religion is derived from the Latin noun religion, which denotes both earnest observance of ritual obligations and an inward spirit of an individual. Religion is a sacred engagement which is believed to be a spiritual in reality. Religion is a worldwide phenomenon that has played part in all human culture and so is a much broader, more complex category than the set of traditional beliefs or practices. An adequate understanding of religion must take into account its distinctive qualities and patterns as a form of human experience as well as the similarities and

differences in religion across human cultures (Broughton, Beigi, Switzer, Raker & Anderson, 2009).

Religion is the term the most commonly used to designate the complex and diverse realm of human experiences (Paden, 2009). In Massachusetts there were different views and opinions from religious leaders on immunization. These views and opinion started from the time of variolation (the deliberate inoculation of a person with small pox material in other to prevent the spread of the diseases). A minority religious view strongly put the others should to eschew immunization and accept the small pox as God sent (White, 1986).

Health-Worker Based Factors

Immunization is a routine exercise (Freed, Cowan & Clark, 2008; Tarrant & Gregory, 2003; Hanslik et al., 2000) and health workers may be more concern about the herd immunity rather than many of the processes that may demand assistants from the community members (Daley et al., 2006; Fredrickson et al., 2004). Health workers are more likely to be concerned with protecting, as many as possible, children from childhood killer diseases through routine immunization (Omer, Salmon, Orenstein, de Hart & Halsey, 2009). Health workers will get busy with immunization, especially children, because of their high knowledge of the effects of these killer diseases and the imports of vaccination to the children (Dinelli et al., 2009; Gust, Kennedy, Shui, Smith, Nowak & Pickering, 2005; Willis & Wortley, 2007).

Childhood immunization is essentially to protect and prevent children from childhood immunizable diseases (Tadesse, Deribew & Woldie, 2009). Immunization offers the greatest benefits for health, well-being and survival of children than many other interventions (UNICEF, 2005). Accordingly, from 1960–2002, a fifty percent reduction in under-five mortality was observed.

Immunization programmes has saved the lives of nearly 4 million children (Kidane & Tekie, 2003). Study showed that the cost to treat a vaccine preventable disease is 30 times more than the cost of the vaccine. Further investigations of outbreaks of vaccine preventable diseases indicated that incomplete immunization was the major reason for the outbreaks. Moreover, a low immunization rate was the major reasons for many of the outbreaks of infectious diseases in the past two decades (Gore, Madhavan & Curry, 1999).

Involving community members in decision making towards planning for, implementation and evaluation of health programmes go a long way to promote active participation of community members in such programmes (Baatiema, Skovda, Rifkin & Campbell, 2013; Preston, Waugh, Larkins & Taylor, 2010). A review by Fielder (2003) demonstrated where health professionals collaborated effectively with community members, community participation enhanced the uptake and response to health interventions, promoted scalability and sustainability of child health promotion intervention in rural Mexico (Baatiema et al., 2013; Rifkin, Hewitt & Draper, 2007). Thus, community members are likely to commit their community resources including money, materials and time that can contribute to improved health via such programme being implemented (Rifkin et al., 2007; Taylor, Wilkinson & Cheers, 2008). Community health workers are sometimes promoted as a mechanism to increase community involvement in health promotion efforts, despite little consensus about the role and its effectiveness. The effectiveness of these workers indicates that they assist in increasing access to care, particularly in underserved populations. The author also observed that health workers increased health knowledge, improved health status outcomes, and behavioral changes (Swider, 2002).

A mid-term evaluation conducted by BASICS staff compared some AIN-C communities with control communities. These evaluations revealed that enrollment of children under two years was 92% for AIN-C communities as against 21% control communities. Iron supplement coverage for children over four months also rose to 47% in AIN-C children while only 9% increment was found among the control communities. In addition, the review indicated that immunization coverage was increased to 76% among AIN-C children and were fully immunized compared to 66% of the controls. Also, AIN-C exclusive breastfeeding (EBF) rates increased from 27% to 49% for children under 4 months and from 21% to 39% for children under 6 months of age, while control rates decreased from 20% to 17% for children under 4 months and from 15% to 13% for children under 6 months. The authors observed that mothers in the AIN-C communities were fully involved in the planning and many other decision making processes of the project (Griffiths & McGuire, 2005; Taylor et al., 2008; Serpa & de Suarez, 2003; Villalobos, McGuire & Rosenmoller, 2000).

Motivation or incentives are critical in whipping up individual, group of individuals or a whole community towards participation of a community project (Noguchi, Albarracín, Durantini & Glasman, 2007; Shinitzky & Kub, 2001). A research conducted in the Northern Region of Ghana by Baatiema, et al. (2013) revealed the imminence of motivation, through indirect involvement of the community members, in increasing community members' active participation in Community-based Health Planning and Services (CHPS) programme. Baatiema et al. found that taken active steps to involve community members in each stage of addressing health problems at the community-level motivated these members that increased their participation and eventual

establishment of the CHPS programmes and its utilization (Kilpatrick, Cheers, Gilles & Taylor, 2009). However, Shinitzky and Kub (2001) lamented that public health professionals such as nurses face challenges to motivate and facilitate health behavior change when working with individuals, families and communities in designing and implementing programmes. Despite these challenges as speculated by Shinitzky and Kub, and Noguchi et al. in their meta-analysis to measure motivations underlying enrollment and retention in HIV-prevention interventions observed that samples who were motivated with some incentives to use condoms were more likely to complete an intervention than were those who received nothing motivational. Motivation from programme designers and/or implementers, such as health professionals, is also more effective when community members are carry along to participating in such community health intervention programmes (Shinitzky & Kub, 2001; Noguchi et al., 2007).

Collaboration is a key for the success implementation and achievement of goal(s) of any community health project (Haines et al., 2007; Singh, 2002). Community members participate in community health programmes such as child immunization programme, at various areas and stages. A proper collaborative participation between community members and health workers provides a beneficial outcome for project targeted participants (children), health workers and the community at large (Viswanathan et al., 2004). Such partnerships in health programmes do not only provide health improvement to the targeted audiences (Viswanathan et al., 2004), it promotes community empowerment by building the capacity of the community members as they take part in decision making concerning the programmes (Minkler et al., 2009). For instance, a comprehensive systematic review conducted by Viswanathan et al.

(2009) provided evidence that effective partnership between community health worker and community members result in greater improvements in participant behavior, health outcomes and increased appropriate health care utilization. These authors concluded that community health workers can serve as a means of improving health outcomes for underserved populations such as KEEA district, for some health conditions. But such health improvement is likely to be achieved through effective collaborative efforts between the two agencies. In addition, Norris et al. (2009) observed from some rural community projects that there was maximum satisfaction, positive lifestyle changes and increased in knowledge acquired among the community members that were attributed to effective project implementation and contributed to the general outcome of the project target goals. These they attributed to the effective partnership between community health workers and the community members, which was a coordinated effort of the health workers.

Community health workers undertake various tasks, including case management of childhood illnesses such as pneumonia, malaria, and neonatal sepsis and delivery of preventive interventions like immunization, promotion of healthy behaviour, and mobilizing the communities (Viswanathan et al., 2009). However, for the success of these activities community health workers cannot be stand-a-lone implementers; the active involvement of the communities is much required (Haines et al., 2007). Minkler et al. (2009) noted that such collaborative participation should be community based rather than simply community placed. They believed that this will bring community members and other stakeholders such as nurses, doctors and community pharmacists to collaborate in addressing, effectively, health and other social problems to the benefit of the community members.

Conceptual Framework

The framework for the study was informed by the definition of "community participation" by Pearse and Stiefel (1989) and Reddy (1996). These two definitions were combined to re-define community participation as people's involvement in decision-making processes in implementing, planning and monitoring programmes, and their involvement in efforts to evaluate such programmes with a view to enhancing their well-being in terms of health, personal growth and self-reliance or other values they cherish in their community.

The definition also identifies decision-making, creation of awareness and initiation of process or action for community members on the EPI programme. Decision-making is seen here as both a stage in the process and also as component of planning, implementation, monitoring and evaluation stages of the EPI programme. This is reinforced by the World Bank (1994), that participation has three main dimensions;

1. The involvement of all those affected in decision-making about what should be done and how
2. Mass contribution to the participation effort, that is to the implementation of the decisions and
3. Benefits of the programme to community members.

The definition also implies that the context of participation is the programme or project. Though it is acknowledged that macro level participation is important and provides a supportive environment for participation at the community or micro-level, it was not the concern of this study.

The study focused on the participation of beneficiaries as a group (that is, the community) and not as individuals. Reddy (1996) argued that community participation is said to have occurred only when people act in concert to advice, decide or act and their views on issues are implemented in programmes which can improve their health status, that can best be solved through such joint action, because joint action is essential for commitment creation, learning, confidence, building and resources sharing among others.

Reddy's classification of community participation into four levels of information sharing, consultation, decision-making and action initiation in order of increasing intensity was used as the basis for measuring the intensity of community participation in the planning, implementation and monitoring and evaluation stages of the programme used in the study. The various activities involved in each of the stages were classified on the basis of their being either information sharing, consultative, decision-making or action initiation for the assessment of the intensity of community participation.

Sustainability or the concept of sustainable programme is central to beneficiary participation in programme. Sustainability of project and programme is seen as a possible outcome of beneficiary participation (Oakley et al., 1998; White, 1986). In fact, the UN Economic Commission Africa (1991) credited with popularizing the concept of sustainable development made 'a political system that secures the effective citizen participation in decision-making', the first requirement towards the achievement of sustainability in programmes. White (1986) contends that when people have taken an active part in the planning, and or implementation of a programme they will collectively consider the process in the programme their own, have

pride in it process and therefore do so responsibly to improve the participation level.

Sustainability, like participation has been defined and interpreted in many ways, but in essence, it alludes to maintenance and viability over the long term. According to Bovin (1995), the context of participatory development, sustainability does not imply that a given activity can be continued indefinitely without change. Rather, it means the people reach a stage of self-reliance that enables them to pursue their current activities and to cope with changing circumstances with a relatively high degree of autonomy. To them, sustainability therefore requires resources, know-how, skills, vision, self-confidence and enabling socio-economic relationship.

Summary of Review of Literature

Community participation transcends every field of human endeavour, from community health promotion, education, agriculture, marketing to economic and political science. Community participation has been promoted and deemed to be a critical element in enhancing population health. The health status of the populace can mostly be advanced with community health intervention programmes, which community member participation plays major role. Community participation does not only bring about effective social cohesion between outsiders and community members, it promotes the act of pooling community resources and expertise to achieve programme goal(s). Community participation also promotes sense of ownership among community members as they contribute to the design, implementation and evaluation processes of the community programme. Programme sustainability and empowerment of community people are also key attributes of community participation.

However, community participation is not with major challenges. Some research specialists observed that, many at times, community members do not have time to commit to participation in community projects. In addition, community members may lack expert knowledge to contribute effectively to the processes of the programme. This can cause problem between outsiders and community members which can delay the project and compromise achievement of project goals.

Many researchers found conflicting results, as outlined in the above two paragraphs, from studying community participation. These authors have studied community participation in several fields and in several communities, both urban and rural. One of the health promotion areas in which community participation has been studied is EPI. EPI programmes have contributed and continue to contribute to the health promotion of children by preventing childhood killer diseases. Ghana has introduced EPI programmes in most communities over a decade ago. One such communities implementing EPI programmes is KEEA with a periodic routine childhood immunization. The coverage of routine immunization has over the years been low in Ghana as whole, and many stakeholders are wondering why. Thus, some factors are playing various roles in how people partake in EPI community activities. Some of these factors have been identified as educational level of the community members, attitude, religious beliefs, political influence, gender, economic status and collaboration between outsiders and the community members.

Research EPI and community participation has also revealed conflicting results. However, none of such researches or evaluations have been conducted in KEEA community. This is the gap this current study proposed to fill.

CHAPTER THREE

METHODOLOGY

The purpose of this study was to find out the factors influencing community participation in EPI in Elmina sub-District of Ghana. The methods and procedures of obtaining data for the study were explained in this chapter. Specifically it focused on research design used, the study population, sample and sampling procedure employed in the study, instrument used for collection, procedure used for data collection and data analysis.

Research Design

The descriptive survey design was used for the study. Leedy and Ormrod (2005) explained descriptive research study as a type of research that involves either identifying the characteristics of an observed phenomenon or exploring possible correlations among two or more phenomena. Survey helps to classify understanding of important phenomena through the quantification of relationships among variables. The purpose of such a design is to provide an explicit description of the phenomenon. In every case, descriptive research examines a situation as it is. It does not involve changing or modifying the situation under investigation, nor is it intended to determine cause-and-effect relationships.

The descriptive design has been chosen because this study was to determine factors that influence community participation in EPI for the purpose of establishing relations and describing the phenomenon as it pertains among the sample for the study. If a relationship of sufficient magnitude is realized between the two variables for the study and a score on the other

variable is known, conclusion can be made of the relationship on either variable.

Research method specialists have pointed out lot of strengths of surveys (Babbie, 2007; Nwadinigwe, 2002). Babbie for instance has written that surveys are useful in describing a large population with accurate representative sample. Nwadinigwe also was of the view that surveys are also flexible where many variables and questions can be asked on a topic at a time, thus making analysis also flexible. In addition, surveys make measurement of opinions, beliefs and attitudes standardized. However, surveys in most cases collect superficial data which do not get in-depth or rich information from the participants. Also, there can be sample selection bias that may be the point of skewed data collection (Creswell, 2009).

Population

The estimated population of Elmina sub-District was 51,416 representing 33% of the total of K.E.E.A (Ghana Health Service, 2008). The accessible population was 27,049 that comprised the adult of 18 years and above. Thus, 52.6% of the target population and made up of 31 communities in the sub-District. The communities and their populations were, Bantama (1747), Mbofra Akyinim (685), Jira Akyinim (334), Pershie (495), Damanbodo (606), Neizer's Garden (592), Essuekyir (1055), Nduabaasa (534), Roman Hill (1093), Java Hill (630), Chapel Square (975), Sea View (590), Nyanta (659), Teterem (1012), Sybil Awenee (1037), Akotobinsin (2001), Ayisa (798), Brofobanho (377), Estate (621), Iture (745), Sanka (807), Bronyibima (2313), Yensu Nkwa (759), Ampenyi (905), Essan (705), Essan Junction (640), Ankwanda (1041), Mpeasem (452), Eduegyei (367), Ayensudo (1664), and Brenu Akyinim (810). In addition, the public health nurses in the sub-District

were 19 (Elmina Urban Health Centre, 2011).

The study area is one of the five sub-Districts in KEEA. It covers an area of approximately 660 square kilometres and shares boundaries to the South with the Gulf of Guinea, East with UCC Sub-District, North with Ankaful Sub-District and West with Kissi Sub-District (Elmina Urban Health Centre, 2011).

Elmina has historical sites such as the St. George's Castle, Old Dutch Cemetery, St. Joseph's Catholic Church building and Fort Coenraadsburg which serve as tourist centres in the Sub-District (Elmina Cultural Heritage and Management Programme [ECHMP], 2002). The people celebrate the "Bakatue" festival which signals the opening of the Benya River. The main languages spoken are English and Fante, with very few of the people speaking Ewe. Christianity, Islam and Traditional Religion are the major religions practiced in the sub-District. The economic activities of the people of Elmina are fishing, farming, salt exploration and canoe building. According to ECHMP, about 75% of the people perform jobs which are directly and indirectly associated with fishing.

On health care delivery, the sub-District is served by the Elmina Urban Health Centre (EUHC), one private clinic and one maternity home (Elmina Urban Health Centre, 2011). Health delivery is structured in line with the policies of Ghana Health Service (Ghana Health Service, 2007; 2002). The services rendered on fertility issues at the health facilities include; Antenatal Care (ANC), Post Natal Care (PNC), Immunization, Family Planning, Prevention of Mother to Child Transmission (PMTCT), Safe Motherhood and HIV Testing and Counselling.

Sample and Sampling Procedure

The sample size selected for the study was 294 comprising 279 community members and 15 health staff. The sample of the community members represented about 1% of the accessible population. The sample size of 279 was considered appropriate. According to Fraenkel and Wallen (2000) for descriptive studies a sample with a minimum number of 100 participants is essential if any meaningful inferences are to be drawn from the sample to generalization to the accessible population.

The quota sampling technique was used to select the community members. A proportionate calculation of 1% was administered on the individual enrolments of the 31 communities (279) was used for the study. Specifically, Bantama (18), Mbofra Akyinim (9), Jira Akyinim (5), Pershie (7), Damanbodo (8), Neizer's Garden (8), Essuekyir (11), Nduabaasa (6), Roman Hill (12), Java Hill (6), Chapel Square (10), Sea View (6), Nyanta (7), Teterem (10), Sybil Awenee (10), Akotobinsin (20), Ayisa (8), Brofobanho (6), Estate (6), Iture (7), Sanka (8), Bronyibima (23), Yensu Nkwa (8), Ampenyi (9), Essan (7), Essan Junction (5), Ankwanda (10), Mpeasem (7), Eduegyei (5), Ayensudo (17), and Brenu Akyinim (8). The samples were selected conveniently from each of the study communities. In addition, the researcher purposively selected all the 19 health workers in the sub-District for the study.

Demographic Data on Health Staff

There were 15 community health workers involved in this study, of whom 80% (n=12) are Christians and 20% (n=3) Islam. Besides, there were 53% (n=8) single and 47% (n=7) health workers in this study. The health workers comprised 33% (n=5) males and 67% (n=10) females whose age ranged 25-35 years (M=29.53; SD=2.83). These health workers comprised 40%

(*n*=6) secondary school leavers, 40% (*n*=6) certificate holders, 20% (*n*=3) diploma holders. In addition, 80% (*n*=12) work as community health nurses, 13% (*n*=2) as senior community health nurses and 7% (*n*=1) do not hold any particular job position. Working experiences of the health workers ranged from under one year to six years (*M*=3.40; *SD*=1.45).

Demographic Data of Community Members

Two hundred and seven nine community members' questionnaires were included in the data analysis. There were 19% (*n*=53) males and 81% (*n*=226) females. Thirty one percent (*n*=85), 29% (*n*=81), 25% (*n*=71) and 15% (*n*=42) of the community members had no formal education, basic education, secondary education and tertiary education, respectively. The community members comprised 65% (*n*=182) Christians, 28% (*n*=77) Islamic, 5% (*n*=15) Traditionalists and 2% (*n*=5) from other religious backgrounds. The community members are engaged in fishing 17%, farming 9%, salt exploration 4%, artisans 17%, trading 29%, government work 19% and other menial jobs 5%.

About 29% (*n*=80) of the community members are single, 59% (*n*=164) married, 10% (*n*=28) divorced and 3% (*n*=7) widowed. Forty one percent (*n*=115) of these participants did not live in the community throughout their lives, however, 59% (*n*=164) spend their entire lives in the community. Twenty eight percent (*n*=78) of the participants have no under-five child, 45% (*n*=125) have one each of such children, 25% (*n*=70) have two each and 25 (*n*=6) have three each. Data was collected from fairly young population with age ranged 17-60 years (*M*=31.22; *SD*=8.06).

Instrument

Two sets of researcher-developed questionnaires were used for collection of data from respondents; one for community members and the other for health workers. The composition and construction of the questionnaires were guided by various variables (community participation, community based factors, programme based factors and health worker based factors on EPI) and available empirical literature.

The questionnaire for community members comprised four sections (Sections A-D). Section A was made up of seven alternate option items and two open ended items that solicited participants' personal data (1-9). Section B comprised six items which sought information on level of community participation in EPI programme (10-15). Section C sought information on community based factors that influence EPI programme (16-22). In addition, section D contained five items that focused on information about health worker factors that influence EPI (23-27). Thus, a total of 27 item questionnaire was developed (Appendix A).

The participants responded by marking an option that best described them at section A. In addition, they stated their age and number of children they have (2 and 7). Section B was on six point Likert scale, 0-5, where 0 represent "not at all", 1 rarely and 5 very often. Participants were expected to respond by marking the figure that best indicated their participation in EPI. High score indicates higher participation in EPI activities in the community. Sections C and D were designed on four point Likert scale, strongly agree (SA), agree (A), disagree (D) and strongly disagree (SD). All the questionnaire items in section C were constructed in the negative form and therefore coded

SA=1, A=2, D=3 and SD=4. However, section D items were reverse scored SA=4, A=3, D=2 and SD=1.

The second questionnaire, Health Worker Questionnaire contained two sections A and B. Section A collected participants' demographic information with six closed ended items and an open ended (1-7) where health workers indicated number of years they have been working. Section B comprised six items (8-13) that sought information on programme based factors that influence EPI programme. This section of the questionnaire was in four point Likert scale where participants responded Strongly Agree SA=4, Agree A=3, Disagree D=2 and Strongly Disagree SD=1 (Appendix B). All the items in this section are positive and thus scored as indicated above.

Validity of the Instrument

The questionnaires were taken through face, content and construct validity prior to data collection. Initially, the two questionnaires were given to two colleagues Masters' students who corrected few errors. Secondly, the questionnaires were given, with the research questions, to the two senior research assistants from the Department of Health, Physical Education and Recreation (HPER) of University of Cape Coast. These activities have streamlined the questionnaires and reduced the items to 30 and 14 for community members' questionnaire and health worker questionnaire respectively. Thirdly, the researcher gave the questionnaires to five community members and five health workers from Komenda sub-District. These respondents were encouraged to answer the items with frankness and comment or correct where they felt the need be. This led to rewording few of the items. Lastly, my supervisors scrutinized the questionnaires for their final approval.

This reduced the questionnaire items to 27 and 13 for community members' questionnaire and health worker questionnaire respectively.

Construct Validity of the Instrument

Sections B, C and D of the community members' questionnaire were taken through exploratory factor analysis (EFA) after the main data for this study was collected. The objective was to assess the factor structure of the instrument and how the questionnaire items were "tapping" the various constructs they were deemed to measure (Field, 2005; Torres-Reyna, 2007). The 18-item four-point Likert scale questionnaire (minus demographic variables) designed to measure community participation and its influencing factors was taken through exploratory factor analysis to ascertain its factor structure (Sounan et al., 2012).

Using principal component factor analysis (CFA) with orthogonal rotation (Varimax), three factors which account for 74% of the variance were extracted (Field, 2000). These factors are named as follows: "community participation", "community-based factors" and "health worker factors". The first factor which is community participation is composed of six items with coefficient of reliability, alpha .96. The second factor, community-based factors has four items with alpha .85. In addition, the third factor health worker factors comprised four items with alpha .86. Initial loading in the rotated component matrix indicated that four items 20, 21, 22 and 27 did not meet the cut-off point of 0.5 and were removed from the analysis (Field, 2000; Stevens, 2002). The three factors and the items comprising them are presented in the Table 2 with their reliability co-efficient values. All further statistical analyses in this research study, were based on these factors and their items.

Table 1: Item Listing, Factor Loading and Communalities for the Three factor Community Participation in EPI Programmes

Factor	Factor loading 1	2	3	Communality
Factor 1: Community Participation (alpha = .96)				
Helping to mobilize community members for immunization	.86			.78
Helping to set up sites for immunization	.88			.81
Assisting health personnel during immunization sessions	.90			.86
Assisting nursing mothers during immunization sessions	.87			.80
Providing place for keeping immunization equipment	.90			.87
Assisting health workers to reach children due for immunization	.91			.86
Factor 2: Community-Based Factors (alpha = .85)				
Community members and health workers cannot work together on immunization activities		.81		.67
Immunization health workers do not need community members to be effective		.85		.67
Immunization is a personal issue for those who care		.83		.65
Immunization services are to be done by health workers only		.70		.65
Factor 3: Health Worker Factors (alpha = .86)				
Health workers involve community members in EPI			.80	.74
Health workers invite community members to participate in immunization			.83	.76
Health workers commend community members for participating in immunization			.74	.65
Health workers involve community members in decision making in immunization			.83	.75

Reliability of the Instrument

The internal consistency reliability of the instruments was established by collecting data from 50 community members with community members' questionnaire from Komenda Sub-District. The Cronbach alpha was utilized for the reliability because the measures have multiple-score items (Ary, Jacobs & Razarieh, 1990). The instrument for community members yielded internal consistency reliability co-efficient of .91 for community participation in EPI, .75 for community-based factors and .72 for health worker-based factors for sections B, C and D respectively, with the overall reliability of .80. These reliabilities co-efficient were considered appropriate (Fraenkel & Wallen, 2000).

The data used for the results of this study yielded more robust reliability co-efficient. Initially, the alpha reliability test for community members' questionnaire indicated that items 22 and 27 were redundant and therefore removed. The follow up test yielded higher alpha reliability co-efficient of .96 for community participation in EPI, .87 for community-based factors and .86 for health worker-based factors for sections B, C and D respectively, with the overall reliability of .91. Additionally, health worker questionnaire yielded acceptable alpha reliability co-efficient of .74 (Fraenkel & Wallen, 2000). But, an initial test showed that item number 8 was redundant and was removed. Therefore, the analyses conducted in this study were expected to include 25 questionnaire items for community members' questionnaire and 12 items for health worker questionnaire. However, a construct validity test on community members' questionnaire revealed some of the items did not load appropriately to measure the latent variables they were intended to measure.

Data Collection Procedure

Data collection started just after the research protocols had been approved by my supervisors. Two introductory letters (one for community chiefs and the other for the Physician Assistant-in-Charge) were collected from the Department of HPER (Appendices C and D). The letters enabled the researcher to introduce herself, the research purpose and contact the community chiefs. The researcher also used the letter to contact Physician Assistant in-charge of Elmina Urban Heath Centre and the community members and other health workers for this study. The participants also signed informed consent form (Appendix C) prior to completing the questionnaire.

Four trained research assistants from the KEEA health directorate assisted me in the administration of the questionnaire. The research assistants were educated on the purposes of the study. In addition, they were trained in the administration and how to appropriately interpret the questionnaire items to the participants who could not read well.

Three of the research assistants distributed the questionnaire (community members' questionnaire) to the members in each community. Those community members who could not read nor write English language had the items interpreted to them in the local Fante language and their responses ticked on their behalf by three research assistants. The questionnaires were collected off-hand after they had responded to them. Additionally, a research assistant administered the health worker questionnaire to the health workers. The health workers were given three days to return the completed questionnaire. This ensured about 98% recovery of the questionnaire. In all a total of six weeks was used for the administration and collection of the questionnaires.

Data Analysis

The questionnaires were statistically analysed using statistical software SPSS version 16. The data files were crosschecked for completeness of the content and for internal consistency in responses. From the results of the factor analysis, the five research questions and two hypotheses which guided this study were statistically analysed individually. Research question one which sought to find out the level of community participation in EPI in Elmina sub-District was statistically analysed using frequency and simple percentage. There were six questionnaire items on six point Likert scales 0-5 that were used to measure community participation in EPI. The categorization and scoring of participants, in participation in EPI programmes, was done as low with a score between 0-2, medium 3 and high 4-5. Thus, the frequency of the number of community members who scored low, medium or high determine community participation in EPI.

Differences in community members participation in EPI based on their educational levels (research question 2) was also tested using one-way analysis of variance (ANOVA). Hypothesis one was also tested with this same analysis. ANOVA test was utilized for the analysis because a quantitative data (interval) was collected (Babbie, 2007; Ofori & Dampson, 2011). A follow-up test (post hoc), using Scheffe test, was carried out to identify where the difference exited between the educational levels. The researcher chose Scheffe test over others such as Bonferroni and Tukey HSD because Scheffe is more conservative and that provides a more reliable practical difference between the two groups (Huck, 2008). Besides, effect size using eta squared (η^2) was manually calculated to determine the practical significance difference or the magnitude of the difference that existed between the groups (Cohen & Cohen, 1983). The

criteria for a One-way Anova effect size with eta squared are .01, .06 and .14 as small, medium and large respectively (Huck, 2008). Formula for effect size calculation (Agyenim-Boateng, Buabeng, Ayebia-Arthur & Ntow, 2010);

$$\text{Eta squared } (\eta^2) = \frac{\text{Sum of squares between groups}}{\text{Total sum of squares}}$$

Research questions three, four and five were statistically analysed using multiple regression as a tool. Research question three investigated the influence of community–based factors on community participation in EPI programme. Besides, question five explored the influence of health worker factors on community participation in EPI programme. In addition, research question five attempted to find out the influence of programme-based factors on community participation in EPI programmes. Items measuring research questions three, four and five were forced entered into the multiple regression models by research question. This was done to measure the influence of individual items, and not as construct, on community participation in EPI. Multiple regression was preferred over other analytical tools such as simple linear and logistic regressions, and correlations because the analysis aimed at determining the influence of an independent variable (measured with many items) on dependent variable (measured with many items). Besides, the analyses were done with the items not as construct. Moreover, these items are measured on interval scale, a condition that satisfied multiple regression analysis (Babbie, 2007; Huck, 2008; Ofori & Dampson, 2011).

Multiple regression models were built to test the hypothesis two which stated that health worker factors will be more significant in influencing community participation in EPI programmes than community base factors. Four and five, four point Likert scale items measured health worker and community base factors respectively. These items were summed up separately

to form health worker factor and community base factor constructs. The two constructs were forced entered into multiple regression model to test their relative significance in influencing community participation in EPI programmes. Multiple regression was the best analytical tool suited for predicting community participation with health worker and community base factors when dependent variable (community participation) is a quantitative date (interval scale) (Huck, 2008; Ofori & Dampson, 2011) as in this study. Besides, the independent variables (health worker and community base factors) could be any form of data, either quantitative and/or qualitative, which the current data is in interval scales.

CHAPTER FOUR

RESULTS AND DISCUSSION

The purpose of this study was to find out the factors influencing community participation in EPI in Elmina sub-District of Ghana. This chapter presents the results and discussion of the findings under the six research questions guiding the study.

Research Question 1: What is the Level of Community Participation in EPI in Elmina Sub-District?

Community participation in EPI was analysed using frequency and percentage counts. The researcher categorized and scored participants' participation in EPI programmes as low, medium and high, with six separate items measured community participation in EPI. Thus, frequencies of scores between 0-2 indicate low, 3 medium and 4-5 high participation in EPI programmes.

Analysis shows that out of 279 community members, over 91% (n = 154 to 263) scored low on each of the items comprising community participation in EPI programmes. For instance, 98% (*n* = 263) and 93% (*n* = 258) community members scored low on items "helping to mobilize community members for immunization" and "assist health personnel during immunization sessions" respectively. Moreover, about 2.0% (*n* = 6) and 8% (*n* = 21) of the participants scored medium or above on the same items. Additionally, whereas 91.0% scored low in assisting health workers to reach children due for immunization, only 9.0% scored medium or above (see data in

Table 2). Hence, community members' participation in EPI programmes is low in Elmina sub-District of the Central Region of Ghana.

Table 2: Frequency and Percentage Analysis of Community Participation in EPI Programmes

Item	Low (%)	Medium (%)	High (%)
Helping to mobilize community members for immunization	263 (97.9)	3 (1.1)	3 (1.1)
Helping to set up sites for immunization	262 (93.9)	7 (2.5)	10 (3.6)
Assisting health personnel during immunization sessions	258 (92.5)	13 (4.7)	8 (2.9)
Assisting nursing mothers during immunization sessions	260 (93.2)	11 (3.9)	8. (2.9)
Providing place for keeping immunization equipment	259 (92.8)	12 (4.3)	8 (2.9)
Assisting health workers to reach children due for immunization	154 (91.0)	15 (5.4)	10 (3.6)

The finding revealed that community members' participation in EPI programmes was low in Elmina sub-District of the Central Region in Ghana. Perhaps majority of the community members have low formal education with some having quite a negative perception about EPI programmes. Education is a very strong indicator of how individuals seek, accept and utilize information. Therefore, education or knowledge people have on a particular programme affects how these individuals accept and utilize such programme and its services (WHO, 2012). The finding revealed that community members' participation in EPI programmes was pronouncedly low in Elmina sub-District

of the Central Region of Ghana. Perhaps majority of the community members have low formal education with some having quite a negative perception about EPI programmes. EPI programmes require community members to have some basic information that such as diseases covered under the programme, the causes of these diseases, mode of spread, signs and symptoms and how these conditions can be prevented EPI. In addition, it is expected that community members be aware of the time and period children and women in fertilized age should be immunized against the diseases. These demands from the community members are largely influenced by their level of formal education that in turn affects their knowledge and acceptance of the programme and its services that serve the life of children from childhood immunizable diseases (NPI, 2007). According to Swider (2002) the success or otherwise of community participation depends on the belief that large homogeneous groups within the community will accrue benefits from programme services. This belief of the benefits of the programme is largely dependent on the level of knowledge that also depends on the educational levels of community members.

Educational level is one major influencing factor on the perception of the community members towards participation in community programmes (UNICEF, 2005). Empowering community members through increasing access to formal education, awareness creation prior and during programme implementation become vital in increasing community participation in many programmes (WHO, 2012). Thus, relatively, higher education empowers community members with “better” knowledge and understanding of benefits of community programmes including health interventions that may increase their participation.

Low level of education may be factors in accepting and difficulty in creating awareness of community interventions. Richardson and Waddington (1996) revealed that unawareness by women to take sick children for immunization, their fear of being reprimanded by health care providers and perception that children even get sick when immunized, cultural and religious barriers are some barriers to successful implementation of EPI programme. They contended that many people may be unaware of the vaccine recommendations for the age groups, and its importance or may not have access to vaccine information. These unawareness, fear, and cultural and religious factors identified in the findings of these authors could be dealt with and promote high participation in health care services including EPI programmes with the increase in education.

It is not very surprising community participation in EPI was low in this study Thus 60.0% (*n*=166) of the community members have only up to basic education (see sample and sampling procedure). As education gives community members tool for participation in community intervention programmes, participation in turn empowers the members to become agents of social action and change. Participation affords community members "to take charge" of community programmes, thus manage resources judiciously to the mutual benefits of the whole community (Pearse & Stiefel, 1989), and increase positive perception of such community intervention programmes (Woodford & Jackson, 2003). In addition, perception greatly influences people's attitude towards many things including participation in community health intervention programmes.

According to Woodford and Jackson (2003), perception is individual's capability to continually synthesize past experiences and current sensory cues

to act in present situation. Thus, many individuals respond to issues based on the way they perceive such things for their benefits or otherwise. The National Immunization Programme (2007) in Nigeria on NIDs revealed that most common childhood diseases are attributed to many vaccine preventable conditions such as bad food, bad water, and poor environmental sanitation. However, many mothers attributed the disease condition of the children to evil forces for which many mothers failed to completely immunize their children. Again, community members perceive that the frequency rounds of NIDs, non-payment of charges on immunization, and numerous doses a child acquires can make a child more overdosed. The mothers believe the vaccines can reduce the immunity previously acquired thereby exposing the child to more severe childhood diseases (NPI, 2007).

Even though immunization programmes have had a dramatic impact on reducing the number of severity of communicable diseases outbreak among children, many community members still believe that vaccine preventable diseases persist and in some cases have increased in prevalence (UNICEF, 2005). This perception may be a base for these members reluctantly accept and participate in community health intervention programmes aimed at reducing and/or preventing diseases. Additionally, owing to the low educational level, it is likely that community members in the current study perceive EPI programmes and the implementation as not viable to "serve" or protect the lives of their children. Thus, they failed to participate adequately in these health programmes leaving them for health workers alone who by mandate to carry out such programme.

Research Question 2: Do Community Members in Elmina Sub-District Differ in their Participation in EPI Based their Educational Levels?

Differences in community members' participation in EPI base on educational levels was tested through calculating one-way ANOVA. ANOVA results reveal that there was statistically significant difference in members' participation in EPI according to their educational status; F (3, 275) = 3.3, $p <$ .05. Scheffe follow up test results indicate that community members without formal education were significantly different and better in participation in EPI programme (M = 4.87; SD = 6.27) than members with tertiary education status (M = 1.60; SD = 3.66) with a small effect size (η^2 = .04). On the other hand, there was no statistically significant difference between any of the educational levels (see data in Table 3). Therefore, educational status is a significant determinant of community members' participation in EPI programmes. And that the researcher failed to reject the hypothesis one which stated that educational status will be a significant determinant of community participation in EPI programmes.

Table 3: One-Way Anova Results Showing Differences in Community Participation in EPI Programmes

Groups	*N*	*M*	*SD*	*df*	*F*	*Sig.*
No formal Education	85	4.87*	6.27			
Basic Education	81	4.23	6.03			
				3, 275	3.34	.020
Secondary Education	71	4.03	5.07			
Tertiary Education	42	1.60*	3.66			

N = 279; $\eta^2 = .04$

There is positive relationship between educational attainment and many social and behavioural factors including participation in EPI programmes (Maekawa et al., 2007; Paashar, 2005; Vikrama, Vannemana & Desai, 2012). The finding revealed that community participation in EPI programmes is dependent largely on community members' educational status. For instance, it is clear that community members with lower educational status actively partake in EPI programmes than those with higher educational status. Probably, participation in community immunization programmes demands more time commitment, and attitude rather than knowledge of and availability personal resources (Maekawa et al., 2007). It is a common knowledge in academia and policy discourse that maternal education is influential in child health and survival (Paashar, 2005). WHO, UNICEF and USAID (2002) pointed out that despite many women in African countries have low formal education which influences their knowledge on immunization, these women embrace the values of immunization and do immunize their children. They also revealed that many women are likely to use immunization services provided they are aware of when and where to send their children and those services are available, accessible and friendly. From Indian rural community, a study by Paashar (2005) demonstrated that a positive and significant relationship exists between the proportion of educated females in a district and a child's complete immunization status within that district. Thus, increasing women's literacy at the community level, in addition to mother's access to higher education such as secondary school and beyond at the individual level emerged as effective developmental and child health enhancing tools.

Ghana EPI Review (2004a) study also revealed that unawareness of the need to send a child for immunization, different doses of incomplete

immunization scheduled by mothers and caregivers, mother's age and place of residence, caregivers and mothers households' economic level, and mothers educational level, influence the attitude of community members on EPI activities. In addition, Ghana EPI Review (2004a) revealed that in Ghana changing of immunization regime that a child can be immunized through routine services with card, mass campaigns, and house to house visits without cards was assumed to influence parent's health seeking behaviours. Thus, less educated mothers who daily activities mostly confine them to their houses, contrary to their educated counterparts whose daily routines are exclusively outside their homes may be less likely to actively partake community EPI programmes than less literate ones.

Moreover, community members with lower level income and other individuals who volunteer for community projects cannot afford to spend their time, energy and money if at all they have any to spare, on participation in community-based programmes without rewards such as paid or if there is uncertainty about the benefits from such participation. Similarly, if there is a high degree of inequality in the distribution of income in a community, participation of the destitute and very poor along with the very rich and wealthy people would be difficult since real participation can occur only among the equals (UN Economic and Social Council, 2000).

Contrary to this speculation, Baum et al. (2000) revealed in their community participation project that people of low income and education status reported low levels of involvement in social and civic activities. These authors reiterated that levels of participation in social and civic community life are significantly influenced by individual socioeconomic status, health and other demographic characteristics. USAID (2003) also supports this when they

noted that immunization coverage among children of high educated people was low with associated high drop-out rate. Thus, the act of using immunization services by many women in the developing countries goes beyond knowledge of and the availability of personal resources to include value for immunization.

Research Question 3: What Community–Based Factors Influence Community Participation in EPI Programmes in Elmina Sub-District?

To determine the influence of community-based factors on community participation in EPI programmes, multiple regression analysis was carried out. Overall model significantly predicted community participation in EPI from community-based factors; *beta* = -6.23, t = -3.28, $p < .05$. Two of the four items; "community members and health workers cannot work together on immunization activities"; *beta* = 2.35, t = 3.14, $p < .05$ and "immunization services are to be done by health workers only" *beta* = 1.21, t = 2.18, $p < .05$ respectively, were significant in predicting community participation EPI programmes. In addition, these items contributed 26% and 17% respectively, to the variance of community participation in EPI programmes (see data in Table 5). Thus, community-based factors are useful predictors of community participation in EPI programmes.

The finding indicates that community-based factors are useful predictors of community participation in EPI programmes. Effective collaboration between implementers (health workers) and the receivers of community health projects (community members) is very critical to achieving project goals (Adinku, 2000; Singh, 2002) either to enhance health status of the community members (Green & Ottoson, 1999) in this case children.

Table 4: Forced Entered Regression Analysis of Community-Based Factors on Community Participation in EPI Programmes

Variable	Beta	R	R^2	t	Sig
Constant		.34	.11	-3.28	.001
Community members and health workers cannot work together on immunization activities	.26			3.14	02
Immunization health workers do not need community members to be effective	-.04			-.47	.64
Immunization is a personal issue for those who care	-.01			-.06	.95
Immunization services are to be done by health workers only	.17			2.18	03

Four research items were used to measure community-based factors (Table 4). General regression model indicated significant prediction of community participation in EPI programmes as result of community-based factors. Two of the items indicated significant prediction while two did not. For example, "community members and health workers cannot work together on immunization activities and immunization services are to be done by health workers only" were significant in determining community participation in EPI programmes. However, "immunization health workers do not need community members to be effective and immunization is a personal issue for those who care" could not predict community participation in EPI programmes.

Probably, these two items (community members and health workers cannot work together on immunization activities and immunization services are to be done by health workers only) are significant in determining community

participation in EPI programmes because community understand their roles and that of the health workers' in EPI programme implementation (Haines et al., 2007; Singh, 2002). Moreover, item construction made it obvious that community members identified that they need to work together with the health workers to effectively and efficiently implement health projects such as EPI programmes. The contribution of 26% and 17% of the variance of community participation in EPI programmes is marked indication of how essential working together is in determining the success of community health programmes (Adinku, 2000; Green & Ottoson, 1999). Thus, it is clear that health workers need community members just as community members need health workers for successful implementation of most health programmes including EPI, to advance the health status of the people (Viswanathan et al., 2004).

Collaboration is a key for the success implementation and achievement of goal(s) of any community health project (Haines et al., 2007; Singh, 2002). Community members participate in community health programmes such as child immunization programme, at various areas and stages. A proper collaborative participation between community members and health workers provides a beneficial outcome for project targeted participants (children), health workers and the community (Viswanathan et al., 2004). Such partnerships in health programmes do not only provide health improvement to the targeted audiences (Viswanathan et al.), it empowers by building the capacity of the community members as they take part in deciding making concerning the programmes (Minkler et al., 2009). For instance, a comprehensive systematic review conducted by Viswanathan et al. (2009) provided evidence that effective community health worker, community participation result in greater improvements in participant behavior, health

outcomes and increased appropriate health care utilization. These authors concluded that community health workers can serve as a means of improving health outcomes for underserved populations such as KEEA district, for some health conditions. In addition, Norris et al. (2009) observed from some rural community projects that there was maximum satisfaction, positive lifestyle changes and increased in knowledge among the community members, that contributed to effective project implementation and general outcome of the project target goals. These they attributed to the partnership between community health workers and the community members. However, in Mexico, Zakus (1998) reported community participation where some community members served as volunteers and nurses as supervisors, the strategy led to several flaws in the participatory process and resulted in far less than what could potentially have been achieved in terms of improving health outcomes. Ultimately, the participatory mechanisms became additional dependencies of the health system instead of it being a community project, thus, failed in its quest for promoting sustainability (Draper et al., 2010).

Community health workers undertake various tasks, including case management of childhood illnesses such as pneumonia, malaria, and neonatal sepsis and delivery of preventive interventions like immunization, promotion of healthy behaviour, and mobilizing the communities (Viswanathan et al., 2009). However, for the success of these activities community health workers cannot be stand-a-lone implementers; the active involvement of the communities is much required (Haines et al., 2007). Minkler et al. (2009) noted that such collaborative participation should be community-based rather than simply community placed. They believed that this will bring community members and other stakeholders such as nurses, doctors and community

pharmacists to collaborate in addressing, effectively, health and other social problems. Thus, there is no community health that can attain and achieve any appreciable success without the programme community members' and other community resources' active commitment to the programme.

Research Question 4: How do Health Worker Factors Influence Community Participation in EPI Programme in Elmina Sub-District?

The influence of health worker factors on community participation in EPI programmes was statistically analysed by the use of multiple regression. Forced enter multiple regression analysis results show that the model was good and significant in predicting community participation in EPI programmes; *beta* = -6.29, t = -4.02, $p < .05$. However, item by item analyses indicate that two items; "health workers commend community members for participating in immunization" (*beta* = 1.18, t = 2.47, $p < .05$) and "health workers involve community members in decision-making in immunization" *beta* = 1.59, t = 2.43, $p < .05$. But the two items contributed to the variance of community participation in EPI programmes almost equally; 18% and 19% respectively (see data in Table 6). Therefore, health worker factors can be used as good variables to determining community participation in EPI programmes. And that the researcher failed to reject the hypothesis that health worker factors will be significant in influencing community participation in EPI programmes.

The finding suggests that health workers play significant roles in determining community members' level of participation in EPI programmes. While the full regression model indicated that health worker factors were significant in predicting community participation, two of the four items measuring health worker factors indicated no significant prediction. However, the other two items ("health workers commend community members for participating in immunization" and "health workers involve community

members in decision-making in immunization") significantly predicted community participation in EPI programmes.

Table 5: Forced Entered Regression Analysis of Health Worker Factors on Community Participation in EPI Programmes

Variable	Beta	R	R^2	t	Sig
Constant		.42	.17	-.4.02	.001
Health workers involve community members in EPI	-.05			-.62	.54
Health workers invite community members to participate in immunization	.14			1.62	.11
Health workers commend community members for participating in immunization	.18			2.47	.01
Health workers involve community members in decision-making in immunization	.19			2.43	.02

The two items contributing to the significant determination of the community participation suggested that motivating community members, including involving them in decision making would contribute markedly to community participation in EPI programmes (Rebori, 2005; Sign, 2002). Involving community members in decision making towards planning for, implementation and evaluation of health programmes go a long way to promote active participation of community members in such programmes (Baatiema et al., 2013; Preston et al., 2010). A review by Fielder (2003) demonstrated where health professionals collaborated effectively with community members, community participation enhanced the uptake and

response to health interventions, promoted scalability and sustainability of child health promotion intervention in rural Mexico (Baatiema et al.,2013; Rifkin et al., 2007). Thus, community members are likely to commit their community resources including money, materials and time that can contribute to improved health via such programme being implemented (Rifkin et al., 2007; Taylor et al., 2008). Community health workers are sometimes promoted as a mechanism to increase community involvement in health promotion efforts, despite little consensus about the role and its effectiveness. The effectiveness of these workers indicates that they assist in increasing access to care, particularly in underserved populations. The author also observed that health workers increased health knowledge, improved health status outcomes, and behavioral changes (Swider, 2002).

A mid-term evaluation conducted by BASICS staff compared some AIN-C communities with control communities. These evaluations revealed that enrollment of children under two years was 92% for AIN-C communities as against 21% control communities. Iron supplement coverage for children over four months also rose to 47% in AIN-C children while only 9% increment was found among the control communities. In addition, the review indicated that immunization coverage was increased to 76% among AIN-C children and were fully immunized compared to 66% of the controls. Also, AIN-C exclusive breastfeeding (EBF) rates increased from 27% to 49% for children under 4 months and from 21% to 39% for children under 6 months of age, while control rates decreased from 20% to 17% for children under 4 months and from 15% to 13% for children under 6 months. The authors observed that mothers in the AIN-C communities were fully involved in the planning and many other

decision making processes of the project (Griffiths & McGuire, 2005; Taylor et al., 2008; Serpa & de Suarez, 2003; Villalobos et al., 2000).

Motivation or incentives are critical in whipping up individual, group of individuals or a whole community towards participation of a community project (Noguchi et al., 2007; Shinitzky & Kub, 2001). A research conducted in the Northern region of Ghana by Baatiema et al. (2013) revealed the imminence of motivation, through indirect involvement of the community members, in increasing community members' active participation in Community-based Health Planning and Services (CHPS) programme. Baatiema et al. found that taking active steps to involve community members in each stage of addressing health problems at the community-level motivated these members that increased their participation and eventual establishment of the CHPS programmes and its utilization (Kilpatrick et al., 2009). However, Shinitzky and Kub (2001) lamented that public health professionals such as nurses face challenges to motivate and facilitate health behavior change when working with individuals, families and communities in designing and implementing programmes. Despite these challenges as speculated by Shinitzky and Kub, and Noguchi et al. in their meta-analysis to measure motivations underlying enrollment and retention in HIV-prevention interventions observed that samples who were motivated with some incentives to use condoms were more likely to complete an intervention than were those who received nothing motivational. Motivation from programme designers and implementers such as health professionals are also more effective to carry along the community members to participating in such health programmes (Shinitzky & Kub, 2001; Noguchi et al., 2007). It is clear so far by these discussions that the roles of health workers are crucial on promoting active

participation of community members in any community health intervention programmes if that project is to achieve its purposes.

Research Question 5: How do Programme-Based Factors Influence Community Participation in EPI Programme in Elmina Sub-District?

Programme-base factors can largely influence how community members participate in EPI programmes such as under five immunization intervention. To determine this, the researcher used multiple regression analysis. The full model revealed that programme-based factors were not statistically significant in influencing community participation in EPI programmes (*beta* = -12.0, t = -2.44, $p > .05$). This was evident in that out of the five items measuring programme-based factors, only "EPI requires that immunization programmes are held frequently throughout the year" that was significant in determining community participation in EPI programmes; (*beta* = 4.0, t = 2.49, $p < .05$). Therefore, programme based factors may not be vital in influencing community participation in EPI programmes.

The finding here suggested that programme based factors do not predict community participation in EPI programmes. However, the study participants agreed that EPI programmes including immunization should be held frequently throughout the year (significant). Four of the five items that measured programme-based factors for participation in EPI programmes were not significant in predictors. These items included "mobilization of community members is part of EPI programme, EPI requires community members to provide resources/logistics for immunization services, EPI requires that awareness be created among communities and EPI requires that community members are given immunization as programme. This aspect of the instrument was answered by the health workers whose knowledge and perceptions about EPI programmes are much higher and more positive (Kimmel et al., 1996).

Table 6: Forced Entered Regression Analysis of Programme-Based Factors on Community Participation in EPI Programmes

Variable	Beta	R	R^2	t	Sig
Constant		.78	.62	-2.44	.080
Mobilization of community members is part of EPI programme	.00			.00	1.00
EPI requires community members to provide resources/logistics for immunization services	.00			.00	1.00
EPI requires that awareness be created among communities	.00			.00	1.00
EPI requires that community members are given immunization as programmed	.00			.00	1.00
EPI requires that immunization programmes are held frequently throughout the year	.78			2.49	.034

According to Kimmel at al., there is, among mothers of under children, a high poor perception of the threat and potential severity of the killer diseases. The authors contended that this poor perception may be influenced by local or culturally based beliefs and a relative lack of medical knowledge (Fredrickson et al., 2004).

The result of this question may also skewed this way due to the fact that the health workers might not necessarily regard "mobilization of community members is part of EPI programme, EPI requires community members to provide resources/logistics for immunization services, and EPI requires that

awareness be created among communities" as significant in determining effectiveness of immunization programmes in the rural areas (Kimmel et al., 1996). Rather, health workers, who were surveyed for programme-based factors, may have many different factors as influencing EPI immunization implementation (Fredrickson et al., 2004). Immunization is a routine exercise (Freed et al., 2008; Tarrant & Gregory, 2003; Hanslik et al., 2000) and health workers may be more concern about the herd immunity rather than many of the processes that may demand assistants from the community members (Daley et al., 2006; Fredrickson et al., 2004). Health workers are more likely to be concerned with protecting, as many as possible, children from childhood killer diseases through routine immunization (Omer et al., 2009). Health workers will get busy with immunization, especially children, because of their high knowledge of the effects of these killer diseases and the imports of vaccination to the children (Dinelli et al., 2009; Gust et al., 2005; Willis & Wortley, 2007).

Childhood immunization is essentially to protect and prevent children from childhood immunizable diseases (Tadesse et al., 2009). Immunization offers the greatest benefits for health, well-being and survival of children than many other interventions (UNICEF, 2005). Accordingly, from 1960–2002, a 50% reduction in under-five mortality was observed. Immunization programmes has saved the lives of nearly 4 million children (Kidane & Tekie, 2003). Study showed that the cost to treat a vaccine preventable disease is 30 times more than the cost of the vaccine. Further investigations of outbreaks of vaccine preventable diseases indicated that incomplete immunization was the major reason for the outbreaks. Moreover, a low immunization rate was the major reasons for many of the outbreaks of infectious diseases in the past two decades (Gore et al., 1999).

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to find out the factors influencing community participation in EPI in Elmina sub-District of Ghana. This chapter focuses on the summary of the entire research, findings, conclusions based on the findings of the study, and relevant recommendations for the further actions.

Summary

Community participation appears to be the vehicle or platform for community development programmes. Community participation is a developmental approach essential wheel of ensuring that community programmes are well thought out, executed, monitored, evaluated, maintained, managed, financed, using human, natural and man-made resources for the benefits of the present generation and posterity (Putman, 2000).

Many researchers and community development agencies have identified community participation as a proven approach to addressing healthcare issues and has been utilized in the Expanded Programme on Immunization activities (Adinku, 2000; Burns et al., 2004; Cheetam, 2002; World Bank, 1994). However, the quality of participation varies from programme to programme. Moreover, in spite of the failure of many health programmes designed without participation of target communities or groups. On the other hand, some professionals also continue to question the value of community members' participation in programmes designed, implementation and evaluation (Adinku, 2000).

As community participation is core to the success of many community health intervention programmes (Wehmeier, 2003), there are many factors that affect the planning, implementation, evaluation and the achievement of the goals of the programmes. These factors range from programmes formulation, planning, execution, evaluation and the involvement of the community members in the stages of the programmes (Daley et al., 2006; Fredrickson et al., 2004; Viswanathan et al., 2009). Other factors influencing community participation may include attitude of programme implementation professionals (health workers), programme resources management, educational levels of the community members, and the collaboration process between health workers and the community members (Shinitzky & Kub, 2001).

The framework for this study was in five phases, chapters one, two, three, four and five. Chapter one focused on the incidences that exposed community participation and the factors that influence community participation, with the emphasis on EPI programmes. The chapter also presented five research questions and two hypotheses that were formulated to guide the study. Then chapter two reviewed the related literature pertaining to community participation and factors influencing it. This same chapter contains synthesized pertinent theories related to community participation. In addition, the chapter highlighted the PMT as the theoretical base for this study.

The study was a survey in which data was collected from both community members and health workers at Elmina Sub-District. The community members (279) were conveniently selected while the health workers (19) were purposive sampled for the study. The researcher developed two questionnaires, community members' questionnaire and health worker questionnaire, for the study. Community members' questionnaire was pilot

tested and taken through construct validity using principal component factor analysis (CFA) with orthogonal rotation (Varimax). The questionnaire yielded three constructs namely; community participation (α = .96), community-based factors (α = .85) and health worker-based factors (α = .86).

Frequencies, percentages, means and standard deviations were used to analyze participants' background information. Additionally, means, standard deviations, and ANOVA were calculated to analyze research question two. Moreover, Schefe's post hoc analyses (multiple comparisons) were calculated to determine where, among the groups, the differences existed. Also, effect size using eta square (η^2) was calculated to determine the practical significance or the magnitude of the differences among the groups with statistically significant differences.

Key Findings

The following findings are derived based on the results of the study;

1. Community members' participation in EPI programmes was low in Elmina sub-District of the Central Region of Ghana
2. Community participation in EPI programmes is dependent largely on community members' educational status. Thus, community members with low level of educational attainment participated higher in EPI programmes that their higher educated counterparts.
3. Community-based factors are useful determinants of community participation in EPI programmes.
4. Health worker play significant roles in determining community members' level of participation in EPI programmes.
5. Programme-based factors do not predict community participation in EPI programmes.

Conclusions

The following conclusions have been drawn based on the findings;

1. EPI programmes in Elmina Sub-District may not be achieving its goals, for covering as many children as possible to preventing preventable childhood killer diseases, due to low participation by the community members.
2. Effective collaboration between implementers (health workers) and the receivers of community health interventions (community members) is very critical to achieving community health intervention project goals, thus, to enhance health status of the community members, especially among children.

Recommendations

Based on the conclusion of the study the following recommendations were drawn;

1. The health workers are encouraged to enhance their collaborative efforts between themselves and the community members in all stages of EPI programmes.
2. Elmina Sub-District Health Directorate needs to step up efforts to providing health education to the community members on the EPI programmes and the need to actively partake in the programmes.

Recommendations for Further Studies

1. There is a need to extend this research and expand the scope of measurement community participation in EPI programmes in other districts in the Central Region of Ghana.
2. A research is needed to explore the factors responsible for low educated community members participating in EPI programmes better than higher educated members.

3. There is a need to develop a standardized instrument to measure community participation, specifically in community health intervention programmes.

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APPENDICES

APPENDIX A

COMMUNITY MEMBERS' QUESTIONNAIRE

UNIVERSITY OF CAPE COAST

QUESTIONNAIRE FOR COMMUNITY MEMBERS

Factors Influencing Community Participation in Expanded Programme on Immunization (EPI) in Elmina Sub-District

Dear Respondent,

I am an M. Phil (Health Education) student at the Department of Health, Physical Education and Recreation (HPER), UCC. As a requirement for graduation, I am conducting research about factors that influence community participation in EPI in Elmina Sub-District. You have been selected to provide information, which can contribute immensely in this respect. Be assured that the study is purely for academic purpose and as such your identity will NOT be disclosed anywhere. To ensure this, you are required not to write your name on the questionnaire. You are entreated to return the completed questionnaire for the necessary analysis to be done so as to enable a reporting of the result. Thank you for participating in this study.

If you have any questions feel free to contact the following;

Mercy Yawson (0244-759-934) Dr. Joseph K. Ogah (0243-102-322)

(RESEARCHER) (SUPERVISOR)

SECTION A

Instruction: Kindly respond to each item of the questionnaire as candidly as you can. In each of the following statements, write your answer or tick [√] the option that best matches your responses to that item. After answering the questionnaire you will be allowed two weeks to go through to verify your responses after which they will be collected.

1. What is your sex? a. Male [ ]
   b. Female [ ]
2. What is your age as at your last birthday? …….years.
3. What is your religious affiliation? b. Christian [ ]
   c. Islamic [ ]
   d. Traditional [ ]
   e. Other, specify……
4. What is your highest level of formal education?
   a. None [ ]
   b. Junior High [ ]
   c. Senior High [ ]
   d. Tertiary [ ]
   e. Other, specify [ ]
5. What is your occupational status?
   a. Fishing [ ]
   b. Farming [ ]
   c. Salt exploration [ ]
   d. Artisanery [ ]

e. Trader [ ]

f. Government worker [ ]

6. What is your current marital status?

a. Single [ ]

b. Married [ ]

d. Divorced [ ]

e. Widowed [ ]

7. Have you lived in this community all your life? Yes [ ]

No [ ]

8. If not, for how long? a. 1-10 years [ ]

b. 11-20 years [ ]

c. 21-30 years [ ]

d. 31-40 years [ ]

e. 41 years and above [ ]

9. How many children do you have under five years? ……

Level of community participation in EPI	**0**	**1**	**2**	**3**	**4**	**5**
10. Helping to mobilize community members for immunization						
11. Helping to set up sites for immunization						
12. Assisting health personnel during immunization sessions						
13. Assisting nursing mothers during immunization sessions						
14. Providing place for keeping immunization equipment						
15. Assisting health workers to reach children due for immunization						

SECTION B

Indicate the level at which you perform the activities indicated in community participation in the EPI by ticking [√] the statements.

Note: 0 = Not at all, 1 = Rarely, Very often = 5

For Sections C and D indicate or tick [√] your level of agreement or disagreement with each statement

Note: SA = Strongly agree, A = Agree, D = Disagree, SA = Strongly disagree

SECTION C

Community based factors that influence EPI	**SA**	**A**	**D**	**SD**
16. Community members and health workers cannot work together on immunization activities				
17. Immunization health workers do not need community members to be effective				
18. Immunization is a personal issue for those who care				
19. Immunization services are to be done by health workers only				
20. Participation in immunization activities is too much work for community members				
21. Children go for immunization but they still get sick				
22. Community volunteers who help in immunization should be paid				

SECTION D

Health worker factors that influence EPI	**SA**	**A**	**D**	**SD**
23. Health workers involve community members in EPI				
24. Health workers invite community members to				

participate in immunization				
25. Health workers commend community members for participating in immunization				
26. Health workers involve community members in decision-making in immunization				
27. Health workers implement the views of community members (such as opinion leaders chiefs, assemblymen, etc) on immunization programmes				

APPENDIX B

HEALTH WORKER QUESTIONNAIRE

UNIVERSITY OF CAPE COAST

QUESTIONNAIRE FOR HEALTH STAFFS

Factors Influencing Community Participation in Expanded Programme on Immunization (EPI) in Elmina Sub- District

Dear Respondent,

I am an M. Phil (Health Education) student at the Department of Health, Physical Education and Recreation (HPER), UCC. As a requirement for graduation, I am conducting research about factors that influence community participation in EPI in Elmina Sub-District. You have been selected to provide information, which can contribute immensely in this respect. Be assured that the study is purely for academic purpose and as such your identity will NOT be disclosed anywhere. To ensure this, you are required NOT to write your name on the questionnaire. You are entreated to return the completed questionnaire for the necessary analysis to be done so as to enable a reporting of the result. Thank you for participating in this study.

If you have any questions feel free to contact the following;

Mercy Yawson (0244-759-934) Dr. Joseph K. Ogah (0243-102-322)

(RESEARCHER) (SUPERVISOR)

SECTION A

Instruction: In each of the following questions write your answer or tick [√] the option that best matches your response to that item.

1. What is your Sex? a. Male [ ]
   b. Female [ ]

2. What is your age as at your last birthday? …….years.

3. What is your highest level of formal education?

   a. WASSCE [ ]

   b. HND [ ]

   b. Diploma [ ]

   c. Degree [ ]

   d. Other, please specify……

4. What is your position at work?

   a. Community health nurse [ ]

   b. Senior community health nurse [ ]

   c. Principal community health nurse [ ]

   d. Nursing officer [ ]

5. What is your religious affiliation? b. Christian [ ]
   c. Islamic [ ]
   d. Traditional [ ]
   e. Other, specify……

6. What is your current marital status?

   a. Single [ ]

   b. Married [ ]

   c. Divorced [ ]

d. Widowed [ ]

7. How long have you worked under the EPI programme? ……..

SECTION B

For each of the following statement indicate or tick [√] your level of agreement or disagreement

Note: SA = Strongly agree, A = Agree, D = Disagree, SA = Strongly disagree

Programme-based factors that influence EPI	**SA**	**A**	**D**	**SD**
8. EPI requires involvement of community members in immunization activities				
9. Mobilization of community members is part of EPI programme				
10. EPI requires community members to provide resources/logistics for immunization services				
11. EPI requires that awareness be created among communities				
12. EPI requires that community members are given immunization as programmed				
13. EPI requires that Immunization programmes are held frequently throughout the year				

APPENDIX C

INFORM CONSENT

UNIVERSITY OF CAPE COAST

TOPIC: FACTORS INFLUENCING COMMUNITY PARTICIPATION IN EXPANDED PROGRAMME ON IMMUNIZATION (EPI) IN ELMINA SUB-DISTRICT

PARTICIPANT CONSENT FORM

I understand that:

I. My answers will be used in a thesis study.

II. My participation is completely voluntary, and I may withdraw at any point of the study without penalty.

III. My identity will be protected in the reporting of the findings.

IV. All data will be secured, and then destroyed three years after the completion of the thesis.

I, ... have read the above information and agree to participate in this research.

Signed: ..... Date: …….....

Please send consent form to me at the address below or my email:

Mercy Yawson

HPER Department

U. C. C.

Cape Coast

Email: meryawson@yahoo.com

Thank you for participating in this study.

APPENDIX D

APPLICATION FOR INTRODUCTORY LETTER

C/o HPER Department,

U. C. C.,

Cape Coast.

21st March, 2013.

THE HEAD

HPER DEPARTMENT

U. C. C.

CAPE COAST.

Dear Sir,

APPLICATION FOR INTRODUCTORY LETTER

I wish to apply for separate introductory letters to the Chiefs of the 31 communities in Elmina Sub-District, and the Physician Assistant-in-Charge of the Elmina Urban Health Centre, to enable me conduct my thesis on the topic " factors that influence community participation in Expanded Programme on Immunization in Elmina Sub-District" in their outfits.

I hope this request will meet your kind consideration and attention.

Sincerely,

MERCY YAWSON

ED/MHL/11/0005