

Assessment of strategic management practice of malaria control in the Dangme West district, Ghana

—Article submitted to the West African College of Nursing for the award of a fellow

Adelaide Maria Ansah Ofei

School of Nursing, University Of Ghana, Legon, Ghana. adelaideofei@yahoo.com

Received 23 February 2011; revised 1 April 2011; accepted 6 April 2011.

ABSTRACT

Strategic management (SM) practice was assessed in all HCFs both in the public and private and some chemical shops within the Dangme West district using semi-structured questionnaires. In-depth interviews were carried out with healthcare managers in their clinical setting. The study utilized both qualitative and quantitative methods in describing the SM practice. Healthcare managers were using all the elements of SM in the management of malaria but these were not holistically coordinated. Present were short ranged informal planning based on the objectives of NMCP and day-to-day operation of the HCFs especially with Ghana Health Service facilities. Due to homogenous nature of Dangme West district, management of culture wasn't given much attention by healthcare managers though healthcare providers were acutely aware of its importance to quality service delivery. Competition was woefully absent in the healthcare environment. No formal structure has been created for the management of malaria control activities with the exception of the involvement of Community Based agents. The district was widely implementing all the strategies of the NMCP with favourable outcomes.

Keywords: Assessment; Strategic Management; Practice; Malaria Control; Dangme West

1. INTRODUCTION

1.1. Background

The healthcare system in Ghana is confronted with the formidable task of improving and guaranteeing the health and well-being of all people living in Ghana. Such a broad goal encompasses many specific objectives for

individuals and populations, e.g. increased life expectancy, reduction in avoidable deaths and improvement in quality of life. Recognizing that resources are never adequate, a rethinking and restructuring of priorities is inevitable at all levels. Thus, the health care system has since independence gone through series of progressive reforms intended to develop and improve public health practice in Ghana. Prominent among these reforms, are the adoption of Primary Health Care (PHC) concept, creation of the Ghana Health Service by an act of parliament (Act 525), development of the Medium Term Health Strategy (MTHS) and a 5-year Programme of Work (PoW). In all these developmental approaches malaria control has been given some form of prominence.

Malaria as a public health challenge seems to be on the increase globally with over 1 - 2 million deaths each year. Over 90% of these are African children who due to poor access to health care facilities and local perceptions about the disease fail to seek prompt help. Indeed, malaria is accredited to be a major cause of poverty and low productivity especially in poor countries [19]. It is estimated that the annual economic burden of malaria in Africa is about US\$ 1.7 billion or 1% of the Gross Domestic Product. In Ghana, malaria is hyper-endemic and accounts for more than 44% of reported out-patient visit and an estimated 22% of under-5 mortality. Reported cases however, represent only a small fraction of the actual number of malaria episodes in the population because the majority of people with symptomatic infections are treated at home and not reported [11].

Malaria is a life threatening disease in individuals with low or impaired immunity, but malaria is both preventable and curable. Ghana therefore, has identified Malaria as one of its priority diseases targeted for control in the medium term. Resources are sent directly by the National Malaria Control Programme (NMCP), with support from the Global Fund, Development Partners, etc. to the district for the management of malaria and

other diseases of public health concern to help strengthen decentralization (MTHS, 1995). For instance available data at the NMCP office showed that from 2004 to 2006 first quarter, a total of thirty thousand and one dollars, ninety seven cents (\$30,001.97c) was sent to the Dangme West district health directorate for malaria control activities. The issue is, what management processes have these healthcare managers (HCMs) put in place to cope with the increasing trend of morbidity and mortality associated with malaria? Strategic management (SM) according to Duncan [10] is a major thrust that would guide the management of healthcare organizations to anticipate and cope with the variety of external forces operating beyond their control.

“Strategic” is the most overused word in the vocabulary of business. Frequently, it is just another way of saying, “this is important”, but the aim of true strategy is to master environment by understanding and anticipating the actions of other economic agents, especially competitors [16]. A strategy to a program is amongst other things a plan of how the program can achieve its goals and objectives [6,26]. It is a ‘commitment of present resources to future expectations’ [9]. The aim of SM is to decide on program goals, the means of achieving those goals, and ensuring that the program is sustainably positioned in order to pursue these goals. Furthermore, the strategies developed provide a base for managerial decision making [3,32,31].

1.2. Statement of the Problem

As GHS continues with its decentralization process, resources are being disbursed directly to the district for the delivery of healthcare services. For example, financial data at the Dangme West DHD showed that between 2005 and 2006 first quarter the NMCP/Global Fund sent twenty thousand, six hundred and thirty dollars, seventy six cents (\$20,530.76c) to the DHD for malaria control activities. It is however, uncertain what structures the districts have developed to manage the health system in coping with the increasing malaria morbidity and mortality.

Malaria is a public health problem which no doubt accounts for a substantial disease burden in the Dangme West and for many years various control measures have been undertaken with limited success. The percentage of reported cases of febrile illness presumed as malaria at the OPD has consistently risen over a period of five years (2002-2006) with annual OPD reported cases of 17,675 to 30,070. Current percentage rate of reported cases of febrile illness presumed malaria at the OPD was 51 percent [8], which was just the tip of ice-burg because most people managed uncomplicated malaria at home. What management processes have the HCMs

practiced all this while and how have they managed increased morbidity and mortality in malaria control? What are the outcomes of the efforts exerted by HCMs in malaria control?

This study describes the extent to which SM process is being used to manage malaria control in the Dangme West district. There are numerous decisions and actions that managers and administrators take in the course of operating a development program. While all of them have an impact on the direction of the program and its outcome, certain interventions by the government and the program leadership is critical in that they provide the basic framework for operational decisions and set the pace for program performance. This means that for effective and efficient malaria control, we should go beyond the leadership, resources and political commitment bit and use holistic approach or the SM approach in the management of malaria within the district as suggested by Paul [30].

Pertinent questions that need to be asked in this study are what management processes have the district developed for malaria control and how has management thought their way out to cope with increasing morbidity and mortality of malaria? The reason for using the SM model was that this area has not been studied in depth although it is a promising area.

1.3. Objective

To evaluate the extent to which the practice of SM is fully integrated into the management principles of GHS at the district levels and to make recommendations for improvement.

1.4. Significance for the Study

SM when applied at the district level will give a holistic approach to management such that malaria control programmes can wholly be linked to their environment with realistic objectives and packages that can always be verified. It will also ensure appreciable handling of the three major spheres of administrative responsibility of HCMs namely, day-to-day operations, management of the culture of the healthcare facility (HCF) and management of strategy. All three must coexist and synergize each other for optimal performance or output.

The district is the operational level of the GHS. It is the operational level where all decisions concerning the delivery of healthcare are implemented. The study will provide knowledge about issues and needs of district health system management and directions for SM in malaria control. It will let the membership of district health management team (DHMT) appreciate the importance of their environments especially, the concept of

competition. Develop a common sense of purpose and shared values with the community thus, improving effectiveness and efficiency of malaria control program within the district since malaria is a developmental issue. It will encourage management training for all healthcare providers regardless of the size and site of the HCF. Furthermore, it will provide literature for further studies in this area.

1.5. Literature Review

SM can be defined as a continuous, iterative process aimed at keeping an organization as a whole appropriately matched to its environment [5]. It is a process of making explicit the goals of the enterprise, the environment in which it operates, the strategies, and finally the feedback loops that tell the firm whether each of these steps has been identified correctly [37]. One important element of SM process is the development of a vision for the organization by top management. SM is in large part, a decision-making activity. Strategy therefore, is the result of a series of managerial decisions often supported by a great deal of quantitative data. Strategic decisions are fundamentally judgemental and generally the more important the decision, the less quantifiable it is and the more it is reliant on opinions of others [10].

Vision according to Hussey [20] is an expression of hope and is simply regarded as statement of basic principles that governs the direction in which a program seeks to develop. Critical to management is the choice of objectives which provides guidance and unified direction, facilitates planning, inspires motivation and commitment, and promotes control [17]. Multiple objectives are usually pursued in a homogenous environment whereas single-service strategy is pursued in diverse environment where uncertainty in relation to market or public response is high [30]. Mintzberg [26] acknowledged that informal planning is an implicit strategy worked out by a dominant leader without the support of a formal process which is a highly ordered logical process developed purposefully for developmental programs. Formal planning becomes increasingly important to programs when; their markets stop growing, there is increase in competition and the rate of environmental change is dramatic [10]. Hussin [18] asserted that long-range planning and strategic thinking is common to most HCMs but not SM which is still vague to many managers. External environmental analysis is a process for understanding the external environment of organizations and acts as a window through which, HCMs can view external environment for information and/or issues [10] and develop packages to satisfy consumers.

Internal involvement of staff in the exposition of the planning processes and inter-institutional communica-

tion patterns between top and bottom layers of the HCFs according to Hussin *et al.* [18] are strategies used to reduce resistance. Implementation is critical, in that if planning is creative and brilliant but strategies are poorly implemented, little is likely to change. Technical and financial support to districts for situation analysis according to Teklehaimanot [38] is to ensure that interventions will be adapted to local needs which will be sustained after RBM support. Interventions required adequate resources but Duncan *et al.* [10] acknowledged that although financial resources are important reality checks to strategic decision making, the vision of management should not be limited by the financial resources available. Duncan *et al.* [10] reiterated that there are dedicated personnel whose attraction to the field goes beyond monetary rewards and is mostly focused on some of the "strategic uniqueness" of healthcare. These strategic unique characteristics of the healthcare are inspiration-related currencies, task-related currencies, position-related currencies, relationship-related currencies, and personal-related currencies.

As malaria morbidity and mortality continues to increase in most countries in Africa, international agencies and malaria control program managers have identified the strengthening of program evaluation as an important strategy for improving the efficiency and effectiveness of malaria control programs [4]. Evaluation helps managers to account for the investment made, refine strategies and identify and correct flaws in program implementation. It provides decision-makers with the required tools for refined planning and modified strategies by updating on progress, as well as any problems or constraints.

2. METHODS

2.1. Study Area

The Dangme-West District is located in the south-eastern part of Ghana, in close proximity to Tema, the country's largest seaport, and Accra, the capital city. It is the largest district (about 1,700 square kilometers) in the Greater Accra Region and its capital is Dodowa. The district is one of the two rural districts in the Greater Accra region which has not yet been caught up by the rapid urbanization of the peripheral areas surrounding the city of Accra. The Dangme West district according to Ghana Statistical Survey [13] is extremely poor and predominantly rural with both poor socio-economic and infrastructural development [22] making financial access to health quite difficult. The district is sparsely populated with most inhabitants living in scattered small communities less than 2,000 people, sometimes with very poor road access which gets worse in the rainy

season. The district was selected for the study because it is among the first 20 districts that implemented the RBM programme supported by the Global Fund.

2.2. Study Design

The study was a cross-sectional exploratory descriptive study of the processes for the management of malaria control activities in the Dangme West based on the conceptual model (**Figure 1**). The study used both quantitative and qualitative methods of data collection in assessing strategic management practice. The researcher held semi-structured in-depth interviews with all the in-charges of HCFs and operators of chemical shops. These respondents were termed as HCMs for the study. Furthermore, discussions were held with the district pharmacist, the Global Fund representative of the district and the Public Relation Officer at the district assembly to gather information on managerial support to malaria control. Additionally, there was desk review of annual

district reports and documents for the past five years to enrich information for the study.

2.3. Study Population

The study population was all persons who provide healthcare services in the Dangme West district. All HCFs in the district; both public ($n = 10$) and private ($n = 5$) and all chemical shops ($n = 25$) in the district. All HCMs in the 15 HCFs took part in the study. Purposive sampling was used to select 17 chemical sellers out of 25 chemical shops from the communities selected for the study due to the vast nature of the district and money constraints. The list of chemical shops in the district was collected from the president of the chemical sellers association in his pharmacy shop at Dodowa. Those who couldn't participate were shop assistant or attendants who could barely write and/or had little or no knowledge on current trends in malaria control practices.

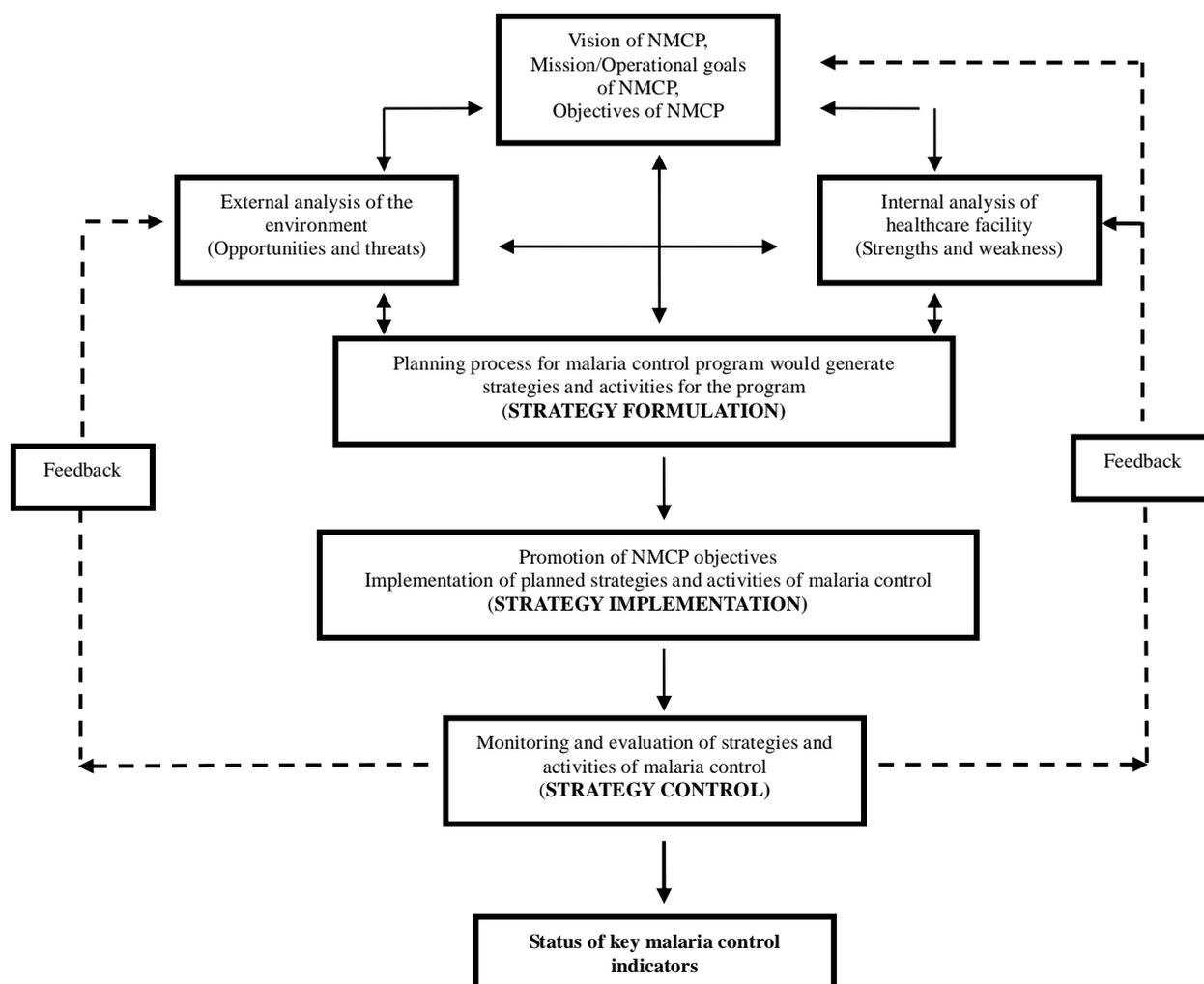


Figure 1. The conceptual framework.

2.4. Data Analysis

Analysis of data was both qualitative and quantitative using the SPSS 12.0.1 for Windows, (2003) and Epi-info™ version 3.3.2 for windows, (2005). Qualitative data was analyzed manually by grouping, themes, sub-themes and trends after collating all data. After the questionnaires have been checked for consistency, they were coded and entered primarily into Epi-info. The Epi-info data was later transferred into the Excel Spreadsheet then to SPSS software for analysis using a number of descriptive statistical techniques such as, cross tabulation, simple frequency tables, means, bar charts and pie chart to describe the various dimensions of the SM process.

2.5. Ethical Consideration

At the district, consent was sought from all those who were involved in the study particularly from the DHA, chiefs and opinion leaders of the selected communities and the district assembly. Confidentiality and anonymity was maintained throughout the study.

3. RESULTS

Out of the 32 HCMs 16 (50.0%) were chemical sellers, whereas, 8 (31.3%) were nurses, 34.7% of the HCMs were beyond the age of 50 years. The conduct of the situational analysis involved both internal and external analysis of the HCFs and is the building blocks of strategic planning for managing malaria control activities in the district. Information presented below informs the HCMs on the strengths and weaknesses of their HCFs and the opportunities and threats within their environments. This is used to formulate strategies towards management of malaria control within the district. Out of 32 HCMs interviewed, all the 10 in the public HCFs representing 41.7 percent could state the vision of NMCP, again, all 5 (20.8%) in the private HCFs knew about the vision of NMCP. Whereas, out of the 17 chemical sellers interviewed, 9 (52.9%) knew the vision of NMCP. Vision of the HCFs was found displayed in only 2 facilities and it was a replica of the vision of the parent organization.

Though an operational strategy hasn't been developed by many of the HCMs, but because malaria is a household or common disease, intuitively they effectively communicated their ideals through the following strategies. Out of the 32 HCMs, only 5 (15.6%) have developed operational strategies for the control of malaria. None of the 17 chemical sellers have developed operational strategies for malaria control because they were interested only in selling their drugs and not particularly interested in any one disease condition. Operational

strategies developed by the HCMs for management of malaria vividly expressed the intent of management towards healthcare delivery. The HCMs acknowledged their desire to give quality care to their clients, ensuring that all the tenets of NMCP were strengthened. The operational strategy of malaria control was given by Miss Cee HCM in a private-not-profit facility as:

To provide quality care in the most effective and innovative manner especially in the areas of curative, preventive and promotive health care to the community we serve at all times acknowledging the dignity of the patient;

Similarly, Madam Aggie, HCM of public healthcare facility stated:

To give quality care, education and effective management, and to ensure all cases are treated with Artesunate-Amodiaquine and encouraged children under five and pregnant women to sleep in ITNs.

Communication of operational strategies has been outlined below and the media was sparingly used as compared to the other mediums of communication.

The NMCP have designed a set of objectives to ensure uniformity in the organization, coordination and implementation of the activities of malaria control within the districts. There was keen interest of HCMs in both public and private HCFs in meeting these objectives. The implementation of these objectives was ardently supervised by the district health administration regularly.

The **Table 1** shows that the most common tools used in the planning process were community assessment (68.8%), objectives set by the NMCP (56.3%), SWOT analysis (40.6%), make reference to previous objectives with some analysis (50.0%), information technology, expert opinion and finally through scenario building. This indicated that management of malaria in the district was both community and NMCP related.

Out of the 32 HCMs, 56.3 percent (18) used objectives set by the NMCP for their planning process; 9 (50.0 percent) from the public, 4 (22.2 percent) from the private and 5 (27.8 percent) from the chemical sellers. Additionally, out of the 32 HCMs, 40.6 percent (13) used the SWOT analysis; 7 (53.8 percent) from the public, 3 (23.1 percent) from the private with 3 (23.1 percent) being chemical sellers.

Environmental factors were analyzed by HCMs to identify opportunities and threats within their environment. Whereas HCMs in both public and private HCFs were really concerned about the socio-economic background of healthcare consumers, ironically the chemical sellers were not bothered. The concept of competition was nonexistent for the HCMs, even the chemical sellers who were business entities. I would recount an amazing incident that chanced during the interview of Miss Bee a HCM and her colleague at Osudoku sub-district:

Table 1. Management tools used in the situational analysis.

| | Tools | Percentage | Public | Private | Chem. shop |
|--|------------------|-------------------|-------------------|------------------|------------------|
| Information technology | 32 (100%) | 8 (25.0%) | | | |
| Scenario building | 32 (100%) | 3 (10.7%) | | | |
| Expert opinion (Consultants) | | 10 (31.3%) | | | |
| Make reference to previous objectives with some analysis | | 16 (50.0%) | 8 (50.0%) | 2 (12.5%) | 6 (37.5%) |
| Make use of objectives of NMCP | 32 (100%) | 18 (56.3%) | 9 (50.0%) | 4 (22.2%) | 5 (27.8%) |
| SWOT analysis | 32 (100%) | 13 (40.6%) | 7 (53.8%) | 3 (23.1%) | 3 (23.1%) |
| Community assessment | 32 (100%) | 22 (68.8%) | 10 (45.5%) | 4 (18.2%) | 8 (36.4%) |

Source: Healthcare facility survey

Having just answered in the negative about competition, a drug peddler carrying his wares passed by. The peddler took some time in exchanging pleasantries with the healthcare manager before continuing on his mission. Then I asked her: You claimed there are no competitors here, what about the peddler who just passed by? Is he not offering some form of healthcare? Don't you have chemical sellers around? Are they not treating malaria? All these questions were answered in the affirmative. She then admitted that both the activities of chemical sellers and drug peddlers posed a great challenge for malaria control within the community.

Generally, the HCMs utilized most of the environmental factors especially the political, social, regulatory and epidemiological factors in coming up with plans for malaria control. Opportunities identified by HCMs within their environment that enhanced malaria control were generally community participation, interpersonal relationship between staff and clients, extensive use of ITNs, research on rectal Artesunate for children under five and involvement of CBAs in home-base care. Teyi, a HCM of a private HCF in the Prampram sub-district recalled opportunities as:

Good interpersonal relationship between staff and clients urged them to openly discuss their problems, there were also organized groups such as churches, youth clubs, schools, etc., which makes BCC a whole lot easier. Finally the involvement of community based agents in home-base care greatly influenced incidence of malaria in the under fives.

Miss Adotey a HCM of a public HCF on her part claimed:

Community members' are always in haste to identifying health problems for healthcare providers to solve and their eagerness to learn innovative ideas concerning malaria control. There is again, overwhelming collaboration between the healthcare facility and the communities, extensive use of ITNs, communal spirit of most communities, and research on rectal Artesunate for children under five years by the HRU; and administration of

rectal Artesunate suppositories to under five-year olds by the CBAs.

Whereas Mr.Kweinor a chemical seller at Ayikuma remarked:

Education of the community on home-base care by the DHD, education of market women and the HE-HA-HO programme by the NMCP on radio have increased the knowledge-base of the people on malaria. Environmental cleanliness is also encouraging.

Threats basically were challenges that impinged on the success of intended objectives. Generally threats identified by the HCMs ranged between environmental sanitation to unemployment, poverty and illiteracy. Threats as retorted by Dr. Kwei a HCM in Prampram sub-district were abound and he remarked:

Since this community is still growing, new buildings are springing up with open trenches all over the place which collect water when it rains thus, creating a convenient environment for the breeding of mosquitoes. Again, there are no toilet facilities in the communities, so individuals dig holes which become breeding places for mosquitoes.

Miss. Ayi also in the Prampram sub-district described threats identified as:

The activities of chemical shops and drug peddlers, unemployment, poverty, increase in the premium of the National health insurance scheme; high illiteracy rate, lack of transportation and portable water in some communities.

Similarly, Miss Lee at Osudoku sub-district remarked:

The rice farms in the community breed a lot of mosquitoes. The choice of medicine to use for malaria is crucial since there are several options at the chemical shops that are relatively cheaper than the recommended drug for malaria by the government.

Mr. Tetteh a chemical seller in the Ayikuma sub-district declared:

Unemployment with its associate effects of poverty has been a major hindrance in the purchasing of recommended drug Artesunate-Amodiaquine which, they

considered expensive. There are also pit latrines all over the communities and these are potential places for breeding of mosquitoes.

At Old Ningo Mr. Agyeman a chemical seller had this to say:

There are no gutters in the community thus; there are pools of standing water all over the community with reckless disposal of refuse also compounding the already compromised situation. Most people are illiterates and there is no communal spirit.

Mr. Akoto also a chemical seller acknowledged that:

The choice of medicine to be used is a major threat to the control of malaria. Clients always come with their demands and preferences, which usually depend on affordability. They reckoned that the recommended drug is too expensive for the ordinary man hence, their reliance on other equally efficacious alternatives such as the herbal preparations.

Methods used for assessing strengths and weakness within the HCFs and conducting community assessment are outlined in **Table 2**.

Facility strengths identified by HCMs generally were availability of recommended drugs for the management of malaria, relatively moderate fees charged for service delivery, promotion of the tenets of NMCP and knowledgeable staff. This was expressively put by Dr. Nartey a HCM in Prampram as:

We are always ready to receive clients and there is good relationship between clients and us. We charge relatively low fees and clients spend less time at the clinic. Again, we have in stock most of the drugs for malaria.

Similarly Miss Agartha, a HCM in Ayikuma remarked:

We have adequate logistics; provision of free ITNs, provision of free folic acid, and Artesunate Amodiaquine for one year. Additionally, we have stocks of antimalaria drugs e.g. Quinine, Artesunate and Amodiaquine.

Mr. Dakey a chemical seller in Asutuare said:

The experience gained from persistent training ensured delivery of quality service to clients and I have in stock adequate drugs for the management of malaria.

Miss Adotey a HCM in Dodowa declared:

Our staff ensures that clients receive quality care thus; there is good staff-client relationship. We have available all malaria drugs and laboratory facility for confirmation of the diagnosis of malaria.

Facility weaknesses identified by HCMs were inadequate quality and quantity of staff; inadequate logistics; no definite plan for the program; inadequate finance; inadequate motivation of staff; insensitive attitude of some staff; infrequent in-service training for staff; and lack of privacy. Attitude toward risk was non existence, and all 32 HCMs declared they did not encounter any risk in either planning or implementation. Almost all staff especially those in the public HCFs were involved in the planning process whereas in the private and chemical shops only the HCMs did the planning.

Out of the 32 HCMs, 3 (9.4 percent) did have formal plans, 18 (56.3 percent) had informal plans whereas 11 (34.4 percent) had both formal and informal plans. Even the 3 HCMs with formal plans could not readily produce their plans.

Table 2. Methods used for internal auditing.

| Method | Type of healthcare facility | | | Total (n = 32) |
|---|-----------------------------|-----------|---------------|----------------|
| | Public | Private | Chemical shop | |
| Utility rate | 6 (46.2%) | 5 (38.5%) | 2 (15.4%) | 13 (40.6%) |
| Government assessment | 8 (42.1%) | 5 (26.7%) | 6 (31.6%) | 19 (59.4%) |
| Measuring the market share | 5 (38.5%) | 3 (23.1%) | 5 (38.5%) | 13 (40.6%) |
| Studying the gap | 9 (50.0%) | 4 (22.2%) | 5 (29.4%) | 18 (56.3%) |
| Benchmarking other facilities | 4 (40.0%) | 2 (20.0%) | 4 (40.0%) | 10 (31.3%) |
| Perception testing of key constituency groups | 8 (53.3%) | 3 (20.0%) | 4 (26.7%) | 15 (46.9%) |
| Community assessment | | | | |
| Activity parameters of the facility | 5 (50.0%) | 4 (40.0%) | 1 (10%) | 10 (31.3%) |
| Simple on-going conversation | 7 (33.3%) | 5 (23.8%) | 9 (42.9%) | 21 (65.6%) |
| Informal gathering of local leaders | 6 (40.0%) | 4 (26.7%) | 5 (33.3%) | 15 (46.9%) |
| Structured questionnaire | 4 (36.4%) | 2 (18.2%) | 5 (45.5%) | 11 (34.4%) |
| Focus group discussion | 6 (46.2%) | 3 (23.1%) | 4 (30.8%) | 13 (40.6%) |
| Healthcare facility's discharge data | 9 (56.3%) | 4 (25.0%) | 3 (18.8%) | 16 (50.0%) |
| Traditional database and health statistics indicators | 4 (44.4%) | 2 (22.2%) | 3 (33.3%) | 9 (28.1%) |

Source: Healthcare facility survey

Out of the 32 HCMs, 17 (53.1 percent) developed plans for malaria every year. 6 (15.6 percent) asserted the duration of their plans were two years while 2 (6.3 percent) had five-year plan for their HCFs. The remaining 8 (25.0 percent) HCMs declared they neither had plans nor duration for their plans. The mean duration period was 1.5 years. Out of the 32 HCMs, 2 (6.3 percent) had annual planning meetings. 1 (3.1 percent) had semi-annual meetings, 9 (28.1 percent) had quarterly meetings while 10 (31.3 percent) had monthly meetings. For 10 (31.3 percent) of the HCMs however, planning meetings were contingent and usually ensued as situation demands.

The first barrier towards implementation in any developmental program has been resistance to change. Out of the 32 HCMs interviewed, 4 (12.5 percent) admitted to facing much resistance to change, 9 (28.1 percent) claimed they faced little resistance, while 15 (59.4 percent) asserted to facing no resistance during implementation.

HCMs remarked that factors relevant to implementation of malaria control were leadership, training, adequate resources, and organizational culture. See **Table 3** for detailed description. The factor that ostensibly impacted on implementation of malaria control was leadership; the use of non coercive influence to shape the HCF's goals, motivate behaviour towards the achievement of goals and help define organizational culture.

Out of the 32 HCMs, 23 (71.9 percent) had their staff trained and delegated the authority needed to produce the quality of healthcare services demanded. All the 10 (43.5 percent) public HCMs had their staff trained, 4 (17.4 percent) of the private HCFs also had their staff trained whereas, 9 (39.1 percent) of the chemical shops had their staff trained too. 9 (29.0 percent) HCMs had adequate number of qualified clinical staff on duty at all times to ensure that clients receive prompt and high quality healthcare services. Frequency of In-service training offered to staff to upgrade knowledge, skills and attitude ranged between quarterly 9 (28.1%), annually 8

(25.0%), twice a year 7 (21.9%), weekly 2 (6.3%), thrice a year 1 (3.1%), twice in three years 1 (3.1%) to none 4 (12.5%). Most of the chemical sellers either had annual training 8 (47.1%) or had training twice a year 5 (29.4%).

Out of 32 HCMs, 15 (46.9 percent) had flexible cultures, 4 (12.5 percent) had very flexible cultures, while the 3 (9.4 percent) had a rigid, and 1 (3.1 percent) had very rigid cultures. 9 (28.1 percent) had somehow neutral culture for malaria control. Leadership style promoted in the HCFs according to the 32 HCMs were management team leadership style 18 (56.3 percent), and the combined style of leadership 12 (37.5 percent). Another fact was that all HCMs who pursued a combined style of leadership also had flexible cultures. The chi-square was 13.338 with a p-value of 0.345. F-statistics was 3.937 with a p-value of 0.047, and a correlation coefficient of -0.207.

Implementation of malaria control within the facilities was done through the assignment of responsibilities for each aspect of the plan 13 (40.6 percent), trust and open communication 12 (37.5 percent), establishment of relationship among people 11 (34.4 percent) and finally delegation of authority 6 (18.8 percent). Management of malaria control was carried out in such a way that it provided staff with a sense of security, autonomy and at the same time motivation (91.7 percent). This was done by giving incentives, open recommendation of staff, rewarding extra work, and verbal encouragement of staff. Arguably almost all the HCFs had in place similar motivational strategies. One important factor was the zeal of healthcare providers to see that everything was in order, thus, even when there were no incentives, work was accomplished without any hindrance. The regular workshops on malaria organized to upgrade knowledge, skills and attitude equally enhanced competence, commitment and confidence. Furthermore, appraisals and good interpersonal relationship between management and staff ensured contentment among colleagues.

Table 3. Factors that impact on implementation of malaria control.

| Factor | Most imp. | Imp. | Least imp. | Total |
|----------------------------------|------------|------------|------------|-------|
| Leadership | 19 (59.4%) | 7 (21.9%) | 6 (18.8%) | 100 |
| Training | 19 (59.4%) | 7 (21.9%) | 6 (18.8%) | 100 |
| Motivation | 10 (31.3%) | 10 (31.3%) | 12 (37.5%) | 100 |
| Adequate resources | 15 (46.9%) | 5 (15.6%) | 12 (37.5%) | 100 |
| Need to build Information system | 16 (50.0%) | 6 (18.8%) | 10 (31.3%) | 100 |
| Organizational culture | 10 (31.3%) | 7 (21.9%) | 15 (46.9%) | 100 |
| Organizational structure | 11 (34.4%) | 8 (25.0%) | 13 (40.6%) | 100 |

Source: Community Survey

Out of the 32 HCMs, 18 (56.3 percent) had their staff trained on the strategies of NMCP, basic S&S and management; 9 (50.0 percent) from the public HCFs, 5 (27.8 percent) from private with 4 (22.2 percent) being chemical sellers. 17 (53.1 percent) out of the 32 HCMs did also involve opinion leaders, district assembly and religious institutions in their BCC; 8 (47.1 percent) from the public HCFs, all the 5 (29.9 percent) private HCFs and 4 (23.5 percent) from chemical shops.

Out of the 32 HCMs, 14 (43.8percent) had standard case definition of malaria developed and pasted at vantage points within their HCFs; 8 (57.1 percent) from the public, 4 (28.6 percent) from the private and 2 (14.3 percent) chemical sellers. 18 (56.3 percent) HCMs out of the 32 persistently carried out BCC on malaria prevention within the communities; 9 (50.0 percent) from the public HCFs, 3 (16.7 percent) from the private HCFs while 6 (33.3 percent) were chemical sellers.

Out of the 32 HCMs, 14 (43.8 percent) would request for laboratory test for confirmation of diagnosis; 7 (50.0 percent) were public HCFs, 5 (35.7 percent) were private HCFs while 2 (14.3 percent) were chemical shops. Other

measure identified was the requisition for blood film for malaria parasites (BF) for pregnant women before SP was given when clients develop malaria by 1 public healthcare manager. 14 HCMs representing (43.8 percent) out of the 32, acknowledged the involvement of school children in their BCC; 7 (50.0 percent) from the public HCFs, 3 (21.4 percent) from the private HCFs while 4 (28.6 percent) were chemical shops. 12 (37.5 percent) HCMs out of the 32, developed and distributed simplified case definition of malaria leaflets to households; 7 (58.3 percent) from the public, 1 (8.3 percent) from the private HCF whereas 4 (33.3 percent) were chemical shops.

Systems developed to ensure appropriate response and referral has been enumerated in **Table 4**. Prompt attention to emergency cases and provision of approved treatment was important to the groups. In almost all the HCFs visited, protocols for case management of malaria were visibly displayed on the walls. Some HCFs had drugs such as Artesunate suppositories, Folic acid and iron tablets free for children under five-years and pregnant women. See **Table 5** for detailed description.

Table 4. Systems developed for appropriate response and referral.

| System | Type of healthcare facility | | | Total (n = 32) |
|--|-----------------------------|--------------------|------------------------|-------------------|
| | Public (n = 10) | Private (n = 5) | Chem. shop (n = 17) | |
| Protocol for malaria case management in all clinical areas | 9 (60.0%) | 4 (26.7%) | 2 (13.3%) | 15 (46.9%) |
| Provision of approved malaria treatment in the facility | 9 (50.0%) | 4 (22.2%) | 5 (27.8%) | 18 (56.3%) |
| Prompt attention to emergency cases | 9 (42.9%) | 5 (23.8%) | 7 (33.3%) | 21 (65.6%) |
| Effective system of referral | 9 (56.3%) | 5 (31.3%) | 2 (12.5%) | 16 (50.0%) |

Source: Survey of Healthcare Facilities

Table 5. Measures for delivering quality healthcare services.

| Measures | Type of healthcare facility | | | Total (n = 32) |
|---|-----------------------------|--------------------|------------------------|-------------------|
| | Public (n = 10) | Private (n = 5) | Chem. shop (n = 17) | |
| Effective use of performance appraisal to identify Staff needs for subsequent training | 4 (50.0%) | 2 (25.0%) | 2 (25.0%) | 8 (25.0%) |
| Patients are given prompt attention | 9 (37.5%) | 5 (20.8%) | 10 (41.7%) | 24 (75.0%) |
| Patients are always given all their treatment at the facility | 10 (52.6%) | 5 (26.3%) | 4 (21.1%) | 19 (59.4%) |
| Improved staff attitude to clients | 8 (44.4%) | 4 (22.2%) | 6 (33.3%) | 18 (56.3%) |
| Horizontal integration with some agencies within the community to ensure easy access to resources | 1 (20.0%) | 3 (50.0%) | 1 (20.0%) | 5 (15.6%) |
| Provision of incentives | 1 (16.7%) | 4 (66.7%) | 1 (16.7%) | 6 (18.8%) |
| Open recommendation of hard working staff | 7 (46.7%) | 5 (33.3%) | 3 (20.0%) | 15 (46.9%) |

Source: Facility Survey

HCMs asserted that clients' concerns were acknowledged through friendly attitude of staff towards clients which coaxed them to air their grievances to them whenever possible; they also questioned clients about effective use of drugs or provision of other services. Additionally, complaints were sometimes lodged with opinion leaders or the assemblymen, following-up of cases, and open discussions during staff or advisory board meetings. Apart from Dodowa HCF that had a suggestion box, the remaining HCFs basically resorted to informal measures in soliciting for clients' concerns.

Qualitative data suggested that home-based management of malaria was essentially carried out by education, counseling and home visits to ensure that mothers did the right thing however; others have not been doing anything. Whereas, the HCMs in both the public and private resorted to BCC on care of children at home to care takers, the chemical seller largely engaged in talking to clients on how to take medicine. Namely, mothers were trained to tepid sponged their children when there is fever and to give Paracetamol before sending them to the CBAs for rectal Artesunate, they were also encouraged to use ITNs especially for children under five years and to give ORS when there was diarrhoea and vomiting.

Qualitative data suggested that although, HCMs were not aware of what they have been doing, maintaining competitive edge was essential to all the HCFs. They ensured prompt attention to clients to avoid client frustration and maintained cordial staff-clients' relationship to enhance maximum satisfaction. Occasionally, mass educational campaigns were carried out, canvassing community members to use their HCFs. Offering of 24-hour quality service to clients and ensuring that clients receive all treatments at the facility. Fees charged were relatively moderate and clients have been encouraged to join the NHIS to be able to always patronize their services.

Qualitative data indicated that special efforts adopted in both public and private HCFs to enhance NMCP strategies were Behaviour Change Communication (BCC) which was carried out both massively and individually. These educational campaigns emphasized multiple prevention strategies such as the use of ITNs, IPT and environmental cleanliness. HCFs also had in stock recommended drugs. Staff especially, those in the public HCFs have all been trained in current trends and training was carried out periodically to update skills, knowledge and attitude of staff. Distribution of ITNs to children less than two years was on-going in all the public HCFs, together with the administration of SP. The chemical sellers on the other hand, have embarked upon education and counseling of customers.

Multiple strategies adopted to reduce the occurrence

of malaria within the district by HCMs were basically promotion of insecticide treated materials, liaising with the district assembly for educational campaigns, encouraging communities on good environmental sanitation and administration of chemotherapy to pregnant women.

24 (75.0 percent) HCMs out of the 32 encouraged the use of insecticide treated materials in combating malaria; apart from 9 (37.5 percent) chemical sellers, the 15 (68.5 percent) were all HCMs from both public and private HCFs. Out of the 32 HCMs, 13 (40.6 percent) liaised with the district assembly for health educational campaigns; 7 (53.8 percent) from the public, 3 (23.1 percent) from the private and 3 (23.1 percent) being chemical sellers. 22 (68.8 percent) out of the 32 HCMs, did encourage drainage, mosquito proofing and general sanitation through education campaigns in the fight against malaria; 9 representing 40.9 percent were public HCMs, 4 representing 18.2 percent were from the private and 9 (40.9 percent) being chemical sellers.

Administration of chemotherapy to pregnant women was carried out by 14 (43.8 percent) out of the 32 HCMs; 9 (64.3 percent) from the public, 3 (21.4 percent) from the private, with 2 (14.3 percent) being chemical sellers. Additionally, residual spraying was carried out by 6 (18.8 percent) HCMs out of the 32, while larviciding was done by 5 (15.6 percent) HCMs.

HCFs are primarily community assets thus, the community 32 (100 percent) partner whatever the HCMs embarked upon to ensure their effectiveness. Equally important in this partnership was the religious institutions 20 (62.5 percent), educational institutions 13 (40.6 percent) and the district assembly 10 (31.3 percent). Partnering the religious institutions were 7 (35.0 percent) from the public, 5 (25.0 percent) from the private and 8 (40.0 percent) chemical sellers. Partnering educational institutions were 7 (53.8 percent) from the public, 3 (23.1 percent) from the private and 3 (23.1 percent) chemical sellers. Partnering the district assembly were 6 from the public, 3 from the private and 1 chemical seller. The activities of NGOs 5 (15.6 percent) were not wide spread within the district, apart from the World Vision International who was assisting in staff training; the Catholic Church was also assisting with the financial management of one HCF. Hence, community participation in malaria control was exceedingly important to the HCMs and every effort was being used to sustain it.

The health system in the district has been using the integrated approach to public health diseases in the management of malaria. Thus, there has not been any structural change within the HCFs for the sole management of malaria. Qualitative data suggested there have been the creation of community based agents (CBAs) in

the communities. These volunteers have been identified and trained to administer rectal artesunate suppository at the community level. They have been giving artesunate suppositories to be used as first aid in the management of malaria in the under fives.

Caretakers were instructed to rush their infants to the CBAs for insertion of the suppository before taking them to HCF for treatment continuation. However, because the rectal artesunate was free, many caretakers preferred going to just the CBAs for the free rectal suppository without going to HCFs for further management due to cost. The CBAs have also been trained in the principles of IPT; they roamed the community to ensure that all pregnant women attended ANC. The defaulters were then referred to the HCFs for antenatal care and SP. The midwives would then issue these women chits to be given to the CBAs so as to ensure constant communication between the CBA and the client.

The reporting system used sporadically to conduct the control process indicated that out of the 32 HCMs, 50.0 percent (16) followed a quarterly control approach whereas 6.3 percent (2) had an annual approach. The remaining 9.4 percent (3) of the HCMs conducted it monthly while 12.5 percent (4) did interfere immediately when the need arose. 7 (21.9%) did not have any control mechanism in place. **Table 6** depicts the control process for malaria activities. The process which is common to all the groups was studying, analyzing and evaluating the outcomes and taking corrective measures where necessary (62.5 percent).

Informal processes such as feedback through conversation, frequent team meetings, direct contact and interviews were used in all the HCFs. There was no doubt that the HCMs' ability to orchestrate planning and implementation in the light of changing conditions was greatly strengthened by the operation of this sensitive process. Use of feedback in supervision was mainly verbal and immediate or during staff meetings.

Partners involved in the management of malaria within the district were the Health research unit, NGOs such as World vision international and the Catholic Church, the district assembly, educational and religious institutions, opinion leaders and the community as a whole. These agencies carried out periodic researches, pilot surveys; provided assistance for BCC, distribution of ITNs, training and organized communal labours. Most of these partners were members of the DHMT; they communicated constantly to plans and constituted a core group within the district helping to reduce morbidity and mortality attributable to malaria. Partnership according to HCMs was maintained by constant communication. The DHMT for instance would confront them with their problems after receiving quarterly reports. Challenges

were addressed by these partners through dialogue and feedback on how resources have been utilized.

4. DISCUSSION

Conduction of situational analysis was prevalent though, the researcher couldn't really fathom usage of information generated from the analysis. There was no formal documentation of any conduct of situational analysis; as formal plans were infrequently used in the management of HCFs. Data presented therefore, were simply perceived conduct of situational analysis by the HCMs. The vision of NMCP was widely known in both private and public HCFs. The high knowledge of the strategic vision could be due to the increased in-service training and promotion of malaria control within the district by the health directorate. Dangme West typically being an indigenous district, her environment was naturally uncompetitive [10], all the HCM were pursuing multiple goal and multiple service strategies as acknowledged by Paul [30] for better outputs of malaria control. As suggested by Hussey [20] and Senge [34] knowledge of the vision, mission and objectives is critical because it would guide the direction of the program and create energy for changing reality which ensure higher performance and disciplined program.

It is very sad though, that none of the HCFs could boast of a computer, which is very basic to effective planning. The development of timely, accurate, systematic, consistent and useful information system is crucial for analysis of dynamic forces of the environment for efficient planning as noted by Sprague and McNurlin [35]. Therefore, to have a structured plan the DHD should endeavour to equip the HCFs with computers to facilitate planning.

SWOT analysis according to Duncan *et al.* [10] is an essential logical element that combines analysis with judgment in planning. HCMs constantly carried out SWOT analysis to enhance collaboration with the communities as indicated by both Bopp [1] and Ofosu-Amaah [29]. Community participation in malaria control was important to global RBM [8] and frantic efforts were being made by the HCMs to enhance this objective. Opportunities identified were overwhelming collaboration between HCFs and the communities, extensive use of ITNs, increased communal spirit in some communities and research on rectal Artesunate for children under five years by the health research unit (HRU). The activities of the HRU kept malaria control active in the district which confirms the assertion of Paul [30] that integration of pilot projects enhances program effectiveness and keeps it reengineered.

Threats identified included unemployment, high illiteracy, poverty, and poor environmental conditions which

challenged the control process. The district is predominantly rural with poor socio-economic and infra-structural development; hence, in some communities the NHIS was initiated and sponsored by International Labour Organization, this encouraged many residents to utilize the HCFs. After the project residents simply stopped using the HCFs due to finance. This is of immense concern to the management of malaria. A peculiar situation captured during the study, was a virtually empty HCF during working hours. Explanation given was that residents were looking for money to pay-up their premiums.

Conventional methods were used in assessing strengths and weaknesses. Common among them were government assessment, perception testing of key constituency groups and studying the gap, which were mostly used by the public HCFs because of centralization of administration within the district health system. Benchmarking was a novelty and was sparingly used by the HCMs probably because of its uncertainties in practice as stated by Macmillan and Tampoe [24] or its comparative nature as planning was basically informal. Community assessment was fairly utilized by all the HCMs; simple on-going conversation and informal gathering of local leaders were most favoured method.

Common strengths among the HCFs were availability of recommended anti-malarias, charging of moderate fees and promotion of the tenets of NMCP. Attitude of healthcare providers were particularly good because of the indigenous nature of the district. HCMs readily accepted that due to the rural nature of the district, most professionals refused postings to the area hence, inadequate quality and quantity of healthcare providers was a major weakness to almost all the HCFs (GHS). Inadequate resources, no definite plans for the program, inadequate motivation of staff, insensitive attitude of some staff, infrequent in-service training for staff, and lack of privacy were some weaknesses identified with the HCFs. Analysis of all the above data set the pace for effective planning though there were no formal plans in almost all the HCFs just as Botchie [2] confirmed this to be very common in public services in Ghana.

Planning for malaria control activities in the district was much more informal than formal. HCMs were more interested in the day-to-day management of their facilities due to the homogenous nature of district. Planning in such an environment according to Duncan *et al.* [10] can be mostly informal especially with smaller entities such as the HCFs found in the district. Though almost all the healthcare managers used either informal or combined planning process relevant to the situation, there was consistency in decision making, and management of malaria control within the HCFs was relatively effective. Duncan *et al.* [10] reiterated that when there is an increase either

in the level of competition or changes in environmental factors, the need for a formal planning process appreciates. The attitude of the HCMs therefore, was due to doing business in an uncompetitive and relatively stable environment.

As discovered by Hussin *et al.* [18] the general practice of HCFs was more towards short-term than long term, and the duration ranged between one to five years with an average of 1.5 years. Generally, it can be concluded that strategic orientation did not exist in the district and so was strategic thinking since plans were mostly informal or combined with short-term duration. This was not unforeseen; the districts are the operational level and normally are implementers of plans orchestrated either by the regional or national levels of GHS. Frequency of planning meetings ranged between quarterly and monthly meetings though, many preferred contingency planning meetings to bridge up gap on trends of malaria control with colleagues.

Ensuring access to basic quality healthcare services was a key strategic objective of the health sector [27] and since various studies [7,15] have observed relationship between user-perception of quality of care and healthcare seeking behaviour for malaria and other illnesses, clients were assured of prompt attention for all treatment being given at the facility and more importantly improved attitude of healthcare providers. As Wyss rightly put it a well-functioning health system depended on motivated workforce, much more was being done both at the district and national level to help motivate healthcare providers to give off their best. The use of performance appraisal has always been a thorny issue in the GHS and there have been several attempts in reviewing its use. Only a quarter of the healthcare providers admitted to using the tool although, it is very efficient and effective in identifying weaknesses in terms of knowledge, skills and attitudes for further training. It is an open secret that this important management tool is used just for promotional purposes and its contents were never analyzed for developmental gains. Monitoring of client's concern is an essential way of assessing clients' perception on quality healthcare delivery and improving performance based on user perspective which would ultimately guide healthcare providers in satisfying clients' needs. Although the DHD has recommended the use of suggestion boxes to formalize concerns, like the proverbial African, concerns were still generated through informal means. This again is of great concern since clients could be victimized and/or ignored through this process. HCMs need to be encouraged to have suggestion boxes installed in all HCFs so as to generate impartial perceptions of their output or impact from the general public which would ultimately improve performance

and attitude of staff.

In maintaining competitive edge HCMs naively used a combination of approaches suggested by Macmillan and Tampoe [24]. Time based approach was significantly used to avoid client frustration and maximize satisfaction; this approach couldn't be well executed at the public facilities where work load was almost always high. Healthcare delivery being a professional service was undoubtedly a knowledge-intensive enterprise thus; development of knowledge have been a strategy in sustaining commitment, competencies, and confidence of the workforce to guarantee delivery of quality healthcare to clients in the district as confirmed in all these studies [14,21,25,33]. Hence, in carrying out most of their mandate, knowledge and technology generated from research [28] were used in curbing the ascendancy of severe malaria.

With the upsurge of morbidity and mortality, strengthening of programme evaluation was essential to ensure effectiveness and efficiency of malaria control [4]. HCMs in evaluating malaria control activities mostly studied, analyzed and evaluated outcomes; taking immediate steps to make amends where necessary. They again organized frequent staff durbars to discuss achievements and the way forward. Thus, HCMs used both outcome-based and impact-based approach in their evaluation and extensively involved their colleagues which encouraged commitment to the ideals of malaria control.

An effective feedback system provides the workforce with the opportunity to reflect on their past performance and improve upon it, thereby enhancing performance. Feedback again promotes commitment among staff, strengthening competence and confidence. The study acknowledged that HCMs used more informal approaches such as conversation than the formal approaches. This was seen more with the HCFs, where conversation appeared to be the favourite of the healthcare managers. Chemical sellers appeared not to be bothered about this approach and never really patronized it. It is however; important to note that giving constructive feedback is very essential in management as stated by Mary Parker Follet that management is "working through people to achieve organizational goals". Feedback always have the magic of ensuring that individuals' creative ability is accessed jointly as a team to boost competitive edge, achieving organizational goals and ensuring that workforce becomes committed, competent and confidence. Partnership in malaria control was very important and was maintained by effective communication. Partners involved in the control process were the DHD, HRU, NGOs and the wider society. These partners had roles in planning, sometimes implementation and even evaluation; they assisted wherever necessary to

ensure that malaria control remained effective and efficient.

5. LIMITATIONS OF THE STUDY

The approach used for data collection was both quantitative and qualitative but generally due to the technical nature of management and the educational background of most of the respondents especially the HCMs, most questions had to be explained vividly before they could complete the data collection tools. This may perhaps have affected some of the responses that were generated.

6. CONCLUSIONS

The study generally identified many elements of the practice of SM in the district. However, these elements were not being managed holistically thus, construing the main tenets of the systems' theory, on which the SM theory was developed; that is the whole is greater than the sum of its part. Thus, though the status of key malaria control indicators was remarkable, this would have been further enhanced if SM had been holistically practiced in the district.

7. RECOMMENDATIONS

The diverse findings identified presents implications for public health practice, education, research, and policy formulation. The In-Service Training of GHS should endeavour to develop SM as a taught course for senior managers using the experiential teaching method to give it a practical approach. HCMs who have had the advantage of being at GIMPA and exposed to the SM course should be encouraged to make use of knowledge acquired through training to enrich malaria control and other health issues of public health concern. BCC should be encouraged within the district and more effort is still needed to extend community participation. This will enhance acknowledgment of health programmes and usage of basic tools developed to improve health. DHD should persuade HCMs to have continuous BCC, taking advantage of local nuances so as to increase knowledge and acceptance of new health trends and issues. The involvement of CBAs in healthcare delivery is very commendable and this should be encouraged to ensure that all pregnant women attend ANC and caretakers improve their skills on home-based care of malaria.

The DHD should organize workshops and seminars on the principles of business management especially, customer care and work ethics. HCMs should be encouraged to have formal plans for their HCFs. Finally, HCMs should focus on persistent upgrading of knowledge, skills and attitudes of their staff to ensure sustainable delivery of quality healthcare. The DHD should

align themselves with the chemical shops to supervise their activities, to ensure that they at least record malaria or febrile cases handled and also to ensure that they follow regulations promulgated by the Pharmacy Council. This would at least help in the assessment of actual incidence and prevalence of malaria because lots of chemical sellers are selling and dispensing drugs wrongly to unsuspected healthcare consumers. There should be a firm grip on the chemical sellers within the district since the Pharmacy Council is too remote and their infrequent visits are not helping much.

REFERENCES

- [1] Bopp, M. (1994). The illusive essential: Evaluating participation in non-formal education and community development. *Convergence*. Vol. XXVII. 1.
- [2] Botchie, G. (1986). Planning and implementation of development plans in Ghana: An appraisal. *Rural development in Ghana*. Ghana University Press, Accra.
- [3] Browne, M. (1994). The evolution of strategic management thought: *Background Paper-Strategic Management Educators' Conference, Australian Centre in Strategic Management QUT*
- [4] Bryce, J., ROUNGOU, J.B., Nguyen-Dinh, P., Naimoli, J.F., & Breman, J.G. (1994) Evaluation of national malaria control programs in Africa. *Bull World Health Organ.* **72**, 371-381.
- [5] Certo, S.C., Peter, P.J. (1988). *Strategic Management: Concepts and Applications*. New York: Random House Business Division, (1st. Edition).
- [6] Davies, W. (2000). Understanding strategy. *Strategy and Leadership*, **28**, 25-30.
- [7] de Savigny, D., Mayombana, C., Mwageni, E., Masanja, H., Minhaj, A., Mkilind, Y., Mbuya, C., Kasale, H., Reid, G. (2004). Care-seeking patterns for fatal malaria in tanzania. *Malaria Journal*, **3**, 27.
- [8] District Health Directorate/GHS (2002-2006). *Annual Reports*. DHD/GHS, Dangme West.
- [9] Drucker, Peter F. (1999). *Change Leaders*. <http://www.inc.com/magazine/199990601/804.html>
- [10] Duncan, W.J., Ginter, P.M., Swayne, L.E. (1996). *Strategic Management of Healthcare Organizations*. 2nd Edition. Blackwell Publishers Ltd. Cambridge, Massachusetts.
- [11] Gates Malaria Partnership. (2006). GMP Report 2001-2006. Greenford Printing Co. Ltd., Pinstone Way, Bucks.
- [12] Ghana Health Service (2001). *Roll Back Malaria Baseline Survey*. GHS, Accra.
- [13] Ghana Statistical Service (2000). Ghana Living Standards Survey Report of the Fourth Round (GLSS4); Ghana Statistical Service, Accra.
- [14] GHS/HRDD, Ghana (2006). *A manual on In-service Training policy and Guidelines for Implementation*. NHLMC, Kumasi.
- [15] Goodman, C., Coleman, P., Mills, A. (2003). Economic Analysis of Malaria Control in Sub-Saharan Africa. *In Global Forum for Health Research*. WHO, Geneva.
- [16] Greenwald, Bruce; Kahn, Judd (2005). All Strategy is Local. *Harvard Business Review*. September, 94.
- [17] Griffins, Ricky W. (1999). *Management*. 6th Ed. Houghton Mifflin Company. Boston, New York.
- [18] Hussin, J, Hejase; Dima, A. Baltagi; Kassem, Kassak. (2000). Assessment of Strategic Management Practice in Private Non Profit Hospitals in Greater Beirut. *Health-care Management Present and Future Challenges*. April 11-13, Beirut-Lebanon Presented Papers.
- [19] Ijumba, Jasper; Kitua, Andrew Y. (2004). Enhancing the Application of Effective Malaria Interventions in Africa through Training. *American Society of Tropical Medicine and Hygiene*, vol. 71, 253-258.
- [20] Hussey, David. (1994). *Strategic Management: Theory and Practice*. 3rd Ed. The Alden Press, Oxford, UK.
- [21] Katz, Ralph (1998). *Managing Professionals in Innovative Organizations*. Ballinger Publishing Company, Cambridge, Massachusetts.
- [22] Kpabitey (1996). *Five Year Medium Term Development Plan (1996 – 2000)*. Dangme West District Assembly.
- [23] Jauch, Lawrence R; Glueck, William F. (1988). *Business Policy and Strategic Management*. New York: McGraw-Hill Book Company, (5th. Edition).
- [24] Macmillan, Hugh; Tampoe, Mahen (2000). *Strategic Management. Process, Content and Implementation*. Oxford University Press Inc. New York.
- [25] Maister, D. H. (1993). *Managing the Professional Services Firm*. Free Press, New York.
- [26] Mintzberg, Henry (1978). Patterns in Strategy Formulation. *Management Science* **24**, No 9.
- [27] Ministry of Health (2003). *5 Year Program of Work*. Ministry of Health, Ghana.
- [28] Ministry of Health (2000). *Roll Back Malaria Strategic Plan for Ghana*. MOH: Ghana.
- [29] Ofosu Amaah, V. (1983). National Experience in the Use of Community Health Workers: A review of Current Issues and Problems. *World Health Organization*. Geneva.
- [30] Paul, Samuel (1983). Strategic Management of Development Programs: Evidence from an International Study. *International Review of Administrative Sciences* **1/1983**, 73-86.
- [31] Porter, Michael (1980). *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. The Free Press, New York.
- [32] Robbins, S; Bergman, R; Stagg, I; Coulter, M. (2000). *Management*. Prentice Hall, New Jersey
- [33] Scott, M. C. (1998). *Profiting and Learning from Professional Service Firms*. Wiley & Sons, Chichester.
- [34] Senge, P. M, (1990). *The Fifth Discipline: The Art and Practice of Learning Organization*. Doubleday, New York.
- [35] Sprague, R. H; McNurlin, B. C. (1993). *Information Systems in Practice*. 3rd Ed., Prentice Hall, Englewood Cliffs, New Jersey.
- [36] Business Dictionary.com. (2010).
- [37] Gardner, James R; Rachlin, Robert; Allen, Sweeny H. W. (1986). *Handbook of Strategic Planning*. John Wiley & Sons, New York.
- [38] Teklehaimanot, A. (2005). Coming to grips with malaria in the new millennium. UN Millennium Project. Working Group on Malaria.