HEALTH INFORMATION SYSTEMS IN THE HO DISTRICT : A STUDY OF HOW HEALTH SERVICE INFORMATION IS UTILIZED AT THE SUB-DISTRICT LEVEL.

A DISSERTATION PRESENTED TO THE SCHOOL OF PUBLIC HEALTH, UNIVERSITY OF GHANA, LEGON, IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE MASTER OF PUBLIC HEALTH (MPH) DEGREE.

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1998

DECLARATION

I HEREBY DECLARE, THAT EXCEPT FOR REFERENCES TO OTHER PEOPLE'S WORKS WHICH HAVE BEEN DULY CITED, THIS WORK IS THE RESULT OF MY OWN RESEARCH AND THAT THIS DISSERTATION HAS NEITHER IN WHOLE NOR IN PART BEEN PRESENTED FOR ANOTHER DEGREE.

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DEDICATION

THIS WORK IS DEDICATED TO MY DEAR DADDY, REV. LAUD KWASHIE ALORZUKEY WHO DEPARTED TO BE WITH THE LORD THREE MONTHS TO THE END OF MY COURSE AND MY LOVELY DAUGHTER "SWEETIE" WENDY WHO WAS BORN FOUR MONTHS AFTER THE BEGINNING OF MY COURSE.

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ABSTRACT

Since the Sogakope Conference on the integration of health service, in 1991, the focus has been on the sub-district as the most basic operational unit for health service delivery and management in Ghana. This new role of the sub-districts was reinforced with the introduction of the Budget and Management Centre concept in 1996/97.

It is expected that, since the use of information is very essential for effective management, Sub-District Health Teams (SDHTs) and Heads Of Health Facilities (HOFs) must know and actually utilize available health service information.

The objective of this study, therefore, was to carry out an exploratory study to determine how health service information is utilized at the Sub-district level and to describe the Health Information System at that level. The study was carried out in all the 6 Sub-districts in the Ho District of the Volta Region from June to August, 1998.

Data was collected (on health data collection, analysis, storage and utilization) using a checklist (for data collection tools) and two interview guides for SDHT leaders and HOFs respectively. Additional information was obtained by examining available records.

The study revealed, that there is gross under-utilization of health service information primarily due to lack of training (of health workers in information utilization.)

Data collected by SDHTs largely excluded non-MOH and traditional health facilities in the respective sub-districts.

There is also poor filing and storage of health data / information.

Poor feedback from the District Health Management Team (DHMT) to the SDHTs and from the SDHTs to the health facilities is another significant finding.

Based on the findings, it is recommended that ;

- *health workers be trained in the handling and* ***utilization*** *of health service data / information.*
- *effort must be made to collect and collate health data (for analysis and utilization) from all service providers in the Sub-districts.*
- *feedback from the DHMT and SDHTs to the lower levels must be highly encouraged.*

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ABBREVIATIONS

SDHT	-	SUB-DISTRICT HEALTH TEAM
DHMT	-	DISTRICT HEALTH MANAGEMENT TEAM
MOH	-	MINISTRY OF HEALTH
M.A.	-	MEDICAL ASSISTANT
N.O.	-	NURSING OFFICER
CHN	-	COMMUNITY HEALTH NURSE
SEN	-	SENIOR ENROLLED NURSE
S/M	-	STAFF MIDWIFE
HOF	-	HEAD OF FACILITY
MRA	-	MEDICAL RECORDS ASSISTANT
PIF	-	PERFORMANCE INDICATOR FORM
F/T	-	FIELD TECHNICIAN
T.O.	-	TECHNICAL OFFICER
LAB. TECH.	-	LABORATORY TECHNICIAN
MCH	-	MATERNAL AND CHILD HEALTH
SD	-	SUB-DISTRICT
SDHS	-	SUB-DISTRICT HEALTH SYSTEMS
VRHA	-	VOLTA REGIONAL HEALTH ADMINISTRATION
RDHS	-	REGIONAL DIRECTORS OF HEALTH SERVICES
FP	-	FAMILY PLANNING
DCE	-	DISTRICT CHIEF EXECUTIVE
DHA	-	DISTRICT HEALTH ADMINISTRATION
HIS	-	HEALTH INFORMATION SYSTEMS
SEC	-	SECTION
PP	-	PAGES
WHO	-	WORLD HEALTH ORGANIZATION
BMC	-	BUDGET AND MANAGEMENT CENTRE
GSPH	-	GHANA SCHOOL OF PUBLIC HEALTH

GLOSSARY

HEALTH INFORMATION:	All information related to health
INFORMATION FEEDBACK:	Reporting to those who supplied information on the use made of it, the results obtained and the action to be taken.
INDICATORS:	These are variables that help to measure changes directly or indirectly and to assess the extent to which the objectives and targets of a programme are being attained.
HEALTH CENTRE:	(In WHO usage) is a centre that carries out promotive, protective, preventive, diagnostic, curative and rehabilitative activities but has no beds other than perhaps the few needed for emergencies and maternity care.
CHECKLIST:	A list of items or descriptions of actions to be looked at, one at a time, to ensure that no item or action is overlooked.
DISTRICT:	A clearly defined administrative area (population between 50,000 and 300,000) at which some form of local government takes over many

responsibilities from central government departments.

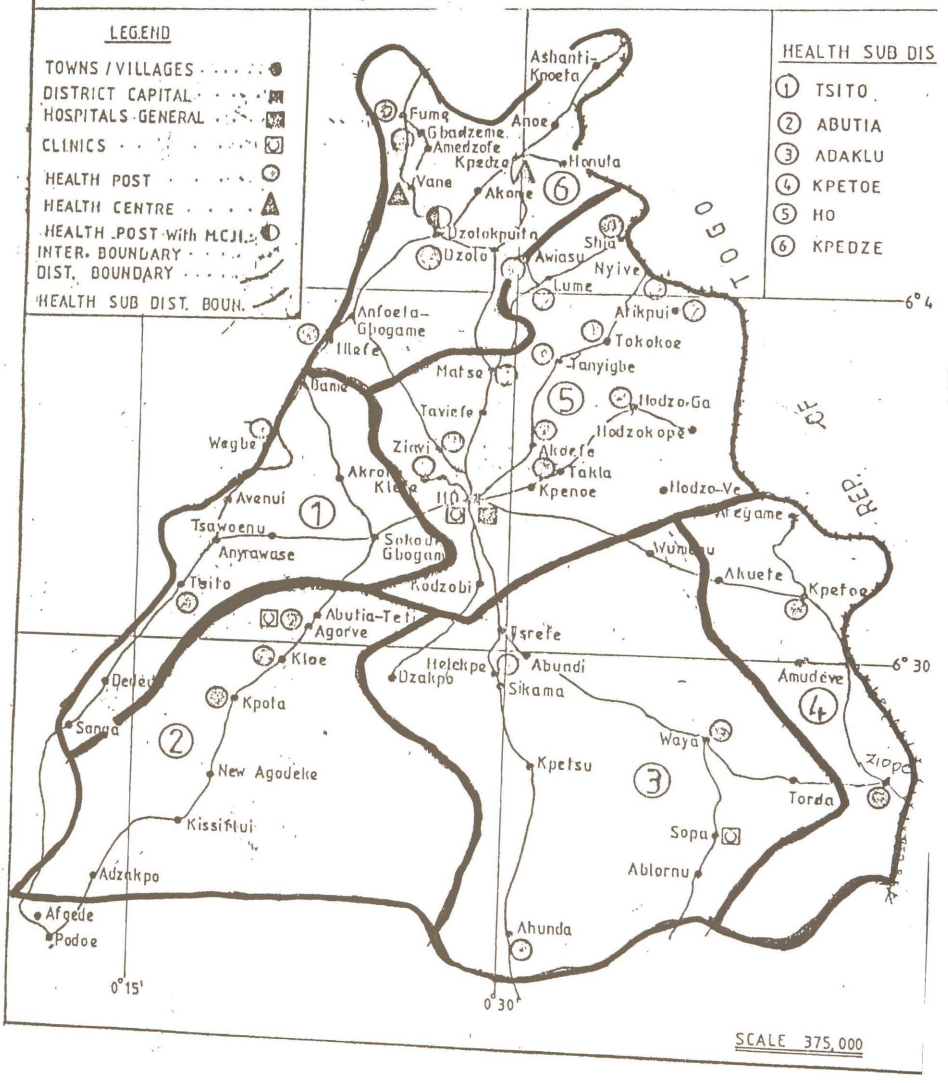
MANAGEMENT:	Includes planning, organizing, directing, monitoring and control, supervision and evaluation.
OPERATIONAL PLAN:	Description of action to be undertaken and the resources necessary to achieve stated goals and objectives
INFORMATION:	Data processed for a purpose (eg. decision making).
INFORMATION SYSTEM:	A group of people, procedures, methods and equipment for the collection, processing and storage of information.
SUB-DISTRICT	A demarcated geographical zone within a District. The zone is the assigned area of operation for a Sub-District Health Team (SDHT).
SUB-DISTRICT HEALTH TEAM (SDHT):	A Ministry of Health Technical Team, responsible for planning organizing and delivering an integrated package of service to a specified zone in sustained and consistent manner.

CATCHMENT AREA: Refers to that area served by each static service delivery point and its outreach programmes.

SUB-DISTRICT (LEVEL B) STATION: A peripheral health station (Health Centre, Post, Clinic or MCH point) with its catchment area and depending on its status, serves a package of Curative and Public Health functions regularly to the immediate community while retaining the role of a referral point to the catchment area at large.

DISTRICT MAP OF GHANA

HO DISTRICT SHOWING SUB-DISTRICTS



CHAPTER ONE

1.0 INTRODUCTION:

1.0.1 STUDY LOCATION: HO DISTRICT

The Ho District which is one of the twelve (12) political/administrative districts in the Volta Region of Ghana is located in the middle zone of the Region.

The Ho District covers an area of 2,564 square kilometers with an estimated population of 251,530 (1998 estimate projected from the 1984 population census) and an annual growth rate of 1.8%. The Ho township doubles as the District and Regional Capital.

The Local Government/Political Authority in the district is the District Assembly and is headed by a District Chief Executive (DCE). The District Health Administration (DHA) is considered a decentralized department under the District Assembly and is represented on the District Assembly's Social Services Sub-committee by the District Director of Health Services (DDHS), who is the head of the DHA. The DDHS reports directly to the DCE and the Regional Director of Health Services (RDHS).

The Ho District is sub-divided into 6 sub-districts: Tsito, Abutia, Adaklu, Kpetoe, Ho-Shia and Kpedze-Vane sub-districts. Sub-District Health Teams (SDHTs) in the Ho District were inaugurated in August, 1994 and are responsible for health service delivery and management in the sub-districts.

Population and Health Centre/Post distribution by Sub-districts in the Ho District.

SUB-DISTRICT	1998 POPULATION	NO. OF HEALTH POSTS/CENTRES
TSITO	42,769	3
ABUTIA	38,684	2
ADAKLU	41,758	3
KPETOE	43,810	2
HO-SHIA	42,825	11
KPEDZE-VANE	38,684	9
DISTRICT TOTAL	251,530	30

There are 50 health facilities in the District; the highest number of health facilities per district in the Volta Region, with the facilities more concentrated in the upper half of the district specifically in the Ho-Shia and Kpedze-Vane sub-districts. The District has no District Hospital but has 1 Regional Hospital, 1 Polyclinic, 30 (MOH) Health Centres/Posts and 4 Maternal and Child Health Centres, 1 Quasi-Government Hospital, 3 Mission Clinics, 5 Private Medical Practitioners and 5 Private Maternity Homes. At the community level, there are 81 trained and 112 untrained Traditional Birth Attendants.

1.0.2 BACKGROUND INFORMATION:

With the identification of the district as the most appropriate level for the implementation of Primary Health Care in Ghana as far back as 1975, emphasis had been on district level structures. Since the introduction of District Health Management Teams (DHMTs) in 1978,

they have become the vehicle for decentralization of the management of health services. It has also been the responsibility of the DHMTs to plan for all health programmes and activities at the district level, which includes services at health care institutions, outreach services and community based activities (MOH, 1993)

SUB-DISTRICT CONCEPT IN GHANA:

The Sub-district health management concept was initiated and developed in Ghana as a result of deliberations at two conferences held at Sogakope[2] and Akosombo[3] on the policy of integration of services in health care delivery and the strengthening of the district health systems.

The Sub-District Health System is the interface between the DHMT and the community and the concept aims at decentralizing health planning, decision-making and administrative processes further down below the district level.

Within the framework of Primary Health Care, sub-districts are at level B with the level B (sub-district) facilities comprising health centres and health posts: Level A is the community level with Level C being the District level.[4]

The sub-district is managed by a Sub-District Health Team (SDHT) which is a multi-unit health team responsible for the management and delivery of the integrated package of basic health services to the sub-district in a sustained and consistent manner. The sub-district working group recommended that the SDHT be headed by the most senior and qualified member of the team [5].

The roles of the SDHT include, planning the health activities of the sub-district, budgeting for these activities, managing the funds which are allocated to the level A's and level B's managing the cash and carry system and developing links with the community [4]

Health information is so critical to the above roles of the SDTHs It is required to undertake a situation analysis for identifying major problems, setting priorities and defining objectives. It is also needed for monitoring of progress towards stated goals and objectives. Its vital role in management and health service delivery cannot, therefore, be over-emphasised. It is therefore significant that the Conference that recommended the Sub-District Health Systems in 1991, recognizing the vital role of health information, made another important recommendation that "The entire health information system should be reformed in order to reflect information needs at each level, and the use to be made of available information for planning and decision making" [2]

CHAPTER TWO

2.0 LITERATURE REVIEW

2.0.1 DATA AND INFORMATION

Data may be defined as facts, events or transactions which have been recorded and are the input raw materials from which information is produced while information is data that has been processed in such a way as to be useful to the recipient.[6] Qualities of good information include relevance, accuracy, completeness, reliability, timing (i.e. communicated in time) and communication to the right person and by an appropriate channel.[6]

For sound management and decision making, good information is a prerequisite. [6,9,10,11,12] However, it can also be used as an excuse for not planning: an all too frequent argument for not taking a difficult decision is the apparent lack of sufficiently accurate information.[11]

The status of information in developing countries is extremely variable.[7] In many countries, accurate and reliable information remains rare and managers have become skilled at "instinctive management" [7] and use intuition rather that trust faulty information and misleading data. [8] Lippeveld (1997) observed, that even when some good data are available, especially at the district, health centre and community level, some managers and care providers rely primarily on intuition when making ad hoc decisions rather than use pertinent information.[9]

2.0.2 INFORMATION SYSTEMS DESIGN AND DATA COLLECTION

More often than not, information-gathering systems are designed by the central authority/highest level of bureaucracy [13,15] or may be designed to

address the information needs of high-level programme managers. [10,13] Even though central authorities can provide examples of simple indicators and methods of recording, aggregating and analyzing data to obtain useful information,[14] it is important to recognize that each level of workers/managers have different information needs to be met.[6,10] Not basing the information system design on the information needs at each level may result in putting all the burden on field staff while addressing only the information needs of high level managers or omitting data important to the field worker.[10] Also, requirements for recording or reporting data are frequently drawn up without reference to the technical skills of the personnel concerned or to the diagnostic equipment in peripheral health facilities [9] Furthermore, health workers receive little or no training in methods of data collection. [9] Ironically, the technical accuracy of data depends largely on the skills and motivation of the data collectors and availability of diagnostic aids. [11]

Studies in different countries including countries from Africa and Latin America indicated that an average of 40% of the working time of Primary Health Care workers was spent in filling out forms and collecting data [19] even though it is evident that much of the information recorded by health workers is not relevant to the tasks they perform.[9] In a study of Health Information Systems carried out by Aryee, et al (1992), [23] in the Dangme East and Dangme West Districts, it was realized that at the health centres/post, some of the workers had difficulty in understanding some terminologies used in some of the forms and others had difficulty in filling these forms. Some staff also felt they were overworked and this affected their availability of time to fill forms. Unless staff at all levels understand the importance of the data they are collecting for aggregation and analysis, the value and use of the information system will be negligible [16]

2.0.3 DATA ANALYSIS AND STORAGE

Raw data is only of use after analysis and transformation into information. Analysis of information can occur at a variety of levels, from that of the original collector to that of a user at the central level. Wherever possible, analysis conducted as close as possible to the level of the data collector is likely to provide him/her with an interest in the information.[11] Sometimes, information systems try to provide too much information such that some of it may not even be correctly analyzed or used.[12] Presentation of information is often neglected but when it is done, how the information is presented will depend on its purpose and at who it is aimed; there is actually no single correct way to present information.[11] Sometimes, records are not kept well enough. They may only be kept from time to time, or be incomplete or they may not be dated, or they may not even be kept at all.[12]

2.0.4 UTILIZATION AND DISSEMINATION OF INFORMATION

Ideally, collectors should also be among the users of the information. Feedback also helps to motivate these data-collectors. [11] Current information systems are often fragmented and produce redundant information and internally inconsistent data. [16] Even when management data are routinely generated, they are rarely used effectively in planning and in giving direction to community health activities.[16] Collecting, analyzing and presenting information all have attendant costs, yet much information is processed without any end-use.[11] As noted by Tarimo (1991),[14] the health centre is important in the context of intersectoral establishment of a management information system as the health centre level would supply the planning process for health with valuable inputs and also furnish indicators or tools for evaluating the various programmes of action at the health centre and community levels.

Monekosso (1994) also noted that information support at the health centre level can lead to improvement in services, so the health centre must collect, process, analyze, communicate and use a whole range of information.

The flow of critical management information should be accessible at all levels [17] but rather unfortunately information is often channeled in one direction only; or worse, raw data are collected at one place and analyzed elsewhere, with no subsequent feedback on either the use to which they are being put or on the implications of the information.[11] Within the framework of a larger programme, strong vertical programmes lead to the by-passing of existing lines of communication, with the result that reports often fail to reach line managers.[9] In Ghana, vertical organisational structures have resulted in the development of vertical transmission of health information [18] and it is relevant to note that the Ministry of Health has recognized the importance of horizontal linkages between programmes.[18]

The success of any management information system is heavily dependent on feedback of the data collected;[16] however, most health workers deliver vast amounts of information without receiving feedback.[9] If the worker does not receive some immediate feedback regarding the utility of the collected information, then motivation will be low and predictably, the quality of the information will suffer. [19]

2.0.5. INFORMATION TECHNOLOGY

Rapid access to meaningful information is a cornerstone to effective decision making and management in this information age [20,21] and significantly, there is a growth in the need and use of computers in health information systems. [11,22] There is however the danger that

computers can tend to over-emphasize quantified information, with the consequent danger that less weight is given to qualitative information.[11] Also for low volume data processing, manual processing may be faster, cheaper and more meaningful.

2.0.6. HEALTH INFORMATION MANAGEMENT IN GHANA

A study carried out by Senaya (1997) [25] on the sub-district health system in the Ho District revealed that health information returns were sent routinely to the DHMT by individual health institutions. SDTHs, therefore, did not receive data from the various health facilities and other service providers within their sub-districts. The study further revealed that there was nobody responsible for data collaction from the various data collection points in each sub-district and also, that there was no evidence of sub-district data analysis and utilization for planning.

Another study of Health Information Systems in the Dangme East and West Districts carried out by Aryee et al (1992) [23] showed that there was lack of in-service training, improper channeling of returns and lack of feedback.

In establishing the Sub-District Health Systems[5], it was envisaged that the SDHT would be responsible for basic data collation in terms of morbidity and activity from all service providers in the zone, carry out basic data analysis and plan for the sub-district. It was also expected that the SDHT would identify other sercice providers in the zone (besides MOHservice providers), collect data on them and coordinate their activities with those of the SDHT.

HEALTH FACILITIES

At the Sub-district level, health workers at the health facilities are responsible for the collection of health data (at the respective facilities), converting the raw data into information, and also transmitting health data to the SDHT[24] At the health facility level the health information is also to be used to assess individual and institutional performance, compare performance over time, against targets, to monitor trends in coverage and for planing basic health services

THE SDHTs

It is expected that SDHTs would collect basic data in terms of morbidity and activity from ALL health service providers in their respective zones. The SDHT is also expected to collate collected health data and carry out basic data analysis.

The SDHT, besides transmitting the collated health data to the DHMT, is also expected to use the analysed data for basic management (including assessment of the sub-district's health problems), operational planning and the delivery of basic curative and preventive health services[5].

Prendergast (1993)[4] in a study of Information Systems and decision making within sub-district health teams in the Akuapim North District in the Eastern region observed that there was little use of health information in decision making at the sub-district level. The study showed that information was used by individuals in assessing their own work and in identifying problems in the area; however, the SDHTs did not make use of this information when compiling their workplans.

CHAPTER THREE

3.0.1. PROBLEM STATEMENT:

In 1996 Sub-District Health Teams (SDHTs) were requested to prepare sub-district profiles of their respective sub-districts.

The profiles submitted by all the six (6) SDHTs in the Ho District contained very scanty health service information even though a great amount of health data is collected at the sub-district level. On the other hand, the profiles contained detailed information on other sectors; for example information on the Ghana Education Service (GES) included the number and types of schools, and a breakdown of class and sex distribution of pupils and teachers in the various categories of schools.

Also, even though health data collected at the sub-district level is expected to be analysed and used at the health facilities and by SDHTs for decision making, planning, report writing etc, it was observed that annual reports from the health facilities and sub-districts contained very scanty relevant health information. This showed a weakness in the Management Information System with a focus on the utilization of health service information at the sub-district level in the Ho District

3.0.2. RATIONALE FOR STUDY

Following the identification of utilization of health service information as a problem at the Sub-District level in the Ho District, the issue was discussed with the Ho DDHS.

With his (DDHS) approval, this study was initiated to primarily find out how health service information was being utilized by the SDHTs and at the sub-district health facilities and to make recommendations to help improve the handling and utilization of health service information (at the sub-district level in the Ho District).

3.1. OBJECTIVES

3.1.1. GENERAL OBJECTIVES

To describe the health information system at the sub-district level and to determine how health service information is utilized at that level in the Ho District.

3.1.2. SPECIFIC OBJECTIVES

1. To describe the health information system of the SDHT and in a sample of sub-district health facilities.

2. To determine how health service information is utilized at the sub-district level (by SDHTs and sub-district health facilities).

3.2 METHODOLOGY

3.2.1. STUDY DESIGN

3.2.1.1. STUDY TYPE

The study was of an exploratory type, descriptive and analytic in content. It was carried out in all the six(6) sub-districts in the Ho District of the Volta region of Ghana. The study was done between June and August 1998.

3.2.1.2. STUDY POPULATION

The study population was made up of:

- the six(6) sub-district health team (SDHT) Leaders
- two (2) heads of facilities (HOFs) from each of the six (6) sub-districts.

Where there were more than two facilities in a sub-district, the 2 heads of facilities were chosen randomly by balloting.

3.2.1.3. DATA COLLECTION

Permission was sought from the Volta Regional Director of Health Services, Acting District Director of Health services, District Health Management Team(Ho District) and Sub-District Health Teams in the Ho District for the study to be conducted.

Data was collected (on health data collection, analysis, storage and utilization) through in-depth interviews using two interview guides (one for SDHT Leaders and the other for heads of health facilities) and a checklist for data collection tools. Additional information was collected by examining available records (reports, returns etc.) The data was collected by the GSPH Resident.

INTERVIEW WITH SDHT LEADERS

All the Six (6) SDHT leaders were interviewed for this study. The aim was to interview the SDHT leaders and then carry out a follow-up interview of some SDTH members to verify the responses of the leaders. It however came up (during the pre-testing stage) that following recommendations made in 1997 by Senaya, L.K. (then a GSPH Resident) who did a study of the Sub-District Health System in the Ho District, the various SDHTs have been recently reconstituted with mostly new members but with the leaderships retained. Most of the members are therefore still "finding their feet".

All the six (6) SDHT leaders are senior officers with four (4) of them being Medical Assistants and the other two (2) Nursing Officers. They are also the most senior health personnel in their respective sub-districts and have been sub-district health team leaders for periods ranging from two to four years. They are also heads of health facilities (health centres/posts).

INTERVIEW WITH HEADS OF HEALTH FACILITIES

- Two(2) heads of sub-district health facilities from each of six (6) sub-districts were interviewed for this study. The twelve respondents include two (2) HOFs who are also SDHT leaders.
- **CADRES OF HEALTH STAFF IN CHARGE OF FACILITY**

CADRE OF STAFF	FREQUENCY
Medical Assistant	2
Senior Staff Midwife	1
Staff Midwife	2
Senior Enrolled Nurse	5
Community Health Nurse	2
Total	12

There are various categories and levels of staff in charge of sub-district health facilities in the Ho District, ranging from Community Health Nurse (CHN's) to Medical Assistants (MAs).

- **THE NUMBER OF YEARS AS IN CHARGE OF FACILITY**

No. of Years as i/c	0 - 2	2 - 4	4 - 6	6 - 8	8 -10
Frequency	3	3	2	2	2

The respondents have been in charge of their respective facilities for periods ranging from 10 months to 10 years with 75% of them being in charge of their facilities for more than 2 years.

3.2.1.4. DATA PROCESSING :

Data was processed manually. The data was sorted out into two parts; according to the health facility and SDHT levels. Data was then transferred manually to two master sheets. Answers were categorized and grouped to make it easier for the compilation of the responses for analysis.

3.2.1.5. STUDY LIMITATIONS

The study was limited by inadequate funds and time constraints. For example, due to inadequacy of funds, research assistants could not be recruited for the study. Time constraints also did not permit a larger group of health workers to be included in the study and available health data could not be scrutinised for accuracy, consistency and completeness.

CHAPTER FOUR

4.0 FINDINGS

The results are presented in two main sections (sec. A & B). Section A deals with the SDHT; where the findings deal with the description of the Health Information System (HIS) of the SDHT and how health information is utilized by the SDHT.

Section B, on the other hand, deals with the health Centres/Posts (i.e. Sub-district level health facilities). The findings here deal with the description of the HIS of the health facilities and how health service information is utilized by the health facilities:

4.1 SECTION A: THE SUB-DISTRICT HEALTH TEAMS:

4.1.1 TRAINING IN DATA COLLECTION AND INFORMATION UTILIZATION

All the respondents have had training in data collection and the filling of return forms. All of them have also had in-service training in data collection within the last 6 months covering sources of information, consistency and completeness, and submission procedures. Unfortunately, however, none of the 6 respondents (SDHT leaders) had received any training in the utilization of health information.

4.1.2 SOURCES OF SUB-DISTRICT HEALTH DATA:

None of the SDHTs receive data from level A health workers in their sub-districts. However, they (SDHTs) receive health data (in the form of

return forms) from all Ministry of Health facilities in their respective sub-districts.

With respect to non-MOH orthodox health facilities, two (2) of the 6 SDHTs do not receive any data at all from these facilities; one of them because there is no such facility in the sub-district. Of the remaining 4 SDHTs, 2 of them receive monthly returns from private maternity homes in their sub-districts; the third receives returns from a mission clinic and the fourth receives returns from a mission clinic and a Military Reception Centre. None of the 6 SDHTs receive returns from private for profit clinics or from non-orthodox medical practitioners.

One of the SDHT leaders said the health status of non-users of the MOH facilities in the sub-district is not of any importance to the SDHT, whereas the other 5 SDHT leaders said the health status of the non-users of the MOH facilities are important to their SDHTs.

4.1.3 DATA COLLATION AND ANALYSIS

In all the six (6) sub-districts, the SDHT leaders are responsible for data collation in their respective sub-districts. All the SDHTs have calculators for doing simple calculations (eg. for calculation of indicators).
In one sub-district the entire SDHT meets monthly to calculate indicators for the Volta Regional Performance Indicator Form (PIF) 2 and to analyse other data. In the other 5 sub-districts the SDHT leaders are solely responsible for the calculations of indicators (for PIF 2) and analysis of data. Sometimes, some of the SDHT leaders travel all the way to the District Health Administration to do the caculations with the help of the District Biostatistician.

PERFORMANCE INDICATOR FORMS (PIF)

The Performance Indicator Forms (PIFs) 1, 2, 3 were designed by the Volta Regional Health Administration for reporting and feedback purposes; and also to assist in data analysis at the health facility, Sub-district and district levels respectively in the Volta Region.

The PIF 1 (Appendix 4) gives a monthly summary of indicators based on out-patient attendance, in-patient care, staff service output rations, disease control, drugs and transport management.

The PIF 1 also enables individual health facilities to compare their performances against that of the other health facilities in the respective sub-districts.

The PIF 2 (appendix 5) is filled by the SDHT and also enables the SDHT to compare its performance against that of the other SDHTs in the district. The PIF 2 is used to calculate indicators of Maternal and Child Health Services, Disease Control, financial and transport management.

The PIF 3 (appendix 6) is filled by the DHMT and the source documents are the PIF 1 and PIF 2 from the health facilities and SDHTs in the District.

4.1.4 STORAGE AND RETRIEVAL

Only one out of the six (6) SDHT leaders keep photocopies of return forms received from the health facilities. The other five (5) SDHTs routinely re-submit all return forms received by the SDHTs (from the health facilities) to the DHMT (after calculating indicators for (PIF 2). No copies are however kept by the SDHTs.

One SDHT leader has no filing cabinet so she keeps SDHT documents together with copies of institutional data and other documents in a cupboard in which drugs are also stored.

The remaining five(5) SDHT leaders have files and filing cabinets belonging to the health facilities where they work. SDHT documents and health data are however kept in the same files and cabinets as the institutional data. It is however significant to note that in all the sub-districts, filing of documents are poorly done and this has affected the retrieval of data / documents. Admittedly, SDHT documents and health facility data can be stored in the same cabinet but in different files provided the filing system allows for easy retrieval of data or documents.

4.1.5 CHANNELING OF INFORMATION AND FEEDBACK

All the SDHTs submit returns received from the health facilities only to the DHMT. Unfortunately, however , apart from one SDHT which has received only one completed PIF 2 from the DHMT no other SDHT has received any form of feedback from the DHMT.

Two SDHT leaders admitted they do not send any feedback to the health facilities from which they receive health data.

Three of the SDHTs have sent feedbacks of only one completed PIF 1 each to the health facilities within the last seven (7) Months; with the 6th SDHT sending two PIF 1 forms to health facilities in its sub-district in the seven (7) months.

None of the SDHTs share health information with any other SDHT in the District.

4.1.6 UTILIZATION OF HEALTH SERVICE INFORMATION

- TRAINING

As noted earlier, none of the SDHT leaders have had any training in the utilization of health service information in particular and health information in general.

♦ AWARENESS OF USE OF HEALTH INFORMATION

On what the data / information received by the SDHT can be used for, one SDHT leader said she was not sure of what it can be used for.

Uses of health service data / informations mentioned by the five (5) remaining SDHT leaders are as follows

- For planning health education (4 respondents)
- To identify top ten (10) diseases (1 respondent)
- For retrospective performance assessment(2 respondents).

- WHAT SUB-DISTRICT HEALTH DATA / INFORMATION IS ACTUALLY USED FOR:

All the 6 SDHT leaders admitted that the health data/information received from the health facilities in the respective SDs are hardly utilized by the SDHTs but mostly passed on to the DHMT. Copies of the returns are not even kept by five (5) of the SDHTs. Interestingly five out of the six SDHT leaders stated emphatically that they did not know what the DHMT uses the health data / information the SDHTs transmit to it (DHMT) for. The sixth respondent said "it is possibly used by the DHMT for general planning"

4.1.7 AVAILABILITY OF DOCUMENTS/RECORDS.

All 6 SDHTs have the folowing documents.

- Annual reports
- Action plans
- Minutes of SDHT meetings
- Sub-district Profile (1996)

None of the 6 SDHTs has any of the following documents

- Activity Reports
- Checklists
- Other sub-districts annual reports
- The DHMT's annual reports

It is significant to note the following;

- The annual reports contain very scanty health service information and are often not based on data collated by the SDHTs but more weighted by health service data from the SDHT leaders' health facilities.

- The action plans are not drawn based on health service information but mostly on the views of SDHT members and suggestions from the DHMT and other higher levels. The SDHT leaders claim the action plans they draw are mere paper work and are never implemented because funds are not released to the SDHTs by the DHMT for the implementation of the plans.

4.2 SECTION B: SUB-DISTRICT HEALTH FACILITIES

4.2.1 TRAINING IN DATA COLLECTION/HEALTH INFORMATION UTILIZATION

TABLE 1 :TRAINING IN DATA COLLECTION/HEALTH INFORMATION UTILIZATION

	YES	NO	TOTAL
TRAINING IN DATA COLLECTION	11	1	12
TRAINING IN INFO. UTILIZATION	0	12	12

Only one respondent did not have any training in health data collection and none of the 12 respondents had any training in information utilization.[Table 1]

4.2.2 STAFF AND DATA COLLECTION

TABLE 2 : PERCENTAGE OF STAFF INVOLVED IN DATA COLLECTION:

HEALTH FACILITY	TOTAL No. OF STAFF	STAFF COLLECTING DATA	PERCENTAGE OF STAFF COLLECTING DATA	No. OF DATA COLLECTING TOOLS
1	13	12	92.3	25
2	3	3	100.0	23
3	5	5	100.0	23
4	3	3	100.0	23
5	5	3	60.0	24
6	13	6	46.2	25
7	55	5	100.0	24
8	7	4	57.1	24
9	7	3	42.9	23
10	10	6	60.0	25
11	6	4	66.7	23
12	12	10	83.3	25
ALL FACILTIES	89	64	71.9	24

The total number staff per facility range from 3 to 13 with the number of staff involved in data collection at the facility ranging from 3 to 12. The percentage of staff of a facility involved in data collection range from 46.2% to 100.0% with an average of 71.9%. The number of data collection tools used per facility range from 23 to 25.[Table 2]

TABLE 3 : CATEGORIES OF STAFF INVOLVED IN DATA COLLECTION

CATEGORY OF STAFF	FREQUENCY	PERCENTAGE
Medical Assistant	2	3.2
Nursing Officer	1	1.6
Staff Midwife	4	6.5
Midwife	4	6.5
Sen. Enrolled Nurse	7	11.3
Enrolled Nurse	4	6.5
Comm. Health Nurse	16	25.8
Lab. Technician	2	3.2
Sen. Tech. Officer	1	1.6
Technical Officer	1	1.6
Sen. Field Technician	1	1.6
Field Technician	1	1.6
Med. Records Asst.	9	14.5
Orderly	9	14.5
TOTAL	**62**	**100.0**

It is evident from the results that about 14 different categories/levels of staff ranging from orderlies to Medical Assistants are involved in data collection at the sub-district health facilities. [Table 3]

This study however did not delve into whether all the various categories/levels or staff have had training in data collection and utilization.

PROBLEMS FILLING FORMS

All the respondents said none of their staff have problems filling forms and collecting data. Pressed further to explain why they think this is so, they explained that since they have not received any negative feedback from the SDHT or DHMT indicating that data has been wrongly collected or submitted, they assume their staff are doing well. Moreover, they have not received any complaints from their staff to the effect that they have problems with data collection or filling of forms.

4.2.3 STORAGE AND RETRIEVAL:

All the 12 health facilities keep their data in files and notebooks. Unfortunately, three of the facilities do not have filing cabinets and therefore keep their data in cupboards together with their drug supplies. The other nine (9) health facilities have filing cabinets for their data. It is important to note that filing of data is poorly done and stored in a disordered manner. This makes the retrieval of data very difficult.

All the 12 facilities have copies of data collected at their respective facilities which are transmitted to the SDHTs and other higher levels.

4.2.4 USEFULNESS OF FACILITY HEALTH DATA

Asked whether the health data collected at their respective health facilities is of any use to the various levels of the MOH (from the health facility to the MOH headquarters), one respondent said No, except at the

regional level from where it is used for monitoring drug use at the facility levels.

The other respondents however said they believe the data/information collected at their respective facilities are of use to the various levels of MOH, and below are some of their responses:-

(i) at the facility level
- Yes, but not sure of what it can be used for (1 respondent)
- For record keeping (1 respondent)
- For retrospective performance assessment (5 respondents)
- For handing over purposes (1 respondent)
- For research (1 respondent)
- For requisition of drugs (1 respondent)

(ii) at the SD level (SDHT):
- For filling PIF 2 (2 respondents)
- To prepare an action plan (1 respondent)
- Not too sure (3 respondents)
- To plan for sub-district (2 respondents)
- For vaccine distribution (1 respondents)
- For comparison with data from other sub-districts (1 respondent)
- For transmission to DHMT and Regional levels (1 respondent)

(iii) at the District level (DHMT).
- Not sure (6 respondents)
- For vaccine distribution (1 respondent)
- For compiling reports (1 respondent)

- For comparison with data from other districts (1 respondent)

(iv) at the Regional and National levels:

- It's useful but not sure about extent of usefulness (4 respondents)
- For planning health programmes for Ghana (1 respondent)
- For ordering drugs for the region (1 respondent)
- For drug supply control by the Regional Medical Stores (2 respondents)
- For disease control (2 respondents)
- "Compiling reports to know how the work is being done for them (MOH)" (1 respondent)
- For comparison with data from other regions.

4.2.5 CHANNELING OF DATA AND FEEDBACK:

2 respondents from the same sub-district said all return forms from their health facilities are submitted directly to the SDHT for onward transmission to the DHMT and other higher levels.

The remaining 10 respondents said Monthly Family Planning Reporting Forms, (EPI) Immunization Monthly Returns and Midwives Monthly Returns are submitted in a vertical manner directly to the District MCH unit whereas the remaining return forms are submitted directly to the SDHT for onward transmission to the DHMT and other higher levels.

8 of the 12 respondents said they never received any feedback from the SDHTs whereas 2 respondents received feedback in the forms of PIF 1 (2 times in the past seven months while 2 others received only one PIF each

within the 7 months period. None of the 12 respondents received any feedback directly or indirectly from the DHMT.

4.2.6 UTILIZATION OF HEALTH SERVICE INFORMATION

None of the respondents has been trained in information utilization.
On what health data collected can generally be used for, the following responses were elicited:

- Drug requisition
- Disease surveillance
- Research
- Retrospective health facility performance assessment
- Monitoring drug use
- Not sure what health information can be used for.

On what health service data collected at their respective health facilities are actually used for, one respondent said "it is used for retrospective performance assessment of the health facility." All the other eleven respondents said the data they collect are not used. One respondent explained that she did not know how to use the data collected whilst another respondent said she did not know she was expected to use the collected data.

All the 12 respondents said most managerial decisions they take are based on their personal experiences and not on health information. Consequently they believe the best managerial decisions they have taken are based on their personal experiences.

9 of the respondents said they did not know to what use the DHMT puts the health data they submit to it (through the SDHTs).

The 3 other respondents said the DHMT uses the data submitted to them for:-

- Compilation of reports
- planning health programmes
- Revenue assessment and retrospective performance assessment.

All the respondents said they carry out health education in their respective catchment areas but the topics chosen for the programmes are based mainly on what "instructions they receive from above".

One respondent however said she chooses her topics based on "current health issues" she hears on the radio.

4.3 DISCUSSION OF FINDINGS

INTRODUCTION

The overall objective of the management information system in Ghana, as indicated by the MOH, is to facilitate decisions at all levels that will improve the quality and coverage of health care services. Also, all levels have the responsibility of converting the raw health service data into information (indicators) for regular presentation and discussions at the respective levels.

It is, however, significant to note that the MOH is still in the process of selecting the most appropriate indicators to serve as tools for monitoring health system performance.[24]

4.3.1 BACKGROUND OF RESPONDENTS

The professional status and rank is a reflection of the educational background and professional experience of the respondents. As noted by Aryee et al (1992), "the educational level of a worker is undoubtedly an important factor in determing his or her ability to make accurate and meaningful returns".

The background of staff required to manage data must therefore be taken into consideration in the designing of information training programmes and the assignment of information management responsibilities.

4.3.2 TRAINING IN DATA COLLECTION AND INFORMATION UTILIZATION

All the SDHT leaders and HOFs interviewed (except one HOF) admitted being trained in data collection and have had an in-service training within the last six months. This is very commendable. Regular in-service training and effective supervision must be encouraged to ensure the collection of high quality health data.

Also considering the calibre of staff directly responsible for data collection, especially at the facility level, it will be very relevant to broaden training programmes to cover all those involved with the data collection.

Unfortunately, none of the SDHT leaders and HOFs has been trained in information utilization. This is likely to immensely affect their abilities and capabilities to utilise collected data and can hamper effective health service delivery and management.

There is the need for immediate training in information utilization for these officers as part of their training for management of health service. Training in information utilization can also be effectively combined with training in data collection. Even for those involved in only data collection (but not its utilization,) it can create in them the awareness of the importance of the data they collect thereby motivating them to make the effort to collect accurate and meaningful data.

4.3.3 SOURCES OF HEALTH DATA

Prior to the establishment of the Sub-District Health Systems (SDHS), it was realised that service management and coverage data ignored, to a large extent, a host of other providers (of orthodox or traditional persuations) who are probably more widely dispersed and in close link with communities than MOH units. This created a situation of a service biased toward providing MOH set tasks rather than responding to community needs.

Therefore, in establishing the SDHTs, it was envisaged that the SDHTs would identify other service providers (private or traditional) in their zone and actually collect data from all service providers in the zone. This unfortunate situation has however not changed much, as revealed by this study, since the bulk of health service data collected by the facilities and SDHTs are from MOH facilities and only a few private maternity homes and mission clinics. Data is not collected/received from level A workers, private clinics and traditional health institutions.

The narrow scope of health service data being collected can lead to incompleteness of data collated for analysis and utilization.

As stated earlier, the needs of the larger community who do not utilize the MOH facilities are being consequently ignored; especially in sub-districts where the number of MOH facilities are few, non-existent or poorly patronised. To address this problem, there will be the need to re-design some of the reporting forms to include relevant omitted data and also to encourage the HOFs and SDHTs to broaden their programmes and activities to assess, identify and repond to community needs.

It is also clear from this study that even though most of the SDHT leaders believe that information on the health status of non-users of MOH facilities (in their respective sub-districts) is important to the SDHT, they (SDHT leaders) do not know what relevant information to collect or even how to go about colecting the information.

This problem can be addressed to a higher degree by providing relevant training, materials and funds to the SDHTs.

4.3.4 DATA COLLATION AND ANALYSIS

An SDHT is expected to have one of its members, other than the leader, as a Data Organiser/Information Officer. However, it is evident from this study that the SDHT leaders in the Ho District have been responsible for data collation in their respective sub-districts.

This study reveals that it is only in one sub-district that data is analysed regularly by the entire SDHT. In the other 5 sub-districts, only the SDHT leaders are responsible for data analysis (without the involvement of the other SDHT members). One of the SDHT leaders, in an obviously disturbed mood, remarked during the interview "my main headache now is who to calculate the PIF 2 indicators when I proceed on leave shortly; since none of the other SDHT members know how to calculate the

indicators". This is a clear pointer to the fact that data analysis by the entire SDHT is a positive exercise and must be encouraged. Regular data analysis by the entire SDHT can also promote good teamwork and ensure continuity of work in general and data analysis in particular; even in the absence of the SDHT leader.

The introduction from January this year (1998) of PIF 1,2 and 3 by the Volta Regional Health Administration, for the calculation of selected indicators at the facility, sub-district and district levels respectively has also greatly enhanced data analysis at these levels.

A study carried out by Senaya L. K. last year in the Ho District showed that;-

i) The SDHTs did not receive data from the various health facilities in the sub-districts,

ii) There was nobody responsible for data collation in the sub-districts,

iii) There was no evidence of sub-district data analysis.

The findings of this present study therefore show that there has been a marked improvement in the receipt, collation and analysis of data by the SDHT.

4.3.5 STORAGE AND RETRIEVAL

There is generally poor filing and storage of health records at the sub-district level in the Ho District.

A visit to the District Health Administration (DHA) revealed that there were at least 20 filing cabinets just packed in the District stores for several months now while some health facilities and SDHTs do not have filing cabinets and , therefore, keep records together with drugs in the only available cupboards. Those who even have filing cabinets filed their

records wrongly and also stored them in a disordered manner. Some records were even not kept at all. For example, all return forms completed at the facility level are in triplicates. One copy is kept by the facility and the other two copies are submitted to the SDHT for onward transmission to the District and Regional levels. No provision has therefore be made for the SDHT to have copies of the returns.

The return forms must therefore be completed in quadruplicates or provision must be made for making of photocopies so that the SDHTs can also have copies for use.

Apart from one SDHT, the rest (five) do not keep copies of data collected from the health facilities in the sub-districts. This can present problems when it comes to report writing and planning and can also lead to decision making based on intuition rather than the use of information.

The available SDHT records are also not kept separately but mixed up with the health facility records where the SDHT leader is based. There is the need for a training programme for SDHTs, HOFs and information officers on records filing and storage procedures.

The filing cabinets presently being held up in the DHA stores must be released for use by the health facilities and SDHTs .

4.3.6 CHANNELING OF DATA AND FEEDBACK

Senaya [25] noted in his study last year in the Ho District , that health information returns were sent routinely to the DHMT by individual health institutions without first passing through the SDHTS. Findings in this study however show that apart from the MCH/FP units which still send returns directly to the District MCH unit , all other returns from

the health institutions are first sent to the SDHTS for analysis before being transmitted to the DHMT .This shows a marked improvement in the channeling of health information returns in the Ho District .

The by-passing of the SDHTs with respect to the submission of MCH/FP data will lead to the SDHTs not receiving vital informations for analysis and subsequent utilization. The full integration of the various health service delivery units and the channeling of ALL health information returns from the health facilities through the SDHTS to the DHMT must be vigorously pursued.

As noted by Schware (1988),[16] the success of any management information system is heavily dependent on feedback of data collected. This gives an indication of the magnitude of importance of feedback in information management. This study reveals that there is very poor feedback from the district to the sub-district level and from the sub-district to the facility level. The Performance Indicator Form (PIF) concept introduced by the Volta Regional Health Administration (VRHA) if well implemented can enhance feedback. Also , to improve the feedback process , it will be helpful for the DHMT and SDHTs to make copies of their activity reports, quarterly and annual reports available to the SDHTs and health facilities respectively. The findings of this study supports the observation by Lippeveld et al (1997)[9] that most health workers deliver vast amounts of information without receiving feedback.

As noted by Bertrand (1988),[19] if the worker does not receive immediate feedback on information collected , motivation will be low and the quality of information will suffer.

The critical issue of feedback needs to be seriously and urgently addressed.

4.3.7 UTILIZATION OF HEALTH SERVICE INFORMATION

Findings of this study is in line with observations made by Aryee et al (1992)[23] in their study in the Dangme East and Dangme West Districts and by Prendergast (1993)[4] in the Akwapim North District , that there is some awareness of the importance and use of collected data at the sub-district level. Unfortunately, this awareness has not been practicalized by being translated into utilization of information. The obvious result is the under-utilization of information by HOFs and SDHTs in the Ho District despite the vast amounts of data being collected .

Lack of training and support are the main possible causes of the poor/non-utilization of health information at the sub-district level in the Ho District. Improper channeling of information, non-storage of relevant information and poor supervision may be contributing factors. HOFs and SDHTs must be adequately trained, assisted and encouraged to utilize information at their respective levels .

Due to poor feedback , most HOFs and SDHT leaders do not even know what health information transmitted to the DHMT is actually used for. Effective feedback can eliminate this ignorance and enhance the working relationship between the district and the sub-district levels, besides improving the quality of information gathered at the lower levels. The use to which health information can be put are numerous and some of the avenues (for information utilization) which can be explored at the sub-district level include:

- Planning and decision making
- Monitoring and Evaluation
- Advocacy
- Health education and promotion

- Networking and linkage forging
- Feedback
- Report writing
- Research

CHAPTER FIVE

5.0 CONCLUSIONS

The major findings in this study are as follows :

a) There is under-utilization of health service information at the sub-district level in the Ho District.

b) The main identifiable related factor in the under-utilization of health service information, in the Ho District, is lack of training in information utilization.

c) A vast amount of health service data is collected by sub-district MOH facilities in the Ho District. This however largely excludes data from other service providers (i.e Level A workers, non-MOH orthodox and traditional practitioners) in the district.

d) There is poor filing and storage of health data at the sub-district level in the Ho District.

e) MCH/FP returns forms are submitted in a vertical manner from the individual facilities directly to the district MCH division whereas all other returns are submitted in an integrated manner through the SDHTs to the DHMT.

f) Compared to last year (1997), there has been a marked improvement in the collection , collation and analysis of health service data by the SDHTs. Most of the SDHT members (besides the leaders), are however not involved in data collation and analysis and most of the

SDHTs do not keep copies of health data channeled through them for collation and submission to the DHMT.

g) There is no sharing of health information between the SDHTs.

h) There is poor feedback from the DHMT to the SDHTs and from the SDHTs to the health facilities.

I) The introduction of the PIFs, by the VRHA for use at the facility, Sub-district and district levels, has to some extent contributed to information management at the District level and below in terms of data analysis, performance assessment and feedback.

5.1 RECOMMENDATIONS

The following recommendations are made to help improve the handling and utilization of health service information at the sub-district level in the Ho district in particular and in the Country as a whole.

a) A comprehensive training programme on data analysis, filing, storage and utilization should be organised for HOFs, SDHTs and information offficers at the Sub-district level by the DHMT or RHA to complement the data collection training programmes. This should be followed up with regular in-service training and the necessary support and supervision.

b) Simple booklets with practical illustrations on the various ways data can be utilized in the sub-districts should be produced (by the RHA or MOH headquarters) and made available to HOFs and SDHTs.

c) It is recommended that the channeling of MCH/FP data in a vertical manner be discontinued and ALL health data be channeled in an integrated manner through the SDHTs to the DHMT .

The necessary logistics must be made available to the SDHTs to enable them keep copies of data collected and collated from the health facilities .

d) SDHT leaders must involve the other members of the SDHT in the analysis and utilization of health service data .

e) SDHTs must liase with other service providers in the sub-district (i.e level A workers, private orthodox and traditional practitioners) to facilitate the collection of relevant health data from them.

f) The SDHTs must be encouraged to share information (in the form of annual reports, activity reports, sub-district health plans etc.) with other SDHTs and health related and influencing agencies like , Ghana Water and Sewerage Corporation, Ghana Education Service, Town Development Committees etc etc .

This will enable the SDHTs learn from each other and improve inter-sectoral collaboration.

g) The critical issue of feedback must be seriously addressed. DHMTs and SDHTs must be encouraged to send regular feedback to the SDHTS and facilities respectively . The DHMT ,for example, can make copies of its activity reports, quarterly and annual reports, completed PIFs etc . available to the various SDHTs.

h) The introduction of PIFs by the VRHA is commendable. It is however recommended that the full impact of the PIFs on data analysis, performance assessment and feedback be assessed and if very positive, be recommended for use by the other regions which do not as yet have these tools.

5.2 DISSEMINATION AND UTILIZATION OF RESULTS

The provisional results of this study was discussed with the Ho DHMT at a workshop in Ho on the 7th of August , 1998.

Copies of the findings and recommendations will be made available to the HOFs and SDHTs in the Ho Districts .

Copies of the full report of the study will also be made available to the Ho DHMT , the Volta Regional Director of Health Services (RDHS) and the Ghana School of Public Health (GSPH), University of Ghana, Legon..

It is hoped that the findings of this study and the related recommendations will go a long way to improve the handing and utilization of health service information at the sub-district level and also to facilitate bottom-up planning for health service delivery and management.

It is also hoped that it will be useful to health planners and manager.
It will be exciting if somebody identifies a grey area unearthed by this work, for a future study .

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APPENDIX I

INTERVIEW GUIDE (SDHT LEADERS)

DATE OF INTERVIEW:.....

SUB-DISTRICT:.....

1. Respondent's professional status?
   .....

2. HoW long have you been an SDHTLeader?
   (Years & Months):.....

3. Have you had any training in the filling of forms/data collection?
   .....

4. Have you had any training in the use (utilization) of health information?
   Yes/No: if yes probe for date, duration.

5. Do you receive data directly from Ministry of Health (MOH) facilities in your sub-district?

6. Do you receive data from non-MOH health facilities in the sub-district?.

7. Do you receive data from Level A health workers [e.g. TBAs, village health workers, guinea worm volunteers etc] in your sub-district?

8. Who is responsible for collation of data received by the SDHT?

9. Do you have calculators for the analysis of data?

.....

10. Who is responsible for analyzing data received by the SDHT? [Probe - individuals or as a team]..... .....

11. How is health information stored by the SDHT? Probe: Files, cainets etc, together with institutional data etc.

12. Does the SDHT submit returns only to the DHMT? If no, specify

.....

13. Do you receive feedback on information submitted to the DHMT/other higher levels? [evidence]

.....

14. Do you share health information with other sub-districts within the Ho District? - if yes, specify information shared.

15. What can health information gathered by the SDHT be used for?

.....

16. What is the health information gathered by the SDHT used for?

.....

17. Is information on the health status or health needs of those who do not use your health facilities important to the SDHT?

.....

18. What is the information you transmit to the DHMT used for?

.....

19. Does the SDHT give any feedback to the health facilities?

[evidence] .....

20. Do you have the following documents?

(a) Annual reports - Yes/No

(b) Activity/Intervention Reports - Yes/No

(c) Action Plan - Yes/No

(d) Other sub-districts Annual Reports - Yes/No

(e) DHMT Annual Reports - Yes/No

(f) Minutes of meetings - Yes/No

(g) Sub-district profile - Yes/No.

APPENDIX 2

INTERVIEW GUIDE [HEADS OF FACILITIES]

DATE OF INTERVIEW:.....

Sub-District:.....

Health Facility:.....

1. Respondent's Professional Status:.....

2. How long have you been the head of this facility? [Years & Months]
.....

3. Have you had any training in the filling of forms/data collection? Yes/No; if yes probe for date, duration
.....

4. Have you had any training in the use [utilization]of health information?
Yes/No if yes probe for date duration.
.....

5. How many data collection tools are used in your facility? [identify from checklist]
.....

6. Who is [are] responsible for data collection/filling forms in your facility?

- Number of staff collecting data:.....
- Category of Staff collecting data:.....
- Total Number of Staff in facility:.....

7. How is the data/information stored? [files, notebooks, cabinets, computers etc]

8. Does any of your staff haven problems in filling any of the data collection form?
   - Yes - category of staff and type of form
   - No
   - Don't know

9. In your view, is data collected from your facility of any use to
   [a] You (as head of faculty) If yes specify
   [b] The SDHT? " " "
   [c] The DHMT? " " "
   [d] Any other person/officer? If yes specify.....

10. To who is data collected at your facility directly transmitted to? [list and specify]

11. Do you receive any feedback? If yes, in what form and how often?

12. Do you keep copies of data collected at your facility? [evidence]

13. In managing the health facility;
    (1) most of the decision I take are based on:
        [a] experience
        [b] intuition
        [c] health data/information

14. In managing the health facility; the best decisions I have taken are based on:

    [a] experience

    [b] intuition

    [c] health data/information

15. What can the information collected at your facility be used for?

    - Don't know
    - Not too sure
    - I know [specify]

16. What is the data collected in your facility used for?

    (Please specify).....

17. What is the data/information you transit to the SDHT used for?

    .....

18. What is the data/information transmitted to the DHMT used for?

19. Do you receive any feedback?

    [evidence].....

APPENDIX 3

CHECKLIST

DATA COLLECTION TOOLS

01. Identity Card
02. Statement of Out-Patients
03. Out-Patients Department Card
04. Out Patients Tally Sheet [Morbidity Tally Sheet]
05. Monthly Out-Patients Morbidity Returns
06. Out-Patient Register
07. National Register
08. Combined Antenatal and Post-Natal Card
09. CD1 [Communicable Diseases Returns]
010. Road to Health Chart
011. Laboratory records book
012. Antenatal Care Register
013. Midwives Case Book
014. Midwives Monthly Returns
015. Family Planning Client Card
016. Monthly Family Planning Reporting Forms
017. Immunization Form [Tally Sheet]
018. (EPI) Immunization Monthly Returns
019. ...Epidemiology Surveillance Report form
020. Essential Drugs Form: (VR)
021. Guinea Worm Summary Report Form
022. Revenue Returns on Hospital Fees
023. TBA Return Forms
024. Performance Indicator Form 1 (VR)
025. Performance Indicator Form 2 (VR)
026. Performance Indicator Form 3 (VR)

027. Child Welfare Clinic Register
028. Drugs Ledger
029. Prescription analysis Book
030. MCH/FP Quarterly Returns Form
031. (User-Fees) Exemptions form
032. Others: (specify)

APPENDIX 4

VOLTA REGIONAL HEALTH ADMINISTRATI
PERFORMANCE INDICATORS FORM –

INSTITUTION: MONTH:

PROGRAMME	INDICATOR	FORMULA	INST.–1	INST.–2	INST.–3	INST.–4
OUT–PATIENT	Avg. No. of Patients per day [Workload]	Total no. of attendances & re–attendances / Total number of days				
IN–PATIENT	Bed Occupancy [by department]	Total Patient Days X 100 / Available Bed Days				
CARE	Ward/Department Mortality Rate	Number of deaths in ward/department / Number of admissions				
STAFF SERVICE OUTPUT RATIOS	Inpatient: Doctor Ratio	No. of Admissions / No. of Doctors				
	Outpatient: Prescriber Ratio	Total No. of Outpatient Attendances / No. of Clinicians [Doctors & M.A's]				
	In–patient : Nurses Ratio	Total No. of In–patient admitted / No. of Nurses				
	Immunization : CHN Ratio	Total No. of Immunizations given / No. of Community Health Nurses				
DISEASE CONTROL	Proportion of New PTB Cases with Smear Positive	No. of New PTB cases with Pos.Smear X 100 / No. of New Cases of Pulmonary Tuberculosis				
	Default Rate of Positive PTB Smears	No. Pos. Smear of PTB pts. Defit. in S'T X 100 / Tot.No. of Pos.PTB Smear Starting Treatment				
	% of New Cases Multibacellary	No. of New cases of Multibacellary X 100 / Tot.No.of Lep. Cases[Pauci & Multi–Bacellary]				
	No. of Guinea Worm Cases	Tot. No. of Guinea Worm [Prevalence]				
	No. of Cases of Diabetes Mellitus	No. of Cases of Diabetes Mellitus Reported in a Period				
	No. of Cases of Hypertension	No. of Cases of Hypertension Reported in a Period				
	No. of Cases of Stroke	No.of Stroke cases reported in a Period				
	No. of Cases of Breast Cancer	No. of cases of Breast Cancer Reported in a Period				
PHARMACY	Proportion items purchased outside Medical Stores	Cost of items purchased outside RMS X 100 / Cost of all items purchased				
	Cost Recovery proportion	Cost collected from drugs sales X 100 / Amount of drugs given out				
TRANSPORT	Maintenance Cost per Vehicle	Amount of monies spent on vehicle / Maintenance Cost per Vehicle				

NAME OF REPORTING OFFICER..... SIGN:.....

APPENDIX 5

VOLTA REGIONAL HEALTH ADMINISTRATI
PERFORMANCE INDICATORS FORM –

SUB-DISTRICT: MONTH:

PROGRAMME	INDICATOR	FORMULA	S-DIST-1	S-DIST-2	S-DIST-3	S-DIST-4	S-
MATERNAL HEALTH	% of Expected Pregnancy Receiving Care	Total Antenatal Registrants X 100 / Expected Pregnancies					
	TT Vaccination Coverage	No. of Preg. Women Receiving 2 Doses of TT x 100 / Expected No. of Pregnancies					
	Supervised Delivery Coverage	No. of Supervised Deliveries X 100 / Expected No. of Deliveries					
	Absolute Post Natal Coverage	No. of PNC Registrants X 100 / Expected No. of Deliveries					
CHILD HEALTH	Child Welfare Clinic Coverage	No. of CWC Registrants 0–23mths X 100 / No. of Children 0–23 mths.					
	BCG Coverage	No. of Children given BCG Vaccine X 100 / No. of Children 0–11 mths.					
	DPT–3 Coverage	No. of Children given DPT – 3 X 100 / No. of Children 0–11 mths.					
	Immunization Dropout Rate	DPT–1 Cov. – DPT–3 Cov. X 100 / DPT–1 Coverage					
DISEASE CONTROL	Measles Case	No. of Cases of Measles Reported					
	Polio	No. of Cases of Polio. Reported					
	No. of PTB Cases	No. of Pulmonary Tuberculosis cases Rptd					
	Proportion of Out–Patient Case Due to Malaria	No. of Malaria Cases Rptd. at OPD X 100 / Total No. of OPD New Cases Reported					
	No. of Diarrhea Diseases	No. of Cases of Diarrl. diseases Reported					
	% of Institutions with Functional ORT Corners	No. of Inst. with Functional ORT Corners X 100 / Number of Institutions in the Sub–Dist./District					
	No. of Cases of Hypertensio	No. of Hypertension Reported in a Period					
	Investigation proportion [OPD]	No.of OPD Pts. with Lab. Investigations / Number of OPD Patients					
	% of X–rays [by dept.]	Number of x–rays requested / Number of patients					
FINANCIAL MANAGEMENT	% Consultation fees received	Amt. of consultation fees collected x 100 / Amt. of Consult. fees exptd.[from No.of Pts]					
	% Laboratory Fees received	Amt. of laboratory fees collected x 100 / Amt. of Lab. fees exptd. from no. Lab. tests					
	Amount of in–patient fees	Total amount of Inpatient Fees					
	% Utilization of vehicle [by facility]	Number of days vehicle utilized X 100 / Number of days vehicle available					
	Ave. mileage per liter per vehicle	Number of kilometres traveled in month / Number of litres of fuel utilized					

NAME OF REPORTING OFFICER:..... SIGN:.....

APPENDIX 6

VOLTA REGIONAL HEALTH ADMINISTRATION
PERFORMANCE INDICATORS FORM – 3

DISTRICT: MONTH:

PROGRAMME	INDICATOR	FORMULA	KRACHI	NKWANTA	KADJEBI	JASIKAN	HOHOE	KPANDO	E
OUT–PATIENT	Avg. No. of Patients per day [Work Load]	Total No. of attendances & re–attendances / Total number of days							
	Investigation proportion [OPD]	No. of OPD pts. with Lab. investigations / Number of OPD patients							
	Proportion of Out–Patient Cases Due to Malaria	No. of Malaria Cases Rptd. at OPD X 100 / Total No. of OPD New Cases Reported							
DISEASE CONTROL	Measles Cases	Number of cases of Measles Reported							
	A. F. P.	Number of cases of AFP Reported							
	Diarrhea Disease	Number of cases of Diarrhea Disease Reported							
	No. of Guinea Worm Cases detected	Total No. of Guinea Worm Cases detected [Prevalence]							
MATERNAL HEALTH	% of Expected Pregnancies Receiving Care	Total Antenatal Registrants X 100 / Expected Pregnancies							
	TT Vaccination Coverage	No. of Preg.Women Receiving 2 doses TT X 100 / Expected Number of Pregnancies							
	Supervised Delivery Coverage	No. of Supervised Deliveries x 100 / Expected Number of Deliveries							
	% of Institutions with Functional ORT Corners	No. of Inst. with Functional ORT Corners X 100 / No. of Institutions in the District/Region							
	Absolute Post Natal Coverage	No. of PNC Registrants X 100 / Expected Number of Deliveries							
CHILD HEALTH	Child Welfare Clinic [cwc] Coverage	No. of CWC Registrants 0–23mths x 100 / Number of Children 0–23 months							
	Measles Coverage	No. of Children given Measles Vaccine X 100 / Number of Children 0–11 mths							
	B C G Coverage	No. of Children given BCG Vaccine X 100 / Number of Children 0–11 mths							
	DPT – 3 Coverage	No. of Children given DPT–3 Vaccine X 100 / Number of Children 0–11 mths							
	Immunization Dropout Rate	DPT–1 Coverage – DPT–3 Coverage X 100 / DPT–1 Coverage							
PHARMACY	Cost Recovery proportion	Cost collected from drugs sales X 100 / Actual Cost of drugs given out							
FINANCE	% Consultation Fees Received	Amount of consultation fees collected X 100 / Amt. of consultation fees expected [from no. of pts]							

DINDIMIS NAME OF REPORTING OFFICER: ..... SIGN: .....