

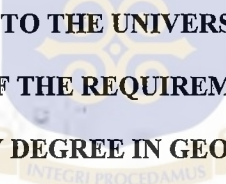
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**SPATIAL DIMENSIONS OF CARE FOR PEOPLE LIVING WITH  
HIV/AIDS IN NEW JUABEN AND MANYA KROBO DISTRICTS**

**BY**

**ISAAC KWASI HENYO**

The logo of the University of Ghana is a shield-shaped emblem. The top section is blue with three golden stalks of grain. The middle section is white with a golden sun-like symbol. The bottom section is blue with a golden banner that reads "INTEGRI PROCEDAMUS".

**THIS THESIS IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON, IN  
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MASTERS OF PHILOSOPHY DEGREE IN GEOGRAPHY AND RESOURCE  
DEVELOPMENT**

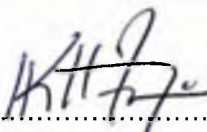
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**DECLARATION**

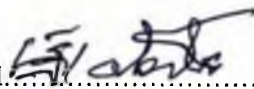
I, ISAAC KWASI HENYO, do hereby declare that this thesis is a product of my own research, supervised by Professor J.S. Nabila and Professor E.A. Gyasi. The thesis has neither in part nor in a whole been presented elsewhere for another degree. All references cited are duly acknowledged.

Signed.....  


Isaac Kwasi Henyo

(Student)

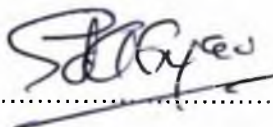
Date.....  
1st October 2007

Signed.....  


(Professor J. S. Nabila)

Principal supervisor

Date.....  
1st Oct. 2007

Signed.....  


(Professor E.A. Gyasi)

Supervisor

Date.....  
22 Oct. 2007



## **DEDICATION**

**Dedicated to Keli Boateng Henyo and Kwabena Amponsah Henyo.**



## ACKNOWLEDGEMENT

I ascribe praise and thanks to the Almighty God by whose grace I have been able to produce this material. I am sincerely grateful to my supervisors Professor J.S. Nabila and Professor E. A. Gyasi by whose guidance and direction I was able to carry out this project. I appreciate the help and support of the following people who contributed in diverse ways towards the project: Mr. Kwaku Amponsah of Adwinsa Publications, who helped in the printing of this material; Mrs. Grace Boateng Henyo, for her financial and moral support; the Matron and staff of the Voluntary Counseling and Testing Unit of St. Martin de Porres Hospital at Agomanya and St. Joseph's Hospital at Effiduase; and Mr. Isaac Acheampong of the Ministry of Health, Regional Office at Koforidua. I am again grateful to the lecturers of the Department of Geography and Resource Department, University of Ghana, as well as colleague students whose constructive criticisms and suggestions helped to give shape to this work.

## ABSTRACT

The study examined spatial dimensions of care for people living with HIV/AIDS in New Juaben and Manya Krobo Districts. Both qualitative and quantitative data were used. The research instruments included closed and open ended questionnaire as well as interview schedules and personal observation.

High prevalence rate of HIV/AIDS, limited care centres, and lack of financial and logistical support as well as stigmatization and discrimination were the major problems that necessitated this study. The barriers to care utilization were seen in the degree of availability, accessibility, affordability and acceptability of the health facilities.

Spatially, the two districts differed in terms of size, population and social as well as economic status. Though the Manya Krobo District is bigger in size and population than New Juaben District, the latter is more economically brisk. The main factors that influenced accessibility and utilization of health facilities were distance from place of residence to a health facility and the length of time spent at the facility to get treatment; geographical locations of the communities; the status of each community; the degree of social cohesion and differences in care practices.

The research established that the marital status of the married people did not so much prevent them from being infected. Some social factors that underlined the prevalence of the HIV prevalence rate included unemployment, multiple marriages, festivals and funeral celebrations, and level of awareness of HIV/AIDS. Health Service distribution in New Juaben District was better than in the Manya Krobo District. These facilities included hospitals, clinics, maternity homes, health centres, reproductive health centres, traditional healers and pharmaceutical services. Over 60.0 per cent of PLWHAs lived

beyond a distance of 5 km from the care centres, and over 70.0 per cent of the respondents boarded vehicles to the care centres and back to their houses. In spite of the inconveniences involved in getting to the care centres over 70.0 per cent did not want care centres to be sited in their neighborhood. More people in New Juaben covered longer distances to care centres than in Manya Krobo.

The differences in care delivery in the two districts were seen in the drugs used and contributions made by NGOs. More people in Manya Krobo, however, knew their HIV status than those in New Juaben. Again most PLWHAs in New Juaben covered longer distances to care centres, and therefore spent more time at the facilities than those in Manya Krobo. Also due to stronger social cohesion in Manya Krobo, as a result of family ties, more people living in the communities knew of others' HIV status than in New Juaben. This obviously has led to a higher rate of stigmatization.

To help PLWHAs spend their lives in dignity it is recommended among others, that much of the fund voted for HIV/AIDS programmes should be directed towards care provision for PLWHAs. There is the need to help those infected with HIV/AIDS to set up their personal small scale businesses in order to be self reliant. In a bid to reduce stigmatization, home-based care should be extended to cover other ailments and not to single out HIV/AIDS. Heads of communities should put in measures to discourage sex and alcoholism among the youth during funerals/wake keeping.

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**LIST OF ACRONYMS**

ANC.....	Anti Natal Care
ART.....	Antiretroviral Therapy
CASM.....	Centre for Socio-Medical Assistance
CBO.....	Community-Based Organization
CHAG.....	Christian Health Association of Ghana
CMV.....	Cytomegalovirus
CRM.....	Cryptococcal meningitis
DHMT.....	District Health Management Team
DZT.....	Zidovudine
FGD.....	Focus Group Discussion
FHI.....	Family Healy International
GAC.....	Ghana AIDS Commission
GDHS.....	Ghana Demographic Health Survey
HAART.....	Highly Active Antiretroviral Therapy
HIV/AIDS.....	Human Immune-deficiency Virus/Acquired Immune Deficiency Syndrome
KCH.....	Koforidua Central Hospital
MAC.....	Mycobacterium avium complex disease
MHA.....	Municipal Health Administration
MOH.....	Ministry of Health
MSF.....	Medisan San Francais
MTP.....	Medium Term Plan

NACP.....	National AIDS Control Programme
NNRTIs.....	Non-nucleoside reverse transcriptase inhibitors
NRTIs.....	Nucleoside reverse transcriptase inhibitors
PIs.....	Protease Inhibitors
PLWHAs.....	People Living with HIV/AIDS
SPSS.....	Statistical Programmes for Social Sciences
START.....	Sexually Transmitted and Antiretroviral Therapy
STD.....	Sexually Transmitted Infection
STI.....	Sexually Transmitted Infection
TASO.....	The AIDS Support Organization
TB.....	Tuberculosis
UNAIDS.....	United Nations AIDS
UNDP.....	United Nations Development Programme
VCT.....	Voluntary Counseling and Testing
WHO.....	World Health Organization

## CHAPTER ONE

### GENERAL INTRODUCTION

#### 1.1 BACKGROUND

The Human Immune-deficiency Virus (HIV)/Acquired Immune-Deficiency Syndrome (AIDS) pandemic is considered both biomedical and a development problem. HIV/AIDS is now a household name nationwide. Over 90.0 per cent males and females in Ghana have heard of the disease, and 96.5 per cent of all in Ghana know there is a way to avoid HIV/AIDS (GDHS 2003). It is now synonymous with the term killer disease. With this synonym it has attracted all the discrimination and labeling that a killer is supposed to attract. Since no cure has yet been found for the disease the activists of HIV/AIDS have much of their message and education based on prevention. In the early stages of the disease, little attention was given to care for people living with HIV/AIDS (PLWHAs). Much attention was directed towards education and prevention, and this has not changed very much. However, some attention is now being paid to care. There is the need to ascertain the effectiveness of care provision to PLWHAs in the New Juaben and Manya Krobo Districts where the study is concentrated. Ironically, most of the messages on prevention are packaged such that they give no hope to people living with HIV/AIDS (PLWHAs), but at the same time tend to tell those infected not to despair.

There is the need to curtail the spread of HIV/AIDS and reduce the cost of health care, as well as ensure that PLWHAs live their lives in dignity. This calls for promoting the formation of Associations of PLWHAs, which will help share the burden of care. It is on record that PLWHAs Associations have helped to dispel common misconceptions and have reinforced educational messages about what activities do not carry the risk of HIV

transmission. It is necessary to find out the role of Governmental as well as non-governmental organizations in the provision of care. Care centres and associations have also helped to create the environment necessary for HIV positive people to feel comfortably integrated into their communities. Their activities have also helped to reduce the stigma and discrimination and isolation that result from the infection (GAC, 2003).

There is the need to research into the factors that influence care provision and utilization one of which is distance to the facility. Some of the countries that have been hardest hit, notably Botswana, South Africa, Uganda and Zambia, have developed various means of caring for those infected. The same can be done in Ghana. Among the many factors that affect care delivery in many parts of the world are cultural values. Just as cultural values vary, care provision for PLWHAs vary from one locality to another.

The pandemic is a development problem because of its negative effects on socio-economic development of countries that have high prevalence rates. Those infected often lose their employment status or have their working hours reduced. This, in effect, reduces the level of productivity.

The notion of spatial dimension, in connection with this study, is about the differences in care provision as a result of the different geographical as well as socio-cultural factors in the two districts under the focus of the study. These include distance to care centres, pattern of distribution of health facilities, social cohesion among the population, status of the communities and health care practices. However, mention is also be made of striking similarities in the two districts.

## 1.2 Statement of the Problem

Studies conducted in the Eastern Region have shown that among the many factors that contribute to the spread of the HIV/AIDS menace, the most prevalent is unprotected heterosexual behaviour. Data revealed on the menace by the Regional Health Services showed that, for the year 2002 alone, the Manya/Yilo Krobo districts took the lead with a combined total of 634 cases; followed by New Juaben district with a total of 626. Kwaebibirem was third with 286, followed by Kwahu South district with a total of 229. The West Akim district recorded 30 cases and occupied the last place on the list. These are just clinical cases, and it is believed those who have not yet been diagnosed are in the majority. Out of these numbers from the Districts, only a small percentage sought care service. For instance, out of the total of 634 people who were diagnosed to be HIV positive, only 63 were on record as those who took treatment. A total of over 500 diagnosed patients could therefore, not be accounted for (MOH 2002). This is a problem. It raises the question of what is happening to the rest of the patients and other carriers. Again, the care units are constrained by a lot of factors, which should be addressed. Funds voted for HIV/AIDS campaigns are least directed to care units. This is evident in the constraints of the care centres. It is, therefore, difficult for those involved in the care activities to achieve their objectives. For instance, due to financial constraints, counseling sessions, which used to be held once in a week at the St. Joseph's Hospital, Koforidua is now held twice in a month. The provision of food and other medications, which are components of the care service, are now difficult to meet. The above problems can be summarized as follows:

- i. The Eastern Region has the highest percentage of PLWHAs in the country, 7.9 per cent.

- ii. Majority of those living with the disease do not seek treatment from the care centres.
- iii. The few care centres in the region are constrained by lack of both financial and logistical support.
- iv. Stigmatization and discrimination seem to be the major impediment to care delivery in the region.

### **1.3 Objectives of the Study**

The basic objective of this study is to find out the effectiveness of the care services and also, to provide a written document on how best the provision of care for PLWHAs can be done. The specific objectives are to:

1. Ascertain the effect of distance and some cultural practices on the HIV/AIDS care delivery at the Ministry of Health Care centers.
2. Find out the effect of HIV/AIDS on the work output of those infected.
3. Identify the differences in care service activities in the two Districts over time.
4. Find out the activities of some governmental and non-governmental organizations in the care delivery
5. Make recommendations to improve upon care delivery for PLWHAs

### **1.4 Propositions**

1. People living with HIV/AIDS would like to take treatment in care centres which are rather located some distance outside their areas of residence, where they are least known by their neighbours, than accessing care service in their immediate neighborhood. This is due to the stigma and discrimination which are attached to the disease.

2. People who have friends or relations living with HIV/AIDS will have a better attitude towards PLWHAs. This is because such people have been hard hit and might have had first hand experience of the situation.

### **1.5 The Study Area**

The study focuses on New Juaben and Manya Krobo Districts in the Eastern Region of Ghana (Fig. 1.1). The area is reputed to be currently leading in the prevalence rate of PLWHAs. The rate of increase has been continuous from a zero rating in the 1970s to the present rate of 8.5 percent in Koforidua. Statistics put forward by the Eastern Regional HIV/AIDS/STI Control Programme indicate a cumulative total of over 12,000 HIV positive cases from 1995-2002, the highest in the country in terms of regional rates.

The District Sentinel Surveillance report shows that the combined Districts of Manya and Yilo Krobo are leading with a total of 634 HIV positive people. This is followed by the New Juaben District with a total of 626, and Kwaebibirem with 286 as at January 1999 to November 2002. The high records of New Juaben can be attributed to the fact that it has the Regional hospital which has better health facilities than the other district hospitals. It therefore attracts more HIV/AIDS patients from neighboring districts. The case of Manya and Yilo can be attributed mainly to economic reasons. With the creation of the Volta Lake most inhabitants of the place are reported to have lost their agricultural lands to the lake and therefore migrated to La Cote D'Ivoire, from where they came with the disease.



### **1.5.1 New Juaben District**

The New Juaben District is a municipality in the Eastern Region of Ghana and Koforidua is the district as well as Regional capital. It is the smallest of the 15 districts in the Region in terms of land area. The district shares border with Akwapim North District in the south, Yilo Krobo District in the east and Suhum Kraboa Coaltar District in the west. The 2000 population census indicates a total population of 142,593 for the New Juaben District.

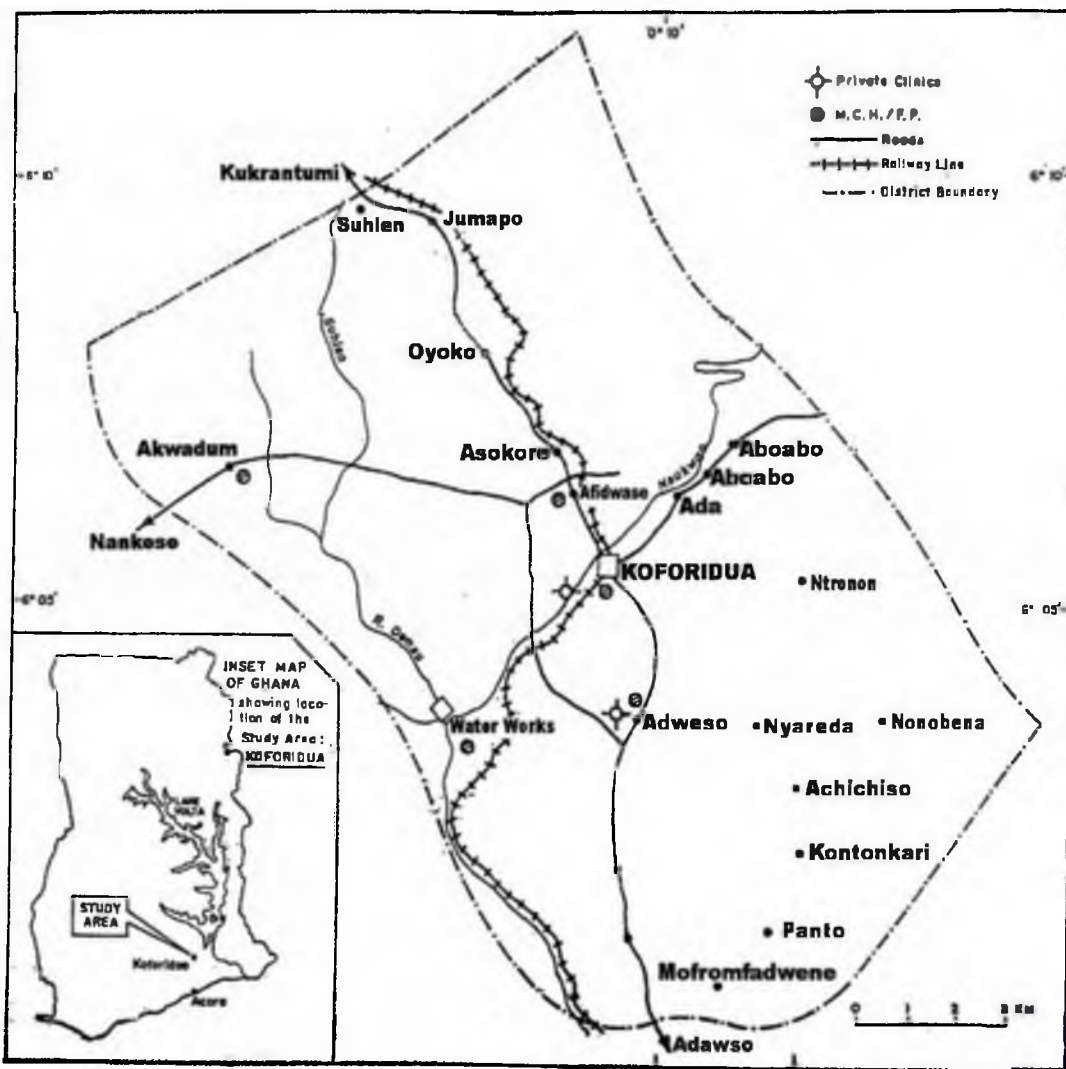
There are a number of ethnic groups in the district, the major one being the Akan group. Other ethnic groups found in significant numbers are the Ga-Adangme and Ewes.

The district is divided into four Health sub-districts namely, Oyoko-Jumapo, Effiduase-Akwadum, Koforidua-Zongo and Adweso. The relief of the district is characterized by the continuation of the Kintampo-Mampong-Kwahu scarp.

The rest of the district is relatively flat with isolated hills dotted across the plains. The district is traversed by a number of rivers and streams notable among which are the River Densu and River Nsukwaw. The vegetation is characteristically tropical rainforest with many big trees of economic importance. Rainfall is abundant throughout the year with the peak between June and August.

The four major occupations in the district are agriculture, wood/timber processing, and commerce and civil/public service. There are 101 recognized communities and about 80 other scattered settlements in the district.

Fig. 1.2 Map of New Juaben District



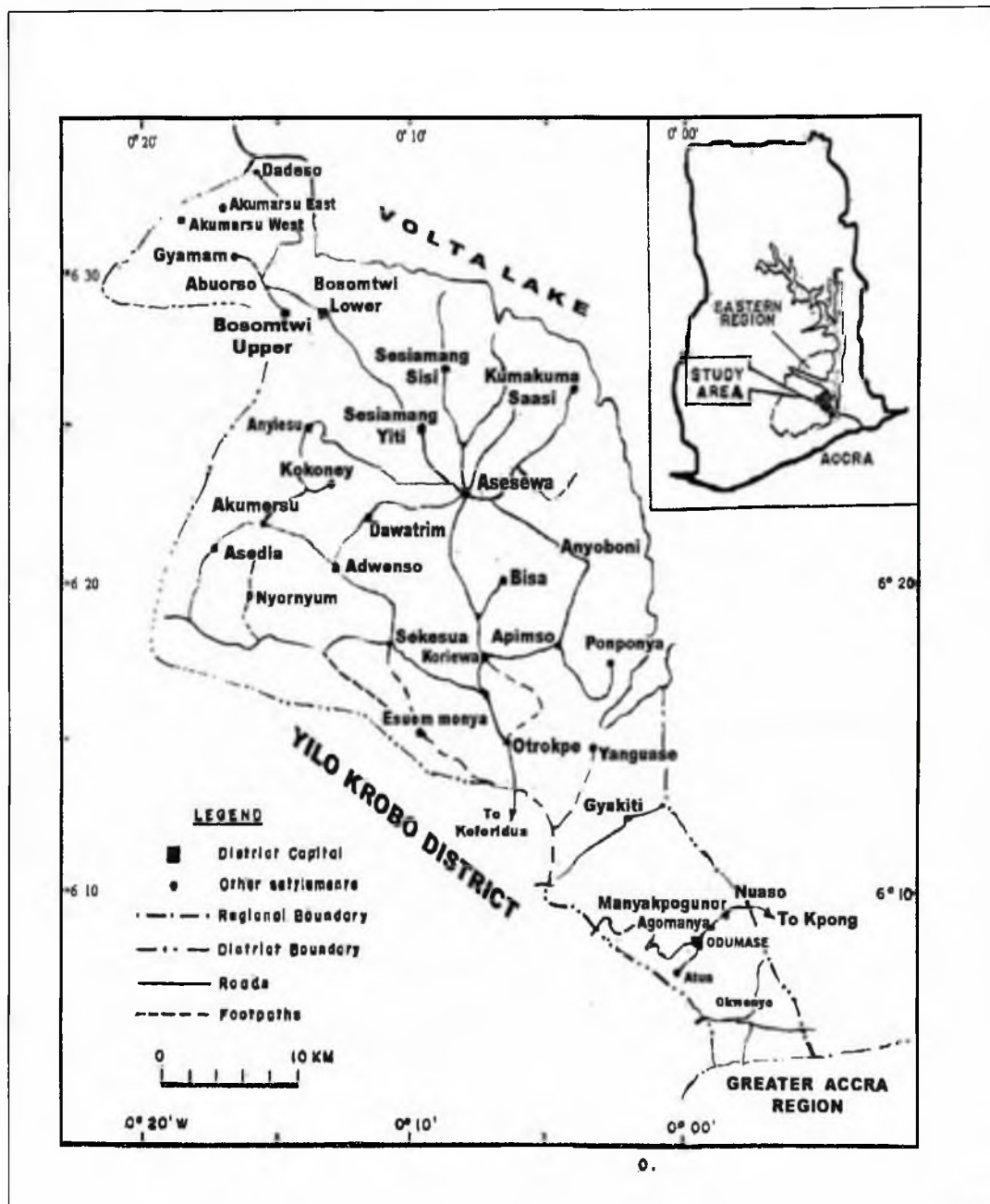
Source: Ministry of Health, Koforidua (2002)

### **1.5.2 Manya Krobo District**

Manya Krobo is one of the fifteen districts in the Eastern Region of Ghana. It is located at the eastern part of the region along the southwestern part of the Volta River. It lies between latitude 6.05'S and 6.30'N and longitude 0.08'E and 0.20'W. Afram Plains in northeast, Fanteakwa in the northwest, Dangme West in the southwest and Asuogyaman and Yilo Krobo in the west border of the district. In the southeast is North Tonga. The total land area covered by the district is about 1476 square kilometers. There are twelve area councils in the district. These include Kpong, Akuse, Odumase, Agomanya, Manya-Kpongunor, Ayermesu-Oborpa, Asesewa, Konkoney-Sisiamang, Terguanya, Sekesua, Mensa-Dawa and Anyaboni-Bisa. The 2000 population census indicates a population size of 154,301 for the Manya Krobo district. Kpong Township has the highest of 9.5% followed by Odumase-Krobo and Agomanya. Generally, population concentration is at Lower Manya (i.e. 52% of the population).

Krobos, who are the natives, dominate the population of the district. This has created an opportunity for the cultural values of the Krobos to be dominant. Also, there is a strong social cohesion among the people. However, there are sizeable groups of Ewes and Akans. Manya Krobo district is relatively flat to the southeast with isolated hills to the northwest. The landscape is generally undulating with several streams, most of which drain into the Volta Lake. Most of the settlements in the district exhibit linear or nucleated settlement patterns, due to the topography of the district and the "huza" system practiced by the Krobos. The district has three hospitals, namely, Atua, St. Martin's and Akuse Hospitals. All of them are located in lower Manya.

Fig.1.3 Map of Manya Krobo District



SOURCE: TOWN AND COUNTRY PLANNING DEPT., ODUMASE- KROBO (2002)

### 1.5.3 Spatial Dimensions of the Study Area

There are some spatial differences between the two areas under study, as implied in the above narration, which might have some amount of influence on care delivery in the individual areas. These differences are in the geographical locations of the two areas, the status of each town, health practices and social cohesion.

Geographically, Effiduase is located along the route from Koforidua to the major road that links Accra to Kumasi (with a junction at Bunso). This makes the town easily accessible to people from the three regions of Ashanti, Greater Accra and Eastern. Agomanya, on the other hand, is located along the route from Accra to Odumase Krobo. Traffic along this route is not as heavy as that of Effiduase and its adjoining towns. This implies that more people, with different cultural backgrounds, could be moving in and out of Effiduase than Agomanya.

Agomanya is one of the few centres, used as pilot project for trying antiretroviral drugs. For this reason, the care activities at the two places are different. Whereas PLWHAs at Effiduase might be treated for opportunistic infections, using common drugs, those at Agomanya might be treated with antiretroviral drugs.

Again, Effiduase is part of the New Juaben metropolis, whereas Agomanya is a District capital. This difference impacts on the social, economic and political conditions of the two places.

Also, since Agomanya is more rural in character than Effiduase, the former is likely to have a stronger social cohesion. People are, therefore, likely to relate better to each other in Agomanya (due to family ties) than in Effiduase, which because of Koforidua might have many migrants living there.

The above spatial differences are likely to influence the care programmes in a number of ways.

### **1.6 Conceptual Framework**

Various factors may be conceptualized as influencing the utilization of health care facilities for AIDS. Fig.1.4 is a diagrammatic representation of the factors and how they interrelate. Utilization is viewed as the product of patient characteristics plus provider and system attributes.

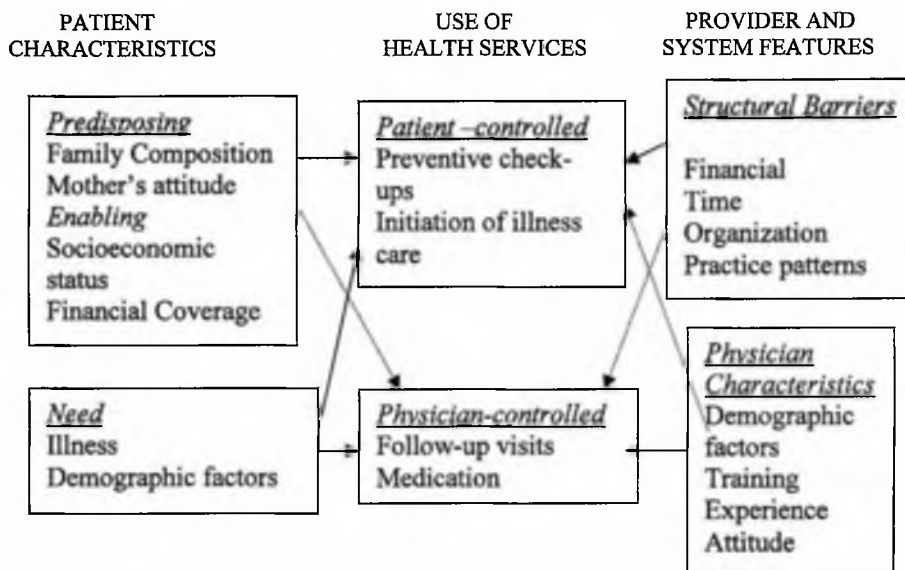
Under the patient characteristics, predisposing factors include age and sex of head-of-household, family size, mothers' attitudes-alienation, belief in preventive check-ups, tendency to consult a physician, salience of health and professional health orientation. Enabling factors include family income, occupation of head-of-household, mother's education, private health insurance and Medicaid coverage. Measures of need include reported chronic and acute illness for children and adults, individual's age, sex and motherhood. Dutton (1986) held patient characteristics in control, which helped to isolate the effect of structural barriers and physician characteristics on patterns of utilization. Physician characteristics include sex and race, training, experience-including years in practice, and selected attitudes-physician satisfaction with practice. Financial barriers include absence of Medicaid coverage and physician's charges (Dutton 1986).

Fig.1.5 shows an adaptation of Dutton's (1986) conceptual framework to include traditional medical practitioners.

In the case of HIV/AIDS, however, a number of factors come into play, which do not make PLWHAs seek care at the care centre (health facilities). The major of these factors

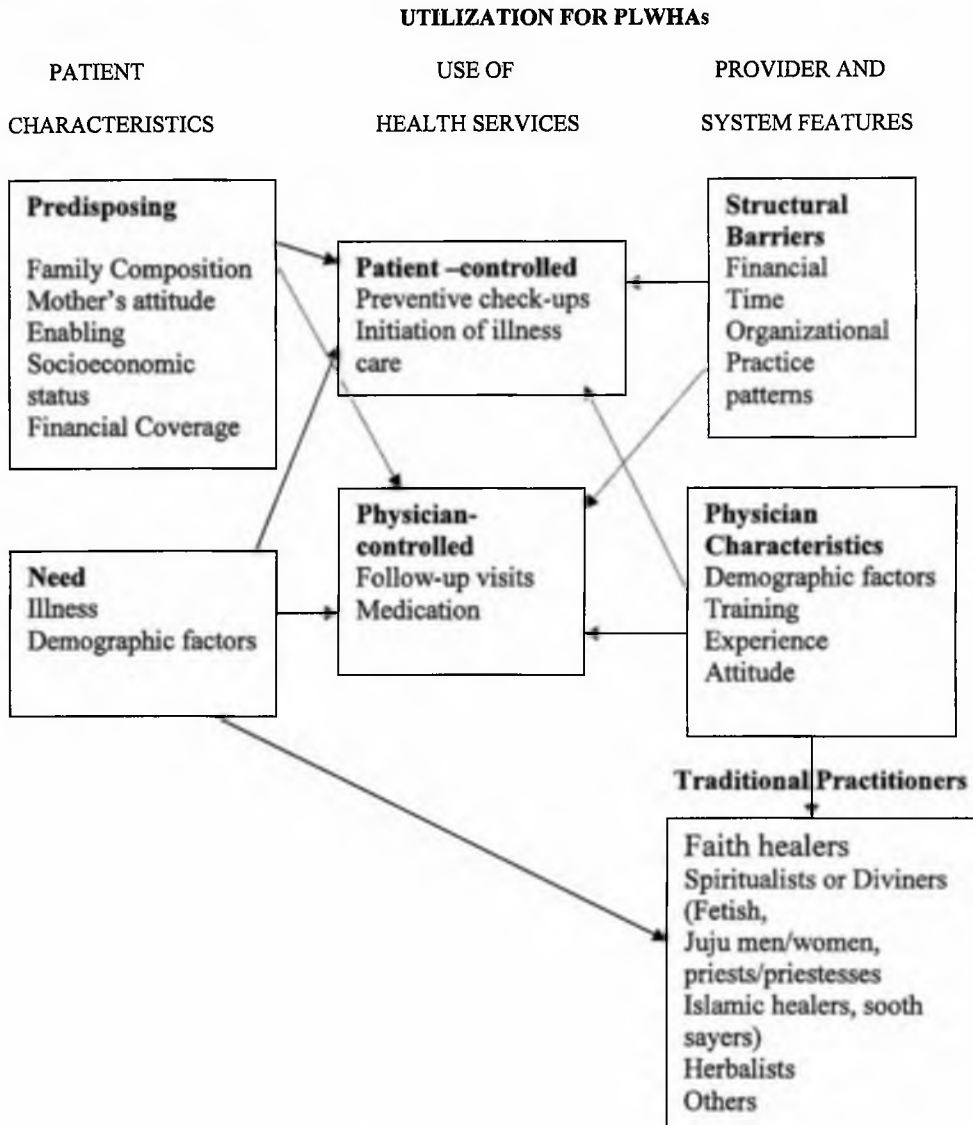
are stigmatization and discrimination. In addition to these is the fact that there is no cure for the disease. For these reasons PLWHAs might take treatment from traditional practitioners, who usually claim they have a cure or potent drugs that might relief their clients of pain.

**Fig. 1.4** DIAGRAMMATIC PRESENTATION OF FACTORS IN HEALTH CARE UTILIZATION



Source: Dutton (1986)

Bold lines indicate stronger interrelationship, while broken lines indicate weaker interrelationship.

**Fig.5 DIAGRAMMATIC REPRESENTATION OF FACTORS IN HEALTH CARE**

Source: Adapted, Dutton (1986).

The conceptual framework adapted describes utilization as a product of patient characteristics and provider and system attributes. Under the provider and system features, physician characteristics and structural barriers are considered as factors that influence health care utilization.

The physician characteristics include demographic factors such as sex and race - clients or patients may be comfortable with physicians of like sex in issues they consider sex related, also peoples perception about the race of the physician may influence their health care utilization. Again, the length and quality of training received by the physician; also the experience acquired by the physician over a number of years; and the physician's attitude –thus, his/her satisfaction with their work.

Some structural barriers to health care utilization are financial charges – medical bills that are paid by those who access health care facility. Time – the period of time used in waiting for treatment at the care centre, as well as the distance covered to get to the health facility can not be ignored in health facility utilization. Organizational barriers – the number of patients that are seen during working hours. Practice patterns that serve as barriers – liberty of patients to choose their physician.

Patient characteristics, both predisposing and enabling factors, are also considered. Family composition and mother's attitude are the predisposing factors. Whereas, socioeconomic status and financial coverage remain enabling factors.

However, the use of health care facility are described as both patient and physician controlled. The patient presents him/her self for treatment or preventive check-ups. The physician on the other hand provides medication and follow-up visits.

In the case of HIV/AIDS people infected with the disease, in addition to the orthodox treatment, take treatment from faith healers and others.

### **1.6.1 Spatial Accessibility to Healthcare**

Access to primary healthcare is an important facilitator of overall population health. There is a strong relationship between healthcare affordability and utilization rates.

Potential care exists when a needy population coexists in space and time with a willing and able healthcare delivery system. Realized care, sometimes referred to as actualized care, follows when all barriers to provision are overcome (Guagliardo 2004).

Spatial accessibility to healthcare can be classified more simply into four categories: provider-to-population ratios, distance to nearest provider, average distance to a set of providers, and gravitational models of provider influence (Guagliardo 2004).

Provider-to-population ratios, also referred to as supply ratios, are computed within bordered areas. The major indicators of health service capacity are factors such as number of physicians, clinics, or hospital beds. The population size within the area is also considered an essential factor (Dutton 1986).

A number of barriers can impede the utilization of health care facility. These can be grouped into five dimensions: availability, accessibility, affordability, acceptability and accommodation. The last three are essentially aspatial, and reflect healthcare financing arrangements and cultural factors. However, the first two dimensions are spatial in nature (Guagliardo, 2004).

Availability refers to the number of local service points from which a client can choose.

Accessibility is travel impedance (distance or time) between patient location and service points. While the distinction between availability and accessibility can be useful, in the context of urban areas, where multiple service locations are common, the two dimensions should be considered simultaneously. The combination of the two is referred to as spatial accessibility. Utilization, simply put, is care realized (Guagliardo 2004).

## **1.7 Methodology**

The methodology for this study considered the various sources from which data was collected, the sampling method used, sample frame and instruments for data collection. Also, the means by which data was analyzed is discussed.

### **1.7.1 Sources of Data**

The sources of data for this study were both primary and secondary. Primary data was collected from the field with the help of assistants who were trained to work together with the researcher in the study area. The data include both qualitative and quantitative types. Secondary data was obtained from journals, textbooks, periodicals, and also information from the Internet was accessed.

### **1.7.2 Sampling Frame and Sampling Technique**

The target population in the study was PLWHAs, Health personnel at HIV/AIDS care units, governmental and nongovernmental organizations that were directly involved in care programmes, and people living in communities of the study area. A total of 200 people constituted the sample size.

Since the total population of the study area could not be covered, a representative sample of 202 respondents was used for the study. The breakdown was done as follows:

- a) One hundred PLWHAs from the care centers.
- b) Ninety people living in the communities where care services are provided
- c) Four health personnel who care for PLWHAs: two from each care centre.

- d) Four personnel from the District Health Management Team (DHMT): two from each district.
- e) The Regional AIDS Coordinator.
- f) An officer from the Disease Control Unit, Eastern Region.
- g) Two people from NGOs, which deal directly with PLWHAs: one from each district.

The St. Joseph's Hospital in the New Juaben District and St. Martin's Hospitals in the Manya-Krobo District were centres where PLWHAs met fortnightly for treatment. Again, the St. Martin's Hospital was one of the centres used for pilot projects in the provision of antiretroviral drugs for PLWHAs. For this reason PLWHAs often met at these centers for treatment. Meetings were often held fortnightly. It is on record that 120 PLWHAs sought treatment at St. Joseph's Hospital and 109 at St. Martin's Hospital. However, the average numbers of PLWHAs who visited the care centers regularly were 75 and 78 for St. Joseph's hospital and St. Martin's Hospital respectively. The two communities, which had care centres, were purposively selected. These are Effiduase (New Juaben) and Agomanya (Manya Krobo District). Since the two care centres did not have equal number of PLWHAs, proportionate stratified sampling technique was used to select 100 respondents. Thus, 47 PLWHAs from St. Joseph's Hospital and 53 from St. Martin's Hospital were selected. Four Health personnel who cared for PLWHAs at the care centres were purposively selected, two from each centre. Three non-governmental organizations involved in care delivery were randomly selected. However, statistics indicate that the population figures for the two communities were 10,065 for Effiduase and 13,508 for Agomanya (Population Census Report 2000). Since the two communities had unequal

population figures, proportionate stratified sampling technique was again used to select the respondents. Out of the 90 respondents from the communities 38 were selected from Effiduase and 52 from Agomanya. A simple random sampling technique was further used to select individual respondents from within the communities for interviews and answering of questionnaires.

### **1.7.3 Instruments of Data Collection and Analysis**

The research instruments used included questionnaires and interview schedules. The questionnaires were structured in accordance with the objectives of the study. The questions were both open and close-ended. This allowed flexibility in the responses, and also helped to solicit views, which would otherwise not have been captured in the questionnaires. Also, an in-depth focus group discussion was applied to enrich the research qualitatively. Both descriptive and inferential statistical techniques were used. Finally, data collected from the research was analyzed using computer based Statistical Programmes for Social Sciences (S.P.S.S.). The results were then presented in the form of charts, bars, tables, etc.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Defining Care for PLWHAs

The World Health Organization (WHO) in 1989 defined care as a comprehensive, integrated process which recognizes the range of needs for well-being. It includes services and activities providing counseling and psychosocial support, nursing and medical care, legal, financial and practical services (Mann *et al* 1992). According to the report even if all new HIV infections could be prevented as of today, there would still be a continuing increase in the number of people with AIDS during the coming decade and beyond (Mann *et al* 1992). Lamptey *et al* (2002) admit that, prevention will remain the backbone of programmes to curb the HIV/AIDS pandemic for the foreseeable future.

Again, Lamptey *et al* (2002) maintain that comprehensive care includes post-exposure prophylaxes (primarily for exposure to HIV as a result of rape or an occupational mishap such as needle stick), psychosocial support for orphans and children of AIDS patients, prevention and treatment of opportunistic infections, home based care, antiretroviral therapy and palliative care. Hisel (2001) points out that important need in the care programme is respect for the individual. She explains that both traditional and alternative types of medical care are available through formal and informal health care delivery procedures. According to Mann *et al* (1992), care systems in some developing countries are severely strained by the additional needs of the People Living with HIV/AIDS (PLWHAs). Thus, even testing for HIV is not assured, and supplementary confirmatory tests like Western Blot are often not available or too expensive for routine use. Those

newer specific antiretroviral therapies like Zidovudine (DZT) are unavailable for most people.

Lamprey *et al* (2002) hold the view that HIV/AIDS prevention and care is a continuum, and a successful prevention effort include providing education about high-risk behaviour, distributing and promoting condoms, diagnosing and treating sexually transmitted infections (STIs), providing voluntary counseling and testing, preventing mother-to-child transmission, ensuring the safety of blood and blood products and reducing the stigma attached to HIV/AIDS.

The Alma Ata declaration (1978) defined Public Health as the science and art of preventing disease, prolonging life, and promoting physical health and efficiency, through organized community efforts, for the sanitation of the environment, the control of community infections, the education of the individual in the principles of personal hygiene, the organization medical and nursing service for the early detection and preventive treatment of disease, and the development of the social machinery which will ensure to every individual in the community a standard of living adequate for the maintenance of health (Lucas *et al* 2003).

In defining health care the declaration points out that, ideally national health services should include the following: Equity- fairness in the allocation of resources with particular attention to the needs of the poor; Value for money- carefully selecting the most cost-effective interventions and managing services efficiently; Stewardship- responding to the needs of the people with transparency and accountability (Lucas *et al* 2003).

## **2.2 Biological Description of the HIV/AIDS Virus**

### **2.2.1 HIV-1 and HIV-2**

There are various types of the HIV pandemic and these vary across the continents and even the sub regions. There are currently two types of HIV: HIV-1 and HIV-2.

Worldwide, the predominant virus is HIV-1, and generally when people refer to HIV without specifying the type of virus they will be referring to HIV-1. Both HIV-1 and HIV-2 are transmitted by sexual contact, through blood, and from mother to child, and they appear to cause clinically indistinguishable AIDS.

However, HIV-2 is less easily transmitted, and the period between initial infection and illness is longer in the case of HIV-2 (Kanabus 2001).

### **2.2.2 The Subtypes of HIV-1**

HIV-1 is a highly variable virus which metamorphoses very readily. So there are many different strains of HIV-1. These strains can be classified according to groups and subtypes and there are two groups, group M and group O.

In 1998, a new strain of HIV was found in a woman from Cameroon in West Africa. The strain does not belong to either group M or group O, and has only been found in three other people, all in the Cameroon (Kanabus 2001).

Within group M there are currently known to be at least 10 genetically distinct subtypes of HIV-1. These are subtypes A to J. In addition, Group O contains another distinct group of very heterogeneous viruses. The subtypes of group M may differ as much between subtypes as group M differs from group O (Kanabus 2001).

The HIV subtypes are very unevenly distributed throughout the world. Subtype B, for instance, is mostly found in the Americas, Japan, Australia, the Caribbean and Europe;

subtypes A and D predominate in sub-Saharan Africa; subtype C in South Africa and India; and subtype E in Central African Republic, Thailand and other countries of Southeast Asia. Subtypes F (Brazil and Romania), G and H (Russia and Central Africa), I (Cyprus), and group O (Cameroon) are of very low prevalence. In Africa, most subtypes are found, although subtype B is less prevalent (Kanabus 2001).

It has also been suggested that certain subtypes may be predominantly associated with specific modes of transmission: for example, subtype B with homosexual contact and intravenous drug use (essentially via blood) and subtypes E and C, with heterosexual transmission (via a mucosal route). Kanabus (2001) points out that, subtypes C and E infect and replicate more efficiently than subtype B in Langerhans cells which are present in the vaginal mucosa, cervix and the foreskin of the penis but not on the wall of the rectum. These data suggest that HIV subtypes E and C may have a higher potential for heterosexual transmission than subtype B.

## **2.3 Methods of Care for PLWHAs**

### **2.3.1 Traditional Methods of Care for PLWHAs**

#### **2.3.1.1 The Use of Purification Rituals in Treating HIV/AIDS**

The role of traditional practitioners in the treatment of HIV/AIDS can not be over looked. In Thailand purification rituals are performed among certain tribes for those infected with HIV/AIDS. This is believed to provide a model for social, economic and psychological support for people living with HIV/AIDS (PLWHA). Among some Akha in Thailand, giving birth to twins and contracting AIDS are considered to be of equal seriousness. Both are thought to be caused by ritual impurity which, in turn, is thought to be caused by

improper behaviour. Ritual impurity is considered a danger to other members of the community. In traditional Akha society, ritual feasts are held to purify families that have given birth to twins so that they do not have to move out of the community (Maneeprasert *et al* 2004).

### **2.3.1.2 The Use of Traditional Foods to Treat HIV/AIDS**

Most African societies depend on a wide variety of herbs for dietary as well as medicinal purposes. At the Mefopla Centre in Bamenda-Cameroon, the immune system of AIDS patients is boosted by indigenous medicinal plants with enzyme rich food. These include oils from plants like Soya, cashew and shea butter saturated fats, wild fruits. Vegetables with high fiber content, which the patients are encouraged to consume, are helpful in cleansing the system. Though this diet and nutritional therapies do not cure the disease, they are reported to improve the immune system. The therapy also involves the elimination of stress bound foods and liquids from patients' diet such as coffee, black tea, sugar, salt, white flour as well as concentrated carbohydrate white rice. The treatment helps to reduce the physical and psychological symptoms that go with the disease like rashes, blisters, respiratory syndromes and stress/depression (Kinyuy 2004).

According to Mokgadi (1999), a strain of potato, a medicinal plant growing in Kwa Zulu (Natal), traditionally used to treat chronic viral and bacterial diseases, was originally used by traditional healers to treat cancer of the bladder and prostate, and according to some sources sexually transmitted diseases, had shown that it contained two substances called sterols and sterolins, which are essential dietary fats or lipids, and has helped many people to recover quicker from chronic and other diseases. The plant had shown the

ability to increase CD4 counts (the amount of white blood cells in the body); to stabilize the patient; increase the weight of patients; and decrease the amount of HIV in the body. They also emphasized the importance of combining Western and traditional medicines in treating terminal illnesses. The root-based medicine is sold in the form of capsules and should be purchased in health centers or pharmacies only (Mokgadi 1999).

### **2.3.1.3 Traditional Counseling for PLWHAs**

The use of counseling in the treatment of HIV/AIDS is not the reserve of modern medicine alone. Wadigo and Washambaa AIDS patients in the Tanga Region in Northeast Tanzania seek advice and treatment from local healers. Marecik (1998) posits that various plant-based applications as well as counseling have proven to reduce substantially the impact of secondary infections on AIDS patients. Patients with AIDS in the Tanga region, state that they feel less pain from AIDS related symptoms after local treatment, as compared to treatments received in the hospitals. Observed improvements made by Marecik (1998) included disappearance of skin problems, increase in appetite, and return of vision strength within two weeks only. Because of a survey indicating traditional healers' better access to patients the regional AIDS working group is re-considering its approach to treatment and counseling of AIDS and STD patients. The counseling and treatment was also reported as more affordable for poorer people (Marecik 1998).

### **2.3.1.4 Multiple Uses of Traditional Medicine**

Ouedraogo (1999) admits that traditional healers maintain their own information on therapeutic drugs. Most commonly drugs are plant based, and various preparations are

used. For instance, *Piliostigma reticulatum* is used to treat headaches, dental neuralgia, oral inflammation, and mumps. Masticating the leaves of *Piliostigma reticulatum* causes dizziness. According to Ouedraogo (1999) it is also boiled with *gueira* and *securidaca* leaves and used in the treatment of syphilis, chancre, bronchitis, malaria, and phagedaena. Prepared as a drink, the mixture is used for epileptic seizures. Non-coniferous twigs in a decoction are used to treat hemorrhoids and as a liniment applied to the chest for lung disease (Ouedraogo 1999). Ethno-medical research in Mozambique has deepened biomedical understanding of beliefs and practices related to sexually transmitted diseases (STD) in Southern Africa, and assisted in the design of culturally meaningful AIDS communication strategies (Green 1997).

#### **2.3.1.5 The Use of Plants for Antibiotic and Contraceptives**

The Giriama community in S.E. Kenya uses some plant species to prevent or treat infectious diseases for wounds, boils, scabies, diarrhea, dysentery, gonorrhea, and syphilis. Annonaceae, Fabaceae and Vitaceae are the most commonly used plant families. Laboratory tests have confirmed that most of the plant species used traditionally to manage bacterial and fungal infections showed strong effects against tested pathogens. The forests are an endangered biotope due to expanding settlements and other utilization. In the case of its disappearance, the Giriama could lose a source of medicinal plants and a number of unique species of fauna and flora would lose their habitat too (Marecik 1998)). The Dogon of Mali from the village of Guinoubanou use a plant-based contraceptive method dating from ancient times. The Dogon are sensitive to the issue of unwed-mothers who would tarnish the family image, as well as to women's health. Women are

considered an essential pillar in the family structure. For these reasons, girls are made to practice a traditional form of birth control. They are given a herbal preparation to take on their first menstruation day each month (Mutta 1998). Women who have just given birth are also given this plant-based medicine, to aid their recovery and for the practice of child-spacing (Marecik 1998).

## **2.4 Modern Methods of Care for PLWHAs**

### **2.4.1 Opportunistic Infections and Treatment**

When a person's immune system is damaged by HIV, then certain infections will develop which the body would normally "fight off" quite easily. These are known as Opportunistic Infections. Treatment for Opportunistic Infections is usually provided when antiretroviral are not available, or when the antiretroviral drugs are no longer effective as the person is resistant to them (IRINplusnews 2004).

Mostly, people with advanced HIV infection are susceptible to infections or malignancies that are called 'opportunistic infections' because they take advantage of the opportunity offered by a weakened immune system. In industrialized countries, before the introduction of Highly Active Antiretroviral Therapy (HAART), the prevention and treatment of opportunistic infections was long the basis of care for HIV positive people. Even now, the prevention and treatment of opportunistic infections plays an important part of management of HIV.

Prevention and treatment of opportunistic infections is an important part of HIV/AIDS care and support. Opportunistic infections result in significant morbidity and mortality for people living with HIV/AIDS. Taking care of the well-being of people is important on a

practical as well as on a personal level. Interventions that prevent the occurrence of opportunistic infections can result in significant gains in life expectancy and quality of life among people living with HIV (Kanabus 2001).

#### **2.4.2 HIV Antiretroviral Treatment**

This is the main type of treatment for HIV or AIDS. It is not a cure, but it can stop people from becoming ill for many years. The treatment consists of drugs that have to be taken every day for the rest of someone's life. To understand more about treatment one needs to have some basic knowledge of HIV/AIDS.

HIV is a virus and like other viruses when it is in a cell in the body it produces new copies of itself. With these new copies, HIV can go and infect other previously healthy cells. It is easy for HIV to spread quickly through the billions of cells in the body, if it is not stopped from reproducing itself (Kanabus 2001). Antiretroviral treatment for HIV infection consists of drugs which work against HIV infection itself by slowing down the reproduction of HIV in the body. The drugs are often referred to as antiretrovirals, anti-HIV drugs and HIV antiviral drugs.

#### **2.4.3 Various Antiretroviral drugs**

There are currently 20 approved antiretroviral drugs in the UK and many more in the expanded access programmes and trials. Each antiretroviral drug usually has three names. Sometimes drugs are referred to by their research or chemical name, for example AZT. The second name for the drug is the common name for all the drugs with the same chemical structure.

There are four main groups of anti-HIV drugs. Each of these groups attacks HIV in a different way. These include nucleoside reverse transcriptase inhibitors (NRTIs); non-nucleoside reverse transcriptase inhibitors (NNRTIs); protease inhibitors (PIs); and fusion or entry inhibitors. The first group of antiretrovirals is known as the NRTIs. They were the first to be discovered in the treatment of the HIV/AIDS pandemic. The major function of this group of drugs is to inhibit the duplication of the virus in the human cell. By this action the HIV virus is not able to multiply as fast as possible. Examples are Combivir, Trizivir and lamivudine (Kanabus 2001). The second group of drugs is known as the NNRTIs. These attack the enzyme within which the HIV virus can thrive. By so doing the drugs stop the infection of other healthy cells in the body. With these PLWHAs can live healthier and also longer than expected. Examples are Delavirdine, Efavirenz and Nevirapine (Kanabus 2001).

The third group of antiretrovirals is known as Protease Inhibitors (PIs). Protease is a digestive enzyme that breaks down protein and it is one of the many enzymes that HIV uses to reproduce itself. When taken by the patient, protease inhibitors take effect before the protease in HIV attacks the healthy chain of enzymes in the body. Examples of these are Amprenavir, Atazanavir and Atazanavir.

The fourth group of the anti-HIV drugs named Fusion or Entry Inhibitors. These drugs are going through clinical trials and are yet to be approved. The surface of HIV carries proteins called gp41 and gp120. These are the proteins which allow HIV to attach itself to, and enter into, cells. By blocking one of these proteins, fusion inhibitors slow down the reproduction of the virus. For example T-20, the fusion inhibitor that is closest to approval, sticks to the protein gp41. The T-20 fusion inhibitor differs from the other

antiretrovirals in that it needs to be injected. T-20 is a protein and cannot be taken orally, since it would be digested in the stomach (Kanabus 2001).

#### **2.4.4 Combination Therapy and HAART for PLWHAs**

For antiretroviral treatment to be effective for a long time, it has been found that you need to take more than one antiretroviral drug at a time. This is what is known as Combination Therapy. The term Highly Active Antiretroviral Therapy (HAART) is used to describe a combination of three or more anti-HIV drugs (Kanabus 2001).

The general recommendation is to use a minimum of three antiretroviral drugs. If one drug is taken on its own, it has been found that, over a period of time, the drug stops working. HIV reacts to the drug in the person's body and changes, so that the virus is no longer affected by the drug. The virus then starts to reproduce itself the same way as before. This is known as the virus becoming resistant to the drug. If two or more antiretrovirals are taken together it vastly reduces the rate at which resistance develops (Kanabus 2001).

#### **2.4.5 Substance Abuse and HIV/AIDS**

People with alcohol use disorders are more likely, than the general population, to contract HIV. Similarly, people with HIV are more likely to abuse alcohol at some time during their lives. Alcohol use is associated with high-risk sexual behaviors and injection drug use, two major modes of HIV transmission (Petry 1999).

Concerns about HIV have increased as recent trends suggest a resurgence of the epidemic among men who have sex with men, as well as dramatic increases in the proportion of cases transmitted heterosexually. In persons already infected, the combination of heavy

drinking and HIV has been associated with increased medical and psychiatric complications, delays in seeking treatment, difficulties with HIV medication compliance, and poorer HIV treatment outcomes. Decreasing alcohol use in people who have HIV or who are at risk for becoming infected reduces the spread of HIV and the diseases associated with it. Fredrikson & Kanabus (2001) put those in high risk as those of ages 15-49.

#### **2.4.6 Home-Based Care (HBC) Programmes**

Four best practices of home-based care programmes are the following:

- Partnership for home-based care in rural areas-Uganda
- Kariobangi community-based home care and home-based AIDS care programme-Nairobi, Kenya.
- Bambisanani-Eastern Cape, South Africa.
- Centre for Socio-Medical Assistance (CASM) – Abidjan, La Cote d’Ivoire.

The HBC programmes in the above countries differ in nature in the above named countries. In Uganda the programmes are mainly NGO-Based and in Kenya they are mainly community-based. The programme is public-private mix in South Africa, while those in La Cote d’Ivoire are run by Faith-Based Organizations (GAC 2003). All these programmes rely on volunteers for the care-giving for PLWHAs at homes. The Kenyan programme puts emphasis on three main cadres- volunteers, relatives, and community workers (GAC 2003). The GAC report has it that the South African programmes rely on both volunteers and health workers while that of Uganda is run by The AIDS Support Organization (TASO) 2,240 volunteers, averaging 40 per community. The services

offered by all include material/financial, emotional/spiritual, prevention of HIV/AIDS, and social support and awareness (GAC 2003).

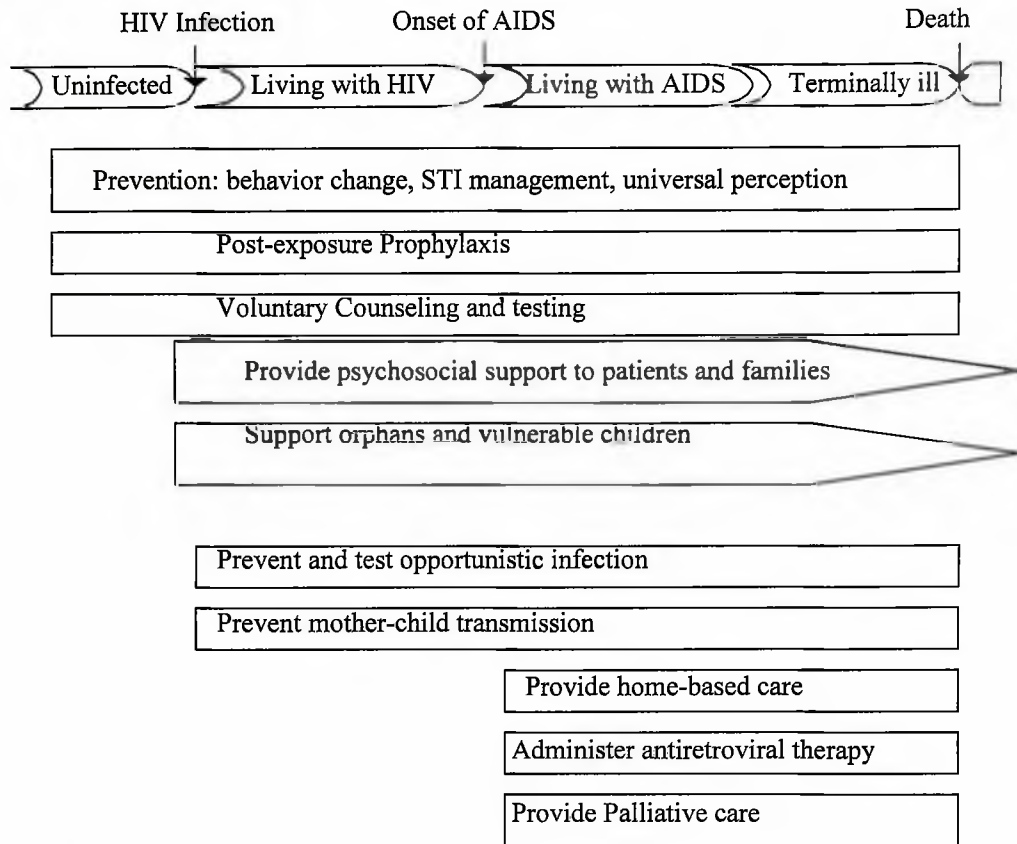
#### **2.4.7 Prevention and Care Continuum**

Fig. 2.1 shows a prevention and care continuum for HIV/AIDS. The diagram seeks to explain how an uninfected person can prevent infection and also, how an infected person can be treated to prolong his/her life. Activities that are considered under this continuum include voluntary counseling and testing, support to orphans, preventive measures and administration of antiretroviral therapy.

In Fig. 2.1 the various components of the prevention and care continuum are mutually reinforcing. The availability of HIV treatment and care services can be a powerful incentive for people to seek counseling and testing. Without such services people have little incentive to learn their HIV status.

Counseling provides an opportunity to educate infected people about the importance of, and the methods for preventing the infection of others. Access to care and treatment also help to reduce the stigma associated with HIV infection, encourages more people to get tested for HIV, and may promote behavioral change.

Prevention programmes are much more likely to be successful if they involve policy makers and people who influence the social and economic environment of the community (Lampsey *et al* 2002).

**Fig. 2.1: HIV/AIDS Prevention and Care Continuum**

Source: Lamptey *et al* (2002).

Providing prevention and treatment of opportunistic infections and HIV-associated diseases can:

- Reduce the suffering of people living with HIV/AIDS and improve their quality of life and the quality of life for their families.
- Allow people with HIV/AIDS to continue as contributing members of their families and communities for as long as possible.

- Prevent the further spread of TB and other transmittable opportunistic infections to other members of the family.

A partial list of the world's most common opportunistic diseases and infections includes:

- Bacterial diseases such as tuberculosis (TB), Mycobacterium avium complex disease (MAC), bacterial pneumonia and septicaemia ('blood poisoning').
- Protozoal diseases such as pneumocystis carinii pneumonia (PCP), toxoplasmosis, microsporidiosis, cryptosporidiosis, isopsoriasis and leishmaniasis
- Fungal diseases such as candidiasis, cryptococcosis (cryptococcal meningitis (CRM)) and penicilliosis
- Viral diseases such as those caused by cytomegalovirus (CMV), herpes simplex and herpes zoster virus
- HIV-associated malignancies such as Kaposi sarcoma, lymphoma and squamous cell carcinoma (GAC 2003).

#### **2.4.8 Understanding the HIV/AIDS Pandemic**

Gupta *et al* (1993) hold the view that global experience demonstrate that, what people need in order to keep from being infected by HIV are a solid factual understanding of HIV and its transmission; access to relevant services and supplies; and the confidence and social power to initiate and sustain behavioral change. Ford (1994) posits that, in dealing with HIV/AIDS we are dealing with a social as much as a biological and medical phenomenon.

Gupta *et al* (1993) assert that most existing AIDS prevention efforts are deficient in two ways. First, among women the target is mainly commercial sex workers and, to a lesser

extent, adolescent girls who attend school. Second, current interventions pay little attention to the broader, social, economic and cultural context in which high-risk behaviour occurs. They recommend that sexually transmitted disease services should be made more accessible by integrating it into existing family planning and maternal health services (Gupta and Weiss 1993).

Many individuals do not think they stand the risk of getting AIDS. A survey conducted among Albertans showed that only 1.8 percent rated their chances of getting AIDS as high (Population Research Laboratory 1990). The research revealed that people who know or have known a person with AIDS oppose discrimination in access to health care for PLWHAs, regardless of the financial cost to public purse. Although HIV/AIDS affects both rich and poor through out the world, the poor, underprivileged, and uneducated are often more vulnerable to infection. It is reported that HIV/AIDS and poverty are mutually reinforcing. The epidemic pushes people deeper into poverty, making it more difficult for them to sustain or recover their earlier livelihoods; income drop, in turn, can make people and their families more vulnerable to HIV infection and AIDS related illness (Population Bulletin 2002).

Welch *et al* (1990) hold the view that, in the management of people with AIDS there is often no clear division between curative and palliative care. Much will depend on the patient concerned and his current symptoms, and may change suddenly. Most patients, they believe, have firm ideas about the type and degree of care that they would like, and can be enabled to make major decisions about management. As with other illnesses, many people with AIDS feel that natural remedies are beneficial in combating their

disease. Complimentary therapies are particularly popular with people who feel let down by the failure of conventional medicine to find a cure for them (Welch *et al* 1990).

## **2.5 The HIV/AIDS Situation in Africa**

The extent of the epidemic is only now becoming clear in many African countries, as increasing numbers of people with HIV are now becoming ill. In the absence of massively expanded prevention, treatment and care efforts, the AIDS death toll on the continent is expected to continue rising before peaking around the end of the decade. This means that the worst of the epidemic's impact on these societies will be felt in the course of the next ten years and beyond. Its social and economic consequences are already being felt widely not only in health but in education, industry, agriculture, transport, human resources and the economy in general (Yolah 2001).

Counseling and testing can lead patients to other HIV services. A study that included Kenya, Tanzania and Trinidad documented a 43 percent reduction in unprotected sex among those who received voluntary counseling and testing for HIV (Lamptey *et al* 2002). For millions of people living with HIV/AIDS, little treatment and care are available. For most people in the countries hardest hit by the HIV/AIDS epidemic no treatment is available at all. Nor can the governments of most developing countries severely affected by AIDS afford the huge sums needed to provide treatment for AIDS patients (Population Report 2001). Funding for HIV/AIDS prevention is inadequate. While more and more policy makers acknowledge HIV/AIDS, rarely do governments provide enough funding for effective action against the pandemic. The amount of donor assistance per HIV-positive person fell by more than half from 1988-1997 (Population

Report 2001). The report asserts that funding for AIDS is not going where it is needed most. While 95 percent of people with HIV infection live in developing countries, 95 percent of all AIDS prevention money is spent in industrialized countries. According to UNAIDS (2000), a total of US \$ 7 billion to 10 billion is needed annually for AIDS prevention and care in lower and middle-income countries, most in Africa, five times what is currently spent.

By 1999, 13.2 million children under the age of 15 had lost either their mother or both parents to AIDS. That, nine of every 10 children orphaned by AIDS are in Sub-Saharan Africa (UNAIDS 2000). The report has it that, Brazil has halved its AIDS deaths by providing generic AIDS drugs at US\$ 4,500 per patient per year, while in US similar drugs cost \$ 12,000 to \$15,000. However, this amount is far beyond the means of most African countries. Nevertheless, there is considerable disagreement over HIV/AIDS education-including what to teach at what age, in what setting, by whom, and to what end (Population Reports 2001).

### **2.5.1 Sub-Saharan Africa**

Sub-Saharan Africa is the region of the world that is most affected by HIV/AIDS. An estimated 29.4 million people are living with HIV/AIDS and approximately 3.5 million new infections occurred in Sub-Saharan Africa in 2002. In just the past year the epidemic has claimed the lives of an estimated 2.4 million Africans. Ten million young people (aged 15-24) and almost 3 million children under 15 are living with HIV. AIDS in Sub-Saharan Africa has orphaned an estimated eleven million children (UNAIDS 2002).

## **2.5.2 Commerce and HIV/AIDS**

Ntozi *et al* (1997) posit that itinerant trading is the second major economic activity for women who constitute an important chain in the distribution of goods in West Africa. With the outbreak of AIDS these women, some of whom move far away from home sometimes for days or even weeks, stand the risk of being infected with HIV through their activities (Ntozi *et al* 1997).

This state of affairs, occasioned by the extreme difficult conditions in which the women work, is exploited for the sexual gratification of the men with whom they come into contact (Ntozi *et al* 1997).

Captain Lonsdale, in his report to the British parliament, commented that irrespective of the Hausa, who come for kola nuts alone, there are many who trade from their country to places such as Sansanne, Mango, Safara, Hambori, and Timbuktu, from where they bring to Salaga (Ghana), cloths of various kinds differing from those of Hausa manufacture, ivory, cattle and sheep. Then again some make Salaga their headquarters for two to three years, trading backwards forwards to places within 60 days journey (Ntozi *et al* 1997).

## **2.5.3 Care Systems of Countries Hit by HIV/AIDS in Africa**

### **2.5.3.1 Prevention of HIV/AIDS and Care in Botswana**

Botswana's first AIDS case was reported in 1985. The disease was then seen as that which affected male homosexuals in the West and people from other African countries (Boroughs 2003).

Botswana's response to the HIV and AIDS epidemic can be divided into three stages. The early stage (1987-89) focused mainly on the screening of blood to eliminate the risk of

HIV transmission through blood transfusion. The second stage (1989-97), and the first Medium Term Plan (MTP), saw the introduction of information, education and communication programmes, but the response was still fairly narrowly focused. During this stage, in 1993, the government adopted the Botswana National Policy on AIDS (Boroughs 2003). Botswana is one of the countries that have been hardest hit by the worldwide HIV epidemic. In 2004 there were an estimated 260,000 people in Botswana living with HIV. This, in a country with a total population of 1.6 million, gives Botswana a prevalence rate of 36.5%, the second highest in the world after Swaziland. Life expectancy is only 39 years, while it would have been 72, if it were not for AIDS. There are around 60,000 registered orphans in the country but it is feared that Botswana will have about 200,000 orphans in 2010 if the current situation is not reversed. In an address to the UN General Assembly in 2001, the President of Botswana, Festus Mogae, said 'we are threatened with extinction. People are dying in chillingly high numbers. It is a crisis of the first magnitude' (Boroughs 2003). Botswana has become the first African country to aim to provide antiretroviral therapy to its citizens on a national scale. It is believed by many that if any country in Africa is going to succeed in implementing such a comprehensive HIV/AIDS care and treatment programme, then it is Botswana (Kanabus 2001).

#### **2.5.3.2 Provision of Care for PLWHAs in Republic of South Africa**

Khayelitsha is a township outside Cape Town, South Africa, with a population of between 400,000 and 500,000. The population is overwhelmingly poverty stricken and the choice of the township by Medicins Sans Frontiers (MSF) was in itself an opportunity

to prove that an Anti Retroviral Treatment (ART) programme could be undertaken in even the poorest conditions in a primary health care setting (MSF 2002).

The MSF report has it that, out of the 40,000 who tested HIV positive, only 7,000 of them were aware of their condition. MSF has established a pilot programme where HIV/AIDS care and treatment is provided free to the community. According to the MSF (2002) report, patients with HIV/AIDS are accepted into an ART programme based on medical criteria such as their CD4 level (which determines their ability to fight off deadly infections if not treated). Most AIDS sufferers die when their CD4 rates fall to such low levels that severe opportunistic infections, such as extra-pulmonary TB, Cryptococcal meningitis and toxoplasmosis, can take hold and kill the patient. Severe opportunistic diseases are most prominent when CD4 rates fall below 200. An average healthy person has a CD4 rate between 800 and 1,200.

Of the patients in Khayelitsha's first ART programme by MSF, the average base line CD4 rate was 48. In truth, these patients were simply victims waiting to die (MSF 2002).

### **2.5.3.3 HIV/AIDS in Uganda**

Ntozi *et al* (1997) observe that, orphans in Uganda totaled 1.3 million out of 8 million children, giving a high level of prevalence of 16.2 per cent. In the district of Masaka, which is one of the hardest hit by AIDS, the 1991 census figure of orphans was 102,542, about a quarter of the children in the district. It was reported that in the past one of the parents usually survived. If the father survived, he would have the means to look after the orphans. A child with a father was not considered an orphan, because the father would marry other wives who would look after his children using his wealth (Ntozi *et al* 1997).

Among the Bakiga and Banyankone tribes, the father of the deceased wife would offer the widower another daughter to replace her sister and look after the orphans (Ntozi *et al* 1997).

Uganda is one of the few African countries where HIV prevalence rates are declining, and it is seen as a rare example of success in a continent which is facing a severe AIDS crisis. Uganda's policies are credited with having brought the prevalence rate down from higher than 30% in the early 90s to around 6% last year. Now, the government and the UN say that only 4.1% of adults have the virus. The country is seen as having implemented a well-timed and successful public education campaign, reducing the numbers of people indulging in casual sex as well as significantly cutting the HIV prevalence rate (WHO 2001).

Uganda is estimated to have a population of about 20-25 million. Although the extreme mortality of AIDS has had an effect on this- the figure would otherwise be higher. Again, due to AIDS, life expectancy in Uganda is 42 years. It was estimated in a UNDP report that 51% of the population did not have access to healthcare facilities in 2001.

AIDS in Uganda was initially known as 'slim' due to its physically wasting characteristics. It began to spread in Uganda on the shores of Lake Victoria in the late 1970s. In 1982 the first AIDS case in Uganda was diagnosed. Between 1982 and 1986 there was little understanding of what AIDS was, and it was not known that it was caused by HIV. During this period the epidemic was largely addressed at local levels with communities caring for those infected and affected by deaths.

In Uganda, the prevalence rate has been seen to fall since the early '90s. A declining prevalence rate indicates that there is a lower percentage of HIV positive people amongst

a population - it does not necessarily mean that there are fewer positive people. The percentage could have declined because there have been a large number of births of negative babies. It could imply some sort of social problem - for example, PLWHAs may experience such discrimination that they will feel reluctant to take the test. It might mean that testing methods have become more accurate, or the decline could also be because there have been a large number of deaths of positive people (WHO/AFRO 2000).

#### **2.5.3.4 HIV/AIDS Prevalence and Care in Kenya**

HIV information among antenatal clinic attendees has been available from Kenya since the mid-1980s. Nairobi and Mombassa are the major urban areas. In the major urban areas, HIV prevalence among ANC attendees tested increased from 2% in 1985 to 19% in 1995. In Nairobi, HIV prevalence increased from 2.7% in 1987 to 6.6% in 1990 and by 1995 had reached 25%. In 1999, HIV prevalence among ANC attendees in Nairobi was 17%. HIV prevalence among ANC attendees in Mombassa increased from 10.2% in 1990 to 16.5% in 1993 and then 17.8% in 1998. In Kiwi, a peri urban area of Mombassa, HIV infection rates doubled from 12.2% in 1989 to 24.1% in 1995; in 1999, the rate was 23%. Information on age specific HIV prevalence is not available (IRINplusnews 2004). Outside the major urban areas, HIV information became available in 1988. By 1990, 12 sentinel surveillance sites were reporting HIV information. Among antenatal clinic attendees tested in these sentinel surveillance sites, median HIV prevalence increased from less than 1% in 1988 to 13% in 1997. In 1997, HIV prevalence ranged from 6 to 35% among 15 sentinel surveillance sites. In Kisumu, a town near the Uganda border, HIV prevalence escalated between 1990 to 1993 at about 20% and then shot up to 30% in

1994, 34.9% in 1997 before decreasing to 27% in 1999. In Busia, another border town, the rates increased from 17.1% in 1990 to 34% in 1999 (IRINplusnews 2004).

Sex workers tested in Nairobi were found with an HIV prevalence of 60.8% in 1985 and by 1992, the rate had gone up to 85.2%. In 1993-95, 55.2% of sex workers tested in Mombassa were HIV positive. HIV prevalence among male STI clinic patients tested in Nairobi increased from 16% in 1985 to 28% in 1991-92 while among female STI patients, HIV prevalence increased from 33.3% in 1991 to 47.2% in 1998. In 1998, HIV prevalence among female STI clinic attendees tested in Nairobi was 29%. Nine percent of STI clinic patients tested in 1994 in Mombassa were HIV positive (IRINplusnews 2004).

#### **2.5.3.5 The Ghanaian Situation**

Ntozi (1997) point out that in the mid 1980s over 80 per cent of all the reported cases in the country were females. This was in contrast to the situation observed in some parts of Africa, where the sex ratio of infected persons was about even (Ntozi *et al* 1997).

According to Mensah (2000), from December 1987 to January 1988, a team of medical personnel from the Korle-Bu teaching hospital undertook an epidemiological study in the Krobo district to study the efficiency and potency of a Korean and Zairian herbal preparation. Findings showed that more people with HIV/AIDS could not be detected except those who reported in the hospitals. The disease was recognized as one for those who traveled outside the country. She points out that, some people related HIV infection to evil spirits; and certain hospitals were afraid of being labeled as having AIDS in the hospitals. Mensah (2000) posits that, the community, church and NGO involvement in case-identification, mobilization, education, treatment and support was stressed.

According to the report St. Martin's clinic at Agomanya took in many of the PLWHAs in the area. The clinic tried to involve the community in the education and support of sufferers, to provide home-based nursing care, counseling services, social and pastoral support and provide income-generating activities for young people in the area. The services provided were: outpatient care; home care; pastoral care and social services (Mensah 2000).

## CHAPTER THREE

### THE EXTENT OF THE HIV/AIDS PANDEMIC

#### 3.1 Comparing HIV/AIDS Prevalence in Manya Krobo and New Juaben

##### 3.1.1 Distribution by sentinel surveillance centres in New Juaben District

Fig. 3.1 shows a break down of the HIV/AIDS cases in the New Juaben District by surveillance centres. The St. Joseph's Hospital at Effiduase and Koforidua Central Hospital are the recognized centres for the voluntary counseling and testing of HIV/AIDS in the District. These centres are endowed with the basic facilities as well as the trained personnel to handle PLWHAs. St. Joseph's Hospital recorded 338 HIV positive cases in 1999. Out of this total 195 were those who reported sick and the remaining 143 were seemingly healthy people who went to donate blood at the centre. The figure increased by more than a 100 per cent in the year 2000 when patients made up 324 and donors were 543, making a total of 867.

The figures for Koforidua Central Hospital were rather higher. This might be attributed to the fact that it is the Regional Hospital and has got more facilities, as well as the capacity to handle more patients than the other hospitals. In 1999 donors who tested HIV positive were 2,194 while patients made up 909, summing up to 3,103 PLWHAs. Patients who were found to be HIV positive in 2002 were 886, while donors increased to 2,408. These made up a total of 3,294 in 2002.

It is necessary to state that, the sentinel surveillance figures do not give the total picture of the HIV prevalence situation in the districts. The figures covered those who fell sick and were made to take HIV test, and healthy looking people who went to donate blood to the perceived sick people. Those who visited the hospitals but were not made to take the

test would not be captured. The same can be said about those who do not visit the hospitals at all, but rather do self medication.

**Table 3.1 Sentinel Surveillance Report for New Juaben District**

Reporting Centre	Donors	Patients	Total	Year
St. Joseph's Hosp	143	195	338	1999
St. Joseph's Hosp	543	324	867	2000
St. Joseph's Hosp	543	324	867	2001
St. Joseph's Hosp	665	475	1,140	2002
St. Joseph's Hosp	592	369	961	2003
K. C. H.	2194	909	3103	1999
K. C. H.	1,962	787	2,749	2000
K. C. H.	1,962	787	2,749	2001
K. C. H.	2,408	886	3,294	2002
K. C. H.	2,311	732	3,043	2003
Total	13,323	5,788	21,860	

Source: Disease Control Unit, Koforidua (2004)

### 3.1.2 Distribution by Surveillance Centres in Manya Krobo District

In the case of Manya Krobo, the surveillance centres were Atua Government Hospital and St. Martin's Hospital at Agomanya. The total number of PLWHAs recorded in the Atua Government Hospital was 644 in 1999. Out of this figure 132 were patients whereas the larger majority of 512 were donors. These figures were lesser than that of St. Martin's Hospital which had a total of 954 PLWHAs in that same year, but less than that of Koforidua Central Hospital which had 3,103 as the total for both patients and donors in 1999. St. Martin's Hospital on the other hand had a combined total of 954 PLWHAs in 1999. In comparing the sentinel surveillance centres from 1999 to 2003, the Koforidua Central Hospital was always in the lead. This might be attributed to the fact that, being a Regional Hospital, it is better resourced than the others and therefore attracts more

patients. This puts the New Juaben District ahead of Manya Krobo in terms of prevalence rate of PLWHAs.

**Table 3.2 Sentinel Surveillance Report for Manya Krobo District**

Reporting Centre	Donors	Patients	Total	Year
Atua Govt. Hosp.	512	132	644	1999
St. Martin's Hosp	645	309	954	
Atua Govt. Hosp.	536	322	858	2000
St. Martin's Hosp	622	143	765	
Atua Govt. Hosp.	536	322	858	2001
St. Martin's Hosp	622	143	765	
Atua Govt. Hosp.	145	470	615	2002
St. Martin's Hosp	266	1,020	1,286	
Atua Govt. Hosp.	175	707	882	2003
St. Martin's Hosp	48	108	156	
Total	4107	3,676	7,783	

Source: Disease Control Unit, Koforidua (2004)

### 3.1.3 Distribution by Marital Status

It is asserted that the young unmarried can avoid the pandemic by abstaining from sex or the use of condom in sex or sticking to a faithful partner. However, Table 3.3 does not show significant difference between the married and unmarried in terms of infection. The percentage of the singles was 42.9, 38 per cent were married and the widowed added up to 13 per cent. The combined total of the married and the widowed was 51 per cent. In the case of Effiduase the married infected people formed 55.2 per cent as against 27.6 per cent singles. This contradicts the assumption that marriage serves as a check on the spread of the menace. It rather suggests that faithfulness to one's partner is very important, and for that matter good behavioral practices are the best check on the disease.

**Table 3.3 Marital Status of PLWHAs in Manya Krobo and New Juaben Districts**

Marital status:	Frequency			Valid Total Percent	Cumulative Percent
	MK	NJ	Tot		
Single	32	14	46	42.9	42.9
Married	18	28	46	38.1	81.0
Widowed	6	9	15	12.7	93.7
Non Valid	3	0	3	6.3	100.0
Total	59	51	110	100.0	

MK - Manya Krobo NJ - New Juaben

Source: Field data from Manya Krobo and New Juaben Districts (2003)

### 3.1.4 Distribution by Age and Sex Groups

The survey revealed that over 77 per cent of PLWHAs in the two districts were between age 26 and 45 (Fig. 3.1). This is a little more than the national figure of 60.9 per cent, NACP (2003). The age distribution indicates that majority of those infected with HIV/AIDS are those in the productive as well as reproductive group. This seems to suggest that the disease has mainly infected the most sexually active group in the

**Fig. 3.1 Age Distribution of Respondents Living with HIV/AIDS**

Source: Field data from Manya Krobo and New Juaben Districts (2003) communities, and therefore has the tendency to affect future demographic characteristics of the areas in particular and the nation in general.

The regional mean age for PLWHAs stood at 34.9 years. The median age was 35 years and the modal age 30 years (MOH 2002).

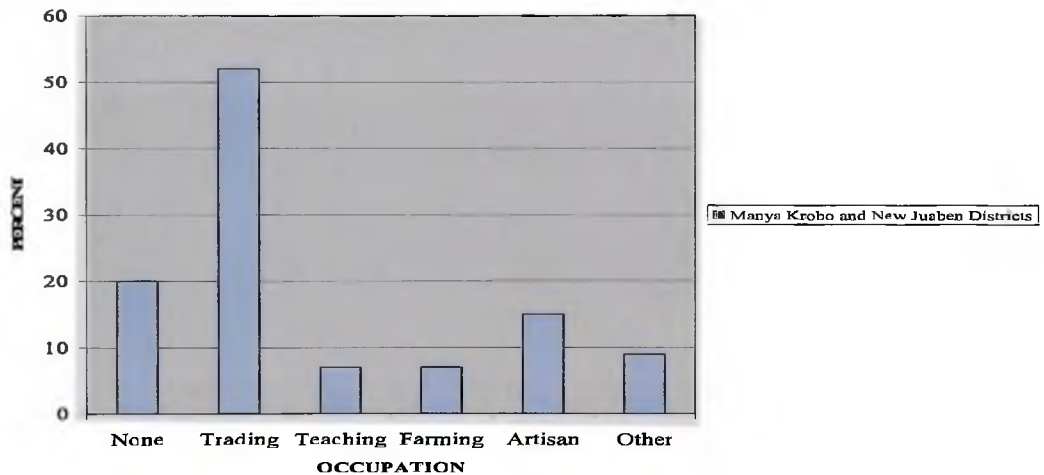
Females formed 69 per cent of the PLWHAs with the remaining 31 per cent being males. This is not too much in contrast with the regional figures of 60.3 per cent females and 39.7 per cent males (MOH 2002). One possible implication of sex composition to this study is that female activities in the study area are likely to be affected in the near future if there is no immediate intervention. The general effect on the communities is going to be diverse. This is due to the fact that females form the majority in the communities, and are involved in various socio-economic activities which make them more vulnerable. Gupta *et al* (1993) assert that, in most existing AIDS prevention efforts among women the target is mainly commercial sex workers and, to a lesser extent, adolescent girls who attend school. Thus, it is important to widen the focus of preventive measures to include more women. They recommend that sexually transmitted disease services should be made more accessible by integrating it into existing family planning and maternal health services (Gupta *et al* 1993).

However, in comparing the age-sex distribution of the two communities, it was realized that the male HIV/AIDS respondents in Effiduase made up 37.9 per cent while those at Agomanya were 23.5 per cent. Thus, in the two communities females were the most infected. In the case of the most infected age group, those between 36 and 45 in both communities were the highest (Fig. 3.1). The percentages were 38.2 and 44.8 for Agomanya and Effiduase respectively. This implies that labour force and reproductive groups in Effiduase were highly affected than Agomanya.

### 3.1.5 Distribution of HIV/AIDS by Occupations

The economic activity one engages in influences his/her perception. Fig. 3.2 shows the various types of occupation engaged in by the respondents. These ranged from farming, artisanship, trading, teaching and others in non permanent activities to those with no occupation at all. About 20.0 per cent of the PLWHAs were not engaged in any economic venture, and therefore depended solely on benevolence for their survival. According to the Population Bulletin (2002), although HIV/AIDS affects both rich and poor throughout the world, the poor, underprivileged, and uneducated are often more vulnerable to infection. It admits that HIV/AIDS and poverty are mutually reinforcing. The epidemic pushes people deeper into poverty, making it more difficult for them to sustain or recover their earlier livelihoods. Income drop, in turn, can make people and their families more vulnerable to HIV infection and AIDS related illness (Population Bulletin 2002).

**Fig.3.2 Occupation of PLWHAs**



Source: Field data from Many Krobo and New Juaben Districts (2003)

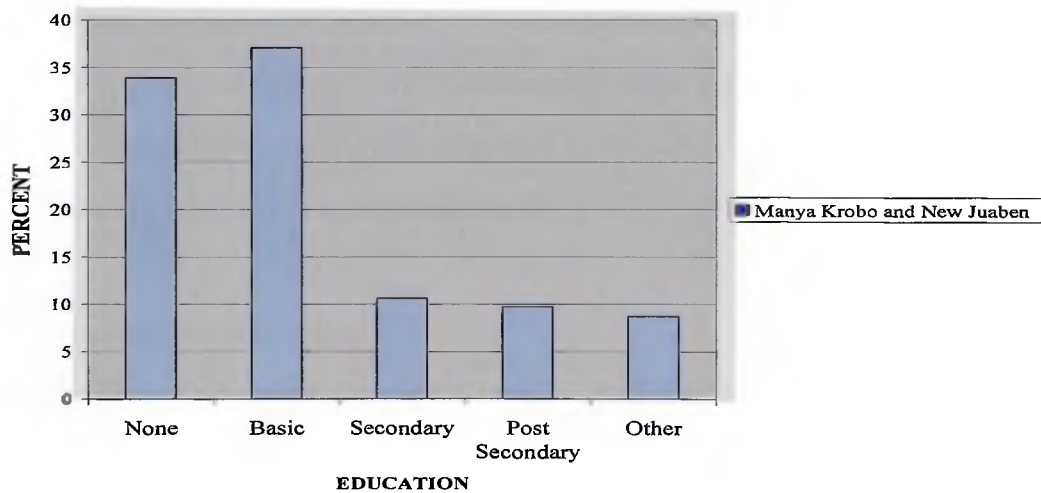
The highest percentage of 52.0 was engaged in trading activities (Fig. 3.2). This was in consonance with the Eastern Regional sentinel surveillance report (2002) which showed

traders as the most infected group of workers. This explains the observation of Ntozi *et al* (1997), who posit that itinerant traders along West Africa are the most vulnerable since they are forced to engage in illicit sexual activities to win some favours, most especially the females. About 14.0 per cent of the PLWHAs were artisans (Fig. 3.2).

### 3.1.6 Distribution by Educational Background

Fig. 3.3 shows the educational attainments of PLWHAs in the study area. Out of the total of the two districts, 37.0 per cent had attained basic education (Primary, Middle/ JSS). As much as 20 per cent attended secondary school or higher. As high as 34 per cent of these respondents were people who had no formal education at all. It could be discerned from the chart below, that the incidence of HIV/AIDS has no respect for one's educational background.

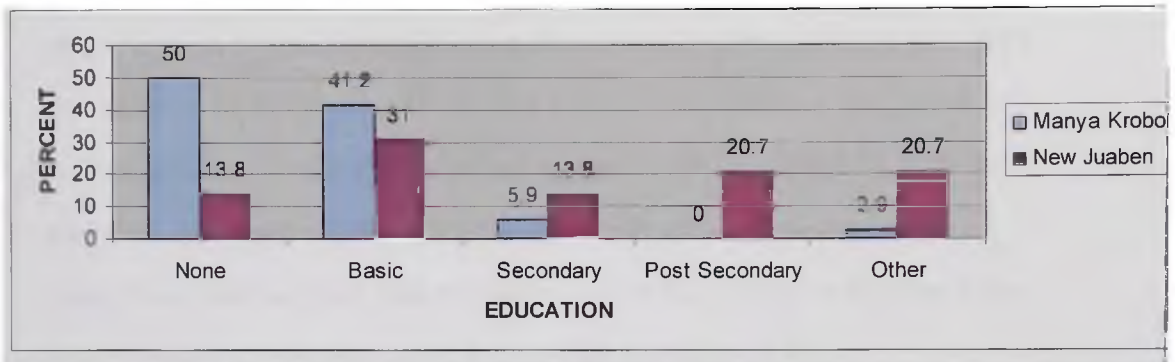
**Fig. 3.3 Educational Background of PLWHAs in Combined Districts**



Source: Field data from Manya Krobo and New Juaben Districts (2003)

However, majority of those infected had a basic education, 37.1 per cent. This was followed by those who had no formal education at all, with 33.9 per cent (Fig 3.3). This could be attributed to the fact that those with secondary education or higher are able to understand and apply the HIV/AIDS campaign better than their other counterparts.

**Fig. 3.4 A Comparative Educational Background of PLWHAs**



Source: Field data from Manya Krobo and New Juaben Districts (2003)

In comparing the illiteracy rate among PLWHAs in both communities, those at Agomanya who had no formal education were 50.0 per cent. The corresponding figure for Effiduase was 13.8 per cent (Fig. 3.4). This variation can be attributed to the fact that Effiduase is more developed and access to schools might be easier than Agomanya. Also, the higher educational background might help those at Effiduase to better understand the advertisements on HIV/AIDS and be more cautious.

### 3.2 Medical History of PLWHAs

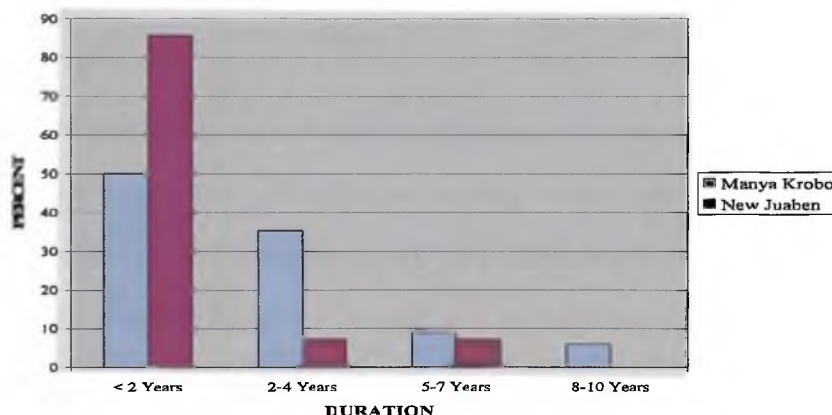
When asked the length of time they had lived with the disease 65.5 per cent, who formed the majority, indicated they had lived with the disease for less than two years (Table 3.4). Those who had lived with the disease for 8-10 years constituted as low as 2.6 per cent (Table 3.4). This explains the fact that those who had lived with the disease for a period

of about 10 years might have developed the full blown AIDS and would therefore not be strong enough to visit the care centres for treatment or might have died (Fig. 3.4). There is therefore the need to extend treatment to those who are unable to make it to the care centres. The home based care programme takes care of such patients.

At Agomanya there were people who had lived with the disease for a period of about 10 years. However, none of those at Effiduase had exceeded 7 years (Table 3.4). This might also be due to the fact that those living with HIV/AIDS at Agomanya were treated with antiretrovirals which boosted their immune system. PLWHAs at Effiduase on the other hand were only treated of their opportunistic infections with some common drugs.

Again, those who had lived with the disease for less than 2 years in the New Juaben district formed 85.7 per cent of all PLWHAs in that district (Fig. 3.4).

**Fig. 3.5 Length of Time PLWHAs had lived with the Disease**



Source: Field data from Manya Krobo and New Juaben Districts (2003)

This shows that a very high percentage of PLWHAs in the New Juaben district were newly infected as compared to those in Manya Krobo district. The corresponding percentage for Manya Krobo was 50.0 of all PLWHAs in the district (Fig 3.4).

**Table 3.4 Duration of Infection with HIV/AIDS**

No. of Years	Frequency		Total	Percent
	MK	NJ		
< 2 Years	29	43	72	65.3
2-4 Years	21	4	24	22.0
5-7 Years	6	4	10	9.0
8-10 Years	3	0	3	2.6
Non Valid	0	1	1	0.9
Total	59	51	110	100.0

MK – Manya Krobo NJ – New Juaben

Source: Field data from Manya Krobo and New Juaben Districts (2003)

Thus, a half of PLWHAs in Manya Krobo were newly infected. This difference might again be attributed to the fact that PLWHAs in Manya Krobo were treated with antiretrovirals and, therefore, lived longer to add to the numbers. The care centre at New Juaben, on the other hand, had been losing most of the PLWHAs who had lived with the disease for more than five years. Thus, since they were not treated with the antiretrovirals they kept growing weaker and could no more get in touch with the care centres. Some had died and others were bed-ridden.

### 3.3 PLWHAs' Response to Voluntary Counseling and Testing

There was the need to find out from respondents whether or not they took the HIV/AIDS tests voluntarily and the number of times they had taken the tests. This was to unravel the question of double counting in sentinel surveillance reports. The survey revealed that 54.8 per cent of the respondents had taken the test only once. Thus, over 43.0 per cent of the respondents indicated that they had taken the test more than once (Table 3.5). In a bid to know whether the tests were taken at the same place, 22.2 per cent said no. The reason given by most of them was to confirm their previous test(s). The implication is that, this

number will bloat the statistics collected on the number of PLWHAs. These points to a loophole in the sentinel surveillance report.

**Table 3.5 Number of Times PLWHAs Took HIV Test**

No. of tests taken	Frequency	Percent	Valid Percent	Cumulative Percent
1	59	54.0	54.8	54.8
2	28	25.4	25.8	80.6
3	12	11.1	11.3	91.9
4	9	7.9	8.1	100.0
Non Valid	2	1.6		
Total	110	100.0		

Source: Field data from Manya Krobo and New Juaben Districts (2003)

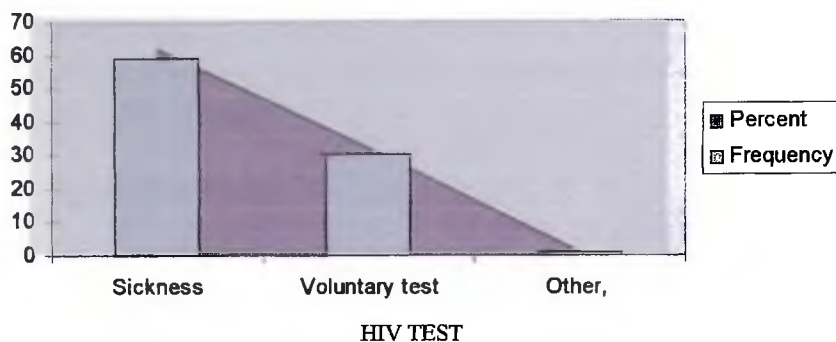
On an enquiry of how respondents got to know their HIV/AIDS status, 62.0 per cent indicated that they took the test on the occasion of sickness (Fig 3.10). This suggests that they reported to the hospital sick and were made to take the test. The implication is that most people who are HIV positive, and have not yet been diagnosed, might move about thinking they are free from the menace until they have the opportunistic infections. Those who voluntarily took the test were 32.0 per cent (Fig 3.5). It could therefore be deduced that there is a little patronage in the Voluntary Counseling and Testing (VCT) programme.

**Table 3.6 HIV Tests Taken by PLWHAs**

How did you know Your HIV status?	MK		NJ	
	Frequency	Percent	Frequency	Percent
Voluntary Test	12	20.6	11	20.7
Sickness	45	76.5	37	72.4
Other	2	2.9	3	6.9
Total	59	100	51	100

MK – Manya Krobo NJ – New Juaben

Source: Field data from Manya Krobo and New Juaben Districts (2003)

**Fig.3.6 How PLWHAs Knew their HIV Status**

Source: Field data from Manya Krobo and New Juaben Districts (2003)

Those who took HIV test voluntarily in Manya Krobo District were 20.6 per cent and 20.7 per cent for New Juaben District (Table 3.6). Thus, there was no significant difference in attitude towards Voluntary Counseling and Testing in the two places. More people in the communities got to know their HIV status when they fell sick and were made to take the HIV test.

### 3.4 Socio-Economic Factors Underlying the Prevalence of HIV/AIDS

The spread of the HIV/AIDS pandemic is further fueled by a range of socio-cultural factors which hinder the care provision to people living with the disease. These factors include unemployment, difficulty in caring for dependants of PLWHAs, job security, stigmatization and discrimination. These make PLWHAs more vulnerable and therefore highly likely to spread the disease. It is believed that, if solution is found to these difficulties encountered by those infected, the rate of spread is likely to reduce.

#### 3.4.1 HIV/AIDS and Employment Status

Table 3.7 shows that the pandemic has direct effect on the jobs of those infected. Since HIV/AIDS has the attendant problems of bodily weakness and loss of weight, those

infected are not able to do much hard work, rather, they spend more time taking treatment. Those put on antiretroviral drugs spend much money in the purchase of the drugs as well as on their diet. The treatment demands the intake of many calories of food nutrients, and this implies spending of much money. Ironically, however, most of those living with HIV/AIDS could hardly make ends meet.

**Table 3.7 Effects of HIV/AIDS on Respondents' Jobs**

Have you changed your job?	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	56	50.8	55.5	50.8
No	45	41.3	44.5	92.1
Non Valid	9	7.9	0	100.0
Total	110	100.0	100.0	

Source: Field data from Manya Krobo and New Juaben Districts (2003)

Many of the PLWHAs, 55.5 per cent, had changed their various jobs (Table 3.7). This might be due to the fact that most respondents had their health deteriorated, and could not work as hard as they used to.

To those who were still working, 66.7 per cent indicated that the number of their working hours had decreased (Table 3.9). This implies that productivity in the various sectors where they worked would decline. And since majority were self employed, they would not be able to earn as much income as they used to. This would therefore, lead to dependence on others for more of their needs. The family which was the immediate support system was likely to be over burdened and this would ultimately raise the dependency ratio of the country.

**Table 3.8 Change of Job in Separate Districts**

	Frequency	Percent	Frequency	Percent
Have you changed you job ?	MK	MK	NJ	NJ
Yes	38	64.7	17	34.5
No	19	32.4	27	51.7
Non Valid	2	2.9	7	13.8
Total	59	100	51	100

MK – Manya Krobo NJ – New Juaben

Source: Field data from Manya Krobo and New Juaben Districts (2003)

Those who had changed their jobs as a result of the disease in the Manya Krobo district formed over 64.7 per cent (Table 3.8). Those at Effiduase who had changed their jobs were 34.5 per cent (Table 3.8). Most of them indicated that their working hours had reduced, and this might have led to the change of their jobs.

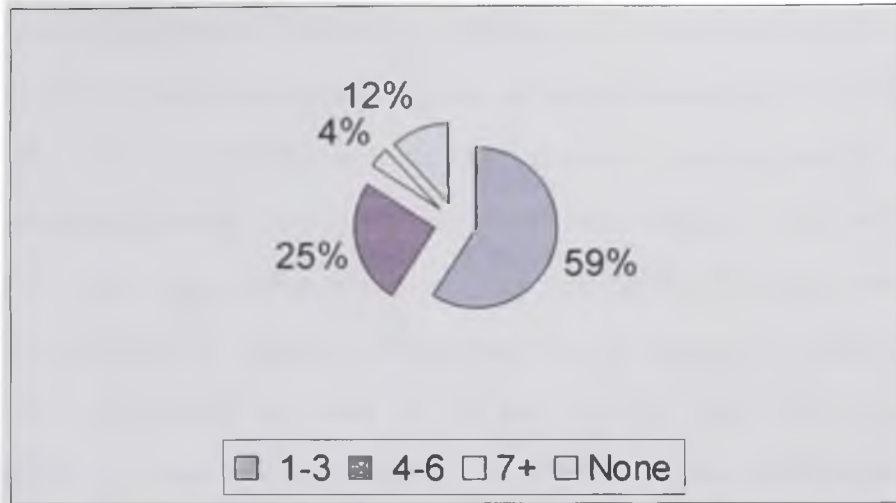
**Table 3.9 HIV/AIDS and Number of Working Hours**

Has your working hours reduced?	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	74	66.7	66.7	66.7
No	19	17.5	17.5	84.1
no response	17	15.9	15.9	100.0
Total	110	100.0	100.0	

Source: Field data from Manya Krobo and New Juaben Districts (2003)

### 3.4.2 Number of children of PLWHAs

The HIV/AIDS menace does not only infect, but also affect relations and dependants of PLWHAs, more especially their children. The ultimate effect however, is on the nation as a whole. The study revealed that 59.0 per cent of PLWHAs had 1 to 3 children; 25.0 per cent had 4 to 6 children; and 4.0 per cent had 7 or more children (Fig. 3.7).

**Fig. 3.7 Number of children of PLWHAs**

Source: Field data from Manya Krobo and New Juaben Districts (2003)

A lesser percentage of 12.0 had no children. The implications are that the sick parents had the dual responsibility of paying for their medical bills and at the same time taking care of their children. This is definitely a daunting responsibility since those infected with HIV/AIDS do not have the capacity to work as hard as they used to. The other possibility is that some of the children might have been infected with the virus and might therefore perpetuate the spread of the disease. It is therefore necessary that care programmes should make provision for children of PLWHAs.

### **3.4.3 HIV/AIDS and Social Responsibilities of the Infected**

In response to the question of whether their role in caring for their dependants had changed, 78.6 per cent said yes and 21.4 per cent had not experienced any change in caring for their dependants (Table 3.10).

For those who had not experienced any change in caring for their dependants, this might not mean they were working to cater for their families. Many of them indicated they had members of their families and other relations helping in this responsibility (Table 3.10).

Over 58.0 per cent of PLWHAs indicated they had lesser resources to cater for their dependants than formerly. This suggests their strength might have gone down, and they could not work as hard as previously to make ends meet (Table 3.10). This is more so because of the fact that majority of those living with the disease were traders (self employed). The next group pointed out that they could no longer cater for their dependants. This means their children/wards were either made to fend for themselves or might have been taken over by others. If the former is true, then, it might contribute to larger numbers of street children. Surprisingly, however, some PLWHAs claimed they had more resources to cater for their dependants than when they were not infected (Table 3.10) This suggests that their plight might have touched the heart of a benevolent person/group that used to provide for their needs.

In a bid to find out the extent to which PLWHAs' responsibilities had been affected the following observations were made. Majority of the respondents, 47.6, indicated they had less to cater for their dependants than previously (Table 3.10). In further explanation to their situation during a focus group discussion, most of them said they had lost their jobs as a result of poor health. Most of the respondents had to spend their little resources to treat themselves.

**Table 3.10 PLWHAs' Role in Caring for Dependants**

Role in taking care of dependants	Frequency	Percent
I have less to care for my dependants than previously	53	47.6
I can no more care for my dependants	19	17.5
I have much to care for my dependants than formerly	12	11.1
Others have taken over that responsibility	5	4.8
Non Valid	21	19.0
Total	110	100.0

Source: Field data from Manya Krobo and New Juaben Districts (2003)

Those who could no more cater for their families made up 17.5 per cent ( Table 3.10). This might be those who had developed AIDS. At this stage those infected became very weak and could not undertake much difficult tasks. Another group of the respondents claimed they had more resources to care for their dependants than formerly. This was 11.5 per cent of the PLWHAs and could be described as the fortunate group (Table 3.10). This might be the effort of family members as well as government and non-government organizations.

**Table 3.11 Comparing Roles in Manya Krobo and New Juaben Districts**

Role in taking care of dependants	Frequency		Percent		Total Percent
	MK	NJ	MK	NJ	
I have less to care for my dependants than previously	38	14	34.5	12.8	47.3
I can no more care for my dependants	12	7	10.9	6.4	17.3
I have much to care for my dependants than formerly	4	9	3.6	8.1	11.7
Others have taken over that responsibility	2	4	1.8	3.6	5.4
Non Valid	3	17	2.8	15.5	18.3
Total	59	51			100.0

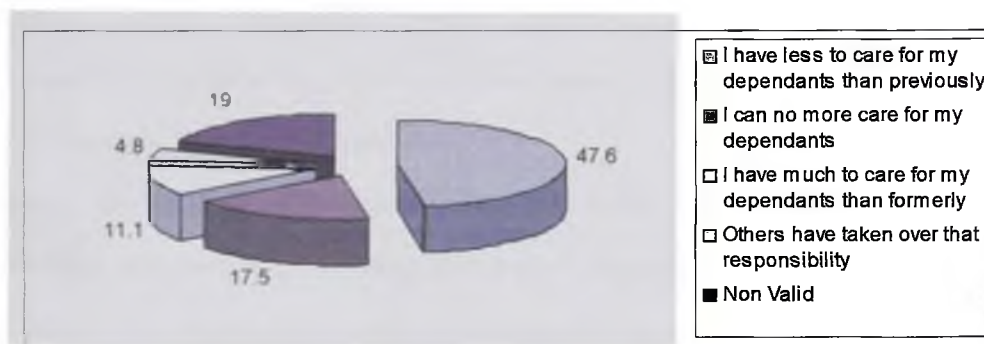
MK – Manya Krobo NJ – New Juaben

Source: Field data from Manya Krobo and New Juaben Districts (2003)

It was revealed that those who had more resources to cater for their dependants than previously were more in New Juaben than in Manya Krobo; the percentages were 8.1 and

3.6 respectively (Table 3.11). This might be attributed to the difference in the level of poverty within the two districts. New Juaben is a municipality and enjoys more brisk economic activities, which might translate to more wealth than Manya Krobo. It is therefore likely that PLWHAs in New Juaben might get more resources from rather high income earners than their counterparts in Manya Krobo. Table 3.11, again, reveals that those who had less to cater for their dependants were 34.5 per cent for Manya Krobo and 12.8 per cent for New Juaben. This, further, confirms the fact that PLWHAs in New Juaben might be richer than their Manya Krobo counterparts.

**Fig. 3.8 Ability to Cater for Dependants**



Source: Field data from Manya Krobo and New Juaben Districts (2003)

#### 3.4.4 HIV/AIDS and Job Security of the Infected

Many of those living with HIV/AIDS pointed out that they feared losing their jobs. This might be due to the problem of discrimination and stigmatization associated with the disease. Some employers as well as co-workers and clients, for fear or ignorance, would have nothing to do with PLWHAs. In an answer to whether they feared losing their job the following responses were collated. As much as 27.0 per cent refused to answer. Those who said yes made up 54.0 per cent. The fear of losing their jobs might also be due to the fact that PLWHAs spent more time seeking medication than their seemed healthier

counterparts. This, to the employer, might be a debit to working hours. Employers might therefore, use absenteeism as an excuse to sack PLWHAs.

Over 60.0 per cent of the respondents at Agomanya feared losing their jobs, and 45.0 per cent at Effiduase were in the same situation. This is ironical, since those at Agomanya received antiretroviral and were expected to be healthier and should have had a better attitude towards life.

**Table 3.12 HIV/AIDS and Job Security**

Do you fear loosing your job?	Frequency	Percent	Cumulative Percent
Yes	59	54.0	54.0
no response	30	27.0	81.0
No	21	19.0	100.0
Total	110	100.0	

Source: Field data from Manya Krobo and New Juaben Districts (2003)

### **3.4.5 Stigmatization and Discrimination**

Most of the respondents, 68.3 per cent, said they found it difficult to declare their HIV/AIDS status to others. This might be due to the perception of most people towards PLWHAs. Thus, PLWHAs are commonly branded promiscuous for the fact that a high percentage of those infected acquire the disease through sex. Again, those living with HIV/AIDS, over 60.0 per cent pointed out that they found it difficult to relate to people in their communities.

The problem of stigmatization was not much different in the two places. However, it was much higher at Effiduase than at Agomanya. Those who found it difficult to declare their status as a result of stigmatization were 72.4 per cent in Effiduase and 64.7 per cent in Agomanya. The lesser percentage in Agomanya might be due to the higher degree of social cohesion in Agomanya because of family ties. Most respondents from the

community indicated that they were related to the PLWHAs in one way or the other. For this reason PLWHAs in Agomanya might have had it a little easier to declare their status than those at Effiduase.

**Table 3.13 Relating to people in the community**

Do you find it easy relating to people?	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	66	60.3	60.3	60.3
No	35	31.7	31.7	92.1
no response	9	7.9	7.9	100.0
Total	110	100.0	100.0	

Source: Field data from Manya Krobo and New Juaben Districts (2003)

### 3.4.6 Some Cultural Activities and HIV/AIDS

Some socio-cultural practices and beliefs exposed people in the communities to the HIV/AIDS menace. Some of these practices included festivals, funerals, parties and musical concerts. 53.9 per cent of the respondents indicated that they actively took part in festivals, funerals and musical concerts. It is a common knowledge that almost all the festivities mentioned below are associated with alcoholism.

**Table 3.14 HIV/AIDS and Socio-Cultural Activities**

Festivity	Frequency.	percent	Cumulative %
Festival only	4	3.1	3.1
Funeral only	5	4.7	7.8
Musical concerts only	12	11.5	18.9
all above	59	53.9	72.8
none	5	4.7	77.5
Funerals and festivals.	9	7.9	85.4
Funeral & musicals	11	9.5	94.9
Musical concerts and festivals.	5	4.7	100.0
Total	110	100.0	

Source: Field data from Manya Krobo and New Juaben Districts (2003)

#### **3.4.6.1 Funeral/Wake keeping and HIV/AIDS**

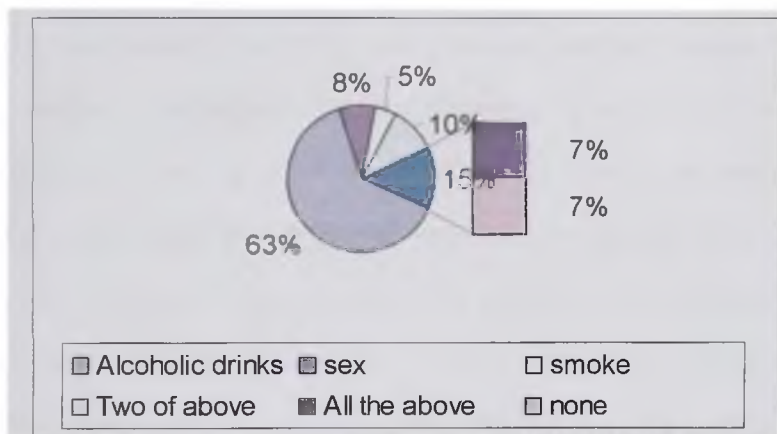
One of the objectives of the study is to establish the relationship between some cultural practices and the incidence of HIV/AIDS. When respondents were asked whether they used to attend funerals over 90.0 per cent, of the combined respondents from the two communities, said yes. And the follow up question was whether they had ever had sex during a funeral/wake keeping under the influence of alcohol 53.8 per cent shunned answering the question. Those who answered yes were 14.7 per cent of the respondents. The rest said they were not sure. This suggests that some cultural practices are now being misused, and this might have negative repercussions on the citizens in these communities and the nation as a whole.

Most of the respondents from Agomanya, 98.3 per cent, were regular funeral attendees than their counterparts in Effiduase; and 14.3 per cent had ever had sex, under the influence of alcohol during funeral/wake keeping celebrations (in the follow up question). And since unprotected sex is the major means by which HIV/AIDS is spread, over 14.0 per cent of the respondents in the communities stood the risk of contracting the menace. The high attendance to funerals may be attributed to the fact that there is a very high social cohesion amongst the people than at Effiduase. Most of the respondents at Manya Krobo were natives of the community, and might therefore be related to each other. This implies also, that people in this community could not afford to neglect important social obligation, such as funeral/wake keeping. It could be stated at this point that some social and cultural functions, though might be organized with good intentions, are being exploited for evil motives.

### 3.4.6.2 Festivals and HIV/AIDS and Other Activities

One of the cultural activities that the study considered was festival celebrations in relation to the spread of HIV/AIDS. It was observed that, during the period of festivals, there was a lot of merry making and this was accompanied by musical concerts, drinking and making of new friends. Other natives, who lived outside the communities, as well as tourists, also participated in the festivals.

**Fig. 3.9 What Respondents do during Festivals**



Source: Field data from Manya Krobo and New Juaben Districts (2003)

In response to the question of whether or not festivals contributed to HIV infection, 54.9 per cent said no, 12 per cent said yes, and the rest were not sure. Participation in most cultural activities and respect for such festivities are often higher in rural settings, which are often predominated by indigenes who are more attached to the culture, than in urban areas. It was observed that more people in the Manya Krobo District knew more about their festivals than their counterparts in New Juaben. However, with the promotion of tourism such festivities are now assuming new dimensions and the trend may change.

Asked whether they celebrated or had ever celebrated the festival with their boy/girl friend, some of the respondents, 27.1 per cent, said yes. In a bid to know the activities

respondents involve themselves in during festivals, the following responses were collated: a good majority of the respondents, 62.7 per cent of the respondents indicated they took alcoholic drinks during festivals. This is likely to influence their behaviors during such festivities. Thus, people are likely to partake in activities, such as sex, which they would not normally do without alcohol. They might therefore not be able to protect themselves against HIV/AIDS.

### **3.4.6.3 Multiple Marriages and HIV/AIDS**

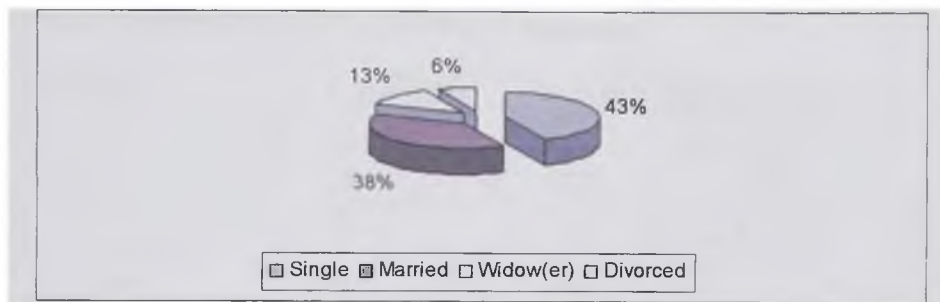
The study revealed that polygamous marriages (and extra marital relations) were not uncommon in the communities. Most of the respondents alluded to the fact that married people do not stick to their partners only. It was therefore not surprising to note that a higher percentage of PLWHAs in Effiduase were married, thus 55.2 per cent. The unmarried made 27.6 per cent, while 17.2 per cent had been widowed as a result of the pandemic. In an interview with the PLWHAs, many of the married respondents blamed their plight on their spouses, some of who were already dead. There is therefore, the need for married partners to remain faithful to themselves. This affirms the position of Lamptey *et al*, (2002), that care and prevention are intertwined, and behavioral change is an important element which should not be left out.

It is asserted that the young unmarried can avoid the pandemic by abstaining from sex or the use of condom in sex or sticking to a faithful partner. However, Fig. 3.2 does not show any significant difference between the married and unmarried in terms of infection. While the singles made up 43 per cent, the married were 38 per cent whereas the widowed made up 13 per cent. The combined total of the married, the divorced and the widowed was 57 per cent. In the case of Effiduase the married infected people formed

55.2 per cent as against 27.6 per cent singles. This contradicts the assumption that marriage serves as a check on the spread of the menace. It rather suggests that faithfulness to one's partner is very important, and for that matter good behavioral practices are the best check on the disease.

The issue of multiple marriages was not different in the two districts. All respondents in the districts admitted it was a common practice which was prevalent in the communities.

**Fig. 3.10 Marital Status of PLWHAs**



Source: Field data from Manya Krobo and New Juaben Districts (2003)

### 3.4.7 Travel History and HIV Infection

The study tried to find out the travel history of respondents by the question on present and former places of residence, and a follow up question on how long they stayed. As much as 85.3 per cent of PLWHAs had changed residence. Those who claimed to be permanent settlers were 14.7 per cent. This does not mean the permanent settlers do not travel. Those who had changed residence in a period of less than one year were over 14.0 per cent. Respondents who had changed residence within the past three years were 35.3 per cent. Some of the places mentioned as former place of residence included Kade, Tema, Abidjan, Ashaiman, and Koforidua. These places are noted to be of high

prevalence rates. This suggests that respondents might have contracted the disease in one of their former places of residence.

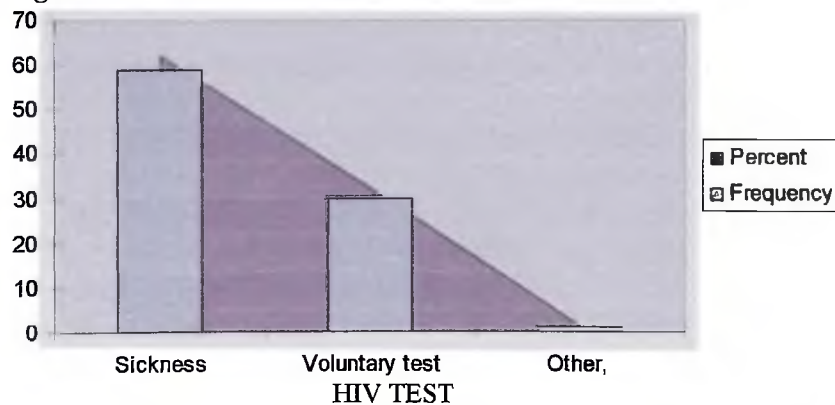
The difference between the two communities on their change of residence was not much different. However, more people in Manya Krobo had changed residence than those in New Juaben. Their movement from place to place might be in search for job opportunities, which is likely to be scarcer in Manya Krobo than in New Juaben. This is because of the more developed nature of the latter.

**Table 3.15 Length of Stay in Present Place of Residence**

No. of years	Frequency	percent	Cumulative %
<1	14	14.7	14.7
1-3	34	35.3	50.0
4-6	14	14.7	64.7
7+	20	20.6	85.3
permanent	14	14.7	100.0
Total	95	100.0	

Source: Field data from Manya Krobo and New Juaben Districts (2003)

**Fig. 3.11 How PLWHAs Knew their HIV Status**



Source: Field data from Manya Krobo and New Juaben Districts (2003)

On an enquiry of how respondents got to know their HIV/AIDS status, 62.0 per cent indicated that they took the test on the occasion of sickness.

This suggests that they reported to the hospital sick and were made to take the test.

The implication is that most people who are HIV positive, and have not yet been diagnosed, might move about thinking they are free from the menace until they have opportunistic infections.

Those who voluntarily took the test were 32.0 per cent. It could therefore be deduced that there is less patronage in the Voluntary Counseling and Testing (VCT) programme. Those who took HIV test voluntarily in Manya Krobo District were 20.6 per cent and 20.7 per cent for New Juaben District. Thus, there is no significant difference in attitude towards Voluntary Counseling and Testing in the two places. More people in the communities got to know their HIV status when they fell sick and were made to take the HIV test.

## CHAPTER FOUR

### PATTERNS OF DISTRIBUTION OF HEALTH CARE DELIVERY

#### IN RELATION TO HIV/AIDS

#### 4.1 Distribution of Health Care Facilities in New Juaben and Manya Krobo Districts

##### 4.1.1 Health Service Provision and Facilities in New Juaben and Manya Krobo

###### Districts

The Municipal Health Administration (MHA) manages the health system in the municipality. The Municipal Director of Health services, whose office is located at the Koforidua Regional Hospital, is the head of the District Health Team. As at the end of December 2003 the district had over 160 health facilities distributed throughout the communities. These were both government and private facilities. These serve the over 10,000 people in the district. Although, these facilities do not all give special care for PLWHAs most of them serve as first point of call for those infected for referral to the hospitals. They also help in the treatment of opportunistic infections.

The estimated total of about 165 health facilities are distributed within the district. These were made up of hospitals, clinics, maternity homes, health centres, reproductive health centres, traditional healers and pharmaceutical services. The three hospitals in the district were the Koforidua Central Hospital (Regional Hospital), the St. Joseph's Hospital and the Police Hospital which were located at Koforidua, Effiduase and Galloway respectively. The 11 clinics in the municipality were mainly owned by private individuals. These include Koforidua Clinic, Asiedu Clinic, Bona Clinic, Rabito Clinic and Asomani Clinic. There were also maternity homes which served the district. The activities of traditional healers were also experienced in the municipality. These facilities

eased access to health care and also exposed residents to a variety from which they could make their choice.

**Table 4.1 Health Facilities in New Juaben District**

Facility	Location	Number
Hospital	Koforidua, Galloway, Effiduase	3
Clinics	Sorodae, Koforidua, Oguaa, Betom, Adweso, Sushien	11
Maternity Homes	Oguaa, Zongo	3
Health Centres	Oyoko, Jumapo	3
Reproductive Health Centres	Zongo, Densuano, Koforidua, Oguaa	26
Traditional Medical Healers	Located in most communities	32
Pharmaceutical Services	Well Distributed	87
Total		165

Source: District Health Management Team (2004).

The Manya Krobo District had three hospitals, namely, Atua Government Hospital, St Martins Hospital at Agomanya and Akuse Hospital, all in Lower Manya. The hospitals served Manya Krobo and its neighboring districts, including Yilo Krobo, Asuogyaman and Dangme West. The majority of the people in Upper Manya depended on the only Health Centre at Asesewa and the 3 Reproductive and Child Health Centres (RCH). The Atua Government Hospital and St Martins Hospital were facilitated to take care of PLWHAs. Most of those infected in all parts of the district took treatment at the St. Martins Hospital at Agomanya.

Distribution of health facilities were more concentrated in Lower Manya to the disadvantage of residents of Upper Manya.

**Table 4.2 Health Facilities in Manya Krobo District**

Facility	Location	Number
Hospitals	Atua, Akuse, Agomanya (mission)	3
Clinics	Otrokper, Agomanya, Kpong, Asesewa, Akuse	8
Maternity Homes	Kodjonya, Odumase, Asesewa	5
Health Centres	Asesewa	1
Reproductive Health Centres	Sekesua, Otrokper, Anyaboni, Akateng, Kpong	6
Traditional Medical Halers	Present in the communities	**
Pharmaceutical services	Present in the communities	**
Total		***

Source: District Health Management Team (2004). \* This indicates unavailable figures

## 4.2 Distribution of Health Personnel in the Study Area

### 4.2.1 Distribution of Health Personnel in New Juaben District and Manya Krobo

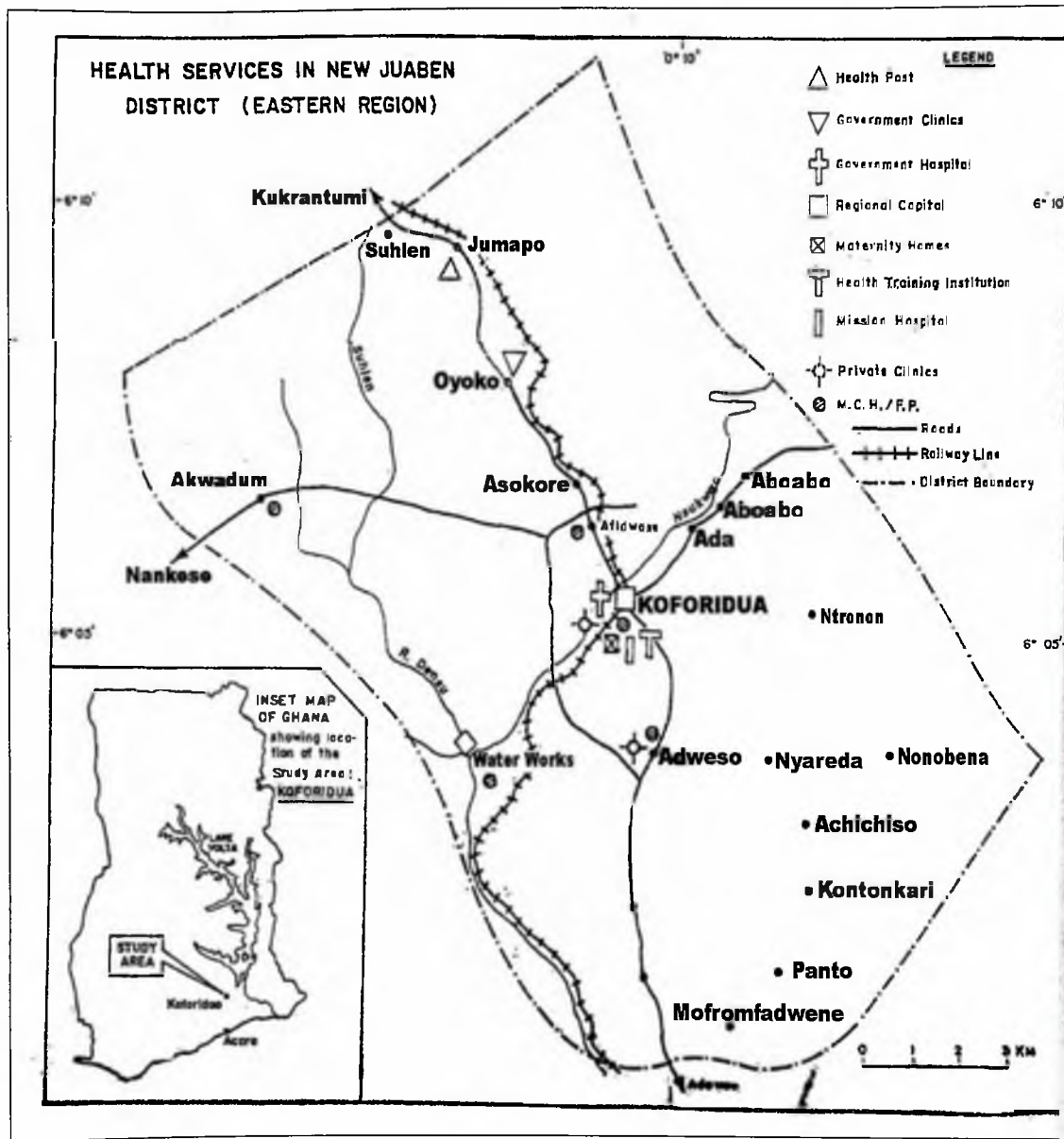
#### Districts

The district had a wide range of health personnel including medical, paramedical, and administrative as well as other workers. As at the end of December 2004 the staff strength of the Regional Health Directorate stood at 143. This included a Director, Accounts personnel, Nursing officers, Pharmacists and labourers.

The staff strength of personnel at the Regional Hospital was 545. This was far more than that of the rest of the District and the Regional Health Directorate put together. This showed the capacity the Regional Hospital had to handle the health situation in the District in particular and the Region as a whole. The rest of the District had a total staff of 126 at post, as at the end of December 2004. It was therefore not surprising that people from all parts of the region as well as those from outside, including PLWHAs took treatment from the Regional Hospital. The high figures of PLWHAs in the district might

be attributed to this fact. The activities of the other hospitals, clinics, health centres, etc., together with their staff strength supplement that of the Regional Hospital.

**Fig. 4.1 Map of New Juaben Showing Health Facilities**



Source: Ministry of Health, Koforidua (2003)

The Manya Krobo District was also endowed with a wide range of health personnel who handled the health situation in the District in various forms. This consisted of medical officers, nurses and midwives, pharmacists and dispensary personnel, administrative as well as other workers. Data on the three hospitals and the health centre at Asesewa showed a total of 302 health personnel working in various capacities. Atua Government Hospital had a staff strength of 134, Akuse Hospital had 72, St. Martin's Hospital had 76 and Asesewa Health centre had 20. These figures did not include those working at the clinics, maternity homes, pharmacies and traditional practitioners. The district had inadequate counselors, and the few counselors were health personnel working on part-time. There were 26 trained counselors in St. Martin's Hospital and 33 in Atua Government Hospital.

A comparison of the distribution of health care facilities in the two districts showed that the New Juaben District was far ahead of Manya Krobo District. Access to health care was therefore, likely to be easier in New Juaben than Manya Krobo. Even with the few facilities at Manya Krobo most of them were located at lower Manya, making those at Upper Manya more deprived. There were limited facilities for Voluntary Counseling and Testing (VCT) services which were all located in Lower Manya. There was none at all in Upper Manya. This was therefore a hindrance to accessibility to health care for PLWHAs in the area.

Fig.4.2 Map of Manya Krobo Showing the Distribution of Health Facilities



### **4.3 The Role of Governmental and Non-governmental Organizations in the**

#### **Provision of Health Care**

With the onset of the HIV/AIDS menace, there had been a growing number of organizations, both governmental and non-governmental, to take care of the infected as well as those affected by the disease. These were support networks and associations whose activities varied from one to another. These included provision of moral, psychosocial and financial support, as well as food items. Others included clothing and Medicaid, counseling and testing. Such organizations, though distributed throughout the districts, were not well known. This made it difficult for PLWHAs and those affected to seek assistance from them. Also, there was little or no coordination among these organizations and this made it difficult for Ghana AIDS Commission and other national level institutions to liaise with them.

#### **4.4 Membership of Support Network and PLWHAs Associations**

The knowledge about PLWHAs Association and support network was also measured in the research. It became clear that there was knowledge about the existence of such organizations by 54.3 per cent of the respondents living in the communities. In an answer to whether respondents belonged to these associations, only 19.1 per cent said yes. This shows that most people did not belong to the groups, though they had the interest of contributing to support PLWHAs. It was perceived therefore, that there was the need for a conscious effort to be made to give the general public the opportunity to join such associations so that they may donate to PLWHAs. This would also make them have a first hand knowledge of the HIV/AIDS situation and become more cautious.

Those who did not belong to any support network or association in Effiduase were 72.5 per cent, and those in Agomanya made up 70.8 per cent. This indicated a low patronage in the activities of HIV/AIDS associations. However, a significant number of people in the two areas were willing to contribute to PLWHAs, through the associations. Those from Effiduase were exactly 50.0 per cent, whereas those from Agomanya made up 62.7 per cent. The higher figure from Agomanya could be attributed to the fact that most of the respondents from the communities had friends and relations living with the disease, and confirms the second proposition that people who were hard hit by HIV/AIDS were likely to have a better attitude towards PLWHAs.

#### **4.5 Other Sources of Care for PLWHAs**

In addition to the treatment received at the care centres most of the respondents living with HIV/AIDS indicated they took treatment from various groups. These included community based organizations, churches and family members. Those who claimed to be solely dependent on the Ministry of Health for their treatment were 74.6 per cent. The church also provided care for 15.9 per cent of the respondents. Those who benefited from the activities of community-based organizations were 7.9 per cent of the respondents. The support received included finance, antiretroviral drugs, food items and psychosocial support. In an interview with some respondents they indicated they took herbal treatment. This confirms the assertion that complementary therapies were particularly popular with people who feel let down by the failure of conventional medicine to find a cure for them (Welch *et al* 1990).

Others visited spiritualists who they believed might have a solution to their predicament.

Table 4.3 shows that most of the PLWHAs depended on the services of more than one care provider for their survival. Those who depended solely on the care centres set up by the hospitals for their health needs made up 74.6 per cent. Some in addition to the services from the care centres relied on the Community Based Organizations (CBOs) for their health needs. The contributions of churches to the needs of PLWHAs were also recorded. Those who received help from churches in addition to care from the centres were 15.9 per cent (Table 4.3).

**Table 4.3 Providers of care to PLWHAs**

<b>Respondent's care providers</b>	Count MK	Count NJ	Total	Cumulative %
Ministry of Health	34	13	47	74.6
Community based organization	0	5	5	7.9
Church	4	6	10	15.9
Family	4	8	12	19.0
Other, specify	0	9	9	14.3
Total				100.0
<b>Particular services received</b>				
Financial support	3	20	23	39.0
Condoms	0	1	1	1.7
Antiretroviral therapy(drugs),specify	18	11	29	49.2
Counseling	27	22	49	83.1
Psychosocial support	20	16	36	61.0
Financial support from family members	12	2	14	23.7
Food	18	15	33	55.9
Other, specify	0	2	2	3.4
Total				100.0

MK- Manya Krobo NJ- New Juaben

Source: Field data from Manya Krobo and New Juaben Districts (2003)

The support the respondents received included counseling, antiretroviral, psychosocial support and finance. Over 49.0 per cent received antiretroviral drugs and 83.1 received counseling and 61.0 had psychosocial support. Over 23.0 per cent had financial support from both family members and others.

It was observed that people living with HIV/AIDS would not readily tell the sources of their support. Most of them often wanted to portray they were in serious need of help and therefore disclosing their various sources of help might restrain would-be helpers. Most respondents declined answering the questions on their supporters. However, apart from the services of the care centres, 8.8 per cent of PLWHAs in Agomanya said they received assistance from Community Based Organizations which provided home-based care. The rest did not respond. On the other hand PLWHAs at Effiduase disclosed their sources of help. Those who had extra support from churches were 14.6 per cent. Over 19.0 per cent received family support and 22.0 per cent said they had other sources.

**Table 4.4 How often PLWHAs get Support**

How often do you get this Support?	Frequency	Percent	Valid Percent	Cumulative Percent
Fortnightly	38	60.3	79.2	79.2
Weekly	6	9.5	12.5	91.7
Other, specify	3	4.8	6.3	97.9
Monthly	1	1.6	2.1	100.0
Total	48	76.2	100.0	
Missing System	15	23.8		
Total	63	100.0		

Source: Field data from Manya Krobo and New Juaben Districts (2003)

#### **4.5.1 Activities of Family Health International (FHI)**

Although many organizations are on record as providing help for PLWHAs in the study area, the activities of Family Health International were very much felt in the Manya Krobo District. In February 2001, FHI launched a new five-year project to explore cost-effective ways to deliver comprehensive care—including antiretroviral therapy (ART)—

to people with HIV/AIDS in Ghana. The sexually transmitted and antiretroviral therapy (START) programme aims to:

- Promote safer sex through education and communications
- Provide voluntary HIV counseling and testing
- Prevent mother-to-child HIV transmission
- Prevent and treat opportunistic infections in people living with HIV/AIDS
- Prevent and treat other sexually transmitted infections (STIs)

#### **4.5.1.1 FHI Support to HIV/AIDS Programmes**

FHI offers a range of technical services, including clinical care and research in HIV/AIDS, sexually transmitted infections and other infectious diseases, contraceptive technology, and women's health. Family Health International offers a range of technical services, publications and other materials on HIV/AIDS, sexually transmitted infections and other infectious diseases, contraceptive technology, and the health and well-being of women of reproductive age.

FHI offers a full range of programmes and support needed to effectively control the HIV/AIDS pandemic. It provides technical and managerial assistance and training to non-governmental organizations and private-sector agencies. Some organizations that enjoyed the support of FHI in the Manya Krobo District included Queen Mothers Association, and Community Based Organizations. FHI design, manage and evaluate comprehensive HIV prevention, care, and support programmes. After identifying what is needed, FHI develops programmes with communities to meet local needs, and advocate for effective, compassionate, realistic, and appropriately resourced responses.

The Ministry of Health from December 2003 introduced Highly Active Antiretroviral Therapy (HAART) in Ghana for the care of PLWHAs. Various activities were undertaken to prepare for a successful take off. The first two years was used to pilot a comprehensive treatment and support project using ART at two sites in the Eastern Region (St. Martin de Porres Hospital, Agomanya and Atua Government Hospital). The project was funded and implemented jointly with FHI, (NACP Bulletin, 2003).

An interview held with the counseling unit of the St. Martin de Porres Hospital, showed that FHI's contribution to the HIV unit included infrastructural support, incentives in terms of remuneration to personnel who cared for PLWHAs, training of personnel in home-based care programme.

#### **4.6 Christian Health Association of Ghana (CHAG)**

CHAG was composed of 16 church groups including Catholics, Protestants and Pentecostals. It was made up of 128 health institutions, 49 hospitals and 79 clinics. CHAG provided 40% of orthodox health services in Ghana. Its activities were mainly centred in rural areas and were community based.

The care centres in the two districts benefited very much from the assistance of CHAG. Their premises as well as the staff who worked on PLWHAs were all employees of CHAG.

The philosophy of CHAG was to provide holistic care to the very poor and needy. It considered HIV/AIDS as a health related problem with developmental dimensions.

The strategies of CHAG included promotion of safer sex, management of sexually transmitted diseases (STDs), promotion of infection control, strengthening health and

community services for care and support, and promotion of home based care. Much of CHAG's work in community based HIV/AIDS work consists of information dissemination training, community mobilization and income generation programmes for PLWHAs and medical care and counselling.

The contributions of churches in providing for PLWHAs were much pronounced in the two districts. These ranged from spiritual or emotional assistance to materials like food, clothing and finance. However, the Manya Krobo District had more non-governmental organizations working on people infected with HIV/AIDS than the New Juaben District. This might be due to the fact that the district was the first to record HIV cases and therefore attracted the attention of such organizations.

## CHAPTER FIVE

### ACCESSIBILITY AND UTILIZATION OF HIV/AIDS CARE CENTRES

#### 5.1 Introduction

One of the cardinal factors that influences people's use of health facility has been the distance between the facility and the users. Dutton (1986) in writing on the structural barriers that impede utilization of health facility discusses time. He posits that the length of time one spends in moving from his/her place of residence to a health facility and the time he/she spends at the facility to get treatment can serve as barriers. For this reason the study made it one of its objectives to find out the effect of distance on care delivery for PLWHAs in the communities. Other factors considered include the geographical locations of the communities, the status of each community, the degree of social cohesion and differences in care delivery.

Effiduase is part of the New Juaben Metropolitan area, and therefore enjoys a spill over of the brisk socio-economic activities of Koforidua, the regional capital. The survey showed that the care centre at Effiduase did not only serve PLWHAs in the metropolis, but PLWHAs from other parts of the region, and even outside the region.

**Table 5.1 How PLWHAs got to the Care Centres**

How do you get to the care centre?	Frequency			Percent	Cumulative Percent
	MK	NJ	Total		
By vehicle	38	39	77	81.0	81.0
By walking	13	5	18	19.0	100.0
Total			95	100.0	

**MK- Manya Krobo NJ- New Juaben**

Source: Field data from Manya Krobo and New Juaben Districts (2003)

Agomannya on the other hand is a district capital and also experiences brisk business activities, but not to the level of Effiduase. The town exhibits more rural characteristics, in terms of very close social cohesion among the inhabitants, than Effiduase.

The values in Table 5.1 suggest that, 19.0 per cent of the respondents used to walk to the care centres. The large majority, however, had to spend money on transport in order to take treatment. This definitely puts a daunting financial burden on the patients. This was confirmed by the health personnel at the centres, that majority of the patients could not afford the 50,000 cedis they had to pay for treatment monthly. It also shows that the centres do not only serve people living in the communities, but others who traveled 30 km. and more from other places were also taking treatment from the centres.

**Table 5.2 Relocation of Care Centres**

Would you like the care centre close to your house	Frequency			Percent	Cumulative Percent
	MK	NJ	Total		
No	43	26	69	73.0	73.0
Yes	8	15	23	23.8	96.8
no response	0	3	3	3.2	100.0
Total			95	100.0	

MK- Manya Krobo NJ- New Juaben

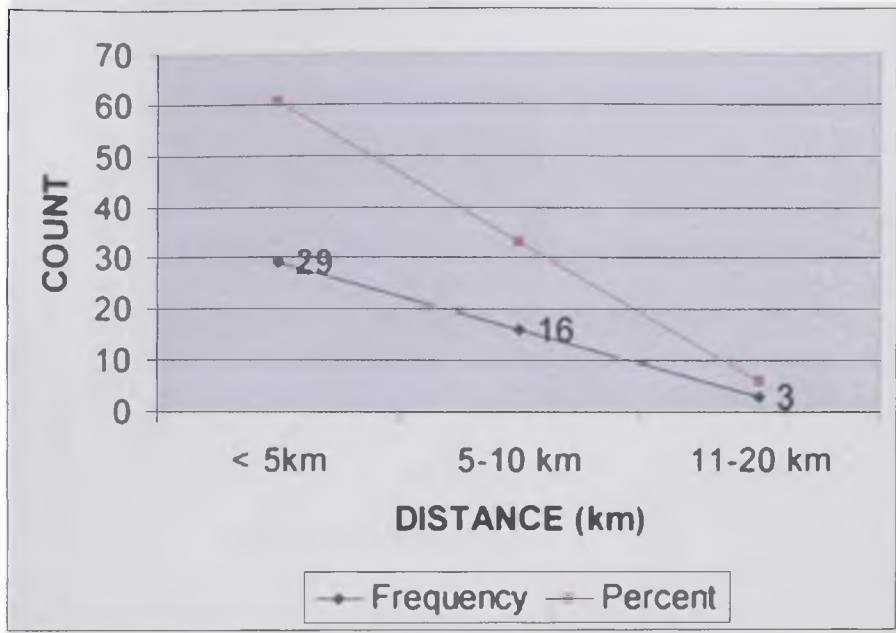
Source: Field data from Manya Krobo and New Juaben Districts (2003)

In spite of the inconveniences involved in getting to the care centres, when the patients were asked whether they would like to have the care centres close to their place of residence, so that their financial burdens could reduce, as high as 73.0 per cent replied in the negative (Table 5.2). This was in complete contradiction with Dutton's (1986) assertion, that distance is a barrier to utilization of health facility. The reason for this response was glaring, stigmatization and discrimination. The implication is that those who do not have the means to travel would be left to their fate. This also indicates that those who lived closer to the care centre were not very happy with their situation, since people in the locality could easily know their HIV status.

## 5.2 Factors Affecting Accessibility and Utilization of Healthcare Facilities-

### A Comparative Study of Agomanya and Effiduase

**Fig.5.1 Distances to Care Centre, Agomanya**



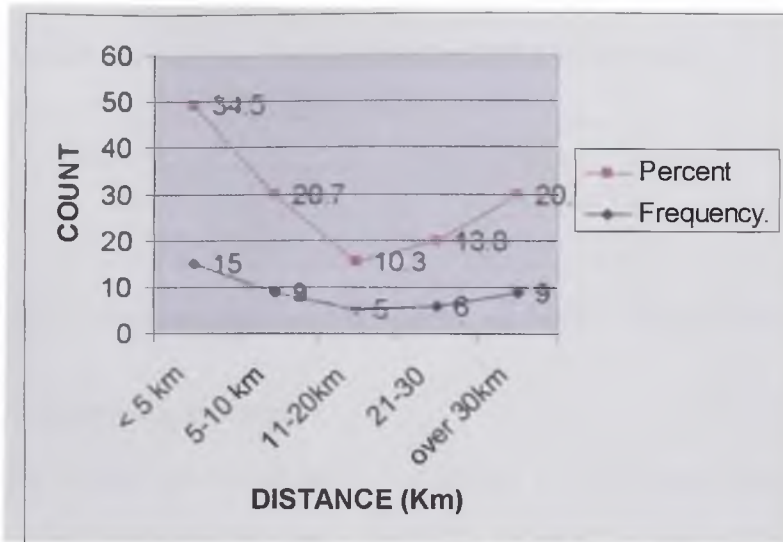
Source: Field data from Manya Krobo and New Juaben Districts (2003)

In finding out the distance covered by respondents, in order to get treatment, the following observations were made, as shown in Fig. 5.1 and Fig. 5.2.

In the case of Agomanya, the study revealed that 60.6 per cent of the respondents lived within a distance of less than 5 km. This could be interpreted to mean that about 60.6 per cent or less of the PLWHAs lived in the community. They might, or not, be natives of this community. As high as 33.3 per cent, came from the nearby communities, thus, living within a distance of 5 to 10 km. Some of the neighboring towns include Atua, Somanya, Odumase, Kpong, Akuse, Asesewa, Terguanya and Sekesua. The rest, who formed 6.1 per cent, lived beyond a distance of 10 km. The response suggests that the

care centre provided treatment for PLWHAs, majority of whom were either natives or only lived within the community.

**Fig. 5.2 Distance to the Care Centre, Effiduase**



Source: Field data from Manya Krobo and New Juaben Districts (2003)

At Effiduase, those who lived within a distance of less than 5 km. were 34.5 per cent. This is a little above half of that of the Agomanya figure of 60.6 per cent, while those who traveled for 5 km. to 10 km. made up 20.7 per cent. Thus, 55.2 per cent of the respondents lived within a distance of 10 km from the care centre. This might cover communities such as Asokore, Nsukwaw, Oyoko, Jumapo and Akwadum. 10.3 per cent lived within a distance of between 11 km and 20 km, while 13.8 per cent lived between 21 km and 30 km. As much as 20.7 per cent of PLWHAs lived beyond 30 km. This is in contrast with Agomanya, which had none of the respondents living beyond a distance of 20 km. Some of the respondents indicated they came from as far as Kumasi for treatment at Effiduase. This could again, be explained by the geographical location of the Effiduase

Township. It is easily accessible to those who travel along the Accra-Kumasi route. This could also be attributed to the fact that PLWHAs would like to take treatment in environments where they are not known- a confirmation of the first proposition of this research.

**Table 5.3 Other Care Providers who attended to PLWHAs**

Do others provide care?	Frequency	Percent	Valid Percent	Cumulative Percent
No	66	60.3	60.3	60.3
Yes	37	33.3	33.3	93.7
no response	7	6.3	6.3	100.0
Total	110	100.0	100.0	

Source: Field data from Manya Krobo and New Juaben Districts (2003)

### 5.3 Differences in Care Delivery

The care delivery practices in the districts differed in various ways. These ranged from types of drugs used in treatment of PLWHAs, policy of ministry of health, incentives given to health personnel and activities of support networks and associations.

#### 5.3.1 Provision of Antiretrovirals

The provision of antiretrovirals was one of the issues that differentiated between care provisions in the two care centres. This is the main type of treatment for HIV/AIDS. Though antiretrovirals do not cure they stop people from becoming ill for too long. St. Martin's de Porres Hospital in the Manya Krobo District is one of the few centres being used to pilot the use of antiretroviral drugs. The two main drugs used were Combivir and Efavirenz. Patients in this district had to pay 50,000 cedis monthly for their drugs together with other common drugs. Those who had tuberculosis took additional treatment on different days. Antiretroviral treatment for HIV infection consists of drugs which

work against HIV infection itself by slowing down the reproduction of HIV in the body (Kanabus 2001).

Whereas PLWHAs in the Manya Krobo District received antiretroviral treatment, those in New Juaben did not have access to such treatment. The main activities were centered on prevention and treatment of opportunistic infections. This treatment was freely administered.

Another difference was in the support of orphans and vulnerable children. The care centre at Agomannya in collaboration with the Queen mothers Association provided support for orphans. These included those who were orphaned as a result of HIV/AIDS as well as other causes.

The care centre at Effiduase, on the other hand, did not provide antiretrovirals for PLWHAs. The main treatment was for opportunistic infections such as tuberculosis, fever, headaches, etc.

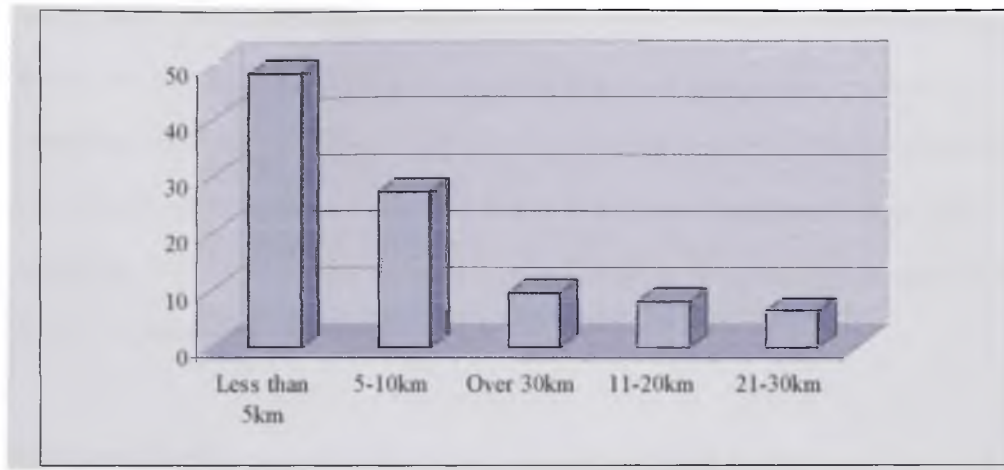
### **5.3.2 Interventions from Organizations**

The role of organizations as well as individuals in the provision of care for PLWHAs is very crucial, since treatment for the pandemic is very expensive. What is more, most of those infected who took treatment at the centres were those of low economic backgrounds. Fortunately for PLWHAs at Manya Krobo, renowned organizations as well as individuals contributed in diverse ways to care for those infected. Principal among the interventions was that of the Family Health International (FHI). Their activities included subsidizing the cost of drugs for PLWHAs, financial remuneration for health personnel who cared for PLWHAs and training of personnel for home-based care and counseling.

#### 5.4 The Effect of Distance on Care Delivery

In an answer to the question of how long their houses were from the care centres, the following responses were collated. Out of the total of 95 respondents, from the two

**Fig. 5.3 Distances from PLWHAs' House to Care Centre**



DISTANCE-km

Source: Field data from Manya Krobo and New Juaben Districts (2003)

districts, 48.4 per cent lived within a range of less than 5 km. from the health facilities.

27.4 per cent traveled over a distance of between 5 and 10 km. to take treatment. Those who covered a distance of 11 to 20 km. made up to 8.1 per cent.

A percentage of 6.5 traveled a distance of between 21 and 30 km. to receive treatment from the care centres. Those who covered over 30 km. were 9.7 per cent. When respondents were asked, how they got to the care centres for treatment, 81.0 per cent of the PLWHAs indicated they got there by means of vehicle.

#### 5.5 Length of Time Spent at Facility

Among the programme of activities organized for the PLWHAs at the care centres were talks on care, sermons, treatment, entertainment, distribution of gifts and socialization.

Meetings which were held fortnightly started at about 8.00 a.m. and ended at about 1.30 p.m. Some, however, stayed longer depending on their ailments. In a focus group discussion (F.G.D) held with those infected, most of them enjoyed staying at the centres for long since that was the only place they were given good attention. Again, they could freely associate and shared their experiences with colleagues. Some enjoyed the activities held at the care centres and did not care when they spent long hours over there. This observation, however, contradicts the popular opinion that the length of time spent at the health facility could serve as a structural barrier to healthcare utilization (Dutton 1986). In the case of PLWHAs, however, long time well spent at the facility rather motivated them. This was the case for the two districts.

## **5.6 Other Likely Factors that Affect Utilization of the Health Facility**

Apart from the popular factors that are known to affect health care utilization, such as distance and time spent at the facility, others were considered. These include knowledge of other people's HIV status; attitude of relatives towards PLWHAs; and whether or not people living in the communities know their HIV status

### **5.6.1 Knowledge of Other People's HIV Status**

When people with good motives know the HIV status of their neighbours, they are likely to encourage and urge them on in life. However, if the same information gets into the fold of ill-mannered people, they are likely to make life unbearable for those infected. It was interesting to note that, though one's HIV status is kept secret by health personnel who worked on PLWHAs, majority of the respondents, who formed as high as 72.5 per cent

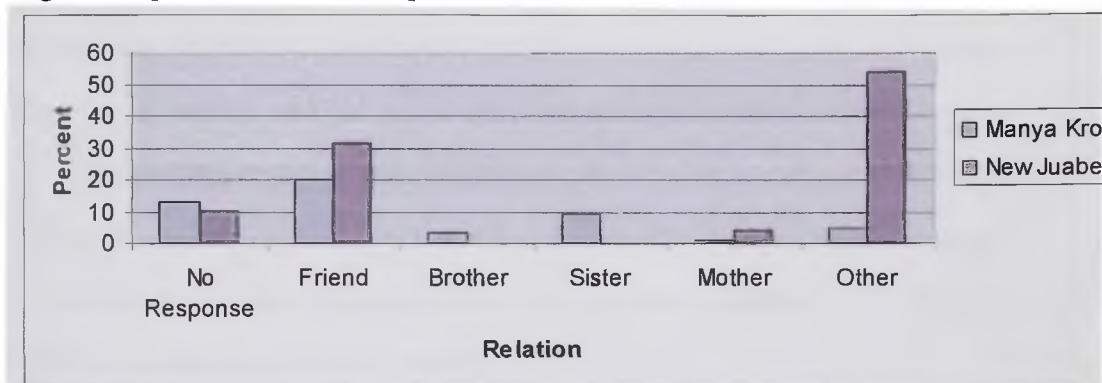
knew about other residents' HIV status. To most of the respondents those they knew were either relatives or friends. This suggests, also, that the information about HIV status is kept within family and friend circles. However, this might lead to stigmatization and discrimination if such information is passed on to other people in the community, which is more likely the situation. Those infected will have no option but to move to localities where they are not known. Of the total respondents, more than 67.0 per cent were willing to share cups and plates, shake hands with as well as work together with PLWHAs. This attitude will definitely impact positively on health care utilization. Others were either not sure or not willing to associate with those living with the disease. The implication is that there is the need for intensified education, on the need to associate with PLWHAs.

#### **5.6.2 Relationship with People Living with HIV/AIDS**

The question on knowledge of other people's HIV status was followed by one on the relationship between the respondents and PLWHAs. 25.5 per cent of the respondents did not indicate their relationship with those infected with the HIV/AIDS menace. This could either be interpreted to mean that, they had no relationship with those living with the disease or they wanted to keep their relationship a secret. However, 20 per cent of the respondents from Manya Krobo, and 31.3 per cent from New Juaben indicated they were their friends. Only the respondents from Manya Krobo said they had brothers and sisters living with HIV/AIDS. Those who claimed they had brothers living with HIV/AIDS made up 3.0 per cent of the respondents (Fig. 5.4). Those who had sisters living with HIV/AIDS were 9 per cent. The percentages of 1 and 4.2 for Manya Krobo and New Juaben respectively, said their mothers were living with HIV/AIDS. The above data

suggest that over 65.0 per cent of the respondents had a relation living with the disease. This therefore, reflected in their attitudes towards PLWHAs. This confirms the assertion by Population Research Laboratory (1990), that those who have been hard hit (affected) by the disease (in terms of having a friend or relation infected) are likely to have a positive attitude towards those living with HIV/AIDS.

**Fig. 5.4 Respondents' Relationship with PLWHAs**



Source: Field data from Manya Krobo and New Juaben Districts (2003)

### 5.6.3 Respondents' Knowledge of their Own HIV Status.

When one knows his/her HIV status it helps so much in either taking early treatment or avoiding bad behavioral practices. Again, when people know they are likely to test HIV positive their attitude towards those infected will not be hostile. Asked whether they knew their HIV/AIDS status 23.6 per cent said yes, while the remaining 76.4 per cent said no. This indicates a higher level of awareness and response to the HIV/AIDS campaign than the national rate of 7.5 per cent, (GDHS 2003). When those who answered in the negative were further asked whether they were likely to be HIV positive, 72.5 were not sure. 23.6 per cent said no. This confirms the assertion that many individuals do not think they stand the risk of getting AIDS. A survey conducted among Albertans showed

that only 1.8 percent rated their chances of getting AIDS as high, Population Research Laboratory (1990).

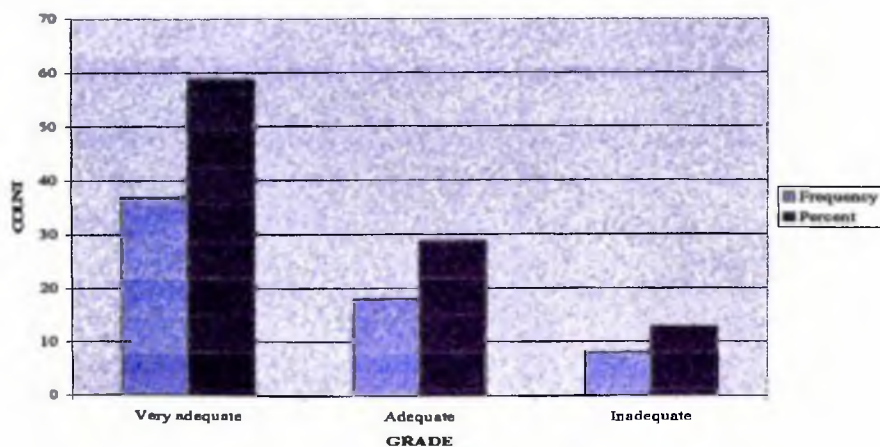
The remaining 3.9 per cent admitted they stand the risk of contracting the menace. The above figures show a high level of consciousness about HIV/AIDS in the study area. This might be due to the fact that people living in the communities might have had a first hand knowledge of the devastating effect of the HIV/AIDS menace.

When those who did not know their HIV/AIDS status were asked whether they were likely to test positive, 85.7 per cent said no. This shows the attitude and mentality of a cross section of the populace. Thus, majority of those who had not taken the HIV/AIDS test never thought they stood the risk of testing positive. This mentality is likely to impact on respondents' response to accessing and utilizing healthcare facilities.

### 5.7 Care Service Assessment by PLWHAs

When PLWHAs were asked of their views concerning the care service provision at the centres their grading ranged from very adequate to inadequate.

**Fig. 5.5 Grading the Care Service PLWHAs Received from Care Centres**



Source: Field data from Manya Krobo and New Juaben Districts (2003)

According to 58.7 per cent of the respondents living with HIV/AIDS, the care service was very adequate (Fig. 5.5). This was because of the fact that most of them had no friends except their counterparts who they met fortnightly at the centres.

Again, the care service rendered by the staff that worked at the centres motivated and brought a lot of relief to most of them. To 28.6 per cent of them the care they received was simply adequate (Fig. 5.5). Some of them claimed it was better than none at all and were therefore, satisfied with the care service provided to them. To the last group which formed 12.7 per cent, the care service was inadequate and therefore requested that something more should be done for them. For members of this group they might have relied mainly on the services of the care centres for their upkeep whereas members of the other two groups might have used the care centres as supplement to other services they received elsewhere.

## CHAPTER SIX

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 6.1 Summary

The problems that necessitated the study included very high prevalence rate of HIV/AIDS in the study area; majority of PLWHAs in the area did not attend care centres for treatment; care centres were a few and these were constrained by lack of financial and logistical support; stigmatization and discrimination remained the major impediments to care delivery. The two study areas differed in terms of size, population and social as well as economic status. Though the Manya Krobo District was bigger in size and population than New Juaben District, the latter was more economically brisk. Whereas the dominant ethnic group in the Manya Krobo District was Krobos, that of New Juaben District was Akans.

There are two major types of HIV. These are HIV-1 and HIV-2 of which the former is dominant in West Africa and the world in general. The main methods of treatment could be grouped as modern and traditional. The traditional methods include the use of purification rituals, traditional foods and herbs as well as counseling services. Plants are used to help family planning and also for contraceptive purposes. The modern method on the other hand uses chemotherapy in treating opportunistic infections as well as counseling and other psychosocial support services. The barriers to care utilization are seen in the degree of availability, accessibility, affordability and acceptability of the health facilities. Some of the African countries hardest hit by the HIV/AIDS are Botswana, South Africa, Uganda and Kenya. These countries had their own means of caring for PLWHAs which varied from country to country.

The HIV/AIDS prevalence rates in New Juaben District exceeded that of Manya Krobo from 1999 to 2003. The marital status of the married people did not so much prevent them from being infected. Singles made up to 43 per cent; the married were 38 per cent; whereas the widowed made up to 13 per cent. The combined total of the married and the widowed was 51 per cent. In the case of Effiduase the married infected people formed 55.2 per cent as against 27.6 per cent singles. Over 77 per cent of PLWHAs in the two communities were between age 26 and 45. Females formed 69 per cent of the PLWHAs with the remaining 31 per cent being males. As high as 34 per cent of respondents, who formed the majority, were people who had no formal education at all. At Agomanya there were people who had lived with the disease for a period of about 10 years. However, none of those at Effiduase had exceeded 7 years.

Some of the factors that underlined the HIV prevalence rate included employment status, multiple marriages, festivals and funeral celebrations, and level of awareness about HIV/AIDS.

Health Service distribution in New Juaben District was better than in the Manya Krobo District. These facilities included hospitals, clinics, maternity homes, health centres, reproductive health centres, traditional healers and pharmaceutical services. Whereas the facilities were distributed through the New Juaben District, those in Manya Krobo were concentrated at Lower Manya. The districts had a wide range of health personnel including medical, paramedical and administrative. Personnel at Agomanya were better resourced to take care of PLWHAs than those at Effiduase. The activities of NGOs in care provision were more and better felt in Manya Krobo District than in New Juaben. Most people did not belong to support networks and associations, though they had the

interest of contributing to support PLWHAs. Others who helped in the support of PLWHAs were churches, family members and community based organizations. The support of Christian Health Association of Ghana (CHAG) and churches were popular in the two places. In addition to these, Family Health International (FHI) provided more support for PLWHAs in Manya Krobo District than any other NGO.

The factors which were discussed, as those influencing accessibility and utilization of health facility, are distance or length of time spent in moving from place of residence to a health facility and the time spent at the facility to get treatment; geographical locations of the communities; the status of each community; the degree of social cohesion and differences in care practices.

Over 60.0 per cent of PLWHAs lived beyond a distance of 5 km from the care centres, and over 70.0 per cent of the respondents boarded vehicles to the care centres and back to their houses. In spite of the inconveniences involved in getting to the care centres, when the patients were asked whether they wanted to have the care centres close to their place of residence, so that their financial burdens could reduce, as high as 73.0 per cent replied in the negative. More people in New Juaben covered longer distances to care centres than in Manya Krobo. The major differences in care delivery in the two districts were seen in the drugs used and contributions made by NGOs. There was the use of antiretrovirals at Agomanya but not at Effiduase. PLWHAs in the two districts did not complain about time spent at the centres, though some stayed there for over five hours. More people in Manya Krobo, however, knew their HIV status than those in New Juaben.

## 6.2 Conclusion

Distance and time spent at the facility did not deter PLWHAs from taking treatment at the various care centres. Although most of the respondents (PLWHAs) paid transport fare to receive treatment from the care centres, 73.0 per cent were not willing to have the care centres close to their place of residence (Table 5.2). This, obviously, was to avoid being identified as PLWHAs by those living in their communities and the consequent labeling and discrimination.

Most PLWHAs had changed their jobs and complained of fear of losing their present jobs due to discrimination and poor health. According to the respondents, they felt weak most often and could not do much hard work. Those who took the antiretrovirals also said it made them feel hungry most of the time. This, they said made them spend a lot of their income on food items.

Most respondents living in the communities participated in some socio-cultural activities such as funerals, musical concerts and traditional festivals, all of which sometimes exposed respondents to activities that could lead to HIV infection. For instance, 62.7 per cent of people living in the communities admitted to have taken alcohol during festivals, 8.2 per cent said they had ever had sex during festivals. It was a popular view that funeral celebrations in the communities were synonymous with alcoholism. This definitely could make people indulge in sex without protecting themselves.

The care services provided at the centres for PLWHAs varied between the two communities. Whiles most of the patients living with HIV/AIDS at Agomanya resided in the same community and its environs, it was different with PLWHAs at Effiduase. Antiretrovirals were provided to those who took treatment at Agomanya, but those at

Effiduase were only treated for opportunistic infections. Also, there were interventions from renowned NGOs, like Family Health International, who provided for both the staff who worked on PLWHAs as well the patients. These interventions were not forthcoming in Effiduase.

Most people living with HIV/AIDS drew a lot of consolation and much support from churches and religious organizations. This has generated much confidence in religious organizations by those infected. The provisions of these organizations to PLWHAs included psychosocial support, finance and other material support. Most of the PLWHAs were not economically sound and therefore relied on the benevolence of these groups and individuals for their survival.

The research again established that a lot of associations existed in the communities whose activities were not coordinated. This has led to overlap of some of the operations of these associations. The activities of some of the associations were not clearly laid out. Care centres which had direct contact with PLWHAs had not got enough funds and resources to cater for those living with the disease.

PLWHAs do not have legislative protection against intimidations and harassments both at the workplace and the home. This has exposed a lot of those living with the disease to embarrassment and disgrace which adds to their already precarious situations. Some have been ejected from their homes and others have lost their jobs just because of their HIV positive status.

The propositions of the study were as follows:

1. People living with HIV/AIDS would prefer to have care centres rather located outside their areas of residence, thus distant from where they live. As a result of

stigmatization which is attached to the disease, they would rather prefer taking treatment at places where they are not known even if it is distant from where they live.

2. People who have friends or relations living with HIV/AIDS will have a better attitude towards PLWHAs. This is because such people have been hard hit and might have had first hand experience of the situation.

The study affirmed the first proposition. Thus, when asked whether the respondents living with HIV/AIDS wanted to have the care centres nearer to their places of residence, 73.0 per cent said no (Table 5.2). Though most of them spent money on transport to get to the care centres, they claimed they felt comfortable with the care centres sited outside their areas of residence.

With the second proposition, however, it was revealed that those who had their relations living with HIV/AIDS as well as those who knew no one living with the disease, were both sympathetic with PLWHAs and were willing to share with them. 96.1 per cent of these people did not describe those living with the disease as accursed, but just unfortunate (Appendix A.28). Asked what they thought should be done for PLWHAs (Appendix A.12) over 80 per cent wanted much resource to be voted for their care. Those who were willing to donate to PLWHAs were 88.2 per cent (Appendix A.31), whereas those who had friends or relations living with HIV/AIDS constituted 74.5 per cent.

### **6.3 Recommendations**

PLWHAs should be encouraged and also supported to hold onto their own small scale businesses to be less dependent on others. This will psychologically and economically

liberate those living with HIV/AIDS. This is necessary because those infected are not very fit to conform to the rigorous schedules or routine of the cooperate work places.

2. A legislative instrument should be put in place by the state to protect PLWHAs in their dealings with the general society. This will help to restore the confidence of PLWHAs and might not hide their status for the fear of being discriminated against. With this legislative instrument in place PLWHAs will be able to contest their human rights, even in the law courts.
3. Home-based care programmes and activities of Community-Based Organizations (CBOs) should be established throughout the country. This would complement the activities of health centres and also serve as an alternative for PLWHAs who could not visit care centres for various reasons. However, the programme should not single out those living with HIV/AIDS but should be extended to cover those with other ailments, such as syphilis and skin diseases, which were common in the communities. When the activities are restricted towards those living with HIV/AIDS most people might avoid their services, since their visit to one's house might announce the presence of PLWHAs to others in the communities.
4. Steps should be taken by donors and support groups to direct much financial resources to PLWHAs most of whom find it very difficult to afford their medication. Most resources voted for HIV/AIDS activities are concentrated on public education and prevention, with very little to care for PLWHAs. This is important because the cost of treating HIV/AIDS is high, especially with antiretrovirals. Also, those treated with antiretrovirals need a lot of nutritional supplements to keep them healthy. This calls for much financial support from government and non-governmental organizations.

5. Health personnel and others who care for those living with HIV/AIDS should be adequately remunerated. This is because of the high risk associated with their work. There is therefore, the need to motivate counselors and care providers who work on PLWHAs so that they may give off their best. This will also attract a lot of people into the care service which lacks the needed number of personnel.
6. A policy should be put in place to make HIV test free or to reduce the fee drastically. This could be factored into the National Health Insurance Levy. By so doing many people will be encouraged to patronize in VCT which at the moment has a very low patronage. In this case the true national prevalence rate will be known and the necessary steps could be put in place to curb the spread. To make most of the people have access to VCT, more health institutions in the communities need to be equipped in order to be able to conduct HIV test. The study found out that only a few health facilities had the needed equipment to do the test. Hence, those who wanted to take the test had to move to the few centres.
7. Very attractive packages should be put in place for PLWHAs who come out to take treatment as well as those who mount platforms to campaign against the menace. This would motivate more people to take the test and also report to the care centres for treatment. When people get to know that their siblings and other relations have the disease they are likely to change their attitude towards PLWHAs. Consequently, this will lead to reduction in stigmatization and discrimination. The study found out that most people after testing positive moved to other localities where they could not be identified and avoided taking treatment at the care centres.

8. Community heads should be made to come out with bylaws which would ban the youth from participating in socio-cultural practices that expose them to HIV. The research made it clear that most of the youth in the communities took part in some activities, such as funerals and wake keeping and musical concerts that exposed them to HIV infection. Most of them conceded to have taken alcohol and some admitted to have had sex under the influence of alcohol. As a result, bylaws such as the following could be passed and enforced by the district assemblies in collaboration with the chiefs:
- i) Parents/guardians of children under 18 years, whose wards are found to have abused drugs or taken alcoholic drinks, are to be fined and their wards should be reported to their school heads for some form of corporal punishment. However, if they are not students or pupils, the assemblies in collaboration with the chiefs could award the punishment.
  - ii) Children should not be permitted to attend social functions such as funerals and wake keeping except those who are directly affected. However, attendance to public functions such as musical concerts and also, staying late into the night by these children outside their homes should be banned outright. The breaking of these bylaws should attract sanctions as in (i) above.
9. Workers and other members of the community should be encouraged to contribute towards the care of PLWHAs. The GAC in collaboration with the churches and other religious organizations should embark on a sensitization programme on care for PLWHAs in the churches and mosques. This should be followed by a passionate appeal to the members to commit themselves to regular contributions to care for those infected. Such fund should be controlled by the religious organizations and measures should be put in place to check the

disbursement. The reason for involving religious organizations is that most of those infected expressed trust in them.

10. Finally, medical research institutions should be encouraged to develop potent herbal drugs that could be used to treat PLWHAs of their opportunistic infections. This could serve as a supplement, if not a substitute, to the orthodox drugs which are often more expensive. It was realized during the study, that most PLWHAs used traditional medicine in addition to the treatment they received at the care centres.

It is envisaged that if the above recommendations are heeded to the prevalence rate of the HIV menace would greatly reduce. Also, those infected would have a befitting care and treatment that they deserve.

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**APPENDIX A**

## DEPARTMENT OF GEOGRAPHY AND RESOURCE DEVELOPMENT

## UNIVERSITY OF GHANA

Questionnaire for people living in communities where care services are provided

1. Age: Less than 15 years  26 – 35 years  46 – 55 years   
15 – 25 years  36 – 45 years  above 55 years
2. Sex: Male  Female
3. Marital Status: Married  Single  Widow(er)  None
4. Number of children 1-3  4-6  7 +  None
5. Religion: Christian  Traditionalist   
Moslem  Other, specify \_\_\_\_\_.
6. Level of education attained  
None  Basic  Post Secondary  Degree   
Secondary  Diploma  Other, specify \_\_\_\_\_
7. Do you know your HIV status? Yes  No
8. If No, are you likely to be HIV positive?  
Yes  No  Not sure
9. Do you know any one living with HIV/AIDS? Yes  No
10. What is your relationship with him/her? (If yes)  
Friend  Mother  Spouse   
Brother  Father   
Sister  Other, specify .....
11. Which of the following could you do with PLWHAs?  
Eat together  Marry using condom  Share scissors/blade  Embrace   
Share a cup/plate  Shake hands  Work together with  None
12. What do you think should be done for PLWHAs?  
Much resource should be voted for their care

- It is useless to spend much on them [ ]  
They should be kept out of the community [ ].  
Other, specify .....
13. Would you take an HIV/AIDS test before marriage? Yes [ ] No [ ]  
Why? .....
14. Which of the following is allowed (or practiced) in your community?  
Multiple marriages by men [ ] Having concubines [ ]  
Extramarital sex [ ] Sharing of shaving blades, scissors [ ]
15. In which of the following activities do you partake?  
Festivals only [ ]  
Funerals only [ ]  
Musical concerts only [ ]  
All above [ ]  
None [ ]  
Funeral and festivals [ ]  
Funeral and musicals [ ]  
Musicals and festival [ ]
16. Which of the following do you do during festivals?  
Take alcoholic drinks [ ]  
Sex [ ]  
Smoke [ ]  
Two of above [ ]  
None of above [ ]
17. Do you know of any HIV/AIDS care organization in your community?  
Yes [ ] No [ ]
18. If yes, what is this organization? .....
19. Which of the following preventive measures do you endorse?  
Condom use [ ]  
Abstinence [ ]  
Faithfulness to one's partner/behavioral change [ ]  
All the above [ ]  
Other, specify.....
20. Can HIV/AIDS be transmitted spiritually? Yes [ ] No [ ]
21. Which of the following is true about HIV/AIDS?  
Can be cured by traditional medicine [ ]  
Has no cure [ ]  
Not real [ ]  
A means to discourage sex [ ]
22. In which of the following festivities do you participate?

- Festivals  Funerals  Musical concerts  Other, specify .....
23. Who do you enjoy celebrating the above festivity(ies) with?  
 Boy/girl friend  Brother(s)  Sister(s)  Parent(s)
24. Which of the following do you do during the festivities?  
 Drink alcoholic beverages  Sex  Smoke  All  None
25. Do you see other people practicing any of the above? Yes  No
26. Which people do you know to be active in provision of care for PLWHAs?  
 .....
27. What do you think is the main cause of HIV/AIDS?  
 Sex  Sharing of cutting instruments   
 Blood transfusion  Witchcraft   
 Other, specify.....
28. What do you think about PLWHAs?  
 Immoral  Cursed  Dangerous  Friends  Unfortunate
29. Do you belong to a Support Network or an Association for PLWHAs?  
 Yes  No
30. If No, would you like to join one? Yes  No
31. Are you ready to donate something to PLWHAs? Yes  No
32. Which of the following, in your opinion, are more prone to HIV/AIDS?  
 Young girls  Young boys  Adult women  Adult men
33. Which of these stand the highest risk of getting HIV/AIDS?  
 Students  Traders  Farmers  Artisans  Workers  Unemployed
34. What would you do if you were diagnosed HIV positive?  
 Infect others  Declare openly  Campaign openly   
 Take treatment secretly  Join HIV Association   
 Commit suicide  No idea  Other, specify .....
35. Have you ever had sex without condom? Yes  No
36. What do you think can be done to make PLWHAs come out openly?  
 By: Communities: .....  
 Churches/mosques: .....  
 Family members: .....  
 Individuals: .....

**APPENDIX B**

## DEPARTMENT OF GEOGRAPHY AND RESOURCE DEVELOPMENT

## UNIVERSITY OF GHANA

## Questionnaire for Regional AIDS Coordinator/DHMTs

1. What does your work entail?
2. Where do you have care centres for PLWHAs in the Eastern Region/community?
3. What are the various/different approaches to the care provision by your outfit?
4. What does each approach entail?
5. Where and how is Home-Based Care practiced in your community/region?
6. Does the urban/rural environment influence care provision in any way?  
Yes [ ] No [ ]  
If yes, how?
7. What is your operational definition for care for PLWHAs (what does it entail)?
8. Do you provide for orphans? Yes [ ] No [ ]

Why.....

9. Which of the following do PLWHAs prefer most?  
Receiving care service at the care centers [ ]  
Receiving care service at their homes [ ]  
Other, specify.....  
Why.....
10. Is distance a problem to PLWHAs in care delivery? Yes [ ] No [ ]

Why.....

11. What are some of the expectation of PLWHAs from your outfit?
12. Are you able to meet these expectations? Yes [ ] No [ ]

Why/ How.....

13. Which of the following do PLWHAs prefer most?  
Being gathered together for care service [ ]  
  
Being attended to in their homes [ ]

Why.....

14. Are there Support Networks or Associations for PLWHAs in the region/community? Yes [ ] No [ ]

If yes, what are some of these organizations?

15. Which three communities in the Eastern Region would you like a study into care services to be conducted in terms of differences in care provision?

Why.....

16. How do you gather PLWHAs together for care provision?

17. Do some cultural practices (attitudes or beliefs) hinder care provision?

Yes [ ] No [ ]

If yes, what are these practices.....

18. What do you think can be done to achieve a more effective care delivery for PLWHAs?

19. Is funding a problem? Yes [ ] No [ ]

20. What are your sources of funding?

21. Which NGOs are active in care provision in the Eastern Region/community?

22. What specifically do they do? (If there are any)

23. Do majority of PLWHAs who attend care services come from the communities in which the care centres are sited? Yes [ ] No [ ]

24. What are the criteria for siting care centers?

25. Do PLWHAs pay anything for their treatment? Yes [ ] No [ ]

If yes, how much and why?

26. Do PLWHAs receive treatment from other traditional sources? Yes [ ] No [ ]

27. Do you encourage that? Yes [ ] No [ ]

28. How much do you require in treating one person living with HIV/AIDS per day?

29. How much do you spend presently on one PLWHA per day?

30. What are the roles of the following in providing care for PLWHAs?

a) Ghana AIDS Commission

- b) Regional Administration
- c) District Assembly
- d) Churches
- e) Individuals
- f) CBOs

31. Is there a good coordination among the various bodies that contribute to care delivery in the Region/community? Yes [ ] No [ ]

If yes, how is it done?

If no, how is it affecting care delivery?

32. Does money for care sometimes get into wrong hands? Yes [ ] No [ ]

If yes, how can this be checked?

33. What is the attitude of relatives of PLWHAs towards PLWHAs?

Excellent [ ]

Very good [ ]

Good [ ]

Not good [ ]

Bad [ ]

34. Is it better than those with no relatives living with HIV? Yes [ ] No [ ]

35. Do you receive complaints of PLWHAs losing their jobs? Yes [ ] No [ ]

36. Would you say that most people in the Eastern Region/community now know the cause of HIV/AIDS? Yes [ ] No [ ]

37. How can care delivery be made more effective?

38. How can the government help in the care for PLWHAs?

**APPENDIX C**

## DEPARTMENT OF GEOGRAPHY AND RESOURCE DEVELOPMENT

## UNIVERSITY OF GHANA

Questionnaire to help in an academic research for people living with HIV/AIDS (PLWHAs), in the New Juaben and Manya Krobo Districts (it will be treated as a confidential material). Kindly provide the appropriate answers.

**Backgrounds Characteristics**

1. Age
 

Less than 15 years <input type="checkbox"/>	26 – 35 years <input type="checkbox"/>	46 – 55 years <input type="checkbox"/>
15 – 25 years <input type="checkbox"/>	36 – 45 years <input type="checkbox"/>	above 55 years <input type="checkbox"/>
2. Sex
 

Male <input type="checkbox"/>	Female <input type="checkbox"/>
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3. Marital Status
 

Married <input type="checkbox"/>	Single <input type="checkbox"/>	Widow(er) <input type="checkbox"/>
----------------------------------	---------------------------------	------------------------------------
4. Number of children
 

None <input type="checkbox"/>	1-3 <input type="checkbox"/>	4--6 <input type="checkbox"/>	7 + <input type="checkbox"/>
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5. Religion
 

Moslem <input type="checkbox"/>	Christian <input type="checkbox"/>	Traditionalist <input type="checkbox"/>
Other, specify _____.		
6. Education:
 

Basic <input type="checkbox"/>	Post Secondary <input type="checkbox"/>	Degree <input type="checkbox"/>	None <input type="checkbox"/>
Secondary <input type="checkbox"/>			
Diploma <input type="checkbox"/>			
Other, specify _____			
7. Present town/village of residence \_\_\_\_\_
8. Former place of residence \_\_\_\_\_
9. How long have you been in your present place of residence? \_\_\_\_\_
10. Occupation
 

None <input type="checkbox"/>	Trading <input type="checkbox"/>	Nursing <input type="checkbox"/>	Teaching <input type="checkbox"/>	Farming <input type="checkbox"/>	Banking <input type="checkbox"/>
Artisan <input type="checkbox"/>					
Other, specify.....					
11. How long have you lived with the disease
 

Less than 2 yrs <input type="checkbox"/>	2-4 yrs <input type="checkbox"/>	5-7 yrs <input type="checkbox"/>
8-10yrs <input type="checkbox"/>	More than 10 yrs	

12. How did you know your status?  
 Voluntary test   
 Sickness  Other, specify \_\_\_\_\_
13. How many times have you taken HIV test? 1  2  3  4

Did you take the test(s) at the same place? (If more than once) Yes  No

### **Effect of Distance on HIV/AIDS Care Delivery**

14. How far is your house from the care centre?  
 Less than 5 km.  5-10 km.  11-20 km.  21-30 km.  Over 30 km.
15. How do you get to the care centre?  
 By:            Vehicle (how much do you pay?) .....  
                   Walking  
                   Other, specify \_\_\_\_\_
16. Would you prefer having the care centre in your own community or very close to your house? Yes  No
17. Do other care providers attend to you? Yes  No
18. If yes, which of them do you prefer most and why?  
 Personnel from the ministry of health  why? \_\_\_\_  
 Community volunteers  why? \_\_\_\_  
 Home-based care  why?  
 Herbalist  why?  
 Others, specify \_\_\_\_\_

### **Effect of HIV/AIDS on Employment Status**

19. Have you changed your job? Yes  No   
 If yes, why? \_\_\_\_\_
20. Has the number of hours you spend working decreased?  
 If yes, why? \_\_\_\_\_
21. Do you feel threatened of loosing your job? Yes  No
22. Has your role in caring for your dependants changed? Yes  No
23. If yes, how?  
 I have much to care for my dependants than formerly.   
 I have less to care for my dependants, than previously.   
 I can no more care for my dependants.   
 Others have taken over that responsibility.   
 Other, specify \_\_\_\_\_

24. Do you find it difficult declaring your HIV/AIDS status to others?

Yes  No

Why? \_\_\_\_\_

#### **How Culture Affects Care Delivery**

25. Do you often attend funerals? Yes  No

26. Have you ever made new (boy/girl) friends at funerals? Yes  No

27. Have you ever had sex during funerals/wake keeping? (Under the influence of alcohol or not) Yes  No  Not sure

28. Do you find it easy relating to people who are aware of your health status in your community? Yes  No

29. What practices in your community do you appreciate most? \_\_\_\_\_.

30. What practices in you community saddens you most? \_\_\_\_\_.

31. Which of the following apply to you?

I have made more friends than formerly.

I have lost some friends

I don't have friends at all.

Other, specify \_\_\_\_\_.

#### **Differences in Care Service Activities in the Various Communities**

32. Which of the following provide care for you?

Ministry of health

Community based organizations

Church

Family  Other, specify \_\_\_\_\_.

33. What particular services do you receive?

Financial support

Condoms

Antiretroviral therapy (drugs), specify \_\_\_\_\_.

Counseling

Psychosocial support

Financial support from family members .

Food

Others, specify \_\_\_\_\_

34. Which other care services would you need & why? \_\_\_\_\_

#### **Activities of some governmental non-governmental organizations**

35. From which NGO (Association) do you receive support? (Material and non material)

36. What particular support do you get?
37. How often do you get this support?  
Daily  Weekly  Fortnightly  Monthly   
Other, specify.....
38. What do you like about this support? \_\_\_\_\_.
39. What do you dislike about the support? \_\_\_\_\_
40. How did you acquire HIV?  
Blood transfusion  Sex  Cutting instruments   
Other, specify.....  
No idea
41. How much do you need to pay for your medications in a day?
42. How long do you spend at the hospital (care centre) for treatment?
43. How would you grade the care service you receive from this hospital/centre?  
Very adequate  Adequate  Inadequate  Poor

**APPENDIX D****DEPARTMENT OF GEOGRAPHY AND RESOURCE DEVELOPMENT  
UNIVERSITY OF GHANA**

Questionnaire for health personnel who care for PLWHAs

1. Sex: Male  Female
2. Marital Status:  
Married  single  widow (er)
3. Number of Children:  
None  1 – 3  4 – 6  More than 6
4. Religion  
Christian  Moslem  Traditionalist  Other, Specify \_\_\_\_\_
5. Occupation (Job title) \_\_\_\_\_
6. Do you know your HIV status? Yes  No
7. What does your work entail?
8. How many PLWHAs are under your care? \_\_\_\_\_
9. Is the number mentioned above too much to work on? Yes  No
10. What type of assistance/provisions do you get?
11. What is the source of the above?  
District assembly   
Non-governmental organization(s), specify \_\_\_\_\_  
Church (es), specify \_\_\_\_\_  
Individuals   
Others, specify \_\_\_\_\_
12. What care services do you provide to your clients?  
Provide psychosocial support to patients   
Provide psychosocial support to families   
Support orphans and vulnerable children   
Prevent and test opportunistic infection   
Prevent mother to child transmission   
Provide home-based care   
Administer antiretroviral therapy   
Provide palliative care   
Provide food   
Provide clothing   
Other, specify \_\_\_\_\_
14. Do most of your clients come from this community? Yes  No

15. In the context of the scope of your care provision, how would you define care?
16. Does your outfit provide antiretroviral drugs? Yes  No
- If yes, what are these drugs?
17. How much does each cost?
18. Are your clients able to afford? Yes  No
19. How much does it cost to treat one PLWHA per day?
20. Do you have difficulty in getting clients to treat? Yes  No
21. If yes, what might be the cause?  
 Stigmatization  Poverty  Hindrance from families  Discrimination  
 Other, specify.....
22. Do your clients take treatments from other sources? Yes  No
23. If yes, what are these sources?  
 Spiritualists  Herbalists  Traditionalist  Other, specify...
24. What are some of the difficulties you face in your health care delivery operations?
25. How many of your clients fall within the various age groupings?  
 Less than 15 yrs  15-25  26-35  36-45  46-55  56+
26. Are the majority of your clients natives of this community? Yes  No
27. Which of the following is true about your clients?  
 Usually change their place of residence upon acquiring the disease   
 Would like care centres to be located outside their place of residence   
 Home-based care is preferred more than movement to care centres   
 Would like their treatment to be in secret   
 Other, specify.....
28. Could the centre be located at a better place? Yes  No . If yes, where/why?
29. How can care delivery be made more effective?
30. Are you happy (or satisfied) with your work? Yes  No
- Why?.....