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KNOWLEDGE, ATTITUDES AND PRACTICES
ON
LEPROSY IN WA DISTRICT, GHANA



A DISSERTATION SUBMITTED TO THE SCHOOL OF PUBLIC
HEALTH, UNIVERSITY OF GHANA, LEGON, IN PARTIAL FULFILMENT
OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF PUBLIC
HEALTH DEGREE

AUGUST 2003

DECLARATION

This dissertation is the result of independent investigation. Where my work is indebted to the work of others, I have duly acknowledged in my reference.

I declare that this work has never been presented in any form for any other degree or concurrently being submitted in candidature for another certificate.

Student:.....


(Prosper Kwaku Gbekor)

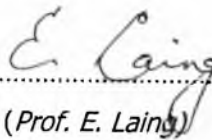
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(Prof. E. Laing)

DEDICATION

*This book is dedicated to the Almighty God for being with me
always*



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LIST OF ABBREVIATIONS

DDHS	District Director of Health Services
DHA	District Health Administration
DHMT	District Health Management Team
FGD	Focus Group Discussion
JSS	Junior Secondary School
KAP	Knowledge, Attitudes and Practices
LEP	Leprosy Elimination Programme
MDT	Multi-Drug Therapy
MSLC	Middle School Leaving Certificate
VHV	Village Health Volunteer
WHA	World Health Assembly
WHO	World Health Organization

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ABSTRACT

Leprosy is a disabling disease that has struck fears into humans for thousands of years. The World Health Organization targeted the disease for elimination by the year 2000 and many countries adopted strategies for its elimination as a public health problem. One major obstacle to achieving this objective is the stigma associated with the disease.

The Upper West Region was the only region in Ghana, with all its five districts that had not achieved the elimination target of one case per 10,000 by the end of 2002. This study, which was conducted between June and August 2003, among six randomly chosen endemic communities in Dorimon sub-district of Wa district, sought to find the local perceptions of the disease, treatment seeking behaviours, local etiology and the communities' reactions towards the leprosy-affected people. The study was descriptive and explorative in nature using both qualitative and quantitative data collection tools.

It was realized from the study that about 80.5% of the respondents did not have any formal education. The signs of leprosy were well recognized by most of the respondents (87.0%) but the knowledge of pathological cause was lacking. Only about 37.0% could identify microorganism as responsible for leprosy. Many more thought that witchcraft machinations, juju spell and curse could be responsible for causing leprosy. About 32.0% of the respondents associated leprosy with the consumption of the meat of animals like goat, mudfish, hippopotamus, python and giraffe, which they felt might either aggravate or cause the disease. For fear of getting infected with leprosy many people (71.0%) would not allow the leprosy-affected persons to perform household duties. About 49.5% the respondents felt that the affected people should not also be allowed to play leadership roles in the society because they were incapable and might not be respected.

Health education, especially in the endemic communities should be intensified on the causation of the disease in order to improve communities' awareness about the etiology of the disease. There should be some financial support for the leprosy-affected people who are still on treatment to alleviate their financial constraints and this will also encourage self-reporting of the disease. Active case search should be carried out on a regular and sustained basis in the endemic communities until leprosy is completely eliminated.

Map of Wa District Showing Leprosy Endemic Communities

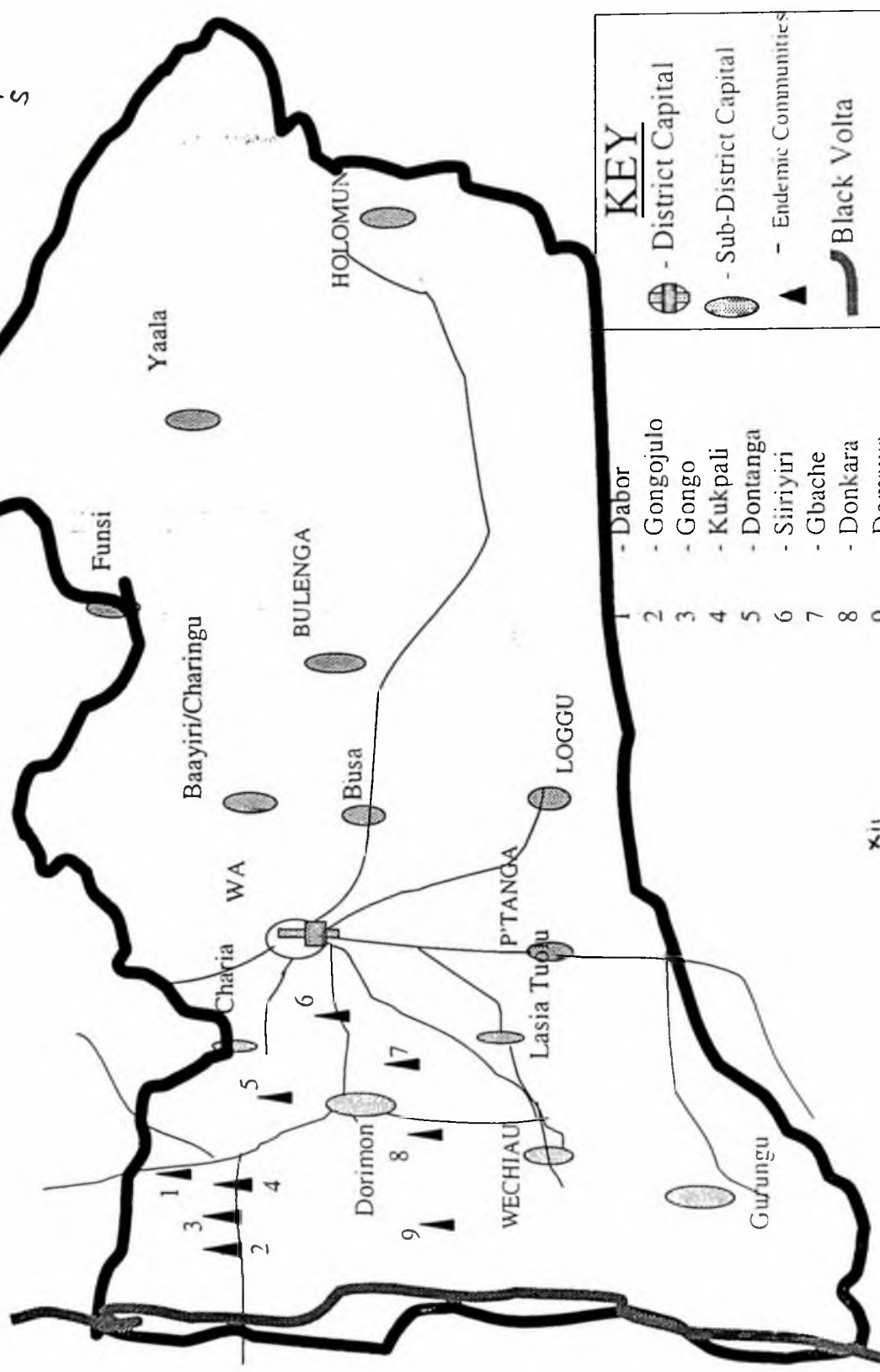
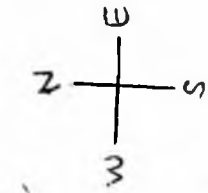


FIG 1

CHAPTER ONE

1.0 INTRODUCTION

1.1 BACKGROUND INFORMATION

Leprosy is an infectious disease caused by *Mycobacterium leprae*. It primarily affects nerves and skin. The disease is of public health importance because it causes considerable disability and deformity. It is one of the oldest diseases known to man and it is also mentioned in the Bible and in the Koran.

M. leprae was first identified by a Norwegian scientist by name Armauer Hansen in 1873, hence the name Hansen's disease. It is a rod shaped acid-fast bacterium that prefers cooler temperatures. This explains why leprosy usually affects parts of the body that are close to the body surface, e.g. skin, peripheral nerves, nose and eyes. *M. Leprae* divides slowly (averagely 11-13 days) and the infection has long incubation periods of 2-5 years.

For centuries, Leprosy was regarded as an incurable disease. However, since the WHO introduced the Multi-Drug Therapy (MDT) in 1982, the burden of the disease has reduced considerably [3].

1.1.1 Mode of Transmission

The exact mechanism for the acquisition and transmission of leprosy is not known. However, household and prolonged close contact may result in transmission. Large numbers of the organisms are shed in nasal discharge of untreated lepromatous patient and the bacilli may remain viable in dried nasal secretions for at least 7 days. Large numbers of the bacilli are also shed in the skin lesions in the lepromatous form of the disease [3].

1.1.2 Reservoirs

Humans are the only reservoirs of proven significance for leprosy. However, there have been reports suggesting that leprosy in armadillos (*Dasypus novemcintus*) may be naturally transmitted to humans [3].

1.1.3 Diagnosis of leprosy

Diagnosis is most commonly based on clinical signs and symptoms. Any of these three cardinal signs are diagnostic.

- Hypopigmented or reddish skin lesion, with definite loss of sensation.
- Damage to peripheral nerve, as demonstrated by thickening of the nerve in addition to either loss of sensation or weakness of muscles of the hand, feet or face.
- Presence of acid-fast bacilli in a slit skin smear or biopsy.

1.2 GLOBAL BURDEN OF LEPROSY

Worldwide, the number of leprosy cases has reduced considerably from twelve million soon after the introduction of Multi-Drug Therapy (MDT) to less than one million within one decade and fewer disabilities are being reported. The number of leprosy patients at the beginning of 2002 in the world was about 634,500 as reported in 106 countries and about 760,000 new cases were detected during the same year [3].

Despite significant progress during the past 15 years, there are some countries across Africa, America and Asia, which still have high numbers of leprosy cases. Of these, about 12 countries in Southern Asia and Sub-Saharan Africa constitute approximately 90% of the global burden of the disease.

Some countries with high prevalence of leprosy include Angola, Brazil, Central Africa Republic (CAR), Democratic Republic of Congo (DRC), Guinea, India, Indonesia, Madagascar, Mozambique, Nepal, Myanmar and Niger [3]. Some countries require special attention because they find more than 1000 new cases per year. Some of these are Ghana, Angola, Ivory Coast and Mali and they recorded up to 6086 new cases per year, about 12% of all regional detection. Increased action to reduce leprosy morbidity in these countries would be helpful for the Leprosy Elimination Programme [3].

Table 1.1
Global leprosy situation in 2002

Regions	Point prevalence (Number of Cases)	Cases detected during The Year, 2002 (Number of cases)
Africa	45170	39612
Americas	83101	42830
East Mediterranean	7007	4758
South east Asia	488333	668658
Western Pacific	7735	4786
Europe	38	53
World	635404	763317

- ♦ As reported by 106 countries (WHO Report 2002)

1.3 NATIONAL BURDEN

Ghana is now among countries, which have attained the elimination target of one case per 10,000 populations since the past 5 years, and the national prevalence rate for year 2002 was about 0.68 cases per 10,000. However, there are still some regions, districts and communities with high prevalence of the disease. In addition, in some areas there are constraints to achieving elimination. These include difficulty in reaching certain communities, cultural barriers and socio-economic factors.

A total of 1063 new cases were detected in 2002. The highest was recorded in Upper East, with 158, followed by Central with 139 and Upper West with 130 cases. At the end of 2002, there was 1 region and 16 districts in Ghana, which had not achieved the WHO elimination target of 1/10000, which is the Upper West Region with the prevalence rate of 1.79/10000. (Source; Ghana Leprosy Service, Annual Reports 2002)

Table 1.2
Trends of new cases of Leprosy in WA District since 1995

YEAR	1995	1996	1997	1998	1999	2000	2001	2002
NO.	20	49	80	109	90	61	63	38

(Source: Annual Leprosy Summary Report, 2001 & 2002, WA District)

1.4 **ELIMINATION OF LEPROSY**

Definition: The elimination of leprosy as a public health problem means reducing the prevalence of leprosy to below one case per 10,000 populations.

In 1991, the member states of WHO through a resolution in the World Health Assembly declared their intention to eliminate leprosy as a public health problem by the year 2000. In the same year, a working group on leprosy outlined the strategies for the elimination of the disease.

The strategies for the achievement of the elimination goals are:

1. Promoting awareness in the community about leprosy.
2. Intensifying case search in areas with high prevalence and difficult to access groups.
3. Expanding the MDT services to all health facilities.
4. Ensuring that all patients take treatment regularly and new cases are given appropriate MDT.
5. Encouraging all patients to take treatment regularly and completely.
6. Developing a programme for disability prevention at all levels.
7. Setting targets and monitoring the progress of elimination.

In Ghana, the goal of the Leprosy Elimination Programme is to reduce the prevalence rate to the global elimination target of less than one case per 10,000 populations within a fully integrated programme. The elimination target should first be attained at the national level by the year 2000, all districts should aim to achieve the target by the year 2005, and all sub-districts should reach the target by the year 2009.

1.5 STATEMENT OF THE PROBLEM

Leprosy is still considered to be a public health problem because it causes permanent and progressive disabilities as well as socio-economic consequences to individuals and their families. It is estimated that 2-3 million people are permanently disabled due to leprosy. The disease continues to be a problem in many developing countries, which account for about 90% of cases worldwide.

Despite the advances in modern technology, people continue to hold outdated views about leprosy. There are too many people with this disease that do not know what to do because they have false beliefs. Still people believe that the disease is highly contagious and it develops rather quickly and others also think that the disease is due to a curse or as a result of sin committed by its sufferers [3]. Though the burden of leprosy has drastically been reduced globally after the introduction of Multi-Drug Therapy (MDT), the disease is still a problem in some developing countries and poor communities where significant numbers of cases remain undetected or are detected late either due to lack of knowledge about modern treatment or the stigma associated with the disease [15]. These may contribute to the reasons why the Upper West Region of Ghana still remains the most endemic region and Wa district is among the most prevalent districts.

The knowledge about the causation of the disease and the level of stigmatization also affect the pattern of health-seeking behaviour and self-reporting of the disease, especially in the endemic communities and therefore these need to be studied. This will help to improve education on the disease and will also aid early diagnosis and treatment in order to prevent the occurrences of deformities and disabilities, especially in the Wa district where the disease is still endemic. The study will also help to achieve the elimination target [2]. Moreover, no such study has been conducted in Upper West Region.

1.6 OBJECTIVES

1.6.1 Main Objective

To assess local perceptions about Leprosy, and how these perceptions affect the health-seeking behaviours of the affected people.

1.6.2 Specific Objectives

- a) To identify the etiology of the disease from the perspective of the communities.
- b) To determine the health-seeking behaviours of people affected with leprosy.
- c) To determine the communities' knowledge about the signs and prevention of leprosy.
- d) To determine the communities' attitude towards the affected people.

CHAPTER TWO

2.0 LITERATURE REVIEW

Leprosy is a disease that has struck fear into human beings for thousands of years. This is partly because it causes considerable deformities and disabilities. In 1991, the 44th World Health Assembly (WHA) adopted a resolution to eliminate the disease as a public health problem by the year 2000. However, one major obstacle to achieving this objective is the stigma associated with the disease. The stigma against leprosy patients affects all aspects of leprosy control [6].

Kumaresan et al (1994), in a study to determine some socio-cultural factors influencing knowledge and attitudes of some communities in Botswana, found out that knowledge on the causation of leprosy was lacking and this in turn influenced health-seeking behaviour of the patients. The study, conducted in two endemic communities found out that the degree of rejection correlated with the seriousness of the disease and extent of disabilities and dysfunction [1].

A study conducted in Eastern Sudan by El Elhassan et al (2002) also found out that knowledge about the pathological cause of the disease was lacking in two endemic communities, Masalit and Hawsa tribes, but the clinical manifestations were well recognized. Among the communities, there was a widely held belief that eating meat of the wild pig and certain type of fish caused leprosy. He also found out that between both tribes, the stigma of leprosy was not strong and the degree of rejection was more towards those with severe disease, particularly patients with ulcerated lesions and severe deformities. Patients were cared for by their families and lived in separate huts within the families' housing compounds [2].

Similarly, in a study to determine the perception of lepers by non-lepers in Cameroon, it was realized that only 28% of the respondents knew that microbes caused leprosy. 33% did not know the cause, 17% thought the disease to be due to hereditary and 8% thought it was due to ill luck. The interactions that did

not involve physical contact were generally welcomed whereas physical contact with lepers was generally shunned. The study realized that most respondents showed humanitarian concern for lepers, but preferred public to individual support. The study groups did not want to be individually or personally committed to any form of special support for leprosy victims, but clearly saw the need and justification for public concern for these patients [8].

A randomly selected 53 leprosy-affected patients in four clinics in eastern Nigeria, were interviewed to determine the socio-cultural factors on leprosy control programme, it was realized that about 60% of them believed that traditional concepts were likely factors explaining the etiology of leprosy. Only four of them were convinced about the microbial etiology [17]. Similarly, it was found among a total of 50 randomly selected patients in Bone district of Indonesia, that knowledge of leprosy was generally satisfactory, but only few adopted the bacteria theory as the cause of their disease [20]. Also, 93% of inmates of leprosy colony in Mysore, India were ignorant of the cause, spread and prognosis of the disease and prevention of disabilities [9]. In a KAP study, which was also conducted in peri-urban Hlaing and rural Laung-Lon townships in Myanmar, it was also found that both the leprosy patients as well community members were still not sure about the cause of leprosy.

The incidence of leprosy was examined retrospectively in Sulawasi, Indonesia over 25 years in a high leprosy endemic village by systematically reviewing data obtained from local programmes and actively gathering data through interviews and house-to-house survey. It was realized that 78% of the cases could be associated to contact with another leprosy patient. 28% of cases were identified as from household contacts, 36% as contact from neighbours and the 15% as from social contact. The estimated risk for leprosy was about nine times higher in households of patients and four times higher in direct neighbouring houses of patients compared to household that had no such contact with patients. The highest risk of leprosy was associated with households of multibacillary patients. Contact with leprosy patients is the major determinant factor in the incidence of

leprosy; the type of contact is not limited to household relationships but also includes neighbours and social relationships [12].

In remote areas where medical services are scarce or non-existent, leprosy sufferers may not realize that the disease is treatable by modern medicine. This will therefore influence the treatment-seeking behaviour of the patients, who may often be treated by spiritual healers and other traditional medicine practices. With the introduction of Multi-Drug Therapy (MDT) and health education of patients and society, many more patients are now seeking medical treatment indicating a change in health-seeking behaviours [2].

A case control study was conducted in Shoal Province of Ethiopia by Assefa et al (2000) to determine factors influencing the early reporting of leprosy patients to modern treatment units. (The cases being those patients with disability grade 1 and 2, the controls were those with disability grade 0). It was realized that more than three quarters (77%) of cases waited for more than 1 year before going to a leprosy clinic, whereas 68% of the cases and only 23% of the controls went to a traditional healer. Patients whose initial contact was with the general health services had better outcomes as compared to those who sought traditional treatment. There was no significant difference between cases and controls with regard to sex, occupation, education or ethnicity. The study showed the need for intensive health education using different strategies to improve voluntary self-reporting of early cases of leprosy [4].

It has been realized that the regularity in attending clinics as well as taking drugs assumes a very significant place in leprosy control programmes since irregularity of leprosy patients can lead to poor disease control, drug resistant disease, and development of physical deformities and disabilities thus leading to programme failure. It was found that age of the patients, type of family, duration of the disease, time lag between diagnoses and starting of treatment and knowledge of patient and their families about the disease were significantly associated with treatment regularity [14]. It was also found that patient's understanding of

treatment regularity was still very unsatisfactory in Myanmar, for which health education measures need to be introduced [13].

In a familiar study to analyze the traditional beliefs and practices concerning leprosy among the people of Limba, Sierra Leone, it was found that the people abandoned their traditional treatment for leprosy in response to an effective leprosy control programme, but retained their traditional world view, including definition of illness, which held a person seriously ill only when he had a severe pain and disability. Thus, they sought treatment from the programme, but only at a relatively advanced stage of the disease [19].

In a longitudinal study to determine social stigma among leprosy patients in a clinic at Gwalior, India, it was found that about 26% of leprosy cases were having one or more social stigma. 63% were having stigma for touch and 43% showed social stigma from their neighbors. Males were more victims of social stigma than females. The social stigma was more prevalent in illiterates and low socio-economic groups [10].

Moreover, leprosy-affected people do not only face physical impairment but also suffer psychological repercussions due to the communities' attitude. The long-term physical and psychological restrictions slowly push the affected persons out of society. With lack of social support and self-confidence, some leprosy affected people end up as beggars [7]. The combination of leprosy, physical impairment and social stigma causing further participation restriction, lead to debilitation of the people affected by leprosy, ending in a state of beggary for some [7]. Similarly, it was also found that as a result of social rejection, leprosy colonies were formed and inhabited by the leprosy-affected people. With inadequate socio-economic support and help, these people often resort to beggary as a way to earn a living. Due to the disease, the social interactions of 85% of the affected people in Sri Lanka were limited to within the colony and 88% to only other affected people [16].

In a study also to describe the community's behaviour towards leprosy-affected people, it was realized in Terai district of Nepal, that 95% of the affected people recognized by the community experienced negative behaviours. Motives for these negative behaviours were mostly found in the fact that people fear the infection caused by the germ. The result also showed that the negative behaviours still persist in eastern Nepal. The study identified the disabilities as an important trigger for the negative behaviours [18].

The age-old stigma associated with leprosy remains an obstacle to self-reporting and early treatment. The image of leprosy has to be changed at the global, national and local levels and creation of a new environment, in which patients will not hesitate to come forward for diagnosis and treatment at the health facility, is necessary (WHO Report, January 2003).

CHAPTER THREE

3.0 METHODOLOGY

3.1 STUDY AREA

Wa district is one of the five administrative districts of the Upper West Region (UWR) and it is the seat of the regional capital. It is the largest district with an area of 5,889.3 sqkm constituting about 32% of the total land area of the UWR and it is within the Savannah ecological zone. It is bounded on the west by the river Black Volta, which forms the international boundary between Ghana and Burkina Faso, Sissala district on the east, Nadowli district to the north and Northern Region to the south.

The 2002 population of the Wa District was about 231,425, projected from the 2000 census with a growth rate of 2.7. The major ethnic groups in the district include the Dagaaba, Wala, and Sissala and the major languages spoken include Dagarti, Waali, and Sissali. Additionally, Akan, Hausa and English are widely spoken particularly in the district capital and other major settlements.

There is one short rainy season from June to October and a long dry season from November to May. The majority of the people are poor subsistence farmers with about 68% of the working population engaging in it. The remaining 32% of the working population are civil and public servants, traders, tradesmen, hunters and miners. The chief crops are maize, yam, groundnuts and beans. Animals like sheep, goats and cattle are reared. Charcoal burning is rampant throughout the district. The district's literacy rate is estimated to be about 15% with about 85% of the population being illiterates.

Only the roads in the capital, Wa are tarred but feeder roads constitute majority and some communities are inaccessible due to bad roads. Major means of transportation are by bicycles and motorbikes but majority of the people walk

long distances on foot. The main channel of communication is radio; television and telephone services are available but mainly in Wa township. Provision of portable water is mainly by boreholes but some communities are still depending on available streams and dams as their main source of water supply.

The district is divided into fourteen sub-districts for the purpose of health administration, which are managed by the sub-district health teams under the supervision of DHMT. There are a total of twenty-four health facilities in the District owned by the Government, Mission and private individuals including one district hospital in Wa town, which also serves as the Upper West regional hospital. The district health systems are managed by the District Health Management Team (DHMT), which is headed by the District Director of Health Services (DDHS).

Leprosy remains as one of the most endemic disease in the district with prevalence rate of 1.59/10,000 at the end of 2002 [11]. The disease is more prevalent in poor and remote areas of the district. Some of the endemic sub-districts include Dorimon, Yaala, Gurungu and Wecheau [21].

3.2 STUDY DESIGN

The study was descriptive and exploratory in nature using both quantitative and qualitative data collection tools.

The study population was made up of adult males and females, eighteen (18) years and above.

3.3 SAMPLING

3.3.1 Sampling Technique

Multi-stage sampling technique was used along the following lines:

Dorimon sub-district, one of the most endemic sub-districts of Wa district was conveniently chosen with the assistance of the DHMT.

Ten most endemic communities in the Dorimon sub-district were carefully selected with the assistance of the sub-district disease control officer.

Names of these communities were written on separate sheets of paper of equal size, which were folded and placed in a container with a lid.

Six communities were selected at random by the principal investigator, in the presence of the research team. After each selection, the container was shaken vigorously to ensure reshuffling of names. The procedure was repeated till six communities were selected. The selected communities were Dabo, Jambusi, Gbache, Siiriyiri, Mwatanga and Gongo-Gongojuli.

3.3.2 Sample Size Calculation

The following formula was used to determine the sample size for the structured questionnaire interview:

From the formula: Sample size, $n = Z^2p(1-p)/d^2$

$Z = 1.96$ at 95% Confidence Interval

$d =$ the margin of error, 5% = 0.05

$p =$ the prevalence of leprosy in Wa district (2002) = $1.59/10,000 = 0.00159$

Therefore, sample size (n) = **244**

Because of time and financial constraints, **200** respondents were randomly selected from the six communities for the structured questionnaire interview.

3.4 TRAINING OF RESEARCH ASSISTANTS

Four research assistants were recruited for the study with the help of the district disease control officer. One day was selected for the training. The training procedure entailed a detailed explanation of the aims and objectives of the study, ethics to be observed by the research assistants, selection of the respondents, translation of the questions into the local Dagarti language and back into the English language to ensure consistency and to avoid ambiguity and general discussions including clarifications on issues related to the study.

3.5 DATA COLLECTION

3.5.1 Data Collection Techniques

Two main data collection techniques were employed in this study:

- a) Structured questionnaire for respondents from the 6 randomly selected endemic communities including some leprosy-affected persons
- b) Focus Group Discussion (FGDs) with some opinion leaders from two randomly selected endemic communities. Two FGDs were conducted in these two communities.

3.5.2 Pre-testing of survey questionnaire

The structured questionnaire was pre-tested at Dorimon an endemic community that was not among the communities selected for the survey. The exercise helped streamline the questionnaire such that certain questions were modified, removed or added.

The FGD guide was also pre-tested and modified accordingly.

3.5.3 Structured questionnaire interview

The total respondents from each community were determined according to the population of the community. That is communities with higher populations had more respondent than communities with low population.

In each community, the houses were listed with the assistance of the village health volunteer (VHV) and the houses from which the respondents were to be selected were randomly chosen from the list, according to the number of respondents to be selected from that community.

In each household, all the members 18 years and above and present at the time of the survey were given numbers and this was written on pieces of paper, folded and placed into plastic container, covered and shaken vigorously, then one was selected for the interview.

The leprosy-affected persons, 18 years and above, who were available in the study communities at the time of the survey, were also interviewed.

At the end of each day the principal investigator collected all filled questionnaires from the research assistants and edited them. The data collected and the collection process were reviewed and mistakes discussed and corrected.

3.5.4 Focus Group Discussion (FGD)

Two Focus Group Discussions (FGDs) were conducted in two endemic communities, Dabo and Siiriyiri. The Village Health Volunteer (VHV) and the sub-district disease control officer selected participants for the FGDs. In all, about 10 participants were selected for each FGD. A FGD guide was used and there was a note taker who wrote down the discussion and a recorder who also recorded it with a tape recorder.

3.6 DATA PROCESSING AND ANALYSIS

Questionnaires were coded manually and the data was entered into the computer using EPI INFO 6. Bar and Pie charts were drawn using Microsoft Excel. Frequency tables were drawn using Microsoft word

3.7 ETHICAL CONSIDERATION

Permission was sought from the RDHS, DHMT, District Assembly and the traditional chiefs before starting the research. Verbal consent was also obtained from the community heads, household heads and individuals before conducting the interviews. In order to ensure confidentiality, the research team avoided asking for names.

3.8 LIMITATIONS TO THE STUDY

Since the principal investigator did not understand the local language, there was a need to rely on another person to conduct the FGD on his behalf.

The period of the survey coincided with the farming season of the area and many of the people were busy on their farms leaving mainly some women and their children at home. In places where the farms were close to the houses, people were called from the farms into their homes in order to be part of the study.



CHAPTER FOUR

4.0 FINDINGS OF THE STUDY

4.1 SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

4.1.1 Age and sex distribution of the respondents

The table 4.1 below showed the age and sex distribution of the respondents.

Table 4.1 AGE AND SEX DISTRIBUTION OF THE RESPONDENTS

Age group	Male	Female	Frequency	Percent (%)
18-24	9	13	22	11.0
25-29	10	8	18	9.0
30-34	14	14	28	14.0
35-39	8	15	23	11.5
40-44	9	18	27	13.5
45-49	2	19	21	10.5
50-54	10	14	24	12.0
55-59	6	6	12	6.0
60 and above	14	11	25	12.5
TOTAL	82	118	200	100.0

From table 4.1 above, it was realized that more females 118 (59.0%) were interviewed than males 82 (41.0%). This might be due to the fact that most of the men were busy on their farms since the survey was carried out during the farming season.

4.1.2 Communities of the Respondents

These were the communities of the respondents from which the survey was conducted and the total number of respondents from each community.

Table 4.2 COMMUNITIES OF THE RESPONDENTS

Community	Frequency	Percent (%)
Dabo	30	15.0
Gbache	35	17.5
Gongo-Gongujuli	27	13.5
Jambusa	27	13.5
Mwatanga	39	19.5
Siiriyiri	42	21.0
TOTAL	200	100.0

4.1.3 Formal Educational Status of the Respondents

The formal educational status of the respondents was captured in the table 4.3 below.

Table 4.3 FORMAL EDUCATIONAL LEVELS OF THE RESPONDENTS

Educational Level	Frequency	Percent (%)
None	161	80.5
Primary	18	9.0
JSS/MSLC	15	7.5
SSS/Sec. School	3	1.5
Post Sec. School	3	1.5
TOTAL	200	100.0

It was realized from the study that the majority of the respondents did not have any formal education (80.5%). Primary (9.0%), JSS/MSLC (7.5%), SSS/Sec. School (1.5%) and Post Sec. School (1.5%)

4.1.4 Occupation of the respondents

Table 4.4 shows the various occupations of the respondents

Table 4.4 OCCUPATIONS OF THE RESPONDENTS

Occupation	Frequency	Percent (%)
Farming	133	66.5
Trading	26	14.0
Teaching	3	1.3
Pitobrewing	4	2.0
Unemployed	30	15.0
Others	4	2.0
TOTAL	200	100.0

It can be seen from table 4.4 above that a vast majority of the respondents were farmers (66.5%). Farming seemed to be the main available profession in the area followed by unemployment, which was also high (15.0%).

4.2 ETIOLOGY OF LEPROSY FROM THE PERSPECTIVE OF THE COMMUNITIES

4.2.1 Etiological factors attributed to Leprosy

Table 4.5 indicates the various etiological factors attributed to the disease. *(Some respondents chose more than one option).*

Table 4.5 ETIOLOGICAL FACTORS ATTRIBUTED TO LEPROSY

Etiological factors attributed to Leprosy	No. of Respondents	Percent (%)
Transmission by Flies	114	57.0
By Poor Personal Hygiene	110	55.0
Through Microorganism	74	37.0
Through Curse	72	36.0
Inherited	71	35.5
Through Witchcraft	67	33.5
Through Juju Spell	38	19.0
Given by God	9	4.5
No Idea	29	14.5

Majority of the respondents stated flies as responsible for causing leprosy (57%). 37% identify microorganism as responsible for the disease. Some people felt that curse (36%), witchcraft machinations (33.5%) or juju spells (19%) could be responsible for causing leprosy. 14.5% had no idea as to what could cause leprosy.

4.2.2 Animals associated with causing or aggravating leprosy

Sixty four (32.0%) respondents associated leprosy with some animals as causing or aggravating the disease; whereas 106 (53.0%) respondents did not associate leprosy with any animal. 30 (15%) of the respondents had no idea whether animals could cause leprosy.

The results are presented in table 4.6. Others in the table include giraffe, cat, python and lizard with 1.6% each. *(Some associated leprosy with more than one animal)*

Table 4.6 ANIMALS ASSOCIATED WITH LEPROSY

Animals associated with leprosy	Frequency	Percent (%)
Goat	42	65.6
Chicken	25	39.1
Mudfish	21	32.8
Deer	4	6.3
Hippopotamus	4	6.3
Others	4	6.3

Those who associated leprosy with goat (65.6%), mudfish (32.8%) and chicken (39.1) indicated that their consumption would make the already existing leprosy worse whereas those who associated the deer (6.3%), hippopotamus (6.3%) and the others (6.3%) with leprosy stated that their consumption could cause leprosy.

4.2.3 Findings from the FGD on the etiological factors attributed to leprosy

The responses from the FGD were mixed, some felt that leprosy could be inherited, and some also said it could be acquired through witchcraft machination. Some few others also felt microorganism could be responsible for the disease.

A man from Dabo said: *"One can acquire leprosy through an inheritance because we have seen people from the same family with the disease"*

Another man also said: *"Some say that leprosy can be acquired through birth or witchcraft, but to me leprosy is acquired through a germ"*

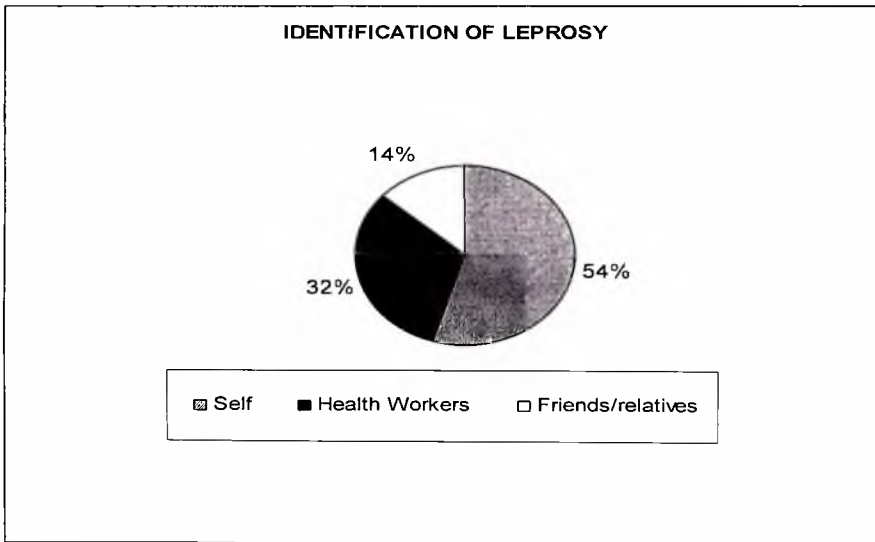
A woman from Siiriyiri also stated: *"To me, leprosy can only be acquired through a curse or when you break a taboo"*

4.3 HEALTH-SEEKING BEHAVIOUR OF LEPROSY-AFFECTED PEOPLE

4.3.1 How people affected by leprosy realized the disease

The ways in which the leprosy affected realized they had the disease are presented on a Pie chart below (FIGURE 4.1).

FIGURE 4.1 IDENTIFICATION OF LEPROSY BY THE AFFECTED PEOPLE



Twenty-two leprosy-affected who were interviewed in this study out of which 12 (54%) realized the disease themselves, 7 (32%) were identified by health

worker(s) during active case search for leprosy and 3 (14%) were identified by friends and/or relatives.

4.3.2 Constraints Identified by the affected people whilst receiving treatment for leprosy

Eleven (50.0%) leprosy-affected people out of the 22 identified some constraints while receiving treatment at the clinic. (*Some identified more than one constraint*). These constraints are presented in table 4.7 below:

Table 4.7 CONSTRAINTS IDENTIFIED BY LEPROSY-AFFECTED PERSONS

Constraints	Frequency	Percent (%)
Financial	5	45.5
No transport	8	72.7
Long distance	7	63.3
No drugs at times	2	18.2
Long waiting time	2	18.2

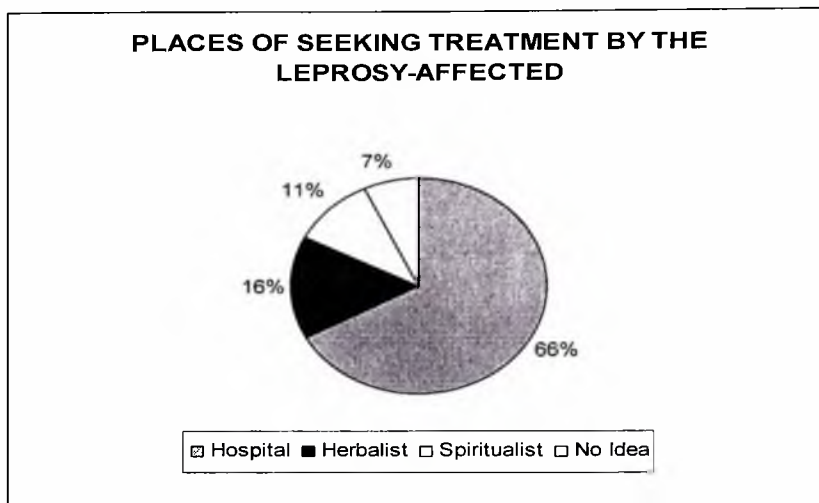
72.7% of the leprosy-affected people who identified constraint stated lack of transportation as the main constraint. 63.3% stated long distance of the clinic from their community, and 45.5% also identify financial constraints.

4.3.3 Places of seeking treatment by Leprosy-affected people

The respondent indicated places of seeking treatment by the leprosy-affected people. The results indicated that the majority of the respondents, 132 (66.0%) preferred the hospital/clinic to other places, 32 (16.0%) chose the herbalist, 22 (11.0%) also chose the spiritualist and another 14 (7.0%) had no idea as to where leprosy-affected persons sought treatment.

The results are presented in figure 4.2:

FIGURE 4.2 PLACES OF SEEKING TREATMENT BY THE LEPROSY-AFFECTED PEOPLE



Reasons given by the respondents for preferring the hospital to other places include the fact that the best treatment and the right drugs were available. Those who chose the herbalist stated that he was always available and his treatment was cheaper. Others also felt that the spiritualist was the best place because God is the best healer and the disease was a spiritual one.

4.3.4 Findings from the FGDs on the Health-seeking behaviour

Majority of the participants in the two FGDs identified the hospital or the clinic as the place where treatment for leprosy should be sought. Some others prefer to go to the spiritualist first before going to hospital.

"You have to go to the soothsayer first to find the root cause of this sickness before going to the hospital:" said by a man from Dabo

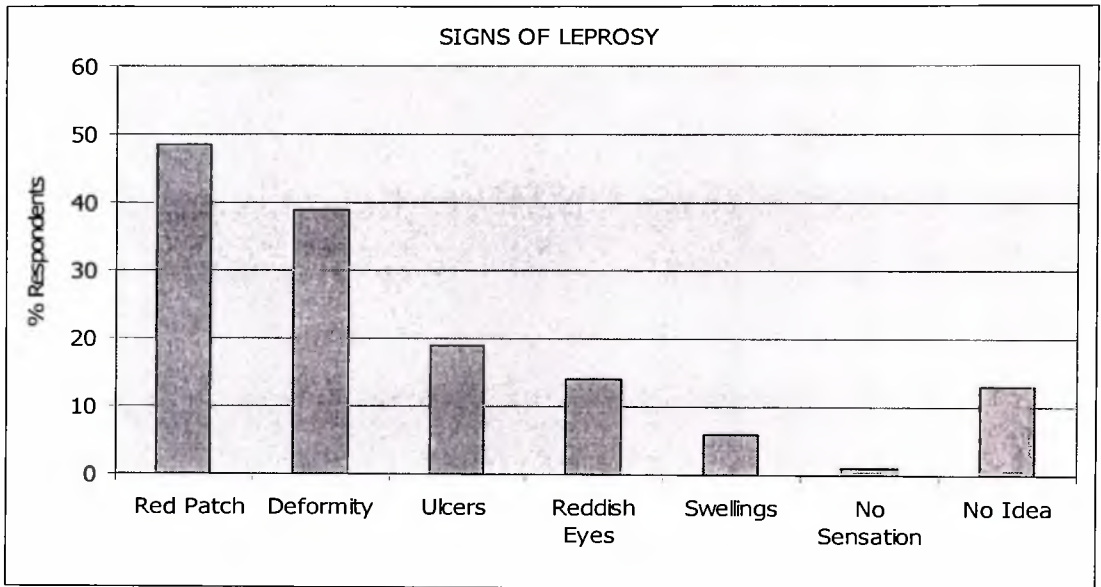
"You have to pour libation to the forefathers before you can seek care for leprosy in the hospital since this disease is spiritual:" another man from Siiryiri

4.4 SIGNS AND PREVENTIVE METHODS OF LEPROSY AS IDENTIFIED BY THE RESPONDENTS

4.4.1 Signs of leprosy as identified by the respondents

Knowledge about the signs of leprosy will help the individual seek treatment early if one is affected. 174(87%) identified signs and 26(14%) had no idea. The various signs are presented in Figure 4.3 below. *(Some stated more than one sign)*

FIGURE 4.3 IDENTIFICATION OF SIGN OF LEPROSY BY RESPONDENTS



Forty-eight percent of the respondents who identified signs of leprosy stated red patch and 39% stated deformity. 14% had no idea about signs of leprosy. Other signs stated include ulcers 19%, reddish eyes 14% and swellings on body 6%.

4.4.2 Preventive methods of leprosy as identified by the respondents

160 (80.0%) of the respondents identified some preventive methods and 40 (20.0%) had no idea. The various methods stated are presented in Table 4.8 below:

(Some selected more than one preventive method)

Table 4.8 PREVENTIVE METHODS OF LEPROSY AS IDENTIFIED BY THE RESPONDENTS

Prevention of leprosy	Frequency	Percent (%)
Environmental cleanliness	62	38.8
Early treatment	50	31.3
Good personal hygiene	36	22.5
Regular check-up	16	10.0
Good food/water	14	8.8
Being Godly	13	8.1
Distribution of drugs	13	8.1
Health education	11	6.9
Others	8	5.0

Environmental cleanliness (38.8%), early treatment for leprosy (31.3%) and good personal hygiene (22.5) were the main preventive methods identified. However, regular check-up in the hospital, taking good food and clean water and also health education were also recognized.

Others in the above table includes, screening everybody for the disease, avoiding contacts with the leprosy-affected persons, provision of more hospitals/clinics and introduction of more herbalists into the communities.

4.4.3 Findings from the FGDs on signs and prevention of leprosy

The signs of leprosy were well recognized by all the participants of the FGDs as also identified during the structured questionnaire interview as red patch on the skin, deformities of the extremities and ulcers among others.

One man from Siiriyiri said: *"If someone is suffering from leprosy, you see that the person's fingers and toes will be cut off, and you will also see sores all over his/her body."*

Preventive methods identified by the participants of the FGDs include regular check-up in the hospital, environmental cleanliness, having regular baths, taking good food and clean water among others.

One woman from Dabo said: *"We should always go for regular check-ups at the clinic, and also immunization against leprosy should be made available and affordable."*

Another woman from Dabo also said: *"We should always keep our environment clean and have our baths regularly and also the type of food we eat should be good."*

From Siiriyiri, a woman said: *"We should watch each other closely so that if we see any sign of leprosy we would draw the attention of that person so that he/she will seek early treatment"*

4.5 COMMUNITIES' ATTITUDE TOWARDS LEPROSY-AFFECTED PEOPLE

4.5.1 How Leprosy-affected People are Treated/Regarded in the Community

The table 4.9 below summarizes the various ways the communities treat or regard the leprosy-affected people. *(Some selected more than one option)*

Table 4.9 COMMUNITIES' ATTITUDE TOWARDS LEPROSY-AFFECTED PEOPLE

Regarded/Treated	Frequency	Percent (%)
As plagued by evil forces	40	20.0
Not allowed to perform household chores	142	71.0
Not allowed to play a leadership role	99	49.5
Not welcomed at social/Community functions	50	25.0
Isolated from the Community	39	19.5
Not allowed to go out	28	14.0
No Idea	6	3.0

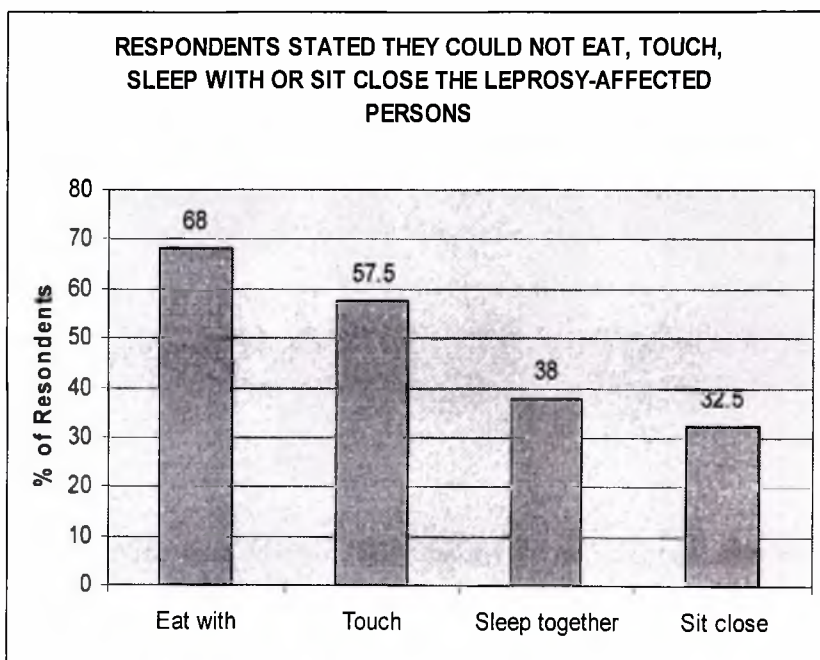
Most of the respondents (71.0%) felt that the leprosy patients should not be allowed to perform house chores for fear of transmitting the disease. Due to the deformities, 49.5% of the respondents stated that the leprosy-affected people should not be allowed to play leadership roles. Some few people (3.0%) had no idea as to how they were treated or regarded

4.5.2 Ways of avoiding contact with people affected by leprosy

The various ways of avoiding contact with the people affected by leprosy are presented in figure 4.5 below as not to eat with, touch or shake hands, sit close or sleep together in the same room.

(Many of the respondents chose more than one option)

FIGURE 4.4 WAYS IN WHICH CONTACTS WITH LEPROSY-AFFECTED ARE AVOIDED



Sixty-eight percent of the respondents stated that they could not eat with leprosy-affected people, 57.5% felt they could not touch or shake hand with them, 38.0% stated that they could not sleep together with them in the same room and 32.5% felt that they could not sit close together.

4.5.3 Reasons for the various attitudes towards the leprosy-affected people:

Out of the 200 respondents, 132 (66.0%) gave the following reasons for the various attitudes towards the leprosy affected people and 68 (34.0) of the respondent had no reason. These reasons are stated in the table 4.10 below:

Table 4.10 REASONS FOR THE ATTITUDES TOWARDS LEPROSY-AFFECTED PEOPLE

Reasons for the reactions leprosy-affected	Frequency	Percent (%)
Fear of transmission	46	34.8
They are incapable	18	13.6
Because of Deformities	14	10.6
Loss of respect	13	9.8
They are Unclean	10	7.6
Leprosy is not shameful	5	3.8
They are Human beings	26	19.7
TOTAL	132	100.0

4.5.4 Findings from the FGDs on the Communities' attitude towards the leprosy affected people

Most of the respondents felt during the FGDs that they could not do anything with the leprosy-affected persons because of fear of getting the disease.

*"A leper cannot do any work and if she is a woman the husband will not allow her to prepare food for him because if she does, the husband will get the disease."*Said by an elderly man in Dabo.

*"Unless she is my family member, I cannot stay in the same room with him/her."*Said by a woman in Siiriyiri.

CHAPTER FIVE

5.0 DISCUSSIONS

5.1 Introduction

This Chapter analyses and discusses the data from the field and interprets them in order to address the main and specific objectives of the study. To ensure a smooth flow of the discussions, this chapter is organized under the following central issue as the preceding chapter:

- **Socio-demographic characteristics of the Respondents.**
- **Etiology of leprosy from the perspective of the communities.**
- **Health-seeking behaviors of people affected with leprosy.**
- **Identification of signs and prevention of leprosy.**
- **Communities' attitude towards leprosy-affected people.**

5.2 Socio-demographic Characteristics of the respondents

The demographic background of the respondents was captured during the study as it was regarded as an important piece of information against which other variables such as etiology of leprosy, treatment-seeking behaviors, prevention of leprosy among others could be assessed. This aspect is very important because many social science studies have shown that people's environment has a very important bearing on their lives.

5.2.1 Age

The respondents seemed to be evenly distributed in the various age groups with highest group being 30-34 years age group with 14%. 45.5% of the respondents fell between 18-39 year groups. This might be due to the fact that during the farming season most of the youths travel back to their villages to assist their

parents on the farms. Though in many rural communities, the youth mostly migrate to bigger cities to look for jobs.

5.2.2 Sex

In this study, more females (59.0%) were interviewed than males (41.0%). The reason for this might be due to the fact that the period of the survey coincided with the rainy season, which is the busy period for most people in the area hence most of the men were on the farm tilling, planting, sowing, harvesting or attending to their crops. Moreover, generally there are more women in many societies than men.

5.2.3 Education

The formal educational levels reached have been analyzed at this stage. The data portrayed that the majority of the respondents (80.5%) had no formal education. This indicated a high level of illiteracy in the area and therefore their exposure to modern concepts of health might be limited.

5.2.4 Occupation

The level of education of any individual is one important bargaining power for securing employment and also for competing effectively in the labour market. It can be seen from the table 4.4 that a vast majority of the respondents (66.5%) were farmers followed by unemployed (15.0%) and then trading (13.0%). Since the majority of them were illiterate, they lack the requisite skill for any white-collar job. Hence many of them were engaged in farming which requires no formal education. Moreover, the unemployment rate was also high due to the high level of illiteracy. Since there were no white-collar jobs, few people who had formal education migrated to seek jobs outside the area.

5.3 Etiology of Leprosy from the Perspective of the Communities

For people in different cultures to describe or explain causes of illnesses may give various concepts or explanation models. These explanatory models are the ways people perceive illnesses and are mostly derived from the beliefs and practices that are deeply rooted in their culture. In Africa, many disease conditions where the causes are not clear may be blamed on supernatural causes like witchcraft machinations, juju, curses or other causes. In this study, majority of the respondents stated that flies and poor personal hygiene could be the factor responsible and only 37.0% thought that some microorganism could cause the disease. Many others still attribute leprosy to curses, witchcraft machinations and juju spells. Some others still thought that the disease could be inherited or given by God as a punishment for some wrongdoing. 14.5% had no idea as to what they think can cause leprosy. It was found in a similar study in Myanmar that both the leprosy patients as well as communities members were not sure about the cause of leprosy [14]. It was also found by Vasundha MK et al (1983) that 96.6% of inmates of leprosy camp in Mysore, India were ignorant of the cause, spread and prognosis of leprosy [9]. Only 28.0% of people in Cameroon knew that microbes could cause leprosy [8]. Similarly, the people of Limba, Sierra Leone maintained their traditional views about the cause of leprosy and this affected their treatment-seeking behaviour [19].

Some of the respondents associated leprosy with the consumption of certain animals. Many of these people said that the leprosy-affected people should not eat the meat of goat, mudfish or chicken. Mostly, it was herbalists and the spiritualists in the communities who demanded that these animals should be avoided during their treatment for leprosy with the belief that the disease would become worse should these animals be eaten. Some of the respondents also stated that consumption of the meat of a deer or hippopotamus could cause leprosy. These findings were similar to that of the study conducted among the Masalit and Hawsa tribes in Eastern Sudan by El Hassan LA et al (2000) [2]. They found that among these communities, there was a widely held belief that eating meat of the wild pig and certain type of fish caused leprosy. Few of the

respondents in this study also associated the consumption of other animals like the deer, lizard, python and cat to the causation of leprosy.

5.4 Signs and prevention of leprosy as identified by the respondents

Ability to identify the signs of any disease condition correctly is the first step to diagnosis and seeking the needed care since every health condition requires its own treatment. All most all the respondents were able to identify sign(s) of leprosy. The most common sign identified is a red patch on the skin and deformities of the extremities body. Other signs of the disease identified by the respondents were ulcers on the body, reddish eyes, and swellings on the body. These were because the affected people live among them and therefore were always seen by them. These findings correspond to the study done in Eastern Sudan by El Hassan et al. Their study found out that though the pathological cause of leprosy was lacking, but the signs were well recognized among the people of the Masalit and Hawsa tribes of Eastern Sudan. It is also similar to the findings in Indonesia, which realized that the knowledge about the signs and symptoms of leprosy was satisfactory among the people of Bone district [20].

Environmental cleanliness, early treatments for the disease and good personal hygiene were the most preventive methods of leprosy identified by the respondents. Most people in many communities knew these preventive methods for diseases, but practicing them is usually the problem. Practicing good personal hygiene for example, depends largely on good and regular water supply. In many communities especially in Upper West Region, where portable water is lacking, it is difficult to practice good personal hygiene. Early treatment is good, provided the signs of the disease are identified early and the place where the definite treatment could be found is known. Some few others stated health education as a preventive method indicating that people would want to know more about the disease in their communities.

5.5 Health-seeking behaviour of leprosy-affected people

Ability to recognize the signs of a disease and its complications is a determinant factor in the health-seeking behavior of the affected people. The leprosy-affected person may also transmit the disease to others if not diagnosed and treated early [12]. It is therefore important for the communities to identify signs of leprosy early in order to seek early treatment to avoid complications and also to prevent the transmission of the disease.

Leprosy usually starts as painless discoloration(s) or red patch(es) on the skin and this may be ignored or mistaken for any other skin lesion. It is therefore important to know the difference between leprosy and other skin lesions that resemble it. It was realized that the majority of leprosy-affected people realized the condition themselves (54.6%) or by health workers (31.8%) and also 13.6% were realized by friends or relatives. Though individuals, friends and relatives could recognize the signs of leprosy, it is normally when the deformities or the ulcers developed. The health workers usually during screening exercises for leprosy are able to identify the patches as they developed and since they can recognize the signs of the disease early.

Health-seeking behaviour of many disease-affected people is largely influenced by some constraints. These constraints are major determinant factors in seeking treatment for many health related conditions. 50.0% of the leprosy-affected people identified some constraints while seeking treatment from the clinic. The main constraint mentioned was financial. This was also identified during the FGDs. This was not surprising taking into consideration the fact that the respondents were mainly farmers, depending on subsistence agriculture. Moreover most of the affected people suffered some deformities and therefore making them less capable in their professional duties. Most of them were also unemployed. The financial constraints couple with their low socio-economic support and help often pushes some of them into beggary to earn a living [16]. Other constraints identified were lack of transport to the clinic for medications,

long distance from the clinic, long waiting time in the clinic and at times no drug immediately available. There was no public transportation system in the study area and many people walk long distances on foot and/or ride on bicycles. Among the communities where the study was done, the shortest distance to the clinic was about seven kilometers.

The main factors, which determine the place where an individual should seek treatment for a particular health condition depends on the confidence in the care at that place, proximity to the facility, cost of treatment and the type of disease condition the individual is suffering from. The availability of treatment for leprosy in the health facility has actually influenced health-seeking behavior of the people positively. 87.0% indicated that the hospital/clinic was the right place to seek care for the disease and only few of the respondents chose herbalist and spiritualist. This portrays the confidence the communities have in the care that they receive in the clinic. Some of the reasons given for preferring orthodox treatment to others were the fact that the hospital had the best treatment for the disease and the right drugs were available. Others who indicated that herbalist treatment was the best stated that the herbalist is always available and his treatment is cheaper [2]. Those who thought that spiritual healing was the best felt that God is the best healer and that the disease is a spiritual one. This showed that in areas where the medical services were scarce or non-existence, the affected people might not know that the disease is treatable by modern medicine [2].

5.6 Communities' Attitude towards People affected with Leprosy

The stigma associated with leprosy is often due to the deformities it can cause [3]. The affected people suffer both physical impairment and psychological repercussions due to community's attitude towards them [7]. The degree of social stigma and rejection was more towards those with severe forms of the disease, particularly patients with ulcerated lesions and severe deformities [2].

Most of the respondents stated that no leprosy-affected person should be allowed to perform household chores (71.0%) and the major reason stated for

this is the fear of infecting others with the disease [18]. For the same reason many of them also indicated that they would not be able to eat with, touch or shake hands or even sit close together with them. This reason was identified by the study conducted by van Bees SM et al (1999), which found that about 78.0% of leprosy cases could be associated to contact with another leprosy patient either from the same household or from neighboring households [12]. It was also found in Cameroon by Touko A. et al (1996) that 94.0% of the respondents welcomed interactions that did not involved physical contact with the leprosy-affected persons and intimacy was rejected by almost all the respondents [8]. The fear getting the disease was one determinant factor for the negative behaviours towards the leprosy-affected people [18].

Due to the deformities, some also felt that leprosy-affected persons should not be allowed to play leadership roles in the society because they are incapable and may not be respected. Many of the respondents also stated that they should not be isolated from the society or prevented from going out and the reasons given for these include the fact that they are human beings and needed to be sympathized with. Similarly, some also stated that the disease was no longer shameful as there is an effective treatment for it. This may be due to the confidence that the communities have in the leprosy treatment [2].

CHAPTER SIX

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

The majority of the people in the study communities did not have any formal education and are therefore illiterate. They were mostly farmers and a good number of them were unemployed.

Some people in the study communities still felt that leprosy could be caused by a curse, juju and witchcraft machinations or could be inherited. Many more had no idea whether microorganisms could be responsible for leprosy. Majority of the respondents stated that flies and poor personal hygiene could be responsible for causing leprosy.

For fear of acquiring leprosy, majority of the respondents could not sit close, eat with or touch leprosy-affected patients and would avoid anything involving physical contact with them. They would not allow them to perform household duties.

Signs of leprosy like the deformity of extremities, red patches on the body and ulcers were well recognized by the respondents, as the disease was common among them.

Though majority of the affected-persons realized the disease themselves, a lot more was diagnosed by the health workers during active case search for leprosy since the individuals may not recognize the early stages of the disease.

The respondents were able to identify good personal hygiene, environmental cleanliness, early treatment for the disease and health education as the main preventive methods of leprosy.

Treatment for leprosy at the hospital or clinic was the preferred choice for most of the respondents as they develop confidence in modern medicine with the reason that the right drugs for leprosy were available there. Few others preferred the herbal treatment because they felt it was cheaper and always available.

Major constraints by the leprosy-affected people whilst receiving treatment at the clinic include financial, lack of transportation and long distance traveling time to the clinic for drugs.

Leprosy has been associated with the consumption of the meat of certain animals like goat, mudfish, deer, python, giraffe and hippopotamus, which the respondents believed might either cause or aggravate the disease.

6.2 Recommendations

In view of the findings from this study, it is recommended that health education on leprosy be intensified in the endemic communities on the fact that microorganism, *Mycobacterium leprae* is the causative agent responsible for leprosy and not through witchcraft machinations, juju or curse.

Health education should emphasize the fact that the consumption of the meat of animals like goat, mudfish, deer, python or giraffe has no association with causing or aggravating leprosy.

Early detection of leprosy is very important for the elimination of leprosy in every community. Therefore there should be regular and sustained active case search in all endemic sub-districts in order to detect the disease early before the complications develop. This should continue until the disease is eliminated.

In order to alleviate the financial constraints and long distant travel for treatment by the leprosy-affected patients, there should be some financial support for them during the treatment period from the Government and this will also encourage self-reporting.

Herbalist and traditional healers in the leprosy endemic communities should be educated on the signs, cause and availability of treatment for leprosy in order to refer the affected people to the hospital or clinic anytime they come to them for treatment.

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RESEARCH QUESTIONNAIRE**TOPIC: SOCIO-CULTURAL ASPECTS OF LEPROSY IN WA DISTRICT**

Number [.....] Interviewer code [.....]

A) BACKGROUND

1) Age **2) Sex** M (....) / F (....)

3) Marital Status: Single, Married, Divorced, Widowed,

4) Level of Education: None, Prim, JSS/MSLC, SSS/Sec. Sch. Tertiary

5) Town/Community

6) Religion: Christian, Moslem, Traditional Rel., Others.....

8) Occupation: Farming, Trading, Teacher, Health Worker,

Traditional Healer, Unemployed, Others.....

B) ETIOLOGY/MODE OF SPREAD

9a) Is Leprosy a major problem in this community? Yes.... No....

b) Please, give reason(s).....

10) Do you know somebody who had Leprosy? Yes.....No.....

11) Do you have relative(s) or somebody close to you who had Leprosy? Yes/
No.

12) How does one get Leprosy? (*You may choose more than one option*)

- | | | | |
|-------------------------|--------|---------------|--------|
| - Poor Personal Hygiene | Yes/No | Juju | Yes/No |
| - Transmitted by flies | Yes/No | - Witchcraft | Yes/No |
| - Curse | Yes/No | - No idea | Yes/No |
| - Inherited | Yes/No | - Others..... | |
| By Microorganism | Yes/No | | |

13a) Is Leprosy infectious? Yes/ No. (*If No go to 14*)

b) If yes, how do you think it is spread from person to person? (*You may choose more than one option*)

Through body contact Yes/No

Talking with the affected person Yes/No

Eating with the affected person Yes/No

Sitting close to the affected person Yes/No

Living in the house / compound with the affected person: Yes/No

No idea

Others (State).....

14) What are the things you see from somebody that make you think that he/she is having leprosy? (State them)

15) What happens if leprosy patient is not treated early?.....

C) **TREATMENT SEEKING BEHAVIOUR**

16 i) Have you ever contracted this disease before? Yes/No. (*If No, go to 20*)

ii) If yes, for how long did you have the disease?.....

17) If yes to (16i), how did you know you had the disease?

I realized it myself

I was told by a friend

I was told by a Health Worker

18i) If yes to (16i), kindly describe where you sought treatment and at these place (*you may choose more than one option, indicate which one first*)

- From Herbalist Yes/No
- From Spiritualist Yes/No
- From Hospital/Clinic Yes/No
- Self-Medication Yes/No
- No Idea
- Others (Specify).....

ii) Reason(s) for choosing these place(s).....

19i) Did you have any problem while receiving treatment from the hosp/clinic?
Yes/ No.

ii) If Yes, what are they: (*you may choose more than one option*)

- No money to go to the hospital at times Yes/No
- Distant to hospital/clinic is long Yes/No
- No means of transport to hosp/clinic Yes/No
- No drug at times in the hosp/clinic Yes/No
- Poor attitude of hosp/clinic staff Yes/No
- Others.....

20i) If no to (16i), where do Leprosy patients often seek treatment and why?
(*You may choose more than one option*)

- From Herbalist Yes/No
- From Spiritualist Yes/No
- From Hospital/Clinic Yes/No
- Self-Medication Yes/No
- No Idea Yes/No
- Others (Specify).....

ii) Reason(s).....

21) What were the main constraints while seeking treatment?.....

D) COMMUNITY'S ATTITUDE TOWARDS LEPROSY PATIENTS

22i) How are Leprosy patients treated/regarded in this community and why?

(You may choose more than one option)

- | | |
|--|--------|
| - Regarded as plagued by evil forces | Yes/No |
| - Not allowed to perform house hold chores | Yes/No |
| Not allowed to play a leadership role | Yes/No |
| - Not welcomed at social / community functions | Yes/No |
| Is isolated from the community | Yes/No |
| Not allowed to go out | Yes/No |
| Others (Specify)..... | |

ii) Reason(s).....

23) Can you:

- | | | |
|---|----------|---------|
| i) Sleep in the same room with Leprosy patient? | Yes..... | No..... |
| ii) Eat together in the same plate? | Yes..... | No..... |
| iii) Sit close together? | Yes..... | No..... |
| iv) Touch/shake hand with Leprosy patient? | Yes..... | No..... |

24 i) Are there any taboos associated with the disease? Yes/ No

ii) If yes state:.....

25) How do you think Leprosy can be prevented in this community?

FOCUS GROUP DISCUSSION GUIDE

- 1) Is leprosy a major health problem in this community?
 - Why do you say so?
- 2) How does one get the leprosy?
- 3) What are the signs that you see to know that someone is having leprosy?
- 4) How does the disease spread from one person to another?
- 5) Where do leprosy patients go for treatment when they realize they have the disease and why at these places?
- 6) What problems do they face while seeking treatment?
- 7) What happens if leprosy is not treated early?
- 8) How are Leprosy patients' regarded/treated in the community?
 - As plagued by evil forces
 - Not allowed to perform household chores
 - Not allowed to play out leadership roles
- 9) Can you sleep in the same room, eat with, sit close to or shake hands with Leprosy patient?
- 10) Are there any taboos associated with leprosy?
- 11) How can leprosy be prevented in this community?