HOME-VISITING IN THE ASSIN DISTRICT

BY

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DECLARATION

I declare that this dissertation has been the result of my own field research, except where specific references have been made; and that it has not been submitted towards any degree nor is it being submitted concurrently in candidature for any other degree.

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[Signature]
DEDICATION

To my academic supervisors Dr. (Mrs.) Matilda Pappoe and Prof. S. Ofosu-Amaah.
ACKNOWLEDGEMENTS

I am most grateful to my academic supervisors, Professor Ofosu-Amaah and Dr. (Mrs.) Matilda Pappoe for the direction, support and assistance given me towards this study. This report is a testimony that their efforts have not been in vain.

I am also grateful to all the academic staff at the school of Public Health for providing me with knowledge which helped me at Assin District for the production of this dissertation.

To the District Director of Health Service, Dr. Kojo Sekyi-Appiah, the District Health Management Team and all the health workers in the Assin District of the Central Region, I say thank you for making it possible for me to undertake the study in the District. My special thanks also go to Dennis Agyeman and Gea Westerhof for assisting me with the data collection.

I am also grateful for all those who helped in diverse ways to get this work produced.
# LIST OF ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>CCA</td>
<td>Community Clinic Attendant</td>
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<tr>
<td>CHN</td>
<td>Community Health Nurse</td>
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<tr>
<td>CWC</td>
<td>Child Welfare Clinic</td>
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<tr>
<td>DHS</td>
<td>Demographic and Health Survey</td>
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<tr>
<td>DDHS</td>
<td>District Director of Health Service</td>
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<tr>
<td>DHMT</td>
<td>District Health Management Team</td>
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<tr>
<td>FP</td>
<td>Family Planning</td>
</tr>
<tr>
<td>HI</td>
<td>Health Inspector</td>
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<tr>
<td>JSS</td>
<td>Junior Secondary School</td>
</tr>
<tr>
<td>KVIP</td>
<td>Kumasi Ventilated Improved Pit Latrine</td>
</tr>
<tr>
<td>MCH</td>
<td>Maternal and Child Health</td>
</tr>
<tr>
<td>MCH / FP</td>
<td>Maternal And Child Health Including Family Planning</td>
</tr>
<tr>
<td>MOH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>ORS</td>
<td>Oral Rehydration Salt</td>
</tr>
<tr>
<td>PHN</td>
<td>Public Health Nurse</td>
</tr>
<tr>
<td>RTHC</td>
<td>Road to Health Card</td>
</tr>
<tr>
<td>SSS</td>
<td>Senior Secondary School</td>
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<tr>
<td>TBA</td>
<td>Traditional Birth Attendant</td>
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ABSTRACT

This study was done in the Assin District of the Central Region of Ghana. The aim of the study was to determine the practice of home-visiting in the district. Health hazards in the home were assessed, and how these hazards were addressed by health workers during home-visiting were observed.

Interviews were conducted in 4 out of the 8 sub-districts for 100 household heads, 12 Community Health Nurses and 6 Health inspectors. In addition, participant observation visits were conducted while Community Health Nurses as well as Health Inspectors were doing home-visiting.

Generally, frequency of home-visiting among the nurses was found to be low. The number of days or weeks elapsing between visits ranged from 3 days to 28 weeks. Quality of service rendered in about 83% of the homes surveyed was considered to be poor.

Among the Health Inspectors, home-visiting was more regular but many health hazards observed in the homes were not addressed.

Health hazards identified in the home included domestic animals living in close proximity with humans, in 88% of homes; scattered refuse 50%, stagnant water 45%, open refuse containers 78.3%, open water storage containers 70%, and home accident hazards 75%. The health hazards that were most frequently addressed by nurses were home accident hazards (open fires) and open water storage containers. The health hazard that was sometimes addressed by Health Inspectors was open water storage containers.

A gap therefore exit between what is done and what should be done by health workers, both in terms of the frequency of home visits and the health hazards addressed during such home visits.

To close this gap it is recommended that:

- All health workers who go on home-visiting be given in-service training on this activity and that home-visiting be included in the curriculum and job description of all health workers.
- Other grass root workers who visit homes be trained to identify and address health hazards in the home.
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CHAPTER ONE

INTRODUCTION AND BACKGROUND INFORMATION ON STUDY AND STUDY AREA

1.1 Introduction

The home is where people of all ages spend most of their time (Lindqvist, K.S. 1989). The home environment can enhance or endanger the health of the household because individuals and groups are at risk of exposure to certain dangers. Without question, it is in the home that health is made and where health can be maintained.

Home-visiting means visiting a client in his or her own environment to provide health and social support services. Such services may prevent, delay or be a substitute for temporary or long-term institutional care (World Health, 1994). Home-visiting has potential for bringing health workers into contact with individuals and groups in the community who are at risk for diseases and who make ineffective or little use of preventive health services (Brugha et al, 1996. pp.522).

In Ghana, home-visiting was one of the major activities of Public Health Nurses in the past. The health visitors, as they were then called, went from house to house giving education on sanitation and personal hygiene. The duties of the Public Health Nurse (PHN) and her auxiliary include running young child clinics, antenatal clinics, schools clinics, special clinics for example malnutrition, family planning, home visiting and inspection of private maternity clinics.
(Ofosu-Amaah, 1981). These activities are expected to reduce maternal and infant mortality rates.

The home is the ideal setting for receiving care. Being in a familiar environment, the client feels free and relaxed and able to take part in an activity that the nurse is performing. A wide range of services can be rendered in the home. It is possible to assess the client's situation and give household-specific health education on sanitation, personal hygiene and child care. In the home the Public Health Nurse monitors the growth, development and immunization status of children under 5 years and carries out immunization for defaulters. Care is given to special groups such as the elderly, discharged tuberculosis and leprosy patients as well as malnourished children. It is also possible to carry out contact tracing.

Some of the possible problems that may arise in the absence of home visiting are increases in the number of preventable diseases in the community as well as low health services coverage. Moore et al (1974), demonstrated how home visits to postpartum patients helped increase postpartum clinic attendance in Louisiana.

1.2 Background Information on the Study Area

Boundaries and Land Area

Assin is one of the twelve (12) districts of the Central Region of Ghana. It is bounded on the south by Abura-Asebu-Kwamankese and Mfantsiman districts, on the west by Upper Denkyira and Twifu-Hemang, in the east by Asikuma-Odoben-Brakwa and Ajumako-Enyan-Esaim. It shares a boundary with the Adansi-East district (Ashanti Region) in the north. The district capital is Assin Foso. With a surface area of 2375 sq. km., Assin district is the largest district in the region. It covers almost 25% of the Central Region's land surface area.
Population

With an annual population growth rate of 3.3%, the projected population of the district for the year 1998 is 190,938. The population is scattered over the district in small settlements. The district has a population density of 80 per sq. km.

Geographical Features

Assin district is situated in the wet semi-equatorial climatic region. The original vegetation is moist, semi-deciduous rain forest. There are two (2) main rainy seasons, the main is from May to July, and the minor is from September to October.

Socio-cultural characteristics

The district is predominantly rural (85%). The great majority of the people (90%) belong to the Akan tribe. The language spoken is Twi. The only recognizable cultural event is the celebration of the Tutu festival which comes on in November every year.

Main Economic Activities

Most of the inhabitants are engaged in farming activities. The district is one of the main producers of cocoa and palmnut.
Health Services

The health facilities in the district include governmental and private institutions. The mission hospital, St. Francis Xavier Hospital at Assin Foso is the district hospital. The eight sub districts are served by seven (7) health posts and one (1) Maternal and Child Health (M.C.H.) center. In addition, there are five private clinics and maternity homes. At the community level, there are 104 trained traditional birth attendants (TBAs), 39 community clinics and 78 trained community clinic attendants (CCAs). The major health problems facing the district are preventable. These include malaria and diarrhoeal diseases and are a result of poor environmental sanitation. Others are low family planning acceptor rate, low postnatal care coverage and a decline in home visiting. However this is a district in which families can benefit a great deal from home- visiting in view of the following factors:

1. Poor geographical access to health facilities. All but two (2) of the health facilities are located on the main Cape Coast - Kumasi trunk road and serve only the people around these areas.

2. Poor utilization of static facilities. In 1997, the coverage for some of the services rendered were as follows:
   i. Child Welfare (0-23 months) 45.7%
   ii. Post Natal Care 36.8%
   iii. Family Planning Acceptor Rate 8.4%
   iv. Medical Care 37.2%
1.3 Statement of the Problem

Home-visiting is an important tool for improving household health care. Recognizing the importance of home visits, a sample monthly work plan to be adopted by level B shows that the Sub District Health Team is expected to carry out home visits and contact tracing, at least 4 days in a week (MCH/FP Annual Report, 1994). In the past, home visits conducted could even be quantified (Ofosu-Amaah, 1981). It has been observed that home visits are given minimal attention in the Assin District and there is very little mention of this activity in reports. In addition, in interviews with health workers, hardly any mention is made of health hazards in the home. It is therefore possible that health hazards are not addressed during home-visiting.

One wonders what activities are actually undertaken during home-visiting and the quality of the services rendered. What is the present level of home-visiting? Does this fall short of the optimal level? It is to answer some of these questions that this study has been planned and implemented for the Assin District.

1.4 Justification for the Study

The information on the state of home visiting will be a guide to help the district develop appropriate strategies on home visiting.

Knowledge on the prevailing health hazards in households is expected to enhance the understanding of these hazards with the view to improving the quality of health advice given during home visits.
CHAPTER TWO

LITERATURE REVIEW AND OBJECTIVES

2.1 Conditions within the Home Environment which affect Health

This section looks at how factors within the home environment impact on health and illness, which create situations expected to be addressed through home-visiting by health and health related workers.

2.1.1 Environmental Characteristics of Households in Ghana

The Ghana Demographic and Health Survey (1993), showed that 35 percent of households in Ghana use piped water as their main source of water, 31 percent depend on well water (including borehole). Nearly 27 percent of households obtain their water from springs, rivers, streams and rainwater.

In terms of sanitation facilities, only 6 percent of households have flush toilets. The majority use pit latrines. About 23 percent have no toilet facility. Overall there are 2.5 persons per sleeping room in Ghana. For the Central Region the mean number of people per sleeping room was 2.8 (DHS, 1993). These findings have major implications for health.

2.1.2 Environmental Characteristics of Homes in Assin District

WATER SUPPLY

The main sources of water supply for households in the district are:

1. Streams
2. Ponds
3. Rivers
4. Hand-dug wells
5. Springs

There is no piped water in the district.

EXCRETA DISPOSAL

The commonest public latrine system in the district is the traditional open pit latrine. About 40 percent of households own private pit latrines, domestic KVIPs or Mozambique type of ventilated improved pit latrines.

Despite the construction of many different types of latrines in the district, many people still lack appropriate sanitary facility, leaving them to defecate indiscriminately around their houses or at the outskirts of the towns (Assin District Report, 1994).

2.1.3 Residential Environment

The residential environment does not only provide shelter and protection for the members of the family, but it is a major factor in the physiological and emotional health of residents (Molner et al, 1961). Housing conditions are therefore closely associated with health status. Assessment of the living space, the sleeping arrangements, the adequacy of furniture, toilet facilities, presence or absence of flies, cockroaches or rodents and internal or external accident hazards of the home give insight into what some of the health problems of family members might be. Katz et al, (1993) found that physical proximity and household specific factors play an important role
in disease transmission. In addition, injuries in the home are the most common source of trauma in the population and occur among all ages (Lindqvist, 1989). In the State of Michigan, home accidents killed more children than all other communicable diseases combined (Molner et al, 1961).

Overcrowding and poor ventilation affects the transmission of air borne pathogens. The incidence of tuberculosis has a close relationship with the degree of crowding in the dwelling place. In some major cities, the majority of pneumonia and influenza cases come from the overcrowded areas of the city (Molina, 1964). Over-crowding is also associated with the transmission of skin conditions such as scabies and the sharing of articles such as sponge and towels which influence the spread of these diseases. Over-crowding can also present accident hazards and mental stress. Children see and tend to learn bad habits in such homes. In addition to its physical nature, some of the basic amenities in the home also affect health.

2.1.4 Utilities in the Home

The relationship between some of the basic amenities in the home, hygiene practices and health cannot be overemphasized. Benneh et al, (1993) found associations between the prevalence of diarrhoea among children under six (6) years of age and the types of water storage facilities, disposal of human waste, eating habits and hygiene practices. Safe water is an essential pillar of health. A review by Esrey and others in 1991 of findings from 144 studies revealed that improved water supply and sanitation often reduces child diarrhoea and mortality by as much as fifty to eighty percent (World Bank, 1994). Many infections of the intestinal tract and skin, especially in the tropics may be significantly reduced following increased availability of water and its use for hygienic purposes (Cairncross et al
1997, World Bank 1993). Even though water is essential in promoting health, its storage may pose some health hazards. In a study conducted in the Greater Accra Metropolitan Area (GAMA), almost all (96%) the households had some form of water storage containers in their homes. Water Quality tests of water in these containers showed that 87% of such storage containers had high counts of faecal coliform. Indoor storage of water was also associated with more mosquito bites. However only 17% of households storing water had open containers (Benneh et al, 1993).

Research findings indicate that improved excreta disposal has a major impact on health (World Bank, 1994). Excreta-related infections such as poliomyelitis, enteric fever and ascariasis can be controlled by improvements in excreta disposal (Cairncross et al, 1997). Crowding of sanitary facility and open defecation by neighbourhood children were associated with higher prevalence of childhood diarrhoea in a study conducted in the Greater Accra Region. Again, 10% of the respondents admitted that children defecated openly (Benneh et al, 1993).

Poor refuse disposal encourages the breeding of flies and may thus promote the transmission of faecal-oral infections (Cairncross et al, 1973). Benneh et al, (1993) found higher prevalence of flies and rodents among 42% of household surveyed which practiced open storage of refuse. Insects such as houseflies, bedbugs, cockroaches and lice in the home also serve as disease carriers. A study of cockroaches in Accra by Agboadaze and Owusu in 1989 cited by Benneh et al (1993), found evidence which suggests that cockroaches could be playing a role in the transmission of diarrhoeal diseases. Benneh et al (1993) have also demonstrated that childhood diarrhoea was more prevalent in households with many flies. Nevertheless, the health status of
an individual in the home is not only determined by the physical nature of that home, but also by his own health seeking behaviour and hygiene practices.

2.1.5 HYGIENE PRACTICES

The health of households are affected by hygiene practices of its members. Good personal and environmental hygiene practices are essential in promoting health. The handling of food in the home may pose some health hazards. Many foods are capable of carrying pathogenic organisms especially if they are not thoroughly cooked. Flies, ants, cockroaches and rodents also play a role in food-borne disease transmission. One way of ensuring the safety of food in the home is by refrigeration.

Hand washing after defecation, before eating, and before preparing food is an important method of interrupting the transmission of many diseases such as diarrhoea, scabies and trachoma (Women and Children in Ghana: A Situational Analysis, 1990; World Bank, 1993; Cairncross et al, 1997). In the study conducted by Benneh et al (1993), about 91% of the principle home makers said they always washed their hands after using the toilet, while 74% said they did so before preparing food. Fruits such as mangoes, sugarcane and berries, which are eaten raw, can be contaminated if not washed properly (Benneh et al, 1993).

Further any housing which people share with animals or poultry may assist the transmission of zoonotic diseases (Cairncross et al, 1997). Earth floors in houses can harbour the eggs and larvae of intestinal worms (Cairncross et al, 1997). Finally, good health seeking behaviour of family members also positively affects health.
Many factors have been found in the home which affect health. One important method of increasing people’s knowledge of these conditions is through home-visiting by health and related workers.

2.2 Home-Visiting

If the home condition is closely associated with health status, what then is the role of the health worker? The role of the Public Health Nurse during home-visit has been clearly described by Carol Robertson. To Carol Robertson these nurses attempt to promote positive health and prevent occurrence of disease by increasing people’s understanding of healthy ways of living and their knowledge of health hazards (Robertson, 1991). In addition according to Lilian Wald as cited by Phillips (1994), the call to the nurse is not only for the bedside care of the sick, but to help in seeking out and addressing the deep-lying basic cause of illness and misery in healthy people. That in the future there may be less sickness to nurse and to cure. The real essence of public health nursing is therefore to stop individuals and groups from becoming sick and going to the hospital. One of the important ways of preventing an individual from becoming sick and increasing his or her knowledge of health hazards is through home-visiting. Home visits have been described as a tradition that must be strongly encouraged (World Health, 1994).

2.2.1. Benefits of Home-Visiting

The benefits of home-visiting cannot be over-emphasized. In a congested area of New York’s Lower East Side, the Child Welfare Movement led by Dr. Josephine Baker clearly demonstrated that infant deaths could be greatly reduced through home-visits (Stanhope, 1994). In his book, "An introduction to Health", Smith (1992) described a study conducted by Bakers and
Anderson in 1988 to back the importance of home visits. Immunization rates rose to ninety percent (90%) as compared to fifty percent (50%) in a comparable area where health visitors spent an hour a month with parents in the study group. In a similar study conducted in Ghana, after six months of home visits, immunization coverage rose from sixty (60) percent to eighty-five (85) percent (Brugha et al, 1996).

Again Smith (1992) had clearly demonstrated that health education given during home visits are more effective, resulting in behavioural change than those given through other sources such as the mass media.

In some countries, home-visits have helped improve family planning acceptor rate. In Korea, Lee (1975) reported a 10 percent increase in family planning acceptor rate as a result of home visits conducted by Family Planning field workers. A similar study in Taiwan also showed that home visits are more useful in recruiting clients for loop insertion than small group meetings or mailing (Taiwan Provincial Department of Health, 1973).

2.2.2 Home-Visiting Practice

Most researches on home-visiting focus on the benefits of these visits. Literature on home-visiting practice and the technique of home-visiting is minimal. In the first national survey of home-visiting practice in the United States, Keenan et al, (1992) reported that family physicians made an average number of 21.2 visits per year.

THE TECHNIQUE OF HOME-VISITING

Haddad, (1979) identified five (5) stages of home-visiting.
• Preparation for the visit which includes studying all available information on the family and carefully thinking out the objective of the visit.

• The visit itself which necessitates making a good impression through an orderly appearance, explaining the purpose of the visit, making observation and eliciting information in the course of the visit.

• Accomplishment of the task, which may involve such things as explaining disease prevention or explaining diet.

• Analysis of the visit which involves summarizing the information and assessing the work done.

• Writing up the visit, which should indicate the problems discovered as well as the remedial actions taken and the plan for the future.

2.3 Operational Definitions

Home

An enclosed environment which may be shared by one or more households.

Health Hazard in the Home

Conditions, devices or practices in the home which create danger to the health and well being of family members. (In this study focus was on the residential environment, utilities in the home, hygiene practices and health seeking behaviour of respondents).

Home -Visit

Visit to a client in his or her own home environment.
Quality Home Visit

The number of activities undertaken during home-visiting. The decision to let quantity of activities stand as proxy for quality is because quality can be described in terms of the content of a service or the number of activities rendered. In this study, because participants had to report on activities that had already taken place in the past and may not remember the fine details of those activities, it was more convenient to use the number of activities to measure quality.

Participant Observation

A data collection technique in which the observer takes part in the situation he/she is watching.

Elderly: A person above 65 years of age.

Public Health Nurse: A professional nurse practising public health.

Community Health Nurse: An auxiliary nurse practising public health.

2.4 Objectives

2.4.1 General Objective

To describe the practice of home-visiting in the Assin District, in relation to health hazards in the home.

2.4.2 Specific Objectives

1. To assess the frequency of home-visits.

2. To describe the quality of services rendered during home-visiting.

3. To describe home-based health hazards within the Assin District.

4. To describe how health hazards are addressed during home-visiting.
CHAPTER THREE

STUDY DESIGN, DATA COLLECTION PROCEDURES AND ANALYSIS

3.1 Methodology

3.1.1 Study Design

The study was descriptive in nature.

3.1.2 Sampling Method

The district was stratified into two (2): urban and rural. Assin Foso the only urban sub-district was selected. In addition, three (3) rural sub-districts were randomly selected as study areas. The study was conducted in a total of one hundred (100) homes, which had already been visited by health workers to interview household heads. Table 1 shows the number of homes visited from each sub district.

Table 1 Number of Homes Visited in each Sub-District

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<thead>
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<th>NAME OF SUB DISTRICT</th>
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<tr>
<td>Assin Foso</td>
<td>22</td>
</tr>
<tr>
<td>Assin Berekus</td>
<td>27</td>
</tr>
<tr>
<td>Assin Praso</td>
<td>35</td>
</tr>
<tr>
<td>Fanti Nyankumasi</td>
<td>16</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100</strong></td>
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In addition all the twelve (12) Community Health Nurses (see Table 2) and six (6) Health Inspectors working in the four study areas were also interviewed.
Table 2. Number of Community Health Nurses interviewed per Sub-District

<table>
<thead>
<tr>
<th>NAME OF SUB DISTRICT</th>
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<tbody>
<tr>
<td>Assin Bereku</td>
<td>3</td>
</tr>
<tr>
<td>Assin Foso</td>
<td>5</td>
</tr>
<tr>
<td>Fanti Nyankumasi</td>
<td>3</td>
</tr>
<tr>
<td>Assin Praso</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>12</strong></td>
</tr>
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3.1.3 Data Collection, Tools and Techniques

Interview schedules were used to obtain data from health workers and community members. A participant observation checklist was used during the participant observation to observe the activities of health workers in the home. Data collection started on 31st July and ended on the 14th August, 1998. Data was collected by the researcher and two research assistant. The researcher personally interviewed health workers and collected data during participant observation. Research assistants were given both theoretical and practical training, covering the statement of the problem, objectives of the study, data-collection tools, and plan for data collection and analysis. There was a field test of interview schedules where research assistants helped to rephrase some of the questions for the final study. Research assistants were specifically taught how to identify health hazards in the home. At the end of each day, interview schedules were checked by the researcher for completeness and accuracy. Clarifications were made when necessary.
One community (Mpaesem) in the Foso sub-district was chosen for pretesting using 10 interview schedules. Following the response to the pretesting, certain aspects of the data collection instruments were modified.

**Participant Observation**

Participant observation visits were also carried out in three sub-districts (Assin Praso, Fanti Nyankumasi and Assin Foso), to observe activities of health workers in the home. The researcher joined these three sub-districts which had scheduled home-visits during the study period on home-visiting. In all, there were 16 observations, 10 by Community Health Nurses and 6 by Health Inspectors.

**3.2 Ethical Consideration**

Permission was obtained from the District Assembly to carry out the research in the district. In addition permission was sought from the District Health Management Team (DHMT), the community members and health workers who took part in the interviews. Permission was however not obtained from the health workers during the participant observation. Prior knowledge that they were going to be observed might influence their activities in the home.

**3.3 Limitations of the Study**

There were a number of limitations to the study. Due to limited resources and time, interviews were conducted in four out of the eight sub districts. It was also not possible to interview all health workers in the district.
Since the study was mainly retrospective (household heads were questioned about past events), there may be recall bias, as some of the respondents might not have accurately remembered all activities undertaken by health workers during home-visiting.

During participant observation, it was possible that health workers might have put up their best performance to impress the researcher. Further it was not possible to assess all health hazards in the home such as medicines within reach of children. One could not enter the bedrooms of the respondents.

Some of the responses to questions might have been subjective. For example, respondents may have described the hand washing practices they believed their children should follow, rather than what they actually did, leading to over-reporting of positive behaviours. There might also have been under-estimation of the extent of open defecation by children and adults as these practices are frowned upon.

Not much literature was found on the topic.

3.4 Assessment of the Quality of Services Rendered during Home-Visiting

Based on personal experience and interviews with health workers at the regional and district level, the researcher came out with at least 7 typical activities that could be carried out during home visiting.

1. Monitoring the growth and development and immunization status of children under 5 years.

2. Assessment of the level of personal hygiene of family members.

3. Assessment of the level of environmental sanitation.

5. Care of special people such as pregnant women and the elderly.

6. Service delivery such as immunization, examination of babies, treatment of minor ailments.

7. Assessment of the needs of other members of the family.

Quality of service rendered in the home was graded as poor, satisfactory/fair, good or excellent. The quality of service was scored according to the number of activities carried out in the home, as measured against the seven (7) activities that could be carried out (refer definition of quality home-visit on page 14).

Table 3 Assessing Quality of Service

<table>
<thead>
<tr>
<th>No. of Activities</th>
<th>Quality of Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>Poor</td>
</tr>
<tr>
<td>3-4</td>
<td>Satisfactory/fair</td>
</tr>
<tr>
<td>5-6</td>
<td>Good</td>
</tr>
<tr>
<td>7 or more</td>
<td>Excellent</td>
</tr>
</tbody>
</table>
CHAPTER FOUR

4.0 RESULTS

4.1 Socio-Economic and Demographic Characteristics of the Respondents

A total of 100 household heads were interviewed: 12% were males and 88% were females. In addition, twelve (12) Community Health Nurses and six (6) Health Inspectors were also interviewed. Table 4 presents the socio-economic and demographic characteristics of community members.

Table 4a shows that five (5) percent of the respondents were over forty-five (45) years. The modal age groups for the respondents were 35-39 and 25-29 years.

Table 4b presents the educational status of community members. As many as 53 percent of the respondents were illiterates. Forty-four percent had had primary education. Only 3 percent had had secondary education.

The commonest occupation of the respondents as shown in Table 4c was trading (48 percent). Farmers comprised 27 percent; 8 percent were artisans. Fourteen percent of the respondents were unemployed.
Table 4: Distribution of Community Members by Age, Educational Status and Occupation

<table>
<thead>
<tr>
<th>a. Age Group (Yrs)</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-19</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>20-24</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>25-29</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>30-34</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>35-39</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>40-44</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>45+</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>b. Educational Status</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illiterate</td>
<td>53</td>
<td>53</td>
</tr>
<tr>
<td>Primary/JSS</td>
<td>44</td>
<td>44</td>
</tr>
<tr>
<td>Secondary/SSS</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Post Secondary</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>c. Occupation</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traders</td>
<td>48</td>
<td>48</td>
</tr>
<tr>
<td>Farmers</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>Artisans</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Civil Servants</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Unemployed</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Others</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

4.2 Home-Visits Received By Community Members

As many as 85 percent of the respondents had received home visits by Community Health Nurses within the 6 months prior to the study. Health inspectors had however visited all hundred (100) homes at least once a week within the same period. All health workers did
home-visiting in the morning. An average of 10 homes were visited in a day and the time of home-visiting (i.e. 9am-2pm), was convenient to 95 percent of the respondents.

4.2.1 Frequency of Home-Visiting Conducted by Community Health Nurses (CHNs)

The periods which had elapsed since the last date of home-visiting by CHNs ranged from 3 days to 28 weeks as shown in Table 5. Only one of the nurses had conducted a visit during the week of the interview.

<table>
<thead>
<tr>
<th>No. of Weeks</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 (3 days)</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>33.5</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>2.5</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>23</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>28</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>12</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

The average time interval elapsing between visits was 43.4 days (6.2 weeks).

With an interval as long as 28 weeks elapsing between visits, one wonders about the number of visits each home could receive.

4.2.2 Number of Times Visited by Community Health Nurses in Six Months

Sixty-one percent of the community members had received one visit, 18 percent 2 visits, and 5 percent 3 visits. Only one (1%) respondent had been visited 5 times within the 6 months. The mean number of visits was 1.17 times/home within the 6 months.
Home-visiting is normally conducted to accomplish a task which may involve such things as explaining disease prevention or explaining diet (Haddad, 1979).

4.3 Activities Undertaken By Health Workers In The Home

Health workers during home-visit undertook various activities. The activities undertaken by Health Inspectors as mentioned by the respondents included assessment of environmental sanitation, serving of sermons and site selection for the construction of toilets and hand-dug wells. In all there were 119 responses. Assessment of environmental sanitation formed 62(52%) of the responses, serving of summons to appear before court 50(42%) and site selection for the construction of pit latrines and hand-dug wells constituted the other activities 7(6%) of the Health Inspectors.

For the CHNs, the activities were more varied. In all there were 180 responses. Activities mentioned were inspection of Road to Health Cards (probably to monitor growth and development and immunization status of children 73(40.4%), health education and counselling 55(30.4%), assessment of level of personal hygiene 26(14.6%), assessment of environmental sanitation 12(6.4%), service delivery (immunization, examination of babies) 10(5.8%); care to special groups (pregnant women) 3(1.8%) and assessment of the needs of other members of the family 1( 0.6% ). However, describing activities alone does not indicate quality of services rendered in the home.
4.4 Quality Of Services Rendered During Home-Visiting

Table 6 shows the number of activities reported by community members to have been undertaken by CHNs in the home. One activity was carried out in the homes of 49 percent of the respondents, two activities in 34 homes and 3 and 4 activities in 15 and 2 percent of the homes, respectively. Poor services were rendered in 83% of homes where a maximum of 2 activities were undertaken. Quality of service rendered in the remaining 17% of homes where 3 or 4 activities were undertaken was satisfactory/fair.

<table>
<thead>
<tr>
<th>No. of Activities</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>49</td>
<td>49</td>
</tr>
<tr>
<td>2</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>3</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Quality was also assessed from the number of activities undertaken in the home by Community Health Nurses, as well as from the mean time spent in the home during participation observation visits. A total of 10 homes were visited. Time spent in the home during participant observation of home-visiting conducted by CHNs ranged from 2 to 10 minutes. The mean time spent in the home was 5.5 minutes.

With regards to the number of activities undertaken in the home, 3 activities were carried out in 4 (40%) homes, one activity in 1 (10%) home and 2 activities in 5 (50%) homes.
From the grading scheme for quality of services described by the researcher, poor service was rendered in 60% of the homes where a maximum of two activities were carried out. Quality of services rendered in the remaining (40%) homes where 3 activities were undertaken was satisfactory.

Based on the researcher’s personal experience, having worked as a Public Health Nurse for some time; for one to conduct quality home-visiting one needs not less than 15 minutes. If satisfactory visits can be produced within the mean time of 5.5 minutes in 40% of homes, it is likely that services can be much better if some more time is spent in the home. This is supported by the finding of Amonoo-Lartson and De Vries (1981) that Community Clinic Attendants who spent more time in consultation performed better.

4.5 Perceived Benefits Of Home-Visiting

It is encouraging to note that as many as 84 percent of the respondents gained benefits from home-visiting. Benefits gained from such visits were 1. increased health knowledge and 2. disease prevention. Some of the specific responses ranked in the order of frequency mentioned include:

1. ‘Learnt about correct method for feeding my children’
2. ‘How to take care of my children’
3. ‘Environmental cleanliness’
4. ‘Preparation of weanimix’ (weaning food for children)
5. ‘Disease prevention by immunization’
6. ‘Benefits of breast feeding’
7. ‘Health inspectors keep us alert to keep our surroundings clean’
8. 'I got personal advice which is not possible at the child welfare clinic'.

Community Members have listed many perceived benefits of home-visiting. Is it possible that they are influenced by the attitude of the health worker in the home?

4.6 Attitude Of The Health Worker In The Home

Eighty-four percent of the respondents complimented the attitude of Community Health Nurses during home-visiting. They were described as being more friendly, jovial and patient in the home than at the clinic. The remaining respondents were undecided. Over 90 percent of the respondents feared the health inspectors. It is indeed encouraging that many of the community members passed a compliment on the attitude of the CHNs. The nurses need commendation. This may perhaps be a reflection of the support received for home-visiting.

4.7 Support For Home-Visiting

With the exception of the Foso sub-district where there were Public Health Nurses to supervise Community Health Nurses, in general, the nurses were neither monitored, nor motivated to go on home-visiting. The nurses conducted home-visiting at their convenience and not according to the schedule of at least one home-visiting per week for the district.

In addition, 7 out of 12 health workers interviewed did not report on home-visiting.
4.8 Health Workers Opinion On Home-Visiting

Community Health Nurses listed home-visiting as one of their important functions to ensure continuity of care as well as recruit clients to the child welfare clinics. Health workers recognized that home-visiting was useful in improving health service coverage and the health status of community members. This activity also helps to improve health worker-client relationship. For those clients who do not have money to attend the clinics, home-visiting is a must. Community Health Nurses suggested that they are given drugs to treat minor ailments in the home.

Community Health Nurses also suggested recruiting and training of all health workers to go on home-visiting. However, they would rather go on home-visiting without Health Inspectors since most mothers hide when they go to the homes together. Generally, health workers had positive opinion on home-visiting. Do community members share the same views?

4.9 Community Members Opinion On Home-Visiting

All community members want home-visiting to be continued by Community Health Nurses, at more regular intervals. The majority of the respondents suggested being visited every month for about 30 minutes. Home-visiting gave community members some privacy. Most of the respondents confessed that at the static clinics, they normally felt shy to ask questions after the health talks. In the home they were able to ask questions and make necessary clarifications. Some of the respondents said they sometimes faced financial problems and were unable to attend clinic or go to hospital. Therefore home-visiting to weigh and immunize their babies as
well as treat minor ailments would be beneficial to such people. It is during home-visiting that many mothers said they were taught how to take care of their children. The messages were more appropriate as they were household specific. Respondents believed that home-visiting should be extended to all members of the home and not only to babies and toddlers.

4.10 Participant Observation Visits

This section briefly describes findings of participant observation visits with Health Inspectors. In addition, it describes health hazards addressed during home-visiting by CHNs. During the visits with CHNs, some health hazards were identified. This included stagnant water, scattered refuse, open refuse containers. In addition, home accident hazards such as misplaced knives and sharp objects were identified. In two of the three homes that had scattered refuse, the nurse asked the mothers to sweep the compound. And mothers were advised to keep children away from open fires in 2 out of the 6 homes that had open fires. The other hazards were not addressed.

HEALTH INSPECTORS

A total of 6 homes were visited to oversee the activities of Health Inspectors. Tenants in 4 (66.6 percent) of the homes were served with summons to appear before court on account of weedy surroundings in two of the homes, presence of stagnant water in one home and indiscriminate defecation in the fourth home. According to the health inspector, tenants had already been given three verbal warnings to clean the nuisance in the homes. Residents in the fifth home were asked to cover a water storage container. No nuisance were detected in the sixth home.
Some of the residents in the neighbourhood disappeared on seeing the Health Inspectors. The mean time spent in the homes by a Health Inspector was 12 minutes.

4.11 Target Groups for Home-visiting met in the Homes

Table 7. Target Groups for Home-Visiting met in the Homes

<table>
<thead>
<tr>
<th>Target Group</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing Mothers</td>
<td>69</td>
<td>27.9</td>
</tr>
<tr>
<td>Pregnant Women</td>
<td>14</td>
<td>5.6</td>
</tr>
<tr>
<td>Children below 2 years</td>
<td>81</td>
<td>32.9</td>
</tr>
<tr>
<td>Children 2-5 years</td>
<td>36</td>
<td>14.6</td>
</tr>
<tr>
<td>Twins</td>
<td>2</td>
<td>0.8</td>
</tr>
<tr>
<td>Malnourished</td>
<td>11</td>
<td>4.5</td>
</tr>
<tr>
<td>Mental Mothers</td>
<td>3</td>
<td>1.2</td>
</tr>
<tr>
<td>Elderly</td>
<td>28</td>
<td>11.3</td>
</tr>
<tr>
<td>Crippled (children)</td>
<td>2</td>
<td>0.8</td>
</tr>
<tr>
<td>Premature Baby</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>247</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Many target groups for home-visiting were identified in the home during the study. Children below 2 years and nursing mothers formed 32.9% and 27.9% respectively of the target groups met. Others were children 2-5 years 14.6%, the elderly 11.3%, pregnant women 5.6% and malnourished children 4.5% (see Table 7).
4.12 **Health Hazards In The Home**

This section describes some of the health hazards that were identified in the 100 homes during the data collection.

**HYGIENE PRACTICES**

Overgrown fingernails was used as an indicator of hygiene practice. All the hundred homes visited had at least one child aged 0-5 years. As many as 57 percent of the respondents had children with dirty and overgrown nails. The remaining 43% of the respondents had children with fingernails cut short and clean.

**HEALTH SEEKING BEHAVIOUR**

Respondents were asked if their children under five years had fallen sick in the past six weeks preceding the interview. As many as 98 percent of the respondents had children who had suffered from malaria, diarrhoea and skin diseases and respiratory tract infections, as presented in Table 8.
TABLE 8. DISEASES OF UNDER-5 YEAR OLDS WITHIN SIX WEEKS PRIOR TO STUDY

<table>
<thead>
<tr>
<th>Type of Condition</th>
<th>No. of Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaria</td>
<td>84</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>41</td>
</tr>
<tr>
<td>Skin conditions</td>
<td>18</td>
</tr>
<tr>
<td>Respiratory tract infection</td>
<td>16</td>
</tr>
<tr>
<td>Constipation</td>
<td>1</td>
</tr>
<tr>
<td>Measles</td>
<td>2</td>
</tr>
<tr>
<td>Vomiting</td>
<td>2</td>
</tr>
</tbody>
</table>

Fifty-five (56.1 percent) of the respondents sent their sick children to a health facility. Children given no treatment and home remedies constituted 1 (1 percent) and 8 (8.2 percent) respectively.

A rather large number, 34 (34.7 percent) bought drugs from chemical shops for their children. Many of such children were given wrong dosages of drugs such as:

1. One sachet of ORS mixed with one glass (about 330mls) of water for diarrhoea.
   The other drug of choice for diarrhoea was Septrin syrup given one teaspoon three times daily for a minimum of 4 days.

2. For malaria the drugs of choice were chloroquine syrup given one teaspoon three times daily, or septrin and paracetamol syrups. The number of days for treatment ranged from one to seven days.

AVERAGE NUMBER OF PEOPLE PER SLEEPING ROOM

In the Assin District an average sleeping room measuring 12 feet by 10 feet accommodated between three to nine people. The mean number of people per sleeping room in the district was
5.3. The modal number of people per sleeping room was 5.

![Bar Chart: Average Number of People per Sleeping Room]

**DOMESTIC ANIMALS IN THE HOME**

Many domestic animals were found in majority of homes (88 percent) of the respondents. Only 12 percent of the respondents had no domestic animals at all in their homes. The animals included dogs, cats, goat/sheep and fowls.

**ACCIDENT HAZARDS IN THE HOME**

Many accident hazards were identified in the homes. These included open fire, dangerous stairs and pathways, misplaced knives and sharp objects. Seventy-five percent of the homes had accident hazards. In 25 percent of the homes no accident hazards were identified. Open fires were the most common accident hazard (48.9%). This was followed by misplaced knives and
sharp objects (41.6%). Dangerous stairs and pathways and medicines within reach of children formed 8.7 percent and 0.8% of the accident hazards respectively.

WATER SUPPLY OF HOMES

Table 9. DRINKING WATER FACILITIES IN THE HOME

<table>
<thead>
<tr>
<th>Source</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well Water</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>Bore Hole</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Harvested Rain Water</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Streams</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Untreated Tap Water (From River Prah)</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

The Table 9 shows the main sources of water of the respondents.

Forty percent of the respondents obtained their water from boreholes; another 33 percent from hand dug wells. Seventeen percent of the respondents used untreated water. Harvested rainwater formed 2% of the sources of water for the respondents. In addition, 8% of the respondents used streams. Many of the respondents (84 percent) had water storage facilities in their homes. The majority 59 (70 percent) of the water storage facilities were not covered.

TOILET FACILITIES

In terms of toilet facilities, only one respondent owned a water closet. The majority (53 percent) of the respondent used pit latrines. As many as twenty-three percent of the respondents used public septic tank latrines, and 11 percent KVIPs. Twelve percent of the respondents practised open defecation (free range) as shown in Table 10. In 45 percent of the homes children practised open defecation.

33
Table 10 Toilet Facilities in the Home

<table>
<thead>
<tr>
<th>Type of Toilet Facility</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pit Latrine</td>
<td>53</td>
<td>53</td>
</tr>
<tr>
<td>Septic Public Tank Latrine</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>Open Defecation</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>KVIP</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Water Closet</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Seventy-one percent of the respondents said they normally saw flies in their toilets or defaecating area. Again 77 percent of the respondents said they normally saw flies in the kitchen or cooking area. Many respondents questioned, ‘why ask us this question, flies exist in all toilets’. The public septic tank latrines were described as having many flies. Respondents were asked if children in their homes washed their hands with soap and water after defecation. Twenty-six percent said they did not know; 30 percent washed their hands with soap and water; and another 44 percent said they washed their hands with only water.

Stagnant water was found in 45 percent of the homes visited, and fifty percent of the homes had scattered refuse in their environs. All but 17 percent of the homes had refuse containers. Sixty-five (78.3 percent) of these refuse containers were not covered.
CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Discussion

The study revealed that in the Assin District, only Community Health Nurses among all the nurses conducted home-visiting. This is contrary to the practice in the past when both Community and Public Health Nurses conducted home-visiting (Ofosu-Amaah, 1972). Home-visiting conducted by CHNs was irregular. The number of days/weeks elapsing between visits ranged from 3 days to 28 weeks. This level of home-visiting by the nurses is considered low and falls short of the four (4) home-visits and contact tracing per week expected to be conducted by each sub district (MCH/FP Annual Report, 1994). Again it falls short of the district’s target of at least one home-visit per week. Moreover, The W.H.O. Special Programme on Research reported that FP and MCH services could be improved through home-visiting by nurses in rural areas provided that the number of homes to be visited is about 300/nurse. At this rate of home-visiting in the Assin District, some nurses may not even cover 20 homes in a year. The number of visits received by community members ranged from 1 to 5 visits within the 6 months. The majority (61 percent) had received one visit. Most of the community members who had received more than one visit were staying close to the home of a Community Health Nurse. The only respondent who had received 5 visits was a friend to one of the nurses. The mean number of home-visiting was 1.17 times/home. This is low compared to the 21.2 mean number of visits per year conducted by Family Physicians in the United States (Keenan et al, 1992).
The major activity undertaken in the home by the nurses was the monitoring of the growth and development of children under 2 years of age. Perhaps this is because the major concern of these nurses is the health of mothers and their children, as the name MCH implies. Health education formed 30.4 percent of the activities in the home. This is important as Wald et al (1985) demonstrated that PHNs can effectively impart health knowledge to high risk mothers in the home and effect positive changes in maternal attitude. In addition Jinadu (1975) reported that face to face teaching in the privacy of the home was an excellent environment for imparting health information.

Record keeping was one of the 5 stages of home-visiting identified by Haddad (1979). However in the Assin District, 7 out of 12 CHNs interviewed kept no records on home-visiting. Perhaps this was because there was hardly any support or supervision for home-visiting.

Home-visiting by HIs was more regular. For this category of workers, between visits interval of more than one week to a home was the exception rather than the rule. Activities reported to have been conducted were environmental inspection and serving of summons. The impression is that there is not much health education taking place, and community members are forced to clean their environment. This is an area of concern which requires attention by the environmental sanitation authority.

About 84 percent of the respondents claimed they gained benefits from home-visiting. The remaining 16 percent who claimed they gained no benefits said the CHNs just inspected their RTHC giving them no feedback. Again some of these respondents claimed they were advised
to send their children to the CWC (Child Welfare Clinic) which they were already doing. They therefore saw no point in being visited.

The fact that as many as 94 percent of the respondents said the time of home-visiting (ie 9am-2pm) was convenient, may be because these respondents were met at home at the time of the visits. One problem faced by the health workers was that they did not always meet people at home. There is the possibility that certain community members are always missed out. During the data collection, the researcher happened to enter some homes and communities where community members lamented that the nurses were only seen passing by their homes, but were never visited. One opinion leader asked whether home-visiting was a new activity that had started in Accra.

Based on the findings that:

- community members want to be visited regularly; at least once a month;
- community members want services rendered in the home to be extended to all family members and not only to toddlers and babies;
- respondents want services such as weighing, immunization and treatment of minor ailments to be rendered in the home
- some community members are not covered by home-visiting;

One can say that community members' expectations for home-visiting are not being met. Moreover, during the data collection many people were identified in the home who were at risk of disease and who need special attention. This is supported by the finding of Bruhga (1996) that home-visiting has a potential for bringing health workers into contact with individuals and groups in the community who are at risk of disease. The elderly and pregnant women formed
11.3 percent and 5.6 percent of such people. It is interesting to note that care was normally rendered to children below 2 years of age. In some instances, even the bulging abdomen of pregnant women went unnoticed. This is an important area which needs to be addressed during home-visiting.

As many as 57% of the children found in the homes had overgrown fingernails. On the basis of this finding one can conclude that not much attention is paid to personal hygiene during home-visiting in the district. In this study overgrown fingernails was used as an indicator for hygiene practice.

The DHS reported an average of 2.5 people per sleeping room in Ghana, and 2.8 people per room for the Central Region. In the Assin District, the mean number of people per sleeping room was 5.5. The degree of overcrowding in the district cannot be overemphasized. It was interesting to note that most of such rooms had no windows. The transmission of air borne disease and skin conditions as a result of overcrowding and poor ventilation cannot be ruled out.

The sharing of homes with animals can lead to the transmission of zoonotic diseases (Cairncross et al, 1997). Consequently, the finding that the majority (88%) of the homes had domestic animals is of importance.

The problem of no piped water for the district became evident from the study. More than 70% of the respondents depended on wells and bore holes. Eighty-four percent (84%) of homes had
water storage containers. This is lower than the finding by Benneh et al, (1993) that 96% of households stored water. This is probably due to the fact that in the Assin district the sources of water (i.e. wells and boreholes) were more regular. In the study by Benneh et al, (1993) only 17% of the households storing water had open water storage containers. In contrast in the Assin district, as many as 70 percent of these containers were not covered. Water in these containers may be contaminated before being used.

The major latrine in use in the district is the pit latrine. Only 1 percent of the respondents owned a water closet. This is lower than the average of six percent (6%) recorded in Ghana (DHS, 1993). The 45 percent of homes where open defecation was reported to be practised by children is higher than the 10 percent recorded by Benneh et al, (1993). Open defecation, open refuse containers, the presence of flies in 71 percent of toilets, and 77 percent in kitchens/cooking areas have health implications. There is the likelihood of food contamination by flies and this may promote the transmission of faecal-oral infections (Cairncross et al, 1973).

Generally, environmental sanitation in the homes was poor. Stagnant water found in 45 percent of homes and scattered refuse in 50 percent of homes may encourage the breeding of mosquitoes and other pests. Little wonder that many children had suffered from malaria in the six (6) weeks prior to the survey.

Accident hazards were found in 75% of the homes. This exposes not only children but also all individuals in the home to home accidents and injuries (Linvist, 1989).
The rather large number of respondents (34.7%) who bought drugs from chemical shops for their sick children needs special mention. This figure is however comparable to the 34 percent recorded by the DHS (1993). Is it possible that in such instances children were not completely cured as they were sometimes given the wrong drugs and dosages of drugs? This may perhaps explain the rather large numbers of sick children.

One wanted to find out if educational status of household heads would have anything to do with the types of hazards found in the home. Many more health hazards were found in the home of the illiterates (See Table 11).

Table 11. Educational Status and Health Hazards in the Home

<table>
<thead>
<tr>
<th>Health Hazard</th>
<th>Educational Status</th>
<th>None</th>
<th>Primary</th>
<th>Secondary</th>
<th>Total</th>
<th>p Value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic Animal</td>
<td>None</td>
<td>48(54.5%)</td>
<td>39(44.3%)</td>
<td>1(1.2%)</td>
<td>88</td>
<td>.01</td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>44(58.6%)</td>
<td>30(40.0%)</td>
<td>1(1.3%)</td>
<td>75</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>30(66.7%)</td>
<td>14(31%)</td>
<td>1(2.2%)</td>
<td>45</td>
<td>0.04</td>
</tr>
<tr>
<td>Scattered Refuse</td>
<td>None</td>
<td>33(66%)</td>
<td>17(34%)</td>
<td>0</td>
<td>50</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>12(22%)</td>
<td>21(42%)</td>
<td>0</td>
<td>33</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>0</td>
<td>3(6%)</td>
<td>0</td>
<td>3</td>
<td>0.52</td>
</tr>
<tr>
<td>Open Defaecation (Adults)</td>
<td>None</td>
<td>8(66.7%)</td>
<td>4(33.3%)</td>
<td>0</td>
<td>12</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>20(58.8%)</td>
<td>14(41.2%)</td>
<td>0</td>
<td>34</td>
<td>0.37</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>0</td>
<td>1(100%)</td>
<td>0</td>
<td>1</td>
<td>0.52</td>
</tr>
<tr>
<td>Bought Drugs from Chemical Shop</td>
<td>None</td>
<td>30(52.6%)</td>
<td>26(45.6%)</td>
<td>1(1.8%)</td>
<td>57</td>
<td>0.68</td>
</tr>
</tbody>
</table>

*Significance is at .05 level.

Of the 12 respondents who practised open defaecation, 8(66.7%) were illiterates and the remaining 4(33.3%) had primary education. Of the 57 children who had dirty and overgrown fingernails, 30(52.6%) came from the homes of illiterates, 26(45.7%) from respondents with
primary education. Only 1(1.8%) came from a home where the respondents had secondary education. Again fifty homes had scattered refuse in the environment. None of the respondents with secondary education had scattered refuse. Seventeen of these respondents had primary education. The remaining 33 respondents who had scattered refuse in their homes had no education. Of the 34 respondent who bought drugs from chemical shops for their sick children 20(58.8%) had no education and 14(41.2%) had primary education. Again the only respondent who gave no medication to his sick child had only primary education. Even though illiterates seemed to have more health hazards in the home, some of these findings are not statistically significant. The relationship between educational status and having domestic animals, accident hazards, stagnant water and scattered refuse in the home were found to be statistically significant. However, the relationship between educational status and practise open defaecation (adults), buying drugs from a chemical shop for a sick child, giving no treatment to a sick child, and having children with dirty and overgrown finger nails were not statistically significant.

Many health hazards were identified in the home. In the study described by Smith (1991), Clover et al demonstrated that home-visits by Health Visitors giving specific advice on how to reduce hazards in the home, did so in 60 percent of the homes. Indeed if home-visiting was being done as often and as comprehensively as should be done one would expect the absence of some of these hazards in the home. And perhaps findings from participant observation visits supported this.

With HIs, three of the homes visited had open water storage containers. It was only in one of the three homes that residents were asked to cover the container. Ideally one would expect that
the water in the container be inspected for the presence of mosquito larvae. This was not done and the picture is therefore not clear as to which health hazards are addressed by HIs during home-visiting. Other health hazards such as open refuse containers and accident hazards were not addressed.

Among the CHNs the health hazards that were sometimes addressed in the participant observation visits were accident hazards, specifically open fires, and scattered refuse. The impression is that health hazards are generally not addressed during home-visiting in the district. What may be some of the possible problems or reasons? It is possible that the health workers perception on home-visiting influences his/her activities in the home?

Health workers recognized that not only was home-visiting useful in improving health service coverage and health status of community members but also helps to improve client-health worker relationship. Moore (1974), and Lee(1975) made the same observations. The perception of health workers in the district to home-visiting was generally positive. With this positive perception one tends to wonder why health workers in the district are not applying what they know should be done? What factors account for these lapses? Could any of the following account for the situation:

- Lack of motivation?
- Inadequate number of health workers
- Lack of training in the skills of home-visiting?
- Lack of logistic support?
- Lack of adequate job description?
5.2. CONCLUSION

The study examined the practice of home-visiting in the Assin District. In this district, CHNs and HIs conduct home-visiting. The frequency of home-visiting for the nurses was low and falls short of the standards set for Ghana and the district. HI visited the homes more often, at least once a week. The activities in the home mainly centred on children below 2 years of age and assessment of environmental sanitation.

The perception of health workers to home-visiting was generally positive. However, many health hazards were identified in the home. Indeed home is where health is made and where health can be marred. If home-visiting is being done as comprehensively and as often as should be done, one would expect the absence of some of these hazards in the home. Findings from participant observation revealed that, generally, health workers did not adequately attend to home-based health hazards. Perhaps this supports the finding that quality of service rendered in the home was poor, and leaves much room for improvement.

The need for strengthening home-visiting as a tool for improving household health care and addressing home-based health hazards in the district cannot be over emphasized.

5.3. RECOMMENDATIONS

On the basis of the findings of this study, the following recommendations are made:

DISTRICT HEALTH MANAGEMENT TEAM

1. In-Service training should be organized for all health workers who go on home-visiting (ie. Community Health Nurses, Public Health Nurses and Health Inspectors) on skills in
home-visiting. In addition, community based health workers such as traditional birth attendants and community clinic attendants should also be trained to identify and address health hazards in the home.

2. Health workers who go on home-visiting should be given support and motivation. These workers should be paid their snack or lunch allowances on the days on which they go on home-visiting, as a necessary incentive.

3. It is important to forge better inter-sectoral collaboration at the district level. The District Assembly could assist the DHMT with transport to support home-visiting. In addition, other grass root workers who go to the homes such as social workers and Agriculture Extension Officers should be trained to identify and address health hazards in the home.

DISTRICT ASSEMBLY

1. More boreholes should be provided for the communities especially in Assin Praso where community members use stream and untreated water. Efforts should be made to get the district supplied with piped water

2. There should be regular maintenance of the public septic tank latrines. Additional toilets should be constructed, and education on the use of these toilets should be on-going.

POLICY MARKERS

1. Home-visiting should be included in the curriculum of all health workers, so that other officers such as Nutrition and Disease Control Officers are trained in the skills of home-visiting.
2. To ensure that all health workers go on home-visiting, this activity should be in the job description of all health workers.
REFERENCES


23. Taiwan Provincial Dept. of Health (1973), Experimental Study for Loop Extension Programme (Cost study of Mailing, Home-visiting and Small Group Meetings). *Taiwan Population Summaries.*

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APPENDICES

APPENDIX I

TITLE: HOME-VISITING IN ASSIN DISTRICT

INTERVIEW SCHEDULE FOR HEALTH WORKERS

Interview No:.....................................................
Sub-district:.....................................................
Interviewer:.....................................................
Date:............................................................

1. Category of Health Worker(s)
   (a) Community Health Nurse [ ]
   (b) Health Inspector [ ]
   (c) Others (state) ........................................

2. Do you organize home-visiting in your catchment area?
   (a) Yes [ ]
   (b) No [ ]

   (B) If yes are there other health workers who join you on home-visiting ........................................

3. How often do you go on home-visiting in a week? ..........
   ........................................................................

4. How many homes do you visit in a day? .................
   ........................................................................

5. At what time of the day do you go on home-visiting? .......
   ........................................................................

6. When was the last date you conducted a home-visit? .......
   ........................................................................
7. What are some of the activities you undertake during home-visiting?

................................................................................
................................................................................
................................................................................
................................................................................
................................................................................

Any others ................................................................
................................................................................
................................................................................

8. Which activities do you undertake in the home which you think may not be useful?

................................................................................
................................................................................
................................................................................

9. Which other activities do you wait to under during home-visiting?
................................................................................
................................................................................

10. What problems do you face with home-visiting?
................................................................................
................................................................................

11. Do you report on home-visiting?

   (a) Yes [ ]
   (b) No [ ]

   If Yes, show evidence.
................................................................................
................................................................................

12. What are the general benefits of home-visiting to your work?
................................................................................
13. What is your opinion on home-visiting?

14. What support do you get from your superior officer?

15. What suggestions do you have for improving home-visiting?
APPENDIX 2

PARTICIPANT OBSERVATION CHECKLIST

PART 1

Interview No: .....................................................

Sub-district: .....................................................

Community: ......................................................

Date of Visit: ...................................................

1. Category of Health Worker(s)
   (a) Community Health Nurse [ ]
   (b) Health Inspector [ ]
   (c) Others (state) ...........................................

2. Are there people in the house visited? ...................

3. What are the activities undertaken by the health workers?
   (a) Community Health Nurse? ..............................
       ..................................................................
       ..................................................................
       ..................................................................

   (b) Health Inspector? ............................................
       ..................................................................
       ..................................................................
       ..................................................................

4. What is the time spent in the home (minutes) ..........
   ........................................................................
PART 2

Which of the following health hazards can you identify in the home?

5. Domestic animals living in close proximity to humans

6. Accident Hazards
   (a) Misplaced knives and sharp objectives
   (b) Open fire
   (c) Dangerous stairs and pathways
   (d) Medicines with reach of children
   (e) Chemicals and other solutions in unlabelled bottles.

7. Open Refuse containers YES/NO
8. Open water containers YES/NO
9. Scattered Refuse YES/NO
10. Stagnant water in the home environment. YES/NO
APPENDIX 3

TITLE: HOME-VISITING IN ASSIN DISTRICT

INTERVIEW SCHEDULE FOR COMMUNITY MEMBERS

PART 1

Sub-district: ......................................................
Community: ........................................................
House No.: ........................................................

1. Age: ........................................................

2. Occupation: ................................................

3. Educational Status
   (a) Nil
   (b) Primary/JSS
   (c) Secondary/SSS
   (d) Post Secondary

4. Have you even been visited by any health worker
   (a) Yes [  ]
   (b) No [  ]

   If yes describe the health worker who visited you.
   (a) Community Health Nurse
   (b) Health Inspector
   (c) Others (Specify) ........................................

5. For each of the health workers please state the last date you were visited?
   (a) CHNs .....................................................
   (b) HI .......................................................  

   How many times have you been visited the health worker within the past 6 months.
6. At what time of the day were you visited
   (a) 9am-2pm [  ]
   (b) 3pm-6pm [  ]
   (c) Other state ........................................

7. Was the time convenient?
   (a) Yes [  ]
   (b) No [  ]
   If no, state a convenient time .........................

8. What are some of the activities undertaken by the health workers in the home?
   (a) Community Health Nurse? ............................
       ................................................................
       ................................................................
       ................................................................

   (b) Health Inspector? .....................................
       ................................................................
       ................................................................
       ................................................................

9. Did you gain any benefits from the visit?
   (a) Yes [  ]
   (b) No [  ]
   If YES, what benefits did you gain?
       ................................................................

10. What other activities do you want to be carried out during home-visiting?
     ................................................................
     ................................................................
11. What do you dislike about home-visiting?

12. Can you describe the attitude of the health worker?
(a) Community Health Nurse? ..................................

(b) Health Inspector? ...........................................

13. What target groups for home-visiting can you identify in the home?

PART 2

14. Is there at least one child aged (0-5 years) in the home?
(a) Yes [ ]
(b) No [ ]

If YES, does this child have dirty and overgrown fingernails?
(a) Yes [ ]
(b) No [ ]

15. Has this child fallen sick within the past 6 months?
(a) Yes [ ]
16. Where did you send him or her for treatment

17. How many people share a sleeping room?

18. Are there domestic animals in the home?

(a) Yes [ ]
(b) No [ ]

19. Are there accident hazards in the home?

If YES, which of the following can you identify

(a) Misplaced knives and sharp objectives [ ]
(b) Open fire [ ]
(c) Dangerous stairs and pathways [ ]
(d) Medicines with reach of children [ ]
(e) Chemicals and other solutions in unlabelled bottles. [ ]

20. Are there water storage facilities in the home?

(a) Yes [ ]
(b) No [ ]

If YES, are the containers covered?

(a) Yes [ ]
(b) No [ ]

21. Is there a refuse container in the home?
22. Is their scattered refuse in the home environment?
   (a) Yes [ ]
   (b) No [ ]

23. Is there stagnant water in the home environment?
   (a) Yes [ ]
   (b) No [ ]

24. Are the flies in the
   (a) Toilet (1) Yes [ ] (2) No [ ]
   (b) Kitchen/cooking Area (1) Yes [ ] (2) No [ ]

25. Type of drinking water facility.
   (a) Well [ ]
   (b) Bore holes [ ]
   (c) Rain Water [ ]
   (d) Streams/Rivers [ ]
   (e) Others ..........................

26. Type of toilet facility
   (a) Pit latrines
   (b) KVIP
   (c) Water closet
   (d) Open Defaecation
   (e) Septic tank latrine
   (f) Others ..........................

27. Is open defaecation practised by the children in the home?
   (a) Yes [ ]
   (b) No [ ]

28. Do children wash their hands with soap and water after defaecation?
(a) Yes [ ]
(b) No [ ]
(c) Others state .................................