KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

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FACTORS INFLUENCING THE UTILIZATION OF ANTENATAL CARE SERVICES IN THE BOSOMTWE DISTRICT OF THE ASHANTI REGION OF GHANA.

A DISSERTATION SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES OF THE KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR A MASTER OF PUBLIC HEALTH IN HEALTH SERVICES PLANNING AND MANAGEMENT

BY

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DECLARATION

I, Kwaku Gyamfi Oppong hereby declare that this is a work of my own independent research, with the exception of the references to other people's publications which have been acknowledged in my research. I therefore declare that this work has not been presented wholly or partly for the award of any degree or academic honours elsewhere.

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DEDICATION

I dedicate this work to my Cousin Mr. Peter Opoku and his wife Mrs. Cynthia Opoku and my siblings Adwoa, Kwabena, and Chief for their immense support during the period of study for this programme.

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A safe stronghold my God is still, a trusty shield and weapon. To God be all the glory and honour. I owe my very existence to my Maker and I am grateful to HIM for the strength, knowledge, guidance and protection throughout my life.
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And then to my parents, I say God bless you to enjoy the fruits of your labour.

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ABBREVIATIONS

ANC **Antenatal Care**

W.H.O **World Health Organization**

TBA **Traditional Birth Attendant**

PNC **Postnatal Care**

DHA **District Health Administration**

GHS **Ghana Health Service**

CHPS **Community Based Health Planning and Services**

GDHS **Ghana Demographic and Health Survey**

MCH **Maternal and Child Health**

KNUST **Kwame Nkrumah University of Science and Technology**

ABSTRACT

In the year 2005, the Bosomtwe district recorded six (6) maternal deaths. The causes of death included severe anaemia, postpartum haemorrhage, severe diarrhoea and pulmonary embolism. In addition, the district had witnessed a downward trend in

antenatal coverage (from 84% in 2004 to 75% in 2005) and supervised deliveries. There had also been an increase in still births (from 15 cases in 2002 to 25 cases in 2005).
It was in the light of all these happenings that a research had to be carried out to ascertain reasons why pregnant women and mothers did not utilize Antenatal care services which could help curb these unfortunate situations.

This study was carried out to ascertain the factors influencing the utilization of antenatal health services in the Bosomtwe district.

Information was elicited from 300 randomly selected respondents. The respondents were either pregnant women or nursing mothers who had given birth within the last twelve months of carrying out the research. The researcher carried out Face–to–face interviews with respondents using a questionnaire.

Poor utilization of ANC services was associated with poor education of women on ANC(20.7%), low socio-economic factors (58.7%) far distances with poor roads patients had to travel to health facilities(36%), beliefs that certain ailments were spiritual and could not be treated in a hospital(41%), lack of adolescent friendly ANC and attitude of some health staff.

Higher levels of education generally improved ANC attendance, particularly early booking for ANC. Hospital workers, husbands and parents were the greatest influence on ANC attendance.

Universal education of the women, improved health education, free ANC services and the construction of health facilities in certain communities were significant suggestions made by the patients for improving the delivery of antenatal care.

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND INFORMATION

Antenatal care is the name of the particular form of medical supervision given to a pregnant woman and her baby, starting from the time of conception up to the delivery of the baby. It includes regular monitoring of the woman and her baby throughout pregnancy by various means including a variety of routine regular examinations and a number of simple tests of various kinds. The WHO defines antenatal care coverage as the Proportion of women who attended at least four antenatal visits during pregnancy, provided by skilled health personnel for reasons relating to pregnancy among all women who gave birth to a live child in a given time period.

Factors influencing the utilization of antenatal care facilities are confounded by a number of factors including literacy levels, level of awareness regarding the importance of antenatal care, distance from the health care facility, socioeconomic conditions among others. The World Summit for Children Goal calls for access to antenatal services for all pregnant women. Though difficult to quantify, most commentators use at least 5 components to measure utilization to antenatal services. These are;
Physical availability of ANC services, distance from and/or time taken to reach the facility, economic and other costs associated with utilization of the services, Cultural and social factors that may impede access and quality of the services offered

There are several indicators of ANC utilization. These include the percentage of pregnant women registering to receive care, timing of their first visit, the percentage receiving late or no ANC at all. The WHO has recommended at least 4 visits per pregnancy which has been widely adopted by most of its member states. The number of visits is also an indication of adequacy of utilization. The percentage of ANC for all stages and numbers of visits is very high globally and approximates 90% in a lot of countries including developing countries (Abou-Zahr and Wardlaw, 2003).
The World Health Organization (WHO 2000) model for antenatal separates pregnant women into two (2) groups; those likely to need only routine antenatal service (75%)

and those with specific health conditions or risk factors that require special care (25%). For the first group a standard programme of 4 visits is recommended with additional visits should conditions emerge which require special care. The WHO guidelines are explicit as regards the timing and content of antenatal visits according to gestational age. It stipulates that only examinations and tests that serve an immediate purpose and have been proven to be beneficial should be performed. These include measurement of blood pressure, testing of urine for bacteriuria and proteinuria. Blood tests to detect syphilis and severe anaemia. Routine weight and height measurement at each visit is considered optional.

The importance of early and regular attendance to ANC are not far fetched. Early booking and frequent visits are essential most for the monitoring of foetal growth and prompt detection and management of such diseases like anaemia, malaria, pregnancy-induced hypertension, sexually transmitted infections and eclampsia. Many women do not utilize maternal health care for reasons other than the mere unavailability of the health facility. Antenatal is a key strategy in reducing maternal mortality. However many women do not find its significance when they are pregnant. Even some women have the notion that pregnancy is a condition and not a disease and so it may not be necessary to attend antenatal clinic. In addition to this, there are beliefs in some part of Ghana and Africa that some of the neonatal and infant diseases cannot be cured or treated in the hospital. Thus the mere presence of an ANC services in a health facility does not automatically lead to utilization of the services by pregnant women. There is therefore the need for adequate education on the importance of ANC to all and sundry. Due to cultural and belief influences, husbands and other family members do not understand the need for their wives to attend ANC. Utilization of ANC services may also be influenced by the level of education of the pregnant woman, her husband and some immediate relatives.

Besides these, economic factors play very important part in determining whether pregnant women would utilize ANC services.
Millions of women cannot afford to use maternal health services. In Africa, fees have had a negative effect on utilization of maternal health services (Nanda, 2002). In

Zimbabwe, use of ANC services declined with the introduction of user fees in the early 1990s. In Tanzania, the introduction of user charges led to a 5.3 percent decline in ANC utilization in three public health facilities. However, suspension of user fees led to an increase in attendance at ANC clinics in South Africa.

A study conducted in Ghana by Overbosh and others (2003) found that household income, distance to a health facility, and charges for services significantly influenced demand for ANC services. The study demonstrated that distance and charges negatively affected the utilization of antenatal care services. A survey carried out in Nigeria showed that the introduction of fees led to a 46 percent decline in the number of deliveries at the main hospital in the Zaria region (Nanda, 2002).Even when formal fees are low or non-existent, women often face hidden fees and expenses for transport, drugs, and food or lodging for the woman or her family members. Introduction of free or highly subsidized rates at ANC could increase utilization of the services.

Distance of ANC centers and child welfare clinics from the residence of pregnant women is also another factor that greatly affects utilization of these services. The fact that some women would have to bear the cost for transportation and perhaps the fee at the ANC center is a great barrier to utilizing these ANC services. She would rather stay at home. In most parts of the developing world, there exist many unmotorable roads. This is especially so with roads leading from the rural areas to the urban areas. More unfortunate is the fact that most of these rural towns have no ANC services and so pregnant women would have to often ply these roads to the city to attend ANC. This is even more serious during labour. Some women in labour deliver on the way with the help of people who are novice in obstetrics.

Health staff attitude towards pregnant women is yet another factor that could immensely affect the increased or decreased utilization to ANC services. It has been found in many cases that health staffs are generally friendly towards pregnant women. However, there are some instance where patients are shouted at or insulted for a wrong done. This is especially so with pregnant adolescents since society frowns on premarital sex and immorality

1.2 PROBLEM STATEMENT

The World Health Organization estimates that 551,000 women die of maternal health causes annually. And as high as 251,000 (46%) of these deaths occur in Africa. The most common causes include bleeding, unsafe abortion, hypertensive disorders such as eclampsia, lack of education, just to mention a few. The WHO recognizes the importance of mothers' health on the survival of their children and hence the sustenance of the human race. It is in the light of these that improving maternal health and reduction of infant mortality were of major concern in outlining the Millennium Development Goals (MDG's).

In Ghana, between 1400 and 3900 women die each year due to pregnancy related complications.

The Bosomtwe district is no exception. It has an estimated population of 93,498(2005). Data from the health information unit has indicated a decrease in antenatal coverage from 84% in 2004 to 75% in 2005 .There is a rise in still births(25 cases in 2005 as against 15 in 2002), a fall in antenatal attendance(86% in 2002 to 74% in 2005) and a decrease in supervised deliveries of 58% in 2005.

In 2005, there were Six (6) cases of maternal deaths. Two(2) of the cases were due to severe anaemia, another two(2) due to post partum haemorrhage and then one(1) each due to severe diarrhoea and pulmonary embolism.

Complications of pregnancies and maternal death could be prevented if mothers attend ANC regularly. At ANC centers, mothers are usually examined to identify any threat to their life and that of their babies. This is done through routine laboratory and physical examinations. Mothers are also given medications to prevent anaemia, malaria and other diseases. In addition, ANC provides a platform for mothers to discuss any health problem with the health provider and to receive the services from skilled health staff.

Regular attendance to ANC therefore needs to be encouraged due to all its benefits to mother and child.

There was therefore the need to find out why women in the Bosomtwe district were refusing to attend this all-important health service.

1.3 RATIONALE FOR THE STUDY

A healthy new born begins with a mother. Good nutrition and quality healthcare before, during and after a mother gives birth can prevent the nearly four million newborn deaths and four million stillbirths reported globally each year.

The role played by ANC services in helping to reduce maternal death and complications of pregnancy is not far fetched. Mothers and pregnant women are educated on the danger signs of pregnancy. In addition, they are educated on diets that would promote health in both mother and the unborn child. And in some situations, mothers are supplied with nutritious food at maternal health service centers. Furthermore, pregnant women are given prophylaxis on malaria and iron-deficiency anaemia, two major conditions affecting their health. Women in labour are also given professional services to help in safe delivery. Besides these, new born babies are immunized against childhood diseases and their growth patterns are well monitored. All go together to help produce a healthy mother and child. The benefits of antenatal health services to the society are endless.

And so avoiding it is detrimental.

It is in the light of these that the factors leading to the low patronage of this all-important health services in Bosomtwe district would have to be identified and the appropriate measures taken to solve it.

Then also as part of efforts to achieve the Millennium Development Goals 4 and 5 (MDGs), the Ministry of Health and the Ghana Health Service are working together to reduce infant mortality and improve maternal health. And one channel that is being used is improving utilization of ANC services and the promotion of focused antenatal. At ANC centers, pregnant women are examined to identify danger signs of pregnancy and given appropriate medications to prevent complications. Foetal growth is also monitored. All these are aimed at helping to produce a healthy mother and child and to reduce maternal and child mortality. However, there seem to be a number of reasons that patients are refusing to utilize this important service. This has contributed to a number of reported pregnancy related complications, maternal and infant mortality. It is in view of this that a study on the factors affecting the utilization of ANC services in Bosomtwe District needed to be conducted. The data obtained would be made available

to the DHMT and the Regional Health Directorate for the necessary actions to be taken.

1.4 CONCEPTUAL FRAMEWORK

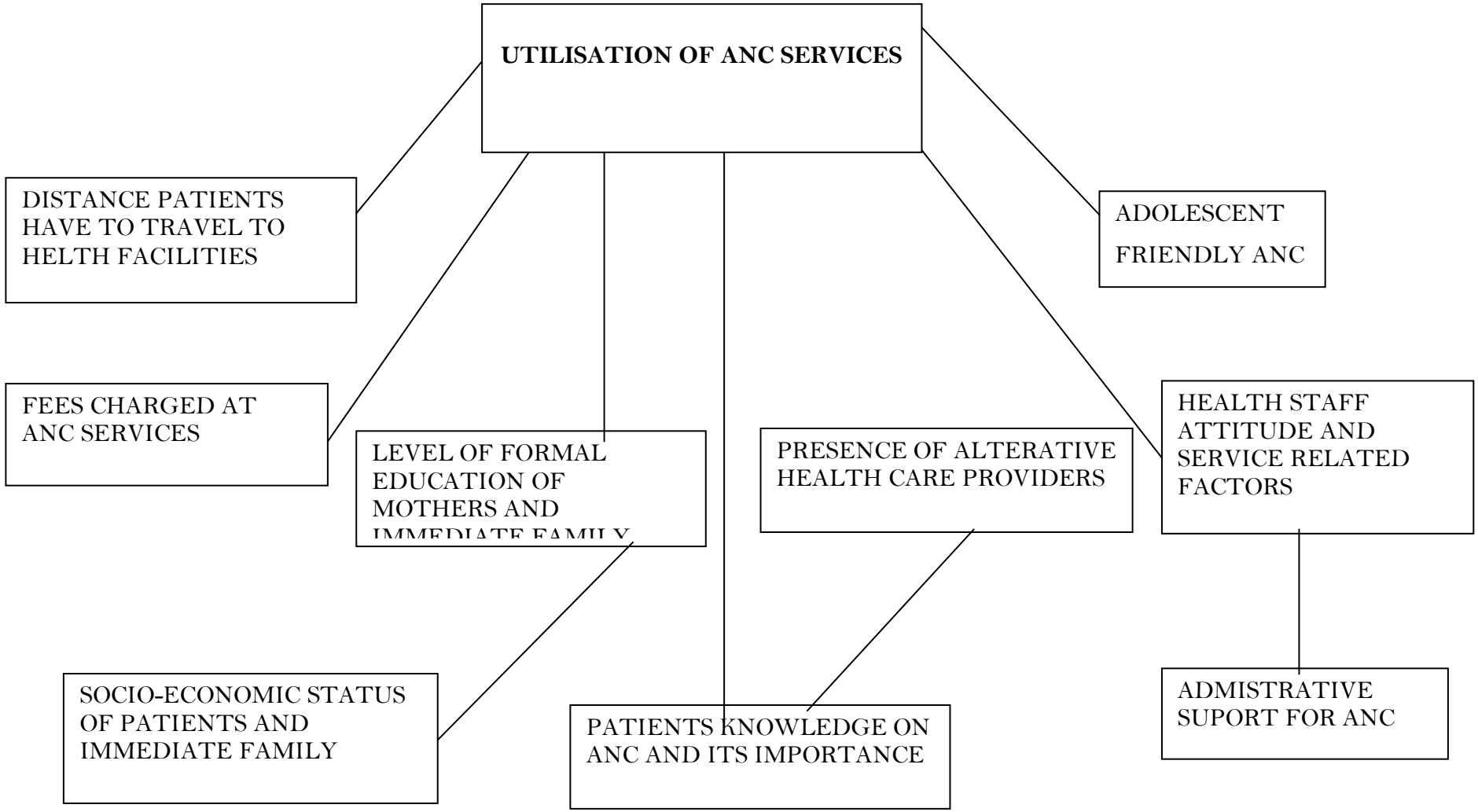
FACTORS INFLUENCING THE UTILIZATION OF ANC SERVICES IN THE BOSOMTWE DISTRICT OF THE ASHANTI REGION

The factors that influence the utilization of ANC services may be grouped into three. The first one is the factor contributed by the patient and perhaps her immediate family. This may include her socio-economic status, level of education, and income level. These may as well influence the health seeking behaviour of the patient.

The second factor is the one associated with the health facility and her staff. This may include the proximity of the health facility to the residence of patients; which is likely to influence the number of ANC visits, fees charged at ANC, staff attitude towards patients and the quality of ANC services provided by the facility. The third factor influencing utilization of ANC services is the level of public awareness on the importance of ANC. This may have an effect on the health seeking behaviour of patients and the community as a whole.

FACTORS INFLUENCING UTILISATION OF ANTENATAL SERVICE IN THE BOSOMTWE DISTRICT

Fig 1.1



RESEARCH QUESTIONS

1. What is the level of knowledge of mothers on ANC and its importance?
2. What is the relationship between the socio-economic status of mothers or couples and the utilization of ANC services?
3. Why do mothers opt for other alternative health care instead of the hospital?
4. How do services related factors influence utilization of ANC by mothers?
5. What is the effect of distance of health facility on ANC attendance?
6. What interventions could be put in place to improve on the current level of ANC attendance?

GENERAL OBJECTIVE

To determine the factors which influence the utilization of antenatal services in the Bosomtwe District of the Ashanti Region of Ghana.

SPECIFIC OBJECTIVES

1. To examine the level of knowledge of mothers on antenatal care and its importance.
2. To establish the relationship between the socio-economic status of mothers or couples and the utilization of antenatal services.
3. To examine the reasons why mothers opt for alternate health services instead of the hospital, clinic or maternity.
4. To ascertain the influence of health Staff attitude and service related factors on the utilization of antenatal care services.
5. To examine the influence of distance from health facilities on antenatal attendance.
6. To make recommendations on how to improve the level of antenatal care based on the findings.

CHAPTER TWO

LITERATURE REVIEW

2.1 DEMOGRAPHIC CHARACTERISTICS

Women in developing countries often face serious health risks during pregnancy, either for herself or her child. In Africa, pregnancy related health risks caused about a quarter of the burden of disease in 1990 for women in the age group of 15 to 44 years (Murray and Lopez, 1996). Maternal mortality is high in Africa, with an estimated lifetime

risk of maternal death of 1 to 16 and a maternal mortality ratio of about 1000 deaths per

100,000 live births (WHO, 2001). Within Africa, Ghana ranks relatively favourably with a maternal mortality ratio of 590 (World Bank, 2002). According to national estimates of the maternal mortality ratio in Ghana, which are considerably lower, it was more than halved in the past decade, from 500 in 1990 to 214 in 1999 (MoH, 2000). Still, even such level is rather high when compared to 21 deaths per 100,000 life births for the developed countries.

Complications of unsafe abortion, pregnancy and childbirth, such as haemorrhage, obstructed

labour or infection, are major causes of death for women of reproductive age in Ghana (MoH,

1999a). In addition they can cause severe pain or disabilities if not treated properly. These pregnancy and childbirth complications could be prevented through the utilization of health services from skilled health personnel. One is such is the attendance of Antenatal services

Contributing to the risks of pregnancies are other health hazards such as anemia and malnutrition. Anaemia is widespread in the country and is particularly serious among pregnant women. In 1991, 8% of pregnant women were severely anaemic at

the time of registration at an antenatal clinic and over 60% were moderately anaemic. In most cases anaemia is caused by inadequate iron intake in conjunction with malaria, hookworm, bilharzias, or haemoglobin disorders (sickle cell). Nutritional problems in the country are associated with a low birth weight of over 20 percent of the babies in Ghana (MoH, 1999).

Ghana has implemented a number of policies and strategies to achieve an improvement in the health of pregnant women and their babies and a reduction of maternal mortality, for instance through the encouragement of regular ANC attendance. (MoH,

1999), In 987 the Ghana Safe Motherhood Programme was introduced as a pilot programme and later expanded to cover the whole country. In addition, the Ministry of Health of Ghana completed in November 1997 its comprehensive National Reproductive Health Service Policy and Standards. The main components of this policy are prevention and management of reproductive tract infections, post abortion care, family planning and safe motherhood, the latter including specific policies about antenatal care during pregnancy.

According to the Ghana National Reproductive Health Services Protocols (MoH, 1999), the objectives of antenatal care are:

- To promote and maintain the physical, mental and social health of mother and baby by providing education on nutrition, rest, sleep and personal hygiene.
- To detect and treat high-risk health conditions arising during pregnancy, whether medical, surgical or obstetric.
- To help prepare the mother to breast feed successfully, experience a normal recovery after delivery and take good care of the child, psychologically and socially.

To achieve these objectives, the antenatal care policy document spells out the routine management of pregnancy and the number of visits to antenatal care services a client is supposed to make. The World Health Organization nowadays recommends at least four such visits in the course of the pregnancy (WHO, 1994), since recent empirical

evidence has shown that four visits suffice for uncomplicated pregnancies, and more visits are only recommended in case of complications (Villar *et al.*, 2001).

The standard recommended number of antenatal visits in Ghana is still according to previous protocols and concern monthly visits up to 28th week of pregnancy, followed by bi-weekly visits to the 36th week of pregnancy, and weekly visits afterwards to delivery. If for any reason the woman can not make the recommended number of visits, then a minimum of four visits are to be made at the 10th, 20th, 30th, and 36th week of pregnancy.

Apart from these routine visits, the policy recommends that a pregnant woman report to the clinic any time she feels unwell or has any complication. The first antenatal visit should be made as early as possible, as soon as the woman thinks she is pregnant (MoH, 1999). During the antenatal care visits the development of the pregnancy is to be monitored, health advice given, health hazards such as anemia, hypertension and infection are to be screened for and if necessary treated, and tetanus vaccinations should be administered.

Through antenatal care and supervised delivery, the risks of maternal and prenatal complications can be reduced and the health of mother and child enhanced (an overview of the effectiveness of antenatal care is given in Carroli, Rooney and Villar, 2001; Health agencies across the world have identified under-utilization of maternal and child health services as the major factor in the maternal mortality in the developing countries (Raghupathy, 1996).

The use of antenatal care among pregnant women is already high in Ghana in recent years, at around 85 percent (MoH, 2000). However, according to a recent survey only 60 percent of the women attended the minimum number of four visits. Fourteen percent (14%) did not attend antenatal care at all, while twenty-six (26%) percent attended less than the recommended minimum of four visits. Pregnant women in urban areas make more often at least 4 antenatal visits than women in rural areas (73 vs. 55 percent). This may be due to a better proximity to health care facilities and to

higher incomes in urban area, because distance was mentioned by women as reasons for not making any antenatal visits (by 9 and 39 percent respectively).

2.2 PATIENTS' KNOWLEGDE ON ANC AND ITS INFLUENCE ON UTILIZATION OF ANC SERVICES

Health education is the key to ensuring the better understanding of the importance and need for ANC for mothers and pregnant women.

Health education can only be meaningful to the traditionally inclined people if it is tied to the intrinsic values of the people themselves. In this respect, health education can only improve antenatal care utilization if the communities at different levels are involved in motivation and information dissemination with active involvement of the men folk. This can be supplemented by home visits by the various health workers. (Ademuwagun, 2003)

Many patients still patronise TBAs because they are believed to be nearer, possess special powers and cheaper to consult. The training being given to the TBAs at the hospital will be more meaningful if they are aware that they are not trained to be doctors, hence with certain limitations. They should quickly refer 'at-risk' patients to the hospital for proper evaluation and treatment.The TBAs need to be further integrated into the maternity services if we are to witness improved attendance in antenatal care services and improvement in the scourge of maternal and infant mortalities as presently experienced in this country. (A.A.G Jimoh,Utilisation of Antenatal Services at the Provincial Hospital, Mongomo, Guinea Equatoria**)**

Higher levels of education and knowledge on ANC and its relevance improve ANC attendance in general and early booking for ANC services. From a study by A.A. G Jimoh on utilization of ANC services in Equatorial Guinea , hospital workers (50.73%), husbands (14.71%) and parents (13.9%) had a lot of influence on ANC attendance whilst farming season (18.97%), safe delivery and treatment (13.05%),

conveniences(10.93%), reduction in number of antenatal visits (9.71%) were the factors that mostly influenced the time of registration for ANC. Poor obstetric history, previous obstetric complications and adequate education by the ANC staff made more women to book early, while reduction in the number of visits, traditional practice and distance were responsible factors for registration in the third trimester. Most of the women (93%) believed that they derived benefits from the antenatal care rendered and 98% of them considered the ANC care offered as acceptable. Traditional birth attendants (TBAs) were believed to be better than orthodox practitioners (in some respects) by a third of these patients who were nearer to them (39%) and believed they had certain spiritual powers (29%). This is hardly surprising in view of the fact that most women still compliment ANC services with those offered by the traditional healers and TBAs. The fact that 41% of these patients solicited for obligatory ANC care to all women showed the level of awareness about the necessity of ANC care. Six (3%) women advocated community involvement, which is very commendable even though the percentage is small.

The value of formal education on antenatal care attendance has been revealed in this study. More women who had had formal education tended to attend antenatal care clinic earlier and were more likely to follow instructions given by the attending doctor or midwife. The higher the formal education a woman had, the less likely she was to book late in pregnancy Hospital workers (50.73%), husbands (19%) and parents (13.97%) were the greatest influences on antenatal care attendance. In this study, all the married women (19%) said their husbands were a strong influence on their antenatal care utilization, thus, any attempt to improve ANC attendance has to take the education of men into consideration. The overbearing influence of the men tended to affect breastfeeding practices, susceptibility to HIV/AIDS amongst women and contraceptive choices as well as antenatal care utilization. It is gratifying to note that many women are still of the opinion that antenatal care services have been beneficial to them and have made useful suggestions to improve the level of ANC.

Even though improved health education, health visits and community involvement were least suggested, they are more likely to produce better results in terms of antenatal care attendance.

2.3 IMPORTANCE OF ANTENATAL CARE

The International Safe Motherhood Initiative's aim of reducing maternal mortality globally aspires to enable all pregnant women have safe and healthy pregnancy and delivery through encouragement of early and regular use of ANC and PNC services. Letamo G and Rakgoasi S.D.-2003 report that good distribution of ANC service does not necessarily guarantee utilization by women. Owuor-Omondi and Kobue also noted that eclampsia account for an unusually high percentage of maternal deaths especially in adolescents which implies poor coverage of ANC and/lack of knowledge among women about its complications.

The value of a number of screening tests and interventions at ANC service centers is firmly established. Examples include the prevention and treatment of malaria and anaemia, the early detection of hypertension and proteinuria, and the treatment of severe hypertension. Rooney (1992) reviewed the evidence of the various screening tests, diagnostic investigations and interventions. A WHO Technical Working Group has also produced recommendations on the content of antenatal care (WHO 1996). In 2001 WHO then published the outcome of a randomized trial to test a new model of antenatal care (Villar et al., 2001). For routine antenatal care in this new model four visits are recommended; details of the content of these visits are presented based on the available evidence (WHO, 2002). Data for 2000-2001 show just over 70% of women worldwide have at least one visit with a skilled provider during pregnancy. In developed countries usage is as high as 98% whilst in developing countries the average is around 68% nearly 2 out of every 3 .(Abou-Zahr and Wardlaw.2003).

Urban women are twice as likely as rural women to report having four or more antenatal visits. Not surprisingly, there are marked urban/rural differentials in use of antenatal care, the differences being most pronounced for four or more antenatal visits. Overall, some 86% of women in urban areas report at least one antenatal visit and 61% report four or more

visits. By contrast, women in rural areas are only 65% and 39%, respectively. (Abou-Zahr and Wardlaw.2003)

As a general rule, urban/rural differences are greatest when overall use of antenatal care is low. For example, in Bangladesh, Ethiopia, Morocco, Pakistan and Yemen, the urban rate for four or more visits is at least six fold the rural rate. Zimbabwe is notable for rural levels roughly the same as the urban levels. (Abou-Zahr and Wardlaw, 2003).

A study was carried out to evaluate the utilization of antenatal care at the Provincial Specialist Hospital, Mongomo, Guinea Equatoria, and paying close attention to the confounding factors affecting effective antenatal care (ANC) delivery. Information was elicited from 200 pregnant women attending the antenatal clinic using a questionnaire. Previous antenatal clinic attendance was high (92.5%). However, with increasing gestation, the percentage of those who never had antenatal care increased. Poor ANC attendance is associated with more abortions and poor obstetric performance. Higher levels of education generally improved ANC attendance, particularly early booking for ANC. Hospital workers, husbands and parents were the greatest influence on ANC attendance. Universal education of the women, improved health education, community involvement and integration of traditional birth attendants (TBAs) are significant suggestions made by the patients for improving the delivery of antenatal care. (A.A.G Jimoh, 2003)

According to Ademuwagun,(Utilization of antenatal services at the provincial hospital in Mongomno,Equitorial Guinea,2003) health education can only be meaningful to the traditionally inclined people if it is tied to the intrinsic values of the people themselves. In this respect, health education can only improve antenatal care utilization if the communities at different levels are involved in motivation and information dissemination with active involvement of the men folk. This can be supplemented by home visits by the various health staff.

2.4 EFFECT OF SOCIO-ECONOMIC FACTORS ON UTILIZATION OF ANC SERVICES

Thousands of women cannot afford to use maternal health services. In Africa, fees have had a negative effect on utilization of maternal health services (Nanda, 2002). In Zimbabwe, use of ANC services declined with the introduction of user fees in the early 1990s. In Tanzania, the introduction of user charges led to a 5.3 percent decline in ANC utilization in three public health facilities. However, suspension of user fees led to an increase in attendance at ANC clinics in South Africa.

In Ghana a study conducted by Overbosh and others (2003) found that household income, fees for services and distance to a health facility significantly influenced demand for ANC services. The study demonstrated that distance and charges negatively affected the utilization of antenatal care services. Also in Nigeria a study showed that the introduction of fees led to a 46 percent decline in the number of deliveries at the main hospital in the Zaria region (Nanda, 2002).Even when formal fees are low or non-existent, women often face hidden fees and expenses for transport, drugs, and food or lodging for the woman or her family members.

In a study to assess the impact of free user fee and waivers of fees on maternal services utilization Suneeta Sharma et al., in June 2005 reported the cost of services in general as a major barrier to utilization, affecting the poor the most. In Zaria, Nigeria a study found that the shift from free to fee-based services for obstetric care reduced admissions overall but significantly increased emergency cases. The number of maternal deaths rose correspondingly (Harrison K, - 1997). The poorer women are, the more likely fees are to affect their use of health services. Studies in La Côte d'Ivoire and Peru found that fees deter everyone from using health services, but deter poor women most of all. (Suneeta Sharma et al 2005)

The purpose of antenatal care is to prevent or identify and treat conditions that may threaten the health of the fetus/newborn and/or the mother, and to help a woman approach pregnancy and birth as positive experiences. To a large extent antenatal care can contribute greatly to this purpose and can in particular help provide a good start for the newborn child.

Many questions have been posed about the health benefits of antenatal care, especially in relation to its costs. Given the limited resources of health care and the wide range of services provided as part of antenatal care, such questions must be dealt with. Care should be appropriate, cost-effective and based on the needs of the specific pregnant woman.

Observational studies have clearly demonstrated that antenatal care prevents health problems for both mother and child. Yet,until fairly recently, little was known about which elements of antenatal care were particularly valuable. Research shows that many antenatal interventions are unnecessary or of unproven benefit. Nevertheless, components of antenatal care and timing continue to be introduced without scientific evaluation.

In general terms, antenatal care is relatively expensive. In a multi-country randomized trial carried out by the World Health Organization (WHO), the average cost was about US $3000 per pregnant woman in 1996. The main cost of antenatal care was found to be due to the interventions that follow from the suspected problems found during the process of care. Therefore, antenatal care needs to be scrutinized and planned carefully. WHO has developed and evaluated a simplified model of care and has demonstrated in a large study that it provides the benefits of more complicated models while tending to save money.

The government of Ghana has since July, 2008 made all services of antenatal and delivery free- of –charge. Although it has not achieved a hundred percent response from all Ghanaian women, it has lead to the record of a significant increase in turnout at ANC and supervised delivery services. The sustenance of these free services would help in early detection of complications in pregnancy to reduce maternal and infant mortality. And thus the move to achieve the MDG 5 would be enhanced.

2.5 INFLUENCE OF UNSKILLED PERSONNEL UTILIZED BY PATIENTS

Every year, an estimated half million women die of causes related to pregnancy and childbirth (WHO 1991). Experience in other countries has shown that strategies most likely to produce a significant decline in maternal morbidity and mortality include the assurance that women in labour can receive the skilled care they require (Safe Motherhood Newsletter 1994). In Malawi, the maternal mortality rate is estimated at 500 per 100,000 births (Chipangwi 1989). A 1989 community study which analyzed maternal death data from 12 hospitals identified many direct causes of this very high maternal mortality, but the primary roots of the problem were found to be much deeper (Chipangwi 1989). One of these is the lack of trained assistance available during the majority of deliveries. It is estimated that at present in developing countries, 45% of births are either not attended or attended by non-trained personnel (Voorheove et al 1987). Awareness of the factors which may bring about this lack of attendance or attendance by non-trained personnel during childbirth is a precondition for improving women's use of health services.

Malawi's health service delivery is based on the National Health Plan 1986–1995 (UNICEF 1993). The main objectives of this health plan include extension of peripheral and community-based health services. This health service system has, however, been constrained by a lack of financial and human resources. Although, gravely short of resources to offer optimal health services, the government of Malawi has done all that it can to provide antenatal services to pregnant mothers.

Among the steps taken to improve maternal health care services in Malawi is the training of traditional birth attendants (TBAs). Most TBAs, if not all, are elderly women who are already known to attend to mothers during labour in rural settings. These women are well known in their localities. They are identified, and given a 2-week training course consisting of theory and practice on simple and safe obstetrics. They are taught how to identify at-risk mothers, how to carry out hygienic deliveries,

including care of the cord, and how to promote appropriate health education to the mothers. At the end of the course, in addition to the certificates of attendance, they are provided with delivery kits free of charge.

Antenatal clinic attendance in Malawi is good, and many mothers express the wish to deliver in a health unit (Mponda and Mwafulirwa 1993); in reality, the majority of them end up either not being attended or attended by non-trained people (the majority of whom are family members) during delivery. In Mangochi district, not more than 40% of pregnant women deliver in health units or with a TBA (Mponda and Mwafulirwa 1993).

The training being given to the TBAs at the hospital will be more meaningful if they are

aware that they are not trained to be doctors, hence with certain limitations. They should quickly refer 'at-risk' patients to the hospital for proper evaluation and treatment.

Many of these patients still patronise TBAs because they are believed to be nearer, possess

special powers and cheaper to consult. The TBAs need to be further integrated into the maternity services if we are to witness improved attendance in antenatal care services and improvement in the scourge of maternal and infant mortalities as presently experienced in this country. (A.A.G Jimoh,1997)

CHAPTER THREE

METHODOLOGY

3.0 INTRODUCTION

This chapter of the study takes a look at the study design, sampling, sampling techniques, research instruments and the study population. In addition, it takes a look at the ethical considerations, the limitations, pre-testing and the collection of the data itself.

3.1 RESEARCH METHODS AND DESIGN

The study was a cross sectional survey. Qualitative methods were used to explain the study variables. This included pregnant women in households visited by the research team, nursing mothers in the community who had given birth within the last twelve months at the time of the research and pregnant women attending ANC services at the health facility.
Key informants during the research were the Director of health services, the District Pharmacist, the Public health nurses at the maternal and child unit and the Medical Superintendent of the district hospital.
The tools used for the data collection included questionnaires, interview guides, pens and notebooks

3.2 PROFILE OF STUDY AREA

This research was carried out mainly in the households of the communities and a few health facilities that provide antenatal health services in the district. These included Health centers, CHPS zones, and hospitals. Some of the services provide are as indicated below:

1. Ante natal care
2. Health education
3. Child welfare clinic
4. Postnatal care

The Bosomtwe District is in the Ashanti Region of Ghana. It was formerly part of the Bosomtwe-Atwima-Kwanwoma district. Kuntanase, the district capital is about 28km from Kumasi. The district shares common borders with Ejisu-Juaben district and Kumasi Metropolis on the North; Asante Akim North district on the East, Atwima Kwanwoma District on the West and the Amansie-East district on the South.

The district has three sub-districts and 63 communities with an estimated population of 93,498. The main occupation of the populace is farming. Plantain, cassava, maize, sugarcane and shallots are the major crops grown. The main occupation of the people around Lake Bosomtwe is fishing. All the communities are connected to the national grid.

3.3 HEALTH SYSTEM

There are 15 health facilities in the district. These are made up of two (2) hospitals, nine(9) health Centers, three(3) private maternity homes and one(1) private clinic.

There are sixty-eight (68) Community Based Surveillance Volunteers (CBSVs) who have been trained to support community health activities in the district. They record and report on monthly basis diseases, deliveries and deaths in their catchments areas. It is interesting to note that all these CBSVs can read and write and they are evenly distributed throughout the district with at least one in a community.

Due to the deplorable nature of the roads connecting Amakom and Kuntanase, emergency cases are always referred by the use of boat services to transport cases to Abono for onward vehicular transport to Kuntanase.

During rainy seasons, the Amakom sub-district is cut off from the rest of the district due to inaccessible roads. Staffs therefore solely depend on the boat services for outreach activities, purchasing of medical items and attending meetings.

3.4 ANTENATAL HEALTH SERVICES COVERAGE 2008

Table 3.1

Table representing ANC coverage and vital ANC statistics in the Bosomtwe district

INDICATORS	**SUB-**	**DISTRICTS**	
	KUNTENASE	**JACHIE/PRAMSO**	**AMAKOM**
Total population.(2006)	32438	45795	15265
WIFA(23.2% of total population)	7526	10624	3541
Expected Number of Pregnancies(4% of total population)	1297	1832	611
ANC attendance	213	1202	76
Average No. of visits per client	2.5	6.3	2.1
No. of pregnant women receiving Tetanol	201	253	8
Proportion of expected pregnancy receiving care	6.3	10.3	5.7
% of pregnant women receiving tetanol	15.4	13.8	1.3
No. of pregnant women with 4+	39	522	17

visits			
% pregnant women with 4+ visits	18.3	43.4	22.3

Source: Annual Performance Review Report 2008-Bosomtwe District.

The population of women expected to get pregnant in Kuntanase, Amakom and Jachie/Pramso sub-districts were 1,297, 611 and 1,832 respectively. The Kuntanase and Amakom sub-districts had 2.5 and 2.1 as the average ANC attendance by patients in 2008. These figures are lower than the four (4) ANC visits recommended by W.H.O. On the whole, only Jachie/Pramso sub-district had a little more than 50% of her pregnant women attending four (4) ANC visits before delivery. Figures from Kuntanase and Amakom were both below 40%. The statistics above gives a clear indication of a large room for ANC coverage.

3.5 GEOGRAPHIC DISTRIBUTION OF POPULATION

TABLE *3.2*

Table representing the geographical distributions of population by age groups-2008

AGE GROUPS	**SUB**	**DISTRICT**	
	KUNTANASE	**JACHIE/PRAMSO**	**AMAKOM**
0-11 months 4%	1,298	1,832	611
12-23 months 3.9 %	1,265	1,786	595
0-23 months 7.9%	2,563	3,618	1,206
24-59 months 8.6%	2,790	3,938	1,313
6-59 months 14.5%	4,704	6,640	2,213
0-59 months 16.5%	5,352	7,556	2,519
School age 5-9 years 14.6%	4,736	6,686	2,229
0-14 years 12.1%	3,925	5,541	1,847
0-14 years 43.2%	14,013	19,783	6,594
15-19 years 9.7%	3,147	4,442	1,481

10-19 years 22.0%	7,136	10,075	3,358
5-19 years 36.4%	11,808	16,669	5,556
64+ years 6.10 %	1,979	2,793	931

Source: Annual Performance Review Report 2008-Bosomtwe District

Jachie/Pramso sub-district is the most densely populated of the three sub-districts. A closer view of the statistics indicates that Infants and Children (0-14 years) made the highest proportion (43.2%) of the entire district. And then, within this same age bracket, infants and children who were between 0 to 59 months made the highest proportion of 16.5%.

The youth between 15- 19 years constituted 9.7% of the population in the district.

The aged (64+ years) were 6.10% of the total population in the district. These really suggest that, the Bosomtwe district is a growing district since majority of her residents are below 30 years.

3.6 SAMPLING

In all, a total of 300 respondents took part in the survey. The respondents were randomly selected. The total population of the District is 93,498. The total number of women in fertile age (WIFA) is 23.2% of the total population. This is equal to 23.2% * 93,498= 21691.536. The proportion of this figure to the total population is 21691.536/93,498=0.232. Thus p=0.232

Sample size:

$$n = \frac{Z^2 pq}{d^2} \quad \{z = 1.96\ p = 0.232\ q = 0.768.\ d = 5\%\}$$

$$n = \frac{(1.96)^2 (0.232)(0.768)}{(0.05)^2}$$

$$n = \frac{0.68448}{0.0025}$$

n =273.79 (approximately 274)

where n = sample size;
p = the proportion of women in the population who get pregnant.
q = proportion of population not getting pregnant where (q = 1-p)
Z = 95% Confidence Interval = 1.96 (for a two-tailed test)
d = w/2; where w is the width of the confidence interval

For each of the respondents, a language that could be understood by both interviewer and interviewee was used. This was usually Ashanti twi .The purpose of the study was explained to their understanding of each respondent before the interview was carried out. The names of respondents were not demanded. In addition, each respondent was assured of the confidentiality of any information provided for the study.

3.7 STUDY VARIABLES

Table (3.3) Operational definitions of study variables

VARIABLES	OPERATIONAL DEFINITION	SCALE OF MEASUREMENT
Patient's knowledge	Patient understanding of Antenatal clinic and its importance. And the ability to identify danger signs in pregnancy	Ordiinal Checklist to be used Poor Fair Good Very Good
Alternate health service	A facility other than the hospital, maternity or CHPS patients utilized	Nominal YES NO
History of ANC utilization	Factors that prevents, directly or indirectly, the optimal utilization of the health facility by the client even when they need that services provided	Nominal
Socio-economic status	Variable assessing the level of income of mother or couples	**Ordinal** Unemployed- 'low' status Farmer/Fisherman - medium' status Public Servant-high

Educational status	Number of completed years in school	**Ordinal** No education Primary Secondary Tertiary

STUDY VARIABLES

VARIABLES	OPERATIONAL DEFINITION	SCALE OF MEASUREMENT
Utilization	assessing the ANC and other MCH services provided by a facility	**Ordinal** -No visit(Poor) -Fair (1-3 visits) Good (4-5 visits) Very Good (6+ visits)
Staff attitude	Attitude and practice of the health provider in the course of delivery of services as perceived by the client.	**Ordinal** -Hostile -Friendly -very friendly
Health seeking behaviour	The act of seeking a healthcare service in response to an illness exhibited by the client	**Ordinal** -poor(1 visit) -fair(2 -3visits) -Good(4-5 visits) -Very Good(6+

3.8 DATA COLLECTION TECHNIQUES AND TOOLS

Data was collected on women who were pregnant and those who had given birth within twelve months as at the time the data was being collected. The tools used were pens, pencils and exercise books

The major sources of information about the district were obtained from the District Director of Health Services, the District Pharmacist, the Medical Superintendent of Kuntenase Hospital, the District Matron, the District Nutritionist, District Disease Control Officer and the Head of the Maternal and Child health Department of Kuntanase Hospital.

The questionnaires administered were composed of both open-ended and close-ended questions, in order to gather most of the primary data from the respondents.

All the questionnaires were issued by the Chief investigator and Trained Research Assistants. These Research Assistants were mainly Community Health Nurses and Health Assistants

Each interview was done by first seeking the permission of the interviewee. Interviews were done on only those who gave the go ahead. No one was coerced to answer the questions.
In addition, bio-statistical reports of the population and facility reports were also obtained to help in the whole study.

3.9 PRE-TESTING

The questionnaires and key informant interview guides were pre-tested to detect flaws and the necessary changes made. This was carried out at Esreso which is 20km from Kuntenase and has similar demographic characteristics.

3.10 ETHICAL CONSIDERATIONS

A letter of introduction from the Community Health Department of K.N.U.S.T was issued to the Regional Director of Health Services of Ashanti Region, the District Chief Executive of the Bosomtwe District, the District Director of Health Services of Bosomtwe and the Medical Superintendent of Kuntanase hospital to officially inform them of the study.

In addition, the consent of each respondent was sort before each interview was carried out. Respondents were assured of the confidentiality of information that would be given during the study. More so, interviewers used language which respondents could understand and speak.

Questions that were not too personal and embarrassing ones were not included in the questionnaire.

3.11 DATA HANDLING AND ANALYSIS

The Chief investigator personally entered information on every questionnaire on daily basis. The investigator also kept an electronic copy of the raw data which was upgraded at the end of each working day. The hard copies were kept till the final submission of the dissertation. Data was analyzed using SPSS version 16. Statistics used include mode, mean and percentages

3.12 LIMITATION OF THE STUDY

In the cause of the study, a few limitations were encountered. These include;

A very poor road network. Bosomtwe District is made up three sub–districts namely Amakom, Jachie-Pramso and Kuntenase. The poorest road network was that leading to Amakom. Rains had washed off many bridges and made some communities inaccessible. And so the population in the affected area could not be interviewed.

Time constraints; the time for the study was quite short and did not allow for all the visitation of all the twenty three (23) communities.

Monetary Problems; funds for the project was not available as at the time the project was being carried .Chief investigator had to finance the whole project. Few Research assistants could be trained for the study, since their training and upkeep during the project needed money.

3.13 ASSUMPTIONS

In the course of the study the following assumptions were made.

That the sample population is representative of the whole population of pregnant women in the district.

1) That the women of child bearing age were evenly distributed across the various the sub- districts and constituted about 51% of the total population.

2) The responses given by the respondents were accurate and true.

3) That in the cause of the study there was no massive migration of the population under consideration.

CHAPTER FOUR

RESULTS AND ANALYSIS

A total of 300 women were interviewed during the survey. Their ages ranged between 15 to 49 years.

4.1 SOCIO-DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

4.1.1 Age

Table 4.1

Table representing the age of respondents

Age of Respondents/years	Frequency	Percentage
15-20	56	18.7
21-30	157	52.3
31-40	67	22.3
41-49	20	6.7
Total	300	100

The age distributions of respondents are as shown in table 4.1

The mean, median and modal age of the respondents lied between 21 and 30 years

4.1.2 Marital Status

Table 4.2

Table representing the marital status of Respondents

Marital Status of Patients	Frequency	Percentage
Single	39	13.0
Married	247	82.3
Divorced	3	1.0
Widowed	4	1.3
Co-habiting	7	2.3
Total	300	100

A total of 39 (13%) respondents were not married. These were mostly adolescents and young adults of school going age and had dropped out of school due to the pregnancy. However, majority (82%) of the women interviewed were married. A total of 7(2 %) respondents were co-habiting, 3(1%) were divorced and 4 (1%) were widowed.

4.1.3 Respondents' Educational Level

Table 4.3

Table representing the educational level of Respondents

Mothers educational level	Frequency	Percentage
No education	30	10.0
Primary education	73	24.2
Junior High	152	50.7
Senior High	40	13.3
Tertiary	5	1.7
Total	300	100

10 % of respondents had no formal education, 24% had had primary education and 51% of respondents had schooling up to the Junior High School. 2% of respondents had had tertiary education

4.1.4 Husband's educational level

Table 4.4

Table representing the educational level of the husbands of respondents

Husbands educational level	Frequency	Percentage
Unanswered question	31	10.3
No schooling	19	6.3
Primary	32	10.7
Secondary	158	52.7
Tertiary	60	20.0
Total	300	100

10.3% of respondent did not answer as to whether their husbands were gainfully employed. This percentage represent those who had no husbands, thus either they were

not married, had divorced or had died. They were not forced to answer the question. 6.3 % of the respondents said their husbands have had no education, 10.7% have had primary education, 52.7 % have had up to High school education and 20 % have had tertiary education.

4.2 PATIENTS KNOWLEDGE ON ANTENATAL CARE AND ITS IMPORTANCE

4.2.1 Patients understanding of ANC

Table 4.5

Table representing Respondents' understanding of ANC

Level of understanding	Frequency	Percentage
Unanswered question	30	10.0
No idea	12	4.0
Poor	50	16.7
Fair	118	39.3
Good	89	29.7
Very Good	1	3.0
Total	300	100.0

The question on what ANC is had a good answer from 29.7% of respondents and a very good answer from only 0.3 %. However, the knowledge of 39% could be described as fair while 17% could be described as poor. Four percent (4%) had no knowledge on what ANC is.

4.2.2 Patient's knowledge on the importance of ANC

Table 4.6

Table representing the knowledge of respondents on the importance of ANC

Knowledge of Respondents	Frequency	Percentage
Unanswered question	33	11.0
No idea	12	4.0
Poor Knowledge	28	9.3
Fair knowledge	104	34.7
Good	108	36.0
Very Good	15	5.0
Total	300	100.0

A total of 28 (9%) of the respondents had poor knowledge on the importance of ANC. The response from 41% could be classified as good knowledge on the importance of ANC. Four percent(4%) had no idea whatsoever on the importance of ANC.

4.2.3 Patients' source of knowledge on ANC

Table 4.7

Table representing the source of Respondent's knowledge on ANC

Source of Knowledge	Frequency	Percentage

Unanswered question	28	9.3
Hospital/ Clinic	95	31.7
Maternity	21	7.0
Radio	95	31.7
Television	37	12.3
Self initiative	24	8.0
Total	300	100.0

Patients got a lot of their knowledge on ANC from the media. This represented 54% of the total, while 39% obtained it from the health facilities. Others (8%) said it was a self initiated step to find out what ANC was all about. This suggest that the populace in Bosomtwe district could be educated on ANC very well through the media and through trained health staff.

4.2.4 Patient's knowledge on the danger signs of Pregnancy

Table 4.8

Table representing Respondents' knowledge of danger signs of pregnancy

Level of knowledge on danger signs of pregnancy	Frequency	Percentage
Unanswered question	11	3.7
No idea	6	2.0
Poor	32	10.7
Fair	84	28.0
Good	159	53.0
Very good	8	2.7
Total	300	100.0

As much as 11% of respondents had a poor knowledge on danger signs of pregnancy, 2.0 % had no idea at all on it. A percentage of 56 had good knowledge on the danger signs.

4.2.5. Action taken by patients on seeing danger signs.

Table 4.9

Table representing the actions taken by Respondents on seeing a danger sign

Action taken by respondents On seeing a danger sign	Frequency	Percentage
Unanswered question	8	2.7
Visit the hospital	189	63.0
Visit the maternity	85	28.3
Visit a Herbalist	14	4.7
Visit a Fetish Priest	4	1.3
Total	300	100.0

Majority of Respondents (82%) said they would seek professional care from a hospital or maternity seeing a danger sign. Eighteen respondents (18) representing 5% said they would rather see a fetish priest or an herbalist for treatment.

4.3 EFFECT OF SOCIO-ECONOMIC FACTORS ON UTILIZATION OF ANC SERVICES

4.3.1Respondents' occupation

Table 4.10

Table representing the occupation of Respondents

Mothers occupation	Frequency	Percentage
Unemployed	60	20.0
Farmer	95	31.7
Hairdresser	13	4.3
Trader	114	38.0
Civil Servant	18	6.0
Total	300	100

Twenty percent (20%) of respondents were unemployed and so had no source of income. However, 80% of the respondents had an income generating venture.

4.3.2 Husband's occupation

Table 4.11

Table representing the occupation of the husbands of respondents

Husbands' Occupation	Frequency	Percentage
Unanswered question	31	10.3
Unemployed	4	1.3
Farmer	97	32.3
Tradesman	85	28.3
Civil Servant	36	12.0
Other	47	15.7
Total	300	100.0

10 % of respondents refused to answer this question. This included those who had divorced, those who had no husbands or whose husbands had died and those who for personal reasons d not to answer this question. 1% of husbands were not employed. A total of 86% of husbands were gainfully employed. The occupational status of husbands could possibly influence attendance of ANC since 80% of respondents get money from husbands to cater for expenses on ANC.

4.3.3 Provider of money for ANC

Table 4.12

Table representing the provider of money for ANC

Provider of money for ANC	Frequency	Percentage
Husband	239	79.7

Parents	24	8.0
Self	37	12.3
Total	300	100.0

Husbands (80%) were the major providers of funds for respondents to attend ANC. However, 12% of funds for ANC came from respondents themselves. This information show that some respondents are also willing to sponsor ANC themselves

4.3.4 Missed ANC appointments

Table 4.12

Table representing missed ANC appointments by Respondents

Missed ANC appointments	Frequency	Percentage
Unanswered question	10	3.3
Yes	154	51.4
No	136	45.3
Total	300	

51% of respondents admitted haven missed ANC appointments before. On the other hand, 45% said they had not missed ANC appointments before.

4.3.5 Reasons for missed ANC appointments

Table 4.13

Table representing reasons why respondents missed ANC appointments

Reasons for missed ANC appointments	Frequency	Percentage

Unanswered question	137	45.7
No money	123	41.0
Far distance of facility from home	27	9.0
Objection by husband	10	3.3
No reason	3	1.0
Total	300	100.0

46% refused to answer this question and were not coerced to do so. Lack of finance was the major reason respondents failed to attend ANC, this contributed to 41.0% .Far distance of health facility and objection by husbands contributed 9.0% and 3% respectively. Based on these findings, failure to attend ANC could mainly be due to the absence of money. However, objection by husbands and the proximity of ANC center were also significant.

4.4 ALTENATE FACILITIES UTILIZED BY RESPONDENTS

4.4.1 Alternate Health facilities patients utilized

Table 4.14

Table representing facilities utilized by respondents other than the hospital/clinic/maternity

Alternative facilities utilized by respondents	Frequency	Percentage
Unanswered question	127	42.3
Traditional Birth Attendant	57	19.0
Fetish Priest	8	2.7
Herbalist	47	15.7
Family member with knowledge in herbs	53	17.7
Prayer camp	6	2.0
Chemical shop	2	0.7
Total	300	100.0

Apart from the hospitals, clinics and maternities, 18% of respondents confessed they had gone for treatment from family members with knowledge in herbs. Services of TBAs were utilized by 19% (57) of respondents. 15% had utilized the services of herbalists and 2% had gone to prayer camps for treatment. It is clear that respondents do not only utilize orthodox medicines but other alternatives they believe could alleviate their ailments.

4.4.2 Why the alternate service.

Table 4.15

Table representing reasons respondents attached to their choice of facility they utilise

Reasons for the choice of facility	Frequency	Percentage
Unanswered question	127	42.3
Nearness of facility to home	89	29.7
Good attitude of Service Provider	18	6.0
Good quality service of facility	30	10.0
Less expensive service	36	12.0
Total	300	100.0

Forty-two percent (42%) did not answer this question for various reasons. However, 30% opted for other services instead of the hospital or clinic due to their close proximity. Twelve (12.0%) said the alternate service was less expensive. And so, the fees charged at ANC centers and the proximity of ANC centers could influence utilization of ANC services.

4.5 ATTITUDE OF HEALTH STAFF ON PATIENTS ATTENDING ANC

Table 4.16

Table representing respondents' opinion on the attitude of health staff

Respondents view of staff attitude	Frequency	Percentage

Unanswered question	2	0.7
Very friendly	99	33.0
Friendly	176	58.7
Hostile	10	3.3
Shouted at sometimes	13	4.3
Total	300	100.0

275 respondents, representing 92%, described the attitude of health staff as very friendly or friendly. However, 7% described health staff attitude as sometimes hostile.0.7% refused to answer this question.

4.5.1 Time spent at ANC

Table 4.17

Table representing time spent by respondents during ANC appointments

Time spent at ANC appointments	Frequency	Percentage
Unanswered question	3	1.0
Less than 30 minutes	34	11.3
Between 30minutes to 1 hour	124	41.3
2 hours	85	28.3
3 hours	35	11.7
4 hours	19	6.3
Total	300	100.0

Mean time spent at ANC was between 30 minutes to 1 hour. Forty-six percent (46%) spent between 2 hours and 4 hours at ANC. The time spent at ANC is quite long especially for the working mothers. Lengthy times may discourage ANC attendance as it may be an interruption to the work on some mothers.

4.5.2 Punctuality of health Staff.

Table 4.18

Table representing punctuality of health staff as assessed by respondents

Punctuality of health staff	Frequency	Percentage
Unanswered question	1	0.3
Always on time	223	74.3
Sometimes late	62	20.7
Always late	14	4.7
Total	300	100.0

Health staffs were more often very punctual (74%) with 5% always being late. Punctuality show a sense of seriousness. The attitude of Health staffs of which punctuality is a factor could influence the attendance of mothers to ANC centers.

4.5.3 Level of Privacy at ANC centers

Table 4.19

Table representing level of privacy offered to patients

Privacy at ANC centers	Frequency	Percentage
Unanswered question	1	0.3
Not at all	11	3.7
Sometimes	29	9.7

Most often	38	12.7
At all times	221	73.7
Total	300	100.0

Privacy provided by health facilities usually utilized by respondents was in most cases accepted by respondents. Seventy-three percent (73%) of respondents confirmed that they were given privacy with health staff at all times. 13% were given privacy at some times and 4% said they were not offered one at all. Privacy for all patients is very important. Privacy provides confidence for the patient to really share her health problem with the healthcare provider without fear of a third party knowing what was discussed.

4.5.4 Time spent with Health Staff

Table 4.20

Table representing respondents' view of whether time spent with health staff was adequate.

Time spent with Health Staff was adequate.	Frequency	Percentage
Unanswered question	1	0.3
Yes	261	87.0
No	38	12.7
Total	300	100.0

Majority (87%) of respondents described the spent with health staffs during ANC visits as adequate. However, 13% said otherwise. One person refused to answer this question. She was not coerced to answer. Health staffs spending enough time with patients are able to understand the health needs of the patient better and to provide better solutions to them

4.6 INFLUENCE OF DISTANCE OF HEALTH FACILITIES FROM THE RESIDENCE OF RESPONDENTS

4.6.2 Time taken by Respondents to reach Health facilities.

Table 4.21

Table representing time taken by respondents to the health facility they utilize

Time taken to reach health facility	Frequency	Percentage
Less than 5 minutes	21	7.0
10 to 20 minutes	87	29.0
30 minutes	84	28.0
1 hour	76	25.3
2 hours	23	7.7
3 hours	8	2.7
More than 4 hours	1	0.3
Total	300	100

Mean time taken to reach health facility was 30 minutes. 29.0 % took between 10 to 20 minutes to reach a health facility. 36%, which made up the majority took 1 hour to more than 4 hours to get to a health facility?

Proximity of ANC centers could influence ANC attendance, for instance far distance and long hours of travel to ANC centers may discourage utilization of ANC services.

4.6.3 Nature of roads leading to health facilities

Table 4.22

Table representing Respondents' view on nature of roads to health facilities

Nature of roads to health facilities	Frequency	Percentage
Good	224	74.7
Just motorable	23	7.7

Bad	30	10.0
Very bad	21	7.0
Unmotorable	2	0.7
Total	300	100.0

224(75%) of respondents described roads from their homes to health facilities as good. However, 53 (18%) described road as bad, very bad or unmotorable. Unmotorable roads leading to ANC centers may discourage attendance of ANC services.

4.7 OTHER FACTORS INFLUENCING ANC ATTENDANCE

4.7.1 Respondents' attitude towards ANC attendance

Table 4.23

Table representing proportion of respondents who attended ANC during their last pregnancy

ANC attendance	Frequency	Percentage
Unanswered question	17	5.7
Yes	242	80.7
No	41	13.7
Total	300	100

Eighty percent (80%) of respondents attended ANC during their previous pregnancy and 14% did not attend ANC. The ANC coverage for their previous pregnancies could be described as high. However, the 14% who did not attend is still a significant figure that cannot be overlooked.

4.7.2 Reasons Respondents attended ANC clinics.

Table 4.24

Table representing some reasons why respondents attended ANC

Reasons for attending ANC services	Frequency	Percentage
Unanswered question	64	21.3
Respondent or child was ill	74	24.7
Wanted growth of child to be monitored	74	24.7
Wanted to be given medicines to stay healthy	68	22.7
It is a norm	17	5.7
Due to free service/ NHIS	3	1.0
Total	300	100.0

A majority (49%) of patients attended ANC because either their child was ill or wanted the growth of their unborn baby to be monitored. Twenty-three percent (23%) attended because they wanted to be given medicines to stay healthy. A total of 7% attended because of free service or felt it was a norm to do it. The reasons respondents gave for attending ANC pro suppose that the majority did not really understand the importance of ANC services. Secondly, socio-economic factors play crucial role on whether or not mothers would attend ANC services.

4.7.3 Reason Respondents did not attend ANC clinics

Table 4.25

Table representing reasons why Respondents would not attend ANC

Reasons respondents would not attend ANC	Frequency	Percentage
Unanswered question	254	84.7
Had No money	28	9.3
Far distant of home from	3	1.0

health facility		
Think it is not important	2	0.7
Poor road network	3	1.0
Was not ill	10	3.3
Total	300	100.00

Reasons for not attending ANC was much attributed to financial difficulties, far distance and poor road network from home to health facilities. Three percent(3%) attributed it to the fact that they were not well. These outcomes further confirmes the fact that financial difficulties, proximity of ANC centers and poor road network to ANC centers influence the utilization of ANC services.

4.7.4 Age of pregnancies before accessing ANC services.

Table 4.26

Table representing age of Respondent's pregnancies before attending ANC

Age of pregnancy before attending ANC service	Frequency	Percentage
Unanswered question	8	2.7
One Month	34	11.3
Two Months	59	19.7
Three Months	88	29.3

Four Months	46	15.3
Five Months	45	15.0
Six Months	10	3.3
Seven Months	6	2.0
Eight Months	1	0.3
Nine Months	3	1.0
Total	300	100.0

Three percent (3 %) of the respondents never attended ANC during their pregnancy. A total of 37% of patients reported to ANC from the fourth to the ninth month. Sixty percent (60 %) reported at ANC from the first to the third month. The outcome suggest that 37% of respondents reported late to ANC. This attitude of reporting late to ANC centers may delay the detection of pregnancy complications. Late reporting to ANC centers may also interfere with routine medications such as antimalarial and anaemia prophylactics administered to mothers . And so mothers and unborn babies may not get the full benefit of ANC.

4.7.5 Number of ANC attendance.

Table 4.27

Table representing number of ANC attendance by respondents during their last pregnancy

Number of ANC attendance by Respondents	Frequency	Percentage
Unanswered question	13	4.3
Once	20	6.7
Two	34	11.3
Three	61	20.3

Four	56	18.7
Five	53	17.7
Six	54	18.0
Seven	7	2.3
Eight	2	0.7
Total	300	100

The mean number of ANC visits by respondents was 3.83.

Thirty-eight percent (38%) of the pregnant women attended less than the four ANC visits recommended by the WHO during their pregnancy. This outcome means that the mothers who could not attend the recommended number of ANC would miss the full benefits of ANC. Fifty-seven (57%) had attended between four and nine ANC visits.

4.7.6. Who decides for patient to attend ANC

Table 4.28

Table representing people who decide when respondents' should go for ANC services

Decider on when to go for ANC services	Frequency	Percentage
Husband	127	42.3
Parents	16	5.3
Self	154	51.3
Uncle	3	1.0
Total	300	100.0

Although individual patients formed the majority (51%) who make decisions to attend ANC, husbands (42%) also had a very significant role in deciding on ANC attendance by their spouse. Parents and other relatives covered a total of 6% which is also quite significant.

Husbands and relatives are thus the greatest influence on patients attending ANC.

4.7.7 Where deliveries took place and the reason for the choice

Table 4.29

Table representing facilities Respondents had their deliveries.

Facilities where deliveries took place	Frequency	Percentage
Unanswered question	6	2.0
Hospital/Clinic	152	50.7
Maternity	63	21.0
Home with the help of a TBA	56	18.7

Home with the help of a relative	24	7.7
Total	300	100.0

Twenty-six percent (26%) of patients delivered with the help of unskilled personnel such as close relatives. 72% had supervised deliveries from trained health staff. Supervised deliveries decreased from 54% in 2002 to 47% in 2005(Annual Report of Bosomtwe district).Between the year 2002 and 2005, there had been a decrease in the deliveries by untrained TBAs and relatives in the Bosomtwe district. In 2002, there were 183 home deliveries, and this decreased to 95 in 2005. Deliveries by untrained TBAs also decreased from 263 to 84.(CBSVs Activity Report for Bosomtwe district). There is still a significant number (26%) of respondents who use the services of unskilled individuals during delivery. This attitude may contribute to a rise in maternal death since emergencies and complications cannot be handled by such unskilled individuals.

Table 4.30

Table representing reasons Respondents gave for choosing health facility

Reasons for choosing to deliver in facility in 4.3.5	Frequency	Percentage
Unanswered question	9	3.0
Nearness of facility to house	94	31.3
Good quality services of facility	178	59.3
No reason	6	2.0
Less expensive	13	4.3

Total	300	100.0

As many as 178 (59%) of respondents chose to deliver in the health facilities they did because of good quality services offered by the facility. And 94 (31%) gave nearness of the facility to their homes as the reason they delivered in the health facilities they did. The responds suggest that proximity of ANC centers and the quality of services offered at ANC centers may influence ANC attendance.

4.7.8 Postnatal Attendance

Table 4.31

Table representing postnatal attendance of Respondents

Postnatal attendance	Frequency	Percentage
Unanswered question	16	5.3
Yes	209	69.7
No	75	25.0
Total	300	100.0

A majority (70%) of mothers attended postnatal care. This may be a reflection of the reported increase in postnatal care in the district.

Annual performance review of Bosomtwe district has shown an increase in postnatal care since 2002. Mothers who delivered at recognized health facilities may have been told to report for postnatal services.

Table 4.32

Table representing reasons why Respondents attended Postnatal care

Respondents' reasons for attending ANC	Frequency	Percentage
Unanswered question	93	31.0
Wanted to know the health status of child	95	31.7
Child was ill	39	13.0
It is a norm	21	7.0

Respondent was ill	7	2.3
For circumcision	20	6.7
No reason	25	8.3
Total	300	100.0

Thirty –two percent (32%) of respondents chose to attend postnatal care because they wanted to know the state of health of their babies. Unfortunately, 8% did not know the reason for attending postnatal care. Some 7% also felt it was a norm to attend postnatal care. Though there was an increase in postnatal attendance, majority of respondents did not really know the importance of attending. This may suggest that there is poor level of education on postnatal services.

Table 4.33

Table representing reasons Respondents did not attend Postnatal services

Reasons for none attendance to postnatal services	Frequency	Percentage
Unanswered question	229	76.3
Had No Money	29	9.7
Far distance of hospital from home	10	3.3
Poor road network to hospital	5	1.6
Poor quality service of hospital	2	0.7
Child was not ill	21	7.0

Respondent was not told to come	4	1.3
Total	300	100

Majority of respondents who answered this question said that, financial problems and long distances of health facilities from their homes were the reasons they would not attend postnatal care. This responds further confirmes that financial difficulties and proximity of ANC centers may influence ANC attendance.

4.7.9 Diseases patients perceive cannot be cure in a hospital

Table 4.34

Table representing type of diseases respondent perceive cannot be treated in a hospital/Clinic

Type diseases Respondents perceive cannot be treated in Hospital	Frequency	Percentage
Unanswered question	100	33.3
Failure to thrieve'Asram'(Twi)	123	41.0
Malnutrition	22	7.3
Measles	26	8.7
Epilespy	16	5.3
Tetanus	10	3.3

Marasmus	1	0.3
Whooping cough	2	0.7
Total	300	100.0

In the survey, 100 (33%) of respondents gave no disease perceived to be incurable by health staff in the hospital. On the other hand, 41% said "Asram"(twi) or failure to thrive was a condition that could not be cured in the hospital. It is believed to be passed on by 'evil persons' to infants. Some patients said they had experienced some cases with their wards which were not cured in the hospital. However, going to an Herbalist lead to a cure.

The responds of the mothers to this clearly indicates that as much as 41% are not well educated on some childhood diseases. And the fact that the diseases could easily be taken care of in a hospital or clinic.

4.7.10 Facilities usually utilized by respondents

Table 4.35

Table representing health facilities usually utilized by Respondents

Health facility utilized by Respondents	Frequency	Percentage
Unanswered question	5	1.7
Health Centre	19	6.3
Maternity	18	6.0
Clinic	17	5.7
Hospital	203	67.7
Chemical shop	6	2.0
CHPS Compound	32	10.7
Total	300	100.0

Most commonly used health facility by respondents was the hospital (68%). This was followed by CHPS compound (11%). 6% most often used health centers. Majority of respondents utilize recognized health facilities such as hospitals, clinics and maternity homes. This attitude could be encouraged to have many more mothers using recognized health facilities. In this case, mothers would be given good health care by skilled health staff. In addition to this, complications of pregnancies could be easily taken care of. In so doing, maternal and child mortality could be reduced.

4.7.11 Why Patients utilize other care provider instead of the orthodox ones

Reasons patients attended other care providers instead of the Hospital, clinics and maternities

Reasons why Patients used other care providers	Frequency	Percentage
Nil	127	42.3
Nearness of provider	89	29.7
Good attitude of provider	18	6.0
Good quality service provided	30	10.0
Less expensive	36	12.0
Total	300	100.00

4.8 PATIENTS OPINION ON HOW TO IMPROVE ANC ATTENDANCE

Table 4.36

Table representing views of respondents on how to improve ANC attendance

Respondents' view on how to improve ANC attendance	Frequency	Percentage
Unanswered question	18	6.0
Offer free ANC services	116	38.7
All women should be insured	51	17.0
Need Clinic in our community	26	8.7
Need good road network to hospital	1	0.3

Educate pregnant women on ANC	77	25.7
Health staff should be friendly	6	2.0
More health staff should be posted to health facility	5	1.7
Total	300	100.0

Most respondents (39%) were of the view that offering free ANC services was the key to improving ANC attendance. 25% suggested the increase in the education of women on the importance of ANC. 9% thought a clinic or hospital in their community could be key since they always had to travel long distances for ANC services. Others (2%) said, if Health staff were friendlier, ANC attendance would increase.
These were the views of mothers on how ANC attendance could be increased

CHAPTER FIVE

DISCUSSION

5.1 BACKGROUND INFORMATION

The mean age range of respondents was between 21 and 30 years. This made 53% of the number of women who took part in the study. This group was also the modal age group in the study. This was followed by age bracket 31-40 years. A significant number of Adolescents mothers 19% (57) also took part in the study. This clearly indicates that women between 21 to 30 years may be most active in sexual activity in this regard. However, adolescents were a very important group of individuals whose antenatal care is to be given adequate attention.

Out of the females who took part in the study, 83% (247) were legally married and 3% (7) were co-habiting. As much as 13% (39) of respondents were single. Many of these

single mothers were adolescents and had become school drop outs. This may have affected their finances and some were not willing to spear a few cedis to travel to antenatal care since money to sustain them was even a problem. (Awusabo-Asare K et al. 2004)

90% of respondents had had at least primary education and 10% without any formal education. A majority of 64% had primary and junior high education. Only 2 % had tertiary education. And 83% of husband's of respondents had had at least primary education.

Lack of formal education may greatly influence patients' attitude towards antenatal care and other health services. Abdel-Hady and Yahia Aref identified that, women with higher level of formal education attended ANC services more often than women without or with little education. In addition, these women abided with directives from Health staff more than the illiterate ones.

Most of the respondents (59%) had low socio-economic status. As much as 20% were unemployed and 39% were involved in petty trading. Husbands or Car takers of respondents who were gainfully employed formed 83%. The remaining 17 % of unemployed husbands or those who refused to accept responsibilities of their pregnancy is more likely to affect the socio-economic status of their family.

Although free ANC services have been introduced since 2004, the service cannot be said to be absolutely free since patients may have to buy some medications not included in the free service. In addition, it is known that some monies are still collected at ANC from patients without receipts. All these factors would require that a patient has a source of income or would be supported by relations. (Suneeta Sharma et al, June 2005).

5.2 PATIENTS KNOWLEDGE ON ANTENATAL CARE AND ITS IMPORTANCE

Adequate knowledge on what antenatal service is all about and the benefits to pregnant mothers and the unborn baby is a major factor that would influence the decisions by mothers, husbands and all who influence the lives of pregnant mothers.

In the study, 14% of respondents had no knowledge of what antenatal care was. Poor knowledge was obtained from 17%. A greater percentage of 69% had between fair to very good knowledge on ANC. It is quite alarming to have a significant number without knowledge on ANC and it importance.

Surprisingly, 44% of respondents obtained their knowledge on ANC from the Electronic media with 39 % obtaining theirs from clinics, maternity homes and hospitals. The role of the media in educating the masses on these pertinent issues should thus be appreciated.

Impressively, 83% of respondents were able to mention a number of danger signs of pregnancy. This outcome may be the results of the Health Staff to adequately educate women on the danger signs of pregnancy at ANC. Public awareness on pregnancy related issues were also done through the electronic media.

For the question on what action patients would take on seeing any danger sign of pregnancy, six percent (6%) of respondents said they would see an herbalist or a fetish priest on seeing the danger signs. This may be attributed to some cultural beliefs that some danger signs such edema may have spiritual influences. These unfortunate perceptions of some patients may be due to inadequate education on ANC, outmoded traditional practices and beliefs.

According to Ademuwagun Z.A ,(1999) 'Alafia' – the Yoruba concept of health (implications for health education) health education can only be meaningful to the traditionally inclined people if it is tied to the intrinsic values of the people themselves. In this respect, health education can only improve antenatal care utilization if the communities at different levels are involved in motivation and information dissemination with active involvement of the men folk. This can be supplemented by home visits by the various health workers

5.3 INFLUENCE OF SOCIO-ECONOMIC FACTORS ON ANC ATTENDANCE

Fourteen(14 %) of respondents failed to attend ANC during their last pregnancy. Financial problems were the major reasons for their failure to attend ANC. 80% of respondents were provided with money by husbands to attend ANC while 12% funded ANC visits by themselves. This clearly indicates that husbands had a great influence on ANC attendance by their spouses. In fact 3% of respondents confirmed that their decision to attend ANC had been objected by their husbands. A study carried out in Equitorial Guinea by A.A. G Jimoh on Utilization of ANC services at the Provincial Hospital, Mongomo(1997) confirmed that hospital workers (50.73%), husbands (19%) and parents (13.97%) were the greatest influence on antenatal care attendance. In this study, all the married women (19%) said their husbands were a strong influence on their antenatal care utilization, thus, any attempt to improve ANC attendance has to take the men into consideration. The overbearing influence of the men tended to affect breastfeeding practices, susceptibility to HIV/AIDS amongst women and contraceptive choices as well as antenatal care utilization.

However, other respondents attributed failure to attend ANC to the far distance of health facility, the poor road network from their communities and the subsequent high cost of transportation as some reasons. Interestingly, others said being pregnant did not mean they were sick and so did not need to go for ANC. This seem to be the same attitude of some pregnant women in a research carried out in Saudi Arabia by Abdel-Hardy El-Gilany and Yahia Aref (1997).The research was on reasons for patient's failure to register at the ANC in the Local Primary Health Center(PHCC) . The most common reason for patients seeking care at private clinics was that either they or their husbands were too busy to attend the local PHCC. More than two-thirds of mothers who never received antenatal care believed that pregnancy is a normal occurrence and that there was no need for any specialized care. Also, distance

from the local PHCC was frequently reported as a cause for nonattendance at antenatal clinics Mothers seeking care at a private clinic were more likely to be educated, job holders, younger in age, and with fewer children. On the other hand, mothers who never attended antenatal care were more likely to be illiterate, housewives, and middle aged. Mothers seeking care at private clinics were more likely to have educated husbands who were professionals or semiprofessionals, with a small family size and high family income. On the other hand, mothers who had no antenatal care were more likely to have lowly educated husbands, large family sizes, and to live a long distance away from the local PHCC.

In all, 60% of respondents attended ANC in between their first and third months of pregnancy. And 37% attended ANC between their fourth and ninth month of pregnancy. Administering of the Intermittent Preventive Treatment (IPT) course of medicines is usually not completed by mothers who reported late at ANC. It is advisable that pregnant women attend ANC within the first three months of pregnancy. The WHO recommends that mothers have at least four (4) ANC visits before delivery. This gives health staff enough time to monitor foetal growth, to identify and take care of danger signs of pregnancy. This in turn would prevent pregnancy related complications, maternal and infant mortality.

Moreover, certain cultural beliefs had immense influence on the attendance of ANC services. Some respondents were of the view that some diseases were spiritual. These diseases therefore needed spiritual attention. And so, some respondents opted to see fetish priest and herbalist when their babies had certain diseases. One disease most often attributed to have spiritual background was 'Asram'(failure to thrive).

5.4 ALTERNATE HEALTH SERVICES UTILIZED BY MOTHERS

Apart from the hospital, clinic, CHPS compound or maternity, respondents admitted haven utilized other services such as fetish priests, herbalists, prayer camps, traditional birth attendants (both skilled and unskilled) and chemical shops when they were pregnant.

33% had utilized services from herbalist and persons with knowledge in herbs and 3% had utilized the services of fetish priests. Chemical shops had been the point of call of 1% of respondents. Individuals have the right to make choices as to where they want to access health care, however it is doubtful the knowledge of these other health service providers on the real implications of caring for pregnant mothers. It may be likely that for instance the effect of medications on foetus in the formative stages is not known to these alternative healthcare providers. This is likely to lead to many birth defects.

Reasons why respondents opted for these other services were varied. Some belief some of their experiences were spiritual and could not be solved in a hospital or clinic. For instance 41% believed "Asram" or Failure to thrive was a spiritual condition and could not be taken care of in a hospital. Unbelievably, measles, whooping cough, kwashiorkor were among other diseases respondents' believed could be treated in the hospital.

Traditional Birth Attendants play an important role in the lives of many pregnant women living in rural settings. One reason why pregnant women utilize their services was because they were readily available and close to the households. Women in labour need not have to travel long distances to deliver. The services of TBAs are also quite cheaper compared to those in the hospitals and maternities. Unlike the hospital one need not queue for long to see the TBA.

If there be any training for TBAs, the training being given to the TBAs at any hospital will be more meaningful if they are aware that they are not trained to be doctors, hence with certain limitations. They should quickly refer 'at-risk' patients to the hospital for proper evaluation and treatment.

Many of these patients still patronise TBAs because they are believed to be nearer, possess

special powers and cheaper to consult. The TBAs need to be further integrated into the maternity services if we are to witness improved attendance in antenatal care services and improvement in the scourge of maternal and infant mortalities as presently experienced in this country. Abdel-Hady El-Gilany and Yahia Aref (1997)

5.5 EFFECT OF STAFF ATTITUDE AND SERVICE RELATED FACTORS ON ANC ATTENDANCE

More than 58.7% of respondents described the attitude of health staff as friendly and welcoming. However, a minority (7.6%) who were mostly adolescents were not happy about some of the staff's attitude towards them. The society frowns on adolescent engaging in illicit sex. And so pregnant adolescents are sometimes looked down upon and sometimes insulted for the slightest mistake. This also lead to late reporting and even failure of pregnant adolescents to attend ANC. Creating more adolescent friendly ANC centers would help solve this problem.

The influence of the attitude of Health staff on patients is of great importance. Many patients may have the desire to attend ANC services and also to deliver under trained health staff. However, the unfriendly and repulsive attitude of some health staff result in patients utilizing the services of other unskilled but somewhat caring practitioners. (Godfrey S. Lule and Magaret Ssembatya, 1993.)

Forty-six (46%) of respondents admitted haven spent between two (2) to four(4) hours at ANC services and felt it was a hindrance to many of them who had other responsibilities. The mean time spent at ANC was between 30 minutes to 1 hour.

Health Staff were described as being punctual (74%) most of the time. They were on some occasions late (20%). This may be attributed to the staff that has to travel at long distances and on bad roads to offer ANC services in communities without such service.

5.6 INFLUENCE OF DISTANCE OF HEALTH FACILITIES FROM THE COMMUNITIES OF PATIENTS ON UTILIZATION OF ANC SERVICES

Majority (73%) of respondents utilized hospitals frequently, 11% accessed CHPS compound and 6% accessed health Centers. Respondents took a mean time of 30 minutes to travel to ANC at health facilities. However, as much as 36% took between one (1) hour to four (4) hours to travel for ANC services. 54 % reached health facilities on foot with 46% using other means such as bicycles or car.

The nature of many roads leading to towns with health facilities were described by 18% of respondents as bad and sometimes unmotorable. This is especially so in the Amakom sub district.

A percentage of 72 of Respondents had their deliveries by skilled health staff and 28% from unskilled persons. These unskilled individuals included close relations and those known in the community to help women during labour. Reasons respondents gave for utilizing these unskilled services were the far distance of health facilities from homes and the limited time taken to go into labour. More so, 6% said the unskilled labour was less expensive compared to the hospital. For those who gave this response, the investigator and research assistants took the opportunity to educate them on the free delivery system which had been introduced.

30% of respondents failed to attend postnatal care. Reasons were that the babies were not sick (7%) or were not told by health staff to come (1%). Financial problems, poor road network and proximity of health facility were other reasons given.

CHAPTER SIX

CONCLUSION

6.1.1 PATIENTS KNOWLEDGE ON ANC AND ITS IMPORTANCE

The study revealed that 64% of respondents had a good knowledge on ANC and its importance. A significant value of 14% of respondents had no knowledge on ANC with 17% having poor knowledge on ANC. It therefore suggests there is the need to intensify education on ANC and its importance.

The electronic media seem to provide greater information on ANC and its importance than the hospitals and clinics. Patients could thus be educated very well on the electronic media. In addition, health staff may have to do more education of patients on ANC and its importance

6.1.2 SOCIO-ECONOMIC FACTORS ON ANC AND DELIVERIES

Preferred deliveries in the hands of unskilled personnel may be related to lack of financial support. Many mothers were not gainfully employed (20.0%). They thus depended solely on husbands if they had, and close relations. In the absence of these relations, money to travel to ANC centers becomes a problem. Some husbands also object to the attendance of ANC services by their spouses due to financial difficulties. They are compelled to utilize unskilled health practitioners. The free ANC services introduced in 2004 may help improve ANC attendance but not absolutely solve the problem of non-utilization.

6.1.3 ALTERNATE FACILITIES

The choice of alternate facilities by respondents was on the belief that some diseases were spiritual and could not be cured in the hospital. For instance "Asram" (Failure to thrive) was said by 42% as being a disease that could not be cured in the hospital. Fetish priest, herbalist and close relation with knowledge in herbs were those mostly utilized. In addition these services were closer and less expensive to respondents than the hospitals. This could be due to inadequate knowledge on ANC

6.1.4 STAFF ATTITUDE

Health Staff attitude to most (90%) respondents was positive. However, a small portion , who were mostly adolescent felt intimidated by health staff. Adolescent friendly ANC services were possibly not available and so pregnant adolescents refused to utilize ANC services in the hospitals and clinics. While some adolescents reported very late into gestation period, many pregnant adolescents refused to attend ANC during their entire

gestation period. This was mainly for fear of being insulted or looked down upon. Lateness on the part of staff to ANC services also affected utilization of the service. In addition, Heads of ANC units in all facilities should ensure there is more practice of Focused Antenatal Care.

6.1.5 PROXIMITY OF HEALTH FACILITIES

The mean time to reach facilities was 30 minutes. Most (54%) respondents got to facilities on foot. Difficulty in reaching facilities was attributed to poor road network and far distance from facilities. People living in the Amakom sub-district had peculiarly very poor road network. It was impossible sometimes to travel on some routes after a down-pour. Even on bright sunny days, many road networks were somewhat un-motorable. More so, the poor nature of the road did not encourage pregnant women to travel for ANC clinics, since they would be submitted to rigorous shaking. And this could affect pregnancies, especially those in the early stages.
Besides these, the poor nature of roads causes patients to take hours to travel a distance which should have taken about fifteen minutes

6.2 RECOMMENDATIONS

The following recommendations are being made for the major stakeholders. These include

- Ghana Health Service
- Bosomtwe District Health Administration.
- Bosomtwe District Assembly
- Management of Kuntanase Hospital
- Non Governmental Organizations

6.2.1 GHANA HEALTH SERVICE

As part of the Ghana Health Service's effort to bring health care to the door steps of the people, I recommend the establishment of many more CHPS compound and health centers in the Bosomtwe district. In addition, these facilities should be equipped with the needed resources such as well trained dispensing technologists, nurses, laboratory technicians and others. I also recommend the establishment of many adolescent friendly ANC centers. There could the development of special training programmes to adequately equip health staff to handle pregnant adolescents.

The Ghana Health service should continue to advocate for the sustenance of the free ANC and Delivery services. These free services should be made to cover consultation, medication, laboratory, ultrasound scan and other relevant services.

6.2.2 BOSOMTWE DISTRICT HEALTH ADMINISTRATION (DHA)

The DHA is to be commended for taking a good initiative on erecting a billboard that educates her citizens and visitors on the danger signs of pregnancy at the entrance of the district capital.

The residents in Bosomtwe got a lot of information on ANC from the electronic media. I suggest the electronic media should be fully utilized in educating the masses on ANC and other health issues. Education on ANC in health facilities should also be intensified. More over, the DHA should ensure that all facilities are practicing Focused Antenatal Care.

The DHA should also advocate for the establishment of many CHPS compound and health center in communities such as Abono , Kokodie , Akokofe and others.

Health staff should also be sent to communities with the structures for health centers such as the one in Abono township.

6.2.3 BOSOMTWE DISTRICT ASSEMBLY

The poor nature of many roads leading to health facilities has really affected the utilization of ANC services. The poor roads have also increased the time needed to travel to health facilities. It has resulted in many patients resorting to untrained and sometimes dangerous alternate health care providers. Poor roads have further increased cost needed to travel since drivers charge higher on these roads. It is thus recommended

that the District Assembly spearhead in the construction of many urban roads. This is of paramount importance especially in the Amakom sub-district.

6.2.4 MANAGEMENT TEAM OF KUNTANASE HOSPITAL

I suggest that management ensures that staffs are adequately trained on adolescent friendly ANC. In addition, collection of money from pregnant women without receipt should be discouraged at all levels. Staff should also be admonished to do away with late reporting and ANC unrelated issues at ANC services so as to shorten time spent by patients.

Education of patients on the importance of ANC, danger signs of pregnancy should be intensified

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DATA COLLECTION TOOLS

APPENDIX

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

COLLEGE OF HEALTH SCIENCES

SCHOOL OF MEDICAL SCIENCES

COMMUNITY HEALTH DEPARTMENT

TOPIC: **FACTORS AFFECTING ULTILISATION OF ANTENATAL HEALTH SERVICES IN THE BOSOMTWE DISTRICT OF THE ASHANTI REGION OF GHANA**

Introduction

Good day, I am Kwaku Gyamfi Oppong, a student from the Community Health Department, K.N.U.S.T. I am carrying out a study on the factors affecting the utilization of antenatal health services in the Bosomtwe district of the Ashanti region. The project is jointly designed by Lecturers from the Community health department of K.N.U.S.T. and the Bosomtwe District Health Directorate. The information will be used to address the factors affecting antenatal health services in the district

I assure you that everything you say in the interview will be confidential. I would therefore appreciate if you could grant me five (5) minutes of your time to ask a few questions. Thank you.

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

COLLEGE OF HEALTH SCIENCES

SCHOOL OF MEDICAL SCIENCES

DEPARTMENT OF COMMUNITY HEALTH

TOPIC: FACTORS AFFECTING THE ADEQUATE ULTILIZATION OF ANTENATAL HEALTH SERVICES IN THE BOSOMTWE DISTRICT OF THE ASHANTI REGION OF GHANA (2008)

1. PATIENT'S DETAILS

Age..... 1. 15- 20 2. 21-30 3. 31-40 4. 41-49 [ ]

Marital Status: 1. Single 2. Married 3. Divorced 4. Widowed 5. Co-habiting [ ]

Educational background 1. No education 2. Primary 3. Junior High

4. Senior High 5. Tertiary [ ]

Occupation 1.Unemployed 2. Farmer 3. Trader 4.Public /Civil Servant 5. Other……. [ ]

Husband's Educational Level 1. No education 2. Primary 3. Junior High 4. Senior High 5. Tertiary [ ]

Husband's Occupation 1. Unemployed 2. Farmer 3. Tradesman 4. Public/ Civil Servant 5. Other……

Religion: 1.Christianity 2. Islamic 3.Traditional 4. Other……[ ]

2. PATIENT'S KNOWLEDGE ON ANTENATAL CARE(ANC)

What do you understand by antenatal care ? …….

……..

Could you give any two (2) importance?.....……

…….

Where did you acquire this knowledge on ANC ? 1.Hospital/Clinic 2.Maternity 3. Radio 4. Television other, please specify……..

What are some of the danger signs in pregnancy?.....

What do you do when you see any of these danger signs?

1.Visit Hospital/Clinic 2. Maternity 3. Herbalist 4. Fetish Priest

3. BIRTH HISTORY

How many children have you ? 1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ] 8[ ] 9[ ] 10+ [ ] [ ]

Do you intend to give birth to more children? □ Yes □ No

Please give reasons for your answer in question 3.2 ……..

……..

Did you attend Antenatal clinic during your last pregnancy? Yes □ No□

If Yes, Why?

……
……..

If No, Why? No money □ Far distance from hospital/maternity □ Think it is not important □ Poor road network to hospital/maternity□ Other, please specify……

How old was your pregnancy before you attended Antenatal care?

1. One month 2. Two months 3. Three months 4. Four months 5. Five months 6. Six months 7. Seven months

8. Eight months 9. Nine months

How many times did you attend antenatal clinic before your last delivery?

1. [1] 2. [2] 3. [3] 4. [4] 5. [5] 6. [6] [ ]

3.9 How many times were you given Intermitent Preventive Treatment(IPT) ?

1. Nil 2. once 3. two 4. three

3.10 Where did you have your deliveries?

1. Hospital/Clinic 2. Maternity 3.Home with help of a TBA 4. Home with help of a relative

3.11 Why did you opt to deliver in the facility in question 3.4 ?

1. Nearness of facility to home 2. Good Quality of service of facility 3.Other, please specify……

3.12 Did you attend clinic after delivery? Yes □ No□

3.13 If, Yes Why? ……

……..

3.14 If No, why? No money □ Far distance of hospital from home□ Poor road network□ Poor quality of service of hospital□ other, …… …

…….

3.15 Have you ever lost a child? □ Yes □ No

3.16 If Yes, when did it happen □Before delivery □ During delivery □Few weeks after delivery other, please

specify……..

4. ALTERNATE MATERNAL HEALTH SERVICE SOUGHT BY PATIENTS

4.1 Apart from the hospital, clinic or maternity, which other place do you seek health services? 1. Traditional Birth Attendant 2. Fetish Priest

Other, please specify……

4.2 Why do you choose these services other than the hospital? 1

1.Near to home 2.Good attitude of service provider 3. Good quality of service

Other , please specify……

4.3 What disease of infants do you perceive can only be cured by Herbalist and not in the Hospital or Clinic?

……
…

5.HEALTH SEEKING BEHAVUIOR

5.1What health facility do you usually access?

1. CHPS Compound 2. Health Center 3.Maternity 4. Clinic 5. Hospital

[ ]

5.2 How long does it take to go to the health facility in Question 5.1

1.Less than 5 min 2. 10 to 20 min 3. 30min 4. 1 hour 5. 2 hours 6. other..... [ ]

5.4 What means do you use to get to the health facility?

1. Foot 2. Car 3. Bicycle 4.Motor Bicycle 5. other.....

5.5 How would you describe the road network from your home to the health facility?

1. Good 2. Just motorable 3. Bad 4. Very bad 5. Unmotorable

5.6 Who decides as to when you should go to the health facility?

1. Husband 2. Parents 3. Self 4. Uncle 5. other.....

5.7 Who gives you money when you want to go for ANC?

1. Husband 2. Parents 3. Self 4. Uncle 5. other

5.8 Have ever missed any ANC appointment?

1. Yes 2. No

5.9 If , Yes Why ?

1. No money 2. Far Distance of home from facility 3. Objection by Husband 4. Other.....

5.10 If No Why

?.....

……
……

6. HEALTH STAFF ATTITUDE

6.1 What is the attitude of health staff at the facility you visit ?

1. Very friendly 2. Friendly 3. Hostile 4. other…….

6.2 How long do you spend at each ANC visit?

1.Less than 30 min 2.30min to 1 hr 3. 2 hrs 4. 3hrs 5. 4hrs

other…….

6.3 What is the level of punctuality of health staff during each ANC appointment?

1.Always on time 2. Sometimes late 3. Always late 4.Sometimes postpone appointments

6.4 How would you describe the time spent at ANC?

1. Too long 2. Long 3. Moderate 4. Short 5. Very short

6.5 Are you given enough privacy during personal examination by a health staff?

1. Not at all 2 Sometimes. 3.Most Often 4. At all times

6.6 Do you get enough time with the health staff to discuss your problems?

1. Yes 2. No

6.7 What in your opinion do you suggest could encourage other women in your community to attend ANC when pregnant?

……

……..