

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY,

KUMASI, GHANA

COLLEGE OF HEALTH SCIENCES

SCHOOL OF PUBLIC HEALTH

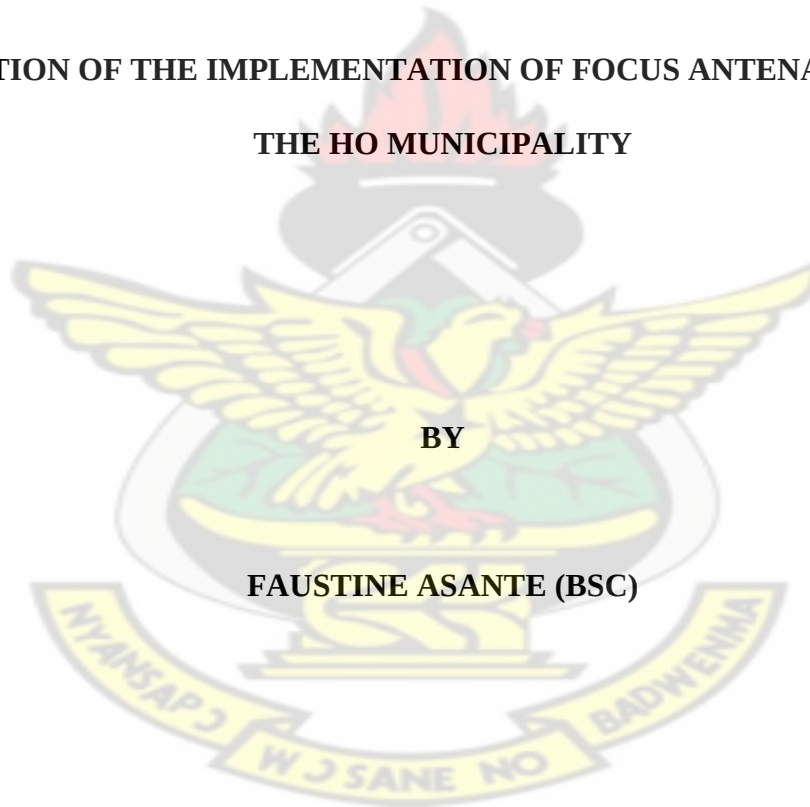
DEPARTMENT OF POPULATION, FAMILY & REPRODUCTIVE HEALTH

KNUST

**EVALUATION OF THE IMPLEMENTATION OF FOCUS ANTENATAL CARE IN
THE HO MUNICIPALITY**

BY

FAUSTINE ASANTE (BSC)



NOVEMBER, 2015

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**A THESIS SUBMITTED TO THE DEPARTMENT OF POPULATION, FAMILY &
REPRODUCTIVE HEALTH**

**COLLEGE OF HEALTH SCIENCES, SCHOOL OF PUBLIC HEALTH IN
PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE DEGREE OF
MASTER OF PUBLIC HEALTH IN POPULATION, FAMILY & REPRODUCTIVE
HEALTH**

NOVEMBER, 2015

DECLARATION

I declare that this dissertation is the result of my own research work. Where my work is indebted to the work of others, I have made the necessary acknowledgement.

I also declare that this work has neither been accepted in substance for the award of other degree nor is it concurrently being submitted for any other degree.

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DEDICATION

This study is dedicated to my husband Mr. Fredrick Yaw Edo-Gake and our children Jemima, Emmanuel and John – Norris for their endurance, support and encouragement throughout my study period.

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I thank God for guiding and leading me throughout the project work.

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Finally, my gratitude goes to all my family members for their moral and financial support during the study period. To the authors whose work I extracted valuable information to conduct the study I say thank you and God richly bless you.

DEFINITION OF TERMS

Ante natal care - The health care and education given during pregnancy

Municipality - Administrative part of a region composed of sub-municipalities

Quality in Health Care - The appropriate performance (according to standards) of interventions that are identified to be safe and sound, that are affordable to the society in question, and that have the ability to produce an impact on mortality, morbidity, disability (Roemer and Montoya-Aquila, 1988).

Grandmultipara - A woman who had more than four pregnancies

Primigravida - A woman with first pregnancy.

Maternal care - Care provided at a health facility during antenatal, labor and delivery and postnatal period.



LIST OF ABBREVIATIONS

AIDS	-	Acquired Immune Deficiency Syndrome
ANC	-	Antenatal Care
BPACR	-	Birth preparedness and complication readiness
CHAG	-	Christians Health Association of Ghana
FANC	-	Focus Antenatal Care
HIV	-	Human Immunodeficiency Virus
IPTp	-	Intermittent Preventive Treatment in pregnancy
MCH	-	Maternal and Child Health
PMTCT	-	Prevention of Mother to Child Transmission
RPR	-	Rapid Plasma Reagent
SP	-	Sulphadoxine pyrimethamine
TT	-	Tetanus toxoid
UNFPA	-	United Nations Population Fund
UNICEF	-	United Nations Children's Fund
USAID	-	United States Agency for International Development
VDRL	-	Venereal Diseases Research Laboratory
WHO	-	World Health Organization

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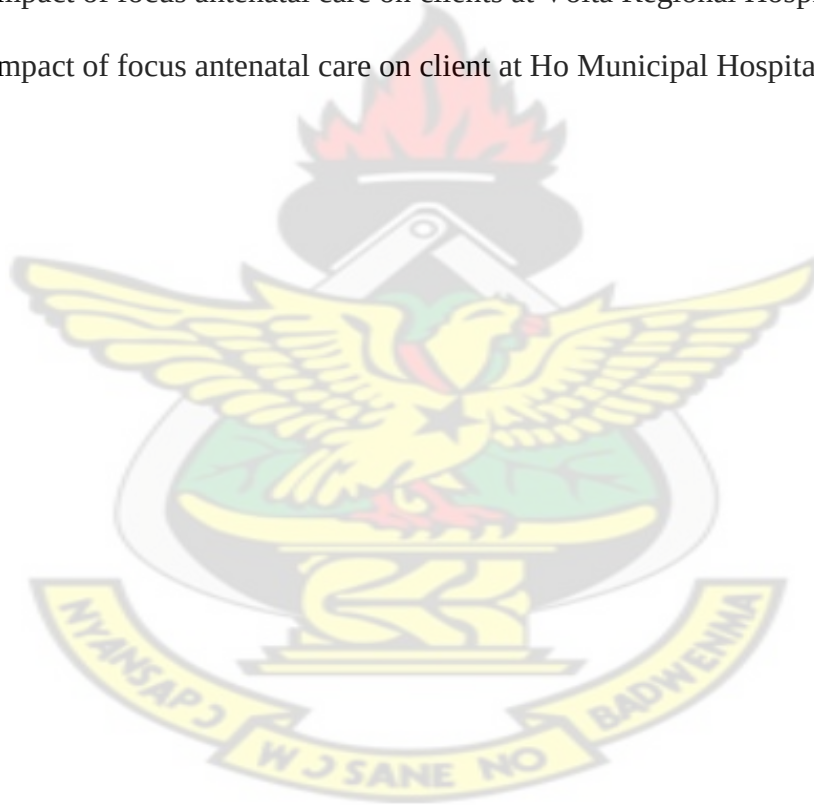


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ABSTRACT

Focused Antenatal Care (FANC) has been identified as a program that is aimed at promoting the health and survival of mothers and babies. FANC expects that a woman will receive individualized care primarily from skilled provider, consistently over a minimum of four visits. It was introduced in a context where many critical assessments were not being widely offered or ignored hence resulting in high mortality rates among pregnant women. This study is conducted to assess the implementation of FANC in the Ho municipality with a focus on how care is rendered to clients by nurses.

The study was a cross sectional descriptive survey. Thirty (30) nurses were interviewed using a structured questionnaire. A checklist was used to observe how clients were assessed by nurses, and also to assess the challenges faced with the practice of FANC. Data from the structured questionnaire was analyzed with SPSS version 16.0

A total of 12 facilities were visited, 30 ANC staff interviewed (16 Community Health Nurses and 14 Midwives), 96 maternal health records were reviewed. ANC staffs were observed interacting with 96 clients.

The study revealed that the nurses were aware of the existence and practice of FANC. However, most of the staff have not had training in FANC, and therefore are not familiar with the details and components. The study revealed also that History taking on clients was poor, health workers are unable to take comprehensive history for early detection of diseases. Examination of ANC clients by health workers were also not optimal, procedures and findings are usually not explained to the women. Not all the procedures required to detect diseases in pregnancy were followed. This has also reflected in filling of the maternal record, where most of the records such as drug history, contraceptive history and physical history were not filled, but progress histories were filled. This is in line with examination done for client that is abdominal palpation and auscultation was done for all clients but ignoring the rest of the procedures. The respondents however, identified various challenges to the delivery of quality and appropriate FANC services. Chief amongst them were issues related to inadequate number of staffs, lack of infrastructure and appropriate equipment. The implementation of focused antenatal care did seem to increase the number of antenatal registrants and an increase in the number of deliveries with a skilled health care provider. But more needs to be done to increase the number of deliveries with skilled care provider.

Generally, the practice of Focused Antenatal care is being implemented in the Ho municipality and it has improved upon the number of clients (pregnant women) that patronize the health facilities. Nonetheless, the structure at all levels in the facilities ought to be upgraded to support the total practice of FANC. There is also the need to orient the staff and the communities on Focus Antenatal Care.

CHAPTER ONE

1.1 INTRODUCTION

Antenatal care is the care a woman receives throughout her period of pregnancy in order to ensure healthy outcomes for the expectant mother and the newborn (DiMario et al., 2005). It is the key entry point for pregnant women to receive a broad range of health promotion and preventive health services, such as nutritional support, prevention and treatment of anemia, detection and treatment of sexually transmitted infections and HIV/AIDS. It is also an indispensable linkage between the household and hospital continuum of care (de Graft –Johnson et al., 2005). The aim of antenatal care is to improve maternal and newborn health (DiMario et al., 2005).

The United Nations (UN) Millennium Development Goals (MDG) on maternal health aims to reduce the number of women who die in pregnancy and Child birth by three-quarters between 1990 and 2015 and to achieve universal access to reproductive health (WHO, 2013). One of the strategies for safe motherhood is improving maternal health through universal access to health services through antenatal care (Starrs, 2006). Although, the effect of antenatal care on maternal mortality seems unclear, there is a broad agreement that antenatal care interventions can show the way to enhanced maternal and newborn health, which can also impact on the survival and health of the infant (Amosu et al., 2011). However, 68% of women in developing countries receive ANC care. In Ghana about 88% of women attend ANC at least once, with 70% having the suggested four visits or more (Abou-Zahr and Wardlaw, 2003).

The traditional approach to ANC, which was based on European models developed in the early 1900's, assumed that multiple visits were better in the care for pregnant

women. Frequent routine visits were the norm, and women were classified by risk category to determine the chances of complications and a better outcome for mother and baby (Maternal and Neonatal Health, 2004).

The traditional ANC aims at promoting and maintaining the physical, mental, and social health of mother and baby by providing education to the pregnant mother and her family (Amosu et al., 2011). However, the traditional ANC, lack quality care, such as poor communication, little education to pregnant mothers as well as late booking by pregnant women (Nyarko et al., 2006). In view of that, WHO in 2001 issued guidance on a new model of antenatal care called goal-oriented or focused antenatal care, as a way of promoting the health and survival of mothers and babies (Birungi et al., 2006).

Focus antenatal care is an individualized, client-centered, comprehensive care that emphasizes on disease detection rather than risk assessment (Ablordeppey, 2011). Its approach to antenatal care lay emphasizes on evidence-based, goal-directed actions, family-centered care, quality rather than quantity of visits, care given by skilled providers which is safe and cost effective (USAID, 2007). The goal of focus antenatal care is to promote maternal and newborn health and survival through early detection of problems and treatment of complications, prevention of complications and disease, birth preparedness and complication readiness and health promotion (Maternal & Neonatal Health, 2004). Focus Antenatal Care means that providers focus on assessment to make decision, take appropriate actions and render care for each woman's individual situation. Women that are at risk may not develop complication, while women not at risk may do so. Therefore using risk approach with more visits does not necessarily improve pregnancy outcome and it is a waste of resources to both facility and the client. However women who never develop complications and are in the low risk may never receive

essential care or may not be prepared to recognize danger signs and or respond to signs of complication (USAID, 2007).

The WHO recommends four antenatal visits for women whose pregnancies are progressing normally. Each visits should include care that is appropriate to the clients overall condition and stage of pregnancy .If problems or potential problems that will affect the pregnancy and newborn are detected the frequency and scope of visits are increased (Villar et al., 2001).

Trials conducted in Argentina, Cuba, Saudi Arabia, and Thailand proved that FANC was safe and was a more sustainable, comprehensive, and effective ANC model (WHO 2001).

In response to this evidence, several countries in sub-Saharan Africa moved to adapt FANC as a way of improving maternal and child health (Frontiers in Reproductive Health, 2008). The WHO focused ANC package which encourages four ANC visits and individualized care, was adopted in 2002 (Villar et al., 2001).

In 2006, feasibility study was done to assess its acceptability in Greater Accra and Central Regions where FANC initiative was introduced (Nyarko et al., 2006).In Ho to be precise, FANC was started in 2006, where midwives and community health nurses in the sub municipality were trained in the implementation of FANC. Most of the health centres in Ho municipality are implementing FANC.

The study aims at evaluating the implementation of focus antenatal care in Ho municipality of the Volta Region, from the perspective of the knowledge of the care provider, care rendered by providers to client, challenges of the implementation and the impact of FANC on clients.

1.2 Problem statement

Antenatal care services provided was expected to be a quality care rather than quantity of care. However, the introduction of focused antenatal care was not accompanied with restructuring of antenatal care services. Provision of Service continues to follow the assembly line system, where clients have to go through a number of access points during a single visit including, receiving of their cards to be numbered and recorded, weighing, and checking of blood pressure, urine analysis, health education, history taking and physical examination. Depending on the history given, clients may be sent to the laboratory or for counseling or put on medication (Amosu et al., 2011) .Focused antenatal care however, expects that a woman will receive individualized care primarily from a skilled provider, consistently over a minimum of four visits. This was introduced in a context in which many critical assessments were not being widely offered (Promise, 2010).

However, about 60% of maternal deaths were caused by factors that could have been detected and addressed during the ante-natal period, such as hypertension, ante- and post-partum hemorrhage, abortion, ectopic pregnancy, and pregnancy-related sepsis (Ouma et al.,2010). Failure to detect and address these causes in time was due to several factors such as client seeking ANC services late and poor management of client, such as poor assessment and diagnosis, failure to follow standard protocols and poor monitoring of clients at the health facilities (Nyarko et al., 2006). Which was not goal directed as FANC. Focus antenatal care is an individualized, client-centered, its approach lay emphasis on evidence-based, goal-directed actions, family-centered care, quality rather than quantity of visits, care given by skilled providers which is safe and cost effective (USAID, 2007). Besides, acceptance of focus antenatal care, its content and coverage of services are not well understood among health workers (Amosu et al., 2011). In the Ho

municipality, Antenatal care coverage for 2011, 2012, and 2013 was 87.1 %, 88.9 % and 90.8% respectively. The number of clients who visited antenatal clinic at least four times in 2011, 2012 and 2013 were 39.6%, 68.9% and 49.2% respectively as reported in the end of year report (2013, Annual Report, Ho Municipal Health Directorate). Most women reported in the second trimester, as first and third trimester registration declined, While registrants improved, the number making 4+ visits declined dramatically compared to 2012. Which is due to poor motivation of clients and long waiting hours identified as some of the causes, another immediate cause of this reduced utilization was attributable to perceived unfriendly service. The underlying cause was the introduction of a delivery items' sheet costing GHs2.00 (and GH¢0.50 in another hospital) for all pregnant women to buy at the health facility.

The Percentage of ANC clients who received two doses of SP declined, due to expired SP during the latter part of the year because of poor procurement planning and performance at the level of SP procurement in the sector (2013 Annual report, Ho Municipal Health Directorate).

So far no study has been conducted in any of the health facilities in the Ho Municipality to evaluate the implementation of the focused ante-natal care services, what challenges and problems are experienced. It is still a new ground for research.

1.3 Rational of the study

FANC program is aimed at promoting the health and survival of mothers and babies (Birungi et al., 2008). This study seeks to evaluate the implementation of focus antenatal care in the municipality. The result of the project would help health planners and program managers as well as stakeholders to develop strategies to improve the quality of ANC in the Ho Municipality.

1.4 Conceptual Framework

IMPLEMENTATION OF FANC

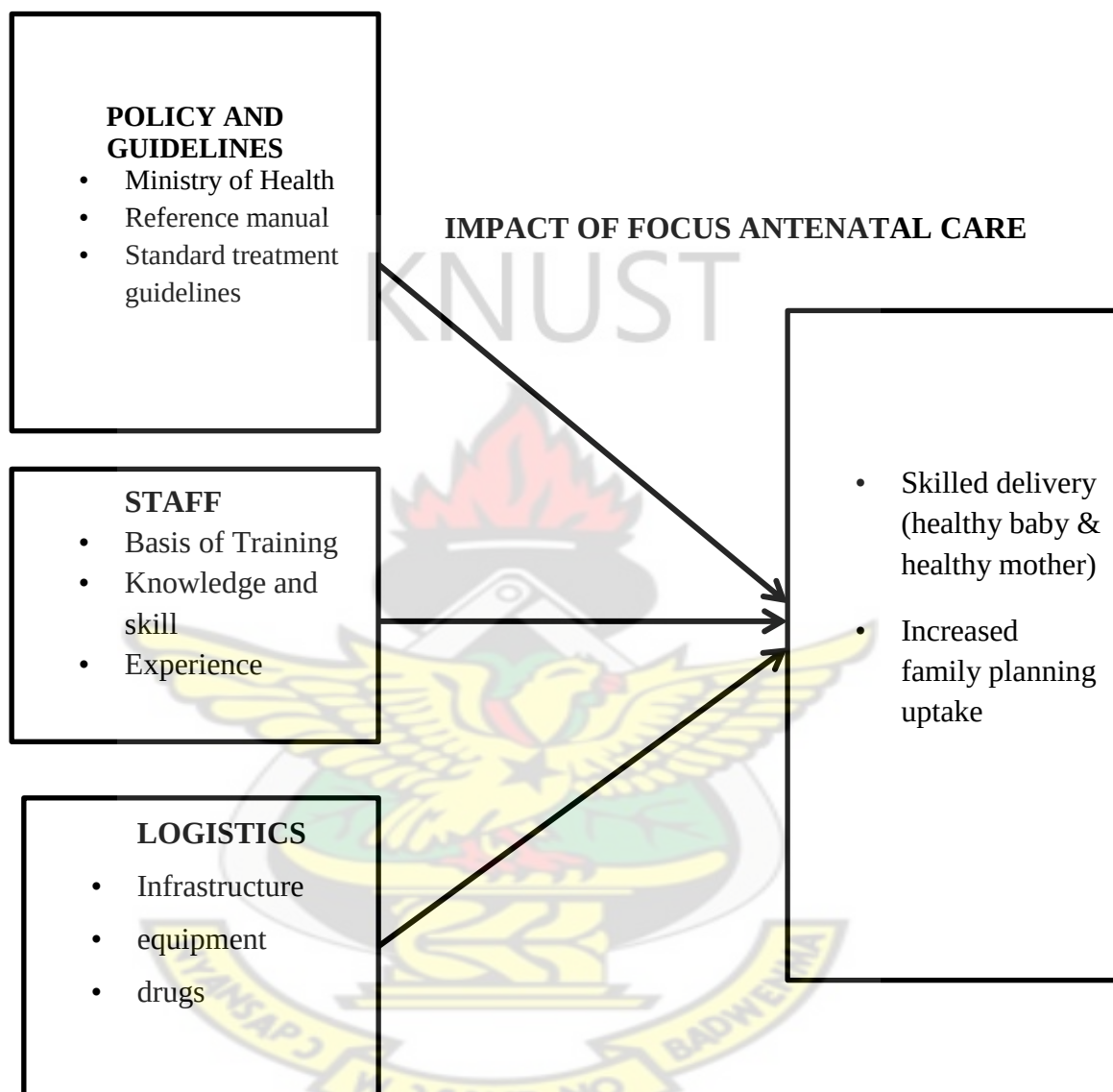


Fig: 1.1 Evaluation of the implementation of focus antenatal care

Focus antenatal care was introduced to do away with the traditional antenatal care that assumed that multiple visits were better in the care for pregnant women and women were classified by risk category to determine their chances of complications and a better outcome for mother and baby (MNH, 2004). Focus antenatal is an individualized, client-

centered, (tailored on person's needs) comprehensive antenatal care and emphasizes on disease detection rather than risk assessment (Ablordeppey, 2011).

The implementation of focus antenatal care depends on policy, staff, guideline and logistics.

Policy: Ministry of Health adopted the goal-directed ante-natal care package, which is the focused ante-natal care model, to promote maternal and child health in Ghana.

Staff: Training and competence of staff improve the effective implementation of focus antenatal care. This training emphasized a minimum of four ANC client visits, the provision of private and confidential services, comprehensive and individualized care (including individualized counseling, blood pressure, weight and height taking, palpation, urine and blood testing, TT immunization, IPT and PMTCT), and continuous care throughout the entire period of pregnancy to enhance the detection of abnormalities. It also stressed on birth preparedness and complication readiness, effective referral. Creating avenue for continuous training of staff to improve technical practice in all health facilities (Nyarko et al., 2006).

Guideline: Such as reference manuals and protocols for focus antenatal care serve as a standard manual for staff to document procedures and to help improve the implementation of focus antenatal care.

Availability of logistics such as infrastructure, essential equipment, laboratory supplies and essential drugs helps to improve the implementation of focus antenatal care which brings satisfaction not only to the users, but also to the providers

1.5 Research questions

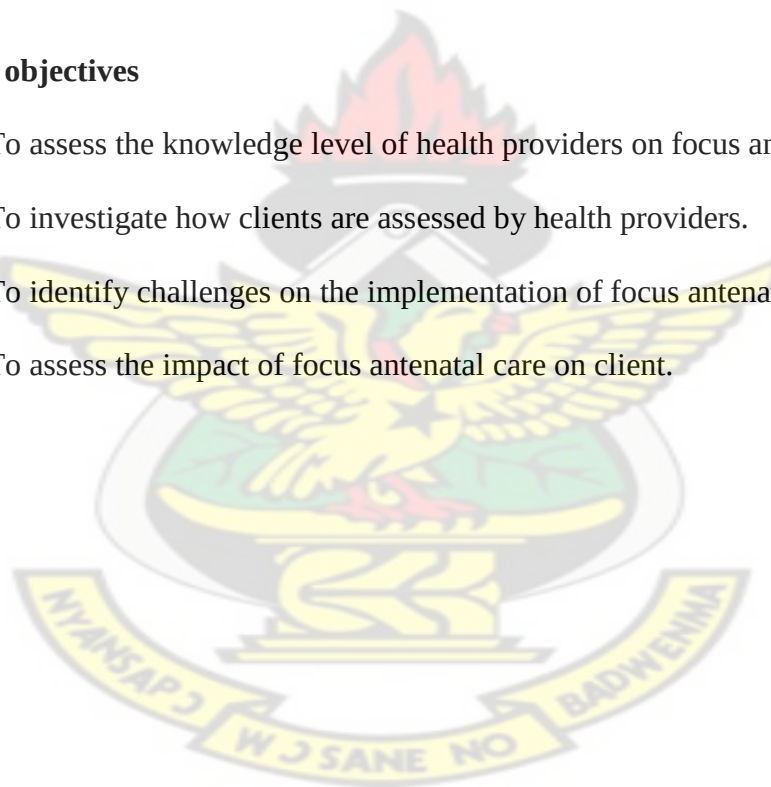
1. What is the knowledge level of staff on focus antenatal care?
2. How are clients assessed by providers?
3. What are the challenges in the implementation of focus antenatal care?
4. What is the impact of focus antenatal care on client?

1.6 General objectives

To evaluate the implementation of focus antenatal care in the Ho Municipality.

1.7 Specific objectives

1. To assess the knowledge level of health providers on focus antenatal care.
2. To investigate how clients are assessed by health providers.
3. To identify challenges on the implementation of focus antenatal care.
4. To assess the impact of focus antenatal care on client.



CHAPTER TWO

LITERATURE REVIEW

2.1 Focused Antenatal Care

It is a personalized care provided to pregnant woman, it highlights on the woman's overall health, her preparation for childbirth with a skilled health provider and readiness for the management of complications (emergency preparedness). It provides timely, friendly, simple and safe service to a pregnant woman. FANC brings standardized service provision since this means that midwives and other service providers will have a basic package that is offered to all clients irrespective of the location of the facility. It offers the pregnant woman an opportunity to know the care provider better and gives her the confidence to discuss general as well as personal issues. It gives the pregnant woman the chance to ask for clarification for instructions that she did not understand or may find difficult to comply with. It also gives opportunity to the partner and other family members to be part of the care and continuity of care during delivery and after delivery (Promised, 2010).

The concept of focus antenatal emphasized on quality of visits to frequent visits does not necessarily improve pregnancy out comes (Kinzie and Gomez, 2004). All pregnant women are at risk of complications. Therefore all pregnancy should be assessed, on evidence based, goal –directed interventions that are appropriate to the gestational age of the pregnancy and to address the most prevalent health issues affecting the expectant woman. It also emphasizes that care is given by a trained health worker or a midwife (USAID, 2007).

The major goal of FANC is to support expectant mothers to maintain normal pregnancies through identification of pre-existing health conditions that may affect

outcome of pregnancies such as malaria, HIV, anemia, and other sexually transmitted infections. It also includes identification of heart disease, diabetes, malnutrition and tuberculosis, early detection and treatment of problems and complications of anemia, infection, vaginal bleeding and hypertensive disorders of pregnancy that may turn out to be life threatening if left untreated (MNH, 2004).

FANC also encourages health promotion and disease prevention activities which include vital health care information, such as required antenatal visits, essential services, danger signs (how to recognize danger signs and where to get help), good nutrition, importance of rest, breastfeeding, family planning and risks of using tobacco, alcohol, local drugs and traditional remedies and birth preparedness. Complication readiness and planning for a skilled attendant at birth, clean and safe delivery, place of birth, transport to get to the delivery facility, items for birth, potential blood donors, how to handle emergencies, newborn care and support during and after birth are also included in FANC (Villar and Bergsjg, 2010). In FANC, the activities are spread within the recommendation of four targeted minimum antenatal visits, scheduled at specific times in the pregnancy. First visit takes place before four months (16 weeks) or as early as possible, when a woman realizes she has missed her menses. The early initiation of antenatal care is imperative to, identify, prevent and treat complications. Second visit takes place in the sixth or seventh month (24-28 weeks) and the third in the eighth month (32 weeks). Screening is continued and the individualized birth plan is further built. Monitoring also occurs during these visits. The fourth visit takes place in the ninth month (36 weeks) to monitor and update the individualized birth plan. More visits may be necessary depending on the woman's condition and needs (Carroli et al., 2001).

2.2 Implementation of Focused Antenatal care

Implementation of the FANC involves the following health policies and guidelines as recommended by the WHO (2008) and protocols from the Ministry of Health. The guidelines explain steps to be taken when attending to expectant woman (Yengo, 2009).

2.2.1 Implementation of focused Ante-natal care in some Africa countries

The Government of Ghana adopted the WHO FANC model in a move to improve its accessibility, quality rather than quantity and continuity of ante-natal care services to pregnant women. It emphasizes on actions which is known to be effective in improving maternal or neonatal health, excluding other interventions that have not proved to be helpful. This model was welcomed by both Clients and health care providers because of its comprehensiveness and individualized care. Clients loved the individualized care approach and privacy during service delivery (Nyarko et al., 2006).

Kenya's Ministry of Health adopted the goal-directed ante-natal care package, which is the focused ante-natal care model, to promote maternal child health in the Kenya context. The study done, showed that focused ante-natal care is acceptable to both client and health care providers and is backed by the government of Kenya (Birungi et al., 2006).

2.3. Staff knowledge on Focus Antenatal

In order to provide FANC, health providers need to have the requisite training to provide a quality care to their clients. A comparative study done in Ghana by Frontiers showed most providers received training on different aspects of focused ANC during pre-service training. However, about three quarters of the providers did not have basic training on some key aspects of focused ANC such as counseling for HIV/AIDS infected clients and syphilis screening (RPR) test. Moreover, 10 out of 17 care providers who had training on

FANC reported having a fair knowledge on standard and guidelines of FANC (Nyarko et al., 2006). A study done in Dares Sallam, revealed that, knowledge gained from training covered the areas of FANC guidelines, danger signs, complications, birth preparedness, and IPT, ITN and health promotion. Also, training period of staff shown that, the length of training has significance, when linked to the course content because an in-depth curriculum is covered in a longer period of training (Yengo, 2009). Training in focused antenatal care did not seem to change the use of antenatal care but may have led to improvement of some specific services (provision of preventive treatment such as iron, folic acid, and SP), a higher rating of the quality of care offered in the ANC and an increase in the number of deliveries with a skilled health care provider, although, there was no improvement in other important services such as the provision of information (Ouma et al., 2010).

A study done in Nigeria shows that, most health providers were not aware of focus antenatal care and most of the health workers obtained information about focus antenatal care from the internet and seminars, whiles some could not remember how they received the information. Majority of health workers know and agreed that the goal for focus antenatal care is to prepare the pregnant woman for delivery and possible complication, whiles few said it was to ensure adequate exercise and others also said is to encourage the practice of traditional birth attendant (Amosu et al., 2011). Many studies reflect weakness in the knowledge and management of PMTCT for HIV and syphilis (Nyarko et al., 2006). A study conducted in Tanzania, found that rural areas have poorly qualified health workers than in the urban areas (licetto et al).

2.4 Assessment of client by health providers

2.4.1 Early detection and treatment of complication and Existing Disease

Even though, most pregnancies are normal, one of the goals of focused antenatal care is the early detection and treatment of disease during pregnancy through focused assessment given by a skilled health provider who takes history, examines and does relevant investigations pertaining to client history. Existing conditions such as Malaria, Tuberculosis, HIV, Sexually transmitted infection, anemia and hypertension, which are prevalent and have an impact on maternal and neonatal health (USAID,2007).Comparative study conducted in Ghana showed that health workers are unable to take comprehensive history to detect early diseases (Nyarko et al.,2006). Similarly, study done in Kenya revealed that providers record some elements but ignore others (Birungi et al., 2006). Not all the procedures required to detect diseases in pregnancy were followed. For example, blood samples for laboratory analysis, measuring blood pressure and palpating for fundal height were omitted (Nyarko et al., 2006).These findings were not far different from that detected in Acornhoek district and Kenya (McINTOSH, 2010).Similarly, a study conducted in Tanzania revealed that assessments of client on blood pressure measurements and abdominal examinations were done during ANC visits while urine testing for albumin or sugar and hemoglobin level determination were rarely done .The reasons for assessment were usually not explained to the women (Sarker et al., 2010) . On the other hand, poor quality of routine ANC has been recognized in terms of its ability to prevent, diagnose or treat complications (Mrisho et al., 2009). Malaria in pregnancy increases the chance of maternal anemia, abortion, stillbirth, prematurity, intrauterine growth retardation and infant low birth weight (WHO, 2008). It is estimated that about 30% of deaths that occur during pregnancy in Africa are due to malaria infection and the result of anemia, and is

estimated to cause as many as 10,000 maternal deaths each year in Africa (WHO, 2008). The burden of Malaria in pregnancy could be minimized by use of “Intermittent Presumptive Treatment” (IPT) and intensifying early detection and prompt treatment of cases among pregnant women. Setting up standards assures at least an improvement of care rendered to client. Treatment of syphilis during pregnancy is another intervention which has proven to be effective in reducing perinatal mortality. Maternal-fetal transmission of syphilis during pregnancy is high and syphilis testing and treatment during antenatal period has proven to prevent stillbirths in most women (Waston et al., 2005).

2.5 Prevention of disease and complication

Individualized care help to maintain normal progress of pregnancy which includes prevention measures such as immunization against tetanus, malaria, anemia, STIs such as HIV/AIDS, protection against vitamin A and or iodine deficiency that can be life saving to a mother .

All pregnant women in malaria-endemic areas are at risk. Malaria causes up to 15% of anemia in pregnancy. In Africa, anemia due to malaria causes up to 10,000 maternal deaths per year. Protection against malaria for women living in malaria endemic zones can be achieved through the use of insecticide-treated nets (ITNs) Intermittent preventive treatment (IPT) and effective case management of malaria illness (Gloyd, 2013).

Intermittent preventive treatment of malaria during pregnancy is a key intervention in the national strategy for malaria control. Sulphadoxine Pyrimethamine (SP), the current drug of choice is recommended to be administered in the second and third trimesters of pregnancy during ANC visits. Pregnant women and ANC staff were generally aware of

SP as the drug recommended for IPTp (Mubyazi et al., 2005). Another study found that despite high awareness about the IPTp strategy, most women received only one dose SP as preventive treatment, and clients are not educated about the SP and the importance of returning for the subsequent doses (Mubyazi et al., 2005). Similarly, a study done in Kenya showed that, providers prescribe first dose of SP than the second dose and client are not asked whether they were allergic to SP before prescribing, and none were given an explanation on the importance of returning for the second dose of SP or about the possible side effects from the first dose. On the other hand, clients were counseled on the use of ITN, and significantly more clients received an explanation on the purpose of the TT injection (Birungi et al., 2006). Studies done in Ghana on prevention of anemia, revealed that providers frequently prescribed iron tablets and folic acid but this was not accompanied by appropriate explanation on how to take them and the purpose for taking them. On the other hand, feasibility study done in Kenya revealed that, providers were more likely to explain the purpose of prescribing iron/folic acid to the client during the third and fourth visit (Nyarko et al., 2006). Antenatal period is as an entry point for HIV prevention and care, particularly for the prevention of HIV transmission from mother to child. This has led to improved interest of client in accessing and use of antenatal care services (Abou-Zahr and Wardlaw, 2003). Concerning Counseling on STI/HIV/AIDS, few clients received counseling on specific STI/HIV. Most clinics still provide counseling through mass educational talks during waiting time rather than with individual clients (Nyarko et al., 2006).

2.6 Health promotion and prevention of disease

It is essential for provider and the client to discuss issues affecting a woman's health as well as that of the newborn baby. The discussion includes how to recognize danger signs,

what to do, and where to get help. Health education on benefit of good nutrition, the importance of iron intake and adequate rest the risk of using tobacco, alcohol, medications, local drugs and herbs must be made known to the woman. The pregnant woman is informed about family planning, and what the benefits are. Regarding breast feeding, aspects such as health and practical benefits, exclusive breastfeeding and significance of immediate breastfeeding after birth are explained (Villar, 2003). It is important that 'all women understand why they need to have a skilled attendant for their delivery, and how to access obstetric care for emergencies. Which is one of the most promising, but at the same time most challenging components of the new ANC model (Both et al., 2006).

2.7 Birth preparedness and complication readiness

It is the process of planning for a normal birth, anticipating the actions needed in case of an emergency. FANC service should discuss component of birth plan which include place of delivery, possible movement close to chosen place for delivery, type of delivery, skilled attendant, transportation funds, birth companionship, what items to prepare, support during and after birth (partner involvement) it also include recognition of danger signs during pregnancy, choose of decision maker, identification of blood donor and donation of blood before onset of labor and psychological preparedness for surgical intervention (Promise, 2010). Decisions and preparation for intrapartum care are processes that occur over time, yet they are often viewed from a static perspective.

Many Studies showed that, providers inform clients about progress of the pregnancy during the first visit, and advise clients more in the fourth visit about supplies to have on hand (Birungi et al., 2006). On the other hand, studies done in Ethiopia revealed that primigravida women are well informed on all the components of BPACR, than the

multiparous women. The study also revealed that only few of pregnant women were well prepared for delivery and obstetric complication, identification of a trained birth attendant, identification of a health facility, arrangement for transport, identification of a blood donor and saving of money for emergencies (Hailu et al., 2011). Although, Hailu et al., 2011, assessed many of the components of the birth preparedness plan, it did not find out whether the respondents had made ready their layette which is also another important component of the birth preparedness plan. Another study reveals the emotional support, encouragement and good communication health provider's give client before labor and delivery (Douglass et al., 2007). According to Mihret and Mesganaw (2008), in a research in Ethiopia, respondents had a high knowledge on birth preparedness and complication readiness but a low knowledge on danger signs. Also respondents made arrangements for transport ahead of time. Findings from Koupela district in Burkina Faso indicated that more women knew about the birth preparedness and complication readiness plan and could even give details of the plan. Many of the respondents were able to mention at least five danger signs of pregnancy, the need to deliver with a skilled attendant, most women save money for delivery, but had less concrete plans for transportation (Moran et al., 2006).

2.8 Consultation to encourage continuity in care

Continuity of care is defined in these studies as care given by health providers, either during pregnancy, labor and postnatal period. Women want consistent care from caregivers that they trust (Green et al., 2000).

Feasibility study conducted in Ghana on FANC shows that health Providers fairly give information to client about the date for return to the clinic or report if there is any

problem (Nyarko et al., 2006) Another study revealed that clients do not keep to ANC visit appointment even when they start ANC clinic late (Ajayi et al., 2013).

2.9 Challenges of the implementation of Focus Antenatal Care

Availability of resources plays a useful role in provision of quality ANC. Though, despite the high ANC attendance in most developing countries, a major setback hindering quality of ANC is inadequate resources (Carroli et al., 2002).

Study conducted in Tanzania suggests that quality of care and effectiveness of ANC and PNC services, is through strengthening human resources in healthcare and improving living conditions for health care providers, as well as incentives for good job performance (Mrisho et al., 2009). According to Abou-Zahr and Wardlaw (2003), the factors influencing health workers' practices were poor implementation of the FANC guidelines, lack of trained staff and absenteeism, shortage of supplies and use of working tools that are not consistent with the Focused Antenatal Care guideline. Besides, majority of the antenatal interventions known to be effective, when carry out by a midwife or nurse or, indeed, lower-level health care workers such as auxiliary nurse, that had the necessary training, equipment and supplies and are appropriately supervised. However, for complicated cases it is imperative to call upon more specialized skilled personnel such as a medical doctor or even an Obstetrician gynecologist. In a qualitative study in Zimbabwe, health workers expressed concern over shortage of antenatal resources such as drugs, staff, electricity and debilitated conditions of the facility (Mathole et al., 2005). In another study, inadequate human resources, infrastructure problems, lack of equipment, gloves and reagents for urine testing and VDRL, and weak health referral systems to support case management of complications of pregnancy was cited as the major shortfalls in providing quality ANC (Licetto et al.).

2.9.1 Policy Guidelines and Protocols

A national policy and locally adapted guidelines and effective monitoring systems must be in place to protect the rights of all women, regardless of their socioeconomic status or place of residence, and to provide quality ANC (Licetto et al.,). A Study done in South Africa revealed that, regardless of the magnitude of the HIV epidemic in South Africa, current maternity care guidelines do not address HIV services, Tuberculosis screening and treatment, male involvement, health education on birth preparedness and postnatal visit serve as hindrance for providing quality services (Ditlopo et al., 2008).

According to Lincetto, skilled providers particularly in rural and remote areas, lack standards of care and protocols. Also, an assessment conducted in Tanzania found that these were twice as many poorly qualified health workers in rural facilities than in urban facilities.

2.10 Impact of FANC

2.10.1 Skilled Delivery

The use of skilled delivery care is crucial for preventing death and disability related to Complication of pregnancies and childbirth (Graham, et al., 2001).

Antenatal care has the prospective to serve as a strategy for increasing the use of a skilled healthcare provider at delivery (Abou-Zahr and Wardlaw, 2003). On the whole, there appears to be a steady link between the use of antenatal care and assisted delivery by a professional health care provider – doctor, nurse or midwife. Women reporting at least four antenatal care visits were on average 3.3 times more likely to deliver with skilled health provider than for those who had no ANC visit (Abou-Zahr and Wardlaw, 2003).

A comparative study conducted in Kenya, finding the effect of training of health workers on FANC revealed that more clients delivered with a skilled attendant who were trained in FANC than those who were not trained (Ouma et al.,2010).Similarly, women receiving more ANC visits were more likely to seek facility-based delivery care (Pervin et al.,2012).

2.10.2 Number of Visit

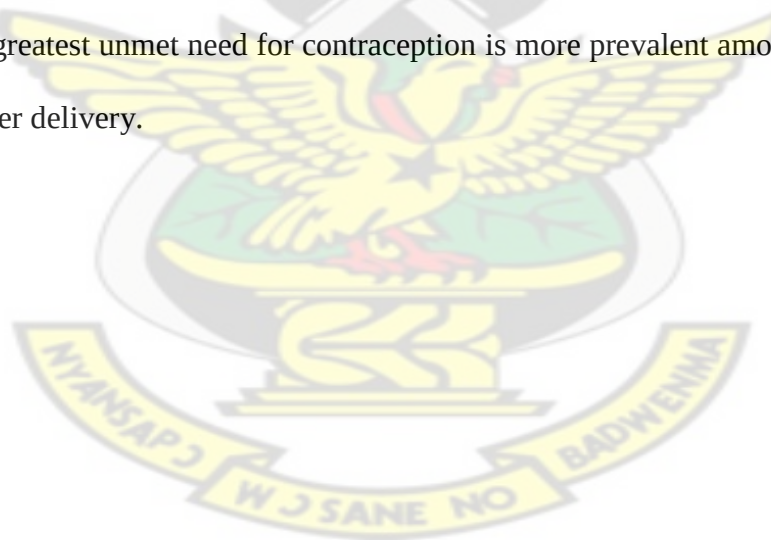
WHO recommend four ANC visits for women whose pregnancy are progressing normal with the First visit in the first trimester, takes place before four months (16 weeks) or as early as possible, when a woman realizes she has missed her menses. The early initiation of antenatal care is imperative to, identify, prevent and treat complications. Second visit takes place in the sixth or seventh month (24-28 weeks) and the third in the eight month (32 weeks).Screening is continued and the individualized birth plan is further built. Monitoring also occurs during these visits. The fourth visit takes place in the ninth month (36 weeks) to monitor and update the individualized birth plan. More visits may be necessary depending on the woman's condition and needs (Carroli et al., 2001).

Antenatal attendance improves perinatal outcome including reduction in the rate of preterm labor. However, most women starts antenatal visit only from second semester. Early initiation of visit to the clinic before sixteen weeks of gestation gives sufficient time for essential diagnosis and treatment of diseases such as treatment of STIs and management of anemia (Tuladhar and Dhakal, 2011).Similarly, a study done in Kenya and Tanzania revealed that pregnant women were advised to start attending ANC before the 16th week of gestation but, 80% of pregnant women initiate ANC in the second trimester regardless of the availability of free ANC services. One of the reasons for a late first visit was to avoid more visits (Mrisho et al., 2009). Another study in Ekiti State

revealed that clients did not go early in pregnancy to register. They were at least 36 weeks before they went to register for the first time, where they even went to register early they did not keep to the scheduled (Ajayi et al., 2013).

2.10.3 Family Planning Uptake

The antenatal and postpartum are the essential period to provide counseling on birth spacing and postpartum contraception use, since most women take advantage of the health care system during these periods. However, they do not get much benefit because family planning and antenatal centers are separate facilities (Bitar, 2011). A Study carried out in Dominican Republic, showed that patient received much information on provision of family planning services during antenatal clinic but few client received family planning services after delivery (Quiterio, 2008). According to Ross and Winfrey (2001), the greatest unmet need for contraception is more prevalent among women in the first year after delivery.



CHAPTER THREE

METHODOLOGY

3.1 Study design and methods

The study was a cross-sectional descriptive survey that was conducted to evaluate the implementation of focus ante natal care in the Ho Municipality. Eleven public health facilities and one clinic owned by CHAG were surveyed. The study was conducted between the month of August and October 2013.

3.2 Profile of the study area

The research took place in the Ho Municipality which is now one of the 25 political /administrative districts in the Volta Region of Ghana. The Municipality is the regional capital of the Volta Region and home to the Regional Health Directorate and is located in the middle zone of the Region. Ho Municipality is bordered on the North by Hohoe District, West by Asuogyaman District, East and South-East by Adaklu-Anyigbe.

It has a population of 192,423 projected from 2010 Population and Housing Census with a growth rate of 2.5%. For administrative convenience for health service delivery, the municipality is demarcated into five sub municipalities which are organized along traditional/electoral lines which include: Ho Central, Hokpeta, Norvisi, Sokode/Akrofu and Dutasor. Ghana Health Service is represented in the Ho Municipality by the Municipal Health Directorate, with the Municipal Director of Health Services and his core management team. The Municipality has the regional hospital while the sub municipalities have health centers and CHPS zones managed by the sub municipal team leaders.

The relief of the municipality could be grouped into two (2) main parts namely

- Mountainous areas and
- Lowland areas

The mountainous portion is to the North and Northwest part of the municipality. This includes part of the Togo Range having heights from 183 to 853 meters. The mountainous areas stretch from Awodome to Avatime and Ashanti-Kpoeta. The lowland areas are South of the municipality of heights between 60 and 162 meters. Exceptions within these areas are, Agbenu inselbegs (305metres) and the Abutia Hills (305metres). The rainfall pattern is bi-annual. The major one is normally from March to June with a break from July to August. The second rainy season then follow from September to November. The mean annual rainfall ranges between 2,000 mm and 1,020 mm. There are several species of trees such as Wawa and Mahogany. Forest conservation has been in practice and there are 31.83 sq km of forest reserve in the municipality at four (4) locations, thus Ho Hills, Kabakaba Hills, Abutia Hills and Klefe Headwaters.

Agriculture, petty trading, construction and formal sector employment are some of the key economic activities in the municipality. There are primary trunk roads with bitumen covering traversing the entire municipality in all directions, and feeder roads feeding into it. Some roads are untarred and difficult to use. Hospitality facilities in the municipality are increasing by the years. A major tourist attraction is the yam festival celebrated by the people in September every year. The municipality is made up of mainly Ewe ethnic group. The predominant religion is Christianity. There are however a number of traditional religious practitioners and Moslems.

There are 258 primary school, 123 Junior secondary school, 14 Senior High School, 1 Teacher Training College, 1 Nursing Training College, 1 Community Health Nurses Training College and School of Hygiene. There are 5 Commercial / Vocational schools,

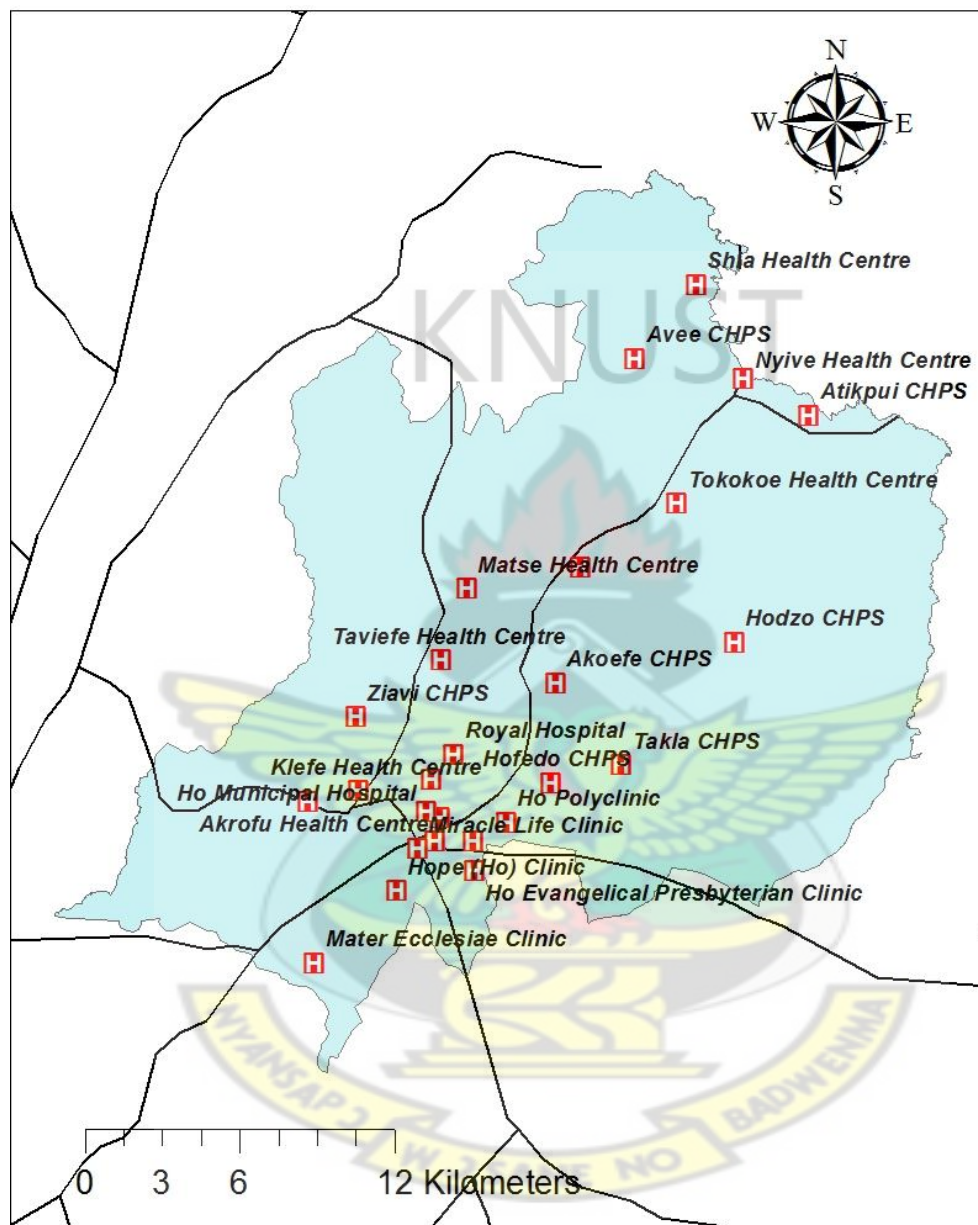
1 Technical Institute and 3 Tertiary Institutions, Ho Polytechnic, Adult College, Tsito and University of Health Allied Sciences.

KNUST



Figure 3.1

Ho Municipality with Health Facilities 2013



Source: 2013 Annual Report of Ho Municipal Health Directorate

OPERATIONAL POPULATION

The municipality has a total of 285,645 from the Ghana Statistical service with the target population as follows:

Total population	192,423	100
Males	9142	47.5%.
Females	100996	52.5%
Under 1	4917	2.6%.
Under 5	22706	11.8%
10-14years	20681	10.7%
15-19 years	19580	10.2%
70 +	10006	5.2%
Women in fertile age (WIFA)	50800	26.6%

Source: 2013 Annual Report of Ho Municipal Health Directorate

Table 3.1 Reproductive Health Performance of the Ho Sub-Municipality

Number	Service	2011	2012	2013
1	Ante Natal Clients Registration Rate $\frac{\text{Total no of registrant} \times 100}{\text{expected pregnancy projected}}$	87.1	88.9	90.8
2	Average Ante Natal visit per client $\frac{\text{Total no of registrant}}{\text{Total no of attendance}}$	39.6	68.9	49.2
3	Family planning acceptors $\frac{\text{Total no of acceptors} \times 100}{\text{Women in fertile age (WIFA)}}$	12.1	27.3	19.3
4	Maternal Deaths, per 100,000 live births	6.2	3.6	4.58
5	Still birth rate $\frac{\text{Total no of still births} \times 100}{\text{Total no of deliveries}}$	2.5	1.1	1.3

Source: 2013 Annual Report of Municipal Health Directorate

3.3 Data Collection Techniques and Tools

The Study focused on assessing (1) knowledge and skill of staff, (2) assessment of clients by health providers, (3) the challenges of the implementation of FANC and (4) the impact on client.

The study used three tools for the data collection, these are, structured questionnaire, observation checklist and records review. The questionnaires were given to the staff that provides ANC services at the facility to personally answer. Structured questionnaire was used to assess the, Socio-demographic characteristics of respondents and knowledge of staff. The structured questionnaire contained 16 items comprising 2 segments which include the staff background characteristics and basis of their knowledge. Some of the questions required “yes” or “no” answer, others required multiple answers. Guided observation check list was administered by the researcher during antenatal services to assess the practices against what focus antenatal care is supposed to be (critical assessment of client by health providers) and challenges of the implementation of focus antenatal care. ANC and delivery records were reviewed at each facility visited to determine the trend of outcome of antenatal care after the implementation of focus antenatal care.

Ethical consent

Consent form was signed by the participant after the purpose of the research had been explained. Each participant was reminded that participation was voluntary and the discussion would remain confidential.

Data entry

Each interview guide was numbered and those used were checked daily to avoid duplication of information. The data was collected between 9.00 am and 2.00 pm each day when ante natal clinic was at its peak. We tried to minimize interruption of conduct at ANC through convenient time for staff when there were fewer clients with staffs. One facility was visited each day, two nurses were interviewed and assessed daily according to the number of nurses working in ANC. This was done to coincide with their clinic days in order to make some observations using the checklist. Moreover data collectors revisit the facility when the day's work is not complete.

3.4 Study Population

The study population was health providers providing service in Volta Region.

Target population; Health workers, providing antenatal care services in the Ho municipality.

Inclusion criteria: Nurses providing antenatal care services.

Exclusion criteria; Nurses practicing in other sections of the maternity unit, nurses that are not rendering antenatal care services and all staff that provide antenatal services, but are on leave.

3.5 Study Variable

Table 3.2 Table of variables

No	Variable	Definition	Scale of measurement
1	Knowledge of staff	Qualification and level of knowledge	Ordinal
2	Assessment of client by providers	To observed what is done from the expected	Ordinal
3	Challenges of focus antenatal care	The physical health care facility as well as supplies of logistics to the health facilities.	Nominal
4	Impact of care	Output of client care	Nominal

3.6 Sampling Techniques

Purposive sampling was used to select respondents. Twelve (12) out of the twenty two (22) health facilities which provide antenatal care was selected for the study. All categories of nurses (Midwives, General nurses and Community health nurses) who work at antenatal department that were on duty were selected until the total number of thirty (30) was reached. An average of two nurses was interviewed in a facility each day.

3.7 Training of Data Collectors

Two-days training were organized for the data collection team which comprised of two data collectors, and a data manager. All the data collection tools were revised during this training session and a template for data entry and analysis was developed.

3.8 Pre-Testing

In order to ensure that the questionnaires are clear and well understood by the participants, questionnaire was pretested at Ketu South District Hospital, to ensure that the tools generate the data. After the tools have been tested, the needed modification and any identified flaws of the final questionnaire refined.

3.9 Data Handling

Filled questionnaires were checked for completeness, clarity and consistency at the end of the interview. All questionnaires were coded for easy data entry and analysis. Each questionnaire was given a unique number. The guided observations and the record review data were also prepared for data analysis. All the forms were kept in a plastic envelope, labeled and kept safely in a cabinet.

3.10 Data Analysis

The data was analyzed using Statistical Package for Social Sciences (SPSS) version 16.0 and the results presented using frequency tables and charts.

3.11 Ethical Consideration

Prior to the initiation of the research activities, ethical consent was granted by the committee for Human Research and Publication Ethics (CHRPE), KNUST. A written permission was obtained from the Volta Regional Health Directorate, Ho Municipal Health Directorate and the twelve facilities involved in the study. Each study participant completed a consent form before participating in the study. Each participant was reminded that participation was voluntary and the discussion would remain confidential. No information pertaining to participant's identity was recorded. Data summaries only

included descriptions of participants in aggregate form. Questionnaire was administered on one-on-one basis. The completed forms were kept under lock and key. Participants each were given a snack in appreciation of their participation. This study does not provide any direct benefits to the participants. Similarly, it did not pose any risk to participants, but the outcome will be use by policy makers which would mostly for the interest to the participants.

3.12 Limitations of the Study

Details of the health outcome to the mother were not researched into.

The outcome of the health of baby was not research into.

Data on the indicators of the impact of FANC from 2006 till 2012 was not available in some facilities.

3.13 Assumptions

It was assumed that there were no misconceptions of the study by the participants. The results of the study would be generalized to the practice of FANC across Health facilities in Ghana.

CHAPTER FOUR

RESULTS AND PRESENTATION OF ANALYSIS

4.1 Results

This work was carried out to evaluate the implementation of the effect of the FANC policy in the Ho municipality. The evaluation involved assessment of staff knowledge and practice of FANC, the availability of essential equipment and logistics, and the effect of FANC on some selected maternal health indicators at each facility.

4.2 General Observations

In all a total of 12 facilities were visited, 30 ANC staff interviewed (16 Community Health Nurses and 14 Midwives) 96 maternal health records were reviewed, ANC staffs were observed interacting with 96 clients. All the staff had heard of FANC.

4.3 Knowledge of ANC staff on FANC

To determine staff knowledge, 6 key items were examined. These are:

- a. The ability of the staff to define FANC
- b. The level of training received by the staff on FANC
- c. The knowledge of the staff on the components of FANC
- d. The staff familiarity with gestation at which to plan the visits.
- e. The Staff knowledge on the essential laboratory tests to request and
- f. The Staff familiarity with the key health messages to be given to the pregnant mother.

4.3.1 The ability of the Staff to define FANC

The ability of the staff to define FANC was based on their ability to mention these 6 elements of the definition namely client centeredness, individualized care, comprehensiveness, disease detection, classification into risk groups and skill care provision. The scores represent the number of the items mentioned. Inability to mention any of them scores zero and obtaining all scores 6.

Table 4.1 below shows that less than 25% knew the full complement of the definition of FANC.

Table 4.1 Familiarity with definition of FANC

Scoring	Number of respondent (N= 30)	Percentage (%)
0	1	3.33
1	13	43.33
2	3	10
3	3	10
4	1	3.33
5	2	6.67
6	7	23.33

Source: field questionnaire 2013

4.3.2 The level of training received by the Staff on FANC

The training received by staffs on FANC based on 10 key items namely comprehensive history taking, dangers signs in pregnancy, Individual birth planning, the role of birth partners during care, Counseling for prevention of sexually transmitted infection, Syphilis screening, P.M.C.T. of HIV, Medical management of HIV/AIDS infected clients, Antiretroviral therapy for HIV/AIDS were also examined and Physical examination of pregnant women were also observed. The scores represent the number of

areas staff has received training on. Training received in one aspect scores 1 and training in all scores 10.

According to table 4.2 less than 5% received training in all the aspect of FANC.

Table 4.2 Training received on FANC

SCORE	Number of respondent (N= 30)	Percentage (%)
1	2	6.67
2	1	3.33
3	2	6.67
4	1	3.33
5	4	13.33
6	7	23.33
7	7	23.33
8	2	6.67
9	3	10
10	1	3.33

Source: field questionnaire, 2013

4.3.3 The staff familiarity with the components of FANC, gestation at which to plan visits and also the essential laboratory tests to request

Knowledge of the components of FANC is based on 4 key items .The scores represent the number of the items mentioned. Stating one aspect scores 1 and obtaining all scores 4.

Staff's ability to mention the gestation at which to plan visit: (first visit less than 16weeks, second visit: 16-28weeks, third visit- 28-32 weeks and fourth visit 32-40weeks). The scores represent the number of the items mentioned. Inability to mention any of them scores zero and obtaining all scores 4.

The basic laboratory tests to request are hemoglobin, sickling, VDRL, HIV status, stool and urine for routine examinations. The scores represent the number of the items stated. Inability to mention any of them scores zero and obtaining all scores 6

Table 4.3 indicates more than 50% of staffs were familiar with the full complement of the components of FANC, also less than 40% of staff knew the number of schedule visits to be done by clients . Only 30% of the respondents knew the essential laboratory tests to request.

Table 4.3 Familiarity with components of FANC, gestation at which to plan visits and with essential laboratory tests to request.

	Scoring	Number of respondent (N= 30)	%
Familiarity with components of FANC	1	7	23.33
	2	4	13.33
	3	2	6.67
	4	17	56.67
Familiarity with gestation at which to plan visits	0	12	40
	1	4	13.33
	2	1	3.33
	3	2	6.67
	4	11	36.67
Familiarity with essential laboratory tests to request	0	6	20
	1	5	16.67
	2	3	10
	3	1	3.33
	4	1	3.33
	5	5	16.67
	6	9	30

Source: field questionnaire, 2013

4.3.4 The staff familiarity with key health messages to be disseminated to the pregnant mother

The health messages to give that is nutrition, personal hygiene, birth plan and complication, rest and exercise, family planning, ITN, IPT and danger signs were also assessed. The scores represent the number of key messages to give. Inability to mention any of them scores zero and ability to mention all scores 8.

Table 4.4, reveals that awareness of health providers on the areas which health education should cover at ANC was low. Only 10% knew all the health messages to be given.

Table 4.4 Familiarity with key health messages to give

Score	Number of respondent (N= 30)	%
1	0	0
2	0	0
3	0	0
4	7	23.33
5	13	43.33
6	6	20
7	1	3.33
8	3	10

Source: field questionnaire, 2013

4.4 Practice of FANC by ANC staff

To evaluate their practice of FANC, the interaction of ANC staff with their clients was observed and their performance on obtaining history, examination, request for essential laboratory tests, prescription of ANC drugs, and completing of ANC records book were observed. The following were noted on the frequency at which enquiry on key indices were made.

4.4.1 Obtaining history on key indicators from clients

Table 4.5 examined the frequency at which history was taken on key indices on a client. On vagina bleeding, staffs are required to enquire into the symptoms of bleeding, color and the amount of bleeding. For anemia, symptoms such as dizziness, palpitation, weakness and breathlessness on slight exertion must be enquired into. Symptoms of Malaria- bitterness in the mouth, headache and fever must be enquired into. Staff must examine for symptoms and signs of hypertension which are dizziness, blurred vision, palpitations, headache and edema of the feet and hands. Pruritus, abnormal vaginal discharge and painful urination are symptoms of STI which staff must enquire about. Table 4.5 indicates that staffs generally enquired more about hypertension and STI/HIV but less on vagina bleeding.

Table 4.5 Obtaining history on key indicators

History Taken N=96	N	(%)
Vagina bleeding	32	33.3
Anemia	54	56.3
Malaria	60	62.5
Hypertension	84	87.5
STI/HIV	78	81.3

Source: field questionnaire, 2013

4.4.2 Examination of ANC clients by health workers

Health workers were observed taking blood pressure, maternal weight, doing abdominal palpations and taking fetal heart rates. Abdominal palpation and the fetal heart rates of fetus as were conducted on all clients as shown in Table 4.6. Blood pressure was not done for all clients because the apparatus were faulty.

Table 4.6 Examination of ANC clients by health workers

Physical Examination =96	N	%
Blood pressure	84	87.5
Abdominal palpation	96	100
fetal heart rate	96	100
Weight	92	95.8

Source: field questionnaire, 2013.

4.4.3 Essential laboratory investigations conducted on ANC clients

Urine for protein, HIV Screening, and HB were the essential laboratory investigations used for the assessment. Less than 70% of the clients were screened for protein in urine.

Table 4.7 Essential laboratory investigations conducted on ANC clients

Essential Laboratory Investigation N=96	N	%
Protein in urine	60	62.5
HIV Screening	34	35.4
HB	49	51.0

Source: field questionnaire, 2013.

4.4.4 Prescription of drugs to clients

From Table 4.8, there was no consistency in the prescription of ANC drugs. All the clients were given Iron/folate drugs and a few were given TT but none was educated on the drug use.

Table 4.8 Administration of drugs to clients

Drug Treatment N=96	N	(%)
TT	36	37.5
SP	62	64.6
Iron drug /folate	96	100
Anti malaria	21	21.9
Education on drugs	0	0

Source: field questionnaire, 2013

4.4.5 Completing maternal health records

To determine the level at which maternal health records were completely filled, sections of the maternal health books were examined. None of the sections was completely filled at the facilities. Table 4.9 illustrated the level of completeness

Table 4.9 Completing of maternal health records

Indicator	Complete	Partial	Blank
Personal history	4 (33.3%)	8 (66.7%)	0
Obstetric history	4 (33.3%)	7 (58.3)	1 (8.3%)
Lactation history	4 (33.3%)	7 (58.3)	1 (8.3%)
Progress histories	9 (75%)	3 (25%)	0
Drug history	1 (8.3%)	8 (66.7%)	3 (25%)
Contraceptive history	1 (8.3%)	8 (66.7%)	3 (25%)
Medical/surgical history	3 (25%)	9 (74%)	0
Physical	2 (16)	7 (58%)	3 (25 %)
Investigational History	1 (8.3%)	9 (74%)	2 (16.6%)
HIV/AIDS	2 (16.6%)	6 (50%)	4 (33.3%)
Family	3 (25%)	5 (41%)	4 (33.3%)

Source: field questionnaire, 2013

4.5 Availability of essential logistics and equipment for the implementation of focus antenatal care

The availability of essential logistics and equipment is necessary for the implementation of FANC. These were defined in terms of availability of midwives, infrastructure, essential antenatal drugs, essential equipment, essential laboratory supplies and guidelines/referral manuals for proper execution of FANC. Using a checklist detailed in table 4.10 the availability of these resources were determined.

Availability of a midwife was scored 1

The types of infrastructure required with a score of 1 for each availability. These are waiting room, cubicle for counseling, cubicles for examination, consulting room, tap water and electricity, laboratory and toilet facility.

Essential drugs required are: Tetanus Toxoid, Folic acid, Ferrous Sulphate and Sulphadoxine Pyrimethamine. Availability of each drug scores 1 on the checklist.

Availability of each of these essential equipment scores 1. These are blood pressure apparatus, stethoscope, and fetoscope, adult scale, measuring tape, thermometer, vaginal speculum and gynecological table.

Available essential laboratory supplies required with a score of 1 for each are: Reagent for urine, VDRL/RPR for Syphilis, Elisa for HIV, reagent for HB, pregnancy test kit, disposable glove, urine specimen bottle and rapid test for Malaria.

Guidelines/reference manuals expected to be present are: Safe Motherhood Protocol, Syndromic management of STIs, Clinical diagnosis of STIs, Standard treatment guidelines, Malaria treatment guidelines, HIV/AIDS counseling, PMTCT, referral protocol and teaching Aids for ANC. Availability of any was scored 1.

Almost all the facilities had essential drugs, equipment and laboratory supplies. The following health centers Matse, Klefe and Taviefe had no Midwives. Takla CHPs zone and Matse health center each had only 1-2 infrastructure out of the 7 required.

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Table 4.10 Inventory and needs assessment

summary of challenges	Midwives	Infrastructure required=7	Essential Antenatal Drugs required=4	Essential Equipment required=8	Essential Laboratory Supplies required=8	Guidelines/ Reference Manual required=9
Health facilities	Number	Available	Available	available	available	available
Shia Health Center	1	5	4	5	8	7
Nyive Health Center	1	4	4	5	8	6
Hofedo Chps Zone	1	3	4	6	7	5
Volta Regional Hospital	2	6	4	8	8	8
Ho Municipal Hospital	4	6	3	8	8	4
Ho Polyclinic	1	5	4	7	8	4
Klefe Health Center	0	4	4	6	5	3
Taviefe Health Center	0	4	4	6	4	3
Matse Health Center	0	2	4	5	5	5
Matter Ecclesiae Clinic	1	5	4	6	8	4
Akrofu Health Center	1	3	3	6	7	7
Takla Chps Zone	0	1	4	5	7	4

Source: field questionnaire, 2013

4.6 Needs assessment according to health facilities

12 facilities assessed on 6 indicators such as availability of logistics and equipment and scored 0-12 accordingly. 0 means no facility has logistics available and score 12 means

all facilities has available logistics and equipment. As illustrated below according to logistics available.

4.6.1 Infrastructural availability for FANC

All the facilities had consulting rooms, but no facility had the full complement of the other infrastructure for FANC.

Table 4.11 Availability infrastructural for FANC

FACILITIES STUDIED N=12		
	N	%
Waiting room	9	75.0
Cubicles for counseling	0	0.0
Cubicles for examination	3	25.0
Consulting room	12	100.0
Tap water and electricity	8	66.7
Laboratory	7	58.3
Toilet facility	9	75.0

Source: field questionnaire, 2013

4.6.2 Availability of essential antenatal drugs for FANC

Almost all the facilities have all the essential antenatal drugs for focus antenatal care services. This is established in Table 4.12 below.

Table 4.12 Availability of essential antenatal drugs for FANC

FACILITIES STUDIED N=12		
	N	%
Tetanus toxoid	12	100.0
Folic acid	11	91.7
Ferrous sulphate	12	100.0
Sulphadoxine pyrimethamine	11	91.7

Source: field questionnaire, 2013

4.6.3 Availability of essential equipment for FANC

From Table 4.13 below, all facilities had almost all the essential equipment but less than half of them had vagina speculum and gynecological tables,

Table 4.13 Availability of essential equipment for FANC

FACILITIES STUDIED N=12		
	N	%
Blood pressure apparatus	9	75.0
Stethoscope	11	91.7
Fetoscope	12	100.0
Adult scale	11	91.7
Measuring tape	12	100.0
Thermometer	11	91.7
Vagina speculum	5	41.7
Gynecological table	2	16.7

Source: field questionnaire, 2013

4.6.4 Availability of essential laboratory supplies for FANC

Reagent for urine testing was available in only 58.3% of the facilities, but most of them had all the essential laboratory supplies, as shown in Table 4.14 below.

Table 4.14 Availability of essential laboratory supplies for FANC

FACILITIES STUDIED N = 12		
	N	%
Reagent for urine	7	58.3
VDRL/RPR	9	75.0
Elisa for HIV	12	100.0
Reagent for HB	9	75.0
Pregnancy test	12	100.0
Disposable glove	12	100.0
Urine specimen bottle	12	100.0
Rapid test for malaria	10	83.3

Source: field questionnaire, 2013

4.6.5 Availability of guidelines/reference manuals for FANC

More than 90% of all facilities had referral protocol and Malaria treatment guideline but none had clinical diagnosis of STIs guidelines

Table 4.15 Availability of guidelines/reference manuals for FANC

FACILITIES STUDIED N=12		
	N	%
Safe motherhood protocol	7	58.3
Syndromic management of STIs	1	8.3
Clinical diagnosis of STIs	0	0.0
Standard treatment guideline	10	83.3
Malaria treatment guideline	11	91.7
HIV/AIDS counseling	4	33.3
PMTCT	6	50.0
Referral protocol	11	91.7
Teaching Aids for ANC	10	83.3

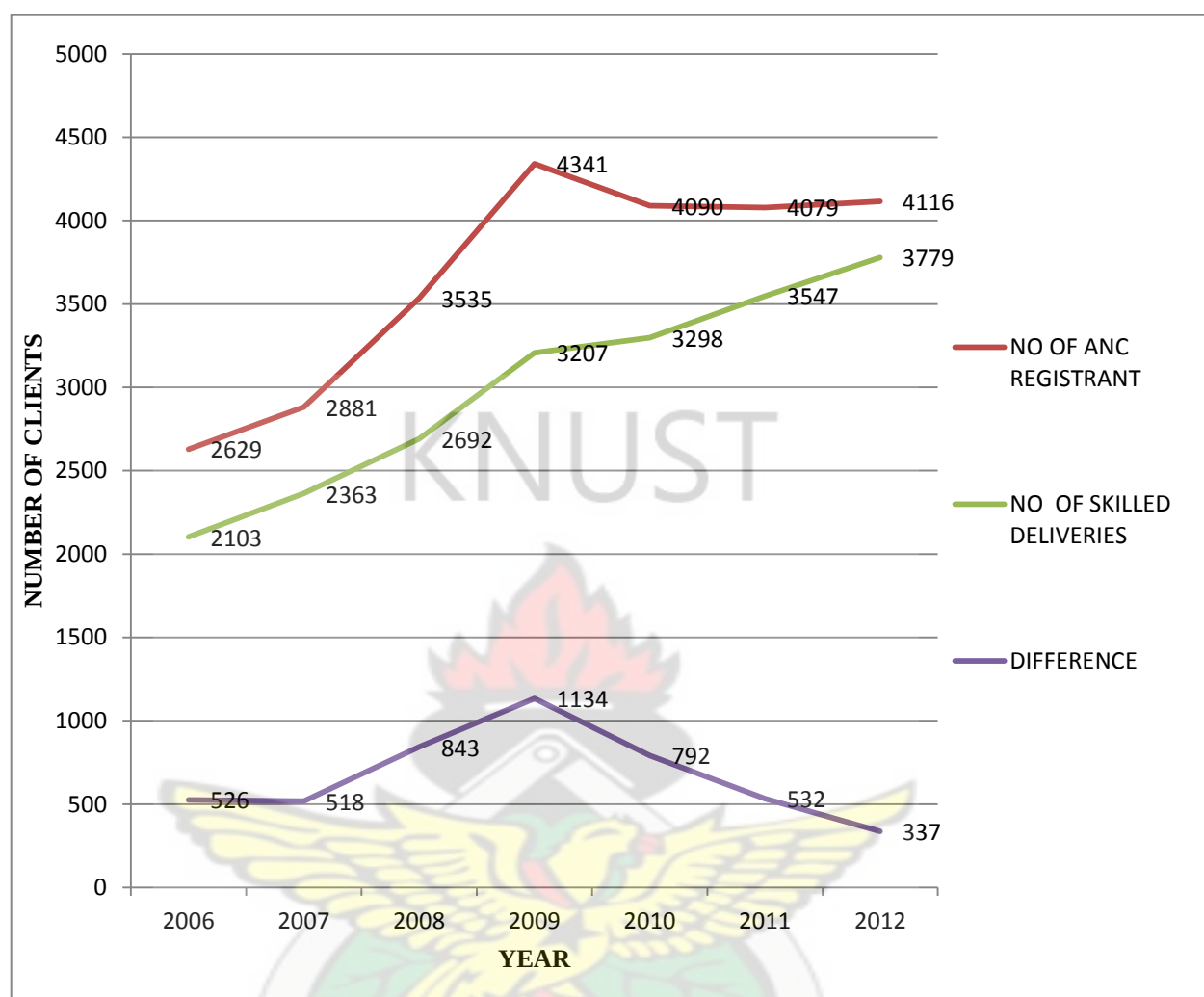
Source: field questionnaire, 2013

4.7 Effect of focus antenatal care on client

The impact of FANC was assessed based on the number of ANC registrants and number of skilled delivery, over a period of six years (2006 to 2012).

The effect of FANC: ANC registrants were higher than the number of skilled delivery. Data did not show consistency in the pattern of selected indicators. There were incomplete data in some health facilities. Figure 4.1 shows the trend in the number of pregnant women who attend ANC and the number of skilled deliveries since the introduction of FANC in the health facilities within the Ho municipalities. Results showed are from 2006 to 2012. The number of ANC registrants increased from the year 2006 to 2009 from 2629 pregnant women through to 4341 pregnant women, but fell in 2010 and 2011 from 4090 persons to 4079 persons. The number of pregnant women in attendance increased in 2012 to 4116 persons. However, the aforementioned results compared the number of skilled deliveries showed continuous marginal increase from the year 2006 to 2009, but declined in 2010 and then continued to increase from 2010 to 2012. The overall results indicate that since the introduction of focus antenatal the number of pregnant women who registered and the number of skilled deliveries continuously increased, although there was a slight decline in numbers between 2009 and 2010.

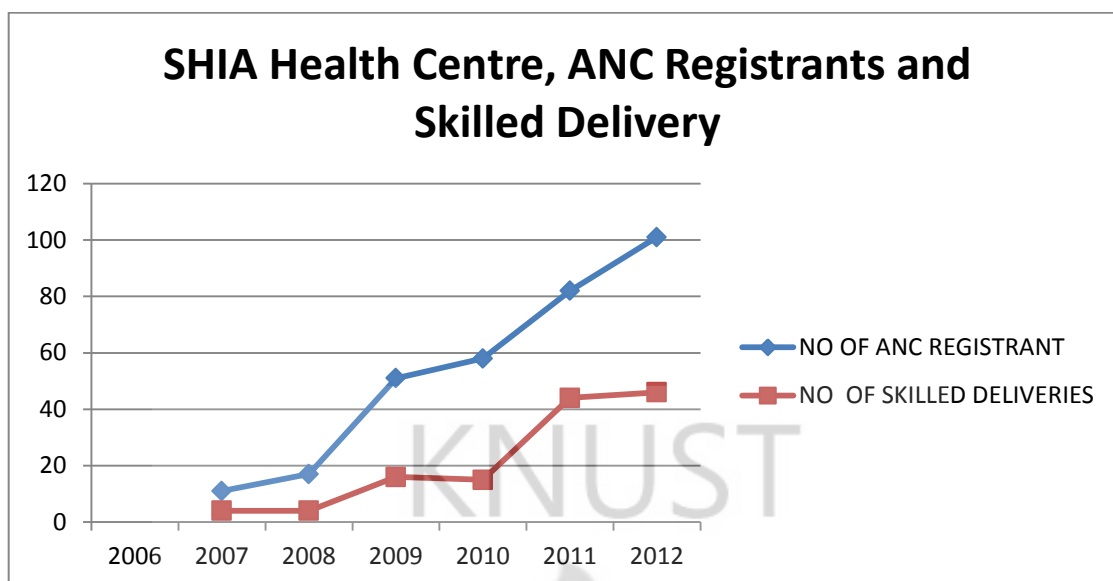
Figure 4.1 Impact of focus antenatal care in the health facilities



Source: field questionnaire, 2013

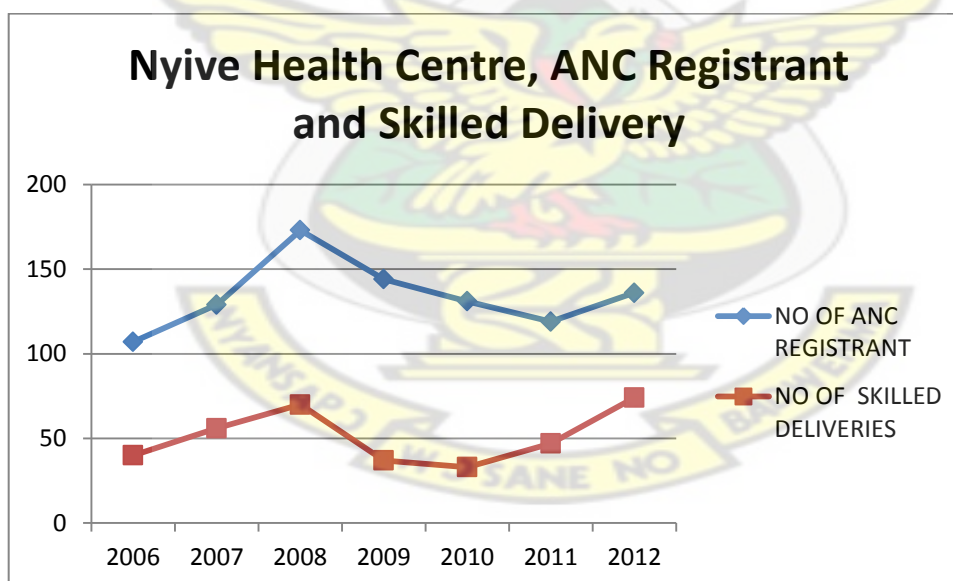
Below are the impacts of FANC in the various facilities. Number of ANC registrant and of number of skilled deliveries are almost the same in 2007, but the subsequent years 2008 -2012 the number of registrant and the number of skilled deliveries are not equal. There is a wide gap between number of registrant and the number of skilled deliveries recorded. This has reflected in figure 4.2- 4.4 (Shia, Nyive and Akrofu health centres). On the other hand figure 4.5 -4.6 the gap between number of ANC and skilled deliveries are close.

Figure 4.2 Impact of focus antenatal care on client at Shia Health Centre



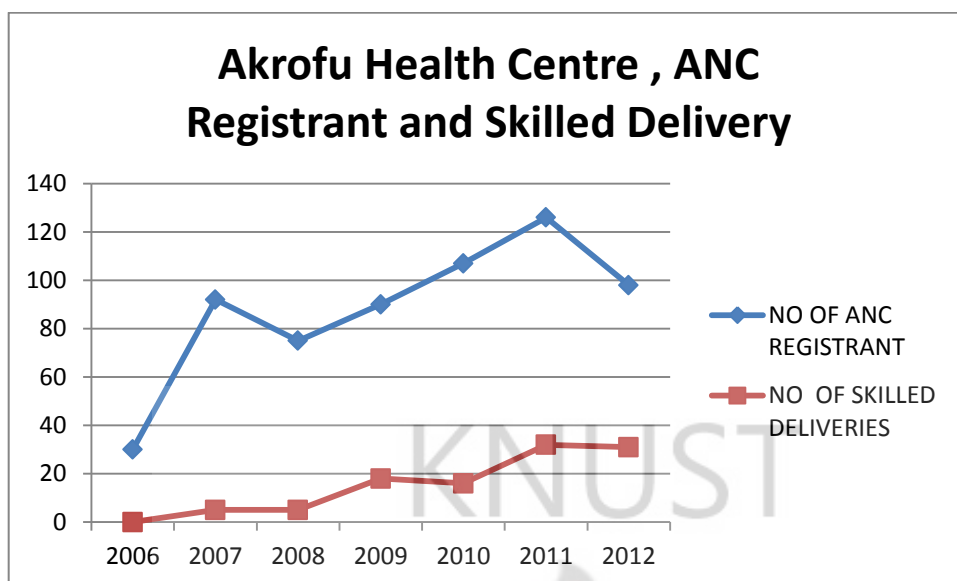
Source: field questionnaire, 2013

Figure 4.3 Impact of focus antenatal care on clients at Nyive Health Centre



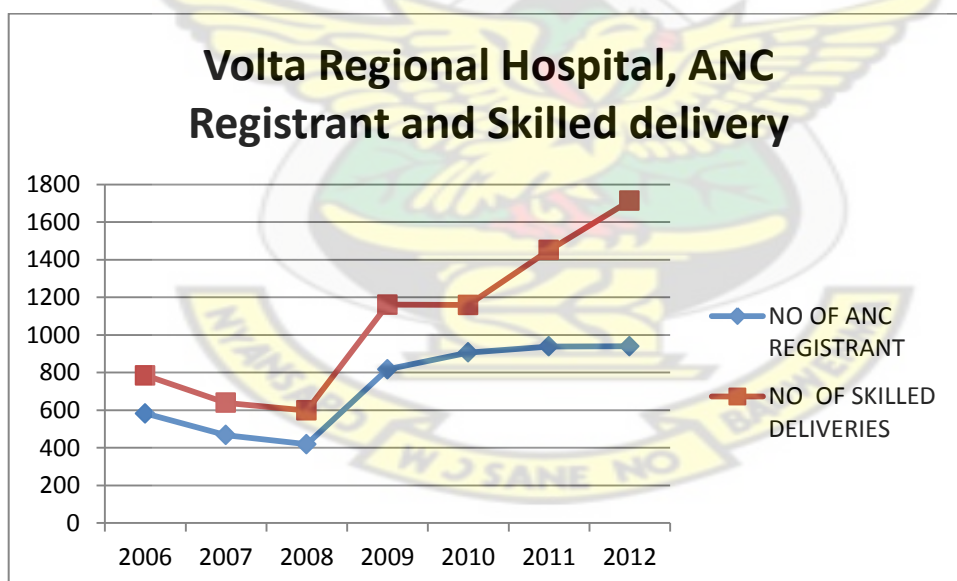
Source: field questionnaire, 2013

Figure 4.4 Impact of focus antenatal care on clients at Akrofu Health Center



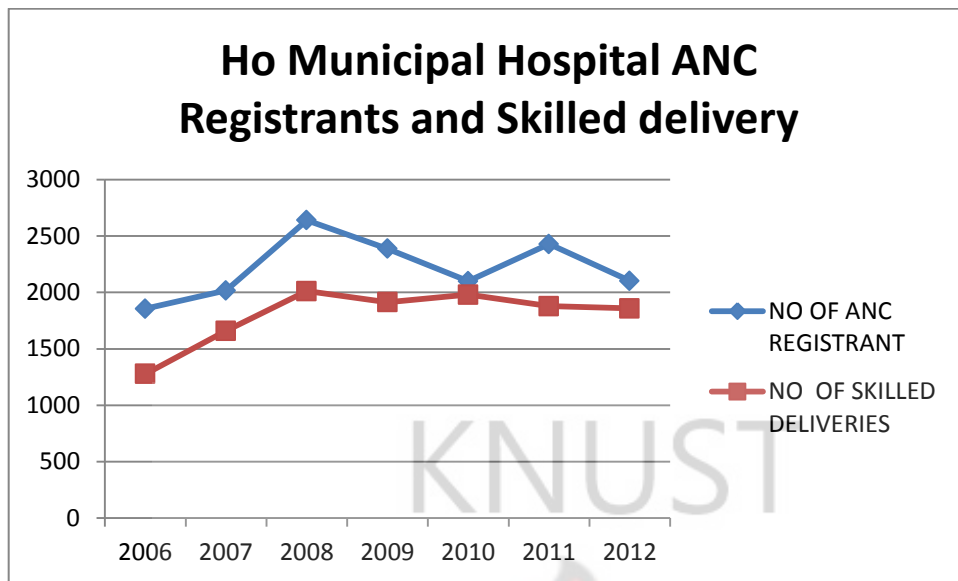
Source: field questionnaire, 2013

Figure 4.5 Impact of focus antenatal care on clients at Volta Regional Hospital

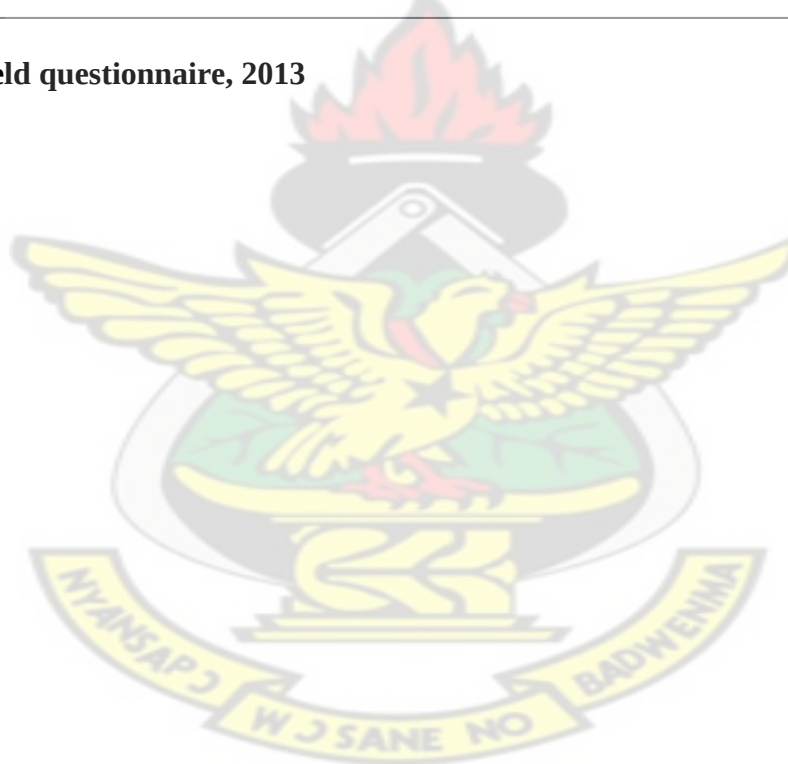


Source: field questionnaire, 2013

Figure 4.6 Impact of focus antenatal care on client at Ho Municipal Hospital



Source: field questionnaire, 2013



CHAPTER FIVE

DISCUSSION

5.0 Introduction

This chapter discusses the main results obtained in chapter four in line with the specific objectives of the study and compares with the literature reviewed in chapter two.

5.1 Knowledge of health care providers on FANC

The knowledge of health workers on the definition of FANC based on the 6 key items in the definition namely client centeredness, individualized care, comprehensiveness, disease detection, classification into risk groups and skill care provision was poor in more than 50% of the staff. Less than 25% knew the full complement of the definition of FANC.

This is in agreement with the study conducted in Nigeria on practice of FANC by health care providers which revealed that only 6% knew that focused antenatal care included early detection and prevention of diseases (Amosu et al., 2011).

In order to provide FANC, health providers need to have the requisite training to provide a quality care to their clients. However, less than 5% of the providers received training on all the components of FANC. This could have accounted for why most were not able to define FANC. This concur with the results of the studies done in Ghana and Kenya revealed that three quarters of the providers did not have basic training on some key aspects of focused ANC such as counseling for HIV/AIDS and syphilis screening (RPR) test. Most providers had received training on different aspects of focused ANC during pre-service training (Nyarko et al., 2006; Birungi et al., 2006).

On the contrary, a study done in Dares Salam by Yengo revealed that, majority of the participant trained in FANC, gained Knowledge on guidelines comprising of, danger signs and complications recognitions, birth preparedness, IPT and ITN administration which implied that good clinical skills in caring for pregnant women were available (Yengo, 2009). While most could not define it, more than 50% of staff knew the four key components, which is the major goal of FANC which support expectant mothers to maintain normal pregnancies through identification of pre-existing health conditions that may affect outcome of pregnancies (MNH, 2004).

Feasibility study in Ghana by Nyarko et al., 2006, revealed that Provider's knowledge of PMTCT, Individual birth planning (IBP) and management of syphilis in pregnancy were particularly low but providers knowledge on the prevention of malaria in pregnancy was relatively high. Also, according to Amosu et al 2011: Birungi et al., 2006, most health providers, agreed that an essential element of a focused approach to antenatal care is the identification and surveillance of the pregnant women and their babies, but only 6% knew the major components of focused antenatal care

In FANC, the activities are spread within the recommended four targeted minimum antenatal visits, scheduled at specific times in the pregnancy, where monitoring of the progress of the pregnancy occurs during these visits (Carroli et al., 2001). The finding of this study reveals that the knowledge of health workers on the minimum number of visits to be made by ANC clients is high. Majority of them knew the minimum visits of four (4), however, their knowledge on gestation at which required visits are to be made by pregnant women was poor as only 36.7% knew the right schedule. Clients may not be visiting ANC at the right time because FANC providers do not fully know the scheduled time of visit during gestation and therefore would not be able to counsel their clients adequately and this could lead to delay in early detection of disease and treatment.

Similarly, their knowledge on the essential laboratory investigations to be conducted on ANC clients was poor. Only 30% knew all the tests ANC clients should receive. All health workers knew more than three out of the eight (8) components of health education topics but only 10% knew all the components. This revealed that providers can only give education on few health topics. This goes to support the assertion of Amosu et al., (2011) and Nyarko et al., (2006), that the content and coverage of focused antenatal care are not well understood among health workers.

5.2 Practice of FANC by ANC staff

Even though, most pregnancies are normal, one of the goals of focused antenatal care is the early detection and treatment of disease during pregnancy through focused assessment given by a skilled health provider through history taking, examination and doing relevant investigation pertaining to each client. This is done to identify existing conditions such as Malaria, Tuberculosis, HIV, Sexually transmitted infection, anemia and preeclampsia and eclampsia, which are prevalent and have an impact on maternal and neonatal health (USAID, 2007). History taking on clients was poor because none of the five component assessed was completed and history on vaginal bleeding was conducted on only 33.3% of the clients seen. This reveals inconsistency in history taking which could have been a base line for further management of client. The antenatal book were also poorly filled, none of the 12 sections of the maternal health book examined was properly and completely filled in any of the health facilities. The midwives concentrated on only the progress history instead of taking the client holistic history. This finding is similar to that of Birungi et al., 2006 who indicated that providers record some elements while ignoring others, and Nyarko et al., 2006 whose findings suggested that Ghanaian health workers were unable to take comprehensive history to

detect early existing diseases. The findings were also not far different from Mrisho et al., 2009 and McIntosh, 2010. This indicates that some vital information needed to take decisions on the client would not be available and may lead to wrong decisions by health workers.

Examination of ANC clients by health workers were also not encouraging as midwives concentrated on only abdominal palpation and fetal heart auscultation. Less than 70% of clients were screened for protein in urine. Although HB and HIV are necessary, HB should be done twice before delivery, which is done at twenty eighth, and thirty sixth or more frequently as indicated by the medical doctor. Although clients are to be screened for HIV and HB, only a few clients were screened for HIV and HB. This can probably be due to some client already having been screened. Despite client being offered the required drugs which are fesoate, folate, tetanol toxoid and sulphadoxine pyrimethamine during ANC, none received education on the use of the drugs. This is in line with the findings of Sarker et al., 2010, that the procedures and findings are usually not explained to the women. Nyarko et al., 2006, also discovered that, not all the procedures required to detect diseases in pregnancy were followed and this is not far different from the findings of McINTOSH, 2010. This poor quality of routine ANC has been recognized in terms of its inability to prevent, diagnose or treat complications (Mrisho et al., 2009). Periodic comprehensive training should be organized for midwives and health practitioners so as to equip them with necessary and relevant skills to practice.

5.3 Availability of resources for the implementation of focus antenatal care

Availability of resources plays a useful role in provision of quality ANC. Despite the high ANC attendance in most developing countries, a major setback hindering quality of ANC is inadequate resources (Carroli et al., 2002). All the facilities had consulting

rooms, but no facility had the full complement such as adequate midwives, infrastructure, equipment, drugs, guidelines and reference manual. This is consistent with Licetto et al., who cited inadequate human resources, infrastructure problems, guidelines and reference manuals, gloves and reagents for urine testing and VDRL, and weak health referral systems to support case management of complications of pregnancy as the major shortfalls in providing quality ANC. That could explain why urine protein was not checked for all pregnant women. Blood pressure was not done for some clients due to BP apparatus were faulty.

The government needs to equip the existing facilities with the needed infrastructure, especially equipment for appropriate service delivery so as to improve upon the number of skilled deliveries in the municipality.

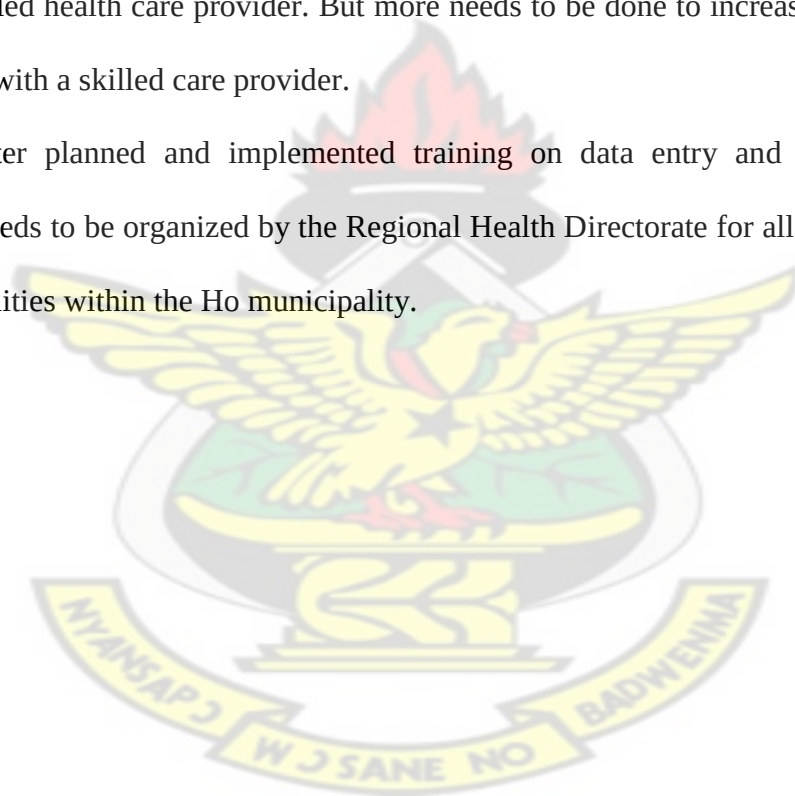
5.4 Effect of focus antenatal care on client

Antenatal care has the prospective to serve as a strategy for increasing the use of a skilled health care provider at delivery (Abou-Zahr and Wardlaw, 2003). Antenatal attendance has also been known to improve perinatal outcome including reduction in the rate of preterm labor (Tuladhar and Dhakal, 2011).

Secondary data collected to find out the impact of focus antenatal care on client revealed a positive impact of FANC on client patronage to the health facilities, predicated by the average number of pregnant women that visit the health facilities and the number of skilled deliveries recorded over the years, from 2006 to 2012. The results show that more pregnant women have registered to the health facilities over the years and the number of skilled deliveries. This goes to agree with Abou Zahr and Wardlaw (2003), which observed that women that report at least four antenatal care visits are more likely to deliver with skilled health than women with none.

However, in the specific facilities, the number of registrant is higher than the number that comes back to deliver at the various facilities due to the fact that some perhaps have delivered at other facilities or at home. On the other hand, Ho Municipal Hospital and the Regional hospital, the number of ANC registrants are fairly even to the number of skilled deliveries recorded, as these facilities has specialist and receive all referrals from the sub districts. Moreover some facilities did not have record from the beginning which could be due to poor storage system. The implementation of focused antenatal care did seem to increase the number of antenatal registrants and an increase in the number of deliveries with a skilled health care provider. But more needs to be done to increase the number of deliveries with a skilled care provider.

Also, better planned and implemented training on data entry and accurate record keeping needs to be organized by the Regional Health Directorate for all nurses in all the health facilities within the Ho municipality.



CHAPTER SIX

CONCLUSION AND RECOMMENDATION

6.0 Introduction

According to W H O studies showed that FANC is an effective service to improve the health of a pregnant woman and the unborn child when implemented well (Villar et al., 2001).

Therefore efforts to provide quality services to the communities must be considered.

6.1 Conclusions

It was realized that the nurses were well aware of the existence and practice of FANC and most have not had training in FANC and therefore, are not familiar with the definition and schedule of FANC.

The study reveals that History taking on clients was poor, health workers are unable to take comprehensive history to detect early existing diseases. Examination of ANC clients by health workers were also not encouraging, procedures and findings are usually not explained to the women. Not all the procedures required to detect diseases in pregnancy were followed. This has also reflected in filling of the maternal record, where most of the records such as drug, contraceptive and family histories were not filled, but progress histories were filled. However, the respondents identified various challenges to the delivery of quality and appropriate FANC services. Chief amongst the issues were limited staffing and lack of infrastructure and appropriate equipment. The implementation of focused antenatal care did seem to increase the number of antenatal registrants and an increase in the number of deliveries with a skilled health care provider.

But more needs to be done to increase the number of deliveries with a skilled care provider.

6.2 Recommendations

Based on the objectives and findings of the research, the following are recommended for consideration:

Ministry of Health/GHS:

- ✓ Government and non-governmental organization could help support health facilities through training and provision of equipment to facilitate work.
- ✓ MOH/GHS could provide current update information on Standard Operational procedures/protocols on maternal health to all health facilities.

The Regional health directorate:

- ✓ The Regional health directorate could organise regular in service training on current issues on FANC.
- ✓ More midwives could be posted to the municipality to beef up staff strength within the facilities.
- ✓ Communities could help government to provide basic facilities to aid ANC
- ✓ Clients could be involved in the care for them to appreciate and understand care rendered to them

OTHER KEY STAKEHOLDERS

- ✓ The media could help disseminate information on FANC to the public in the local languages.

- ✓ Kings and queen mothers could help to encourage pregnant mothers to attend ANC clinic and deliver with a skilled provider.
- ✓ Opinion leaders and religious bodies in the various communities could support by providing basic facilities to aid ANC.

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REFERENCES

- Ablordeppey, J. (2011), Quality Health Partners Projects, Focus Antenatal Care. Unpublished work.
- Abou-Zahr, C.L. and Wardlaw, T.M. (2003), Antenatal Care in Developing Countries: Promises, Achievement and Missed Opportunities: An Analysis of Trends, Levels and Differentials, 1990-2001. WHO Geneva. WHO & UNICEF (Retrieved on 21/5/2015) www.childinfo.org/files/antenatal_carepdf
- Ajayi, I.O., Osakinle, D.C., and Osakinle, E.O. (2013), Quality assessment of the practice of focused antenatal care (FANC) in rural and urban primary health centres in Ekiti State. *Open Journal of Obstetrics and Gynecology*. 3: 319-326
- Akrofu Health Center. Ghana Health Service 2012, Annual Report.
- Amosu, A.M., Degun, A.M., Thomas, A.M., Olanrewaju, M.F., Babalola, A.O., Omeonu, P.E., Ola, O.O., Oyerinde, O.O. and Nwogwugwu, S. (2011), A Study on Acceptance and Practice of Focused Antenatal Care by Healthcare Providers in South-West Zone of Nigeria. *Archives of Applied Science Research*, 3(1):484-491
- Birungi, H. and Onyango-Ouma, W. (2006), Acceptability and Sustainability of the WHO Focused Antenatal Care Package in Kenya. *Frontiers in Reproductive Health Program*. Population Council, Institute of African Studies, University of Nairobi.
- Bitar, S. (2011), Integrating Family Planning into Clinic –Based Antenatal Counselling and Community-Based Postpartum Care Services: Scaling –up High Impact Practices in Egypt. \5 Best Practice brief. (Retrieved 21/5/2015) http://pdf.usaid.gov/pdf_docs/pnaec125pdf

- Both, C.V., Fleba, S., Makuwani, A., Mpembeni, R. and Jahn, A. (2006), How Much Time do Health Services Spend on Antenatal Care? Implications for the Focused antenatal Care Model in Tanzania. BMC. Pregnancy and Childbirth: 6:22
- Carroli, G., Piaggio, G., Khan-Neelofur, G., Gulmezoglu, M., & Mugford, M., (2001), WHO systematic review of randomized controlled trials of routine antenatal care. The Lancet, 357, 1565-1570
- DeGraft-Johnson, J., Daly, P., Otchere, S., Russel, N. and Bell, R. (2005), Household-to-Hospital Continuum of Maternal and Newborn Care. ACCESS Program : Baltimore, M. (retrieved 21/5/2015) <http://pdf.usaid.gov/pdf/docs/PNADE623>
- DiMario, S., Basevi, V., Gori, G. and Spettoli, D. (2005), What is the Effectiveness of Antenatal Care (Supplement): WHO Regional Office for Europe's Health Evidence Network (HEN) Copenhagen. EUROPE (Retrieved 21/5/2015) www.euro.who.int/_data/assets/pdf_file/0005/74660/E87997.pdf
- Ditlopo, P., Menziwa, M., Mullick, S., Ramarao, S., Dalton, J., Nyasulu, D., Beksinska, M. and Kunene, B. (2008), Developing comprehensive and evidence-based policy and guidelines for antenatal and postnatal care in KwaZulu-Natal http://pdf.usaid.gov/pdf_docs/PNADN579.pdf (accessed 7/8/13)
- Douglas, S., Cervin, C. and Bower, K.N. (2007), What women expect of family Physicians as maternity care providers. Canadian Family Physician 53:874-879
- Frontiers in Reproductive Health, (2008), Adapting Focused Antenatal Care: lessons from Three African Countries. Programme brief No 11
- Gloyd, S. (2012), Antenatal Care in Poor Countries. MCH in Developing Countries [http://courses.washington.edu/hserv/544/prenatal care ppt](http://courses.washington.edu/hserv/544/prenatal%20care%20ppt) accessed 1/08/13
- Graham, J.W. Bell J.S. and Bullough C.H. (2001), Skilled Attendance at Delivery Reduce Mortality in Developing Countries. <http://www.jsieurope.org/safem/collect/safem/pdf/s2934e/s2934e>

Green, J.M., Renfrew, M.J. and Curtis, P.A.(2000),Continuity of Carer: What matters to Women? A review of the Evidence. Midwifery 16(3)186-96

Hailu, M., Gebremariam, A., Alemseged, F. and Deribe, k. (2011), Birth Preparedness and Complication Readiness among Pregnant Women in Southern Ethiopia PLoS one Vol: 6(6) journal pone 0021432

Hofedo Health Center, Ghana Health Service 2012 Annual Report.

Ho Polyclinic, Ghana Health Service 2012 Annual Report.

Ho Municipal Hospital, Ghana Health Service 2012 Annual Report.

Ho, Municipal Health Directorate, Ghana Health Service 2012 Annual Report.

Ho, Municipal Health Directorate, Ghana Health Service 2013 Annual Report.

Kinzie, B.and Gomez, P. (2004), Basic Maternal and Newborn Care; A Guide for Skilled Providers .JHPIEGO/MNH Programme; Baltimore MD.ISBN 0-929817-82-6
http://pdf.usaid.gov/pdf_doc/PNADA598.pdf (accessed 2

Klefe Health Center, Ghana Health Service 2012 Annual Report.

Lincetto,O., Mothebesoane-Anoh,S., Gomez,P. and Munjanja,S. Antenatal Care. Opportunities for Africa's Newborns. Chapter 2:51-62

Malaria in Pregnancy, Training Manual for Health Providers. Republic of Ghana. Ministry of Health. (2010) pages 17-19.

Mathole,T.,Lindmark,G.and Ahlberg,B.M.(2005)Dilemmas and Paradoxes in Providing and Changing Antenatal Care: A study of Nurses and Midwives in Rural Zimbabwe. Oxford University Press in association with the London School of Hygiene and Tropical Medicine.(retrieved 28/5/2015)
<Http://heapol.oxfordjournals.org/content/early/2005/09/23/heapol>

McINTOSH, M.B. (2010), Challenges Facing The Implementation Of The National Guidelines For Antenatal Screening in the Acornhoek District University Of Limpopo.ul.netd.ac.za/bitstream/10386/261/1 Challenges Facing The Implementation Of The Nation. Accessed on 1/08/13

Mater Ecclesiae Clinic, Maternal Records. Biostatistic Department (2013).

Maternal Health Records, (2000). Ministry of Health/Ghana Health Service. Reproductive and Child Health Department. Pages1-5

Maternal and Neonatal Health, (2004), Focused Antenatal Care: Planning and Providing Care during Pregnancy. Program Brief.

Maternal and Neonatal Health, (2004), Focused Antenatal Care: Planning and Providing Care during Pregnancy. Program Brief in Villar, J. and Bergsjo,P.(1997),Scientific Basis for the Content of Routine Antenatal Care. *Acta obstetrician et Gynecologica Scandinavica*.76(1):114

Matse Health Center, Ghana Health Service.2012 Annual Report.

McINTOSH, M.B. (2010), Challenges Facing The Implementation Of The National Guidelines For Antenatal Screening in the Acornhoek District University Of Limpopo.ul.netd.ac.za/bitstream/10386/261/1 Challenges Facing The Implementation Of The Nation. accessed 1/08/13

Mihret, H. and Mesganaw, F. (2008), Birth Preparedness and Complication Readiness among women in Adigrat town, north Ethiopia Ethiopian. *Journal Health Development*: 22(1)

MOH/GHS, (2008), Ministry of Health (MOH)/Ghana Health Service (GHS). Ghana National Safe Motherhood Protocol, MOH, Accra. Pages 3-11.ISBN:978-99888444-5.5

- Moran, C.A., Sangli, G., Dineen, R., Rawlins, B., Yameogo, M. and Banza, B. (2006), Birth Preparedness for Maternal Health: Findings from Koupéla District, Burkina Faso. *Journal of Health Population and Nutrition*. 24(4): 489–497.
- Mrisho, M., Obrist, B., Schellenberg, J.A., Haws, R.A., Mushi, A.K., Mshinda, I.H., Tanner, M. and Schellenberg D. (2009), The use of Antenatal and Postnatal Care: Perspective and Experiences of Women and Health Care Providers in Rural Southern. Tanzania. *BMC Pregnancy and Childbirth* 9:10
- Mubyazi, G., Bloch, P., Kamugisha, M., Kitua, A. and Ijumba, J. (2005), Intermittent Preventive Treatment of Malaria during Pregnancy: A qualitative Study of Knowledge, Attitudes and Practices of District Health Managers, Antenatal Care Staff and Pregnant Women in Korogwe District, North-Eastern Tanzania. *Malaria journal* 4:31
- Nyarko, P., Birungi, H., Armar-Klemesu, M., Arhinful, D., Deganus, S., Odoi-Agyarko, H. and Brew, G. (2006), Acceptability and Feasibility of Introducing the WHO Focused Antenatal Care Package in Ghana. *Frontiers in Reproductive Health Program, Population Council*. (retrieved 20/5/2015)
http://pdf.usaid.gov/pdf_doc/PNADH739.pdf
- Nyive Health Center, Ghana Health Service. 2012, Annual report.
- Ouma, O.P., Ejik, A.M.V., Hamel, M.J., Sikuku, E.S., Odhiambo, F.O., Munguti, K.M., Ayisi, J. G., rawford, S.B., Kager, P.A. and Slutsker, L. (2010), Antenatal and Delivery Care in Rural Kenya: the Effect of Training Health Care Workers to Provide “Focused Antenatal Care” *Reproductive Health*, 2010 7:1
- Pervin, J., Moran, A., Rahman, M., Razzaque, A., Sibley, L., Streatfield, P.K., Reichenbach, L.I., Ko linsky, M., Hruschka, D. and Rahman, A. (2012), Association of Antenatal Care with Facility Delivery and Perinatal Survival- A population-Based Study in Bangladesh. *BMC Pregnancy and Childbirth* 12:111

Promise (2010) .Focused Antenatal Care Guide for Practicing Midwives and other Health Staff. Maternal, Newborn and Child Survival in Western Region (unpublished work).

Quiterio, G., Molina, M., Miric, M., Vernon,R. and Rivero-Fuentes, M.E.(2008),Situation Analysis of the Integration of Family Planning Services in Postpartum, Postabortion and Prevention of Mother to Child Transmission Programs in the Dominican Republic Reproductive health at A glance. Ghana (2011). <http://siteresources.worldbank.org/INTPRH/Resources/376374-130.accessed 31/7/13>

Roemer,M.I.and Montoya-Aguilar ,c.(1988),Quality Assessment in Primary Health Care.WHO No 105 Swizerland

Ross and Winfrey,(2001) in Meeting the Family Planning Needs of Postpartum Women Frontiers in Reproductive Health Program, Population Council. Programme Briefs (2008) No10

Sarker, M., Schmid, G., Larsson, E., Kirenga, S., De Allegri, M.,Neuhann, F.,Mbunda, T., Lekule, I. and Muller, O.(2010) Quality Of Antenatal Care In Rural Southern Tanzania: A Reality Check. BMC 3: 209

Shia Health Center, Ghana Health Service.2012 Annual Report.

Starrs, A.M.(2006),Safe Motherhood Initiative:20 Years and Counting.www the lancet.com, vol 368 dol:10.1016/50140-6736

Takla Health Center, Ghana Health Service.2012 Annual Report.

Tulahar, H. and Dhakal, N.(2011), Impact of Antenatal Care on Maternal and Perinatal Outcome: A study at Nepal Medical College Teaching Hospital. Jorpati. NUJG 6:(2):37-43

Taviefe Health Center, Ghana Health Service.2012 Annual Report.

- USAID, (2007), Focused Antenatal Care: Providing Integrated, Individualized Care during Pregnancy. <http://www.accesstohealth.org/toolres/pdfs> accessed 2/08/13
- USAID, (2007), Focused Antenatal Care: Providing Integrated, Individualized Care during Pregnancy. In Family Care International. (1998), Every Pregnancy Faces Risks. Safe Motherhood Fact Sheet. Family Care International. New York.
- Villar, J. & Bergsjg, P. (2010), scientific basis for the content of routine antenatal care: Philosophy, recent studies, and power to eliminate or alleviate adverse maternal outcomes: Scientific basis for the content of routine antenatal care. *Informa Healthcare* 76 (1), 1-14
- Villar, J., Ba'aqeel, H., Piaggio, G., Lumbiganon, P., Belizan, J.M., Farnot, U.Al-Mazrou Y., Carrolli G., Pinol, A., Donner, A., Langer, A., Nigenda, G.,Mugford, M., Fox-Ruhby, J., Hutton, G., Bergjo, P., Bekketeig, L. and Berendes, H. (2001),WHO Antenatal Care Randomised Trial for the Evaluation of a New Model of Routine Antenatal Care. *Lancet*:357:1551-64
- Volta Regional Hospital, Maternal Records. Biostatistics Department.2013
- Watson-Jones., Oliff, M., Terris-Prestholt,F., Chungalucha, J.,Gumodoka, B., Mayaud, P.,Semakafu, A.,M., Kumaranayake, L., Gavyole, A., Mabey, D. and Hayes, R.(2005), Antenatal syphilis screening in sub-Saharan Africa: lessons learned from Tanzania. *Tropical Medicine and International Health* 10 (9) 934–943
- World Health Organisation, (2013), Millennium Development Goal 5: Improve Maternal. Health. http://www.who.int/topics/millennium_development_goals/ma accessed 31/07/13
- Yengo, M.L. (2009), Nurses Perception about the Implementation of Focused Antenatal Care Services in District Health Facilities of Dar es Salaam. University of South Africa.<http://uir.unisa.ac.za/bitstream/handle/1050>.accessed 1/08/2013

APPENDIX A
QUESTIONNAIRE (NURSES
KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF MEDICAL SCIENCES
DEPARTMENT OF COMMUNITY HEALTH

This questionnaire seeks to collect data for the study: **EVALUATING THE IMPLEMENTATION OF FOCUS ANTENATAL CARE (FANC) IN THE HO MUNICIPALITY** This research is purely for academic purposes and as such **privacy** and **confidentiality of all information** shall be observed. I would therefore be grateful if you could kindly answer the following questions.

Thank you

PART1A: SOCIO-DEMOGRAPHIC CHARACTERISTICS

1. Age.....
2. Level of Education. Middle school []¹ Primary []² Secondary []³ Tertiary []⁴ Others, please specify.....
3. Please indicate your rank or Position?
 - a. Community Health Nurse []
 - b. Staff Nurse []
 - c. Staff midwife []
 - d. Midwifery officer []
 - e. Senior Midwifery officer []
 - f. Principal midwifery officer []
 - g. Senior staff midwife []
 - h. Nursing officer []
 - i. Senior nursing officer []
 - j. Principal nursing officer []

4. (a). How many Years have you been practicing as a nurse?.....
 (b) How many Years have you been practicing as a Midwife?.....

PART 1B: BASIS OF STAFF KNOWLEDGE

5. Have you heard of focus antenatal care? Yes []¹ No []² Don't Know []³
6. What do you know about focus antenatal care?
- a. Client centred care..... []
 - b. Individualised care..... []
 - c. Fewer but comprehensive visits..... []
 - d. Disease detection, not risk..... []
 - e. Classification to no risk or risk group.... []
 - f. Care by a skilled provider..... []
7. Have you had any training or had any workshop on focus antenatal care?
 Yes []¹ No []² Don't Know []³
8. If Yes, what is the duration of the training?
9. Please tick the issues on which you had pre-service training?
- a. Comprehensive history-taking []
 - b. Dangers signs in pregnancy []
 - c. Individual birth planning []
 - d. The role of birth partners during care []
 - e. Counselling for prevention of Sexual transmitted infection []
 - f. Syphilis screening []
 - g. P.M.T.C.T. OF HIV []
 - h. Medical management of HIV/AIDS infected clients []
 - i. Antiretroviral therapy for HIV/AIDS []
 - j. Physical examination of pregnant women []

10. What are the components of Focus Antenatal Care?
- a. Early detection and treatment of problems and complications []
 - b. Prevention of disease and complication []
 - c. Health promotion []
 - d. Birth preparedness []
 - e. I Don't know []
11. What is the minimum number of antenatal visit for a client?
- a. One Visit []
 - b. Two Visits []
 - c. Three visits []
 - d. Four visits []
 - e. When it is necessary []
 - f. I don't know []
12. Can a client visit antenatal clinic at any time, outside of the normal visits?
- Yes []¹ No []² Don't Know []³
13. What are the various gestations for each antenatal visit?
- a. One Visit; Less than 16 weeks []
 - b. Two Visits; 16 – 28 weeks []
 - c. Three visits; 28 weeks – 32 weeks []
 - d. Four visits; 32 weeks - 40 weeks []
 - e. I don't know []
14. Please indicate which investigations you do for your clients?
- a. Haemoglobin level []
 - b. Sickling []
 - c. VDRL []
 - d. HIV Status []
 - e. Stool []
 - f. Urine []
 - g. I don't know []

15. What type of immunization do you give to clients?

- a. Tetanus toxoid []
- b. Please state others.....

16. Please tick the education topic(s) you give clients in the Focus Antenatal Care session.

- Nutrition []
- Personal hygiene []
- Birth plan and complication []
- Rest and exercise []
- Family planning []
- ITN []
- Danger sign []
- IPT []
- I Don't know []

APPENDIX B

PART TWO

CHECKLIST

CENTRE:

HEALTH ISSUES

EARLY DETECTION AND TREATMENT OF DISEASE			
ANAEMIA			
	YES	NO	INCOMPLETE
Ask and record any symptoms of anaemia (dizziness, palpitations, weakness, breathlessness on exertion)			
Ask specifically for: History of Malaria, Sickle cell disease, and diet			
Check HB			
Give Treatment			
Refer in case of severe Anemia			
Comments:			
HYPERTENSIVE DISORDERS IN PREGNANCY			
	YES	NO	INCOMPLETE
Check blood pressure			
Check urine for protein			
Ask for danger signs e.g. dizziness, blurred vision, heart burn, headache, oedema or swelling of hands, feet or feet.			
Check for Edema of hands, leg and face.			
Make a decision about a management or referral			
Assess educational needs of the woman and make a plan for counseling			
Share your findings with the woman (blood pressure, state of health).			

Discuss problems detected during the visit(possible causes, complications, preventive measures			
If woman to be referred explain the need for referral			
Remind the woman to report any time she has questions/concern/danger signals			
Give the woman an appointment.			
Comments:			
STIs/HIV/AIDS			
	YES	NO	INCOMPLETE
Ask and record any sign and symptom of abnormal vagina/ urethral discharge, genital sores, painful urination, lower abdominal pain, pruritis /burning sensation/swelling and genital lumps/growth			
Counsel client			
Take sample for laboratory investigation. e.g. Vagina swap, blood sample for syphilis			
Give treatment			
Encourage woman to bring sexual partner			
Comments:			
MALARIA			
	YES	NO	INCOMPLETE
Ask for any signs and symptoms of fever, headache and bitterness in the mouth			
Check for malaria parasite			
Ask client about allergy to sulphur drugs			
Give anti malaria according to gestational age			
Explain and educate client how to take the drug			

Comments:			
VAGINAL BLEEDING			
	YES	NO	INCOMPLETE
Ask for signs and symptoms of bleeding, color, amount			
Counsel client			
Refer or admit depending on its severity			
Comments:			
PREVENTION OF COMPLICATIONS AND DISEASE			
Tetanus Toxoid			
	YES	NO	INCOMPLETE
Find out from client whether she has received any tetanol immunization and how many doses			
Collect antenatal card from mother and determine gestational period			
Tell client the type of immunization she would receive			
Explain reason and importance of immunization and ask for consent			
Give Tetanol			
Record immunization in the antenatal card			
Ask client to report any adverse reaction			
Tell her when to come for the next immunization			
PMTCT			
	YES	NO	INCOMPLETE
Find out client HIV status			
Take blood sample and test			
Counsel client			

Encourage client to start treatment if she is HIV positive			
Encourage client to continue her medication			
MALARIA			
	YES	NO	INCOMPLETE
Give SP according to gestational age			
SP DOSAGE	1 ST DOSE	2 ND DOSE	3 RD DOSE
	YES	NO	INCOMPLETE
Check when the last dose of SP is given			
Ask possible side effect from the 1 st dose			
Ensure client takes the drug before she leaves			
Record it into clients antenatal card			
Educate client about SP			
Ask client to report any adverse reaction			
Advice client when the next dose is due			
ITN			
	YES	NO	INCOMPLETE
Interview client if she sleep in mosquito treated net			
Explain the importance of sleeping in treated net			
IRON/FOLATE SUPPLEMENTATION			
Give iron drug			
Explain the purpose and educate client on how the drug should be taken			
Ask for problems			
Treat incidental ailment			
Comments: 			

HEALTH PROMOTION AND COUNSELLING			
	YES	NO	INCOMPLETE
Client welcomed			
Nutrition			
Personal hygiene			
Care of common discomfort,			
Safer sex			
Early and exclusive breastfeeding			
Prevention of tetanus toxoid			
Prevention of anemia			
Family planning			
Danger signs in pregnancy			
Vagina discharge			
Difficulty in breathing			
Fever			
Severe abdominal pain,			
Severe headache			
Blurred vision			
Convulsions			
Privacy and confidentiality			
Comments:			
BIRTH PREPARENESS			
	YES	NO	INCOMPLETE
Ask about the woman's plan for this birth a. Are all necessary items being gathered together (sanitary pad, baby cloths etc? b. What skilled attendant will attend the birth and where?			
Support person during labour and birth. person to care for the home family when away			

COMPLICATION			
	YES	NO	INCOMPLETE
Ask about the woman's plan for complication?			
a. How will she and the family pay or get access to funds in case she experiences a complication?			
b. Does the family have a plan in case of emergency? Who makes the decision for transport			
c. Does she recognize signs of danger and know what to do?			
d. Who will be a blood donor in case one is needed?			
e. husband involvement			
f. advice provided about how to prepare for any emergency in pregnancy			
g. Continuity of care			
Comments:			

Observation on Maternal Health Record Book

	Filled	Not Filled	Incomplete
Personal history			
Obstetric history			
Lactation history			
Physical examination			
Investigations			
Antenatal progress record			
Schedule of visits	1 st visit	2 nd visit	3 rd visit
	4 th visit	More than 4 visit	

APPENDIX C

PART 3

CHECK LIST

CHALLENGES

CHALLENGES		(TICK)
STAFFING	The number of staff in the antenatal clinic	
Comments:		
INFRASTRUCTURE	Waiting room	
	Cubicles for counseling	
	Cubicles for examination	
	Consulting room	
	Tap water and electricity	
	Laboratory	
	Toilet facility	
Comments:		
ESSENTIAL ANTENATAL DRUGS	Tetanus toxoid	
	Folic acid	
	Ferrous sulphate	
	Sulphadoxine pyrimethamine	
Comments:		

CHALLENGES		(TICK)
ESSENTIAL EQUIPMENT	Blood pressure apparatus	
	Stethoscope	
	Fetoscope	
	Adult scale	
	Measuring tape	
	thermometer	
	Vagina speculum	
	Gynecological table	
Comments:		
ESSENTIAL LABORATORY SUPPLIES	Reagent for urine	
	VDRL/RPR	
	Elisa for HIV	
	Reagent for HB	
	Pregnancy test	
	Disposable glove	
	Urine specimen bottle	
	Rapid text for malaria	
Comments:		
CHALLENGES		(TICK)
GUIDELINES/ REFERENCE MANUAL	Safe motherhood protocol	
	Syndromic management of STIs	
	Clinical diagnosis of STIs	
	Standard treatment guideline	
	Malaria treatment guideline	
	ANC card/register	
	HIV/AIDS counseling	
	PMTCT	
	Referral protocol	
	Teaching Aids for ANC	
Comments:		

APPENDIX D

PART FOUR

RECORD REVIEW

IMPACT OF FOCUS ANC

YEAR	NO OF ANC REGISTRANT	NO OF ANC ATTENDANCE	AVERAGE NO OF ANC VISITS	NO OF DELIVERIES	NO OF FAMILY PLANNING ACCEPTORS
2006					
2007					
2008					
2009					
2010					
2011					
2012					

APPENDIX E

Participant Information Leaflet and Consent Form

This leaflet must be given to all prospective participants to enable them know enough about the research before deciding to or not to participate

Title of Research: Evaluation of the implementation of focus antenatal care in the Ho municipality

Name(s) and affiliation(s) of researcher(s): This study is being conducted by Miss Faustine Asante and Prof. Opare-Addo of the Department of community health, KNUST, Kumasi

Background (Please explain simply and briefly what the study is about):

BACKGROUND INFORMATION

The study is to evaluate the implementation of focus antenatal care rendered by staff to clients. Focus antenatal is a new model of antenatal care, called goal-oriented or focused antenatal care, which is individualized, client-centered, comprehensive antenatal care that lay emphasizes on evidence-based, goal-directed actions, family-centered care, quality rather than quantity of visits, care given by skilled providers, which is safe and cost effective and it is as a way of promoting the health and survival of mothers and babies. This is to do away with the traditional approach to antenatal care which assumed that frequent routine visits which are the norm, and women were classified by risk category to determine their chances of complications and outcome. Staffs are trained to implement this new model. Therefore the study wants to find out staff knowledge, how care is being rendered to client by staff and the challenges and impact of this model on client.

Purpose(s) of research: The study will evaluate the implementation of focus antenatal care rendered by staff to clients. The results of this study will provide useful information for providers to improve on their knowledge, and care given to client and family as a way of promoting the health and survival of mothers and babies.

Procedure of the research, what shall be required of each participant and approximate total number of participants that would be involved in the research: A cross sectional study will be used. 12 health facilities rendering antenatal care services will be purposively selected. And approximately 2-4 staff will be selected from each health facility for the study. In all 34 participants who satisfy the inclusion criteria will participate

Risk(s): This study poses no risk to you.

Benefit(s): There is no direct benefit to you for taking part in this study; however the study outcomes may be of importance to opinion formation and policy development by policy makers in the future.

Confidentiality: All information collected in this study will be given code numbers. No name will be recorded. Data collected cannot be linked to the individual in anyway. No name or identifier will be used in any publication or reports from this study. However, as part of our responsibility to conduct this research properly, the following individuals and/or agencies will be able to look and copy the information you give.

1. Nkrumah University of Science and Technology Committee on Human Research, Publications and Ethics

Voluntariness: Taking part in this study should be out of your own free will. You are not under obligation to take part in the study. The Research is entirely voluntary

Alternatives to participation: If you choose not to participate, this will not affect your treatment in any health facility in any way.

Withdrawal from the research: You may choose to withdraw from the research at anytime you want to and you may also choose not to answer any question you find uncomfortable.

Consequence of Withdrawal: There will be no consequence for you or anybody if you decide to withdraw from the study. Please note however, that some of the information that may have been obtained from you before you chose to withdraw may be used in reports and publications.

Costs/Compensation: For your time and inconvenience created to you, I will compensate you with a snack to show my appreciation for your participation.

Contacts: If you have any question concerning this study, please do not hesitate to contact Miss Faustine Asante on 0208154223

Further, if you have any concern about the conduct of this study, your welfare or your rights as a research participant, you may contact:

The Office of the Chairman

Committee on Human Research and Publication Ethics

Kumasi

Tel: 03220 63248 or 020 5453785