UNIVERSITY OF CAPE COAST

ACCESS AND UTILISATION OF FREE MATERNAL HEALTH SERVICES IN THE SAVELUGU-NANTON DISTRICT IN THE NORTHERN REGION

ABU-HASSAN MAHAMADU

2011

UNIVERSITY OF CAPE COAST

ACCESS AND UTILISATION OF FREE MATERNAL HEALTH SERVICES IN THE SAVELUGU-NANTON DISTRICT IN THE NORTHERN REGION

BY

MAHAMADU ABU-HASSAN

DISSERTATION SUBMITTED TO THE INSTITUTE FOR DEVELOPMENT STUDIES, FACULTY OF SOCIAL SCIENCES, UNIVERSITY OF CAPE COAST IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR AWARD OF MASTER OF ARTS DEGREE IN HUMAN RESOURCE DEVELOPMENT

JULY 2011

DECLARATION

Candidate's Declaration

I hereby declare that this dissertation is the result of my own original work and that no part of it has been presented for another degree in this university or elsewhere.

Student's Signature: …… Date: ……

Name: Mahamadu Abu-Hassan

Supervisor's Declaration

I hereby declare that the preparation and presentation of this dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by the University of Cape Coast.

Student's Signature:…..……..… Date: ……

Name: Dr. Emmanuel K. Ekumah

ABSTRACT

The Free Maternal Health Services Scheme emanated from the conditions and benefits that were outlined in the Highly Indebted Poor Countries (HIPC) initiative embarked upon by the Government of Ghana to alleviate the plight of the poor and vulnerable in society as well as improve upon the living conditions of the citizenry. As a policy, the essence of the scheme was to ensure easy access and utilization of antenatal care, delivery and post – natal care services by women in the rural and deprived communities at no cost to the recipient.

In all, 252 respondents, disaggregated as 232 clients and 20 service providers were sampled for the study in the Savelugu-Nanton District. The research examined the access and utilization of free maternal health services in the Savelugu-Nanton District in the Northern Region. It further examined the output of utilization and factors that affect access and utilization of free maternal health services.

The study found out that majority of women in the district were aware of the existence of the scheme, thereby culminating in increased antenatal care attendance. Negative staff attitude and the distance to service delivery points were seen as impediments to access and utilization of the services. It is recommended that more Community - based Health Planning Services (CHPS) compounds be established, equipped and staffed to enable expectant women receive service in their various communities. Also, the District Health Management Team should step up monitoring and supervision to stem the negative working attitude of health staff.

ACKNOWLEDGEMENTS

This study was made possible through the collaborative efforts of a number of people who shared their experiences, knowledge, time and expertise with me.

My appreciation goes to my supervisor, Dr. E. K. Ekumah for his patience, guidance and advice during the course of this study. I am also deeply indebted to Dr. Kofi Issah, the District Director of Health Services, Savelugu-Nanton District and Mr. Alhassan Amadu, the Northern Regional Population Officer, for their immense support and making available valuable information to me in the course of my research work.

My regards also goes to Samuel Dinko, Jamani Kabiru and Dauda Adam who assisted me in the data collection process. Mr. Abakah of the Institute for Development Studies library deserves commendation for his valuable suggestions which went a long way to enhance this study.

Finally, my acknowledgement goes to my wife and three lovely kids namely, Fareed, Hafiz and Nadia for their prayers and moral support.

DEDICATION

To my wife.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ACRONYMS

AIDS	-	Acquired Immune Deficiency Syndrome
ANC	-	Ante-Natal Care
ARI	-	Acute Respiratory-tract Infection
BP	-	Blood Pressure
CAC	-	Comprehensive Abortion Care
CBS	-	Community-Based Surveillance
CHPS	-	Community-Based Health Planning Services
DHMT	-	District Health Management Team
EBF	-	Exclusive Breast Feeding
EMOC	-	Emergency Maternal Obstetric Care
ENC	-	Emergency Neonatal Care
EPI	-	Expanded Programme for Immunization
FP	-	Family Planning
GDHS	-	Ghana Demographic Health Survey
GHS	-	Ghana Health Service
GOG	-	Government of Ghana
GSS	-	Ghana Statistical Service
HIPC	-	Heavily Indebted Poor Countries
HIV	-	Human Immunodeficiency Virus
ICPD	-	International Conference on Population and Development
IEC	-	Information Education and Communication
IMR	-	Infant Mortality Rate

IQ	-	Intelligent Quotient
ITN	-	Insecticide Treated Nets
IU	-	Imperial Unit
LDC	-	Less Development Countries
MCH	-	Maternal and Child Health
MDG	-	Millennium Development Goals
MMR	-	Maternal Mortality Ratio
MOH	-	Ministry of Health
NGO	-	Non-Governmental Organization
NPC	-	National Population Council
PHC	-	Primary Health Care
PNC	-	Post-Natal Care
POA	-	Programme of Action
RH	-	Reproductive Health
RHU	-	Reproductive Health Unit
SPSS	-	Statistical Package for Solution Services
TBA	-	Traditional Birth Attendant
TNA	-	Training Needs Assessment
UNFPA	-	United Nations Fund for Population Activities
UNICEF	-	United Nations Children and Educational Fund
VV	-	Village Volunteers
WHO	-	World Health Organization
WIFA	-	Women In Fertility Age

CHAPTER ONE

INTRODUCTION

Background to the study

In the past, women and children have been viewed as targets for selected technical programmes and activities, such as the Expanded Programme on Immunization, Exclusive Breastfeeding, Roll-back malaria, iodated salt and vitamin 'A' supplementation among others. Today, issues of maternal and child health have been transformed from a technical concern into a moral and political imperative. As a result, women and children are now demanding access to quality health care as an entitlement guaranteed by the state than a privilege.

It is believed that two hundred million women become pregnant each year around the world and an estimated 515,000 dying as a result, with ninety-nine (99%) percent of them taking place in the developing world. Half of all maternal deaths occur within the first 24 hours after birth, and another 20% in the first week after delivery. A much larger number of women in developing countries suffer serious, long-term complications such as uterine prolapse, fistulae, incontinence, pain during sex and infertility to mention but a few.

The World Health Organisation (2006) estimates that about 4.3 million still births and 3.4 million deaths occur annually in the first week, with 98% of them in developing countries. The longer a baby survives, day by day, the greater the chance of survival to adulthood. Very early deaths in the first days

and weeks of life are most often sequelae of event in utero and during birth, rather than resulting from the external environment into which the baby is born and thus inextricably linked to the mother's health and health care.

Estimates from the World Health Organisation (2006) further suggest that only about 53% of all deliveries in developing countries currently take place with the assistance of a skilled attendant, while emergency services are not accessible in many places.

It therefore comes as no surprise that both international and national health policies and intervention protocols place premium on women and children. Morbidity and mortality among women therefore deserve priority attention since the health of women has implications on the health of their children, family and the nation, particularly in sub-Saharan Africa. According to World Bank (2004), of all the regions in the world, tropical sub-Saharan Africa ranks lowest in income per capita and life expectancy at birth, and highest in mortality for children under-five. Moreover, it is the only one with a negative growth rate during 1980-2000.

The idea of making maternal health services free as a policy, aims at making reproductive services an integral part of the existing general health system and making it accessible and affordable to all individuals in Ghana, within the broad context of the Primary Health Care.

The International Conference on Population and Development [ICPD] (2000) defined Reproductive Health in a comprehensive manner to include the physical, mental and social well-being of both women and men, in all matters relating to the reproductive system and to its functions and processes. This research is located in safe motherhood as the first component of Reproductive

Health (RH). It is important to realize that reproductive freedom is the one from which other freedoms arise. Hence individuals, especially women have a right to attain the highest standard of sexual and reproductive health care. Poverty should therefore not be a factor to deny women access to maternal health care. Gender-based stereotyping and discrimination should also not be used as a yardstick that denies women decision-making on their health.

The crux of the issue is that fertile women run the risk of pregnancy, child bearing and unsafe abortions. They are also socially and biologically more vulnerable to reproductive tract infections and sexually transmitted infections including HIV/AIDS than their male counterparts. They equally suffer most from domestic violence and gender-based sexual abuse.

In recognition of these challenges, the International Conference on Population and Development (ICPD) Programme of Action (POA) made the following recommendations to member governments:-

- Make reproductive health services accessible through the Primary Health Care system to all individuals of appropriate age as soon as possible and no later than 2015.
- Ensure that comprehensive and factual information on reproductive health service are available.
- Ensure that a full range of reproductive health care services are accessible, affordable, acceptable and convenient to all users.
- Enable and support responsible voluntary decision about child-bearing and the choice of methods of fertility regulation, among many others, (ICPD, 2000).

Equally worth noting is the fact that, at the United Nations Millennium Summit in 2000, three (3) out of the eight (8) Millennium Development Goals (MDG) identified by the world's political leaders to be reached by the year 2015 are directly related to health. Common health problems such as child mortality, maternal mortality, HIV/AIDS, malaria and tuberculosis were mentioned (Elizabeth, 2002).

In Ghana in general and the Northern Region in particular, maternal mortality ratios have been high and fluctuating. The maternal mortality ratio for Ghana is estimated to be 214/100,000 live births, though a UNICEF/WHO/UNFPA estimate in the year 2000 puts the figure at 540/100,000 (UNICEF, 2003). Whatever the situation may be, maternal health is an issue that cannot be treated casually. Available audits on maternal deaths are giving some clues as to areas where more efforts are needed to reduce mortality and other complications.

Evidence regarding access and utilization of free maternal health services is possible through research. This study is therefore designed to determine the above phenomenon in the context of how it is being observed in the Savelugu-Nanton District of the Northern Region of Ghana.

The Savelugu-Nanton District with Savelugu as its capital was carved out of the then West Dagomba District Council in 1988. It covers an area of 1,760 square kilometers, with a population density of 58.7 persons per square kilometer. It is bounded by the Tamale Metropolis to the South, Gushegu and Karaga to the East, West Mamprusi to the North, and the Tolon and Kumbungu district to the West.

The 2000 Population and Housing Census returned a total district population of 89,968 disaggregated by sex as 44, 700 males and 45,268 females. Current conservative estimates however puts the district population at over 103,000, with women in fertility age at 26,197. Savelugu-Nanton District has 136 communities. For Community Based Surveillance (CBS) purposes, the Ghana Health Services (GHS) has divided the district into 179 communities. The area is predominantly inhabited by the Dagomba ethnic group with a few other tribes such as Moshi and Mamprusi.

Socio-cultural and religious norms in the communities vest most authority in the hands of chiefs, religious leaders and clan heads who are mostly male. The system of inheritance is patrilineal, thus making women more dependent on men for resources. Women are therefore disadvantaged in terms of access to education, health and other social amenities.

Subsistence farming is the main economic activity in the district, with farm produce such as maize, yam, groundnut and rice mainly dependent on rainfall as the main source of water. This puts great limitations on crop yields when the rains fail and there are long periods of drought. Petty trading and the selling of farm produce are the other economic activities.

The level of poverty is high in the district, thus given rise to the phenomenon of ‘Kaya yoo’, where young girls and boys migrate in large numbers to the big cities in Southern Ghana to engage in menial jobs or work as porters.

Transport and communication links are only partly accessible in the district. The Accra-Paga highway is the only tarred and first class road in the

district, with all other communities linked by feeder roads and farm tracks. Some communities are however inaccessible during the rainy season.

In terms of health infrastructure, the district has a polyclinic at Savelugu which is the only facility providing in-patient care services and at the same time a referral centre for the rest of the facilities. The rest are health centres located at Nanton, Diare, Pong-Tamale, Tampion, Zoggu, Moglaa and Janjori-Kukuo. A Community-based Health Planning Services (CHPS) compound is located at Pigu in the Diare sub-District. Bruham clinic in Savelugu is the only private owned facility that operates in the district. New Life Laboratory another private owned facility is in partnership with Savelugu Polyclinic and offers services to the polyclinic and the health centres on out-reach basis.

A breakdown of trained health service providers comprises two (2) Medical Officers, one (1) Public Health Nurse, eighteen (18) General Nurses, four (4) Medical Assistants, four (4) Dispensary Technicians, ten (10) Health Aids, one (1) First Aider, one (1) Nutrition Officer, one (1) Disease Control Officer and two (2) Medical Officers from the Cuban Medical Brigade. This brings the number to 61 trained personnel (DHMT, 2006).

Statement of the problem

The issue of maternal and neonatal mortality and morbidity might be more serious than that captured by routine data collection. There is increasing maternal morbidity and mortality in most parts of Ghana, especially the Northern Region. This phenomenon exists amidst the nagging and vicious cycle of poverty that is persistent in the region. According to the Ghana

Poverty Reduction Strategy document, seven out of every ten inhabitants in the region live in poverty. Even though both men and women in the region are faced with the problem of poverty, the interplay of structural and socio-cultural factors tend to place the scanty resources in the hands of the men, thereby compelling women, especially the pregnant ones to depend on men for resources and as a result limiting their access to maternal health services. Also, gender-based discrimination against women coupled with limitations set by religion and culture tends to truncate the extent to which they access and utilize information and resources as well as availing themselves of essential obstetric care services. The result is that if maternal health services are not made free, it is not very likely that most mothers can access and utilize them.

The observation is that older women are less likely to receive antenatal care from a trained health professional than younger women. Women are also less likely to obtain care from a trained health professional for higher parity.

In the Northern Region, 8.4% of women in fertility age receive antenatal services from a doctor, 74.3% from a nurse or midwife, 0.7% from a traditional birth attendant/other. These rank very low compared with other regions in Ghana (GSS, 2003).

Medically assisted deliveries continue to be low in Ghana, with less than 50% benefiting from professional delivery assistance between the periods of 1988 to 2003. However, primiparous (first births) are more likely to be delivered by medically trained service providers than those of second or third births order. Still births rate is an indirect measure of the effectiveness in management of pregnancy, labour and delivery. The still birth rate recorded a rise from 2% in 2002 to 2.3% in 2003 (Reproductive Health Unit, 2003).

Similarly, the maternal mortality ratio target of 180/100,000 live births could not be achieved, as 854 institutional maternal deaths were recorded in Ghana, in 2003. The crux of the issue is that maternal and neonatal health data in Northern Region for the year 2002 showed that 50 maternal deaths and 278 neonatal deaths occurred. The community-based surveillance system which complement facility based data collection recorded 44 maternal deaths and 272 neonatal deaths over the same period (Reproductive Health Unit, 2003). Maternal health status of women in the region is a misery, and when the plight of women on reproductive issues is considered in the context of a rural woman within the Savelugu-Nanton District, it is more than a tragedy. Issues that are urgent and need to be explored in more detail are: Why maternal health services should not be accessible to women who best need such services? Why women find it difficult to utilize maternal health services that they may be aware of and which are expected to be free? Whether free maternal health services are rendered by trained service providers in a truly professional manner? Whether the existence of the free maternal services has positively impacted on maternal morbidity and mortality ratios?

Objectives of the study

The study generally sought to investigate access to, and examine utilization of free maternal health services in the Savelugu-Nanton District. Specifically the study aimed at:-

- Assessing the awareness level of women about free maternal health services and the types of services provided under the scheme;

- Investigate into the type of services that are available to women under the Free Maternal Health Service Scheme.
- Assess the reasons for instituting the scheme.
- Examined the output of utilizing of free maternal health services in the district;
- Examining factors that affect access to and utilization of Free Maternal Health Services;
- Offering suggestions on ways to improve access to and utilization of free maternal health services.

Research questions

The study utilized the following research questions:

- What is the level of awareness of women about free maternal health services and the types of services provided under the scheme?
- What types of services are available to women under the Free Maternal Health Service Scheme?
- What are the reasons for instituting the scheme?
- What are the outputs of utilizing Free Maternal Health Services in the District?
- What are the factors that affect access to and utilization of Free
- Maternal Health Services?
- What are the suggestions for improving access and utilization of free maternal health services?

Significance of the study

The findings of this study will be useful to the Reproductive Health Unit of the Ghana Health Service as well as Ministry of Health (MOH) in appreciating the impact of the free maternal health services scheme in the district, as this may be a reflection of what pertains in the entire Northern Region. Policy directions and intervention strategies may be reviewed as a result. Findings will also serve as locality specific data that may be useful literature for other researchers on issues of maternal health. The Health Research Unit of the Ghana Health Service (GHS), Navrongo Health Research Centre, University for Development Studies, UNICEF, PRIME II, DANIDA and other stakeholders will use the findings as cursory information to do an in-depth study on the issue. Families, curious public, students and opinion leaders will equally find the data useful.

Organisation of the study

The remaining chapters are outlined in the following order. Literature review is the focus of Chapter Two. It covers theoretical and empirical issues pertaining to maternal and child health. Chapter Three deals with the research methodology. The results and discussions are presented in Chapter Four. The summary, conclusions and recommendations of the study, as well as suggestions for further research are presented in Chapter Five.

CHAPTER TWO

REVIEW OF LITERATURE

Introduction

This chapter reviews the theoretical and empirical literature on health policy to address deficiencies in maternal and child health and their implications for safe motherhood.

Maternal Health in a Global Context

Maternal health has emerged as global priority because of a great gap in the status of mother's well being between the rich and the poor countries. According to UN (2008), maternal health refers to the health of women during pregnancy, childbirth and the postpartum period. In rich nations, where women have access to basic health care, giving birth is a positive and fulfilling experience. On the other hand, for many women in poor countries it is associated with suffering, ill health and even death.

Internationally, increasing attention given to maternal health has been concentrated in reducing maternal mortality. The tragedy of not preventing these avoidable or treatable deaths resulted in 536,000 maternal deaths worldwide in 2005 (WHO, 2006). Developing regions accounted for 99 percent (533,000) of these deaths, with sub-Saharan Africa and Southern Asia accounting for 86 percent of them (UN, 2008). Put another way, every minute of each year a woman dies from complications of pregnancy, abortion

attempts and childbirth (UNFPA, 2004). Millions more women survive but suffer from illness and disability related to pregnancy and 2 childbirths. It has been estimated by the Safe Motherhood Initiative (SMI) that 30 to 50 morbidities occur for each maternal death (Shiffman, 2003).

Improving maternal health and reducing maternal mortality have been main concerns of several international summits and conferences. It began with the international conference on safe motherhood held in 1987 and continued through International Conference on Population Development (ICPD) 1994 and again through ICPD+5 (five-year review of the 1994 ICPD) and the Millennium Development Goals. The first conference ended with a declaration calling for a reduction in maternal mortality at least half by the year 2000. The ICPD set a goal of reducing maternal mortality to one half of the 1990 levels by 2000 and a further one-half reduction by 2015 (UNFPA, 2004). The Millennium Summit in 2000 calls for a 75 percent reduction by 2015 in the maternal mortality ratio from 1990 levels (UN, 2008).

However, as the deadline approached, these hopes had not been met yet, the world was nowhere near achieving this objective, and it was not even certain that global maternal mortality levels had declined in the past decade to any significant degree (Shiffman, 2003). WHO has summarized three crucial factors underlying maternal deaths. Firstly, lack of access and utilization of essential obstetric services. There is a negative association between maternal mortality rates and maternal health care utilization. WHO estimates suggest that 88 to 98 percent of all pregnancy-related deaths are avoidable if all women would have access to effective reproductive health care services (Shiffman, 2003). Secondly is the low social status of women in developing

countries. The low status of women can limit their access to economic resources and basic education, the impact is that they have limited ability to make decisions, including a decision related to their health and nutrition. Thirdly, too much physical work together with poor diet also contributes to poor maternal health outcomes.

The utilization of maternal health care is one of the important factors to reduce the incidence of maternal mortality. United Nations reported recent data of maternal health care from developing countries are as follow: the number of pregnant women who receive at least one antenatal care is approximately 74 percent in 2005 (UN 2008); 40 percent of deliveries take place in health facilities (UNFPA, 2004); and skilled health personnel assist nearly 61 percent of births in 2006 (UN, 2008). Obviously, the data indicates that the government commitment to maternal health care has not reached the levels required to make strong impact on mortality rates. Many existing interventions have been found to be ineffective in preventing maternal deaths. Laws and regulations in many countries sometimes impede health care policies (mostly in specific areas such as sexuality education and access of adolescents to reproductive health information and services).

Access to maternal and child health service

The effects of maternal health care (or access to care) on subsequent wellbeing and mortality risks in the early infant period has particularly been documented in previous Indian studies (Thaver & Bhutta, 2006). The further findings are that the health seeking behaviour of individuals and family is critical in determining maternal and child morbidity and mortality. Care

seeking behaviour has been strongly associated with such factors determining maternal and child health (Ramasubban & Singh, 1999). In essence, the outcome variables on the issues of maternal and chid health status will be a function of the consideration of the cumulative effects of use versus non use of antenatal care. Women who receive too few antenatal care visits timed in appropriately within their pregnancies can be identified and the risk factors associated with these modeled, in maternal health care indicators (Park & Park, 1989).

The WHO (1992) estimates that 88-98% of pregnancy-related deaths are avoidable. The affirmed stance of Kausar, Griffiths, and Matthews (1999) is that women who receive some form of schooling also have higher probability of using antenatal care services and have relatively lower risks of experiencing maternal deaths, and deaths of their infants and children, than their illiterate counterparts. The issues of whether poverty impacts directly on quality of maternal and child health; whether poor maternal and child health invariably compounds poverty situation; and the intricacy of these variables remain critically situational.

Utilization of maternal health care service

According to Kausar, Griffiths and Matthews (1999), people living in poorer households in rural and urban areas have a lower utilization of maternal health care services than those in the higher socio-economic status. Similarly, infants living in lower socio-economic groups in rural and urban areas have an increased risk of poor nutritional status and neonatal mortality. The findings in this literature source portray a strong urban-rural dichotomy in nutritional

status. An interesting conclusion emanating from their study is that rates of infant mortality are much higher in poorer sectors of urban areas, suggesting that some differential utilization of maternal health care exist between socio-economic groups.

The findings of Madise and Diamond (1996), Mathews and Diamond (1997) and Stephenson (1998) attest to the findings of urban-rural dichotomy in child health and survival and utilization of maternal health care in developing countries. Previous studies have shown that the uptake of maternal health care in developing countries has significant consequences for both the transition of the mother through the pregnancy and childbirth, the survival and health of child during early infancy (Khan, 1987). According to Montgomery and Hewett (2004), households living standards have a substantial influence on three measures of health; unmet need for modern contraception, Birth attended by nurses, doctors or trained midwives and children height for age. They concluded that both household and neighbourhood standards can make a substantively important difference to health.

Determinants of maternal health care utilization

There has been considerable research, particularly in developing countries, exploring the economic and socio-cultural barriers that deter women from seeking maternal health care services. Andersen (1995) has developed a behavioural model that portrays the multiple influences on health care services' use and, subsequently, on health status (Figure 1).

There are two important key elements described in this model, which can affect health care behaviour and finally influence the health outcomes,

namely environment and population characteristics. Health care system and external environment are grouped as environment factors. Health care system refers to national health policy, resources and organisation, while physical, political and economic components are part of the external environment. Both factors are important input for population characteristics.

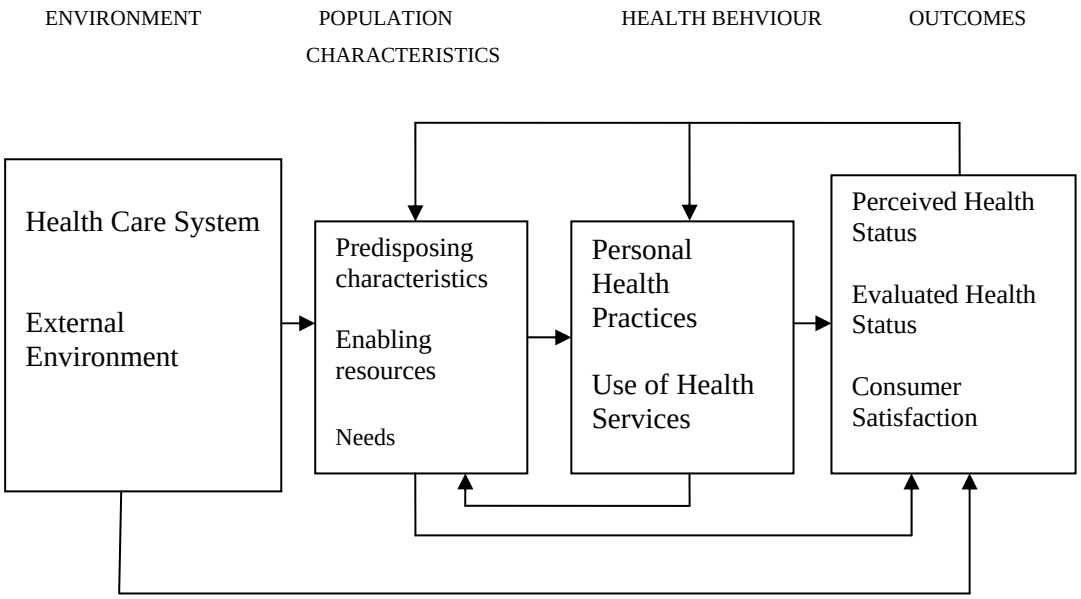

Figure 1: The behavioural model of health service use

Source: Andersen (1995)

This model suggests that personal health practices and people's use of health services are functions of the following three categories:

- Predisposing characteristics: Factors that are present, preceding the ill health and need for care, such as demographic factors, social structures and health beliefs. Demographic factors such as age and gender represent biological and urges the likelihood that people will need health services. Social structure is measured by a broad array of factors that determine the status of a person in the community, his or her ability to cope with and command, the resources to deal with these

problems, and how healthy and unhealthy the physical environment is likely to be (education, occupation, ethnicity, etc). Health beliefs are attitudes, values and knowledge that people have about health and health care services that might influence their subsequent perceptions of need and use of these services (Andersen, 1995).

- Enabling resources, which provide patients with the means to make use of the services (Andersen, 1995). Community and personal enabling resources must be available to use in anytime needed. For example, health personnel and facilities must be available and people must have the means and know how to get to those services and make use of them. Income, health insurance, a regular source of care, and travel and waiting times are some of the measures that can be important in this respect (Andersen, 1995).
- Need, which refers to health status, perceived by the individual or evaluated by the health providers (Andersen, 1995). It is how people view their own general health and functional state, as well as how they experience the symptoms of illness, pain and worries about their health and whether or not they judge their problems to be of sufficient importance and magnitude to seek professional health care.

Personal health services such as diet, exercise and self care interacts with the use of formal health care services to influence health outcomes. The measures of health services' use in this model include those representing type, site, purpose and coordinated services received in an episode of illness. This model also consists of health status outcomes in order to extend the measures of access to include dimensions which are particularly important for health

policy and health reform. It also depicts feedback loops showing that outcome, in turn, affects subsequent predisposing factors and perceived need for services as well as health behaviour (Andersen, 1995).

Another similar conceptual framework has been developed by Kroeger (1983). This framework is for answering the question about how people enter the sick role and make choices regarding the use or non-use of different kinds of health services. Based on an extensive review of the anthropological and socio-medical literature of health care, Kroeger (1983) proposed that determinants of utilization in developing countries could be grouped under three broad headings: (1) characteristics of the subject (predisposing factors) including age, sex, marital status, household composition and size, ethnic group affiliation, occupation, assets and education;

(2) characteristics of illness, expected benefits from treatment and beliefs about disease causation; and

(3) characteristics of the health care system, including accessibility, acceptability, cost and quality of care.

In addition, there is also a model in the literature, which has been used in studies on determinants of utilization of health care services in general, and maternal health care services in particular. “The Attitudes - Social influence - Self-efficacy (ASE)” model shown in Figure 2 predicts various health related behaviours. There are three main psycho-social factors which have been identified that predict behaviour intention: attitudes, social influences and self-efficacy. A person’s attitude towards a specific behaviour is a result from performing the behaviour, for example a person’s attitude in deciding whether to use family planning or traditional practices.

Social influence is as a result of social norms: influence from other peoples whether to perform or refrain from the specific behavior, and whether other people in society perform or refrain from doing specific behaviour. Self-efficacy expectations can be seen as a person's belief whether she/he can perform the desired behaviour and manage the barriers that may prevent him/her from doing specific behavior (Amooti-Kaguna & Nuwaha, 2000).

The implication of the model is that a person's health behaviour can be changed by changing person's attitudes, person's perception of social norms and social support and his or her self efficacy expectations (Amooti-Kaguna & Nuwaha, 2000). Moreover, External variables, such as social, demographic and economic factors, are expected to influence behavior through behavioural determinants and intention.

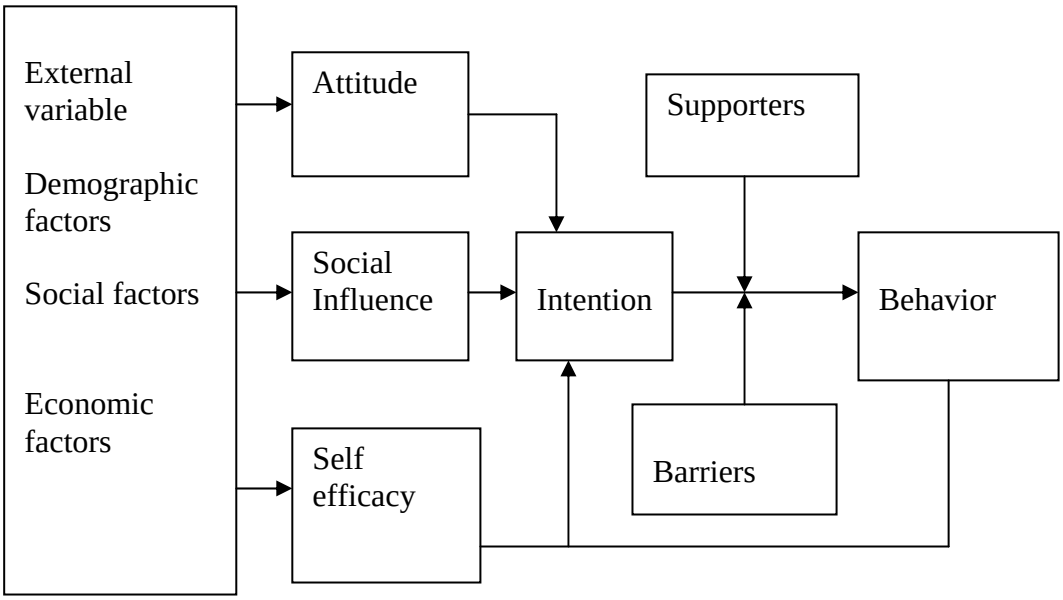

Figure 2: ASE Model for predicting behavior

Source: Amooti-Kaguna and Nuwaha (2000)

Socio-economic and demographic determinants of maternal health care utilization

Women's education

Amongst the maternal characteristics, education of women has been found to have the strongest association with the use of maternal health care services. In Peru for example, formal education of women influences the use of maternal health care services. Results from both the cross-sectional and fixed-effects model, controlling for service availability and the socio-economic status of the household, confirmed the importance of maternal education on the utilization of both prenatal care and delivery assistance (Elo, 1992). Similarly, in Thailand, one analysis showed that maternal education exerts a significant influence on the use of maternal health care services; the odds of using prenatal care and formal delivery assistance is much greater for women with primary schooling, compared to women with zero years of schooling (Raghupathy, 1996).

Educated mothers are considered to have a greater awareness of the existence of maternal health care services and benefited in using such services. Educated mothers are likely to have better knowledge and information on modern medical treatment and have greater capacity to recognize specific illnesses. As education empowers women, they have greater confidence and capability to make decision to use modern health care services for themselves and for the children (Caldwell, 1990, Schultz, 1984). Education also enables women to take personal responsibility for their own health and the health of their children.

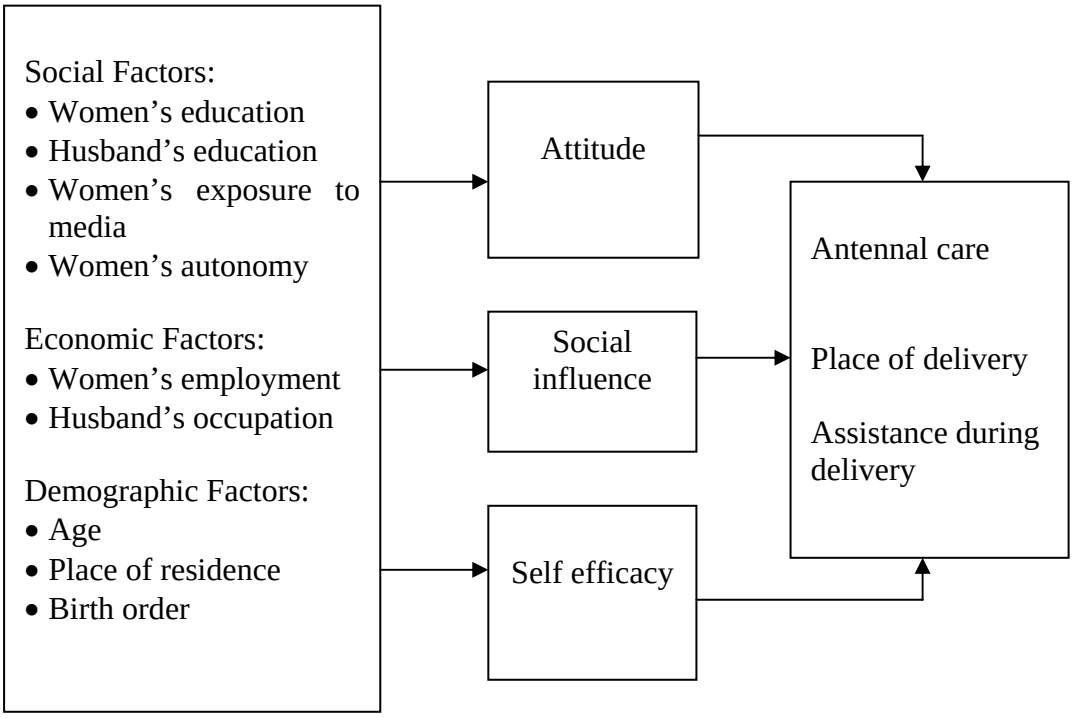

Figure 3: Determinants of maternal health care utilization

Source: Andersen (1995)

Finally, schooling reflects a higher standard of living and access to financial and other resources, because better educated women are more likely to marry wealthier men or have increased earnings themselves (Schultz, 1984). There is also evidence indicating that education alone may not be sufficient to improve health-care-seeking behaviour. For example, Kyomuhendo (2003) found that despite a favorable and enabling policy environment, universal primary education and decentralization of health services, there has not been an increase in the utilization of emergency obstetric care by women in Uganda, because women's care-seeking behavior was not the result of individual preferences or choices but it was conditioned by community poverty, norms and tradition.

Husband's education

Husband's education also reflects tastes and preferences for health-care utilization. The husband's attitudes towards modern care could, for example, influence the wife's decision of whether or not to seek modern health-care services. Caldwell has suggested that men with higher educational attainment may play a more important role in child-care decisions than men with less schooling (Caldwell, 1990).

A study in India reported that matriculate education has the largest and statistically significant impact on the probability of health care use. It increases the probability of pre- and post-natal care use by 10 percent and 8 percent respectively and the probability of the use of trained help at the time of delivery by 7 percent (Shariff & Singh, 2002).

Women's exposure to mass media

Existing research on health outcomes in developing countries has shown the important role of the media in disseminating information on health related issues. Three sources of information are usually used: radio, television, and newspapers and magazines. Women's exposure to information through the radio, television and newspaper significantly increases the utilization rates for all services in India (Shariff & Singh, 2002). There is a 5 percent increase in the probability of the use of natal care for a woman who frequently listens to the radio compared to a woman who does not. Moreover, a study by Obermeyer (1993) in Morocco and Tunisia indicated that watching television weekly is associated with an increase in the likelihood of both prenatal care and hospital delivery.

Women's autonomy

Autonomy has been defined as the capacity to manipulate one's personal environment through control over resources and information in order to make decisions about one's own concerns or about close family members. Women's autonomy thus can be conceptualized as their ability to determine events in their lives, even though men and other women may be opposed to their wishes (Schultz, 1984). The influence of women's autonomy on the use of health care appears to be as important as other known determinants such as education. Dimensions of autonomy such as freedom of movement, decision making power and control over finance can exert a strong influence over service use and service choice in South Asian setting (Schultz, 1984). In a North Indian City, women's autonomy, as measured by the extent of a women's freedom of movement, appears to be a major determinant of maternal health care utilization among the poor to middle income women (Schultz, 1984).

Women's employment status

Dependence on men for economic survival has been a principal barrier to women's control over their reproductive behaviour in developing countries. Empowering women with more economic participation and control in their households and communities might be the key to their achieving control over their own reproductive health.

Employment can increase women's economic autonomy and reproductive health status because it raises awareness and provides new ideas, behaviour and opportunities through interaction with other people outside the

home and community (Caldwell, 1990). One study in Kenya (Schultz, 1984) reported that the antenatal care visits tend to start earlier for women in paid employment. They are likely to have greater knowledge about pregnancy and childbirth due to freedom of movement outside household. They also tend to seek information on services available for pregnancy care during work.

However, employment may not necessarily be associated with greater use of maternal health care, like in Nepal (Schultz, 1984), because non-working women may be better off than working women. In the context of developing countries, women's work is largely poverty induced and is likely to have a negative impact on utilization of maternal health services.

Husband's occupation

The husband's occupation can represent family income as well as social status, and it is well established that increased income has a positive effect on the utilization of modern health care services (Elo, 1992). Differential utilization of health services by different occupational groups also depicts occupation as one of predisposing factors. An empirical research by Paul and Rumsey (2002) in rural Bangladesh showed that fathers employed in non-farm occupations chose trained personnel for delivery more frequently than fathers who were farmers or members of other educations. Furthermore, another study in Bangladesh reported that women whose husbands work in business or services are most likely to be the users of professional healthcare services to treat their complications (Elo, 1992).

Maternal age

Since older and younger women have different experience and influence, their behaviour on seeking health care can also vary. Commonly, younger women are more likely to utilize modern health care facilities than older women, as they are likely to have greater exposure and knowledge to modern health care, also more access to education. Older women, on the other hand, have accumulated knowledge on maternal health care and therefore likely to have more confidence about pregnancy and childbirth or they may be less comfortable with modern medicine and more reluctant to take advantage of available services; consequently, they may give less importance to obtain institutional care (Raghupathy, 1996). In contrast, experience and skills acquired by older women should have a positive influence on the use of health services.

One study in Nepal (Elo, 1992) gave result that women over the age 35 are less likely to utilize prenatal care but more likely to utilize delivery and postnatal care. However, a study in Bangladesh indicated that type of assistance utilized at delivery does not differ significantly with the age of the mother (Paul & Rumsey, 2002). In Philippines, older women tend to have fewer traditional visits both in urban and rural areas and to increase their private visits in urban areas (Wong, 1987).

Place of residence

Place of residence can also be an important determinant of the use of modern health care resources for childbirth. A higher proportion of births in urban areas occur in modern health care facilities compared to rural areas

(Paul & Rumsey, 2002). A study in Morocco also indicated that residence is the strongest predictor of use of maternal health care, with urban women two or three times more likely to use health services (Obermeyer, 1993). Wong (1987) in a study in Philippines reported urban and rural women differed significantly in the types of prenatal care most frequently used. For the urban women the most frequently used type of care tended to be modern public (40.2%), while rural women frequently used traditional practitioners (45%). Overall, about 38% of the rural and 59% of the urban women had modern prenatal medical care (Wong, 1987).

The importance of place of residence in determining women's use of maternal health care can be explained through the availability of health facilities. It is undeniable that generally, medical facilities are more ready accessible in urban than rural areas. In addition, urban women tend to be more educated and therefore, have greater knowledge about the benefits of maternal health care.

Birth order

With respect to birth order, several studies show a strong negative association between birth order and the use of health care services. One study in Turkey (Celik & Hotchkis, 2000) showed that women who delivered their first child were found to be significantly more likely to use prenatal care and trained assistance during delivery than women in the higher order. Another study in urban areas of Philippines appeared that the probability of choosing as most frequent either public or private modern care instead of traditional care

decreases as the number of children aged zero to six years old increases (Wong, 1987). There are perhaps, three possible explanations for this.

Firstly, women with first child pregnancy were more cautious about their pregnancies and therefore sought out trained professional. Secondly, as the number of children increases, women may tend to believe that modern health care is not as necessary and tend to rely more on her past experiences and knowledge from the accumulated previous experience. Thirdly, a higher birth order suggests a greater family size and hence lower resources (both time and money) available to seek formal healthcare.

Maternal and child health policies

The most recent figures from the World Health Organisation (2006), which releases revised maternal estimates about every five years, estimates that 515,000 women die annually from maternal causes. Ninety-nine percent of those deaths occur in the less developed world, making maternal mortality the health indicator that reveals the largest disparity between developing and developed countries (Loudon, 2000). The situation is most dire for women in Sub-Saharan Africa where every one of 13 women dies of pregnancy-related causes during her lifetime compared with only one of 4085 women in industrialized countries.

Most of the death from direct causes could be prevented if women received skilled care at critical moments during pregnancy and child birth. Unfortunately many women deliver without assistance of a skilled attendant – a health professional such as a doctor, nurse, or a midwife who can manage normal deliveries and treat the life-threatening complication of pregnancy and

child birth or refer women to appropriate health care centres (WHO, 2006). Experts estimate that about 15 percent of deliveries have complications that require special medical intervention. Yet only about half of deliveries in Less Developed Countries (LDCs) currently take place with a skilled attendant present (WHO, 1997).

In focusing safe motherhood as a major theme of Reproductive and Child Health, the Ghana Health Service (2003) defined Safe Motherhood as creating the circumstances within which a woman is enabled to choose whether she will become pregnant, and if she does, ensuring she receives care for prevention and treatment of pregnancy complications, has access to trained birth attendants, has access to emergency obstetric care if she needs it, and care after birth, so that she can avoid death or disability from complications of pregnancy and child birth. Deductions from the definition and goal of safe motherhood presuppose that the opportunities for women through reproductive choices are not only beneficial to themselves, but also to their children, spouses and families.

One of the crucial determinants of maternal health is antenatal attendance that paves the way for safer delivery and post delivery care. The World Health Organisation (2006) recommends a minimum of four visits per pregnancy. This rests on the nexus, that early detection of problems in pregnancy leads to more timely referrals in case of complications and this is of particular importance to the health care delivery system. Women who do not receive antenatal care during pregnancy are at a higher risk of obstetric emergencies and adverse out- comes.

The National Population Council (1994) document reiterates the need to empower women in all dimensions as an imperative for quality population. Issues related to young girls and also captured in the 2000 Adolescent Reproductive Health Report states that teenagers aged 15-19 years who are mothers constitute 15.7% of maternal death. Similarly, 7.9% are pregnant with first child and 23.6% have begun child bearing (GSS, 2003). Noting with concern associated complications of early child bearing one wonders what the safe motherhood status of such teenagers will be in future.

Making maternal health services free may be a crucial factor for morbidity and mortality in women and children. However, the extent of accessing and utilizing such a facility remains bizarre in the minds of many people, especially in such rural communities as those in Savelugu-Nanton District.

Safe motherhood initiative

The Safe Motherhood Initiative was launched at an international meeting in Kenya in 1987. The major focus was to reduce high maternal death rates and pregnancy related illness and complications, especially in developing countries. The importance of Safe Motherhood was again given impetus during the 1994 International Conference on Population and Development in Cairo and the 1995 World Summit for social development in Copenhagen as well as during the 1995 Fourth World Conference on Women in Beijing.

Since 1998, the focus of the Ministry of Heath/Ghana Health Service has shifted from Maternal Child Health/Family Planning (MCH/FP) to Reproductive and Child Health (RCH). The Safe Motherhood initiative

however continues to receive much attention. The major components of the Safe Motherhood programme include interventions such as; Antenatal Care, Labour and Delivery Care, Postnatal Care, Family Planning, Prevention and Management of unsafe abortions and Health education. These interventions are carried out within the context of the Primary Health Care (PHC) system, where services are taken closer to the communities while at the same time encouraging community participation.

The Ogan Komering Ilir district in the province of South Sumatra in Indonesia is one area where a national initiative dubbed 'Mother Friendly Movement' has significantly reduced maternal death and injury over the past 15 years. Under the Mother Friendly Movement, coordinated by the Ministry of Women's Empowerment, half a dozen ministries collaborate with grass-root groups to make child birth safer. To achieve the desired results, the Movement uses the mass media and other channels to raise public awareness of the deadly 'three delays' that threaten women giving birth: delay in identifying the signs of obstetric emergency, delay in reaching service delivery facilities, and delay in receiving assistance at the delivery points (Mahler, 1987).

The campaign in the late 1990s also put trained midwives in several remote villages and more recently providing mini-grants to villages that are 20 kilometres or two hours distant from obstetric delivery facilities. A portion of this money is managed by the midwife to arrange emergency transport. Mini-grants are provided just once to a village as seed money to create a system for responding to obstetric emergencies. To sustain the effort, villagers are

expected to develop credit schemes such as encouraging savings by families of pregnant women.

The Himalayan country of Nepal is another country that has chalked some successes in Safe Motherhood particularly in the area of comprehensive abortion care. Before 2002, Nepal had one of the world's most restrictive abortion laws. Under no circumstances were women allowed to terminate a pregnancy and those who did, or were simply suspected of doing so, could land a sentence in the country's prisons. In 2000, it was estimated that up to a fifth of jailed women were incarcerated for seeking abortions. Not surprisingly, Nepal also had one of Asia's highest ratios of pregnancy related deaths. In the late 1990s the maternal mortality ratio (MMR) topped 530 deaths per 100,000 women, and in 1998, it was estimated that more than half of gynecological and obstetric hospital admissions were due to abortion-related complications. All these however changed for the better when in 2002, Parliament approved sweeping legislation to improve women's status, including allowing abortion in a wide variety of circumstances up to the 18th week of pregnancy (Rossi-Espagnet, 1984).

As part of a Safe Motherhood programme, Ipas (2007), working with His Majesty's Government and the Technical Committee for Comprehensive Abortion Care institutionalized a Comprehensive Abortion Care (CAC) model that includes pre-and post abortion counseling as well as providing contraceptives to prevent repeat unwanted pregnancies throughout the country. As of December, 2006, 71 of Nepal's 75 districts, even those in relatively remote regions had trained abortion providers. A remarkable achievement in which Ipas had been instrumental. The success of this initiative is buttressed

by the 2006 demographic and health survey release of Nepal which estimates the Maternal Mortality Rate (MMR) to be 281/100,000 as against the 1998 figure of 530/100,000 (Ipas, 2007).

Safe Motherhood has been described as “the avoidance of the dangers, sufferings, disabilities, deprivations and death which women are exposed to during the course of pregnancy, labour, child birth and their consequences or long after these events which disable them, prevent or obstruct their active participation in gainful ventures or their full emancipation in life” (Kumekpor and Richardson, 1993).

Mahler (1987:8) defines Safe Motherhood Programmes as:

First, functional literacy for all girls and women, adequate primary health care at all levels and an adequate share of available food for girls from infancy to adolescence, and universally available family planning to avoid unwanted or high risk pregnancies;

Second, after pregnancy begins, good prenatal care including nutrition, with efficient and early detection and referral of high-risk patient;

Third, the assistance of trained persons for all women in childbirth, at home or in a hospital; and

Fourth, women at a higher risk and, above all, women in those dire emergencies of pregnancy and childbirth, must have effective access to the essential elements of obstetric care”

From the above definitions, it can be seen that safe motherhood is a very complex and broad concept which covers many activities. Thus a safe motherhood programme is expected to do one or more of three things:

- Affect the incidence of pregnancy;

- Affect the incidence of completeness of pregnancy; and
- Affect the outcome of obstetrics.

The Ghana Safe Motherhood Programme is an evolutionary process, pulling together all initiatives found to have direct impact on maternal mortality in the socio-cultural context.

Maternal morbidity and mortality

The majority of maternal deaths occur after child birth – almost within 24 hours. About a quarter take place during pregnancy and about 15 percent happen at the time of delivery (Starr, 1998). The most common medical cause is hemorrhage, a swift and severe loss of blood before, during and after delivery. Hemorrhage in considered a direct cause of death, because it is directly associated with pregnancy and child birth. Four-fifths of maternal deaths are due to direct causes: hemorrhage, infection, complication related to unsafe abortion and hypertension disorders (WHO, 1999).

The remaining 20 percent of maternal deaths have indirect causes, conditions that are aggravated by pregnancy such as malaria, anaemia, or diabetes. Maternal mortality is influenced by the socio-economic and political context of health care system as well as the cultural and biological realities of women seeking care. The complex interaction means that, women may not seek it out or receive it.

Because of the crucial role that women play in household management, care for children and other family members, and by virtue of the fact that the vast majority of women who die from or are seriously injured by maternity-related causes are in the prime of life, their illness and deaths have dire social

and economic consequences for both families and communities. Consequently, families that lose mothers are likely to suffer declining motivational status, (Koblinsky, Campbell, & Heichelhei, 2000). Surviving children may have lower rate of school enrollment. Babies born to malnourished mothers are more likely to have low birth weights, which are associated with development delays, disabilities and early death. Research shows that newborns whose mothers die are less likely to survive (Starr, 1998).

One of the main health issues facing the country is the high incidence of infant mortality. The Ghana Demographic and Health Survey (GSS, 2003) estimates the Infant Mortality Rate (IMR) to be 77 per 1,000 live births. Enormous reduction in child mortality (under 5 mortality) occurred almost everywhere around the world between 1980 – 1990. For example, child mortality in Chile dropped from 155 to 20 per 1,000 live birth, Tunisia from 245 to 45 and Sri Lanka from 140 to 22 (World Bank, 1993). However, in Ghana child mortality rate as recorded in the GDHS of 1988 was 155 per 1,000 live births.

Data from Ministry of Health (MOH) sources reveal that almost 60% of the deaths occurring among children under 5 are preventable. It is also established that 31.4% of children under 5 are underweight (GSS, 2003). Some risk factors in child mortality are:

- Low level of education of mothers: The GDHS, of 1988 shows that between the ages of one and four, the probability of dying is four times greater for children of mothers with no education than for those of mothers with more than middle school education.

- Age of mother: Births of mothers aged between 20-29 years have a higher chance of survival than those born to mothers much younger or older.

Other factors include marital status, birth order, sanitation and health facilities and household income.

Factors that affect access and utilization of maternal and health delivery services

The effectiveness of the health system in developing countries is undermined by lack of utilization of existing facilities. In developing countries, utilization of basic health services has remain poor even though there has been increasing public expenditure on the provision of modern health care. It has been widely known that better use on maternal health care facilities will reduce maternal mortality. Recent data in Indonesia showed that maternal mortality ratio (MMR) in this country is 228 deaths per 100,000 live births (Statistics Indonesia, 2008). Under such circumstances, it becomes vital to identify the factors responsible for non-use of maternal health facilities.

According to official data, MMR of Indonesia has declined by about one half in between 1985 and 2007. As in the middle of the 1980s, the MMR stood at around 450 deaths per 100,000 live births. It slowly decreased to 404 in 1991. Data from the 1994 Indonesia Demographic and Health Survey (IDHS) imply a slight decline of the MMR to 390 per 100,000 live births. For the period of 1997-2003, Indonesia reduced its MMR from 334 to 307. Finally, the report of the latest survey, namely IDHS 2007 shows that MMR in

Indonesia for the period of 2003-2007 is 228 deaths per 100,000 live births (Depkes, 2008).

It has been widely acknowledged that the causes of maternal death are consistent around the world. Some 80 percent of maternal deaths are due to direct obstetric complications, such as haemorrhage, sepsis, complications of abortion, pre-eclampsia and eclampsia, and prolonged/obstructed labour (UNFPA, 2004). The other 20 percent are due to indirect causes, which generally comprise existing medical conditions that are aggravated by pregnancy or delivery. The indirect causes include anaemia, malaria, hepatitis and AIDS. In Indonesia, most maternal deaths occur during delivery, caused mostly by direct obstetric complications, comprising bleeding and eclampsia (Depkes, 2008).

Poor health outcomes among reproductive women concerns with the non use of modern maternal health care services, such as antenatal care, delivery care and postnatal care. Antenatal care provides the opportunity for complications to be detected and gives women advice on the management of complications (Abou-Zahr, 1996).

Analysis of the Indonesian Demographic and Health Survey (IDHS) 2007 shows substantial differences in the use of antenatal care within the country. The proportion of mothers (15-49 years old) who received antenatal care at least one from the medical professionals is 93 percent (UN, 2008).

A professional delivery care, such as assistance by a skilled health worker (doctor, nurse or midwife) at delivery is a key to reduce maternal mortality (Winikoff & Sullivan, 1987). Most of maternal deaths occur because the delivery is not assisted by skilled health personnel (DEPKES, 2008).

Approximately 73 percent of births in the five years preceding a survey by DEPKES' (2008) survey were attended by skilled health professional. In other words, more than a quarter of the births were not attended by skilled health professional. The coverage of births by skilled birth attendants vary across the provinces of Indonesia from 97 percent in DKI Jakarta to 44 percent in West Sulawesi and 33 percent in Maluku (Statistics Indonesia, 2008).

Traditional birth attendants (TBAs) continue to have a significant role in assisting deliveries. According to information collected by Abou-Zahr (1996), 69.6 percent of the deliveries in Gorontalo were assisted by TBAs, in Maluku (67.5 percent), Southeast Sulawesi (67.3 percent) and West Sulawesi (63.3 percent). Overall in the whole of Indonesia, 35 percent was assisted by a TBA (Statistics Indonesia, 2008). The Ministry of Health of Indonesia has set a target that 90 percent of the births should be assisted by trained medical staff by the year 2010.

Adolescent pregnancy is one of the factors that has contributed to maternal deaths. Very early motherhood increases the risk of dying in childbirth and makes the well being of surviving mothers difficult. Reducing adolescent fertility would contribute directly and indirectly in improve maternal health. According to Abou-Zahr (1996), births to young women aged 15-19 years old account for 9 percent of all births in Indonesia: 7 percent have had a live birth and 2 percent are currently pregnant with their first child (Koblinsky, Campbell, & Heichelhei, 2000).

Access to contraception is important to save women's life. Family planning can prevent the serious health consequences of women's health by helping women prevent unwanted pregnancies and high risk pregnancies

(Winikoff & Sullivan, 1987). Thus, ensuring access to contraception can avoid women from entering the risk of the death from pregnancy. According to UNFPA (2004), ensuring access to family planning could reduce maternal deaths by a third. Contraceptive use among currently married women age 15-49 in Indonesia is 61 percent (BPS, 2008). This figure indicates that efforts in ensuring access of women to voluntary family planning are still lacking.

Unmet need for family planning is the gap between women's stated desires to delay or avoid having children and their actual use of contraception (UN, 2008). Bongaarts and Bruce (1995) define unmet need as the percentage of currently married women who either do not want any more children or want to delay before having their next birth, but have not practiced contraception. According to this definition, the total unmet need for family planning services in Indonesia is low, only 9 percent, of which 4 percent is for limiting and 5 percent is for spacing (Koblinsky, Campbell, & Heichelhei, 2000). Unmet need is considered a problem for maternal health, because once a woman has had the children she desires, not being able to use contraception results in unwanted pregnancies and births. This increases the risk of maternal death, because unwanted pregnancies can lead to unsafe abortion and late prenatal care (Joyce, Kaestner & Korenman, 2000).

In India, many women do not receive prenatal care at all, and the care that is received is often characterized by an insufficient number of visits timed late into pregnancy (WHO, 2006). Furthermore, the delivery care utilized in India is dominated by home birth either in the natal or the marital household. Hence, high-risk pregnancies are often identified, obstetric histories are ignored, opportunities for trans-family planning messages are missed and

important information on child nutrition and health care is not disseminated to a large population.

In the light of the above literature, the fact that 83% of labour in northern region is conducted at home and 7.7% use modern contraceptives (GSS, 2003) one can perceive the obstetric future of women and poor nutritional and survival perspective of children. Recent research in the 1980s and 1990s has revealed a great diversity in the extent and depth of poverty within the urban sector in developing countries.

Harpham, Lusty, and Vaughan (1998) argued that the depth of poverty is worse in deprived city slums than in rural communities. Recent policies present a more diversified stance on the rural-urban dichotomy with regards to nagging effects of poor maternal and childcare services (Rossi-Espagnet, 1994). According to Rossi-Espagnet, environmental pollution, which is a widespread problem for all urban people, affects the poorest more severely, since most of them live at the periphery of the city where manufacturing and processing plants are often built.

Summary

This brief literature review has shown the importance of a range of characteristics in determining maternal health care behavior. In this study, maternal health care services are observed under three categories: antenatal care, place of delivery and assistance during delivery. Women education, husband's education, women exposure to media, women's autonomy, women's working status, husband's occupation, age, birth order and place of residence are the independent variables, which are assumed to have positive or

negative association with the utilization of maternal health care services. The next chapter discusses the research methodology used for the study

CHAPTER THREE

METHODOLOGY

Introduction

The purpose of this chapter is to describe the methodology employed in this study. It covers issues such as the choice of the study area, research design, population and sample selection, data collection techniques and techniques of data analysis.

Study area

Savelugu-Nanton District was chosen ahead of the 19 other districts in the Northern Region who equally stood a good chance of being picked by virtue of the fact that issues of maternal health care cut across the entire region through a simple random sampling. The district was, and still has the highest number of Guinea worm cases not only in Ghana but the world at large. Recording 1,132 cases by December, 2006 and 1,836 as at May, 2007 with women and children being the worse affected.

The selection of the study area is influenced by two reasons. Firstly, over the last two decades, there have been investments in the public health system in the Savelugu-Nanton District with an emphasis on increasing the availability of maternal and child health services and encouraging women to obtain adequate health care during pregnancy and delivery. However, the Maternal Mortality Rate (MMR) has not yet dropped appreciably and the

strategies so far put forward have not brought the desired results yet. Presumably, socio-economic and demographic factors do play roles in the utilization of maternal health care services. Secondly, underutilization of maternal health care service by pregnant women in the Savelugu-Nanton District put them at greatest risk. The utilization requires voluntary participation, however, there are a multitude of factors that deter most women from utilising health care (WHO, 2006).

Study design

The study was a descriptive survey of the views and perception of expectant mothers and trained health professionals. Best and Kahn (1989) views survey as being essentially cross-sectional in which data is collected at a point in time. It often permits the use of questionnaires, as indicated by Borg and Gall (1983). Travers (1969) viewed surveys as studies generally conducted in situations in which not much is known about the phenomena concerning which inquiry is being made.

Population and sample selection

The population of women in fertility age (WIFA) 15-49 years which is the target population of community service recipients (clients) is estimated at 26,197 by the close of December, 2006, while the strength of trained health professionals stood at 61 (District Health Management Team, 2006). For the purpose of increasing validity and reliability of this study, the multi-stage sampling (quasi-probability sampling) procedure was used as a primary method to determine communities at the first level within the four sub-districts

(Diare, Nanton,,Pong-Tamale and Savelugu) of the Savelugu-Nanton District. This was followed by the simple random method which was used to finally select the participating communities, while the convenient method was employed in selecting the actual respondents.

Using 26,197 as the figure of women in fertility age as the target population and with 0.3% as the frequency of death, and with 1% being the worse acceptable level, an 80% confidence interval will return a sample size of 100; 90% will give us 164; 95% will produce a sample size of 232; with 99% producing 399 in that order. For the purpose of this study however, a confidence interval of 95% is preferred, hence the sample size of 232 for community service recipients. From a pool of 61 service providers, 20 were ready for selection. Eleven were purposively selected and interviewed, while the remaining were selected based on simple random method, with a bias towards competency in maternal health delivery. The eleven who were purposively selected include the District Director, the District Public Health Nurse, the medical superintendent of Savelugu Poly clinic and the eight facility heads.

Data collection techniques

In line with general social science research principles, this study was carried out using data from both primary and secondary sources. The stated objective of this research required a great deal of primary data which was elicited from maternal health care service recipients and service providers through the use of interview and questionnaire schedule respectively. Secondary data were sourced from Ghana Health Service Annual Reports,

Health Journals and Ministry of Health Bulletins. Other documents consulted include the Ghana Demographic Health Survey, the Ghana Living Standards Survey of Ghana Statistical Services as well as the Revised National Population Policy.

Data collection instruments

The major instrument used for data collection was the interview schedule administered to 232 community-based service recipients (clients). A support instrument, a questionnaire was also administered to 20 service providers (health workers). As much as possible, both instruments contained a good mix of close-ended and open-ended items. Hence the quantitative and qualitative data obtained met the objectives of this study (see Appendix 1 and 2). Each of the two instruments was structured into four components such that each section catered for each objective of the study. Dichotomous response patterns such as “YES or “NO”, and its modified forms were included, but follow-up open-ended responses such as “explain”, “Give reasons” were added. Rating scales and Likert scales were also an integral part of the instruments.

Data processing and analysis

Borg, Gall and Gall (1983) argued that the results of quantitative studies should be presented in numerical form, whereas the results of qualitative studies should be presented either as verbal data (e.g., transcripts of interviews) or visual data (e.g., video recording of the events).

Data collected from both primary and secondary sources were analyzed by transcribing, editing, coding and computer processing using the Statistical Product for Service Solution (SPSS version 16) software. The response of each interviewee were written down and tagged. This was done for all the responses and the sampled views were written down and further, the necessary results given an in-depth analysis. Most often, this proved difficult, because it was tedious comparing the numerous results of interview with each other but this gave the researcher a true picture of the varying perceptions of the respondents. The most used method was comparative analysis, that is, comparing the results for each response.

Concerning the questionnaires, the responses were organized into various themes and categories (four sections) based on the objectives of the study such that each section provided answers for each of the research objectives. Prior to coding and tabulating the questionnaires for analysis, all the items were checked for inaccuracies. This helped the researcher to find out if instructions had been followed uniformly and whether all items had been responded to. The responses to the questionnaires were then coded by assigning numbers to the various categories of responses for the purposes of analyses.

- Items with “Yes” and “No” responses to positive statements were coded, thus;
- Yes - 1, No - 2
- Similarly, items in the affirmative were given the following codes:
- Strongly Disagree - 1, Disagree - 2, Uncertain - 3, Agree - 4, and Strongly Agree - 5.

- Conversely, coding for negatively worded statements were as follow:
- Strongly Agree - 1, Agree - 2, Uncertain - 3, Disagree - 4, and Strongly Disagree - 5.
- Very Good – 1, Good – 2, Undecided – 3, Bad – 4, and Very Bad – 5,
- Very Effective – 1, Effective – 2, Uncertain – 3, Ineffective – 4, and Very Ineffective – 5.

A short list was also prepared from a master of responses for the open-ended items in order to get the key responses that were given by the respondents. This was followed by a preparation of a sheet showing the coding scheme. This provided a guide for the interpretation of the variables in the analysis. The items on the questionnaires were transferred to a spreadsheet (Statistical Product for Service Solution version 16). The data were then cleaned by examining them for any errors and were finally analyzed using the SPSS. Percentages and tables were employed to present the outcome.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

The purpose of this chapter is to analyze and discuss the results of the study. The chapter is organized into four parts. The first part assesses the awareness level of women about free maternal health services and the types of services provided under the scheme. The second part examines the output of Utilization. The third part examines the factors that affect access to and utilization of free maternal health services, while the last part offers some suggestions on ways to improve access to and utilization of free maternal health services in the district.

Awareness level of women and types of services provided under the scheme

The first objective of this study was to assess the awareness level of women about free maternal health services and the types of services provided under the scheme. Specifically, the study explored the following:-

- awareness of the Free Maternal Health Service Scheme;
- medium of information about the scheme;
- reasons for instituting the scheme;
- types of services covered by the scheme;
- category of health staff who render these services.

Awareness of women about the scheme

Respondents were asked whether or not they had heard about the existence of free maternal health services in the district. Of the 232 respondents, 215 representing 92.7% answered in the affirmative, while the remaining 17 making 7.3% answered in the negative. This is an indication that the majority of women in the district were aware of the scheme. Perhaps the 17 respondents who responded in the negative belonged to the category of unmarried women in their teens, those who have just returned from the 'Kayayei' expedition to the cities in southern Ghana and some of the women aged 50 years and above who were randomly selected.

This position was also supported by the response of all the 20 service providers selected. All of them answered 'Yes' to the question as to whether they thought women were aware of the existence of the scheme in the district. They explained that, the increasing numbers in antenatal attendance goes to buttress this fact.

Medium of information about the scheme

With the issue of how clients accessed information on free maternal health services in the district, 114 (49.1%) respondents mentioned the Community-Based Surveillance (CBS) village volunteers as their source. Another 88 respondents making 37.9% named the health staff as their source of information; 21 making 9.1% named religious leaders, with the remaining nine representing four percent 3.9% mentioning the Assembly men in their communities. From the above figures, it is clear that contrary to the popular belief that it is health staff who are responsible for disseminating information

to clientele, responses elicited from clients in this study about awareness indicates that majority of them got the message from the Community-Based Surveillance (CBS) volunteers. This could be attributed to the fact that, there are two village volunteers each to the 179 communities in the district, bringing their number to 358.

As such, if this number is compared to the 61 service providers at post who are mostly restricted to the health facilities, one can only agree with the respondents. The fact that 9.1% of the respondents also got the message about the Free Maternal Health Service from religious leaders underscores the increasing collaboration between the Ghana Health Service and other stakeholders.

Reasons for instituting the scheme

Responding to the questions as to why the Free Maternal Health Service Scheme was instituted, Table 1 gives a clear picture of the perception of respondents.

Table 1: Responses on why the scheme was instituted

Responses	Frequency	Percentage
To help pregnant women access free health care	147	63.4
Promote good health, safe pregnancy and delivery among the rural poor	68	29.3
Government policy to win votes	2	0.9
No idea	15	6.4
Total	232	100.0

Source: Field Survey, 2007

From the evidence depicted in Table 1, it is obvious that close to 93% of the respondents were aware of the existence of the Free Maternal Health Scheme in the district that catered for women during pregnancy and delivery. This may have accounted for the increasing number of Antenatal attendance that the district had been experiencing of late.

For the 15 respondents constituting 6.4% who claimed to have no idea concerning reasons for which the scheme was instituted, it is possible they fall within the 7.3% category of respondents who had earlier on said they had never heard of the Free Maternal Health Service Scheme. In the same vein, the response of the two making 0.9% who saw the scheme as a policy by Government to win votes could be attributed to the nine respondents who had earlier mentioned the Assemblymen as their source of information about the scheme. Perhaps they may have given it a political slant.

Types of services covered by the scheme

On the types of services covered by the Scheme, the responses as captured in Table 2 explain it all. About 30.6 percent of the client respondents mentioned registration and general health education as the area of coverage.

Table 2: Services covered by the scheme

Responses	Frequency	Percentage
Registration and general health education	71	30.6
Blood pressure and weight	21	9.0
Routine drug administration	33	14.3
No idea	107	46.1
Total	232	100.0

Source: Field Survey, 2007

Taking blood pressure and weight of clients had 21 responses making 9.0%. Respondents in favour of routine drug administration were 33 constituting 14.3%, while the remaining 107 representing 46.1% said they had no idea about the types of services covered by the scheme. It is important to note that, the first three responses given by 125 of the respondents who constituted 53.9% were all services rendered during antenatal visits. As such, as far as most women are concerned, free maternal health services in the district is equated to Antenatal care. The remaining 107 respondents constituting 46.1% said they had no idea about the type of services covered by the scheme.

Probed to explain what they meant by general health education, all the 71 respondents mentioned issues such as personal hygiene, nutrition and drug usage, but not the types of services covered by the scheme nor an explanation as to why the service providers are undertaking a particular activity on them. Perhaps this knowledge deficit, was due to the fact that majority of the women had information about the scheme from the Village Volunteers. These are a group who are laymen with no technical expertise in health, but whose pre-occupation was to spread the message of free maternal services to their kinsmen, while leaving the details to the health workers. Unfortunately, the health staff seemed to be overwhelmed by the antenatal attendance, and as such do more of service delivery than explaining specifics about service coverage.

Category of health staff who render free maternal services

Responding to the question as to which category of health staff were responsible for rendering maternal health services, Table 3 captures their responses.

Table 3: Category of staff who renders free maternal health services

Responses	Frequency	Percentage
Nurses	137	58.9
Doctor and Nurses	78	33.5
All health staff	14	6.2
No idea	3	1.4
Total	232	100.0

Source: Field Survey, 2007

Figures from Table 3 indicate that 137 of the respondents making 58.9% mentioned the nurse as the health staff who renders free maternal health services. This is so because, for most women the health staff they come into contact with most often are the community health nurses and midwives who are mostly female.

The other category of respondents numbering 78 (33.5%) mentioned the doctors and nurses as the service providers. This is probably due to the fact that most of the rural folk referred to male nurses as doctors. Fourteen (6.2%) named all health staff as maternal health service providers. This group may have visited health facilities with other ailments and complications and as such may have come into contact with physicians, laboratory technicians and other Para-medics. It is also possible that the remaining three respondents

constituted 1.4% who said they had no idea as to those who provide maternal health services and part of the seventeen respondents who claimed not to have heard anything about the Free Maternal Health Services Scheme, as such may not have patronized any of the services under the scheme.

It is also imperative to state that, the inability of most clients to identify which group of health staff provides what services could be attributed to the new uniform policy in vogue for the past four years where all health staff are supposed to wear white.

Factors affecting access and utilization of free maternal health services

In a bid to examine respondents' views on factors militating against access and utilization of services under the scheme, the researcher considered: constraints in the operation of the scheme regarding access; and constraints in the operation of the scheme regarding utilization. Table 4 gives a vivid account of the responses.

Table 4: Factors affecting access and utilization of free maternal health services

Responses	Frequency	Percentage
Lack of time	126	54.3
Ignorance	16	6.9
Distance	68	29.3
Financial difficulty	22	9.5
Total	232	100.0

Sources: Field Survey, 2007

From Table 4, 126 (54.3%) stated lack of time for their inability to access services under the scheme. Perhaps this group is either yet to appreciate the inherent benefits of the scheme or is truly bogged down with responsibilities such as helping their husbands on the farm, looking for potable water, looking after kids with Guinea Worm, petty trading and performing other household chores as house wives. Another 16 (6.9%) mentioned ignorance as a factor. It is possible, this class fall under those who claimed not to have heard of the scheme at all. Sixty eight (29.3%) made a strong case for sending health care to the door steps of the populace when they cited distance from their places of abode to the health facilities or service delivery points as reason. This is an indication that the nine health facilities currently serving the 179 communities in the district are woefully inadequate.

For 22 (9.5%), financial difficulty was the reason given. They explained that one need to board transport to the health facilities and for most of them, the cost of the return journey was too much to bear. Also for advance pregnancies where the client needs to be accompanied by another person to and from the clinic, the element of cost even becomes higher. It is important to note however that the problems of distance, lack of time and financial difficulty are mitigated to some extent by outreach services being undertaken by the District Health Management Team. On the other hand, 13 (65%) of service providers cited distance and transportation problem as a barrier, with the remaining seven (35%) stating workload and other household hold responsibilities as the main causes.

Reasons for not utilizing free maternal health services

The views of respondents in Table 5 summarize the position of service recipients as far as utilization was concerned.

Evidence from Table 5 clearly paints a picture where 103 (44.4%) of service recipients cited having no complications as their reason for not utilizing services under the scheme. Perhaps this group was part of those who had patronized antenatal services and adhered to advise received from service providers. It also brings to fore an exhibition of ignorance, that individuals only utilized health services when there is a problem or complication during pregnancy or delivery.

Table 5: Reasons for not utilizing free maternal health services

Responses	Frequency	Percentage
No complications	103	44.4
Staff attitude	87	37.5
Financial difficulty	32	13.7
Distance	5	2.2
Lack of authority for decision making	5	2.2
Total	232	100.0

Source: Field Survey, 2007

The attitude of staff to work and toward clients was also mentioned as a factor that deterred a lot of potential clients from the uptake of maternal services. Eighty seven (37.5%) respondents stated that most often the service providers resided in Tamale and Savelugu the district capital and come to work daily. As such, they reported late for work and departed back after

3.00pm. In effect, most women in labour after 3.00 pm do not even make the attempt at coming and not meeting the midwives. Some also said they were more comfortable with the Traditional Birth Attendants (TBAs) than the midwives when in labour.

A serious revelation that came up during the study was the responses of 32 (13.7%) who cited cost and financial difficulty as an impediment for the uptake of services. For most expectant mothers, they claimed the midwives demanded a bottle of dettol (camel brand) and a cake of cussons soap during labour. For most of them, adding the cost of these items to their transport cost for a service they are told is free is simply unimaginable and would prefer giving birth at home or with the Traditional Birth Attendant.

Finally, five respondents apiece constituting 2.2% cited distance and lack of authority to decide where they will want to deliver as a militating factor. This could be so because the area of study was a predominantly Moslem and Dagomba community where the authority of the man as the head of family is unquestionable. Inheritance and succession was also patrilineal and therefore places authority and resources in the hands of the men. The women therefore are naturally dependent on their husbands when it comes to issues as vital as child birth. The Service providers however cited cultural and superstitious beliefs, distance, illiteracy, the lower status of women and inadequate staff as factors that account for the inability of most women to utilize maternal health services.

The service providers stated that child birth was still considered a mystery, and therefore most women for the first three to four months were supposed to keep their pregnancy a secret. Pregnant women were also not

supposed to sleep or walk outside at night for fear of being attacked by evil spirits. This position made it difficult for women in labour to move out in the night to receive skilled attendant care at the health facility.

Distance of health facilities from communities as well as inadequate staff to attend to clients were also highlighted by the service providers as a factor. For most health facilities there was only one trained staff who was supposed to see to both out patients who reported with other ailment as well as seeing to clients who were there to access maternal health services. This most often causes delays and deters a lot of clients from utilizing the services. The issue of lack of formal education also came up for mention. They said the illiterate folk were generally not comfortable with anything that involves paper documentation. Most of them were equally apprehensive of some of the gadgets and instruments used at the health facilities. Finally, the lower status of women in the society also denied them some decision making rights, even when they were ready to avail themselves of these services. For most mothers issues of gender inequality acted as a formidable barrier even in circumstances where there were favorable conditions for seeking maternal health care (WHO, 1995).

Output of utilizing free maternal health services

The second objective of this study is to examine the output of utilizing the free maternal health services available at the various service delivery points. To achieve this, data was sourced from the District Health Directorate in respect of indicators such as: maternal deaths, antenatal care attendance, infant death, supervised delivery, unsupervised delivery (TBAs), and postnatal

care. Table 6 gives a vivid picture of the performance of the scheme in the Savelugu-Nanton District.

Table 6: Output of utilizing free maternal health services

Indicator	2004	2005	2006
Maternal Death	2	2	1
Antenatal Attendance	18,041	20,311	19,076
Infant Death	42	32	36
Supervised Delivery	1,174	1,434	852
TBA's Delivery	1,376	1,763	1,122
Postnatal Attendance	312	386	428

Source: Annual Report 2006, Savelugu Ghana Health Service (GHS)

From the figures shown in Table 6, it is obvious that majority of women in the district were aware of the Free Maternal Health Service Scheme and had patronized antenatal care services. Table 6 indicates that there was an increase from the 2004 figure of 18,041 to 20311 in 2005. However, the slump in figures to 19,076 in 2006 was attributed to the strike action embarked upon by all health staff in the country to back their demand for increased pay. Maternal death as an indicator did not also fare badly, with only one recorded case in the year 2006.

The figure for infant death (42 in 2004; 32 in 2005; and 36 in 2006) continues to be a problem. The explanation given was that most of the cases were handled by the traditional birth attendants. Supervised delivery saw a marginal increase from 1174 in 2004 to 1434 in 2005, but went down to 852 in 2006. The health workers strike was again cited, however, one could not also

gloss over the negative attitude of health staff which the mothers had indicated as a reason for not utilizing maternal health services.

When one compares the antenatal attendance to supervised deliveries one definitely will have cause to worry about. Postnatal care is progressing steadily and should be given a boost. The indicators are not really the best, however, looking at the various impediments and dire conditions under which most health staff operate, the scheme could be said to have a bright future.

Suggestions to improve access and utilization of free maternal health services

This study also solicited some suggestions on ways to improve patronage of services under the scheme. Suggestions that emanated from the clients are presented in Table 7.

Table 7: Suggestions by clients to improve access and utilization of free maternal services

Suggestions	Frequency	Percentage
Build more health facilities	94	40.5
Sanction staff who extort clients	61	26.3
Staff must be punctual and polite	49	21.1
Address staffing problem	19	8.2
Educate husbands on scheme	9	3.6
Total	232	100.0

Sources: Field Survey, 2007

Evidence from Table 7 indicates that building more health facilities in as many communities as possible was suggested by 94 (40.5%) as a way of improving maternal access and utilization. Suggestions by 61 (26.3%) of respondents called on the authorities to sanction health staff who extort money and other items from clients so as to give true meaning to the scheme which is supposed to be free. The need to ensure punctuality as well as impress upon health staff to be polite to client even in the face of extreme provocation was a suggestion made by 49 (21.1%).

Addressing the acute staffing problem attracted 19 (8.2%). Perhaps as clients, they did not appreciate the magnitude of staff shortage since they wrongly assumed that all health staffs are capable of rendering maternal health care services. Whereas in reality it is only trained midwives, community and public health Nurses as well as Gynaecologist who have the requisite expertise.

Another suggestion by nine (3.9%) called for the education of the men folk to cede part of their authority of decision making to their wives especially in matters concerning the health and reproductive system of the women. As a result of the exalted position of men by both religion and culture, most women are reluctant to challenge the status quo.

Suggestions by service providers to improve access and utilization of free maternal health service

In eliciting suggestions from service providers on ways to improve access and utilization of maternal health services in the district, the following were explored:

- Recommendations on Policy change to the scheme
- Areas of intensification regarding public education
- Training needs of maternal health service providers
- Resources needed to improve the scheme

On the need to fine tune the policy to ensure improved access and utilization of maternal health services, 85% suggested the need to expand the scheme to cover expectant mothers who require surgical operations and family planning services. The remaining 15% declined to policy change with the explanation that they had never set eyes on the policy document.

With regard to areas where efforts in public education should be intensified, all services providers were unanimous that more efforts should be geared at early detection of risks signs among pregnant women and seeking appropriate care from trained service providers. Breaking cultural myths surrounding pregnancy and child birth as well as addressing issues of gender inequality were also highlighted as suggestions to improve the scheme.

In response to a question on training needs, the majority of service providers expressed the need to avail themselves of training in the areas of plotting and interpretation of partograph (a graphic record of the course of labour), child resuscitation as well as Emergency Maternal Obstetric Care. A check at the District Health Directorate revealed that, it was only in the Savelugu Polyclinic that the Partograph was in use. It was further realized that none of the midwives in the sub-districts has had training in the use of the partograph. Another worrying disclosure was that, apart from the District Director, no other staff in the District had received any form of training in Emergency Maternal Obstetric Care and Emergency Neonatal Care.

When the issue of resources needed to improve the scheme came up for attention, suggestions were centred on the provision of means of transport in the form motorbikes and an effective ambulance system for referrals. The need to post more midwives and Community Health Nurses to augment the human resource capacity was also suggested by all. They also suggested that the telecommunication network should be improved with the repair of Motorola communication equipment provided in the sub- districts by UNICEF, but which had since broken down.

The service providers further proposed the building of more clinics in the various communities and motivating staff who accept postings there with incentives. Some also called for laboratories at the sub-district level to aid in simple diagnosis and analysis.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter is in three sections. The first section deals with summary. This is followed by conclusions, and finally, recommendations.

Summary

The study set out to examine the access and utilization of free maternal health services in the Savelugu-Nanton District in the Northern Region of Ghana. Descriptive survey was used for the study. The target population for the study consisted of women in fertility age, that is, 15 – 49 years of the community service recipients (clients) and trained health professionals in the Savelugu-Nanton District. In all, 252 respondents, disaggregated as 20 maternal health service providers and 232 maternal health service recipients took part in the study.

Out of the 20 maternal health service providers, 11 respondents were purposively selected. They were the District Director of Health Services; the Medical Superintendent of the Savelugu Polyclinic; the District Public Health Nurse; and eight facility heads manning the seven (7) health centres and the Community-based Health Planning Services (CHPS) compound. These respondents were selected through the multistage sampling procedure. The study was carried out using data from both primary and secondary sources.

Interview schedule and questionnaire were the main instrument used for data collection. The data collected was carefully checked, coded and computerized. The Statistical Product for Service Solution (SPSS version 16) was the main statistical software for data analysis.

The main findings from the study are:

- The majority of women in the Savelugu-Nanton district were aware of the existence of the Free Maternal Health Service Scheme culminating in increased Antenatal Care attendance.
- The majority of respondents became aware of the Free Maternal Health service Scheme through the Community Based Surveillance (CBS) volunteers, religious leaders and Assemblymen with the rest acknowledging the health staff as their source of information.
- Assisting pregnant women to access free health care as well as promoting good health, safe pregnancy and delivery among the rural poor were the perceived reasons given by respondents as reasons for instituting the scheme.
- There existed knowledge deficit among respondents regarding the types of services covered by the scheme and the category of health staff responsible for providing those unique services.
- Despite some modest gains in the area of general maternal health, maternal mortality, and antenatal care attendance, the impact of the scheme on supervised delivery and post Natal care was quite minimal.
- For a host of clients, hostile attitude of health staff and negative work ethics, distance of health facility, extortion and domestic workload, constituted a major impediment to the uptake of maternal health

services. Service providers however cited distance, gender inequality and cultural beliefs as the main barriers.

- There exist unanimity between clients and service providers that the scheme should be expanded to cover surgical operations and family planning products.
- Nearly all the service providers acknowledged lacking the requisite expertise in the plotting and interpretation of the partograph, infant resuscitation, Emergency Maternal Obstetric Care and Emergency Neonatal Care.
- There was shortage of staff, especially in the area of maternal health which is critical for the successful implementation of the scheme.

Conclusions

The results of the study have led to the following main conclusions with regard to access and utilization of free maternal health services.

The free maternal health scheme as a policy was handed down for implementation in fulfillment of the Millennium Development Goals and the Heavily Indebted Poor Countries (HIPC) initiative without soliciting inputs from the clients who were the beneficiaries. Most of the service providers have also not sighted the policy document to date.

There was a higher level of collaboration between the health authorities and other stakeholders particularly the District Assembly, religious and opinion leaders, chiefs and the Community Based Surveillance Volunteers among others in the district which is quite healthy for resource mobilization and information dissemination.

The attitude of health staff and the distance that clients had to cover from their communities to service delivery points were seen as impediments towards access and utilization of free maternal health services.

The public education machinery in the district was not functioning as effective as it should be. While monitoring and supervision of sub - district staff was also ineffective, thereby creating room for staff to come to work and close as they wished.

Recommendations

From the findings and conclusions, the following recommendations are made to ensuring improved access and utilization of free maternal health services in the Savelugu-Nanton District of the Northern Region:

- In view of the fact that most respondents and services providers had not seen the policy document and what it entails, the District Health Management Team should liaise with the Regional Health Directorate to organize a seminar to educate stakeholders on the policy.
- In order to address the problem of knowledge deficit expressed by the various service providers in the area of maternal health, the District Health Management Team should carry out Training Needs Assessment (TNA) with a view to building their capacity.
- The District Health Management Team should make a deliberate and conscious effort at directing their health education effort towards the uptake of supervised delivery and post natal services.

- The Community Based Surveillance (CBS) volunteers should be motivated to play a more meaningful and complementary role in health care delivery at the rural setting.
- With both clients and service providers calling for the expansion of the scheme to cover areas such as surgical operations and family planning, a review of the policy document was recommended to meet the wishes and aspirations of the rural poor.
- To ensure that, maternal health care is brought to the doorsteps of the rural poor, more Community-based Health Planning Services (CHPS) compounds should be established and staffed to enable the women receive skilled attendant care.
- The District Assembly should be encouraged to sponsor indigenes to the various Health Training Institutions so that on completion they return to serve their kinsmen. In addition to solving the problem of inadequate staff, this initiative will also resolve the communication problem encountered by most health staff who interact with the illiterate folk.
- The Ministry of Health and the Ghana Health Service were to make available motorbikes and telecommunication equipment to ensure the free flow of information and outreach services. An effective Ambulance system was to be in place to facilitate referrals during emergencies and complications.
- In an attempt to motivate all health staff to put in their best, special incentives were to be targeted at maternal health staff who accepted postings to the rural areas.

- Monitoring and supervision should be embarked upon periodically to stem the negative attitude of most health staff whose unprofessional conduct hinders access to and utilization of maternal health services.
- Issues of gender inequality and other negative socio – cultural norms which impede access and utilization of maternal health should be addressed at various fora involving all stakeholders.

REFERENCES

Abou-Zahr, C. (1996). Maternal mortality at the end of a decade: signs of progress. *Bulletin of the World Health Organisation*, 79, 561-568.

Amooti-Kaguna, B. & Nuwaha, F. (2000). Factors influencing choice of delivery sites in Rakai district of Uganda. *Social Science and Medicine*, 50, 203-213.

Andersen, R. M. (1995). Revisiting the behavioral model and access to medical care: does it matter? *Journal of Health and Social Behavior*, 36, 1, 1-10.

Best, J. W. & Kahn, J. V. (1989). *Research in education* (6th Ed.). New Jersey: Prentice Hall Inc, Engle wood Cliff.

Bongaarts, J. & Bruce, J. (1995). The causes of unmet need for contraception and the social content on services. *Studies in Family Planning*, 26, 2, 57-75.

Borg, W. R. & Gall, M. B. (1983). *Educational research: An introduction* (4th ed.). London: Longman.

BPS (2008). *Ringkasan hasil survey demografidan kesehatan.* Jakarta: BPS.

Caldwell, J. C. (1990). Routes to low mortality in poor countries. *Population and Development Review*, 12, 2, 171-220.

Celik, Y. & Hotchkiss, D. R. (2000). The socio-economic determinants of maternal health care in Turkey. *Social Science and Medicine,* 50, 1797-1806.

DEPKES (2008). *Profil Kesehatan Indonesia.* Jakarta: Depkes.

District Health Management Team (2006). *District annual report*. Savelugu-Nanton: Ghana Health Service.

Elizabeth, A. M. (2002). *Concise medical dictionary*. New York: Oxford University Press.

Elo, I. T. (1992). Utilization of maternal health care services in Peru: the role of women's education. *Health Transition Review*, 2, 1, 1-20.

Ghana Health Service (2003). *Ghana living standards survey*. Accra: Ghana Statistical Service.

Ghana Statistical Service (2003). *Ghana demographic and health survey report*. Accra: UNFPA.

Harpham, T., Lusty, T. & Vaughan, P. (1988). *In the shadow of the city community health and the urban poor*. London: Oxford University Press.

International Conference on Population and Development (2000). *Ghana country report*. Accra: ICPD.

Ipas, A. (2007). *Protecting women's health.* Washington DC: World Bank.

Joyce, T. J., Kaestner, R. & Korenman, S. (2000). The effect of pregnancy intention on child development. *Demography*, 37, 1, 83-94.

Khan, M. E. (1987). Infant mortality in Uttar. *Social Change*, 17, (3), 52-64.

Kausar, F., Griffiths, P. & Matthews, Z. (1999). *Poverty and maternal health care utilization in Maharashtra: associated influences on infant mortality and morbidity.* Southampton: Department of Social Statistics, University of Southampton.

Koblinsky, M., Campbell, O. & Heichelheim, J. (2000). Organizing delivery care: what works for safe motherhood? *World Health Organisation*, 77 (5), 399 – 406.

Kroeger, A. (1983). Anthropological and social-medical health care research in developing countries. *Social Science and Medicine,* 17, 147-161.

Kumekpor, T. & Richardson, N. (1993). *Relationship between safe motherhood initiatives and maternal mortality: the case of West Africa*. Accra: National Population Council.

Kyomuhendo, G. B. (2003). Low use of rural maternity services in Uganda: impact of women's status, traditional belief and limited resources. *Reproductive Health Matters*, 11, 21, 16-26.

Loudon, I. (2000). The Transformation of Maternal Mortality. *British Medical Journal.* 305, 155 – 6.

Madise, N. & Diamond, I. (1995). Determinants of infant mortality in Malawi: An analysis to control for death clustering within families. *Journal of Biosocial Science,* 27(1), 95-106.

Mahler, T. (1987). *Definition of a safe motherhood programme: revised national population policy action plan for maternal and child health/ family planning*. Accra: National Population Council.

Montgomery, M. R. & Hewett, P. C. (2004). *Urban poverty and health in developing countries: household and neighbourhood effects.* Accra: NPC.

National Population Council (1994). *Adolescent reproductive health policy.* Accra: NPC.

Obermeyer, C. M. (1993). Culture, maternal health care and women's status: A comparison of Morocco and Tunisia. *Studies in Family Planning,* 24, 6, 354-365.

Park, J. E. & Park, K. (1989). *Textbook of preventive and social medicine,* (12th ed.). Jabalpur: Banarsidas Bhanot Publishers.

Paul, B. K. & Rumsey, D. J. (2002). Utilization of health facilities and trained birth attendants for childbirth in rural Bangladesh: an empirical study. *Social Science and Medicine,* 54, 1755-1765.

Raghupathy, S. (1996). Education and the use of maternal health care in Thailand. *Social Science Med,* 43, 4, 459-471.

Ramasubban, R. & Singh, B. (1999). *Weakness and reproductive health among women in a slum population in Mumbai.* New York: Oxford University Press.

Reproductive Health Unit (2003). *Annual report*. Accra: Ghana Health Service.

Rossi-Espagnet, A. (1984). *Primary health care in urban areas: Reaching the urban poor in developing countries.* Geneva: World Health Organisation.

Schultz, T. P. (1984). Studying the impact of household economic and community variables on child mortality. *Population and Development Review,* 10, 213-235.

Shariff, A. & Singh, G. (2002). *Determinants of maternal health care utilization in India: evidence from a recent household survey*. New Delhi: NCAER.

Shiffman, J. (2003). Generating political will for safe motherhood in Indonesia. *Social Science and Medicine,* 56, 1197-1207.

Starr, A. (1998). *The safe motherhood action agenda: priorities for the next decad*e. New York: Family Care International.

Statistics Indonesia (2008). *Indonesia demographic and health survey.* Jakarta: BPS.

Thaver, I. & Bhutta, A. Z. (2006). *Poverty and ill-health: Challenges, initiatives and issues in Pakistan.* Karachi: Aga Khan University printing press.

Travers, R. M. W. (1969). *An introduction to educational research* (3rd ed.). London: The Macmillan Co.

United Nation International Children's Emergency Fund [UNICEF] (2000). *Reduction of maternal mortality: A joint statement.* New York: UNICEF.

United Nations Population Fund [UNFPA] (2004). *State of the world's population.* New York: UNFPA.

United Nations [UN] (2008). *The Millennium development goals report.* New York: UNFPA.

Winikoff, B. & Sullivan, M. (1987). Assessing the role of family planning in reducing maternal mortality. *Family Planning*, 18, 3, 128-143.

World Bank (2004). *World development report: Investing in health*. New York: Oxford University Press.

World Health Organisation (1999). *The incidence of low birth weight: A critical review of available information*. Geneva: World Health Organisation.

World Health Organisation (1995). *Maternal mortality overview*. Geneva: World Health Organisation.

World Health Organisation [WHO] (1992). *Women's health: across ages and frontiers*. Geneva: WHO.

World Health Organisation (1997). *Perinatal mortality: a listing of available information.* Geneva: World Health Organisation.

World Health Organisation (2006). *Data on perinatal and maternal deaths.* Geneva: World Health Organisation.

Wong, E. L. (1987). Accessibility, quality of care and prenatal use in the Philippines. *Social Science & Medicine,* 24, 11, 927-944.

APPENDICES

APPENDIX 1

QUESTIONNAIRE FOR MATERNAL HEALTH SERVICE PROVIDERS IN SAVELUGU-NANTON DISTRICT, NORTHERN REGION

Introduction

This is a graduate study designed to determine access to, and utilization of, Free Maternal Health Services in Savelugu-Nanton District of Northern Region.

You have been purposively selected to participate in the study in recognition of the important role you play in promoting maternal health in the District. The response you make will be treated with utmost confidentiality, and used to enhance the quality of the study. Therefore, your frank and complete responses are anticipated.

Thank you.

Instruction – please tick [√] or write in the spaces provided as applicable.

Questionnaire Identification Number

Part A: Socio-demographic data of respondents

1. SEX: Male ☐ Female ☐

2. AGE……..

3. Marital Status……...

4. Place of work……

5. Ethnicity……

6. Religion: Islam……..1

Christianity……2

(Specify Denomination)……

Traditional……3

Other (specify)…….

7. Professional Status……..

8. Do you have any special training in maternal Health?

Yes……1 No……..2

8a. If YES, please specify……

9. Indicate your current role in the promotion of maternal Health…….……

10. For how long have you been engaged in maternal health issues in this District?……

Part B: Awareness of community women about free maternal health services

11. From your Interaction with the community women in your catchment area, how would you rate the level of knowledge about free maternal health services?

Very Good……..1

Good……2

Undecided……3

Bad……..4

Very Bad…….5

12. How does information about free maternal health services reach the women? (list more than 1 source if applicable)……...……

13. For how long has free maternal health service been in existence in this District?……

14. Do you think women are aware of the existence of the scheme in their communities? Yes……..1 No…….2

14a. Explain…….

15. Do women attach any importance to the scheme?

Yes…….1 No……..2

15a. IF YES or NO, Explain……

16. Is it very likely that women in your district were not involved in the formulation of the free maternal health service Policy.

Strongly Agree…….. 1

Agree……. 2

Uncertain…….. 3

Disagree…… 4

Strongly Disagree……. 5

Part C: Services provided and output of the utilization of free maternal health services

17. Have you ever had access to the policy document on Free Maternal Health Service? Yes……1 No……..2

17a. State briefly what you know about the Policy…….

18. Specify the services provided under this scheme……

19. Is the free maternal health service an integral part of safe motherhood programme of Ghana Health Service?

Yes…….1 No…….2 Don't know……..…3

19a. If Yes or No,

Explain……

……

20. How free is this free service scheme?.....……

21. What do you know about the policy coverage with regard to the following maternal health issues (please comment)

a) Chronic Maternal Diseases

……

……

b) Costly surgical operations……

……

……

c) Costly Medications……..……

……

d) Parity of the Women……..……..

……

22. Rate the following items in terms of how you perceive the Free Maternal Health Service scheme to have positively impacted on them. Use 1…5, 5 being the highest rating. Circle the appropriate rating item you select.

Maternal Issue	**Impact Rating**				
(i) General Maternal Health	1	2	3	4	5
(ii) Minimizing Morbidity	1	2	3	4	5
(iii) Minimizing Mortality	1	2	3	4	5
(iv) Enhancing patronage of Antenatal Service	1	2	3	4	5
(v) Enhancing Patronage of Supervised Delivery	1	2	3	4	5
(vi) Enhancing Patronage of Postnatal Services	1	2	3	4	5

23. How does Ghana Health Service mobilize resources to enhance maternal Health Services?.....

……

……

24. What is the average daily attendance at free maternal health service points in the areas you operate……

……..……

25. Do you observe any improvement in maternal health following the introduction of the Free Maternal Health Service Scheme?

Yes…….1 No……..2

25a. Please Explain…….……

……

……

Part D: Factors affecting access and utilization of free maternal health services

26. How effective is the Free Maternal Health Service Scheme in the District?

Very Effective…….. 1

Effective……... 2

Uncertain……. 3

Ineffective…… 4

Very ineffective…… 5

27. Is the Free Maternal Health Service actually free?

Yes……1 No……2 Don't know……...3

If YES or No, Explain why……..…

……..

28. What are the constraints in the operations of the scheme with regard to:

a) Access……..……

b) Utilisation of Services…….....

……29. Are there any traditional/cultural hindrances to access and utilization of the services? (explain)……

…….……..…

30. What problems do health providers face in rendering these services?

……

……

31. Do community members co-operate to make the scheme successful?

Yes……1 No……..2 Somehow……3

32. Do you foresee any sustainability in the free maternal health services scheme?

Yes……..1 No……..2

32a Explain…….……

……

Part E: Improving access to, and utilization of, free maternal health services

33. What policy change would you recommend to help improve the free maternal Health Service?.....

……

34. Will intensification of public education improve access and utilization with regard to the scheme? Yes……1

No……..2

34a. Explain…….…….....

35. What training needs does maternal health service providers require to improve the operation of the scheme?.....

……

……

36. What are the resources needed to improve the scheme?.....

……

38. Please feel free to offer other suggestions to help improve Free Maternal Health Services in the District……

……

APPENDIX 2

INTERVIEW SCHEDULE FOR CLIENTS OF MATERNAL HEALTH SERVICE IN SAVELUGU-NANTON DISTRICT

Introduction

This study seeks to determine access to, and utilization of, Free Maternal Health Services in Savelugu-Nanton District. As a member of the District, your responses will inform the findings of the project. Your frank and complete responses are therefore anticipated and will be kept confidentially. o I have your permission to proceed with the Interview?

Yes (Continue with Interview) No– (End the Interview)

PART I: Socio-Demographic Data about Respondents

1. SEX: Male ☐

Female ☐

2. Age……

3. Marital Status…….

4. No of living children……

5. Ethnicity……..

6. Religion……...

7. Community of usual Residence…….....

8. Occupation……..

9. Level of Education (highest Level Reached)…….....

Part II: Awareness of community women about free maternal health services

10. Have you ever heard of the Free Maternal Health Service Scheme?

Yes ☐ No ☐

10a. If YES, what is it?.....

11. Which category of health workers can give maternal health services?.....……...……

12. What is special about maternal health services?.....…….……

……

13. Why was this Free Maternal Health Service concept instituted?.....……

…..…….....

14. For how long do you think the Free Maternal Health Service has been in the District?.....……

5. Would you say this free service delivery is important?

Yes ☐ No ☐

16. Which area of maternal health is covered by the free service scheme?

……

17. Do health workers explain the Free Maternal Health Services to your understanding?

Yes ☐ No ☐

17a. Explain why…….…….

Part III: Services provided and output of the utilization of free maternal health services

18. Is the Free Maternal Health Service in any way different from the routine safe motherhood services rendered?

Yes ☐ No ☐

18a. If Yes or No, Explain…….……

19. What are the free maternal health services received at the various health facilities?……

……

20. Free Maternal Health Services should cover chronic maternal diseases as well.

Strongly Agree…….. Agree…… Undecided…… Disagree……. Strongly Disagree…….

21. How has the Free Maternal Health Services impacted on the following:

a) General Maternal Health

……

……

b) Maternal Related illness

……

……

c) Maternal Related Deaths

……

……

d) Antenatal Services Delivery

……

……

e) Supervised Delivery

……

……

f) Postnatal Services Delivery

……

……

22. How do you perceive the availability of resources for the Free Maternal Health Services?

Very Adequate…… Adequate…….. Undecided…… Inadequate…….. Very inadequate……..

23. What do you have to say about the level of success of the Free Maternal Health service scheme?.....

……

……

Part IV: Factors affecting access and utilization of free maternal health services

24. Would you say the Free Maternal Health Services scheme is working as expected?

Yes ☐ No ☐ Don't know……

24a. If Yes or No, Explain……

25. What are the operational constraints with regard to:

a) Access to Services……

b) Utilization of Services…….…….

……..……

26. Are there any specific traditional hindrances to access and utilization of Free Maternal Health Services? (Probe)……..……

27. Do community members co-operate with Health Care providers to make the scheme successful?

Yes ☐ No ☐

28a. If Yes, How?.....…….

28b. If No, Why?.....

Part V: Measures to improve the free maternal health services scheme

29. Do you as an individual need further education to help you participate meaningfully in the scheme?

Yes ☐ No ☐

30. If Yes, specify what you wish to know.

……

……

31. What measures should be put in place to improve the scheme?

……

……

32. How do you expect the service providers to conduct themselves?

……

……

33. What do you want government to do to improve maternal health services?

……

……

34. What can community members do to improve the scheme?

……

……

35. Please feel free to offer other suggestions for the Improvement of Maternal Health Services in general.

……

……

……