

SCHOOL OF PUBLIC HEALTH

COLLEGE OF HEALTH SCIENCES

UNIVERSITY OF GHANA

**COMMON FOOD TABOOS AND BELIEFS DURING PREGNANCY IN
YILO KROBO DISTRICT, GHANA**



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DEGREE**

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DECLARATION

I, SAMSON K. ARZOAQUOI hereby declare that this Dissertation, **COMMON FOOD TABOOS AND BELIEFS DURING PREGNANCY IN YILO KROBO DISTRICT, GHANA** done by me is original and does not include previous work presented to the University of Ghana for the purpose of obtaining a degree.

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Dr. Amos Laar -----
(Supervisor) Signature

Date



Dedication

This thesis is dedicated to Dr. Garfee T. Williams whose ingenuity and farsightedness yielded a study opportunity for me to pursue Master Degree in Public Health. I am especially grateful for his moral and financial support during the course of the program.

Also to my loving wife, Mrs. Amanita S. Arzoaquoi, my children and my parents, Mr. Samson K. Arzoaquoi, Sr. and Madam Kebeh Korvah, for their immense moral, emotional and financial support.

And to all of my friends both in Liberia and Ghana for the various forms of support provided me which made this work possible.



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ABSTRACT

Background

A food considered as a taboo is strictly forbidden, for health, cultural or spiritual reasons. Food taboos are known from virtually all human societies and may be found in various forms all over the world. Pregnancy is viewed as a critical period in the life of women and is usually subjected to a number of food taboos as a way of safeguarding their lives and that of the unborn baby in Yilo Krobo, district Ghana. The study qualitatively assessed the presence of food taboos and related practices during pregnancy in the Yilo Krobo District, Ghana. Various motivating factors and enforcement mechanisms were also documented.

Methodology

An exploratory cross sectional study using qualitative method was employed to determine the presence and extent of food taboo and beliefs and factors contributing to the adherence to these practices during pregnancy in Yilo Krobo District, Ghana. A total of sixteen focus group discussions (FGDs) were held in six communities in the Yilo Krobo District with a total of 155 respondents which comprised of 46 pregnant women, 30 elderly women, 42 elderly men, and 17 women in fertility age. Respondents were selected using a purposive sampling technique. Analysis was done manually using the principle of systemic text condensation as described by Malterud (1993).

Results

The study revealed that all the participants were aware of the existence of food prohibitions and beliefs for pregnant women in Yilo Krobo district. The study identified snails, rats, hot food and animal lungs as foods prohibited during pregnancy, although snails and rats are also forbidden to eat outside pregnancy. Concern for healthy pregnancy, good outcome, and respect for the ancestors, parents and community elders were identified as the key reasons for adherence to food

taboo and traditional beliefs in pregnancy. On adherence to food taboo and traditional beliefs, the study revealed that food taboos and traditional beliefs are widely practice or adhered in the Yilo Krobo district. Finally, food taboo and traditional practice in Yilo Krobo are essentially enforced by constant reminder by parents, husband of the pregnant women, peers, community leaders and fear of sanction.

Conclusion

The study revealed that food taboos and traditional beliefs relating to pregnancy exist in Yilo Krobo district. Snails, rats, snakes, hot food and animal lungs are the food types prohibited to eat during pregnancy. Health concern is the core reasons for adherence.

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List of Acronyms

Acronym	Meaning
ANC	Antenatal Care
BMI	Body Mass Index
FGD	Focus Group Discussion
GDHS	Ghana Demographic Health Survey
GSS	Ghana Statistical Service
GHS	Ghana Health Service
MDGs	Millennium Development Goals
MMR	Maternal Mortality Rate
RH	Reproductive Health
STATA	Statistical Analysis System designed for Research Professional
UNFPA	United Nations Population Fund
WHO	World Health Organization
WIFA	Women in Fertility Age

Definition of Terms

1. **Micronutrients:** Substances such as vitamins and minerals needed in small amounts for normal body function.
2. **Food Taboo:** Is food and beverages which people abstain from consuming for religious, cultural or hygienic reasons.
3. **Nutrition:** Is the supply of materials - food - required by organisms and cells to stay alive.
4. **Diet:** The kind and amount of food regularly eaten by a person or group of people.
5. **Pregnancy:** Is defined as the state of carrying a developing embryo or fetus within the female body. This condition can be indicated by positive results on an over-the-counter urine test, and confirmed through a blood test, ultrasound, detection of fetal heartbeat, or an X-ray. Pregnancy lasts for about nine months, measured from the date of the woman's last menstrual period (LMP). It is conventionally divided into three trimesters, each roughly three months long.
6. **Anemia in Pregnancy:** WHO defines anemia in pregnancy as hemoglobin (Hb) concentration of $< 11 \text{ g / dl}$ and hematocrit of < 0.334 . Maternal anemia is considered a risk factor for adverse pregnancy outcome.

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Tradition represents the sum total of all behaviors that are learned, shared by a group of people and transmitted from generation to generation. It includes language, religion, types of food eaten, and methods of their preparation, childrearing practices and all other values that hold people together and give them a sense of identity and distinguish them from other groups.

All societies have traditional beliefs regarding harmful and beneficial foods for women during pregnancy. There are also beliefs regarding the optimal amount of food to be taken during pregnancy for successful reproductive outcome. These beliefs may or may not conform to the modern biomedical notion about the proper types and amount of foods needed by pregnant women to safeguard maternal nutrition, adequate of fetus and safe delivery.

Food taboos are known in virtually all human societies. People abstain from consuming variety of foods and beverages for religious, cultural or health reasons. They form a codified set of rules about which foods or combinations of foods that may not be eaten, the origin of these prohibitions and commandments vary. These dietary rules and regulations may govern particular phases of the human life cycle and sometimes associated with special events such as menstrual period, pregnancy, childbirth, lactation, and – in traditional societies – preparation for the hunt, battle, wedding, funeral, etc. On a comparative basis, many food taboos seem to make no sense at all, as what may be declared unfit by one group may be perfectly acceptable to another (Meyer-Rochow, 2009).

Food taboos are sustained by a combination of familial transmission and selective cultural learning from senior women who are considered particularly successful, knowledgeable and prestigious (Patil, Mittal , Vedapriya , Khan, and Raghavia, 2010).

In a study conducted in Laos, Holmes et al., (2007) found contradictions in the notion that food taboos are likely to be deeply held and difficult to counter. Additionally, the finding that often some people did not know the reasons for adhering to food taboo is quite relevant because it may then be easier to modify a belief that has simply been handed down, rather than being associated with a religious prohibition.

On the other hand, food taboos have a long history and one ought to expect a sound explanation for the existence (and persistence) of certain dietary customs in a given culture. Moreover, any food taboo, acknowledged by a particular group of people as part of its ways, aids in the cohesion of the group, helps the particular group maintain its identity in the face of others, and therefore creates a feeling of "belonging" (Myer-Rochow, 2009).

It was also found that there may be trivial reasons for taboos, such as, for example, that chicken livers are not given to children because they are considered a delicacy and so reserved for important men in the village.

Pregnancy imposes the need for considerable extra calorie and nutrient requirements. A balanced and adequate diet is therefore, of utmost importance during pregnancy and lactation to meet the increased needs of the mother, and to prevent “nutritional stress” (Patil et al. 2010).

Maternal nutrition in pregnancy is an important reproductive health issue. It affects the growing baby indirectly via materno-fetal transfer, and directly post-partum, via lactation (Oni & *Tukur* 2012).

Adequate intake of certain food elements during pregnancy improves birth weight and labor spontaneity. Children, who experienced iodine deficiency for example, during fetal developmental stage and early childhood, suffer cognitive impairment (Prema, Neela, & Ramalakshmi, 1989).

Vital nutritional molecules such as proteins, vitamins and other important food elements otherwise known as micronutrients needed by the developing fetus and the growing child are thus provided by the mother.

Essential Health Sector Actions to Improve Maternal Nutrition in Africa publication (2001) identifies that pregnant women often object to increasing food intake because they are concerned that a bigger baby will make delivery more difficult. Women may then, be more receptive to messages that focus on eating specific foods, giving birth to healthy babies, and feeling better during pregnancy than to messages that focus solely on eating more food.

Nevertheless, some food restrictions have been suggested to be particularly helpful during pregnancy. In a publication of The American College of Obstetricians and Gynecologists, Frequently Asked Questions, Faq001 Pregnancy (2012), pregnant women should avoid eating shark, swordfish, king mackerel, or tilefish during pregnancy because these large fish contain high levels of a form of mercury that can be harmful to the developing fetus.

Some socio-cultural beliefs regarding food restriction do exist in Ghana as well as in other developing countries worldwide, which can be harmful for maternal health. However, such information in Ghana from extensive literature review is limited. In spite of the enormous advances and achievements made by The Republic of Ghana in health, maternal and child health still remains a major challenge.

According to Ghana Demographic and Health Survey, Ghana Health Service and ICF Macro (2009), the health care that a mother receives during pregnancy, at the time of delivery, and soon after delivery is important for the survival and well-being of both the mother and her child.

Hence, one means of achieving an improvement in the health of women is to comprehensively review the present dietary habits during pregnancy with the goal of providing a more aggressive dietary standard for pregnant women in maternal health services, such as antenatal care (ANC) during pregnancy.

The fifth Millennium Development Goal recognizes this and therefore, aims to reduce maternal deaths to three-quarters by 2015 (to achieve a maternal mortality ratio of 54 per 100,000 live births) by improving a preventive health care delivered to women during pregnancy.

Therefore, a need was identified to explore rural communities to unravel the myths regarding food taboos and traditional beliefs during pregnancy, the existence or not of food taboos and traditional dietary beliefs, identify and enumerate prohibited foods during pregnancy, the extent of the practice and reasons underlying observance and adherence in Yilo Krobo District of Ghana.

It is hoped that the findings from this study will serve as a platform for a more comprehensive research in maternal nutrition and to serve as a fundamental clues for policy makers, development partners, and health practitioners in identifying, understanding and addressing traditional nutritional practices that are preventing sustainable progress in maternal nutrition and health.

1.2 Problem Statement

In Ghana many studies have focused on dietary habits of pregnant women and the intake of specific nutrients especially micronutrient and the effect on pregnancy outcome and complication. Consistent evidence about Ghanaian women's dietary composition and habits during pregnancy and nutrient intake is however lacking (Koryo-Dabrah, Nti & Adanu, 2012).

In spite of this finding, we could not find any study related to food taboos and beliefs in Yilo Krobo District. Considering food habits and dietary changes that occur throughout pregnancy, it will be informative to explore and identify the dietary habits that occur among pregnant women in Yilo Krobo and identify reasons associated with the dietary changes.

The level of anemia among pregnant women in Ghana also increased between 2003 and 2008, from 65% to 70%. Accordingly, maternal dietary habits, poor dietary pattern such as food taboo and poor nutritional status of women during pregnancy is one of the major causes of anemia in pregnancy (Anderson, 2001). To a large extent, programs and policies to address the problem are, as usual, heavily skewed toward the medical explanatory model (Oni & Tukur, 2012).

There seems to be no true practical focus on maternal nutrition, dietary practices, taboos and beliefs in Ghana. Owing to the significance of maternal nutrition to the overall health of the pregnant women, this study is designed to determine whether food taboos and dietary prohibition are practiced among pregnant women in Yilo Krobo with the aim of providing data that will inform policies and nutritionist for appropriate intervention.

1.3 Justification

A review of the Ghana Millennium Development Goal (MDG) Report 2010 reveals that most of the interventions that have been pursued to curb high incidence of maternal mortality over the years are similar to those for under-five mortality. None of the present policies, strategies and interventions that have been formulated to curb the high incidence of maternal mortality over the years addresses the issue of taboos and beliefs in maternal nutrition.

Though maternal health care has improved over the past 20 years, the pace has been slow and extra and more diversified effort including the issues of foods taboos and beliefs during pregnancy is required for Ghana to achieve the MDG 5 target of reducing maternal mortality rate by three quarters by 2015 including a robust maternal nutritional problem.

Familiarity with the food customs of people is important in order to be able to improve their nutritional status through nutrition education (Leslie, Pelto, & Rasmussen, 2010). Identifying the presence, reasons and the extent of adherence to food taboos and traditional practices in Yilo Krobo, an exploratory study of this type is important.

1.4 Objectives of the Study

1.4.1 General objective

- To assess the general overview of Food Taboo Practices and Traditional Beliefs during pregnancy in Yilo Krobo District.

1.4.2 Specific Objectives

- To identify and list basic foods items restricted by food taboos and beliefs during pregnancy in Yilo Krobo district.
- To examine the reasons for the adherence to food taboo practices and traditional beliefs by pregnant women in Yilo Krobo District.

- To identify the extent of food taboos and traditional practices during pregnancy in Yilo Krobo District.
- To examine the enforcement mechanism of food taboos and traditional beliefs during pregnancy in Yilo Krobo District.

CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

Dietary practices are essential determinants of the nutritional status of a woman during pregnancy. The health and nutritional status of the fetus and the outcome of the pregnancy depends to a greater extent on the nutritional status of the mother. Good maternal nutrition promotes optimum growth of the fetus and provides for adequate lactation. Cultural practices and beliefs have greatly influence the dietary pattern of pregnant women in most part of the world.

This section reviews other relevant studies done on food taboos and traditional beliefs/ practices around the world. The review is thematically arranged as follows:

The Importance of Adequate Nutrition in Pregnancy

Diet as a Human Right

Meaning of Food Taboo

Knowledge on Food Taboo, etc

2.2 The Importance of Adequate Nutrition in Pregnancy

An adequate availability of nutrients during gestation is probably the single most important environmental factor influencing pregnancy outcome. An adequate supply of nutrients is required to maintain the delicate balance between the needs of the mother and those of the fetus. An inadequate supply will cause a state of biological competition between the mother and the conceptus in which the well-being of both organisms is at serious risk (King, 2003). Maternal nutrition is an important factor from a public health point of view because it is modifiable and therefore susceptible to public health interventions (Muthayya, 2009).

The ignorance about nutritional needs during pregnancy worsens the outcome of pregnancy. Some socio-cultural beliefs regarding food restriction do exist in Ghana as well as in other developing countries worldwide, which can be harmful for maternal health.

Sood and Kapil reported that 64% of pregnant mothers in rural India were restricting all foods during the first 6 months, believing that a small baby would be easy to deliver. Other reasons given were the avoidance of indigestion and the advice of mothers-in-law or traditional birth attendants. Foods like sugar, nuts, beans and maize were considered hot and abortifacient and were avoided and so-called “cold” foods, buttermilk, orange and curd were not taken during pregnancy for the fear of harming the fetus.

Similar beliefs do exist in our set up also but not much work has been done in this regard. Therefore a need was identified to study the myths regarding food restrictions during pregnancy and lactation.

The GSS et al 2009 also highlighted that a woman’s nutritional status has important implications for her health as well as the health of her children. Malnutrition in women results in reduced immunity and an increased susceptibility to infections, slow recovery from illness, reduced productivity and heightened risks of adverse pregnancy outcomes. For example, a woman who has poor nutritional status as indicated by a low body mass index (BMI), short stature, or other micronutrient deficiencies has a greater risk of obstructed labor, of having a baby with low birth weight, of producing lower quality breast milk, of dying from post-partum hemorrhage, and of contracting diseases along with her baby.

2.3 Diet as a Human Right

In 1948, three years after the adoption of the UN Charter, the General Assembly adopted the Universal Declaration of Human Rights, which has served as guiding principles on human rights and fundamental freedoms in the constitutions and laws of many of the Member States of the United Nations. The Universal Declaration prohibits all forms of discrimination based on sex and ensures the right to life, liberty and security of person; it recognizes equality before the law and equal protection against any discrimination in violation of the Declaration.

The Convention on the Elimination of All Forms of Discrimination against Women was ratified by 136 States including Ghana as of January 1995. The UN Office of the High Commission for Human Rights Fact Sheet No.23, Harmful Traditional Practices Affecting the Health of Woman and Children, declared that traditional cultural practices reflect values and beliefs held by members of a community for periods often spanning generations. Every social grouping in the world has specific traditional cultural practices and beliefs, some of which are beneficial to all members, while others are harmful to a specific group, such as women. This Fact Sheet listed several harmful traditional practices including the various taboos or practices which prevent women from controlling their own fertility; nutritional taboos and traditional birth practices.

But these issues have not received consistent broader consideration, and action to bring about any substantial change has been slow or superficial.

2.4 Meaning of Food Taboo

Food taboo refers to a codified set of rules about which foods or combinations of foods that may not be eaten. The term taboo is of Polynesian origin and was first noted by Capt. James Cook during his 1771 visit to Tonga, but taboos have been present in virtually all cultures. They may

include prohibitions on fishing or hunting at certain seasons, eating certain foods, interacting with members of other social classes, coming into contact with corpses, and (for women) performing certain activities during menstruation. Although some taboos can be traced to evident risks to health and safety, there is no generally accepted explanation of most others; most authorities agree that they tend to relate to objects and actions that are significant for the maintenance of social order.

2.5 Knowledge on Food Taboo

In a study to discover the different food taboos, enumerate the potential value of the foods that are not eaten, determine the overall nutritional significance of taboos, and to relate the findings to the nutritional status in a rural Nigerian community, Ogbeide (1974), pointed out that, knowledge of food taboos in an area can throw more light upon the etiology, therapy, and preventive aspects of some of the important health problems in any community.

The lack of accurate information on the food and nutrition situation is one of the main obstacles to planning measures for the proper improvement of the nutrition status of the population. It is even more interesting to note that majority of the taboos primarily affects foods of animal origin.

2.6 Culture and Food Taboo

The culture pattern of a group is based on learned behavior, acquired partly by deliberate instruction on the part of parents, but mostly subconsciously by incidental observation of the behavior of relatives and other close members of the community. Irrational behavior and harmful practices are, of course, found in all cultures including those of the so-called Western World (Ogbeide, 1974)

Studies conducted on food taboos during pregnancy and lactation in three villages on Yasawa Island, one of the outer islands in Fiji, found that food taboos (*tabu* in Fijian) are culturally transmitted prohibitions, the violation of which is perceived to carry social or supernatural sanctions (Henrich & Henrich, 2010).

2.7 Why Food Taboo During Pregnancy?

Declaring certain foods taboo because they are thought to make a person sick, is the basis for the many food taboos affecting pregnant women. Largely linked with the realms of mind and 'psyche', most taboos are actually meant to protect the health of the pregnant woman and her offspring and thought to ease the process of birth-giving, even if modern nutritionists completely disagree.

Yet, it is often pregnant and lactating women in various parts of the world that are forced to abstain from especially nutritious and beneficial foods (Santos-Tores & Vasquez-Garibay, 2003).

Although it is not clear why and how exactly these restrictions came to be accepted, pregnant women do not always adhere to them. Amongst the Lese-women of the Ituri forest of Africa, women cope with these restrictions by either secretly discounting them or by eating prophylactic plants that supposedly prevent the consequences of eating the tabooed foods (Bentley, 1999).

Declaring a food item taboo for one section of the population, can of course, lead to a monopoly of the food in question by the remainder of the population (Harris, 1985). For purely egoistic reasons men may declare meat and other, to them, delicacies taboo "for others". That this is the

main reason for some food taboos affecting mainly women and children is suspected (Ogbeide, 1974).

2.8 Food taboos as a factor in group-cohesion and group-identity

Finally, it ought to be mentioned that any food taboo, acknowledged by a particular group of people as part of its ways, aids in the cohesion of this group, helps that group stand out amongst others, assists that group to maintain its identity and creates a feeling of "belonging". Thus, food taboos can strengthen the confidence of a group by functioning as a demonstration of the uniqueness of the group in the face of others.

Food taboos and food habits can persist for a very long time and can be (and have been) made use of in identifying cultural and historical relationships between human populations. (Meyer Rochow, 2009). It has, for instance, been suggested that the food taboos of both Jews and Hindus reflect not the nutritional needs, but the explicit concerns of the pastoral people that they once were (Davies, 1986).

2.9 Food Taboos in Ghana

The large arsenal of customary practices employed to deal with the period from pregnancy through the puerperium is in the custody of the traditional midwives who dominate the obstetric and gynecologic scene in much of rural Ghana. Generally a well-respected village elder, the midwife is considered an authority on the traditional medical lore associated with childbearing and rearing, traditional modes of family planning and treatment of infertility and lactational deficiencies. (Senah, 2003)

A classic food taboo in Ghana is when children are fed with eggs; they grew up to become thieves. In order to ensure safe delivery of normal babies, each society prescribes certain dietary and behavioral taboos or observance, which pregnant women must comply with.

However, by far, the most prevalent restrictions on pregnancy relate to dietary taboos. In some societies in Ghana pregnant women are not expected to eat snail lest the child may be born drooling; they must not eat eggs lest the child grows to become a thief. Among the Kassena Nankana of the Upper East Region, pregnant women are restricted to vegetarian diet; they must not eat meat and groundnut lest they give birth to 'spirit children (Senah, 2003).

Similar taboos and restrictions have been found among the people of Anyamtan in the Dangbme, West District (Arhin, 2001).

In a research involving 279 pregnant women from the antenatal clinic of the Korle-Bu Teaching Hospital and Osu Maternity Home in Accra, Koryo-Dabrah, Nti and Adanu (2012), found that socio-demographic factors such as age, educational level, marital status and income have been found to influence the amount of nutrient intake. In this study, pregnant women with higher education level consumed higher amount of protein compared to women with low and middle level of education. Nearly half (44.8%) of the pregnant women in the study avoided at least one kind of food. Food avoidance in the first trimester was reported by 66.7% of the women. In the second trimester, food avoidance was reported among 36.1% while 47.6% avoided certain foods in the third trimester. Foods avoided included meat and fish (10.8%), eggs and milk (4.3%), green leafy vegetables and cereals (23.3%) and fruits (2.2%).

2.10 Some Common Consequences of Food Taboo.

Meat contains approximately 18% protein; it is, of course, the most valuable source of protein of high nutritional value. It is rich in phosphorus, moderate in iron content, and is an important source of niacin, riboflavin a list very valuable micronutrients.

In an unpublished observation, Dr. A. Tella of the University of Lagos Medical School, working on a systematic and in-depth investigation into the therapeutic potential of snails, a very common food taboo during pregnancy, claimed that snails have a dramatic therapeutic effect on patients who have severe or moderate hypertension and as a rich source of iron, snails could be useful in diet therapy in anemia of pregnancy (Ogbeide, 1974).

Food taboos have been identified as one of the factors contributing to maternal under nutrition in pregnancy, especially in rural African communities (Rotimi et al., 1999). For social and biological reasons, women of the reproductive age are amongst the most vulnerable to malnutrition, a common consequence of food taboos in rural communities. Increased perinatal and neonatal mortality, a higher risk of low birth weight babies, stillbirths, and miscarriage are some of the consequences of malnutrition in women (Krasovec & Anderson, 1991).

There is growing evidence that improving the quality of the diet of the mother during the first half of pregnancy can have as big an effect on birth weight as providing food supplements later in pregnancy. Certainly, the risk of delivering a low-birth-weight baby can be determined very early in pregnancy (Smith et al., 2002), and the influence of maternal nutritional status on pregnancy outcomes is more important in early rather than late pregnancy (Neufeld, Haas, Grajeda, & Martorell, 2004).

Globally, the 30 million low-birth-weight babies bore annually (23.8% of all births) often face severe short- and long-term health consequences. Low birth weight is a major determinant of

mortality, morbidity and disability in infancy and childhood and also has a long-term impact on health outcomes in adult life.

In a study in Tanzania, sixty-nine percent of pregnant women reported food taboos. The study revealed that eating fish was believed to hurt the mother's abdomen and also cause late delivery; eating farm meat would make the child take on characteristics of farm animals. The high prevalence of severe anemia during pregnancy in that district was linked to food taboos among other factors. (Lozoff et al, 2008).

WHO defines anemia in pregnancy as hemoglobin (Hb) concentration of $< 11 \text{ g / dl}$ and hematocrit of < 0.334 . Maternal anemia is considered a risk factor for adverse pregnancy outcome. Riffat and Khan (2008), in a study demonstrated a causal relationship between severe anemia and various maternal and perinatal complications. The underlying cause was postulated to be iron deficiency. Iron deficiency anemia results in impaired transport of hemoglobin and thus oxygen to uterus, placenta and fetus. It also causes tissue enzyme and cellular dysfunction. This mechanism can explain impaired myometrial contractility resulting in atonic uterus, as well as placental dysfunction leading to preterm birth, low birth weight and growth restricted babies and perinatal deaths.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter gives an overview of the research methodology employed in this study. It involves the type of study design, location/ area of the study, study population, variables, sample size, technique and method, data collection method and tools, limitation of the study and ethical consideration.

3.2 Type of Study Design

An exploratory cross-sectional study using qualitative method was employed to assess for the presence and nature of maternal dietary habits and beliefs during pregnancy in Yilo Krobo District, Ghana. The study involved pregnant women, women in fertility age (WIFA), elderly women and elderly men in six communities in Yilo Krobo District.

3.3 Study Location/Area

The Yilo Krobo Municipal is one of the twenty-one districts in the Eastern Region of the Republic of Ghana. The capital is Somanya

3.3.1 Geography

It covers an estimated area of 805sq.km, constituting 4.2 percent of the total area of the Eastern Region with Somanya as its capital. The municipality is bounded in the north and east by Lower Manya Krobo District, in the South by Akwapim North and Dangbme District and on the West by New Juaben Municipal, East Akim Municipal and Fanteakwa District.

3.3.2 Demographic Characteristics

The districts total population according to the 2000 population was 87,847. The total male population in 2000 was 42,378 and female 45,469. The population in the age group 0-14 accounts for 39 percent of the district's total population, while the age group 15-59 accounts for 53 percent. The age group above 60 years represents 8 percent for the population. The district has a population density of 107 persons per square kilometer.

3.3.3 Economic and Cultural Activities

The major economic activities in the Municipality are agriculture, trading and small scale industrial activities. About 58% of the working population is engaged in agricultural activities. Service, Trading (Commerce), and Small Scale Industrial activities employ 18.1%, 12.9% and 7.2% of the working population respectively. Effort at promoting economic activities in the Municipality by the Municipal Assembly is not encouraging. Analysis reveals that spending by the Municipal Assembly on Agriculture and Industry in 2001 was 6% and 0% respectively.

3.3.4 Health Facilities

The Yilo Krobo Municipal has three (3) Private Clinics, Nine (9) reproductive/child health/family planning (MCH) clinics, one (1) chest clinic (Government), three (3) private midwives' maternity homes, seventy-two (72) trained traditional birth attendants. There are four (4) community health planning and services (CHPS) centers at Obenyemi, Wurampong, Labolabo and Opersika. A polyclinic in Somanya is yet to assume full operation. Despite the above facilities, health service delivery is still not adequate; due to the absence of a Municipal hospital. There are no medical doctors and other specialized medical personnel in the district.

3.4 Study Population

The study participants were mainly pregnant women. Additionally, women in reproductive age, elderly women who have had children and men who had children or whose partners are currently pregnant at the time of the study in four sub-districts were also included.

3.5 Sample Size

A total of 155 participants were selected to represent the six study communities. The 155 participants included 46 pregnant women, 30 elderly women, 42 elderly men and 17 women in reproductive age. The table below gives an overview of the number of respondents, FGDs and sites.

Table1: Table showing the number of groups, participants and sites

Study Sites	No of FGDs	FDG 1 Pregnant Women	FDG 2 Women in fertility age	FDG 3 Elderly Women	FDG4Elderly Women
Somanya	4	14	7	9	13
Apalau	2		10	11	
Okotokrom	3	9	-	11	10
Nkuranka	1	7	-	-	-
Okornya	3	9	-	10	12
Ponponya	3	7	-	9	7
Total	16	46	17	30	42

* Focus group discussion was held for all groups of participants

- This group of participant forms the active working class for the indicated communities and therefore could not be readily available to form quorum for FDGs

3.6 Sampling Method

The participants were purposively selected using the maximum variation technique. This sampling strategy implies an intentional and systematic selection of study participants with varying characteristics with reference to the topic of concern. It also implies that data generated from the study will not be generalized to the wider population but the material will have substantial relevance beyond the study population.

3.6.1 Selection of Study Community

Yilo Krobo has seven area councils, Somanya, Oterkpolu, Boti, Nkuraka, Nsutapong and Obawali. The study was originally planned to conveniently select one study community from each of these sub districts. Due to several intervening factors including series of local district meetings, six study communities, Somanya, Apalau, Okotokrom, Ponponya, Nkuranka and Okonya in five sub districts where conveniently selected.

3.7 Data Collection Technique

Permission was first sought and obtained from the district Assemblyman, district elders, queen mothers and community elders after explaining the nature and purpose of the study. Additional meeting were also held at every study site involving the Assemblyman to seek permission and obtain inform consent for participation of community members in the FDGs.

The research team comprising, the principal investigator, an assembly man of the district and an interpreter conducted a total of 16 FDGs on food taboos and beliefs during pregnancy at six study sites in Yilo Krobo district in the Eastern Region of Ghana. The six research sites were: Somanya, Apalau, Okotokrom, Nkuranka, Okonya, and Ponponya.

There were four categories of participants, they include:

- pregnant women
- women in fertility age
- elderly women
- elderly men

In Somanya, the research team conducted FGDs with all four groups of participants at four different venues each lasting about an hour. In FGD1, 14 pregnant women participated, FGD2, 9 elderly women, FGD 3, 7 WIFA and FGD4, 13 elderly men.

In Apalau, the research team conducted 2 FGDs with 11 elderly women and 10 WIFA.

Three separate FGDs were held in Okotokrom with, 9 pregnant women, 11 elderly women and 10 elderly men.

In Nkuranka, 1 FGD was conducted with 7 pregnant women.

In Ponponya, 3 separate FGDs were conducted with 7 pregnant women, 9 elderly women, and 7 elderly men while, in Okonya, the team conducted FGDs separately with 9 pregnant women, 10 elderly women and 12 elderly men.

In all, a total of 155 persons participated in the 16 FGDs at all the six study sites comprising 46 pregnant women 30 elderly women 42 elderly men and 17 WIFA.

The research team sought to find out the existence of food taboos and beliefs during pregnancy in Yilo Krobo, identify the prohibited foods, how widespread is the practice and an in depth explanation regarding reasons for the adherence by pregnant women.

A total of sixteen focus groups consisting of an average of eight participants were organized across six communities in the district. The composition was diverse with regard to socioeconomic status, ethnicity, age, pregnancy status, gestational age, and sex. Homogeneity of sex and gestational status in each was observed to ensure that males do not influence the discussions. With the help of an interpreter, coincidentally an Assembly man of the district, participants were verbally informed of their right to participate or withdraw at any time of the study without any precondition.

Each focus group discussion was recorded using tape recorder and supported with handwritten field notes. All FGDs were conducted both in English and Krobo with the translation of Krobo into English with help of an interpreter.

Before every FGD, study participants were duly informed about the purpose and benefit of the study, study procedure, what would be expected of them as participants, and their confidentiality privacy assured. The field tape recordings were transcribed immediately after every field visit, transcript harmonized with field notes and discussed by the research team.

3.7.1 Analysis

From a thorough review and initial readings of the scripts, the following themes emerged:

- Food items restricted by food taboos and traditional beliefs during pregnancy.
- Reasons for the adherence to food taboo practices and traditional belief during pregnancy.
- Identify the extent of food taboos and traditional practices during pregnancy.

- Ways of enforcing food taboos and traditional practices during pregnancy
- Evil spirits roam the communities at night making night time dangerous for pregnant
- Pregnant women have weaker spirits and are therefore vulnerable to demonic powers and spirits
- All deliveries done at home are normal and safe while those done at health facilities are abnormal and results from ancestral punishment.
- All deformed babies (monkey babies) result from noncompliance with traditional beliefs and food taboos.

These thematic areas were later consolidated into the following themes for analysis:

- Food items restricted by food taboos and traditional beliefs during pregnancy.
- Reasons for the adherence to food taboo practices and traditional belief during pregnancy.
- Identify the extent of food taboos and traditional practices during pregnancy.
- Ways of enforcing food taboos and traditional practices during pregnancy

The tape recorded FGDs supported by hand written notes was transcribed verbatim and analyzed manually using the principle of systemic text condensation as described by Malterud (1993).

Transcripts were reviewed repeatedly to gain thorough sense of the overall content in the texts, identifying central meaningful units in the material, condensation of the content through a coding of the text, and finally creating categories that contain the condensed meaning of the main themes in the material. The data was then sorted according to emerging themes. Sections of the discussions were quoted verbatim, and some modified to enhanced readability. Quotes were translated from Krobo into English.

3.7.2. Validity of the Findings

In order to enhance validity and minimize Assembly Man's influence on participant's responses, the Assembly Man with his consent was regularly asked after every focus group discussion to leave the group, with hand written scripts read out to the participants for concordance or correction. The literate participants facilitated this process. It was also made known to all the participants before the commencement of every FGD that the assembly man had no interest in the results or findings of the research but rather, ensuring full community entry and interpretation.

3.8 Ethical Considerations

The participants of the study were mainly pregnant women. Additionally, women in reproductive age, elderly women who have had children and men who had children or whose partners are currently pregnant at the time of the study in four sub-districts, were also included.

3.8.1 Approval for study

In line with national research standards, approval was obtained from Ghana Health Service Ethical Review Committee (See Appendix viii). Approval was also obtained from the Assembly man of the selected sub-districts, community leaders, and community members as well. Community entry protocol was duly observed when entering the various communities.

3.8.2 Voluntariness/consent

The purpose of the study was explained to all participants and a verbal consent obtained. They were told that participation in the study was completely voluntary and their right to withdrawal at any time of the study was assured. They were also told of their right to skip any questions without penalty.

3.8.3 Potential risks

This study posed no physical risks; however, some discussions and questions were seen to be personal and emotionally sensitive.

3.8.4 Potential benefits/compensation

The participants were all duly informed before their participation that there would be no direct material or financial benefits for their participation. But, their involvement would bring them sense of satisfaction for participating in an important study that may likely help formulate health policies. Though, the participants were told that there would be no financial or material benefits for participating in this study, they were provided transportation and snack after the discussions.

3.8.5 Privacy/confidentiality

All FGDs were conducted at a location convenient for all participants. Tape recorder was displayed before use and the participants assured that all recordings and notes would be strictly used only for the purpose of the study and everything would be done to maintain confidentiality. Personal identifiers such as names were not included in the data during the course of the study.

3.8.6 Data storage/security and usage

All information obtained was stored electronically and password-protected in a personal computer and access limited to only the researcher and the supervisor of the study.

CHAPTER FOUR

RESULTS

4.0 Introduction

This chapter presents key findings of the study. The data was collected with the sole aim of answering the objectives of the research. The chapter provides an overview of the socio-demographic characteristic of the study participants, their current knowledge, attitude, practice(s) and behavior regarding food taboos and beliefs during pregnancy in the Yilo Krobo district. Data collection took place from the 18th of May to the 10th of June 2013.

A total of one hundred and fifty-five (155) respondents participated in the sixteen (16) FGDs in six study sites. The participants comprise of forty-six (46) pregnant women, thirty (30) elderly women, 42 elderly men and seventeen (17) Women in Fertility Age (WIFA).

The study sought to find out the existence of food taboos and beliefs, list basic foods items restricted for pregnant women associated with these foods, identify the extent and reasons for adherence and to examine the enforcement mechanism of food taboos and traditional beliefs during pregnancy in Yilo Krobo district.

4.1 Demographic Characteristics

Of all the one hundred and fifty-five (155) study participants, 67(43%) of the participants had more than five children while 9(6%) of the participants had no child. 15(33%) of the study participants were over 45 years of age and 5(3%) of the study participants were between the age range of 18 and 19 years. The educational level of the study participants was as follows: Junior High School (JHS) which was given by 112(72%), Senior High School (SHS) formed 24(15%)

and tertiary formed 1(1%) while those without any formal education constituted 18(12%). 151(97%) of the participants were Christians. Muslims formed 3 (3%) of the study population. Please see table 4.1 for more details.

Table 4.1: Demographic Characteristic of study participants

Variables	Number of Participants
Number of Children	<i>n=(155)</i>
None	9
One child	8
Two children	18
Three children	30
Four children	23
Five children and Above	67
Age	<i>n=(155)</i>
45 and over	51
40 -44	9
35-39	38
30-34	18
25-29	26
20-24	8
18-19	5
Educational Background	<i>n=(155)</i>
No Education	18
Junior High School (JHS)	112
Senior High School (SHS)	24
Tertiary	1
Religion	<i>n=(155)</i>
Pentecostal	59
Christ Apostolic Church (CAC)	68
Presbyterian	18
Roman Catholic	2
Methodist	4
Muslim	4

4.2 List of food items tabooed and beliefs during pregnancy in Yilo Krobo.

This section provides the list of the various food taboos and beliefs during pregnancy.

All participants admitted knowing what food taboo is and what it meant during pregnancy, labor and afterbirth. The meaning of food taboo as noted from participants across the various FGDs at all study sites were:

“All the laws as instituted by our people about foods that we are not to eat or touch” (A 66 years old elderly woman in Somanya).

“Any food that you are not supposed to touch or eat” (A 22 years old, Okotokrom).

“Food that does not go with our culture to eat or drink” (A 31 years old, Okotokrom).

“Food when you eat can harm you or cause problems for the community” (A 24 years pregnant woman, Nkuranka).

The list of prohibited food items named by study participants includes:

- Snails
- Rats
- Hot food
- Animal lungs

Besides food taboos, an array of traditional beliefs during pregnancy mentioned. (See Box 1)

Box 1: Traditional Beliefs during Pregnancy

Pregnant women should not sit at the same place for long after eating

Pregnant women are not to take bath at night.

Pregnant women should not keep bath-water long before bathing.

Pregnant women should never cross their legs while sitting

Pregnant women should not carry a whole bunch of palm nuts, plantain and banana

Pregnant women should not eat at night.

Pregnant women should not eat hot food

Pregnant women should not cut firewood.

Pregnant women should not split firewood.

Pregnant women should not lie on their back while eating.

Pregnant women should not respond to calls at nights

Pregnant women should not leave their hair open

Pregnant women should always conceal their food from strangers

Pregnant women should never have sex with another man

Pregnant women should never steal

Pregnant women should not eat openly in the public

Pregnant women should not reject food or gift from her husband and family members

Pregnant women should not use two different colours of sandals

4.3 The extent of food taboos and traditional practices during pregnancy in Yilo Krobo

`District

This section describes food taboo and traditional practices and the extent of adherence during pregnancy.

Food taboos are widely practiced in Yilo Krobo. Study participants at all sites showed an in-depth knowledge about food taboos in all communities. A 22 years old WIFA share her views in the following statement:

“In our community, everybody takes food taboo very seriously”

Though the practice is widely observed in the district, some participants alleged that church leaders and members of the religious community are now questioning the reason behind these taboos and the need for adherence. The participants alleged that Christians in line with their religious teaching are not strongly upholding to the taboo and beliefs.

“Some church people stop their members from taking the taboos and beliefs in our community seriously” (A 24 years old pregnant woman in Nkuranka).

Though all participants professed to be Christians and admitted they have been warned by church leaders who regard the taboos and traditional beliefs as devilish and unbiblical, most of them think they would rather hold taboos and beliefs. They will rather uphold the taboos and beliefs for fear of their life.

Notwithstanding, children of influential religious leaders are prominent among those who choose to disregard the taboos and beliefs.

In some communities, the condition for non-adherence is just absent. For example you may not find snail to buy in any market place in Krobo land. If you do otherwise, you will not be allowed to take it to any household due to the widespread resentment. On the other hand, in rare situation, Krobos who may be compared to touch snails for example will rather do so with their left hands. The right hand is mostly used for eating. It is therefore, believed that touching snail with the right hand will get it contaminated with snail which will be passed on during eating. Hence, food taboo broken.

4.4 Reasons for the Adherence of Food Taboos and Traditional Beliefs

The reasons for obeying food taboos from explanations provided by study participants were grouped into three broad categories: health reasons, respect for the ancestors and respect for parents and community elders.

Health related reasons noted from the participant at all the six study sites include

- Safe and timely delivery
- Avoidance of “monkey-babies” (deformed babies)
- Healthy baby and mother
- Avoidance of epidemic disease

A pregnant woman explained why she adheres to the taboos as follows:

“This is the only way I will deliver safely and my baby will have no problem” (A 32 years old pregnant woman, Nkuranka).

The most important expected benefit of adhering to the practices and beliefs are good health during pregnancy and safe delivery.

“If I do not take the taboo, the spirits and witchcrafts will destroy my pregnancy” (A 29 years old woman, Okotokrom).

“When we do not listen to what our forefathers tell us to do, sometimes they get annoyed with us and bring sickness or hard time (misfortunes) to the community. If you plant anything for example the crops will not grow well and hunger will fall on us” (An elderly man, Somanya).

Most parents and community elders/ leaders are usually keen about the health and safety of their children and community members; they tend to do everything to ensure this. Disobedient children/ community members are constantly frowned on. In extreme cases or serious offenses, they are excommunicated from the family or the community. To guard against these odds, pregnant women exhibit high level of respect for their parents and community elders and the advice they offer.

“Our people will be happy with you if you listen to their advice. If you don't listen anything which will happen to you, they will say you are responsible” (A 24 years old WIFA, Okornya).

4.5 Enforcement mechanism for the adherence to food taboo and beliefs during pregnancy in Yilo Krobo

The various Food Taboos and beliefs are enforced by constant reminder by parents, husband of the pregnant woman, their peers and community elders. Every pregnant woman will be properly educated about the taboo whenever she attempts to break it.

“When my mother sees me trying to eat something that I am not supposed to eat, she will quickly stop me because she is afraid that when I eat, I will not deliver safely or something wrong may happen to me” (A 30 years pregnant woman, Somanya).

“The community people too can always stop you if they see you trying to eat what you are not supposed to eat” (A 23 year woman, Okotokrom).

“My friends can also tell me not to eat certain foods that I am not supposed to eat according to our Krobo taboo” (A 27 years WIFA, Nkuranka).

“My husband as well tells me not to eat the food our people say is a taboo” (A36 years WIFA, Okornya).

During FDGs at all the study sites the participants noted that pregnant women who are observed as disobedient to the taboo are advised repeatedly either by the husband, community elders or parents. In some cases, when the offense is seen as grave and may threaten their lives, the pregnant woman is then taken to a “Se wonne” that is a priestess to perform purification rites known as “musuyi” (Purification of the Womb) to ensure safe delivery.

4.6 Limitation of the Study

One of the limitations of this study is that the implications of the food taboos during pregnancy on the nutritional status of Yilo Krobo women was not attempted because it was not a research objective and also due to time and resource constraints.

Language barrier posed a huge problem in this research, in terms of time, cost, and personnel which served as a limitation to the study, since the researcher could not be in the position to communicate directly with the respondents especially during the focus group discussions and had to rely on the interpretation by others.

Though it was alleged by majority of the participants that Christians were widely advised not to observe the food taboos and beliefs by their church leaders, this information could not be validated. This was so seemingly because no participant could admit disregarding the food taboo and beliefs during pregnancy in the presence of others.

Moreover, the regular interruptions by literate FGD participants repeating what was said and providing clarity and additional information was also noted. Additionally, following full community entry in the communities of Ponponya, Okonya, Nkuranka and Okotokrom, a school teacher instead served as the interpreter.

CHAPTER FIVE

DISCUSSION

5.1. Introduction

Taboos are culturally transmitted prohibitions, the violation of which is perceived to carry social or supernatural sanctions. Laderman (1984) suggested that the term taboo implies a rule that may not be broken upon pain of supernatural or societal retribution, thus evoking obedience from all but the most daring or foolhardy. Pregnancy is one of the periods of the female life in sub-Saharan Africa in which cultural expectations and responses are influence.

Pregnancy in various cultures is attended by many food taboos, beliefs, and restrictions (Alabi, 1991), which are often influenced by traditional notions passed on from one generation to another (Zobairi, Freitas & Wasti, 1998).

This chapter discusses the key results of the study from qualitative data collection carried out in the field. It relates the results to the objectives, literature review, and key variables of the research.

In this section, the research findings are discussed according to the following four objectives of the research:

- To identify and list basic foods items restricted by the food taboos and beliefs during pregnancy in Yilo Krobo district.
- To identify the extent of food taboos and traditional practices during pregnancy in Yilo Krobo District.
- To examine the reasons for the adherence to traditional beliefs and food taboo practices by pregnant women in Yilo Krobo District.

- To examine the enforcement mechanism of food taboos and traditional beliefs during pregnancy in Yilo Krobo District.

5.2. List of foods tabooed and beliefs during pregnancy in Yilo Krobo.

This section presents food items prohibited during pregnancy and common traditional beliefs ascribed to pregnancy in the Yilo Krobo district.

5.2.1 Food taboos

Perhaps the most significant finding of this study is, unlike many communities in Ghana and around the world, only very few food items are considered taboos during pregnancy in Yilo Krobo district which seemingly poses no significant health risk to pregnant mothers.

The study revealed, rats, snails, snake, hot food and animal lung as prohibited foods during pregnancy. Similar studies conducted in rural Northern Ghana, by Dove (2010) mentioned that in addition to herbal remedies, pregnant women were taught about taboos by their immediate families, extended families, and communities. The main food taboos identified by that study are as follows:

- Honey which causes respiratory problems for the child at birth
- Bambara beans cause respiratory and skin problems for the child at birth
- Corn flour is linked to heavy bleeding at delivery
- Shea butter can cause difficulty in delivery
- Eggs, fresh meat, fresh milk, and cold and sugary foods make the unborn baby large, contributing to a difficult delivery and possible death of the mother

Another Ghanaian study conducted at Legon (a suburb of Accra) and Dodowa (a rural community), both in the Greater Accra Region of Ghana, revealed that various types of food were avoided by some of the expectant mothers during pregnancy for various reasons. The foods avoided during pregnancy in that study included fufu, gari, kokonte (all cassava based foods), fresh fish, corn dough porridge, eggs, banana, crabs and ripe plantain (Nti, Larweh, & Gyemfua-Yeboah, 2002).

These study findings tend to be in harmony with other findings in many parts of the world where, food taboos during pregnancy are found to be more elaborate and nutritionally significant.

According to Fishman, Evans and Jenks (1998), food taboos recorded all over the world differ only in type and characteristics. In the Kiriwina (Trobriand) for example, pregnant women, have a considerable amount of food taboos to observe including fishes that lead a cryptic life or those that like to attach themselves to corals are not to be eaten by a pregnant woman, because this might cause her to have a complicated birth. Similar beliefs are attached to bananas, pawpaws, mango, and other fruits; they are thought to either cause a hydrocephalus, club-foot, distorted belly or give rise to other deformities in the newborn (Meyer-Rochow, 2009).

5.2.1.1 Rats

In most Western cultures, rats and mice are considered either unclean vermin or pets and thus unfit for human consumption, traditionally being seen as carriers of plague. However, rats are commonly eaten in rural Thailand, Vietnam and other parts of Indochina (Goodburn, Gazi & Chowdhury, 1995).

This appeared contradictory to this study finding. From the FGDs, all the participants in all the study communities unanimously declared that rat is a food taboo during pregnancy.

“When our forefathers first came to settle on this land, they settle on top of the mountains. They could not dig graves to bury their dead because of the rocky nature of the ground but instead used caves between rocks to bury. It was later discovered that rats would enter and dig out the bones of their dead relatives. That is the main reason why we do not eat rats because we believe that they burrow into graves and feed on dead bodies as well” (A 46 years Man from Somanya).

Worldwide, rats are known to spread disease to humans directly, through contact with rats feces, urine, or saliva, or through rat bites simply because, rats and humans live in close proximity. Diseases carried by rats can also be spread to humans indirectly, through ticks, mites or fleas that have fed on an infected rat.

The potential for spillover of zoonotic agents in rats poses a public health concern that has rarely been evaluated. Rats are persistently infected for the duration of their lives and do not show signs of disease, reduced fertility, or mortality from infection. Lassa fever is an acute viral illness that occurs in West Africa and can be transmitted by rats (Hjelle, 2001).

Rats release infectious virus in excrement and saliva and transmission is hypothesized to occur through inhalation of aerosolized virus in urine and feces and passage of virus in saliva during aggressive encounters (Kawamata1987).

5.2.1.2 Snake meat

Generally, participants did not hold the view that snake meat is a taboo in pregnancy.

It is widely known that avoiding snake meat by Ghanaians is a matter of choice.

Snake meat contains protein like any other type of meat. Protein is necessary for many body systems, including the development of muscles and could be essential to the development of the fetus. Protein provides amino acids that the body cannot obtain from any other source, which does everything from building cell walls to regulating hormones. The amount of calories contained in snake meat, depends largely on the type of snake eaten.

Snakes, like other animals, may also contain parasites and other infections that can be transmitted to humans, which can also be neutralized by proper handling, freezing, and thorough cooking. Snake venom poses danger to people only when it enters the blood stream, so there should be no concerns about poisoning from eating most snakes.

Participants could not provide any tangible cultural or health related reason for the avoidance of snake meat, but rather regard same as dishonorable meat. Modernization may have played a key role in the avoidance of this meat.

“It is rare to see someone eating snake in Ghana. It is not a taboo but majority of Ghanaians don’t like to eat snake. Because this has been happening for long time now, some people view it as a taboo” (A 72 years old man from Okotokrom).

Kruger and Gericke (2003) made similar observation that although mere avoidance of potential food (for whatever reason) does not in itself signify a food taboo, it is easy to see how regular avoidance can turn into a tradition and eventually end up as a food taboo.

5.2.1.3 Snail

Terrestrial snails are rich in proteins and like many other mollusks are eaten all over the world but the species eaten and the quantity consumed differs greatly from region to region. Because snail predominantly protein, adverse reactions following the ingestion of mollusks are similar to those reported for allergic reactions to other protein foods. The reactions may range from mild oral allergy syndrome (itching of the lips, mouth, or pharynx, and swelling of the lips, tongue, throat, and palate), through urticaria (hives), which is probably the most commonly reported symptom in Yilo Krobo district. Life-threatening systemic anaphylactic reactions such as difficulty breathing, drop in blood pressure, and even death are also common.

Krobos are generally regarded in the eyes of Ghanaians as people who do not eat snail. This prohibition applies within the context of the Krobo culture, to all. The period of pregnancy serves re-enforce this prohibition in light of the view that pregnancy is a period of increase vulnerability.

“We the Krobos don’t eat snails. We are not even allowed to touch it. Strangers are also not allowed to bring it in our homes or eat it using our utensils. Snails treat us badly and that is why pregnant women are not supposed to eat or touch because it will also affect the baby in the stomach” (An elderly man in Somanya).

5.2.1.4 Animal lungs

Lungs are the major respiratory organs in human. These organs are responsible for the exchange of respiratory gases between the external environment and the internal physiological environment. During the respiratory process, particles contained in the air

are usually inhaled. The health status of the lungs is to a greater extent determined by the character of the inspired air.

Lungs of animal are regarded as taboo for men in Yilo Krobo district. Eating lungs of animal is believed to cause asthma in men. However, pregnant women are forbidden to eat lungs since they do not know the sex of the baby they are carrying. It is strongly believed that a pregnant woman carrying a male fetus who eats animal lung will eventually have a child diseased with asthma.

“Lungs of animals are food taboos for men only. It is can cause asthma in men who eat animal lungs. We are not allowed to eat lungs during pregnancy. It is strongly believed that if the mother is carrying a male fetus, that child will eventual develop asthma after birth. Therefore they must blindly avoid eating lungs” (A 34 year old woman from Nkuranka).

Contrary to this finding, asthma is a chronic inflammatory disease that affects the lungs. In asthma, the bronchial tree contained in the lung becomes inflamed and more sensitive than normal. Asthmatic episodes are trigger by inspired environmental irritants that cause inflammatory changes in the lungs leading to the narrowing of the air tract, and an increase in the production of sticky mucus (phlegm). This leads to symptoms including: difficulty breathing, wheezing and coughing, a tight chest.

A trigger is anything that irritates the airways and brings on the symptoms of asthma. These differ from person to person and people with asthma may have several triggers. Common triggers include house dust mites, animal fur, pollen, tobacco smoke, exercise, and cold air and chest infections.

5.2.1.5 Hot food

Ingestion of hot food is a common cause of stomatitis and various mucus membrane inflammatory conditions in oral cavity. Hot foods are rarely swallowed. When accidentally swallowed, esophagitis may result. There is no anatomical connection between the digestive tract and the uterus where the developing fetus is protected by the muscular of the uterus, the embryonic membranes and the amniotic fluid.

Therefore, the claim by participants that hot food when eaten will burn the skin of the unborn baby has no medical or physiological basis

“When you eat hot konkonte for example, the food will burn the baby skin in your stomach (womb) and the baby will be burn with marks (skin patches on the skin” (A 22years pregnant woman, Somanya).

The amniotic fluid, a clear, slightly yellowish liquid that surrounds the unborn baby (fetus) during pregnancy, It is contained in the amniotic sac. This fluid constantly circulates and helps keep a relatively constant temperature around the baby, protecting from heat loss and protect the baby from outside injury by cushioning sudden blows or movement. Additionally, the amniotic fluid also functions as a shock absorber which is most efficient in preventing damage to the fetus that may result from a blow, undue pressure or increase temperature.

5.3 Traditional beliefs during pregnancy

Throughout the world, pregnancy is marked by different traditional beliefs and values. These beliefs and values give perspective to the meaning of food practices, taboos and myths adhered to during pregnancy. Beliefs are enforced by media, friends and significant others.

Values are widely held beliefs about what is worthwhile, desirable, or important to well-being. Values are evolving during adolescence; therefore, values held at one point may not be the same values important at a subsequent point as in pregnancy. Continual assessment of values related to food consumption is necessary (Bronner, 1997).

The study catalogued an impressive list of traditional beliefs (Table 4.1) during pregnancy and found to be homogenous to all six study communities. Homogeneity was also identified in the reasons provided for compliance.

A 28 years old WIFA in Somanya, describing the significance of beliefs during pregnancy said, *“Once you like yourself and the baby in your stomach (womb), you must obey everything what the old people are saying because, if you don’t hear them, you will see what will happen when is time to deliver or your baby will not be alright.”*

In some instances, belief becomes a common order with collective engagement even in the absence of clearly understanding their true meaning.

A 31 years old woman expressing her dismay about traditional belief in pregnancy said

“I only know that pregnant women are not to refuse gift and later change your mind to accept it. This is what I remember my mother told me and I also heard it from so many persons and I see others obeying it. Whether this is true I do not know.”

5.3.1 Belief about sexual relations during pregnancy

Sex is considered safe during all stages of a normal pregnancy. Penetration and intercourse’s movement won’t harm the baby, who is protected by the mother’s abdomen and the uterus’ muscular walls. The contractions of orgasm aren't the same as labor contractions. Still, as a general safety precaution, some doctors advice avoiding sex in the final weeks of

pregnancy, believing that hormones in semen called prostaglandins can stimulate contractions which may initiate labor. One exception may be for women who are overdue and want to induce labor. Some doctors believe that prostaglandins in semen actually induce labor in a full-term.

From the study, it was found that majority of the community members are Christians. Biblical teaching forbids adultery.

“If there is a man who commits adultery with another man’s wife, one who commits adultery with his friend’s wife, the adulterer and the adulteress shall surely be put to death” (Leviticus 20:10).

There was a general view that any sexual relationship outside marriage was not only morally wrong but harmful to the unborn child, cause problems during labor, such as prolonged or obstructed labor and/or death of the mother and baby. The male participants were observed more assertive about this belief. In a very strong tone, an elderly male from Somanya, stressed that

“There is no compromise about this, any pregnant woman who [sleeps] with another will surely die while giving birth. The baby cannot be for two different men at the same time so God will not allow such baby to be born. It will also bring curse on the family.”

The term ‘*sleep*’ is a local expression in this context as a more polite way of referring to sexual intercourse.

In Zambia, Maimbolwa, Yamba, Diwan and Ransjo-Arvidson (2003), noted similar explanation about extramarital sexual intercourse during pregnancy while investigating Cultural practices and beliefs during pregnancy.

A *mbusa* in that study is quoted as saying:

“A pregnant woman should not [move] with different men because it could lead to abortion, since different men have different blood. ‘Move’ is a local euphemism for having a sexual relationship with someone. (46-year-old mbusa from an urban area)

5.3.2 Belief about carrying weight and overwork.

Carrying heavy weight and doing hard work during pregnancy is considered as an additional weight to that of the unborn baby which is believed to be too much for the woman and may cause termination of the pregnancy. It is also believed that this may cause severe and unbearable waist and back pain during the period of pregnancy.

“In Krobo pregnant women are not to help with lifting water on another person head or taking bunch of fire wood. If she does any of these the pregnancy will ‘come down’ [termination of the pregnancy] pregnant women were not to carry heavy things and overwork.” (A 26 years old pregnant woman, Ponponya).

Lifting weight during pregnancy is a safe and an essential activity, that when executed with careful attention and proper form, can help to reduce pregnancy aches and pains, and may even ease the process of labor and delivery.

Even though, there are benefits can be realized through exercising, a pregnant woman is quite vulnerable and precautions need to be taken to ensure that certain physical activities do not have a deleterious impact. There is no compelling evidence suggesting a link between lifting weight and miscarriage.

5.3.3 Beliefs about difficult and prolonged labor.

Community members believed that during pregnancy sitting in the same place long after eating, keeping bath-water long before bathing, lying on your back while in bed and, crossing your legs while sitting makes the baby to assume similar posture in the womb all of which will cause difficult and prolonged delivery.

In Okornya, a 67 years old man said, *“a woman who was unfaithful to her husband during pregnancy will not deliver the baby until she has confessed her infidelity and the ‘sewonor’ [traditional priest] contacted to immediate perform mmusuyini [cleansing rite] if not she will have to be taken to the hospital for operation or else she will die”*.

A long labor though normal can be difficult to handle. It is especially common in first time pregnancies, with labor lasting beyond the 12-18 grueling hour range without medical intervention. Not only is it exhausting, it makes the laboring woman feel unaccomplished. Labor is considered obstructed when the presenting part of the fetus cannot progress into the birth canal, despite strong uterine contractions.

Carmen and Carla (2003) described the most frequent cause of obstructed labor as cephalopelvic disproportion a mismatch between the fetal head and the mother's pelvic brim. The fetus may be large in relation to the maternal pelvic brim, such as the fetus of a diabetic woman, or the pelvis may be contracted, which is more common when malnutrition is prevalent. Some other causes of obstructed labor may be malpresentation or malposition of the fetus (shoulder, brow or occipitoposterior positions). In rare cases, locked twins or pelvic tumors can cause obstruction

5.3.4 Beliefs about evil spirits and pregnancy.

It is believed that evil spirits are present in the district and roam the communities especially at night. These evil spirits are believed to be attracted to pregnant women and the unborn babies.

An elderly woman was quoted as saying,

“This is because the baby has weaker spirit and can therefore be conquered easily as compared to older people. Most of the adult have personal protection against evil spirits but the babies do not have such protection”.

Therefore, it was gathered from the various FGDs, that vulnerability and exposure to these evil spirit can be minimized or avoided if pregnant women observe the following beliefs:

- pregnant women are not to take bath at night, because, the evil spirit roam around more frequently at night
- pregnant women should not respond to calls at night when the caller is not clearly identified and known, it believed that it could be a call from an evil spirit
- pregnant women should not leave their hair open; this may attract attention not only by other community but evil spirits as well

5.3.5 Beliefs about congenital malformations.

All the participants share the belief that malformations are generally caused by the activities of women during pregnancy though a few participants insisted that malformations could also be caused by some foods eaten during pregnancy.

Although it may be an indirect determinant, congenital anomalies are more frequent among resource constrained families and countries. It is estimated that about 94% of serious birth

defects occur in middle- and low-income countries, where mothers are more susceptible to macronutrient and micronutrient malnutrition and may have increased exposure to any agent or factor that induces or increases the incidence of abnormal prenatal development, particularly infection and alcohol. Advanced maternal age also increases the risk of some chromosomal abnormalities including Down syndrome. Maternal infections such as syphilis and rubella are a significant cause of birth defects in low- and middle-income countries.

Maternal exposure to pesticides, medicinal and recreational drugs, alcohol, tobacco, certain chemicals, high doses of vitamin A during the early pregnancy, and high doses of radiation increase the risk of having a baby with congenital anomalies. Working or living near or in waste sites, smelters, or mines may also be a risk factor.

They represent precautions and preventive measures that are believed to avert congenital malformations. They include:

- pregnant women should not carry a whole bunch of palm nuts, plantain or banana; failure will lead giving birth to a baby without toes or fingers
- pregnant women should not split firewood; splitting firewood will cause suture lines in the baby skull to open and persist after delivery
- pregnant women should not eat hot food; eating hot food during pregnancy is believed to burn the baby skin in the womb and cause patches on the skin
- pregnant women should not use two different colors of sandals; wearing sandals of different colors is believed to cause the pregnant woman to deliver a baby with multiple pigmented skin.

Additionally, it is also believed that pregnant women should not reject food or gift from her husband or close family members; doing so will deny her God's favor or blessings during the time of delivery.

5.4 The extent of food taboos and traditional practices during pregnancy in Yilo Krobo district.

Although, modernization has permeated the district especially the study communities, with the presence of cellular phone services, health clinics, in some places electricity, paved road and the like, there remains a wide spread allegiance to traditional practices such as food taboos and traditional beliefs during pregnancy. This section provides findings from the field that describes the prevalence of food taboos and traditional beliefs in Yilo Krobo.

Additionally, the existence of traditional practices and beliefs held by members of the study community is inherent in the foundation of the district and the apparent uniqueness of its people thus, majority of the participants also viewed some food taboos especially, the avoidance of snail as conferring a tribal identity for the Krobo tribe in the district.

Affirmation for this finding as seen in many other communities around the world can be drawn from a cross-sectional study assessing the prevalence of food taboos during pregnancy, types of foods prohibited carried out in Hadiya Zone, Southern Ethiopia, affirmed that in developing countries, however, a substantial number of pregnant women avoid specific foods due to cultural beliefs or impositions. In this study, Demissie, Muroki and Kogi-Makau (1998), asserted that cultural food restriction during pregnancy is a common practice, particularly in developing countries. High prevalence of food taboo practice is reported in several areas of the world. In one of the communities in Nigeria, for example, it was found that about 66% of women avoided milk Ojofeitimi Ehigie and Babafemi, (1982) while in another village; Ebomoyi, (1987) observed that

practically all pregnant women avoided meat (98%). In the Sudan, a study by Boucher revealed that fatty foods and sweets are abstained from by a sizeable proportion of pregnant women (Boucher, 1984).

5.5 Reasons for the adherence to traditional beliefs and food taboo practices by pregnant women in Yilo Krobo District.

Restrictions imposed by food taboos and traditional beliefs may be associated with a series of positive antenatal health behaviors during pregnancy that encourage women to have positive attitudes toward pregnancy, to prepare for parenting, and to acknowledge this life transition (Haslam, Lawrence, & Haefeli, 2003). One study found that more positive attitudes were associated with better quality of life (Mancuso, Sayles, & Allegrante, 2010)

The reasons for obeying these food taboos and beliefs from explanations provided by study participants can be grouped into three broad categories:

- health reasons
- respect for the ancestors
- respect for parents and community elders

5.5.1 Food taboos and beliefs for health reasons

Food taboos are particularly regarded by people of Yilo Krobo as a form of instruction or command from God and passed down to them through their forefathers to safeguard them against evil and diseases. To doubt, even to ask any questions about the reasons behind the taboo is seen not only as blasphemous and carries health risk.

Health related reasons noted from the participant at all the six study sites include:

- Safe and timely delivery
- Avoidance of ‘monkey-babies’ (deformed babies)
- Healthy baby and mother
- Avoidance of epidemic disease

Timely and safe delivery is regarded as one that is done at home, assisted by traditional birth attendant (TBA) or by experienced community members. Hospital delivery is on the other hand is seen as failure in the normal delivery process; a place for complicated delivery including caesarean section.

“I don’t eat the foods I am not supposed to eat because I know this is the only way I will deliver safely and my baby will have no problem” (A 32 years old pregnant woman, Nkuranka).

Congenital malformations are wildly regarded as punishment for disobedience of cultural norms including eating prohibited foods and the disregard for beliefs for protection and safety of the pregnancy.

A member of the FGD conducted in Nkuranka said, *“If pregnant woman continue to take bath at night, she will one day take bath with evil spirits. If you take bath with evil spirits, you will harm the baby and you deliver monkey baby”* [deformed baby].

All the participants agree that the surest way to ensure healthy pregnancy and deliver healthy baby is to avoid the food taboos and adhered to the traditional beliefs about pregnancy.

“If you eat the taboos like snail, you will get sick. So many things [skin rashes] will come on your skin or you will deliver sick baby and sometimes the baby may ‘go back’ [die]. The foods the old people are talking about is to help us not to fall sick during pregnancy (A 22years old pregnant mother, Nkuranka).

It is reported in similar study that, in order to maintain harmony within the body, pregnant women avoid eating “wet-hot foods” (e.g., shrimp, mango, lychee, longan, and pineapple) will produce a “poisonous” energy which will manifest itself as allergic reactions or skin eruptions in the baby (Martin, 2001; Schott & Henley, 1996).

Accusation of noncompliance with taboos and traditional belief practices are made whenever perceived consequences befall an individual where collective allegiance is expected. A woman who delivers a congenitally abnormal baby is like to be accused of breaking a taboo or a belief some marriages are even threatened or disrupted with strong suspicion. Fear of indictment corroborate with adherence in some instances.

A lamenting 34 years old WIFA in Okotokrom said,

“When you get sick and you are not getting well soon, your husband and his people will always say you eaten something you are not supposed to eat or that you have done something wrong and you need to confess. If the worst thing happen, you deliver with monkey baby, they will condemn you and if you are not careful, your husband will leave you”

In Chinese culture, there are traditional pregnancy restrictions to protect the child from “malign influences” and to avoid the problems associated pregnancy and birth, such as miscarriage, stillbirth, death of the mother, and imperfections in the newborn (Ip, 2009).

“Sometimes when the spirits of our forefather are vex with the kind of things the young people are doing now, eating everything, pregnant women doing anything they feel like, they will punish during the time of delivery” (a 72 years old woman).

Nevertheless, she admitted that the last time she witnessed an occurrence of this type was when she was still a young woman, beaming with smile as she makes reference to the colonial period, *“at that time I was not marred”*.

Haslam, Lawrence, and Haefeli, (2003) noted that, theoretically, pregnancy restrictions may be seen as having both positive and negative impacts on health-related quality of life.

Though many participants agree that some of the reasons are trivial, sometimes mere speculations but vowed to uphold for fear of the perceived repercussions.

The spirits of the forefather are believed to be residing very closely with the living ensuring that the genealogical values were upheld, what was left behind remains intact, a status quo maintained in favor of security, good health and prosperity. Breaking taboos and beliefs humiliates the ancestors who may vent out their anger in many deleterious ways from ill health, poor farms yields to death and in some cases collective punishment.

The pregnant women think they are more vulnerable and therefore need to be seen as utterly acceding.

Though, other community members, particularly men were actively involved with the study, there was no significant variation in the views expressed by them and that of pregnant women. Rather, most elderly participants provided historical background, detailed explanation and reasons for the prohibitions.

5.5.2 Food taboos regarding respect for the ancestors

Ancestor worship is an age-old belief; which can be traced back to the dawn of history. It was extensively developed by the Egyptians and was inherited by the forebears of the Zulu nation (Binns, 1974). Lindemans, (1997) confirms that ancestor worship occurs in ancient cultures throughout the world and that it plays a vital role in primitive religions even in modern times.

Respect for ancestral laws and guidelines for Krobo is cardinal. Many Disobeying ancestral laws will lead to anger of the ancestors who may ruin havoc on either the individual or the community as a whole. Eat what has been declared as taboo by the ancestors is considered a offence.

”When we do not listen to what our forefathers tell us to do, sometimes they get annoyed with us and bring sickness or hard time to the community. If you plant anything for example the crops will not grow well and hunger will fall on us” (An elderly man, Somanya).

In a study, Alabi, (1991) noted that the Orang Asli Temiar practice food taboos and avoidances to maintain harmony with entities, natural and supernatural, and to prevent any misfortune or calamity from happening.

The results show an overwhelming awareness of a sacred, consecrated cultural environment in Yilo Krobo, the hallmark of compliance to taboos by pregnant women in the district. Though, widely eaten in many communities across Ghana, an inherent drive persists in the minds of pregnant women identifying tabooed food items as uncanny, dangerous, forbidden, and unclean. Even more conspicuous was the inability of the participants to show evidence of adverse consequences in noncompliant mothers. In spite of this, pregnancy signals, a period of absolute

concern for good health and the need to live in complete harmony with all others and the cultural dictates.

Though largely incomprehensible, the adherence to taboo in many ways has cultivated the realization for the respect and faithfulness to the husband, chiefs, priests and parents. The physical avoidance of prohibited food items and places illustrates peculiar power inherent in these food items, persons or ghosts, which are believed, can be transmitted from them by contact. Persons or things which are regarded as taboo may be compared to objects charged with electricity with tremendous power which is transmissible by contact. These peculiar powers seemingly superstitious, are believed may be liberated with destructive effect when pregnant women provoke its discharge by either contact or consumption. It is perceived that the magnitude of result of a violation of a taboo depends partly on the strength of the magical influence inherent in the tabooed object or partly on the strength of the opposing spirit.

However, a clear manifest of compulsion to comply with taboos is evident by pregnant women total avoidance of night life and preference for the home of parents where guidance is assumed to be found. The widespread avoidance of commercial foods during pregnancy and limited travels by the Krobos during pregnancy has proven to be one the safest ways to avoid contact or consumption of taboos. Realistically, most of the taboos cut across the generally Krobo population thus, attaching a unique group identity and solidarity with culturally endowed Krobos.

5.5.3 Food taboos as a symbol of respect for parents and community elders.

As noted earlier, most parents and community elders/ leaders are usually keen about the health and safety of the children and community members as a whole; they tend to do everything to ensure this. Disobedient children/ community members are constantly frowned on and in extreme cases or serious offenses, excommunicated from the family or the community. To guard against these odds, pregnant women exhibit high level of respect for their parents and community elders and they advise they offer.

“Our people will be happy with you if you don’t listen to their advice. If you don’t listen anything which will happen to you, they will say you are responsible” (a 24 years old WIFA, Okornya).

When you are pregnant, people should be praying for you and your baby. It is not time for them to vex with you especially your mother and the old people. They are supposed to bless you and take care of you” (a 31years old pregnant woman, Nkuranka).

Manyande and Grabowska, (2009) claimed that the question of whether or not these traditional practices protect women’s health during pregnancy has yet to be answered. Evidence suggests the possibility that following traditional practices during pregnancy has both therapeutic and harmful consequences.

5.5.4 Food taboos as a factor in group-cohesion and group-identity

The views expressed by majority of these participants indicate their allegiance to their community and cultural values. To be regarded as a Krobo, they think, you must abide by what is said and done by the people of Krobo land.

“As a Krobo woman, I have to avoid snail and all other things that I am not supposed to do as a Krobo. All over Ghana, we are known as people who don’t eat snail so, I cannot be a Krobo and eat snail...never” (an elderly woman, Okornya).

In Okotokrom 34years old WIFA admitted in a rather frank tone,

“Whether what they say is true or not I do not know. But, once I am Krobo, I do what the Krobo culture is saying or else I will not be regarded as being part of the community. My own people will avoid me and sometimes, they may even drive me away.”

Closely associated with this finding is an assertion made by Meyer-Rochow, (2009) why looking at further reasons for food taboo adherence. He mentioned that, any food taboo, acknowledged by a particular group of people as part of its ways, aids in the cohesion of this group, helps that particular group maintain its identity in the face of others, and therefore creates a feeling of "belonging".

5.6 Enforcement mechanism for the adherence to food taboo and beliefs during pregnancy in Yilo Krobo

Constant reminder and advice by family, peers and community members, fear of punishment and the unknown and sanctions are the three important ways by which people in Yilo Krobo ensure that pregnant women abide by the dictates of the food taboos and beliefs. The first step in the enforcement process is either constant reminder or advice from a close relative mostly the mother or that of the husband, family or community elders.

Parents are constantly teaching and remind their children about is considered wrong in every given society and need to abide. However, majority of the male participants other hand said they rather advice their wives about the danger associated with disobeying the food taboos and

beliefs. Moreover, these male participants that when a pregnant wife is seen constantly disregarding the taboos and beliefs she is usually sent to her mother for further counseling.

The severity of the punishment is related to the taboo or belief when broken. Death of the mother, baby or both is the most severe form of punishment.

Those delivering the punishment are: ancestors, spirits, and family heads or community elders. It is believed the power and authority used by those implementing the punishment come from God though he may not be directly involved.

A 22years old pregnant woman at Nkuranka said:

“If something happen to you or your baby, you do not know who is punishing you but we know that it is God who is doing the punishment because we don’t see him. Sometimes I also think it the work of evil spirits who are agents of the devil and not God. But whatever the case is, it is better to be on the safe side.”

Fear of the possible outcomes of breaking and disregarding the food taboos and beliefs is the principal instrument compelling full compliance by all pregnant women. According to the participants, though very rare, excommunication by family members, eviction from family home, and expulsion from the community are the common forms of sanctions placed on perpetual violators.

“Every woman in this community knows about the importance of abiding by the taboos especially when you are pregnant. That is why every girl in this district must undergo through the Dipo rites to become a good wife. If all of that is done and you still cannot obey what we think is good for all of us from our forefathers, then it means you cannot be part of us. We will

tell you to leave our district and if you cannot go, you will be denied participation in all our activities” (A 68 years old man from Somanya).

Dipo also known as Puberty rites are performed on adolescent girls to initiates them to womanhood. It is believed that females must go through this practice successfully before they “touch” [sexual intercourse] a man or become a very good wife.

Another elderly male in Okornya responding to the same inquiry said:

“It is very strange to see such a person in our district because we grow up hearing one thing and live all our lives doing the same thing. If anyone decides to do otherwise then, it means you have decided not to identify with us and invite trouble in our land so we simply ask you to leave. You can go somewhere else and live whatever life you want to live” (An elderly man of 46 years from Okornya).

Taboos have played an important role in the traditional African society and keep to exercise its influence on the modern society as well. They helped people to preserve moral rules that were helping them, as individuals and as communities, to live a peaceful and harmonious life. Though formulated in forms of laws and sometimes being ambiguous, they enabled people to maintain the moral order and hierarchy in the society.

In the contemporary society, which in a number of aspects is quite different from the traditional one, there is a need to enforce taboos or to come up with an alternative way that will promote traditional values.

CHAPTER SIX

CONCLUSION AND RECOMMENDATION

Traditional practices including food taboos and beliefs, are commonly ascribed to the people of Yilo Krobo, and widely believed to be inherited from the ancestors play a major role in the daily life of all including pregnant women in Yilo Krobo.

6.1. Conclusion

The study revealed that food taboos and traditional beliefs governing pregnancy exist in Yilo Krobo district. Snails, rats, snakes, hot food and animal lungs are the food types prohibited to eat during pregnancy. Concerns about ensuring healthy gestation, successful pregnancy outcome and courtesy for parents and community elders are the core reasons for adherence.

The study shows that adherence to food taboos and traditional beliefs by all pregnant women in Somanya, Apalau, Okotokrom, Nkuranka, Okornya and Ponponya of the Yilo Krobo district.

Repeated warning about the dangerous consequences of noncompliance and set of family and community sanctions pinpoint measures used in the district to enforce the food taboos and traditional beliefs in Yilo Krobo.

The results, critically imply that some pregnant women in Yilo Krobo are profoundly concern about their general wellbeing, that of the growing fetus, and the outcome of pregnancy,

6.2. Recommendations

On the basis of the study findings and the ardent need for healthy pregnancy, the following are recommended:

6.2.1. DISTRICT HEALTH MANAGEMENT TEAM

Considering the uncompromising need to ensure and maintain good nutritional status during pregnancy, the DHMT should relevant, culture friendly health messages to promote acceptable nutritional practices in the district.

In order to address the myth of clinic based delivery services and uphold the tenets of safe motherhood, the DHMT should conduct regular meetings and discussions with traditional birth attendants (TBA) to bridge this knowledge gap.

In a bid to address the adverse influence of community members on the dietary choice during pregnancy, the DHMT should encourage active male involvement in maternal health care by organizing community-based health education for a in consultation with community elders.

6.2.2. THE GHANA HEALTH SERVICE (GHS)

As a measure to amicably address cultural practices that negatively impact the nutritional status and the general wellbeing of pregnancy, regular consultative meetings should be held with influential traditional leaders on the subject.

6.2.3. TRADITIONAL LEADERS YILO KROBO DISTRICT

Considering the crucial role nutrition plays in the health of pregnant woman and her unborn child. There is a critical need to review traditional practices that adversely affect the dietary intake during pregnancy.

In order to improve pregnancy in the district traditional leaders and local political leaders should encourage facility based delivery.

6.2.4 RECOMMENDATION FOR FUTURE RESEARCH

In a bid to address every aspect of maternal health care, it would be more prudent to expand the objectives of their research to include nutritional composition of prohibited foods, outline the corresponding health implications and conduct same to reflect nation relevance.

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APPENDICES

APPENDIX I

CONSENT FORM

Research Topic: Common Food Taboos and Beliefs during Pregnancy in Yilo Krobo District.

Principal Investigator: Samson K. Arzoaquoi

Qualification: MPH Student

Address: Department of Population and Reproductive Health

School of Public Health, University of Ghana, Legon.

P. O. Box LG 13

Tel. 0549098240 Email: skarzoaquoi@yahoo.com

General Information about the Research

The main aim of this research is to explore the presence and reasons for observing food taboos in Yilo Krobo District.

Description of Research Burden

You will be expected to sit together with other to discuss list issues regarding food taboo in this district including sharing with us your personal experiences. These discussions will last about an hour.

Description of Measures to reduce risk

The methods used in this study and tools that will be used will posed no risk to you. The time spent here discussing with others and inconvenience of answering questions that are personal will be the discomfort you may encounter. You are assured that anonymity and high level of confidentiality will be upheld during after the conduct of this study. Maximum privacy will be ensured and you have the right not to answer any question you are not comfortable with.

Benefits to participants

This research will not guarantee any direct or short term benefit. However findings from this study are expected to be used in formulating policies that will improve maternal health in this district.

Compensation

There will be no financial or material reward for participating in this study but every effort will made to provide transportation and snack during the course of the discussions. You decision to participate will be purely voluntary.

Rights of participants and Right to Opt out of the Research

As a Participant, you have the right:

- To decline enrolling in the study
- Not to answer questions you are uncomfortable with

- Withdraw from the study completely without any precondition. You will suffer no punitive measures for such decision.

Contacts for additional information

Please feel free to contact any of following personalities for further information or concerns that you may have:

Dr .Augustine Ankomah

Department of Population, Family and Reproductive Health

School of Public Health, University of Ghana, Legon.

Dr. Amos Laar

Department of Population, Family and Reproductive Health

School of Public Health,

University of Ghana, Legon.

Principal Investigator

Samson K. Arzoaquoi

Department of Population, Family and Reproductive Health

School of Public Health,

University of Ghana, Legon.

Telephone No: 0549098240.

PARTICIPANT'S CONSENT FORM.**Consent:**

By signing this consent form, I confirm that I have read and understood the information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without cost. I voluntarily agree to take part in this study.

Name of participant: _____

Signature/thumbprint:



Signature of Researcher: _____

Date: _____

APPENDIX II: Schedule of Activities (Work Plan)

Activity	February				March				April				May				June				July			
Submission of Proposal	X																							
Questionnaire design	X	X											X	X										
Pretest of Tool														X										
Data collection																	X	X						
Data analysis																		X	X	X				
Report writing																							X	
Submission of draft report																							X	
Submission of final report																								X

APPENDIX III: VOLUNTEER AGREEMENT FORM

The details of my involvement in the research, Common Food Taboos and Beliefs during Pregnancy in Yilo Krobo District have been explained to me. I have been given an opportunity to obtain clarifications about the research to my satisfaction. I therefore agree to participate as a volunteer.

Date

Signature or mark of volunteer

If participants cannot read the form themselves, a witness must sign here:

I was present while the nature purpose and procedures of the research were read to the volunteer. All questions were answered and the volunteer has agreed to take part in the research.

Date

Signature of Witness

I certify that the nature and purpose, the potential benefits, and possible risks associated with participating in this research have been explained to the above individual.

Date

Signature of Person Who Obtained Consent

FOR ANY ENQUIRY, THE PRINCIPAL RESEARCHER CAN BE CONTACTED ON THE
FOLLOWING NUMBER: 0549098240

APPENDIX IV: FEMALES FGD/KII GUIDE

University of Ghana

School of Public Health

Department of Population, Family and Reproductive Health

Common Food Taboos and Beliefs during Pregnancy in Yilo Krobo District, Ghana

Focus Group Discussion Guide

Participants: Elderly men

Participant selection criteria: Elderly men presently married or have had children.

Introduction

Good morning/ afternoon to all. I want to begin by thanking you for joining our group.

My name is Samson K. Arzoaquoi and I will serve as the head of this group discussion along with (RAs and Interpreter).

Have any of you participated in a group like this before? A group like this is called a —focus group. This is a way for us to hear what you have to say issues that concern you, your community and the nation as a whole which will help in designing programs that are supposed to help you. The discussion is planned for about an hour.

We are going to talk about how much you know about the common food taboos and beliefs during pregnancy in Yilo Krobo district, the prohibited foods and the reasons why pregnant women adhere to these taboos and beliefs and how they compelled to adhere.

We want you to explain to us how you got to know about these taboos and beliefs, for how long and what your thoughts are about the practice in Yilo Krobo district. There may be several different foods that are prohibited during pregnancy; we also want you to tell us these foods and the reasons for their prohibition. We will talk further about what is expected to happen to pregnant women who fail to adhere to the various taboos. There may also be other traditional beliefs, other than food taboos that we will also want us to talk about.

Even though we are very happy about your participation, let me say, you have the right to continue or withdraw at any time or express any concern that you may have about what is done here.

Disclosure

We brought along few items to help us record and take note as we go through the discussion.

They include:

- Audio taping;
- Reporting;
- Observers helping to listen/ take note;

Procedures/ Ground Rules

- No right or wrong answer; we want to hear your personal opinions
- Be honest; want to know what you really think;
- Anything you say will be regarded important; so don't be shy;
- No need to raise your hand;
- One person talks at a time;
- No formal breaks but going to washroom are allow.

Participant Introduction and Listing First name Age Occupation

Please be assured that we will not write your name on any of the papers taken from here. This introduction is intended for us to dialogue and communicate more respectfully.

Age	Tribe	Residence	Educational level	Occupation	No. of Children	Denomination

Let Us Get Started.**A. Knowledge of Food Taboo**

1. Do we know what taboo is?

1a. What is it?

2. Are there any Food Taboos in Yilo Krobo?

Probe: During pregnancy? During labor? After-birth?

2. What do you understand by, Food Taboo during pregnancy?

2a. Why should women observe Food Taboo during pregnancy periods?

Probe: During labor? After-birth?

3. What are some of the experiences that you are aware of that women encounter when they don't observe Food Taboo during pregnancy?

B. Attitude and Perception

1. What are your views about women observing Food Taboo during pregnancy?

Probe: During labor? After-birth?

2. Why do you think women should observe Food taboo during pregnancy?

Probe: During labor? After-birth? Why not?

3. When they observe Food Taboo during pregnancy, do you them as doing the right thing?

Probe: During labor? After-birth. Why? Why not?

C. Information Transfer

1. How did you get to know about Food Taboo during pregnancy?

Probe: During labor? After-birth?

2. How long have you known about Food Taboo?

3. Who first told you about Food Taboo?

3a. Why did they say pregnant women should observe them?

Probe-Before your first pregnancy? During your first pregnancy? During labor?

4. How are they reminded to observe Food Taboo during pregnancy?

Probe: Mother? Mother In Law? Community elders?

D. Desire to Participate and Culture

6. What is the current level of Food Taboo adherence this area? Probe: Explain.

7. In this area, what does culture say about being pregnant in the first place?

Probe further: During labor? After-birth.

8. To the best of your knowledge, are all pregnant women observing Food Taboo in this district?

9. Are there others who do not observe Food Taboo?

9a. What are the reasons they give for not observing Food Taboo?

10. Other than Food Taboo, are there other taboos and beliefs that women must hold during pregnancy?

Probe further if any: What are they?

11. What do you think will happen to them if you refuse to observe the Food Taboos?

E. Prohibited Food Types

12. What are the foods they are told not to eat? (List them) Probe further: What do you know will happen if they eat them? (Record for each food given)

13. Do they eat these foods outside pregnancy?

Probe: During labor? After-birth?

14. What other foods they don't usually eat? Probe: why?

12. In your opinion, why should they be avoiding these foods?

13. Are you aware any health worker at the Clinic telling pregnant women what to eat and what not to eat?

14. What are some the foods they were told to eat? What not to eat?

15. What reasons did they give you?

Thanks for your time and your kind participation.

APPENDIX V: WOMEN IN FERTILITY AGE FGD/KII GUIDE

University of Ghana

School of Public Health

Department of Population, Family and Reproductive Health

Common Food Taboos and Beliefs during Pregnancy in Yilo Krobo District, Ghana

Focus Group Discussion Guide

Participants: Females

Participant selection Criteria: Females aged 15 to 49, not pregnant or have had a child/children or recently give birth.

Introduction

Good morning/ afternoon to all. I want to begin by thanking you for joining our group.

My name is Samson K. Arzoaquoi and I will serve as the head of this group discussion along with (RAs and Interpreter).

Have any of you participated in a group like this before? A group like this is called a —focus group. This is a way for us to hear what you have to say issues that concern you, your community and the nation as a whole which will help in designing programs that are supposed to help you. The discussion is planned for about an hour.

We are going to talk about how much you know about the common food taboos and beliefs during pregnancy in Yilo Krobo district, the prohibited foods and the reasons why pregnant women adhere to these taboos and beliefs and how they compelled to adhere.

We want you to explain to us how you got to know about these taboos and beliefs, for how long and what your thoughts are about the practice in Yilo Krobo district. There may be several different foods that are prohibited during pregnancy; we also want you to tell us these foods and the reasons for their prohibition. We will talk further about what is expected to happen to pregnant women who fail to adhere to the various taboos. There may also be other traditional beliefs, other than food taboos that we will also want us to talk about.

Even though we are very happy about your participation, let me say, you have the right to continue or withdraw at any time or express any concern that you may have about what is done here.

Disclosure

We brought along few items to help us record and take note as we go through the discussion.

They include:

- Audio taping;
- Reporting;
- Observers helping to listen/ take note;

Procedures/ Ground Rules

- No right or wrong answer; we want to hear your personal opinions
- Be honest; want to know what you really think;
- Anything you say will be regarded important; so don't be shy;
- No need to raise your hand;
- One person talks at a time;
- No formal breaks but going to washroom are allow.

Participant Introduction and Listing First name Age Occupation

Please be assured that we will not write your name on any of the papers taken from here. This introduction is intended for us to dialogue and communicate more respectfully.

Age	Tribe	Residence	Educational level	Occupation	No. of Children	Denomination

Getting Started

A. Knowledge of Food Taboo

1 .Do we know what taboo is? What is it?

2, Are there any Food Taboos in Yilo Krobo?

Probe—During pregnancy? Delivery? After-birth?

2. What do you understand by – Food Taboo during pregnancy? Why should women observe Food Taboo during pregnancy periods?

Probe: Delivery? After-birth?

3. Women go through a lot of different experiences during pregnancy. What are some of them that you are aware of that women encounter when they don't observe Food Taboo during pregnancy?

B. Attitude and Perception

1. What are your views about observing Food Taboo during pregnancy?

Probe: Delivery? After-birth? Why not?

2. Why do you think women should observe Food taboo during pregnancy?

Probe: Delivery? After-birth? Why not?

3. What do you think about the attitude of the service providers? Probe further on the regularity and quality of services provided. What do they like about the service provider work, what do they want them to do differently?

C. Information Transfer

1. How did you get to know about Food Taboo during pregnancy?

Probe: Delivery? After-birth?

2. Who first told you about Food Taboo? Why did they say you should observe them whenever you are pregnant?

3. How long have you known about Food Taboo?

Probe-Before your first pregnancy? During your first pregnancy? During labor?

4. What is done to ensure that women are reminded to observe Food Taboo during pregnancy?

Probe: Mother? Mother In Law? Community elders?

D. Desire to Participate and Culture

6. What is the current level of Food Taboo adherence this area? Probe: Explain.

7. In this area, what does culture say about being pregnant in the first place?

About women? Food?

Probe further: Labor? After-birth.

8. To the best of your knowledge, are all pregnant women observing Food Taboo in this district?

9. Are there others who do not observe Food Taboo? What are the reasons they give for not observing Food Taboo?

10. Other than Food Taboo, are there other taboos and beliefs that you must hold during pregnancy?

Probe further if any: What are they?

11. What do you think will happen to you if you refuse to observe Food Taboo?

E. Prohibited Food Types

12. What are the foods you are told not to eat? (List them) Probe further: What they say will happen if you eat them? (Record for each food given)

13. Have you been eating any of these foods outside pregnancy?

Probe: Labor? After-birth?

14. What other foods you don't usually eat? Probe: why?
12. In your opinion, should you be avoiding these foods?
13. Have any health worker at the Clinic told you about what to eat and what not to eat?
14. What are some the foods you were told to eat? What not to eat?
15. What reasons did they give you?

APPENDIX VI: ELDERLY MEN FGD/KII GUIDE

University of Ghana

School of Public Health

Department of Population, Family and Reproductive Health

Focus Group Discussion Guide

Participants: Elderly men.

Participant selection Criteria: Elderly men presently married or have had children.

Introduction

Good morning/ afternoon to all. I want to begin by thanking you for joining our group.

My name is Samson K. Arzoaquoi and I will serve as the head of this group discussion along with (RAs and Interpreter).

Have any of you participated in a group like this before? A group like this is called a —focus group. This is a way for us to hear what you have to say when we design new programs that are supposed to help you. We will talk for about an hour.

We are going to talk about the common food taboos and beliefs during pregnancy in Yilo Krobo District, the prohibited foods and the reasons why people adhere to these taboos and belief and people who compel us.

Even though we are very happy about your participation, let me say, you have the right to continue, withdraw at any time or express any concern that you may have about what is done here.

Disclosure

- Audio taping;
- Reporting;
- Observers helping to listen/ take note;

Procedures/ Ground Rules

- No right or wrong answer; we want to hear your personal opinions
- Be honest; want to know what you really think;
- Anything you say will be regarded important; so don't be shy;
- No need to raise your hand;
- One person talks at a time;
- No formal breaks but going to washroom are allow.

Participant Introduction and Listing

- First name
- Age
- Occupation

Please be assured that we will not write your name on any of the papers taken from here. This introduction is intended to ease dialogue and help us communicate more respectfully.

Age	Tribe	Residence	Educational level	Occupation	No. of Children	Denomination

Getting Started

A. Knowledge of Food Taboo

1 .Do we know what taboo is? What is it?

2, Are there any Food Taboos in Yilo Krobo?

Probe—During pregnancy? Labor? After-birth?

2. What do you understand by – Food Taboo during pregnancy? Why should women observe Food Taboo during pregnancy periods?

Probe: Labor? After-birth?

3. Women go through a lot of different experiences during pregnancy. What are some of them that you are aware of that women encounter when they don't observe Food Taboo during pregnancy?

B. Attitude and Perception

1. What are your views about observing Food Taboo during pregnancy?

Probe: Labor? After-birth? Why not?

2. Why do you think women should observe Food taboo during pregnancy?

Probe: Labor? After-birth? Why not?

3. When women observe Food Taboo during pregnancy, do you see them as doing the right thing? Did you think it was something they should have done?

Probe: Labor? After-birth. Why? Why not?

4. Did your wife ever observe food taboo during pregnancy?

5. Were you in agreement with what she did?

6. What did you do to ensure that she observes the taboo?

4. What do you think about the attitude of the service providers? Probe further on the regularity and quality of services provided. What do they like about the service provider work, what do they want them to do differently?

C. Information Transfer

1. How did you get to know about Food Taboo during pregnancy?

Probe: Labor? After-birth?

2. Who first told you about Food Taboo? Why did they say it should be observed?

3. How long have you known about Food Taboo?

Probe-Before your marriage? After marriage?

4. How are you remind your wife to observe Food Taboo during pregnancy?

D. Desire to Participate and Culture

6. What is the current level of Food Taboo adherence this area? Probe: Explain.

7. In this area, what does culture say about being pregnant in the first place?

Probe further: Labor? After-birth.

8. To the best of your knowledge, are all pregnant women observing Food Taboo in this district?

9. Are there others who do not observe Food Taboo? What are the reasons they give for not observing Food Taboo?

10. Other than Food Taboo, are there other taboos and beliefs that you must hold during pregnancy? Outside pregnancy?

Probe further if any: What are they?

11. What do you think will happen if a woman refuses to observe Food Taboo?

E. Prohibited Food Types

12. What are the foods pregnant are told not to eat? (List them) Probe further: What they say will happen if you eat them? (Record for each food given)

13. Can women eat any of these foods outside pregnancy?

Probe: Labor? After-birth?

14. Do men observe food taboos? Why? What foods?

15. What other foods you don't usually eat? Probe: why?

16. In your opinion, should you be avoiding these foods?

13. Have any health worker at the Clinic told you about what to eat and what not to eat?

14. What are some the foods you were told to eat? What not to eat?

15. What reasons did they give you?

APPENDIX VII: CONSENT FORM FOR PARTICIPANTS IN THE QUALITATIVE STUDY.

INFORMED CONSENT FOR FOCUS GROUP DISCUSSION

COMMON FOOD TABOOS AND BELIEFS DURING PREGNANCY IN YILO KROBO DISTRICT

Principal Investigator: SAMSON K. ARZOAQUOI

Qualification: MPH Student

Address: Department of Population, Family and Reproductive Health, School of Public Health, College of Health Sciences, University of Ghana, Legon.

INTRODUCTION

I am a student from the University of Ghana, School of Public Health. My assistants and I are carrying out a study in YILO KROBO DISTRICT to assess Common Food Taboos and Beliefs during Pregnancy in Yilo Krobo District.

I therefore wholeheartedly invite you to take part in this important study. Before you decide to participate in this study, it is important that you understand why the research is being done and what it will involve. Please take your time and read the following information carefully. Please ask the researcher if there is anything that is not clear.

STUDY PROCEDURE, ADVANTAGES AND DISCOMFORTS

The discussion will take about one hour of your time and your responses will be audio taped, videotaped, reported, observers helping to listen or take note with your permission and these tapes will be kept under lock and key and destroy after a maximum period of one year.

This research will involve men whose wives are currently pregnant or have had children and women who are pregnant or have had children as well. Women who are neither pregnant nor with children but within fertility age will also be included.

The questions are mainly about you, your experiences regarding your pregnancy, foods that you are currently eating, those you have been asked not to eat because you are pregnant, how you got this information, and reasons given you for the practice in this District. We will also want to know from you, if there foods that you don't ordinarily eat and the reasons you have.

This study will not pose any harm to you but rather some personal information will be required from you.

Benefits: There will be no financial or material benefits for participating in this study but will provide transportation and snack after the discussions for your time. However, we hope that the information obtained will be useful to ensure that reproductive health programs are reviewed and perhaps serve as a platform on which a more comprehensive research on rural dietary practices will be carryout. Another reason for this research is for academic purposes.

VOLUNTARY PARTICIPATION/CONFIDENTIALITY

Your participation in the study is purely voluntary and it is your decision to participate or choose not to at any given time during the discussions without any precondition. There will be no penalty against you if you decide not to be a part of the study. Your responses will be

anonymous and would be for the purpose of the study. We will make every effort to preserve your confidentiality including assigning code names/numbers for participants that will be used on all researcher notes and documents.

This study has been reviewed and approved by Ghana Health Service Ethical Review Committee (GHS-ERC) and the University of Ghana, Legon Institutional Review Board (IRB) which are committees whose tasks are to make sure that research participants are protected from harm and their rights respected.

Person to Contact:

Should you have any questions about the research or any related matters, please contact the researcher. You may contact the principal investigator, SAMSON K. ARZOAQUOI at the School of Public Health, University of Ghana, Legon.

(Tel. 0549098240); email: skarzoaquoi@yahoo.com)

Do you voluntarily agree to participate in this discussion?

APPENDIX VIII: CURRICULUM VITAE

Personal details:

Name: Samson K. Arzoaquoi

Date of Birth: December 23, 1969

Gender: Male

Nationality: Liberian

County of Origin: Lofa

Religion: Christain

Marital Status: Married

Present Address: School of Public Health

University of Ghana

TF Hostel, Legon

Telephone: 0549098249 & +231886833276

Email Address: skarzoaquoi@yahoo.com

Educational Background:

Years:	Institution
2012-	Candidate for Master of Public Health School of Public Health University of Ghana, Legon
2005	Doctor of Medicine (MD), A.M.Dogliotti College of Medicine University of Liberia
1995	Bachelor of Science of Science (BSc)

	College of Science and Technology University of Liberia
1982	High School Diploma Voinjama Multilateral High School Voinjama, Lofa County
Professional Training	
2008	Certificate, Institute of International Cooperation, Shanxi, China
2010	Certificate, Neonatal Resuscitation, HBB, MCHIP, Addis Ababa Ethiopia

WORKING EXPERIENCE

Year	Institution
2011-	Medical Director, C.B. Dunbar Maternity Hospital, Gbarnga, Bong County, Liberia
2009-2011	Acting Medical Director/ CEO Phebe Hospital and School of Nursing, Bong County
2007-2009	Physician In- Charge Obstetrics and Gynecology

Phebe Hospital, Bong County

2000-2008

Teaching Assistant

Department of Biology

University of Liberia

2003-2005

Instructor

Tubman Institute of Medical Arts

J. F. K. M. C, Monrovia, Liberia

2002-2006

Instructor

Mother Patern College of Health

Sciences, Monrovia

1992 -2000

Instructor

Monrovia Consolidated School

Monrovia, Liberia

Professional Associations

Member, Liberia Medical and Dental Association

Member, Liberia National Red Cross Society

References:

Dr. Bernice Dahn

Chief Medical Officer

Republic of Liberia

Ministry of Health and Social Welfare

Monrovia, Liberia

Dr. Saye Dahn Baawo

Assistant Minister of Health for Curative Services

Ministry of Health and Social Welfare, Liberia

Dr. Garfee T. Williams

County Health Officer & Medical Director/ CEO

Phebe Hospital and School of Nursing

Gbarnga, Bong County

GHANA HEALTH SERVICE ETHICAL REVIEW COMMITTEE

*In case of reply the
number and date of this
Letter should be quoted*

*My Ref. :GHS-ERC: 3
Your Ref. No.*



Research & Development Division
Ghana Health Service
P. O. Box MB 190
Accra
Tel: +233-302-681109
Fax + 233-302-685424
Email: nanatuesdaykad@yahoo.com

10th May, 2013

Arzoaquoi Samson Korvah
University of Ghana
School of Public Health
Accra

ETHICAL APPROVAL - ID NO: GHS-ERC: 43/03/13

The Ghana Health Service Ethics Review Committee has reviewed and given approval for the implementation of your Study Protocol titled:

“Common Food Taboos and Beliefs during Pregnancy in Yilo Krobo District”


This approval requires that you inform the Ethical Review Committee (ERC) when the study begins and provide Mid-term reports of the study to the Ethical Review Committee (ERC) for continuous review. The ERC may observe or cause to be observed procedures and records of the study during and after implementation.

Please note that any modification without ERC approval is rendered invalid.

You are also required to report all serious adverse events related to this study to the ERC within seven days verbally and fourteen days in writing.

You are requested to submit a final report on the study to assure the ERC that the project was implemented as per approved protocol. You are also to inform the ERC and your sponsor before any publication of the research findings.

Please always quote the protocol identification number in all future correspondence in relation to this approved protocol

SIGNED.....
PROFESSOR FRED BINKA
(GHS-ERC CHAIRMAN)

Cc: The Director, Research & Development Division, Ghana Health Service, Accra