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ACCRA, GHANA**

**MSc. ENVIRONMENT AND PUBLIC HEALTH**



**KNOWLEDGE AND PRACTICE OF FAMILY PLANNING AMONG W  
REPRODUCTIVE AGE GROUP IN AWUTU SENYA EAST MUNICIPALITY  
IN THE CENTRAL REGION OF GHANA**

**BY**

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**A DISSERTATION SUBMITTED TO THE DEPARTMENT OF PUBLIC  
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FULFILMENT OF THE REQUIREMENTS OF MASTER OF SCIENCE  
DEGREE IN ENVIRONMENT AND PUBLIC HEALTH**

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## **DECLARATION**

I declare that except for the references to other people's investigations which have been duly acknowledged, this thesis is the result of my own research undertaken under the supervision of DR. FELIX ADDO-YOBO. This work has not been submitted for award of any other degree elsewhere.

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## **DEDICATION**

I dedicate this project work to God Almighty, for His protection that I am able to pursue this project work. It is also dedicated to my entire family for their significant contribution towards the realization of my academic success. Lastly to all the team from the MSc Environment and Public Health class, 2016/17.

## **ACKNOWLEDGEMENT**

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## **LIST OF ABBREVIATIONS**

CI	Confidence Interval
GHS	Ghana demographic Health Survey
GSS	Ghana Statistical Service
LAM	Lactational Ammenorrhea Methods
LARC	Long Active reversible contraceptive
MOH	Ministry of Health
PHC	Population and Housing census
SPSS	Statistical Package for social sciences
UPA	Unipristal acetate
WHO	World Health organization

## ABSTRACT

The effective use of contraceptive methods in the population would help reduce significantly unwanted pregnancy rates, maternal, perinatal and infant mortality rate, unsafe abortion, adolescent pregnancy rate and control population growth. This can be achieved when people have much knowledge and practice of family planning. Investigation was conducted to assess the knowledge and practice of current family planning among women in their reproductive age in the Awutu Senya East Municipality.

The study was community-based quantitative cross-sectional study design. A multistage sampling method was used to select 316 women in various groups of the municipality using cluster sampling technique. A structured administered questionnaire was used as the data collection tool. SPSS software version 23 was used to analyze the data collected. Univariate analysis was used to describe the variables. Bivariate analysis using Chi-square was performed to test the associations between independent variables and knowledge and practice. Multiple logistic regression analysis was then carried out on the factors at the bivariate level, crude and adjusted odds ratio were computed and statistical significance was accepted at  $p < 0.05$ . The results show that the proportion of women with adequate knowledge on family planning was 88.6%. The proportion that practice was 67.4%. Educational level (AOR= 1.23; 95% CI=1.03-6.43), marital status (AOR= 3.21; 95% CI=1.56-3.78), number of children (AOR= 2.17; 95% CI=1.32-8.54) were the demographic factors found to be significantly associated with family planning knowledge. Marital status and number of children also significantly influenced practice. There was however a strong positive correlation between knowledge score and practice score with correlation coefficient of 0.692. This study has revealed that the proportion of women who currently use contraceptive is good. Knowledge level on family planning was very high and knowledge translates into practice as a strong positive correlation was observed between knowledge score and practice score.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of the study**

Family planning can be well-defined as the practice of present contraceptives or ordinary skills for either limiting or positioning gravidities. Intrauterine Device (IUDs), injectable, implantations, manly and womanly condoms, Capsules, male and female purification, diaphragm plus extra contraception remain modern means of contraception. Likewise, others may also include periodic self-restraint and extraction process. Greatestentities and duos due to economic social and extra reasons anticipate then achieve their desired number of youngsters and moreover for the arrangement and control of their childbirths (WHO, 2012).

Population development or rise arises because of the to and fro of the three core demographic variables specifically fertility, humanity, and trek. This development can be extraordinary, little, even and all these have socio-economic expansion associations on the nation's and owing to the beyond the pattern of existing of the individuals, Ghana is a nation which can be believed to have great population progress demographically with approximately five (4.4) being its recent overall Fertility Ratio (Ghana Statistical Service, 2010).

This recent ratio is an advance upon that of the foregoing years as specified by the Ghana Demographic and Health Survey, investigators and stakeholders are still influenced that the nation has the prospective to raise bigger because of its large-based population. A gaze at the age construction of Ghana's population tells that there is roughly 35 percent of the population inside the age of 0-14 years, 58.3 percent

inside the ages 15-64 years and 3.7 percent at the age of 64 and above (Ghana Statistical Service, 2010).

The use of contraceptives is one of the key elements of fertility stages. Since 1970, there has been an improved use of contraceptives and its use is well-known globally. “Notwithstanding this enormous development, changes exist in its growth across geographical areas and some challenges delay in relations of increasing its level of practice and information about contraceptive use to light existing demands in areas and in terms of making obtainable a sufficient variety of contraceptive procedures to increase the capability of duos desiring to use contraception to do so in a regular and effective manner (Ghana Statistical Service, 2010).

A number of sub-Sahara African states have a constant tall tempo of unmet requests for family planning. Increase rate of fertility in Ghana and other Sub-Sahara African countries together with a drop in mortality has given an increase to record rapid population progress contributing to poverty, low quality of life and increased levels of population. Data gathered from the 2010 population and housing census surveys gave the Ghanaian population to be 24,658,823. This figure represents an increase of 30.4 percent above the 2000 census population of 18,912,079 (Ghana Statistical Service, 2010 Population and Housing Census). The relatively high fertility in Ghana is basically attributed to a low level of contraceptive usage (Ghana Statistical Service, 2010). Contraceptive is defined as the practices of systems intended to avoid or space upcoming pregnancy. There has been a prediction in the generally contraceptive popularity at the global levels demands to increase from 63% to 67% between the year 2000 and 2025 so as to make likely decline of Total Fertility Ratio from 2.8

children per female to 2.3 children per female as projected in the medium variant of the 2002 revision of the United Nations population projection (United Nation, 2002).

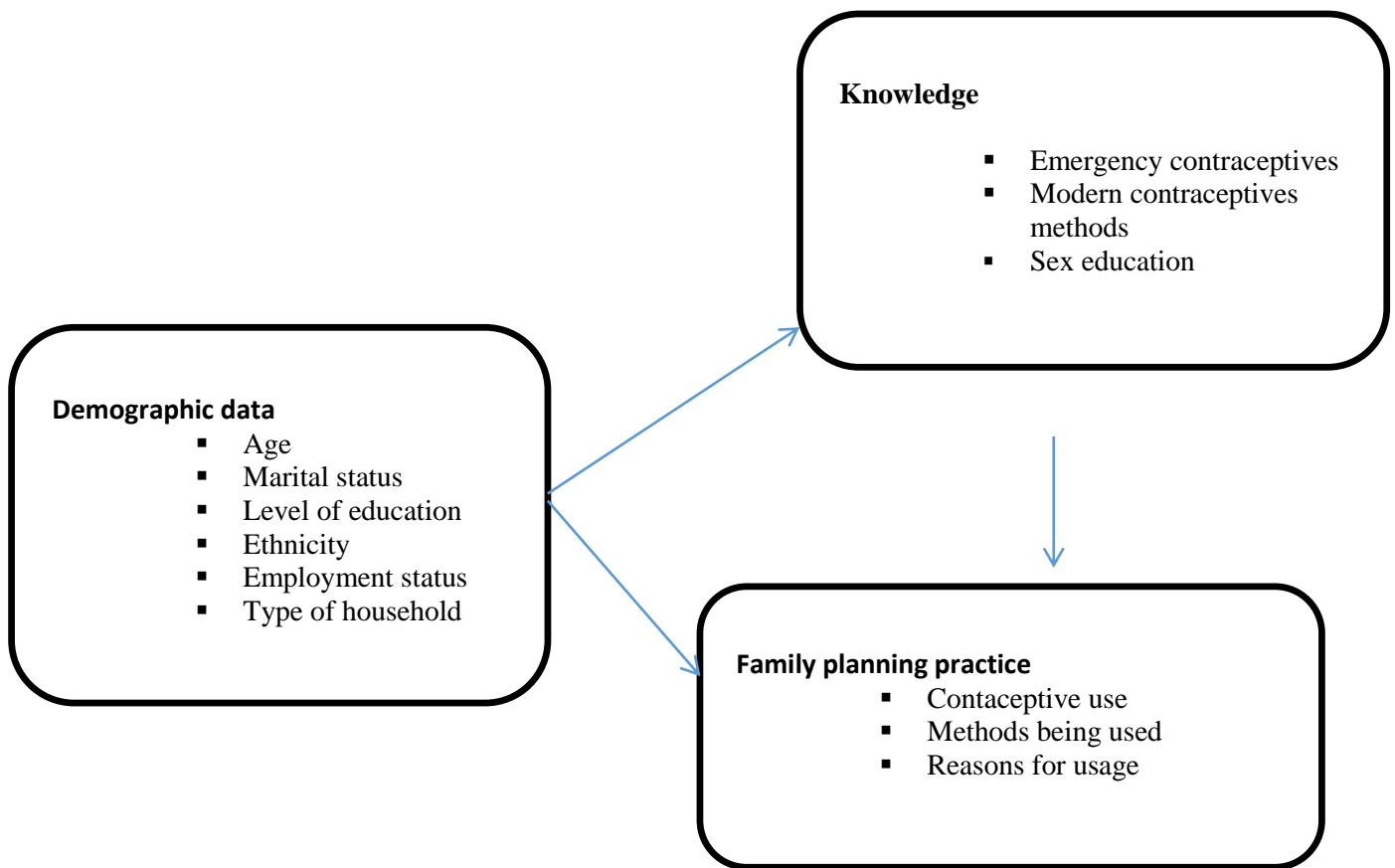
The Ghanaian government has made conscious efforts to increase the knowledge of contraceptives and its use since 1975. A lot of efforts have made to support family planning programs and the dispersal of contraceptives, either openly through government facilities by the Ministry of Health (MOH), or indirectly through the support of the undertakings of non-governmental organizations such as a family planning association (United Nation, 2002). A nationwide contraceptive use of 33% has been approximate even although 43% of married women in the nation preferred to space their offspring and an extra 24% percent need to limit births. The disparity of use of family planning systems among municipal and countryside, the rich and poor position several women in the most deprived region at a disadvantage (Ghana Statistical Service, 2003). According to the 2008 demographic and Health Survey indicates that women in Ghana have an average of 4 children and the normal children per woman ranges from 3 in the municipal areas to 5 in the countryside areas. A key factor underlying the high fertility rate in Ghana is the low patronage of modern contraceptives (Ghana Health Service). Unfortunately, in Ghana, only 25% of current married women are currently using contraceptives (Ghana statistical service, 2008).

## **1.2 Problem statement**

Contraceptive usage and accessibility help to avoid unwanted pregnancies, space births and over help couples to plan for the number of offspring they wish to have. The use of contraception by a woman can improve her multiplicative health as well as the health of her children since she can space her births well. Ghana like several other

African countries is faced with the difficulties of a high population growth rate. A reject in the population can end when there is an extensive fall in both mortality and fertility rates. Demographers, health experts, and family planning experts are of the view that one major technique by which the country can decrease its fertility is during the use of contraception. According to the 2010 Population and Housing Census (2010 PHC), the total population in the Municipal stood at 86,884. This is about 3.9 percent of the Central region's population of which 47.1 are males and 52.9 are females (GSS, 2012). This is a clear indication of a high fertility rate due to a low level of family planning knowledge and contraceptive use and its values on the social and economic development of the populations most especially mothers and children are of great worry. The problem of unwelcome pregnancies among women is the most severe side of the complex of negative factors connected with underdevelopment. The lack of information and access to contraceptive information and service could be relatively low hence the need to research into the awareness and exercise of family planning among reproductive age groups in the Awutu Senya East Municipality of the Central Region of Ghana where is evidence is not readily available.

### 1.3 Conceptual Framework



#### 1.3.1 Narrative of Conceptual framework

The study adapts the Healthcare Utilization Model as the conceptual framework. This model has aspects which are peculiar to the study and well-suited with the objectives of this study; demographic characteristics such as age, marital status, educational level, ethnicity and parity are potential factors that could influence knowledge about family planning. Knowledge about family planning can in turn leads to practice thus there is a positive relationship between knowledge and practice in family planning (Enewold et al., 2010). Having knowledge on contraceptive also has direct correlation with access and use in most studies (Akilimali et al., 2018).

#### **1.4 Justification**

The study is being undertaken to consider the knowledge and exercise of modern family planning methods among women in their fertility age in the Awutu Senya East Municipality of the Central Region. Women in this geographical site are of different ages, cultural, religious and socio-economic backgrounds; hence the reason for this study is to pursue their perception of contraceptive usage and Family Planning Practices. Furthermore, the findings of this research would serve as a beneficial guide for program planning, formulation, and execution for government policies for the district with respect to its aims towards Family Planning. Finally, it would subsidize existing academic knowledge and research for forthcoming related studies.

#### **1.5 Research questions**

1. What is the proportion women who currently use contraceptive in their reproductive age in the Awutu Senya East Municipality?
2. What is the knowledge of the use of contraceptive among women in their reproductive age in the Awutu Senya East Municipality?
3. What is the association between demographic factors and the knowledge of family planning among women in their reproductive age in the Awutu Senya East Municipality?
4. What is the association between demographic factors and the practice of family planning among women in their reproductive age in the Awutu Senya East Municipality?



## **1.6 Objectives of the study**

The main aim of the study is to assess the knowledge and practice of current family planning procedures among women in their productiveness age in the Awutu Senya East Municipality. The specific objectives would be:

1. To determine the incidence rate and use of contraceptive methods among women in their fertile age in the Awutu Senya East Municipality.
2. To evaluate the knowledge of contraceptive methods among women who are able to make pregnant in the Awutu Senya East Municipality.
3. To determine the association between demographic factors and the knowledge of family planning among women in their productive age in the Awutu Senya East Municipality.
4. To determine the association between demographic factors and practice of family planning methods among women in their productive age in the Awutu Senya East Municipality.

## **1.7 Hypothesis**

**Null (H<sub>0</sub>):** Women in their productive age in Awutu Senya East Municipality do not have adequate knowledge and practice of modern family planning procedures.

**Alternate (H<sub>1</sub>):** Women in their productive age in Awutu Senya East Municipality have adequate knowledge and practice of current family planning procedures.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0. Introduction**

This chapter reviews various studies done in relation to variables under study. This chapter reviews existing studies on contraceptive use and its associated inhibiting and enabling factors globally, in Africa and Ghana. It shall be discussed under the sub-headings contraceptive methods, utilization of contraceptive methods, Health Utilization Model and Factors associated with utilization.

According to the Department of Reproductive Health and Research of the World Health Organization, Contraception is the intentional prevention of pregnancy by artificial or natural means. Contraceptives are broadly classified into Traditional and Modern Contraceptives. Examples of traditional methods are Periodic Abstinence, breastfeeding and Withdrawal. The Ghana Demographic Health Survey (GDHS, 2014) identified 12 modern methods of contraceptives, namely female and male sterilization, the pill, the intrauterine device (IUD), injectables, implants, male and female condoms, diaphragm, foam tablets and jelly, lactational amenorrhea method (LAM) and emergency contraception. Modern contraceptives are classified into three main groups: short acting (the pill, injectables, male and female condoms, diaphragm, foam tablets and jelly, LAM and emergency contraceptives), long acting reversible (IUD and Implants) and permanent/irreversible (male and female sterilization). The long-acting reversible contraceptives (LARC) are very effective with failure rate less than 1% and yet reversible with no negative impact on fertility. They are user-independent and the typical and perfect use failure rates are the same.

“Over the past five decades, the use of contraceptive methods has markedly increased such that nearly two in three married or in-union women globally in 2015 were using some form of contraception (Nations, 2015). The contraceptive use prevalence increased rapidly in Asia, Latin America and the Caribbean but very slowly in several regions of sub-Saharan Africa. A decrease in unmet need for family planning accompanied this rapid increase in the use of contraception, such that 12 per cent of married or in-union women globally had an unmet need for family planning in 2015” (Nations, 2015).

## **2.1 Contraceptive Methods**

Contraceptive methods are classified into Traditional and Modern Methods. The traditional methods are Coitus Interruptus (Withdrawal), Breastfeeding and Abstinence. It is widely practiced in the developing world and is usually referred to by the patient as 'being careful'. Perfect use failure rate is 4% and typical use failure rate is 22% during the first year of use. Apart from the frustration it may cause, it is exceedingly unreliable and moreover may give rise to psychosexual troubles in both partners. In the woman it may also result in chronic pelvic congestion and menstrual disorders eventually (Margaret & Hospital, 2001).

The ‘Natural Family Planning’ has been and still is the only approved method of birth control for Roman Catholics. “This method involves periodic abstinence with couples attempting to avoid intercourse during a woman’s fertile period. Techniques to determine the fertile period include the calendar method, cervical mucus method, or the symptom-thermal method. The failure rate in typical use is estimated to be approximately 25%” (Margaret & Hospital, 2001).

Modern contraceptives are classified into three main groups: short acting (the pill, Injectable, male and female condoms, diaphragm, foam tablets and jelly, Lactational Amenorrhea Method/LAM and emergency contraceptives), long acting reversible (Intra-Uterine Device/IUD and Subdermal Implants) and permanent/irreversible (male and female sterilization).

### **2.1.1. Hormonal Contraceptives**

The first steroidal oral contraceptive pill was approved for use in the 1960s. It became popular because of its ease of use and the sense of empowerment and freedom it gives users. Concerns over its adverse effects in older females, particularly the cardiovascular and neoplastic effects, led to a significant decline in its use. This occasioned considerable changes in the type and dose of both estrogen and progesterone. The estrogen changed from mestranol to ethinyl estradiol with initial dose of 150mcg which has been progressively reduced to the current dose of 20mcg. Hence, the cardiovascular and neoplastic adverse effects are very limited in currently marketed oral contraceptive pills.

“The progestins used in the first- and second-generation oral contraceptives caused undesirable androgenic side effects such as acne, oily skin, hair growth and negative effects on high-density lipoproteins. New progestins have been developed to avoid these adverse effects and improve the safety profile”. The modes of administration of hormonal contraceptives are orally, vaginally, intramuscular, subdermal and transdermal.

### **2.1.2. Long-Acting Reversible Contraceptives (LARC)**

These are classified into two main types: intrauterine contraceptive devices/systems and the subdermal implants.

#### **2.1.2.1. Intrauterine Contraceptive Devices/Systems (IUDs and IUS)**

“The initial attempt to use an IUD dates back to about 100 years when an inert device in the form of the Graefenberg ring was used. Medicated devices containing copper or progestin were introduced half a century later. Today, the intrauterine system (IUS) that releases levonorgestrel (LNG) at a slow steady rate of 20mcg per day is widely used and has demonstrated high efficacy for duration of 5 years. It is marketed as Mirena and has additional non-contraceptive benefits in the treatment of heavy menstrual bleeding” (Sitruk et al., 2014).

#### **2.1.2.2. The injectables**

“The available progestin-only injectables included in the current methods of contraception are norethisterone enanthate (NET-EN) and DMPA (depot medroxyprogesterone acetate) or Depo-Provera® which has been approved by the FDA since 1992 and is the most commonly used injectable in the United States” (Sitruk-ware et al., 2014). The major concern with DMPA is lowering of bone mineral density especially when used in young women. It is widely available in most family planning clinics in Ghana.

### **2.1.3. Lactational Amenorrhea Method (LAM)**

This method can be used immediately after childbirth. It is effective when the woman exclusively breastfeeds with persistent amenorrhea within the first six months after

birth. The method requires breastfeeding the baby every 4 hours during the day and every 6 hours at night. The perfect use failure rate is 0.5% and the typical use failure rate is 2%. Frances E. Casey, MD, MPH, Director of Family Planning Services and Assistant Professor, Virginia Commonwealth University Medical Center (Sitruk-ware et al., 2014).

#### **2.1.4. Condoms**

There are two main types: the male and female condoms. It prevents pregnancy by acting as a barrier to the passage of semen into the vagina. It also provides protection against sexually transmitted infections. The perfect use failure rate is 3% and the typical use failure rate is 14%. Frances E. Casey, MD, MPH, Director of Family Planning Services and Assistant Professor, Virginia Commonwealth University Medical Center. The diaphragm, cervical cap, spermicides and sponges are other barrier methods but are not commonly used.

#### **2.1.5. Emergency Contraceptives**

Emergency contraception is indicated in instances of unprotected sexual intercourse, including reproductive coercion, sexual assault, and contraceptive failure. It plays a role in averting unintended pregnancies due to inconsistent use or non-use of contraception. Examples include levonorgestrel, ulipristal acetate and copper intrauterine device (IUD). Levonorgestrel (LNG) is a progestin-only emergency contraceptive pill (ECP) that should be taken orally as soon as possible, within a 72-hour window following sexual intercourse. The primary mechanism of action of LNG is suppression of luteinizing hormone, which delays or inhibits ovulation. Ulipristal acetate (UPA) is an antiprogesterone. It should be taken as soon as possible post-coitus

and remains effective for 120 h following intercourse. It delays ovulation as with LNG. A meta-analysis of two randomized trials directly found UPA to be more effective than LNG (Haeger et al., 2018).

The most effective form of emergency contraception is the copper intrauterine device (IUD). The copper IUD is effective for emergency contraception at any point in the menstrual cycle, as long as pregnancy has been ruled out. The T-shaped device is wrapped in copper coil that releases copper ions. The copper ions reduce sperm motility in passing through cervical mucus and create a hostile environment for the sperm (Haeger et al., 2018). Copper can also alter the uterine and tubal environment (Haeger et al., 2018).

## **2.2 Utilization of modern contraceptive methods**

Family planning is considered an essential human right by the United Nations Population Fund. Family planning can reduce deaths, improve health, and facilitate economic development. Efforts to improve health and quality of life by increasing uptake of modern contraceptive services in any nation or among a group of people such as the military must start with an understanding of the problem. Hence, understanding the factors that influence the use of modern contraceptives in women can inform strategies for improving access and utilization (Omeland et al., 2014)

## **2.3 Factors associated with utilization of contraceptives**

This section highlights factors that influence the utilization of contraceptive among women in general as well as emphasis on military women from existing literature. Identifying these inhibiting and enabling factors forms the basis for planning to

reduce unmet needs for contraception. These have been divided into individual factors, social factors (perceptions, beliefs and attitudes), and health service factors.

### **2.3.1 Individual Factors Influencing Contraceptive use Among Women**

#### **2.3.1.1 Age**

Contraceptive utilization varies in the various age groups. Extremes of maternal age (15 – 24 and 40 – 49 years) are associated with low contraceptive utilization compared to women aged 25 – 35 years in most studies (Solanke, 2017). “Contraceptive use is lower among the young and older women than those in the intermediate age groups in many studies. Participants aged 25 to 34 years were more likely to use modern contraceptives than other age groups” (Tekelab et al., 2015).

#### **2.3.1.2 Educational level**

Educational level has some correlation with contraceptive utilization. The higher the educational level, the greater the likelihood of contraceptive utilization (Solanke, 2017). Women’s education, particularly secondary and tertiary education, contribute to women’s empowerment and decision-making regarding fertility related issues and can help them to exercise reproductive health rights (Tekelab et al., 2015).

#### **2.3.1.4 Religion**

“In some religions, it is believed that children are blessings and gifts from Almighty (God/Allah) and it is sinful to prevent pregnancies. In these religions, each sexual act needs to be open to the possibility of conceiving a child. Contraception is believed to be contrary to Almighty’s Will for marriage because it separates the act of conception from sexual union” (Tigabu, et al., 2018). Some religions permit contraception in the



context of birth spacing while others permit only natural family planning. These ideologies are channeled to communities by religious leaders which influence decisions on contraceptive utilization.

#### **2.3.1.5 Marital status**

In some studies, women who report living with their partners had higher contraceptive use prevalence. This was noted in a study in 5 regions of Brazil (Urruth, et al., 2016). Additionally, a study among adolescents using the 2008 Ghana Demographic Health Survey found higher contraceptive prevalence in the married (Nyarko, 2015). “In other studies, it is the opposite. For instance, in the 2017 Ghana Maternal Health Survey, contraceptive prevalence rate (CPR) among all women age 15-49 is 25%, with 20% using modern methods. Twenty-five percent of currently married women age 15-49 and 31% of sexually active unmarried women age 15-49 use a modern method of contraception” ( Ghana Statistical Service (GSS), Ghana Health Service (GHS), and ICF. 2018. *Ghana Maternal Health Surve2017*. Accra, Ghana: GSS, GHS, and ICF.)

#### **2.3.1.6 Parity**

The relationship between parity and non-use of contraceptive was negative. With exclusion of women with low parity, proportions of non-users increased with parity level. Grand multiparous women had higher proportion of non-users of contraceptive (Solanke, 2017).

### **2.3.1.7 Knowledge**

Contraceptive awareness does not necessarily translate into behavioral change that leads to increased contraceptive utilization. “Knowledge, but not awareness, is the prime catalyst for contraceptive uptake. Knowledge on natural contraceptive methods is equally important to help religious people make informed decisions about family planning in accordance with their faith (Tigabu et al., 2018). Knowledge of ovulatory cycle has a significant relationship with female adolescents’ use of contraceptives” (Nyarko, 2015).

The levels of knowledge of family planning methods as well as communication between spouses regarding family planning issues were significantly associated with contraceptive use (Kessy and Rwanbudongo, 2006). The long-lasting forms of African social organization including the high value attached to the perpetuation of the lineage, the importance of children as a means of gaining access to resources (particularly land), the use of kingship networks to share the costs and benefits of children (primarily through child fostering) and the weak nature of conjugal bonds clearly inhibit contraceptive adoption and fertility decline. In the empirical examination of the factors affecting modern contraceptive use, female education emerges as an important determinant of prevalence at the individual, regional, and national levels (Kessy and Rwanbudongo, 2006).

## CHAPTER THREE

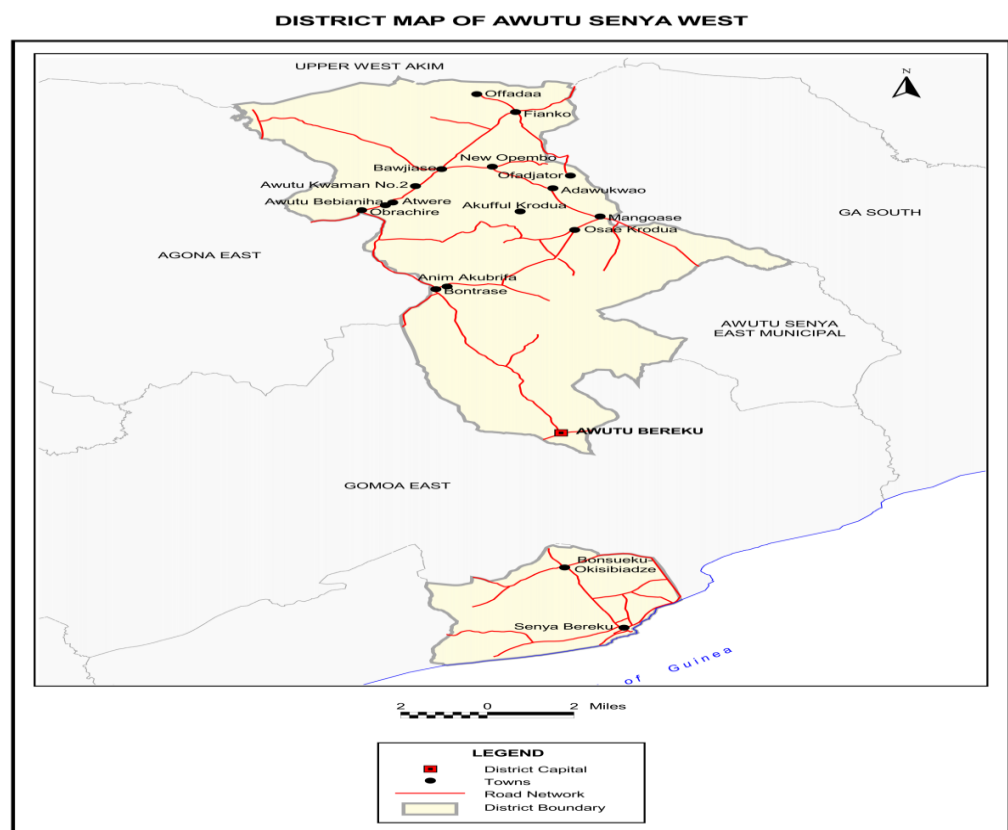
### METHODOLOGY

#### 3.1 Study design

This study is quantitative, descriptive and cross-sectional in nature.

#### 3.2 Study Area

“The Awutu-Senya District is located in the Central Region of Ghana. It covers a surface area of 244.473sq.km. The Gomoa East District has dotted enclaves within the district. The Southern part of the district is bounded by the Gulf of Guinea, to the East by Awutu Senya Municipal, to the West by Gomoa East and Agona East Districts, and the North-Eastern part by West Akim District” (GSS, 2010).



Source: Ghana Statistical Service, GIS

### **3.3 Study Population**

Three hundred and sixteen (316) women within the study population, which is between 15 to 45 years of age living in the Municipality, were used for the study by using cluster sampling technique. The municipality was divided into towns, and further into markets, schools, hospitals and other offices like banks and so on to get women in all sectors of the society to form a true representative of the population under study.

### **3.4 Variables**

#### **3.4.1 Independent variables:**

The independent variables were demographic characteristics such as; age, ethnic background, highest level of education attained, marital status, employment status and number of children.

#### **3.4.2 Dependent Variables:**

The dependent variable was knowledge and practice of family planning

### **3.5. Sample size calculation**

Sample size calculation was done by using the estimate of sample size by Cochran as shown below:

$$n = \frac{Z^2 pq}{e^2} \text{ (Cochran, 1977)}$$

Where:

- $n$  = required sample size
- $Z^2$  = standard normal deviate for two tailed-test based on 95% confidence level = 1.96

- $p$  = prevalence of contraceptive use among women in Ghana,  $23.5\% = 0.235$   
(GMHS, 2017)
- $q = 1 - p$  = proportion of women not using contraception =  $1 - 0.235 = 0.765$
- $e$  = margin of error =  $5\% = 0.05$
- Therefore, the sample size was calculated as follows:
- $$N = \frac{1.96^2 \times 0.235 (1 - 0.235)}{0.05^2}$$
- $$N = \frac{3.8416 \times 0.235 \times 0.765}{0.0025}$$
- $$N = \frac{0.6906}{0.0025}$$
- $N = 276.25 = 276$  participants

20% non responses were allowed bringing the total sample size to 330 respondents.

### **3.6 Sampling procedure**

Proportionate cluster sampling technique was used in selecting participants for this study. The proportion of respondents were sampled from each cluster were based on total population of respondents in various clusters such as into markets, schools, hospitals and other offices like banks and so on to get women in all sectors of the society. In each cluster, simple random sampling was employed by balloting across until the total sample size is attained. The women selected were then approached and consent was sought to be included in the study.

### **3.7 Data collection tools**

Data was collected by administering structured questionnaires to the sampled population in the above- mentioned Municipality using face to face interviews. Two

research assistants were recruited and trained to assist the principal investigator in data collection.

### **3.8 Stakeholder meetings**

Stakeholder meetings were held between the District Assembly, District Health Directorate and the Lead researcher to know and establish the modalities for the research before and after the distribution of questionnaires to gather the information needed.

### **3.9 Measurement of variables**

#### **3.9.1 Measurement of knowledge**

Thirteen questions were asked on knowledge about family planning. Knowledge questions were scored by giving 1 for a correct answer and 0 for a wrong answer. Depending on the summative score of the questions designed to assess knowledge, respondents with a summation score 7/13 (60%) and above were classified as having adequate knowledge whilst those with mean score below 60% were classified as having inadequate knowledge (Ministry of Health, Ethiopia, 2011).

#### **3.9.2 Measurement of Practice**

Three questions (3) were asked based on practices of contraceptives. These were: current use of any modern contraceptives, method of contraceptives used, reasons for non use. The individual were classified as good practice if he/she uses contraceptives and classified as bad if he or she does not use any contraceptive method.

### **3.10 Ethical Consideration**

Clearance was obtained from the Ghana Health Service (GHS) and the Awutu Senya East Municipal Assembly before commencing the research. Clearance was sought from each respondent before they participated in the research. Information given out by each respondent was treated as personal and confidential.

### **3.11 Quality Assurance**

Each member of the research team was assigned a role and responsibility. Time schedule was strictly adhered to, to avoid delays. Any other information given by respondents was well documented. Research records were kept in triplicates.

### **3.12 Data processing and Analysis**

Data was entered into Microsoft Excel (Microsoft Office 2016). The data was cleaned and exported into SPSS version 23 for statistical analysis. Univariate analysis such as percentages, tables and frequencies were carried out to describe the variables. Bivariate analysis using Pearson Chi-square test statistics was conducted to determine associations between dependent (Family planning knowledge and practice) and independent variables (Age, ethnicity, educational level, marital status, employment status, number of children). The factors were then fitted into multiple logistic regression models. Crude odds (cOR) ratio and Adjusted odds ratio (AOR) were reported and statistical significance was set at  $p < 0.05$ . Pearson's Correlation analysis was done to determine the correlation between knowledge score and practice score.

## **CHAPTER FOUR**

### **RESULTS**

#### **4.1. Demographic characteristics of respondents**

A total of 330 women of reproductive age group between 15-45 years were recruited into the study. However, only 316 responded to the questionnaire therefore given a response rate of 95.8%. The analysis is therefore based on a sample size of 316. Most respondents (83.2%) were between the ages of 20-30 years with mean age of 31.9 years. Majority (75%) were married. Regarding educational background of respondents, most respondents (61.7%) had attained secondary education. 86.7% of the women had a monogamic type of household. In terms of employment status, majority were employed representing 75.6%. Concerning the number of children or parity, most respondents (56.9%) had between 1-2 children (Table 4.1). The results showed that, 66.1% had ever had sex education at school. Few respondents representing 21.8% purported to have used contraceptives after marriage (Table 4.2).



**Table 4.1: Demographic characteristics of respondents (N=316)**

Variable	Frequency	Percentage
<b>Age (Yrs.)</b>		
15-19	13	4.1
20-30	181	57.3
31-45	122	38.6
Mean $\pm$ SD    31.4 $\pm$ 0.25 (CI: 30.27-31.48)		
<b>Marital status</b>		
Unmarried	77	24.4
Married	237	75.0
Divorced	2	0.6
<b>Educational level</b>		
No formal education	29	9.2
Primary	48	15.2
Scecondary	195	61.7
Tertiary	44	13.9
<b>Type of Household</b>		
Single parent	35	11.1
Monogamic	274	86.7
Polygamic	7	2.2
<b>Ethnicity</b>		
Akan	145	45.9
Ga	20	6.3
Ewe	51	16.1
Northerner	49	15.5
Others	51	16.2
<b>Employment status</b>		
Unemployed	77	24.4
Employed	239	75.6
<b>Number of children</b>		
None	29	9.2
1-2	180	56.9
3 or more	107	33.9

CI represents Confidence Interval; SD represents stanadard deviation

**Table 4. 2: Background characteristics influencing knowledge and practice in Family planning (N=316)**

Variable	Frequency	Percentage
<b>Ever had sex education at school</b>		
Yes	209	66.1
No	107	33.9
<b>Use of contraceptive after marriage</b>		
Yes	91	28.8
No	225	71.2
<b>Current use of contraceptive method (N=213)</b>		
<b>Ever had abortion (N=316)</b>		
Yes	136	43.0
No	180	57.0
<b>If Yes, causes of abortion (N=136)</b>		
I am a student	18	13.2
Unplanned pregnancy	35	25.7
Too young for having 1 <sup>st</sup> child	37	27.2
Economic reasons	21	15.4
Too little birth space	25	18.5

#### **4.2 knowledge of contraceptives use among women**

Table 4.3 summarizes the results of respondent's knowledge on family planning. The results show that the proportion of women with adequate knowledge on family planning is 280/316 (88.6%) (see 3.9.1 for how knowledge was measured). Majority (90.8%) of women had ever heard of modern contraceptives and 67.7% had ever heard of emergency contraceptives. With regards to knowledge on male and female sterilization as a contraceptive method, majority (59.2%) gave a wrong description. About 69.6% of respondent's gave correct description of IUD as a contraceptive method. Moreover, 81.0%, 87.0% and 97.5% of respondents were also gave correct description to injectable, contraceptive pills and male condoms respectively (Table 4.3).

**Table 4. 3: Awareness and knowledge of Family planning among women**

<b>Variable</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Ever heard of modern contraceptives</b>		
Yes	287	90.8
No	29	9.2
<b>Ever heard of emergency contraceptives(N=316)</b>		
Yes	214	67.7
No	102	32.3
If yes source of information (N=214)		
Family member	18	8.4
Health care provider	145	67.7
Media	51	23.9
<b>Description of Female and male sterilization</b>		
Correct	129	40.8
Wrong	187	59.2
<b>Description of IUD</b>		
Correct	220	69.6
Wrong	96	30.4
<b>Description of Injectable</b>		
Correct	256	81.0
Wrong	60	19.0
<b>Description of Implants</b>		
Correct	188	40.5
Wrong	128	59.5
<b>Description of contraceptive pills</b>		
Correct	275	87.0
Wrong	41	23.0
<b>Description of male condom</b>		
Correct	308	97.5
Wrong	8	2.5
<b>Description of female condom</b>		
Correct	297	93.9
Wrong	19	6.1
<b>Description of Lactational Amenorrhea Method</b>		
Correct	180	56.9
Wrong	136	43.1
<b>Description of Rhythm/Calendar Method</b>		
Correct	242	76.6
Wrong	74	23.4

**Table 4.3 cont'd: Awareness and knowledge of family plannings among women**

Variable	Frequency	Percentage
<b>Description of Withdrawal method</b>		
Correct	300	94.9
Wrong	16	5.1
<b>Description of emergency contraception method</b>		
Correct	192	60.8
Wrong	124	39.2
<b>Overall knowledge score: Adequate: 280 (88.6%)      Inadequate: 36 (11.4%)</b>		

### 4.3 Proportion of women practicing contraceptives

The results of this study shows that the proportion of women who use contraceptives is 213/316 (67.4%). Those that were not using cited the desire to have more children and fear of side effects as major reasons for non use of modern contraceptives (Table 4.4).

**Table 4. 4: Practice of contraceptive among women**

Variable	Frequency	Percentage
<b>Contraceptive use</b>		
Use	213	67.4
Non use	103	32.4
<b>Methods being used</b>		
Condom	18	8.5
Oral pills	29	13.6
Intra Uterine device	27	12.7
Calendar/Withdrawal method	51	23.9
Sterilization (male/female)	1	0.5
Others	87	40.8
<b>Reasons for non use of contraceptives</b>		
Desire for more children	148	59.4
Preferred Traditional method	6	2.4
Fear of side effects	26	10.4
Husbands disapproval	4	1.6

#### **4.4 Association between demographic characteristics and Family planning**

##### **Knowledge**

A bivariate analysis using the chi-square test statistics set at  $p < 0.05$  was performed to examine the relationship between demographic characteristics and knowledge of family planning among women. The results showed that, highest level of education attained ( $p = 0.042$ ), marital status ( $p = 0.028$ ) and type of household ( $p = 0.038$ ) and number of children ( $p = 0.013$ ), were the demographic factors found to be significantly associated with knowledge of family planning (Table 4.6). Age, employment status and ethnicity were all assessed but were found not to influence knowledge of family planning ( $P > 0.05$ ) (Table 4.5)

**Table 4. 5: Association between demographic characteristics and Knowledge of FP**

Variable	Family planning Knowledge			X <sup>2</sup> p-value
	Adequate (%)	Inadequate(%)	Total N (%)	
<b>Age group</b>				0.483
15-19	4(30.8)	9 (69.2)	13(100.0)	
20-30	162(89.5)	19 (10.5)	181(100.0)	
31-45	114(93.4)	8 (6.6)	122 (100.0)	
<b>Marital status</b>				0.028*
Unmarried	63 (81.8)	14(18.2)	77 (100.0)	
Married	216 (91.1)	21(8.8)	237 (100.0)	
Divorced	1(50.0)	1(50.0)	2 (100.0)	
<b>Educational level</b>				0.042*
No formal education	17(58.6)	12 (41.4)	29 (100.0)	
Primary	38 (79.2)	10 (20.8)	48 (100.0)	
Secondary	189 (96.9)	6 (3.1)	195 (100.0)	
Tertiary	36 (81.8)	8 (18.2)	44 (100.0)	
<b>Type of household</b>				0.038*
Single parent	15 (42.8)	20 (57.2)	35(100.0)	
Monogamic	260 (94.9)	14 (5.1)	274 (100.0)	
Polygamic	5 (71.4)	2 (28.6)	7 (100.0)	
<b>Ethnicity</b>				0.723
Akan	133 (91.7)	12(8.3)	145 (100.0)	
Ga	13 (65.0)	7 (35.0)	20 (100.0)	
Ewe	46 (90.2)	5 (9.8)	51 (100.0)	
Northerner	40 (81.6)	9 (18.4)	49 (100.0)	
Others	48 (94.1)	3 (5.9)	51(100.0)	
<b>Employment status</b>				0.458
Unemployed	63 (81.8)	14 (18.2)	77 (100.0)	
Employed	217 (90.7)	22 (9.3)	239 (100.0)	
<b>Number of children</b>				0.013*
None	18 (62.1)	11(37.9)	29 (100.0)	
1-2	172 (95.6)	8 (4.4)	180 (100.0)	
3 or more	90 (84.1)	17 (15.9)	107 (100.0)	

\*Significant ( $p \leq 0.05$ ); number in parenthesis are percentages and outside are frequencies

#### **4.5 Logistic regression analysis of factors associated with knowledge of family planning**

Multiple logistic regression was conducted on factors that were significantly associated with Family planning at the bivariate level. Highest level of education attained, marital status and number of children respondents had were found to be statistically significant at the multiple logistic regression analysis level ( $P < 0.05$ ) (Table 4.6). Specifically, women who had secondary education were 2.6 times more likely to have adequate knowledge on family planning compared to those with no formal education (AOR= 2.6; 95% CI=1.56-4.29,  $p=0.018$ ). Women who had tertiary education were 1.23 times more likely to have adequate knowledge on family planning compared to those with no formal education (AOR= 1.23; 95% CI=1.03-6.43,  $p=0.001$ ). Women who were married were 3.2 times more likely to have adequate knowledge on family planning compared to those who were unmarried (AOR= 3.2; 95% CI=0.56-3.78,  $p=0.014$ ).

With respect to parity, women who had 3 or more children were 2.17 times more likely to have adequate knowledge on family planning compared to those who had no child (AOR= 2.17; 95% CI=1.32-8.54) (Table 4.6).

**Table 4. 6: Multiple Logistics regression of the factors associated with family planning knowledge**

FP Knowledge					
Variable	Adequate	Inadequate	cOR (95%CI)	AOR (95%CI)	pvalue
<b>Educational level</b>					
No formal education	17 (58.6)	12 (41.4)	1.0 (ref)	1.0 (ref)	
Primary	38 (79.2)	10 (20.8)	1.49 (0.90-2.48)	1.90 (1.06-3.29)	0.003*
Secondary	189 (96.9)	6 (3.1)	1.71 (1.11-2.63)	2.60 (1.56-4.29)	0.018*
Tertiary	36 (81.8)	8 (18.2)	1.28(1.11-5.67)	1.23 (1.03-6.43)	0.001*
<b>Marrital status</b>					
Umarried	63 (81.8)	14(18.2)	1.0 (ref)	1.0 (ref)	
Married	216 (91.1)	21(8.8)	2.4 (0.61-1.71)	3.21 (1.56-3.78)	0.014*
Divorced	1(50.0)	1(50.0)	0.72 (0.17-2.65)	0.82 (0.71-2.65)	0.328
<b>Type of household</b>					
Single parent	15 (42.8)	20 (57.2)	1.0 (ref)	1.0 (ref)	
Monogamic	260 (94.9)	14 (5.1)	1.67 (0.15-0.83)	1.54 (0.28-11.4)	0.532
Polygamic	5 (71.4)	2 (28.6)	0.45 (0.16-4.39)	0.53 (0.19-21.5)	0.287
<b>Employmnet status</b>					
Unemployed	63 (81.8)	14 (18.2)	1.0 (ref)	1.0 (ref)	
Employed	217 (90.7)	22 (9.3)	2.1 (0.29-5.78)	1.18 (0.37-8.72)	0.342
<b>Number of children</b>					
None	18 (62.1)	11(37.9)	1.0 (ref)	1.0 (ref)	
1-2	172 (95.6)	8 (4.4)	1.23 (0.43-4.91)	1.37 (1.18-5.11)	0.026*
3 or more	90 (84.1)	17 (15.9)	2.31(1.27-7.12)	2.17(1.32-8.54)	0.002*

AOR=Adjusted odds

Ratio;

cOR = Crude odds

raio



#### 4.6 Association between demographic characteristics and practice

A bivariate analysis was also conducted using the chi-square to determine the association between demographic characteristics and practice of contraceptives. It was found that, marital status ( $p=0.003$ ) and number of children ( $p=0.019$ ) were the two demographic characteristics that significantly influenced practice of family planning (Table 4.7). Age, employment status and ethnicity, educational level was not found to be statistically significant ( $P > 0.05$ ) (Table 4.7)

**Table 4. 7: Association between demographic characteristics and practice of FP**

Variable	Family planning use			X <sup>2</sup>
	Good (%)	Bad (%)	Total N (%)	p-value
<b>Age group</b>				0.678
15-19	5 (38.5)	8 (61.5)	13(100.0)	
20-30	120 (66.3)	61(33.7)	181(100.0)	
31-45	88 (72.1)	34 (27.9)	122 (100.0)	
<b>Marital status</b>				0.003*
Unmarried	23 (29.9)	54 (70.1)	77 (100.0)	
Married	189 (79.7)	48 (20.3)	237 (100.0)	
Divorced	1(50.0)	1(50.0)	2 (100.0)	
<b>Educational level</b>				0.09
No formal education	7(24.1)	22 (75.9)	29 (100.0)	
Primary	21 (43.8)	27(56.3)	48 (100.0)	
Secondary	153(78.5)	42 (21.5)	195 (100.0)	
Tertiary	32 (72.7)	12 (27.3)	44 (100.0)	
<b>Employment status</b>				0.728
Unemployed	38 (49.4)	39 (50.6)	77 (100.0)	
Employed	175 (73.2)	64 (26.8)	239 (100.0)	
<b>Number of children</b>				0.019*
None	3 (10.3)	26 (89.6)	29 (100.0)	
1-2	140 (77.8)	40 (22.2)	180 (100.0)	
3 or more	88 (82.2)	19 (17.8)	107 (100.0)	

\*Significant ( $p \leq 0.05$ ); number in parenthesis are percentages and outside are frequencies

## 4.7 Logistic regression analysis of factors associated with practice of family planning

The results showed that, marital status and number of children were the factors significantly associated with practice. Women who were married were 1.82 times more likely to use family planning compared to those who are unmarried (AOR= 1.82; 95% CI=1.01-4.58,  $p=0.001$ ). Women who had 3 or more children were 2.31 times more likely to use family planning compared to those with no child (AOR= 2.31; 95% CI=1.08-8.66,  $p=0.021$ ) (Table 4.8)

**Table 4. 8: Multiple Logistics regression of the factors associated with family planning practice**

	FP practice				
Variable	Good	Bad	cOR (95%CI)	AOR (95%CI)	p-value
Educational level					
No formal education	7(24.1)	22 (75.9)	1.0 (ref)	1.0 (ref)	
Primary	21 (43.8)	27(56.3)	1.22 (0.74-3.79)	1.42 (0.07-6.23)	0.245
Secondary	153(78.5)	42 (21.5)	1.15 (0.67-7.35)	1.33(0.22-4.77)	0.192
Tertiary	32 (72.7)	12 (27.3)	1.07 (0.32-5.29)	1.19 (0.31-7.32)	0.721
Marrital status					
Unmarried	23 (29.9)	54 (70.1)	1.0 (ref)	1.0 (ref)	
Married	189 (79.7)	48 (20.3)	1.6 (1.02-5.67)	1.82 (1.01-4.58)	0.001*
Divorced	1(50.0)	1(50.0)	0.48 (0.24-7.35)	0.71 (0.71-8.14)	0.715
Employmnet status					
Unemployed	38 (49.4)	39 (50.6)	1.0 (ref)	1.0 (ref)	
Employed	175 (73.2)	64 (26.8)	2.80 (0.35-7.78)	2.54 (0.87- 9.02)	0.459
Number of children					
None	3 (10.3)	26 (89.6)	1.0 (ref)	1.0 (ref)	
1-2	140 (77.8)	40 (22.2)	1.02 (0.56-4.82)	1.28 (0.57-5.22)	0.269
3 or more	88 (82.2)	19 (17.8)	2.27(1.02-6.12)	2.31(1.08-8.66)	0.021*

AOR=Adjusted odds

Ratio;

cOR = Crude odds ratio

#### **4.8 Correlation between knowledge and Practice of family planning**

Karl Pearson's correlation analysis was conducted to determine the relationship between knowledge score and practice score, the results showed that there was a strong positive correlation between knowledge score and practice score at 95% confidence level with a correlation coefficient of 0.692 ( $r = 0.492, p < 0.05$ )

## **CHAPTER FIVE**

### **SUMMARY, DISCUSSIONS, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter is a combination of the summary of findings, conclusion and recommendations based on the study objectives.

#### **5.2 Summary of Major Findings**

The purpose of this study was to assess the knowledge and practices of family planning among reproductive age women in Awutu Senya East Municipality. The study objectives was to determine the prevalence rate of women who use contraceptive methods, evaluates the knowledge on contraceptive methods and determines association between demographic factors and knowledge and practice of family planning.

The major findings of the study are summarized as follows according to the study objectives. The study indicated that there is a very high level of knowledge (88.6%) of contraceptive methods among reproductive age group women at the Municipality. Healthcare providers / written materials / media the top source of information they benefitted from followed by information from parents / husbands / siblings were the sources of information women might have benefitted from. The study also revealed 67.4% of women practice family planning in the municipality. Educational level, marital status and number of children were found to be significantly associated with knowledge. Marital status and number of children also influenced practice. Knowledge about family planning was weakly correlated with practice and showed a

positive relationship. Access to sex education in school was high among the respondents which contributed to their high awareness of family planning methods. The study showed that the calendar / withdrawal method was the most used contraceptive method by the reproductive group at the Municipality, with none usage of any form of contraceptives the second most preferred while sterilization was the least preferred. It is of note that the high knowledge of contraceptive methods didn't quite translate into concomitant high practice levels, although the rate of desiring more children was relative low, same with the number of children per family with the majority having between 0-2 without much desire for more. It can be inferred that the cosmopolitan nature of the Municipality and the relatively high educational level of the populace might have accounted for these choices.

### **5.3 Discussions**

The demographic dynamics of the study area show the most active reproductive age group from 20-30 years were the most encountered representing 57.3% of total respondents. This is expected because the study is on reproductive age groups. Larger proportions were in monogamous marriage with 86.7% of the rest as single parents (11.1%) and 2.2 % in polygamous marriages (Table 4.2). This is understandable because the study area is a characterized by people of different origins with varying beliefs and experiences which is further confirmed with 61.9% of the people being given birth to outside the region.

One of the key specific objectives of the study is to evaluate the knowledge of contraceptive methods among reproductive age women in Awutu Senya East. Findings show that the knowledge about family planning methods is quite high among

the respondents (88.6%) (Table 4.3a) which was made possible through information sources such as healthcare providers / written materials / media. The knowledge levels of respondents was broadened by sex education that 66.1% of them had ever had sex education especially sexually transmitted diseases at school. The knowledge of family planning obtained in this current study is higher than that reported by Avong (1999), Onwuhafua *et al.*, (2007) and Hodogbe&Nyarko (2015) who found knowledge of family planning to be below 70% each in a study conducted in Bangladesh, Nigeria and Kenya respectively. The same trend was obtainable with information source of respondents with healthcare centres and hospital the most potent source.

Determining the prevalence rate and use of contraceptive methods among reproductive age women at Awutu Senya East Municipality is another specific objective of the study. The study showed a 67.4% use rate of contraceptives by women in productive age in the study area (Table 4.4) which is quite higher than the 33% average for Africa as submitted by United Nations (2015). The greater majority of respondents show preference for modern contraceptives while less number preferred traditional contraceptive methods. The most widely used traditional method however was the withdrawal method. This is in agreement with the findings of Hodogbe&Nyarko (2015) who studied knowledge and practice of family planning among female basic teachers in Accra and United Nations (2015) global contraceptives patterns. The singular most preferred contraceptive method of choice in the study was calendar / withdrawal method with the least preferred method was female sterilization. This pattern different from the findings of Ahmed-Adam (2010) who found Injectable as the most preferred by couples in Kaduna State in Nigeria with withdrawal method the next most preferred with condom the least preferred.

Factors such as education level, marital status and number of children were the factors found to influence knowledge and these are important to the study of family planning because of their influence on knowledge and practice. Educational level do however demonstrated the higher influence on both knowledge and practice compared to age as indicated in the greater significant levels recorded by educational level. The study further confirms Rogers (1995) innovation theory that says, early adopters are basically educated of middle income status and urban based. The characteristics of the study population correspond to this assertion and so is their knowledge and practice. Although a sizeable proportion of the sampled population have knowledge was weakly translated into practice, the study thus established a weak positive relationship between knowledge and practice with increase knowledge corresponding to improved practice. This is in line with WHO (2008) which posited that over 120 million couples worldwide do not use contraceptives, despite the fact that they want to space or limit childbearing. Several factors like traditional and religious beliefs, personal experiences and economic base could possibly be reason for this disparity between knowledge and practice of family planning.

#### **5.4 Conclusion**

The study sought to assess the knowledge and practice of current family planning procedures among women in their reproductive age in the Awutu Senya East Municipality. Knowledge and practice of family planning was observed to be high. Educational level attained, marital status and number of children were the factors found to be significantly associated with knowledge. Marital status and number of children significantly influenced practice. Knowledge and practice was observed to be high but there was a strong positive correlation between knowledge score and

practice score on family planning. This is an indication that knowledge translates into practice. Fear of side effects of using contraceptives was major reason cited for not practicing family planning. There would therefore be the need to educate women on side effects and also organize educational programmes for women with regards to contraceptive use in the municipality. The study therefore rejects the null hypothesis that women in their productive age in Awutu Senya East Municipality do not have adequate knowledge and practice of modern family planning procedures.

## **5.5 Recommendations**

Based on the findings of the study, the following recommendations are offered;

- Since the study indicated healthcare providers / written materials / media as the major sources where couples learn about contraceptive methods, the Municipality management should improve on the existing strategies in propagating the practice of contraceptives methods among couples. This can be optimized by more media campaigns in English and the local languages.
- To address the not so strong correlation between age and educational level with knowledge and practice of family planning, community programmes should be organized for couples / relations where forums of free discussions on practice of contraceptive use methods can be held for better understanding of the methods and how to deal making choices comfortable to individual couples.
- Since all respondents in this study were females, it would be insightful for future studies to capture male opinions in order to establish the extent of support and usage of contraceptives among that population.



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## APPENDIX: QUESTIONNAIRE

### Demographic information

<b>A. Age</b>	Thick	<b>D.Marital status</b>	Thick
1= 15-19		0= Unmarried	
2= 20-30		1= Married	
3= 31-45		2= Divorced	
<b>B.Highest level of education</b>		<b>E.Ethnicity</b>	
0= No education		1= Akan	
1= Primary		2= Ga	
2= Secondary		3= Ewe	
3= High school/college		4= Northerner	
4= University		5=Other (please specify)	
<b>C.Type of household</b>		<b>F.Employment status</b>	
0= Single parent		0= Unemployed	
1= Monogamic		1= Employed	
2= Polygamic		<b>G.Place of Birth</b>	
		0=Within the Municipality	
		1=Within the Region	
		2=Outside the Region	

### Knowledge

Family planning knowledge consisted of knowledge of modern contraceptives and emergency contraceptives, source of information about family planning, sex

education at school, and if the women had heard of sexually transmitted infections (STIs), like Gonorrhoea.

**Heard about modern contraceptives**, Female and male sterilization, intrauterine devices (IUDs), Hormonal methods (oral pills, injectable, and hormone-releasing implants, skin patches, and vaginal rings), Condoms and vaginal barrier methods (diaphragm, cervical cap, and spermicidal foams, jellies, creams, and sponges<sup>1</sup>.

0= No method, 1=Oral pill/Condom/IUD (1-3 method), 2= 4 and more methods

**Heard about emergency contraceptives** 0= No, 1= Yes

**Source of information about contraceptives**

1= Parents/ siblings/husbands/friends

2=Health care providers/ written information, media (pamphlets, internet, magazines)

**Sex education at school** 0=No/not remember, 1= Yes

**Heard about STI's like Gonorrhea** 0=No, 1= Yes

**Practice**

**Age of marriage**

0= less than 18 years

1=18-24 years

2= 25-30 years

3=Above 30 years

**After marriage using any of**

**contraceptives**

0=No

1= Yes

**Number of children**

1= 0-2,

2= 3 and more

**Desire for more children now**

0=No,

1= Yes

**Planned pregnancy**

**History of requesting induced abortion**

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0=No/ not remember,

1= Yes

0=No,

1= Yes

**Which method are currently using**

1=Condom

2= Oral pills

3=Intra uterine device

4=Calendar / withdrawal method

5= Sterilization (male/ female)

6= Implants

7= Injectables

8= Others

**Cause of abortion**

1= Study/student

2= Pregnancy was not planned

3= Too young for having 1st child

4= Economical reason

5= Too little birth space

**Reason for not using any**

**contraceptives**

1= I want to be pregnant

2= I preferred the traditional method

3= Fear of side effect

4=Others

**Service for family planning**

**Unmarried girl prefer to go:** 0=No answer, 1=General physician/school nurse, 2=

Clinic for sexual information, 3=Health center for youth, 4= Internet, 5= I never

thought about this before

**Unmarried girl prefer to talk:** 0=No one, 1= Parents, 2=Siblings 3=Friends, 4=

General physician, 5=School nurse, 6= Health canter for youth

**Face problem to seek FP service**

0=No

1= Yes

**Possible cause to face problems**

0=Am shy

1= I depend on my husband

3=Health staff never understand me

4= I don't know where I can go



### ACTIVITY TIMELINE

ACTIVITY	DEC '16	JAN '17	FEB '17	MAR '17	APR '17
Reconnaissance survey	√				
Literature review	√	√	√	√	
Administration of questionnaires			√	√	
Data analysis				√	
Supervisory meeting	√	√	√	√	
Conclusion				√	
Recommendation				√	
Submission of the thesis					√

## **BUDGET**

<b>ITEM</b>	<b>COST</b>
• Cost of printing questionnaires	-Gh¢ 1000
• Cost of data analysis	-Gh¢ 1500
• Cost of Transportation	-Gh¢ 500
• Team members per diem (10 persons)	-Gh¢ 2,000
• Miscellaneous	-Gh¢ 500
• <b>Total</b>	<b>-Gh¢ 5,500</b>

## **FUNDING**

Funding for this project will be solely provided through personal finances.