ENSIGN COLLEGE OF PUBLIC HEALTH, KPONG EASTERN REGION, GHANA

ASSESSMENT OF FACTORS AFFECTING MODERN CONTRACEPTIVE USE AMONG FEMALE TRADERS: A CASE STUDY AT THE LA-NKAWATANANG-MADINA MUNICIPALITY MARKET IN THE GREATER ACCRA REGION OF GHANA

by

EBENY FRANCOIS TEMGBAIT CHIMOUN

A Thesis submitted to the Department of Community Health in the Faculty of Public Health in partial fulfilment of the requirements for the degree

MASTER OF PUBLIC HEALTH

April 2017

1

DECLARATION AND CERTIFICATION

I, Ebeny Francois Temgbait Chimoun, declare that this thesis was written by my effort through the support of my supervisor. It contains no material previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

Ebeny Francois Temgbait Chimoun   …………………………   ……………………

(157100041)   Signature   Date

Certified by:

Dr. Steve Manortey   ……………………………   …………………

Academic Supervisor   Signature   Date

Certified by:

Dr. Steve Manortey   ……………………………   …………………

Ag. Head of Academic Program   Signature   Date

DEDICATION

This work is dedicated to GOD ALMIGHTY, who granted me the knowledge, strength and courage throughout this program.

ACKNOWLEDGEMENT

DEFINITION OF TERMS

1 – Family planning is the practice of controlling the number of children in a family and the intervals between their births by means of voluntary sterilization, natural and/or artificial contraception.

2 – Gross Domestic Product is the monetary value of all the finished goods and services produced within a country's borders in a specific time period.

3 – Private sector is the part of the economy which is run by private individuals or groups, usually as a means of enterprise for profit, and is not controlled by the state.

4 – Wholesale and retail trade: Wholesale trade is concerned with buying goods from manufacturers or dealers or producers in large quantities and selling them in smaller quantities to others who may be retailers or even consumers. Retail trade is concerned with the sale of goods in small quantities to consumers.

5 – Modern contraceptive prevalence rate is the percentage of women who are currently using, or whose sexual partner is currently using, at least one modern method of contraception, regardless of the method used. It is usually reported for married or in-union women aged 15 to 49.

LIST OF ABBREVIATIONS

AdMA	Adentan Metropolitan Assembly
AMA	Accra Metropolitan Assembly
CHPS	Community-based Health and Preventive Services
CPR	Contraceptive Prevalence Rate
DHMT	District Health Management Team
GDP	Gross Domestic Product
GEMA	Ga East Municipal Assembly
HIV	Human Immunodeficiency Virus
ILO	International Labor Organization
IUD	Intra Uterine Device
LARC	Long Acting Reversible Contraceptive
LI	Legislative Instrument
mCPR	Modern Contraceptive Prevalence Rate
PREM	Poverty Reduction and Economic Management Network
SARC	Short Acting Reversible Contraceptive
SDGs	Sustainable Development Goals
SSA	Sub-Sahara Africa
USA	United States of America

ABSTRACT

Modern contraceptive methods are an integrated part of family planning which purpose is to help individuals and families take control over their reproductive health and needs. Modern family planning influence population dynamic and economic development as emphasized by the Sustainable Development Goals. However, the use of modern contraceptives has been very low in many developing countries including Ghana as compared to developed countries.

Considering the tremendous contribution of women in national productivity, this study seeks to investigate factors affecting the utilization of modern contraceptives, and also to determine the its prevalence rate among female traders in their fertility ages at the La-Nkwantanang Madina Municipality market in the Greater Accra Region of Ghana.

A cross-sectional descriptive study was carried out at the La-Nkwantanang Madina Municipality market in the Greater Accra Region. By means of a randomized technique, 306 qualified and consented participants were selected and interviewed on-site during selling hours using a structured and anonymous pretested questionnaire.

The findings of the study revealed that the modern contraceptive prevalence rate was 26.1%. None of the socio-demographic factors investigated were found to be significantly associated with the use of modern contraceptives. The level of awareness was almost universal (96.4%). Contraceptive use was found high among married women (56.3%) and with some form of educational attainments. Again, most contraceptive users were found between 25-24 years (41.2%). Injectable (43.8%) was the most commonly used method

among modern contraceptive users followed by pills (25%) and IUD (12.5%). Not all current contraceptive users (36.3%) have informed their partners.

Despite the fact that modern contraceptive prevalence was higher than the national figure, this study has demonstrated needs for further research among this subpopulation and provision of modern contraceptive near the market.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

CHAPTER ONE

INTRODUCTION

1.0 Background Information

Modern contraceptive methods can be defined as a set of safe and effective means, products or medical procedures developed over time and deliberately used by individuals and couples in order to reduce the risk of unintended pregnancies as a consequence of sexual intercourse (Hubacher & Trussell, 2015).

Apart from contraception, some of the methods offer additional health benefits such as prevention of HIV transmission and other sexually transmitted infections. Technological advancement and research have led to the development of a wide range of modern contraceptives methods that can meet the reproductive needs of most men and women. Modern contraceptives are often classified into three categories: short-acting reversible, long-acting reversible and permanent contraceptive methods.

Short-acting reversible contraceptives (SARC) are utilized in short time intervals from single use to up to three months. They include oral and injectable contraceptives, patches, emergency contraceptive pills, male and female condoms, spermicidal agents (gels, foams, creams etc.), sponges, vaginal rings, diaphragms and cervical caps. When consistently and correctly used, these methods provide remarkable health benefit despite disadvantages such as side effects, inconsistent resupply, frequent redosing that sometimes leads to lapses in protection and other factors (Hubacher *et al.,* 2017). Intra-Uterine Devices (IUD) and sub-dermal implants are long-acting reversible contraceptives (LARC) methods which protect women from pregnancy for at

least three years. In addition, LARC have high contraceptive effectiveness once properly inserted by a qualified staff as compared to SARC. Finally, permanent contraceptive methods including voluntary female sterilization (tubal ligature) and vasectomy (male sterilization) provide up to 99% protection against unwanted pregnancies. Minor side effects mostly related to the procedure itself can be experienced by individuals who choose this method. Thus, adequate counselling is recommended prior to the intervention (Foreman & Spieler, 2013).

Modern contraceptive methods are critical components of family planning which help families and individuals especially women to realize their basic right to decide freely and responsibly the number, spacing and timing of their children. Family planning gives access to information, education and means to affirm and promote good sexual and reproductive health, to contribute to the well-being of women and girls, influence population dynamic and impact social and economic development (Prieto & Boland, 1994).

In developing countries, the number of women in need of modern contraceptives has substantially increased from 720 million in 2003 to 877 million in 2014 with 80% of the increase due to population growth. The breakdown of these figures show that during that same period, the number of women having effective access to modern contraceptives rose from 510 million to 652 million as well as the number of women who are fecund and sexually active but are not using any method of contraception, and report not wanting any more children or wanting to delay the next child from 210 million to 225 million (Singh *et al.,* 2014).

Population growth is expected to remain high in 48 least developed countries, of which 27 are in Sub-Sahara Africa (SSA) even if there is a reduction in fertility rate in the near future. Women in Sub-Sahara Africa have on average about 5 children over their reproductive

lifetime, compared to a global average of 2.5 children. The demographic transition seems to be proceeding slowly and to have not yet started in many countries. Therefore, population of this group is projected to double from 950 million in 2015 to 1.9 billion in 2050 (United Nations, Department of Economic and Social Affairs, Population Division, 2015).

Additionally, Sub-Sahara Africa has the lowest Contraceptive Prevalence Rate (CPR) of 18% and the highest level of unmet contraceptive need of 25% in the world, though figures vary from region to region. In Southern Africa, where the CPR is 58%, almost exclusively of modern methods, unmet need is 16%. In Western Africa, in contrast, only 8% of women use modern contraceptive methods and the unmet need is 23%. Strong evidence links high unmet need and low use of modern contraceptives with high incidence of unwanted pregnancies, unsafe abortions and maternal deaths (Gribble & Haffey, 2008).

The London Summit on family planning held in 2012 urged the global community to invest in modern contraceptives as a cost-effective intervention that has the potential to save and to transform the lives of millions of girls and women in the world's poorest countries. It is estimated that every US$1 invested in Family Planning services yields between US$2 and US$6 in subsequent social sector savings (London Summit on Family Planning, 2012).

With the adoption of the Sustainable Development Goals (SDGs) by the United Nations (UN) in 2015, it is clear that family planning is a cross-sectoral intervention that can contribute tremendously to ensure healthy lives and promote well-being for all at all ages (SDG 3), and achieve gender equality and empower all women and girls (SDG 5) through universal access to sexual and reproductive health-care services (Starbird *et al.,* 2016).

1.1 Problem Statement

Over the past two decades Africa has emerged from a troubled history to become one of the world's fastest growing economic region. Africa's Gross Domestic Product (GDP) was $2.4 trillion in 2013, and is expected to climb to $3.3 trillion by 2020 with an estimated annual growth of 5% faster than the global average of 4.2%. Analysts say the rate of return on foreign investment in Africa is higher than in any other developing region (Zamfir, 2016).

According to the Poverty Reduction and Economic Management Network (PREM) report of the World Bank (2013), the informal sector including the agricultural informal sector activities contributes 55% of Sub-Saharan Africa's GDP (Akyeampong & Fofack, 2013). The informal sector consists of units engaged in the production of goods and services with the primary objective of generating employment and income to persons concerned and which are not guided by formal contractual relationships, institutions, standards and guidelines as in the formal sector (Kingslow, 2003).

The International Labour Organization (ILO) in 2002 indicated that the informal sector accounted for three-quarters of non-agricultural employment in Sub-Sahara Africa. For women, the informal sector represented 92% of the total job opportunities outside of agriculture (against 71% for men); and almost 95% of these jobs are performed as self-employed or own-account workers and only 5% as paid employees in the vast majority of low income urban communities (International Labour Conference, 2002). Numerous advantages are linked with informal sector employment such as flexible timing, easy entry and exit, proximity to residence and compatibility between work and family responsibilities (Akyeampong & Fofack, 2013).

However, the informal sector is characterized by low and stagnant levels of remuneration, insecurity of employment, instability of income, excessively long working hours, and abysmal and unhealthy working condition (Kingslow, 2003).

According to the African Development Bank Group, Ghana's economic growth, which had slowed from 4.0% in 2014 to 3.7% in 2015, increased to 5.8% in 2016 and is expected to reach 8.7% in 2017, following consolidation of macroeconomic stability. Hence, 80% of employed persons in the country are engaged in the informal sector. The highest share of employed females (41%) is found in the services sector with 25.1% of female economically active engaged in wholesale and retail trade. This situation is the result of the formal private sector's inability to generate enough jobs and government policy to maintain a net freeze of employment into some sectors of the public service over decades (Osei-boateng & Ampratwum, 2011; National Employment Report, 2015)

Moreover, Ghana's fertility rate is 4.2. Even though it is better than many neighboring West African countries, it does not compare as favorably to other successful developing nations such as Namibia (3.6), Egypt (3.4) or Morocco (2.6) (United Nations, Department of Economic and Social Affairs, Population Division, 2015). Thus, the country has a modern contraceptive prevalence rate as low as 22%, with only 22% of currently married women and 32% of unmarried sexually active women using any modern contraceptives methods (Ghana Demographic and Health Survey, 2014).

Currently, very little investigation on the effect of women's employment status and utilization of modern contraception methods have been conducted in Ghana. Therefore, this study set out to assess factors that influence the low uptake of modern contraceptive methods among

18

economically active women, specifically female traders in reproductive age with the view to provide new insight into the problem.

1.2 Rationale for the Study

Majority of female traders belong to the informal sector, which is a major source of employment in the country. Various studies have been conducted among certain group of workers such as farmers (Mekonnen & Worku, 2011) or commercial sex workers (Martin *et al.,* 2016). However, there is no information on modern contraceptives use among female traders in the informal sector in Ghana.

Therefore**,** this study will be useful in finding the factors affecting the utilization of modern contraceptive methods among female traders in reproductive age in order to help the District Health Management Team (DHMT) and other collaborating and implementing stakeholders to improve on their strategic plans towards family planning distribution services among this group of women who spend several hours in the market and may not have time to access regular services.

1.3 Hypothesis/Conceptual framework

Uptake of modern contraceptive methods among female traders of reproductive age is believed to be affected by a complex interaction of many factors.

Conceptual framework is defined as a network, or "a plane," of interlinked concepts that together provide a comprehensive understanding of a phenomenon or phenomena (Jabareen,

2009). It provides evidence that a researcher has reviewed the literature, selected relevant theories and/or concepts, and organized them into a structure which shows the boundaries of the present study and presents "… the main dimensions to be studied – the key factors or variables – and the presumed relationships among them" (Miles & Huberman, 1994).

The conceptual framework below gives an overview of some of the factors within which the study was conducted. The framework suggests that demographic, reproductive health service and socio-economic factors impact the utilization of modern contraceptives methods.
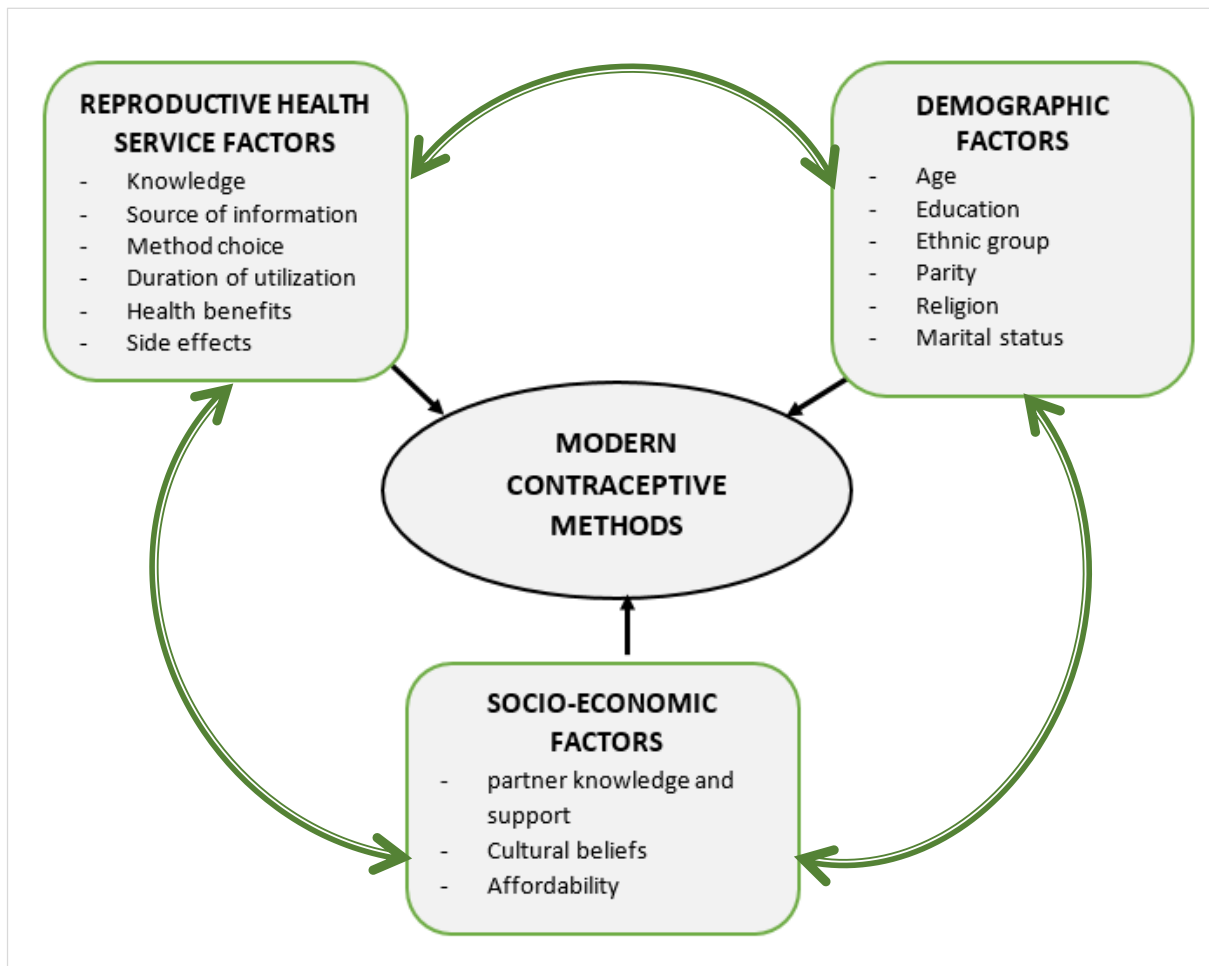
FIG 1.1: A conceptual framework of factors affecting contraceptive use.
Source: Author's design

1.4 Research questions

1) What are the factors affecting the utilization of modern contraceptive methods among female traders in reproductive age (15-49 years) at La-Nkwantanang Madina municipality market of the Greater Accra Region of Ghana?

2) What is the prevalence rate of contraceptive use among the studied population?

1.5 General objective

To investigate factors affecting the utilization of modern contraceptive methods among female traders of reproductive age at La-Nkwantanang Madina municipality market.

1.6 Specific objectives

The specific objectives of the study were:

1. To determine the modern contraception prevalence rate among female traders in reproductive age at La-Nkwantanang Madina municipality market.

2. To assess the knowledge level of these female traders in reproductive age.

3. To investigate socio-demographic characteristics affecting the utilization of modern contraceptive methods.

4. To explore the choice and practice of modern contraceptive methods used.

5. To identify the partner attitude towards modern contraceptive methods.

1.7 Profile of study area

This study was conducted in the main La-Nkwantanang Madina Municipality of the Greater Accra region of Ghana. La-Nkwantanang Madina Municipality is one of the major commercial center of Accra and it has a diverse population coming from all the regions of the country and beyond.

1.8 Scope of the study

The coverage of the research work was the La-Nkwantanang Madina Municipality market of the Greater Accra Region of Ghana.

1.9 Organization of report

Chapter one presents the introduction, which consists of the background to the study, the problem statement, justification for the study as well as the research questions and objectives. Chapter two deals with the literature review which is the selection and analysis of available documents containing information in relation to the topic under study. Chapter three describes the methodology followed during the study. Chapter four presents the analysis of the data, and the results are presented according to the study objectives. Chapter five consists of the discussion of results using existing information. Chapter six provides conclusion and recommendations.

CHAPTER TWO

LITERATURE REVIEW

Extensive research has been made to understand key factors influencing the uptake of modern contraceptive methods. These factors are inter-related and complex. The literature is reviewed under the following headings:

a) Knowledge level about modern contraceptive methods.

b) Socio-demographic characteristics affecting the utilization of modern contraceptives.

c) Choice of modern contraceptive methods.

d) Partner attitude towards modern contraception.

2.0 Knowledge level about modern contraceptive methods

Globally, important achievements have been made in increasing the knowledge about modern contraceptives. Between 1970 and 2015, the number of children born to the average women in developing countries excluding China fell from 5.7 to 3 overall. At the same time, the proportion of women having access and using modern contraceptives has significantly increased (United Nations, Department of Economic and Social Affairs, Population Division, 2015).

Individual familiarity and understanding of modern contraceptive methods is seen as a requirement to the adoption of contraception. Awareness and knowledge of different

contraceptive methods is the key to choose different contraceptive and to practice them, as well as the source of information (Singh & Darroch, 2012).

Evidence from modern contraceptive prevalence in Ghana in 2014, found that 99.8% of urban women and 98.6% of rural women knew at least one modern contraceptive method. The mean number of known contraceptive method was 8.5 and the most widely known method among all women was male condom (Ghana Demographic and Health Survey, 2014).

Contraceptive prevalence survey in Uganda (2012) revealed that knowledge of at least one method is nearly universal. Among all women, the male condom (96.6%), injectable (94.1%) and pill (92.6%) were the most well-known modern methods. However, there is a big gap between knowledge and use of these methods. The modern contraceptive prevalence rate was 26%, having almost double between 2000 and 2011 (Uganda Demographic and Health Survey, 2012).

In a case control study on determinants of modern family planning use among women of reproductive age conducted in the Nkwanta District, in the Volta Region of Ghana, 93.8% of cases and 91.5% of controls knew at least one method of modern contraceptive. Injectable was the most known method among both study arms followed by the pill. The main source of information in the district was from health workers, followed by friends and relatives and through radio (Eliason *et al.,* 2014).

In a qualitative study conducted in Mangochi district, the southern region of Malawi, Chipeta *et al.* found that majority of women selected for focus group discussions were not using any modern method of contraception. The study reported that despite being aware of

modern contraceptives, insufficient knowledge about these contraceptives was a limitation for their utilization (Chipeta *et al.,* 2010).

In Malaysia, another qualitative study with the main purpose of understanding barriers of modern contraceptives practices among women showed that most of the respondents were able to spontaneously identify numerous modern contraceptives methods, but one of the respondents mixed old methods with modern methods. Respondents lacked specific knowledge regarding these various methods, and how the methods works, particularly for IUD (Najafi *et al.,* 2011).

A cross-sectional descriptive study among 185 women attending antenatal clinic in Nigeria revealed that 82% of respondents learnt of modern contraceptives methods in the hospital through doctors and nurses, 14.6% heard about it on television and those who heard from family were 2.3%. The awareness in the study group was very high, as 82% of participants knew about at least one method of contraception. However, while the awareness and knowledge were high, in-depth knowledge in modern contraception was very shallow (Addah *et al.,* 2015).

Using a multilevel linear regression model to determine the strength of the relationship between migration and contraceptive knowledge, a study in Guatemala showed that rural migration has no significant dependent effect on contraceptive knowledge. However, urban migration was associated with an average increase of 0.4 in the number of methods known. Additionally, the results revealed that living in a rural community where urban migration is common was associated with an increase in modern contraceptives knowledge (Lindstrom & Muñoz-franco, 2017).

2.1 Socio-demographic characteristics and cultural practices

Demographic factors such as age of women, education, marital status and number of living children have been acknowledged as major characteristics that influence modern contraceptives use. These characteristics define the person's ability to understand the mechanism of action and effective use of the modern contraceptive methods (Martin *et al.,* 2016).

A study conducted in Pakistan found that contraceptive use was low among young women in their twenties and below as compared to women in their thirties and above. The result established a positive relationship and a significant association between age and contraceptives use. This is indicative of a high desire for child bearing among young women, and a high growing interest of spacing births among women in their thirties (Jabeen *et al.,* 2011).

Similarly, a survey conducted in Nigeria, indicated that the highest modern contraceptive prevalence rate among fecund women not desiring children was 21.3% in the 30-39 age group, followed by 16.9% in the age group 40-49 years. The age group 15-19 years had the lowest prevalence rate at 3.9% (Ejembi *et al.,* 2015).

However, results from a comparative analysis of factors associated with modern contraceptive use among young and older women found the contrary with no significant association between both age groups (young and old) and contraceptive use. Authors attributed this findings to the fact that child bearing is expected regardless of the age at

marriage as young women are expected to prove their fertility soon after marriage (Asiimwe *et al.,* 2014).

A World Bank Report (1995) on 15 Sub-Saharan African (SSA) countries, observed that increase in female education was associated with increased contraceptive use and that female education had an even stronger relationship with a woman's use of contraceptives (Ainsworth, 1996).

Bbaale and Mpuga reported that the use of contraceptives increases with education. Their study shows that women with a primary education was 8-10% more likely to be using a modern or any method of contraception compared to those with no education. Secondary education rose the probability of using modern contraceptives in the range of 14-17%, and post-secondary education increased the probability to the range 16-20%. They even went further to prove that female education increases the probability of using condoms. Women with at least secondary education was 21%-45% more likely to use condoms compared to their counterparts with no education at all. Women whose partners have post-secondary education was 15% more likely to use condoms compared to their counterparts whose partners have no education at all (Bbaale & Mpuga, 2011).

Evidence from various studies show that utilization of modern contraceptives is higher among married women as compared to sexually active unmarried women (Tekelab *et al.* 2015; Apanga & Adam 2015). In the East African countries, women with no children were less likely to use modern contraception than were women with 3 or 4 children. However, women who reported frequent discussion of family planning with their partners were more likely to be using contraception than women who reported they never discussed family planning (Stephenson *et al.,* 2007).

27

2.2 Choice of modern contraceptive methods

According to a result from a study conducted in 2004 in the United State of America, 38% of all women aged 18–44 using reversible methods were using oral contraceptives, 18% were using other hormonal or long-acting methods (7% injectable, 5% patch and 5% IUD), 32% male condoms and 12% other methods (6% periodic abstinence and 6% withdrawal). Twenty-nine percent of women reported using more than one method, and 41% had been using their method for at least five years. Thirty-seven percent of reversible method users, however, reported not being completely satisfied with their method; a similar proportion (38%) reported using their current method mostly because they disliked other options, and slightly fewer (31%) would change methods if not for the cost. Some 58% of women who were using condoms and 24% of those using the pill reported choosing those methods because they did not like other methods (Frost & Darroch, 2008).

A survey conducted in Tanzania in 2010 stated that, the majority of women who are using a contraceptive method uses modern method (24%) and also the use of modern contraceptive methods increased by 20% from 7% in 1991-1992 to 29%. The most used methods are injectable (9%), the pill (5%) and male condoms (4%). The most common family planning methods are: the pill, injectable, permanent methods (Tanzania Demographic and Health Survey, 2010)

A study conducted by Emmanuel *et al.* have also shown that, condom was the most chosen method by the respondents 24 (30.8%), while female sterilization and implant were the least chosen methods 2.6% and 7.7% respectively (Emmanuel *et al.,* 2014).

28

2.3 Partner attitude towards modern contraceptive methods

Although majority of women said their husbands or partners were usually involved in contraceptive discussions, the nature of the involvement varied. Some men were involved by supporting women's contraceptive decisions, other men used methods themselves, and others posed obstacles for women's use of family planning (Casterline *et al.,* 1997).

A research by Aweligeya (2000) into factors affecting family planning in the northern region of Ghana revealed that women who discussed the number of the children they would like to have in their reproductive lifetime been three times more likely to use contraceptive methods as compared to women who did not discussed the issue with spouses/partners. Also women who discussed family planning issues with their spouses/partner were six times more likely to use a contraceptive methods as compared to those who did not discussed with their spouses/partners on family planning (Aweligeya, 2000).

Derose *et al.* (2004) revealed in a cross-sectional survey of 21 countries in Sub-Saharan Africa, using demographic health survey data, that discussions with partners on contraceptive informs women of their husbands' attitude towards contraceptive and therefore the intention for its use. The research also revealed that 77% of cohabiting marital partners held similar attitudes toward family planning and that 73% of the concordant couples approved of contraceptive use. However, only 61% of the wives correctly reported their husband's attitude. Although 76% of the couples agreed on whether they wanted more children, just 44% gave concordant responses on ideal family size. Among respondents who reported knowing a contraceptive method, 35% of wives and 39% of

husbands said they had discussed family planning with their spouse during the previous year. Regression analysis shows that urban residence, the wife's attitude toward family planning and discussions of family planning between spouses have significant independent effects on current contraceptive use (Derose *et al.,* 2004).

Husband–wife communication about family planning and contraceptive use have been important factor in the use of contraceptive. Lasee and Becker, (1997) researched into this in Kenya by using multiple logistic regression to analyzed data from the 1989 Kenya Demographic and Health Survey. The research finding was that, both knowledge and approval of family planning are virtually universal in Kenya. Among 98% of the total 1,026 married couples in which the women were all in their first union, one or both partners know of at least one modern method, and among 85% of couples both partners approve of family planning. Discussion with the partner about family planning was reported in 82% of couples. However, only 67% of wives and 75% of husbands correctly predicted their spouse's approval of family planning, Knowledge and approval of family planning, husband-wife communication, desire for more children and ideal family size are all significantly associated with current use. Multiple logistic regression analyses show that husband-wife communication, particularly the wife's perception of her husband's approval of family planning, is highly associated with current contraceptive use (Lasee & Becker, 1997).

A very recent study conducted by Manortey *et al*., among 390 women of reproductive ages in the Worawora township in the Volta Region revealed that women who discussed the need of contraceptive usage with their partners prior to using were 58.69 times more likely

to use contraceptives as compared to their colleagues who might have not done that, adjusting for all other covariates in the logistic model (Manortey *et al.,* 2017).

Dialogue appears to increase the effectiveness of communication: Specifically, one spouse's perception of the other spouse's approval is more likely to be correct if they have discussed family planning than if they have not, and this relationship significantly affects contraceptive use. Husband's non approval was cited as the major reason for non-use of modern contraceptive among the married women (Greene *et al*., 2012).

CHAPTER THREE

METHODOLOGY

3.0 Research method and design

A cross-sectional study was carried out at the La-Nkwatanang Madina Municipality in the Greater Accra region of Ghana. A convinience sampling technique was used to select female traders of reproductive age at the main market. Qualified selected and consented participants were interviewed on-site during selling hours.

3.1   Data collection techniques and tools

Primary data were collected for this study. The data collection tool was a structured and anonymous questionnaire and the data collection technique was interviews. The purpose of the study was explained to the participants and informed consent obtained before administering the questionnaire. The questionnaire included both opened and closed-ended questions on socio-demographic characteristics, contraceptive knowledge, women's perception on contraceptives, choice of modern contraceptive methods used among female traders in reproductive ages and spousal attitude. It was administered by trained research assistants in English and/or in local dialects (Twi, Ewe, Ga).

3.2 Study Population

The study participants were strictly female traders of reproductive ages (15-49 years) selling at the main La-Nkwatanang Madina municipality market at the time the research was

conducted. Other criteria for participation in the study includes the individual should be a regular trader in the market and willingness to be part of the study without any sense of coercion.

3.3 Profile of the study area

3.3.1 Location

The La-Nkwantanang Madina municipality is located at the northern part of Greater Accra region (one of the administrative regions of Ghana). It is one of the 16 Metropolitan, Municipal, and District Assemblies in the region and covers a land area of about 166 square kilometers. It is boarded on the west by the Ga East Municipal Assembly (GEMA), on the east by the Adentan Municipal Assembly (AdMA), the south by Accra Metropolitan Assembly (AMA) and the north by the Akwapim South District Assembly.

It is a mainly urban municipality with pockets of rural settlements which are quickly developing into peri-urban settlements. Some of the major urban areas include Madina which is the municipal capital, North Legon, Social Welfare Institute area, Akotsi Abor, Okataban and La Nkwantanang. Madina has developed into the bustling central business district of the municipality with major commercial activities being hosted there.

North Legon, Akotsi Abor and Okataban are the major urban residential communities within the municipality. The main rural communities include Oyarifa, Teiman, Ayimensa, Danfa, Otinibi and Pantang. However these communities are rapidly being transformed through the development of housing and commercial properties. In such areas, a contrasting phenomenon of traditional housing livelihoods is emerging side by side with contemporary housing development.

3.3.2   Political administration and structure

La-Nkwantanang Madina Municipal Assembly, the highest administrative and political authority in the municipality, was established by an Act of Parliament (Legislative Instrument (L.I.) 2030) and inaugurated in June 2012. It was carved out of the Ga East Municipal Assembly.

The Assembly consist of a legislative and deliberative body which is the highest decision making body of the Assembly. This body consist of the elected representatives (70%) of the various electoral areas and appointed representatives (30%). It is headed by Municipal Chief Executive while one of the Assembly Members is elected as a Presiding Member. The Assembly through the Local Government Act 1993 462 (section 10 sub sections 1,2,3,4 and 5), carries out the legislative, deliberative and executive functions of Government.

The Municipality is divided into 9 electoral areas with 2 zonal councils. The Assembly has 16 assembly members made up of 10 elected and 5 appointed members. The Municipal Assembly has one constituency thus one Member of Parliament, who is a member of the Assembly without the right to vote.

The Assembly is run through the committee system with the Executive Committee of the being overarching committee of the Assembly. Other deliberative and decision making committees of the Assembly include, the Finance and Administration Sub-Committee, the Justice and Security Sub-committee, The Development Planning Sub-Committee, The Social Survives Sub-Committee and the Statutory Planning Sub-committee.

The Administrative arm of the Assembly is headed by the Municipal Coordinating Director. There are 13 Departments performing various functions in the Municipality all of whom report to the Coordinating Director. The Assembly reports and answers to the Regional Coordinating Council and the Ministry of Local Government and Rural Development.

3.3.3 Social and cultural structure

La-Nkwantanang Madina municipality covers three traditional Paramountcies; namely the La Stool, the Danfa Paramountcy and the Oyarifa Paramountcy. In addition to these major traditional divisions, there are other areas in the municipality whose historical allegiance is to other groups. All these are part of the indigenous Ga Dangme people who settled in the area in the 16th and 17th Centuries covering a large area from the coast to the southern edge of the Akwapim – Togo Range.There are large groups of settler communities who have evolved their own systems of organization heavily influenced by their cultural heritage. The settler communities comprises those who settled in the area in the late 1950s and came from the Gonja, Dagomba, Wala, Frafra, and Hausa stock. These communities have evolved to become almost indigenous by establishing firm roots in the area.

There is significant number of other ethnic groupings in the Municipality whose numbers are substantial and play major roles in the affairs of the Municipality. The most significant among them include Akans, Ewes, Nzema's and Guans. This makes the municipality one of the most cosmopolitan and welcoming area in the Greater Accra region.

3.3.4   Health

There are 39 health facilities in the Municipality. Out of this number, two (2) are government polyclinics, two (2) health centres and two (2) Community Based Health Planning (CHPS) compounds. The Municipality has created ten (10) CHPS zones to enable community health workers to reach out to citizens on health education and immediate care.

The polyclinics are Madina Polyclinic, Kekele and the Rawlings Circle polyclinic. There are two (2) specialized hospitals both located at Pantang: the Pantang Psychiatry hospital and the FOCOS orthopedic hospital. The Alpha Medical Centre is a 40-bed mission hospital at Madina. It is the biggest medical facility in the Municipality. It is owned and run by the church of Pentecost. The Municipality is in the process of turning the Kekele polyclinic into a municipal Hospital. Most of the health facilities are privately run though all of them accept the National Health Insurance.

3.3.5   Economy

La Nkwantanang Madina Municipality is an economically active area with a vibrant economy. The 2010 population and housing census estimates that 70% of the population 15 years and older are economically active. Of the economically active population, 92.3% are employed. The private informal sector is the largest employer in the Municipality, employing 69.7% of the population, with females having relatively higher proportion (78.8%).

The major classifications of economic activities in the municipality include commerce, agriculture, service and manufacturing. The diversity of the Municipality's economy reflects on the vibrancy of the area.

Trading is the main economic activity in the municipality with the Madina market as the main one. As one of the biggest market in Accra, the Madina market has become a busy centre of commercial activity, attracting patrons and traders from all over the region and beyond. Items traded in this market include both perishable and non-perishable such as manufactured commodities, imported goods like cloth, utensils and a variety of spare parts. Other goods are cereals, livestock and second hand clothing. The trading sector is the biggest sector, and generates the highest employment and revenues to the citizens of the municipality.

3.4 Study variables

The dependent variable was the utilization of modern contraceptive methods with 0 for not using and 1 for using any methods.

The explanatory variables were:

Table 3.1 Explanatory variables

EXPLANATORY VARIABLES	CHARACTERISTICS	SCALE OF MEASUREMENT
Knowledge of respondent	Awareness Source of information	Nominal
Socio-demographic characteristics	Age Education level Ethnic group Religion Marital status Number of children Age of the youngest child Type of trader	Nominal / Ordinal
Practice and choice of methods	Methods use duration Reason for using Side effects	Nominal / Interval
Partner attitude	Awareness Acceptance Education level Occupation	Nominal / Ordinal

3.5 Sample size determination

According to the Ghana Demographic and Health Survey 2014, modern Contraceptive Prevalence Rate (mCPR) is 22% among all women.

The estimated sample size was calculated using the following formula:

$$n = \frac{P\,(1-P)\,Z^2}{d^2}$$

Where;

n= sample size,

Z= confidence interval = 95% (1.96),

P= Prevalence of contraceptive rate 22%,

d= precision/error tolerated (5%).

$$n = \frac{(0.22 \times 0.78) \times 1.96^2}{0.05^2} = 264$$

The expected minimum sample size for the study will be 264 female traders. However, an additional 42 female traders were added to the minimum sample size in order to increase the power of the study. Therefore, 306 respondents were interviewed.

3.6 Pre-testing

The pretesting of the questionnaire was done at Ogbojo sub-district market which is also located in the La-Nkwantanang Madina municipality and has few similar characteristics with the main Madina market. Participants were selected randomly. Pre-testing helped to determine the time needed to conduct a complete interview of one respondent, to ensure that the questionnaire is clear and well understood by female traders in local languages and to familiarize research assistants with field data collection after intensive training sessions.

3.7 Data handling

Two nurses were trained to assist the researcher with the data collection. Questionnaire administered were numbered serially. The completed questionnaires were checked

thoroughly at the end of each day for completeness. Questionnaires with mistakes and errors were discarded. Quality control checks were also performed for accuracy, reliability, precision and integrity of data collected. After this, they were put in an envelope and sealed.

3.8 Data analysis

The data was entered in Microsoft Office Excel 2007. After the cleaning, the data was exported into STATA Statistical software package (Stata Corp. 2007. *Stata Statistical Software: Release* 14. StataCorp LP, College Station, TX, USA) for statistical analyses. Chi-square tests for the association and logistic regression models for the strength of the association between the outcome and explanatory variables were performed. A p-value less than 0.05 at a confidence interval of 95% was considered significant.

3.9 Ethical consideration

Ethical clearance was obtained from ENSIGN College of Public Health, Institutional Review Board. Permission was also sought from the La-Nkwantanang Municipal Health Directorate and market leaders. Informed consent was obtained from participants after educating them of the purpose and process of the study, and the right to discontinue at any time they felt uncomfortable to continue the interview process. They were also assured of confidentiality and privacy. No names were written on the questionnaire.

3.10   Limitations of the study

The study involves relatively small sample that may not be statistically representative of all female traders in fertility age at the La-Nkwantanang Madina municipality market.

The challenge met during data collection was the lack of concentration of some participants due to the fact that they were also interacting with clients and other vendors at the same time.

3.11   Assumptions

It was assumed that the current modern contraceptive prevalence rate is 22% and all participants were aware of any modern contraceptive methods. External factors that could influence the research and were beyond control did not impact the conduct of the study.

3.12   Expected outcomes

This study would provide results in line with data available at the national level. It would also help improve women's health and their contribution into Ghana's economy and serve as a reference point for future research on modern family planning among female traders in Ghana.

3.13   Dissemination plan

The thesis will be submitted to the Ensign College of Public Health. Findings from this study will also be shared with the La-Nkwantanang Municipal Health Directorate and the leadership of the traders' association of the market where the study was conducted to enable them improve on the quality of health of the women. Finally, the results will also be published in peer–reviewed journals as a contribution to scientific knowledge on the discipline of Public Health.

CHAPTER FOUR

RESULTS

4.0 Socio-demographic characteristics of respondents

Out of the 306 respondents, 135 (44.1%) fall within the age group of 25-34 years. Only 68 (22.2%) were aged between 15 and 24 years. The mean age of the study subjects was 31.1 ± 7.7 years. More than half (52.6%) of participants were married at the time of the survey. Those who were co-habiting were only 14 (4.6%), while 99 (32.3%) were single. Majority (81.7%) of the study participants were Christians followed by Moslems (18%) and only one professed faith in the African Traditional religion.

Most of the respondents reported the highest level of education attained at the time of the study was Middle or JHS (45.4%), followed by Secondary level education (25.1%) and 13.1% with no formal education. Only sixty seven (21.9%) of respondents mentioned they have never given birth. The average number of kids among those having children was 2 (SD +/- 1.3). 261 out of 306 (85.6%) respondents were permanent vendors at the market with the rest (14.4%) being seasonal vendors. The most represented ethnic groups were Akan and Ewe with 43.8% and 22.5% respectively representing the study subjects in the sampled population (Table 4.1).

4.1 Modern Contraceptive prevalence rate

Eighty respondents out of three hundred and six were using any modern contraceptive methods. This implies that, the modern contraceptive prevalence rate was 26.1% at the time of the survey (Table 4.1).

Table 4.1 Socio-demographic characteristics of respondents

Variables (n=306)	Frequency	Percent (%)
Age		
15 – 24	68	22.2
25 – 34	135	44.1
35 – 49	103	33.7
Education level		
None	40	13.1
Primary school	34	11.1
Middle or JSS	139	45.4
SSS/SHS/vocational	77	25.1
Tertiary	16	5.3
Ethnic group		
Akan	134	43.8
Ewe	69	22.5
Ga/Adangme	30	10
Hausa	58	19
Others	15	4.7
Religion		
Christianity	250	81.7
Islam	55	18
Traditional	1	0.3
Marital status		
Single	99	32.3
Married	161	52.6
Divorced/Widowed	32	10.5
Co-habiting	14	4.6
Having children		
Yes	239	78.1
No	67	21.9
Type of trader		
Permanent	262	85.6
Seasonal	44	14.4
Current use of any modern contraceptive methods		
Yes	80	26.1
No	226	73.9
Age	Mean = 31.1	SD = +/- 7.7
Number of children	Mean = 2.5	SD = +/- 1.3

4.2 Knowledge level and use of modern contraceptive methods

Results from the analysis further show that, majority of respondents 295 (96.4%) knew about at least one modern contraceptive methods while 11 (3.6%) were not aware of any methods. Among those who were aware, only 27.2% were users while 72.8% were non-users of any form of modern contraceptives. The main source of information about modern contraceptives was from the both mass media (48.4%) for both users and non-users followed by health workers education (30.4%), and friends and relatives (17.6%) (Table 4.2).

Table 4.2 Knowledge level and use of modern contraceptive methods

Variables (n=306)	Modern contraceptive use		Total (%)
	User N (%)	Non-user N (%)	
Awareness			
Yes	80 (27.2)	215 (72.8)	295 (96.4)
No	0	11 (100)	11 (3.6)
Source of information			
Friends and relatives	9 (11.2)	45 (19.9)	54 (17.6)
Health workers	28 (35)	65 (28.8)	93 (30.4)
Mass media	40 (50)	108 (47.8)	148 (48.4)
Others	3 (3.8)	8 (3.5)	11 (3.6)

4.3 Socio-demographic characteristics and use of modern contraceptive methods

Out of the 40 respondents who indicated they have not receive any form of formal education, only ten were using some form of contraception. Among the non-users (226), 45.6%, 25.6% and 6.2% of participants have respectively reported to have Middle,

45

Secondary and Tertiary levels of education as their highest attained educational status at the time of the survey. A Pearson's Chi-square analysis to measure the relationship between usage and educational status revealed no association between the respondents' educational level and use of contraception (Table 4.3).

Table 4.3 Distribution of contraceptive use by educational level

Level of education	Users (%)	Non-users (%)	P-value
None	10 (12.5)	30 (13.3)	
Primary school	13 (16.2)	21 (9.3)	
Middle or JSS	36 (45)	103 (45.6)	0.4
SSS/SHS/Vocational	19 (23.7)	58 (25.6)	
Tertiary	2 (2.6)	14 (6.2)	
Total (%)	80 (100)	226 (100)	306

Out of the 80 users of modern contraceptives sampled in the survey, only 16 (20%) of them were Muslims. Christians were representing 82.3% of non-users out of the 226 none-users non-users respondents with the remaining being either Muslims (17.3%) or Traditionalist (0.4%) (Table 4.4).

Table 4.4 Distribution of contraceptive use by religion

Religion	Users (%)	Non-users (%)	Total
Christianity	64 (80)	186 (82.3)	250
Islam	16 (20)	39 (17.3)	55
Traditional	-	1(0.4)	1
Total	80 (100)	226 (100)	306

Among current users, majority 45 (56.3%) were married women, 4 (5%) were in some form of sexual relation and the remaining were single and divorced or widowed women. There were almost equal proportion of users and non-users of contraception among married women (56.3% users versus 51.33% none-users) (Table 4.5).

Table 4.5 Distribution of contraceptive use by marital status

Marital status	Users (%)	Non-users (%)	Total
Single	20 (25)	79 (35)	99
Married	45 (56.3)	116 (51.3)	161
Divorced/Widowed	11 (13.7)	21 (9.3)	32
Co-habiting	4 (5)	10 (4.4)	14
Total	80 (100)	226 (100)	306

Majority of modern contraceptive users were Akan (35%), followed by Ewe (26.2%) and Hausa (17.5%). The similar distribution is observed among none-users. The proportion of

GA/Adangme using modern contraceptives was higher than those not using any methods (Table 4.6).

Table 4.6 Distribution of contraceptive use by ethnicity

Ethnicity	Users (%)	Non-users (%)	Total
Akan	28 (35)	106 (47)	134
Ewe	21 (26.2)	48 (21.4)	69
Ga/Adangme	11 (13.7)	19 (8.4)	30
Hausa	14 (17.5)	44 (19.5)	58
Others	6 (7.6)	9 (3.7)	15
Total	80 (100)	226 (100)	306

About four out of ten (41.2%) users of modern contraceptives fall within the age group 25-34 years, followed by 33.3 % within the age group 35-49 years. Forty eight (21.2%) of non-users of modern contraceptives non-users were aged between 15 and 24 years.

Table 4.7 Distribution of contraceptive use by age

Age group (years)	Users (%)	Non-users (%)	Total
15 - 24	20 (25)	48 (21.2)	68
25 - 34	33 (41.2)	102 (45.1)	135
35 - 49	27 (33.3)	76 (33.7)	103
Total	80 (100)	226 (100)	306

Table 4.8 indicates that 83.7 % of contraceptives users have at least one child. This proportion is higher as compared to the percentage among non-users (76.1%).

Table 4.8 Distribution of contraceptive use by childbirth

Having children	Users (%)	Non-users (%)	Total
Yes	67 (83.7)	172 (76.1)	239
No	13(16.3)	54 (23.9)	67
Total	80 (100)	226 (100)	306

Majority of non-users of modern contraceptives (84.1%) were permanent vendors. Only 10% of seasonal vendors were using modern contraceptives among users.

Table 4.9 Distribution of contraceptive use by type of trader

Type of trader	Users (%)	Non-users (%)	Total
Permanent	72 (90)	190 (84.1)	262
Seasonal	8(10)	36 (15.9)	44
Total	80 (100)	226 (100)	306

4.4 Choice and practice of modern contraceptive methods

Injectable (43.8%) was the most commonly used method among modern contraceptive users followed by pills (25%) and IUD (12.5%). Diaphragm and female sterilization were the least used methods (2.5%) (FIG 2).
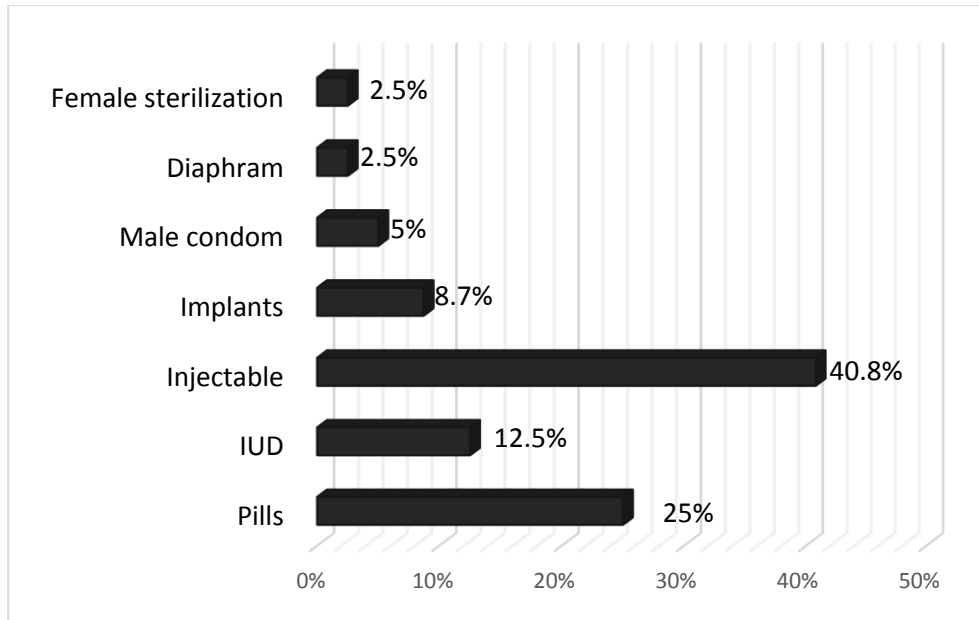
FIG 4.1: Distribution of choice of modern contraceptive among users

The duration of modern contraceptives use was more than 12 months for most users (46.3%) followed by less than 6 months utilization (33.7%) and between 6 and 12 months (20%) (FIG 3).
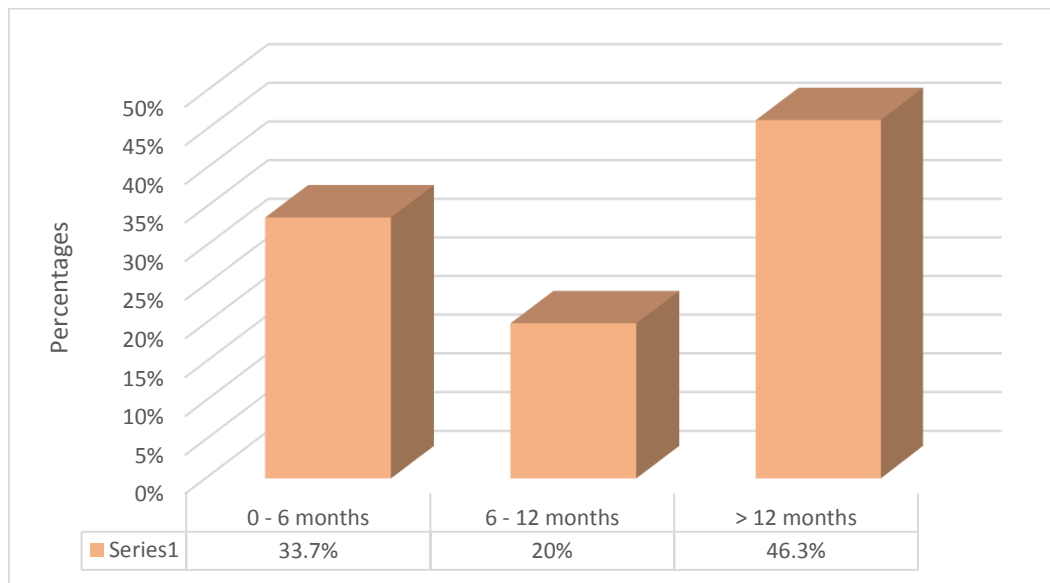
FIG 4.2: Distribution of duration of modern contraceptives use

The two main reasons detailed out by the respondents for using modern contraceptives were to delay pregnancy and child bearing (54%), and to prevent unwanted pregnancy (34.6%) among contraceptive users (FIG 4).
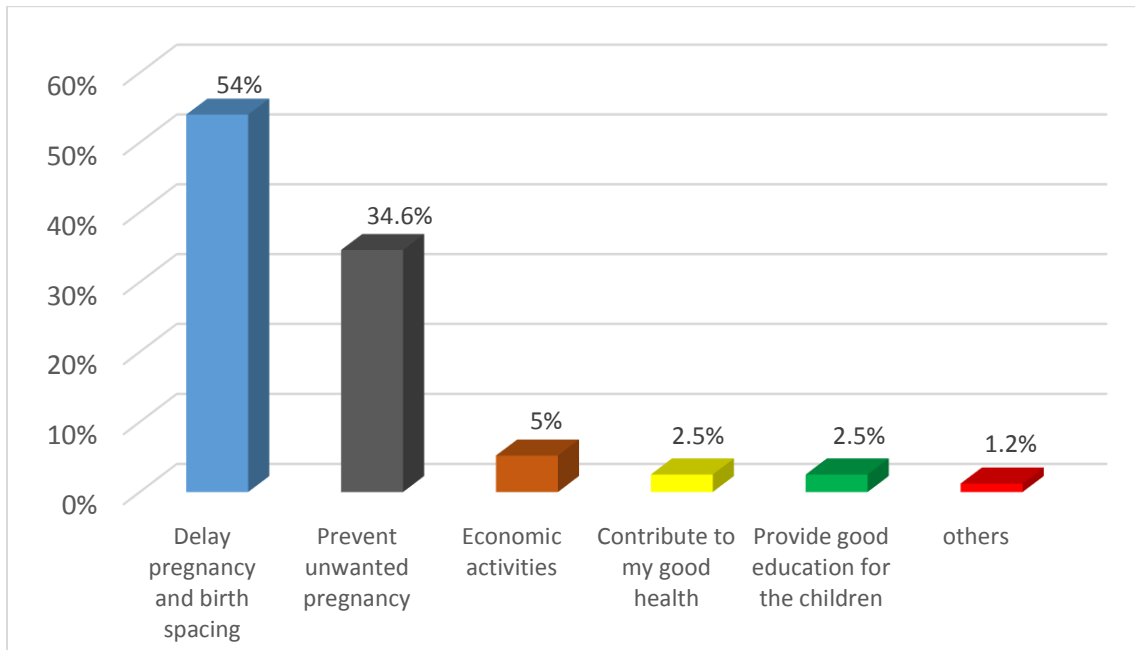
FIG 4.3: Distribution of reasons for using modern contraceptives

Out of the 80 modern contraceptive users, 34 (42.5%) admitted not experiencing any known side effects while 46 (57.5%) complained about side effects (FIG 5).
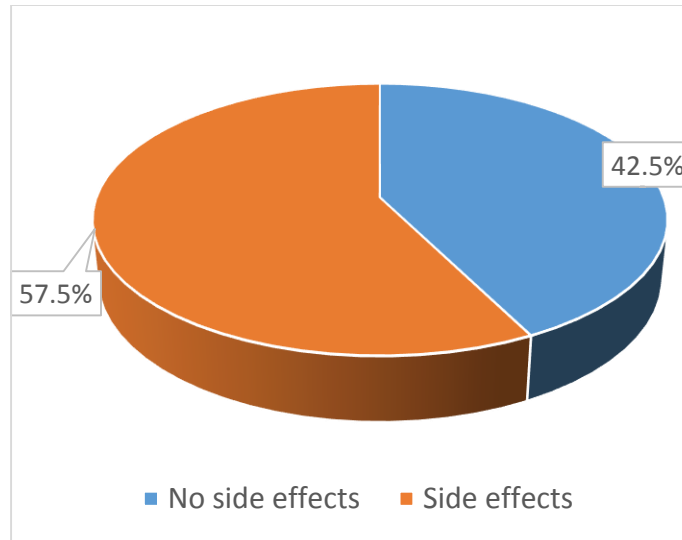
FIG 4.4: Distribution of modern contraceptives effects among current users

The most common reported side effects among the 46 users was irregular vagina bleeding (52.2%), followed by sickness (17.4%) (Table 4.10).

Table 4.10 Distribution of modern contraceptive side effects among users

Variables (N=46)	Frequency	Percent (%)
Side effects		
Weight gain	4	8.7
Sickness	8	17.4
Irregular vagina bleeding	24	52.2
Nausea/vomiting	3	6.5
Mood swings	3	6.5
Others	4	8.7

Out of the 226 respondents currently not using any modern contraceptive, only 49 (21.7%) have used modern contraceptives before their participation in the study.

52

Fear of side effects (47.3%) was the primary reason for not using contraceptive methods. Religious belief accounted for 16% of reasons for not practicing modern contraception (Table 4.11).

Table 4.11 Past use of modern contraceptives among current non-users

Variables (N=226)	Frequency	Percent (%)
Past use of modern contraceptives among current non-users		
Yes	49	21.7
No	177	78.3
Reasons for not using modern contraceptives		
Due to religion belief	35	16
Due to fear of side effect	104	47.3
Due to pressure of husband	8	3.6
Due to desire for more children	12	5.5
Others	61	27.6

4.5 Partner attitude towards modern contraceptive users

Out of the total number of modern contraceptive users, 63.7% admitted having informed their sexual partners prior to usage (Table 4.12). For those who have informed their partner, majority (78%) said their partner approved the use of modern contraceptives and were happy.

Table 4.12 Partner attitude and background towards modern contraceptive use

Variables	Modern contraceptive users	Percent (%)
Partner awareness (N=80)		
Yes	59	63.7
No	21	36.3
Partner attitude (N=59)		
Approve and happy	46	78
Approve but not happy	7	11.8
Indifferent	6	10.2

To understand the background of their sexual partners, the data was further explored in that regards. Most of their women, 31 out of 80 reported their partners (38.7%) have no formal education, followed by those with primary education. For their occupational status, self-employed and government workers represented respectively 65% and 17.5% of respondents' partners. This proportion was higher among those whose partners were aware than those whose partner were not aware as described in Table 4.13.

Table 4.13 Partner awareness of modern contraceptives use and demographic characteristics

Variables (N=80)	Partner awareness		Total (%)
	Yes (%)	No (%)	
Level of education			
No education	23 (39)	8 (30.1)	31 (38.7)
Primary school	19 (32.2)	3 (14.3)	22 (27.5)
Middle or JSS	0	2 (13.5)	2 (2.6)
SSS/SHS/vocational	3 (5.1)	2 (13.5)	5 (6.2)
Tertiary	14 (23.7)	6 (28.6)	20 (25)
Occupation			
Unemployed	0	1 (4.8)	1 (1.2)
Self-employed	40 (67.8)	12 (57.1)	52 (65)
Private employment	7 (11.8)	5 (23.8)	12 (15)
Government employment	11 (18.6)	3 (14.3)	14 (17.5)
Others	1 (1.8)	0	1 (1.2)

CHAPTER FIVE

DISCUSSION

5.0 Introduction

One of the major focus of the Sustainable Developments Goals is improving reproductive health for economic growth (Starbird *et al.,* 2016). This study at the La-Nkwantanang Municipality Market focused on assessment of determinant factors that affect the utilization of modern contraceptive methods among female traders of reproductive age. No factors were found to be significantly associated with the use of modern contraceptives. However, the findings revealed important information necessary in the understanding of modern contraceptives uptake among these group of active women. Therefore, this chapter sought to discuss some of the findings, their limitations and repercussions for women empowerment and economic development.

5.1 Modern contraceptive prevalence rate

The study revealed that 80 respondents out of 306 were using at least one modern contraceptive methods at the time of the survey. The modern contraceptive prevalence rate of 26.1% found in this population differs with 25.3% in a similar study conducted in Nigeria (Mo *et al.,* 2013). The variations in prevalence may be the result of the difference in sample size with the Nigerian study having only 225 participants. However, due to the small sample size, this study was not estimated to be representative of the population of women traders in their fertility ages in the informal sector in Ghana.

56

Again the prevalence rate was higher than the Greater Accra region rate of 19.4% which is dominantly an urban area. At the same time, the region has the lowest fertility rate of 2.8 among all regions in Ghana (Ghana Demographic and Health Survey, 2014). Strulik reported that there was a strong negative association between the total fertility rate and the prevalence rate of modern contraceptive in developing countries (Strulik, 2015).

Furthermore, considering the low and stagnant levels of remuneration, insecurity of employment, instability of income, excessively long working hours, and abysmal and unhealthy working condition, market women may result in high utilization of modern contraceptives in order to increase their income through an increase in time spent at the market and in productivity (Kingslow, 2003).

5.2 Knowledge level and use of contraceptive

The level of awareness about one form of modern contraception or the other among the respondents was 96.4%. This result was slightly higher than the level of awareness (93.4%) among female traders in Plateau State in Nigeria (Envuladu *et al.,* 2012). Again, it was close to the overall level of knowledge in Ghana as reported in the 2014 Ghana Demographic and Health Survey which is 98.7% (Ghana Demographic and Health Survey, 2014).

A study conducted in North-West Ethiopia among street women found that, 93.1% of the participants have heard about modern contraceptives. The study suggested that the high level of awareness could be explained by wide scale increase of information on contraceptives (Zeleke, 2012).

In this sampled urban population, the main source of information for both user and non-users was mass media (48.4%) such as television, radio or newspapers, followed by health worker education (30.4%) and friends/relatives (17.6%). Mass media provide an opportunity to be sending targeted and specific information through promotional messages that are designed based on evidence from research (Baiden *et al.,* 2016).

In contrast, a study conducted in the urban town of Kohat in Pakistan (2011) revealed that the main source of information about modern family planning were friends/relative followed by health workers. The high illiteracy of women respondents make them mostly dependable of their male partners or health workers for modern family planning education (Jabeen *et al.,* 2011).

Awareness and knowledge of different contraceptive methods is the key to select the appropriate contraceptive and to practice them. Out of the 295 participants who were aware of modern contraceptive, only 80 (27.2%) were currently using contraception. There was a wide gap between the knowledge and practices. This result compared favorably with findings from surveys in Tanzania (Tanzania Demographic and Health Survey, 2010) and in Uganda (Uganda Demographic and Health Survey, 2012).

In a qualitative study conducted in the southern region in Malawi, Chipeta *et al.* found that women were not using modern contraceptives for reasons such as negative attitudes, myths and beliefs that surround the use of family planning methods and partner refusal. The study highlighted a common belief among woman participants that contraceptives affect male genital organs, causing men to be impotent as stated by a female participant:

"If a man sleeps with a woman who is taking contraceptives, its power renders him weak (impotent)" (Chipeta *et al.,* 2010)

5.3 Socio-demographic characteristics of respondents and use of modern contraceptives

The most represented age group of respondents was 25-34 years with 44.1% of participants with also the highest percentage of contraceptive users (41.2%). The next age group was 35-49 years (33.7%) representing 33.3% of contraceptive users and finally women aged between 15-24 years (22.2%) represented only one out of four contraceptive users. Again, only one tenth of contraceptive users have no formal education. Forty- five percent of them have middle education level at the time of the study followed by secondary education (23.75%). Contraceptive use was more than twice higher among married women (56.3%) than single ones (25%).

These findings were in line with those from an analysis of contextual factors influencing modern contraceptive practice in Nigeria using data from the 2013 Demographic and Health Survey. The Study found an increase in modern contraceptive uptake with women's age. Furthermore, woman level of education was associated with use of modern contraceptives. Women with secondary education and above were eight times more likely to use contraceptives compared with women with no formal education (Ejembi *et al.,* 2015).

Eliason *et al.,* suggested that educational attainments of women were found to be significant in the utilization of modern contraceptive in a study conducted in the Volta

Region of Ghana. Women with some formal education were more likely to practice modern contraception (Eliason *et al.,* 2014).

A cross sectional study conducted in Ethiopia found that respondents 25-34 years were more likely to use modern contraceptives than other age groups. The survey also demonstrated that one important predictor of contraceptive use was education. Respondents who had secondary education and above were more 2.5 times more likely to use modern contraceptives than those with primary or lower education (Tekelab *et al.,* 2015).

Marital status is an important factor contributing in the use of modern contraceptive as described by Megabiaw who reported that modern contraceptive use was higher among currently married street women (54%) than unmarried counterparts (21.8%) (Megabiaw, 2012). Tseganeh suggested that a high percentage of married women using modern contraceptive could be due to daily exposure to sexual intercourse with their husband and fear of unwanted pregnancy. He also added that married women were not scared about cultural influence (Tseganeh, 2005).

However, Stephenson *et al.* found that in Burkina Faso, Malawi, Ivory Coast and Tanzania, women who were never married had higher use of modern contraceptive than did married women or those in non-marital unions (Stephenson *et al.,* 2007). In addition, Bbaale and Mpuga also found that the probability of using a modern family planning method was smaller for married women than for all women. They believed that because women need to seek their partner approval before using any contraceptives, this reduced their chances for using them (Bbaale & Mpuga, 2011).

5.4 Choice and practice of contraception

This study found that injectable were the most used methods among respondents (40.8%), followed by pills (25%) and IUD (12.5%). The wide use of injectable, pills and IUD contraceptive methods by respondents were in agreement with national trends (Ghana Demographic and Health Survey, 2014) and a study from Ethiopia (Megabiaw, 2012). The injectable could be preferred to other methods because it was described as suitable for covert users of modern family planning in area where contraceptive use was associated with promiscuity (Eliason *et al.,* 2014; Baiden *et al.,* 2016).

A cross sectional study among market women in Nigeria found that it was rather male condom which was reported as the most used modern contraceptive (Envuladu *et al.,* 2012). In this sampled population, the use of condom was very low. This could be explained by the fact that most contraceptive users were married and may experience partner disapproval based on traditional and religious beliefs.

The most used methods were linked with reasons for using modern family planning. Delay in pregnancy and birth spacing (54%) and prevention of unwanted pregnancy (34.6%) were the two main reasons found in this study. Frost and Darroch suggested that there is a strong association between women's motivation to avoid pregnancy and contraceptive use after conducting a nationwide survey on factors associated with contraceptive choice and inconsistent use in the United States. They also demonstrated that women who use long-acting reversible methods have the lowest probability of facing method failure (Frost & Darroch , 2008).

Unfortunately, fear of side effects was the main cause of non-use of modern contraceptive among. A study in rural Ghana found that perceived misconceptions about family planning in general was a major reason for refusing to utilize contraceptive methods. Some women thought that modern contraceptives are meant for only married people. others believed that they are harmful to the womb (Apanga & Adam, 2015).

5.5 Partner attitude towards contraceptive users

This study found that out of the 80 modern contraceptive users, 21 (36.3%) admitted that their partners were not aware that they were utilizing modern contraceptive. This situation refers as covert use of contraceptive. A cross sectional mixed-method study in Sunyani in the Brong Ahafo Region of Ghana reported a prevalence of 34% of covert contraceptive use. It is a practice that women do not willingly admit. Therefore, this phenomenon may be underestimate. During focus group discussions and in-depth interviews, a series of reasons were mentioned by participants. Some of them said they did not want to tell their partners since they were not married to them:

> "*Once the man has not married me, I am my own person and I do not need to let him know". "If he hasn't married me yet, then I am myself, and what will help me is what I will do".*
 (Female participant)

Others were keeping the use of modern contraceptive for themselves in order to claim money to their partners:

"You may have boyfriend who is stingy and the only way you will be able to get money off him will be to feign pregnancy and appear to agree with him to abort it. How will you be able to do that if you let him know you are using family planning method?"

(Female participant)

The study also found that in the often male-dominated relationships, single women were more likely to practice covert contraceptive use in order to minimize their losses in an eventual break out (Baiden *et al.,* 2016). On the contrary, 63.7 % of users have their partners aware with 78% approving and being happy. This could be as a result of discussion between partners about fertility issues in the couple (Tekelab *et al.,* 2015).

Eliason *et al.* reported that women who discussed family planning methods with their partners were more likely to use modern contraceptives (Eliason *et al.,* 2014).

A cross sectional study in southeast Nigeria found that men's awareness of, and support for, modern contraceptives were largely associated with the spouse's desire to use contraception. The study also suggested that men may potentially have more decision-making power with the actual desire of family planning uptake (Ezeanolue *et al.,* 2015).

Considering the educational level, we found that majority of male partner (61%) have some form of formal education. This result was in line with findings from a survey carried out in Uganda and reported that male partner's level of education has a positive impact on the use of contraceptives. However, this impact was lower than of the woman's education (Bbaale & Mpuga, 2011).

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.0 Conclusion

Rapid population growth is one of the serious problems the world is facing now, for which Ghana is no exception. This, if not properly contained will have far-reaching effect in all areas of life, more so in the resource challenged settings. Women should be included in all aspects of reproductive health and family planning programs given the important role they play in the decision making process in the use of modern contraceptive.

This cross-sectional study sought to determine key factors affecting the utilization of modern contraceptive methods among female traders in the reproductive ages in the La-Kwantanang Madina Municipality market in the Greater Accra Region of Ghana. The contextual approach of this research took into consideration three important aspects of contraceptive use: reproductive health services, socio-economic and demographic factors.

The results showed that the current contraceptive prevalence rate within this sampled population was 26.1%, higher than 19.4% and 22% respectively the Greater Accra Region and the national prevalence rate. The level of awareness was almost universal (96.4%) due the power of mass media as the main source of information.

Use of modern contraceptive methods was found high among respondents between 25-34 years (44.1%), with some formal educational attainment, married (56.3%), Christians (80%) and having at least one child (83.7%) at the time of the survey. However, a Pearson's Chi-square analysis to measure the relationship between usage and socio-demographic characteristics

revealed no association between the respondents' socio-demographic characteristics and use of modern contraceptive.

Injectable, pills and IUD emerged as the most utilized modern methods among contraceptive users. Reasons for using these methods were mainly to delay pregnancy and birth spacing and to prevent unwanted pregnancy. Conversely, non-users mentioned fear of side effects of modern contraceptives as primary reason for not practicing contraception.

Finally, the findings revealed that 36.3% of contraceptive users have not informed their partners. However, some formal educational attainment from partner were found among contraceptive users who have inform their partners.

6.1 Recommendations

Considering the findings of this study, the following recommendations are formulated for key stakeholders with the intention of improving contraceptive use among women engaged in the informal sector especially traders:

6.1.1   Ministry of Health /Ghana Health Service

The informal sector plays a key role in economic development. It also provides employment to the majority of active women in the country. However, modern contraceptive prevalence rate is low among women traders and in the general population. I would recommend to the Ministry of Health through Ghana Health Service, to increase government commitment in mobilizing resources needed and implementing various policies such as the National

Population Policy and appropriate interventions for increasing the level of contraceptive use among market women in Ghana.

6.1.2   District Health Management Team of La-Nkwantanang Madina Municipality

There was no association found between contraceptive use and socio-demographic characteristics of respondents. I would like to recommend to the DHMT to conduct further research in this population of active women of the informal sector. Looking at the crowding nature of the market, the factor of simple systematic random sampling should be effectively applied in other to minimize data contamination and bias from respondents.

Furthermore, it was also found that covert contraceptive use was high among contraceptive users. This cannot be ignored by the health system at the local and national level. Qualitative research should be carried out to understand sociocultural norms and behavioral factors attached to this practice.

The findings clearly showed that there was a high percentage of non-users of modern contraceptive methods who were afraid of side effects of contraceptive products and procedures. Intensive health education and promotion activities should be organized by the DHMT and executed at the market. Market women should be sensitized on the importance of contraception, educated on the various methods available to satisfy their needs and made them to understand the positive impact of contraceptive use in their economic activities.

6.1.3 Market level

To increase contraceptive use among market women, focus group discussions and in-depth interviews need to be conducted in order to explore women's attitude and perception of contraceptive methods. Community based family planning clinics and distribution sites should be set up close to the market.

Male involvement has been found to be an important factors of increase contraceptive use. Advocacy programs in collaboration with market leaders and mass media such Community FM stations could be used to help spread the message among market women.

REFERENCES

Addah, A.O., Abasi, I.J. & Obilahi-Abhulimen, T.J., 2015. Contraceptive Choices amongst
    Antenatal Care Patients in a Tertiary Health Centre in Nigeria. *British Journal of Medecine
    & Medical Research*, 9, pp.1–10.

Ainsworth, M., 1996. A symposium on Fertility in Sub-Saharan Africa. *The International Bank
    for Reconstraction and Development/ The World Bank*, pp.81–84.

Akyeampong, E. & Fofack, H., 2013. The Contribution of African Women to Economic Growth
    and Development in Post-Colonial Africa. Historical Perspectives and Policy Implications.
    *Power Reduction and Economic Management Network. Gender and Development Unit/ The
    World Bank*, 6537(July), pp.1–39.

Apanga, P.A. & Adam, M.A., 2015. Factors influencing the uptake of family planning services
    in the Talensi district, Ghana. *Pan African Medical Journal*, 20, pp.1–9.

Asiimwe, J.B. et al., 2014. Factors associated with modern contraceptive use among young and
    older women in Uganda ; a comparative analysis. *BMC Public Health*, 14:926, pp.1–11.

Aweligeya, K.E., (2000). Enhancing contraceptive use: Assessment of detriminants of
    contraceptive use among rural women in northing Ghana. (Master of Public Health
    dissertation, Kwame Nkrumah University of Science and Technology).

Baiden, F. et al., 2016. Covert contraceptive use among women attending a reproductive health
    clinic in a municipality in Ghana. *BMC Women's Health*, 16, pp.1–10.

Bbaale, E. & Mpuga, P., 2011. Female education, contraceptive use, and fertility: Evidence from
    Uganda. *The Journal of Sustainable Development*, 6(1(2011)), pp.20–47.

Casterline, J.B., Perez, A.E. & Biddlecom, A.E., 1997. Factors Underlying Unmet Need for
    Famil Planning in the Philippines. *Studies in Family Planning*, 28(3), pp.173–191.

Chipeta, E.K., Kalilani-phiri, L. & Chimwaza, W., 2010. Contraceptive Knowledge , Beliefs and Attitudes in Rural Malawi : Misinformation , Misbeliefs and Misperceptions. *Malawi Medical Journal*, 22(June), pp.38–41.

Derose, L.F. et al., 2004. Does Discussion of Family Planning Improve Knowledge Of Partner's Attitude Toward Contraceptives ? *International Family Planning Perspectives*, 30(2), pp.87–93.

Ejembi, C.L., Dahiru, T. & Aliyu, A.A., 2015. Contraceptive Use in Nigeria. *Demographic and Health Surveys/United States Agency for International Development*, (September), pp.1–44.

Eliason, S. et al., 2014. Determinants of modern family planning use among women of reproductive age in the Nkwanta district of Ghana: a case-control study. *Reproductive health*, 11(1), p.65.

Emmanuel, A., Achema, G. & Omale, P.O., 2014. Contraceptive choices of married market women in a north central state of Nigeria. *International Journal of Nursing and Health Science*, 1(6), pp.41–45.

Envuladu, E.A. et al., 2012. Utilization of modern contraceptives among female traders in Jos South LGA of Plateau state , Nigeria. *International Journal of Medecine and Biomedical Research*, 1(3), pp.224–231.

Ezeanolue, E.E. et al., 2015. Impact of male partner ' s awareness and support for contraceptives on female intent to use contraceptives in southeast Nigeria. *BMC Public Health*, pp.1–6.

London Summit on Family Planning – July 11 , 2012. In pp. 1–10.

Foreman, M. & Spieler, J., 2013. Contraceptive evidence: Questions and Answers. *Population Reference Bureau*, pp.1–20.

Frost, J.J. & Darroch, J.E., 2008. Factors Associated with Contraceptive Choice and Inconsistent

Method Use , United States , 2004. *Perspectives on Sexual and Reproductive Health*, 40(2), pp.94–104.

Greene, M., Joshi, S. & Robles, O., 2012. *By choice, not by chance. Family planning, human rights and development.United Nations Population Fund Report*,

Gribble, J. & Haffey, J., 2008. Reproductive Health in Sub-Saharan Africa. *Population Reference Bureau*, pp.1–4.

Ghana STatistical Service, 2015. *National Employment Report*.

Ghana Statistical Service, Ghana Health Service & ICF International, 2014. Ghana Demographic and Health Survey. , pp.1–530.

Hubacher, D. et al., 2017. Reports of Major Impact short-acting methods : a randomized patient preference trial. *The American Journal of Obstetrics & Gynecology*, 216(2), pp.101–109.

Hubacher, D. & Trussell, J., 2015. A definition of modern contraceptive methods. *Contraception*, 92(5), pp.420–421.

International Labour Conference & Geneva, S., 2002. *Decent work and the informal economy*.

Jabareen, Y., 2009. Building a conceptual framework: philosophy, definitions, and procedure. *International Journal of Qualitative Methods*, 8, pp.49–62.

Jabeen, M. et al., 2011. Knowledge, attitude and practices of contraception in women of reprodutive age. *Gomal Journal of Medical Sciences*, 9(2), pp.5–7.

Kingslow, M.E., 2003. *informal economy*.

Lasee, B.A. & Becker, S., 1997. Husband-Wife Communication About Family Planning and Contraceptive Use in Kenya. *International Family Planning Perspectives*, 23(1), pp.15–33.

Lindstrom, D.P. & Muñoz-franco, E., 2017. Migration and the diffusion of modern contrceptive knowledge and Use in Rural Guatemala. *Studies in Family Planning*, 36(4), pp.277–288.

70

Manortey, S., Lotsu, P. & Tetteh, J., 2017. Factors Affecting Contraceptive Use among

    Reproductive Aged Women: A Case Study in Worawora Township, Ghana. *Journal of*

    Scientific Research and Reports, 13(1), pp.1–9.

Martin, C.E. et al., 2016. Contraceptive use among female sex workers in three russians cities.

    International Journal of Gynaecology and Obstetric, 131(2), pp.156–160.

Megabiaw, B., 2012. Awareness and utilization of modern contraceptives among street women

    in North-West Ethiopia. *BMC Women's Health*, 12(1), p.31.

Mekonnen, W. & Worku, A., 2011. Determinants of low family planning use and high unmet

    need in Butajira District , South Central Ethiopia. *Reproductive Health*, pp.1–8.

Miles, M. B. & Huberman, A.M., 1994. *Qualitative data analysis: An expanded sourcebook.* 2nd

    ed., Thousand Oaks: Sage.

Mo, B., Et, O. & Owoaje, E.T., 2013. Contraceptive use among female traders in ibadan, nigeria.

    Tropical Journal of Obstetric and Gynaecology, 30(August).

Najafi, F.S.A., Rahman, H.A. & Juni, M.H., 2011. Barriers to Modern Contraceptive Practices

    among Selected Married Women in a Public University in Malaysia. *Global Journal of*

    Health Sciences, 3(2), pp.50–55.

Osei-boateng, C. & Ampratwum, E., 2011. The Informal Sector in Ghana. *Friedrich Ebert*

    Stiftung, (October).

Prieto, I. & Boland, R., 1994. Respecting Human Rights in Population Policies: An International

    Customary Right to Reproductive Choice. *Indiana University School of Law*, 352(1981).

Singh, S.; Darroch, J., 2012. Adding It Up: Costs and Benefits of Contraceptive Services—

    Estimates for 2012. New York: *Guttmacher Institute and United Nations Population Fund*

    (UNFPA).

Singh, S., Darroch, J.E. & Ashford, L.S., 2014. Adding It Up: The Costs and Benefits of Investing in Sexual and Reproductive Health 2014. *United Nations Population Fund*, p.56.

Starbird, E., Norton, M. & Marcus, R., 2016. Investing in Family Planning: Key to Achieving the Sustainable Development Goals. *Global Health: Science and Practices*, 4(2), pp.191–210.

Statistics, N.B. of, 2010. Tanzania Demographic Health Survey.

Stephenson, R. et al., 2007. Contextual Influences on Modern Contraceptive Use in Sub-Saharan Africa Contextual Influences on Modern Contraceptive Use in Sub-Saharan Africa. *American Journal of Public Health*, 9(7)(April 2017), pp.1–7.

Strulik, H., 2015. Contraception and Development. *Journal of Economic Growth*, (March).

Tekelab, T., Melka, A.S. & Wirtu, D., 2015. Predictors of modern contraceptive methods use among married women of reproductive age groups in Western Ethiopia: a community based cross-sectional study. *BMC women's health*, 15(1), p.52.

Tseganeh, W., 2005. Assessment of quality of family planning service, Bahar-Dar special zone, Amhara regional state. *Thesis unpublished*, (May).

Uganda Demographic and Health Survey. *Uganda Bureau of Statistics, MEASURE DHS, ICF International*, (August).

United Nations, Department of Economic and Social Affairs, P.D., 2015. *World Fertility Patterns 2015*,

United Nations, Department of Economic and Social Affairs, P.D. (2015)., 2015. *World Population Prospects: The 2015 Revision, Key Findings and Advance Tables*,

Zamfir, L., 2016. Africa's economic growth. *European Parliamentary Research Service*, (January), pp.1–27.

APPENDIX 1: INFORMED CONSENT FORM

DATE_____   FORM ID_____

TIME OF INTERVIEW_____

Informed Consent

You are invited to participate in a survey on **ASSESSMENT OF FACTORS AFFECTING MODERN CONTRACEPTIVE USE AMONG FEMALE TRADERS: A CASE STUDY AT THE LA-NKAWATANANG-MADINA MUNICIPALITY MARKET IN THE GREATER ACCRA REGION OF GHANA** This is a research project being conducted by Francois CHIMOUN, a student at ENSIGN College of Public Health, Kpong.

Your participation in this survey is voluntary. Please answer the following questions as honestly as possible. It should take approximately 15 minutes to complete the questionnaire. You will receive no direct benefits from participating in this study. However, your responses may help inform policy and practice in the use of modern contraceptives methods.

All information collected will strictly be used for academic purposes and will be kept confidential. If you have any questions please ask or contact Francois CHIMOUN (0246722108)

    Thank you

APPENDIX 2: RESEARCH QUESTIONNAIRE

INSTRUCTIONS: Tick or circle your choice(s) from the options given.

SECTION A: DEMOGRAGRIPHIC OR BACKGROUNG INFORMATION

1	Age		|__|__|	AGE
2	Highest completed education level	**1.** None **2.** Primary **3.** Middle/JSS **4.** SSS/SHS/Vocational **5.** Tertiary	_____	EDU
3	Ethnic group	**1.** Akan **2.** Ga/Adangme **3.** Ewe **4.** Hausa **5.** Nzema **6.** Guan **7.** Other :_____	_____	ETHI
4	Religion	**1.** Christianity **2.** Islam **3.** Traditional **4.** others_____	_____	RELI
5	Marital Status	**1.** Married **2.** Engaged, but not yet married **3.** Single **5.** Divorced **6.** Widowed **7.** Other:_____	_____	MAS
6	Number of children		|__|__|	CHIL
7	How old is your youngest child?		|__|__|	CHILY
	Which type of trader are you?	**1.** Permanent (selling all year) **2.** Seasonal (selling during a specific period of the year) **3.** Occasional (selling from time to time) **4. Others**:_____		OCU
8	About what proportion of monthly household cost do you contribute to?	**1.** less than 25% **2.** 25 – 50% **3.** 50- 75% **4.** more than 75%	_____	HOUSE

SECTION B: MODERN CONTRACEPTIVE METHODS USE

1	Do you know of any modern contraceptive methods?	**1.** Yes **2.** No	_____	AWAR
2	Currently, what is your main source of information about modern family planning?	1. Husband 2. TV 3. Radio 4. Newspapers/Magazine 5. Health workers/Health facility 6. Friends and relatives 7. Other_____	_____	INFO
3	Are you currently using any modern contraceptive methods? -(if No, go to **question 7 and 8**) -(if Yes, go to **question 4,5,6 and 9 + section C: question 1 and 2**)	**1.** Yes **2.** No	_____	CUSE
4	Which methods are you currently using?	**1.** Pills **2.** IUD **3.** Injectables **4.** Implants **5.** Female condom 6. Male condom **7.** Diaphragm 8. Female sterilization 9. Others_____	_____	METH
5	How long have you been using this method?	**1.** 0 – 6 months **2.** 6- 12 months **3.** more than 12 months	_____	PERIOD
6	What is your reason for using modern contraceptive methods?	**1.** Delay pregnancy and Birth spacing **2.** Prevent unwanted pregnancy **3.** Contribute to my good health **4.** improved relationship with my partner **5.** enhance sexual pleasure **6.** provide good education for the children **7.** Economic activities **8.** other_____	_____	ADOPT
7	**Question 3** If you are not currently using any modern methods, what is the reason?	**1.** Due to religion belief **2.** Due to fear of side effect **3.** Due to pressure of husband **4.** Due to desire of male child **5.** Due to non-affordability **6.** due to desire for more children **7.** Other_____	_____	NOUSE
8	Have you ever use any modern contraceptive methods?	1. Yes 2. No	_____	PUSE

	(*if Yes, go to* **question 9**)			
9	Have you encountered any of the following problems often associated with modern family planning?	**1.** Weight gain **2.** weight loss **3.** Breast discomfort **4.** Irregular vagina bleeding **5.** Headache **6.** Genital itching **7.** Nausea and/or vomiting **8.** Delay return to fertility **9.** Marital distrust and partner suspicion on extramarital affair **10.** Disapproval of partner's relative **11.** Other_____	_____	EXP

SECTION C: RELATED TO USE OF MODERN CONTRACEPTIVES

1	Is your partner aware that you are using family planning?	**1.** Yes **2.** No	_____	PAWAR
2	How would describe your partners reaction to your use of family planning	1. Not applicable because he is not aware 2. Approve and Happy 3. Approve but not happy about it 4. Indifferent 5. Totally disapprove	_____	PREAC
3	Partner highest completed level of education	**1.** None **2.** Primary **3.** Middle/JSS **4.** SSS/SHS/Vocational **5.** Tertiary	_____	PEDU
4	Partner occupation	**1.** Unemployed **2.** Self-employed (trader, farmer, car driver…) **3.** Private employment (security man, shop keeper, banker…) **4.** Government employment (teacher, civil servant…) **5.** other_____	_____	POCU