

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

KUMASI

COLLEGE OF HEALTH SCIENCES

SCHOOL OF PUBLIC HEALTH

DEPARTMENT OF POPULATION, FAMILY AND REPRODUCTIVE HEALTH

INFLUENCE OF CONFLICT RESTRICTION (CURFEW) ON MATERNAL HEALTH

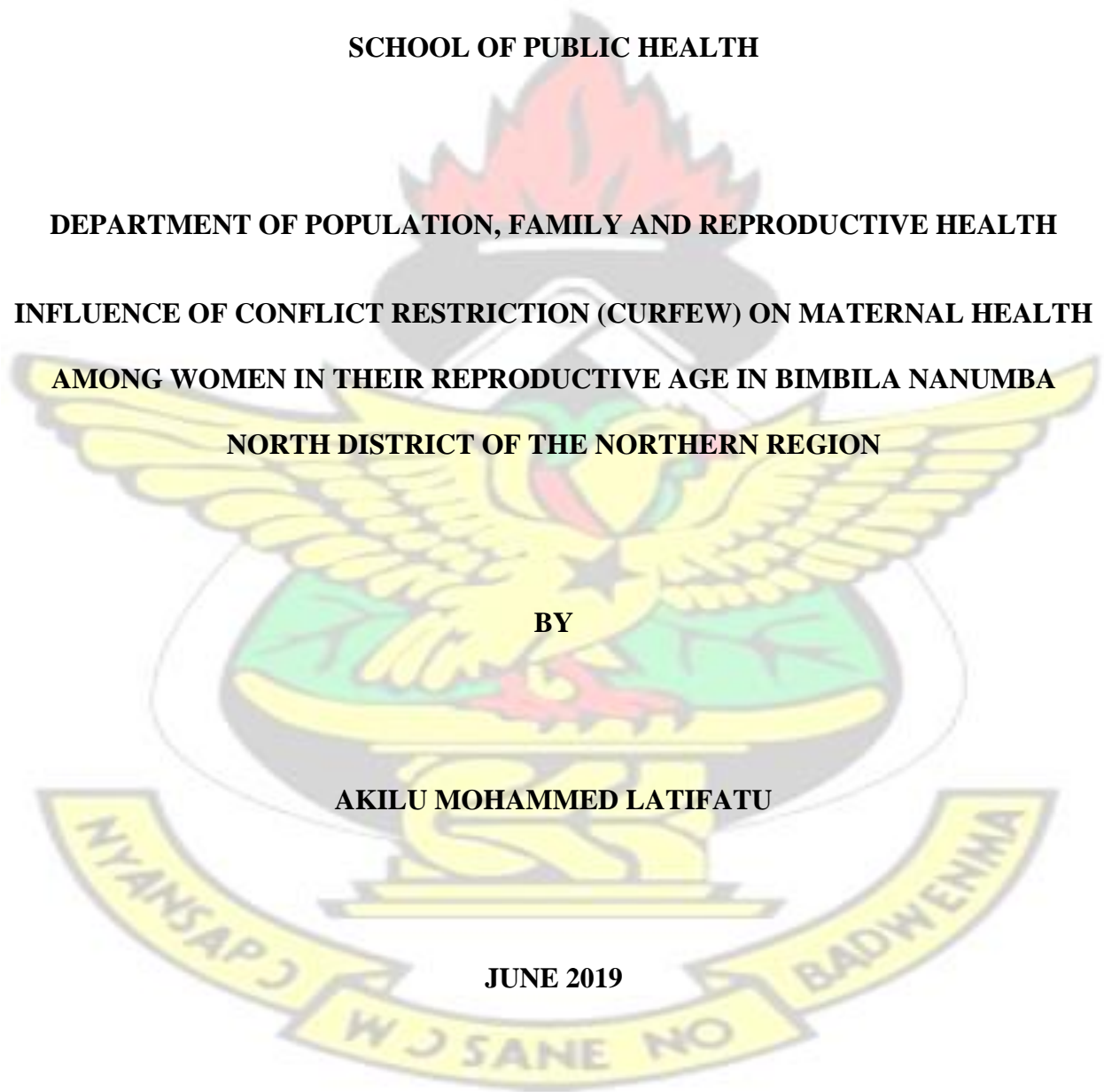
AMONG WOMEN IN THEIR REPRODUCTIVE AGE IN BIMBILA NANUMBA

NORTH DISTRICT OF THE NORTHERN REGION

BY

AKILU MOHAMMED LATIFATU

JUNE 2019



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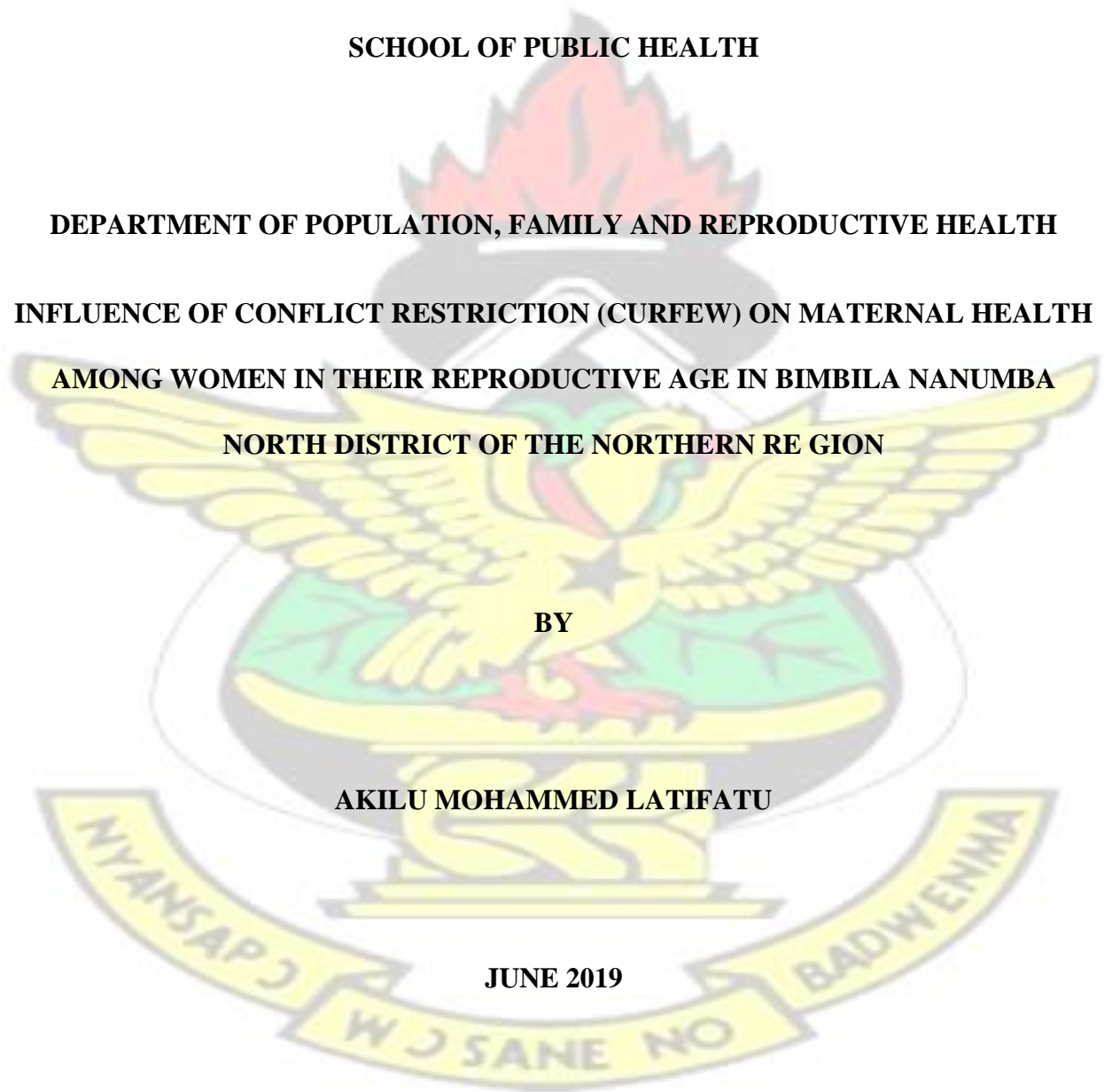
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JUNE 2019



DECLARATION

CANDIDATE'S DECLARATION

I Akilu Mohammed Latifatu hereby declare that, except for references to other people's work which has been acknowledged, this long essay consists of my own work produced from research undertaken under supervision and that no part has been presented for any degree elsewhere.

SIGNATURE..... DATE.....

NAME OF STUDENT

AKILU MOHAMMED LATIFATU

SUPERVISOR'S DECLARATION

SIGNATURE..... DATE.....

NAME OF SUPERVISOR:

DR.EMMANUEL NAKUA

HEAD OF DEPARTMENT

SIGNATURE..... DATE.....

DR. SAM NEWTON

DEDICATION

I dedicate this work to my wonderful family; Mr. and Mrs. Akilu, my siblings and my grandmother (Hajia Mariama Adam) for their love and support through all the seasons of my life. I say thank you and Almighty Allah Richly bless you.



ACKNOWLEDGEMENT

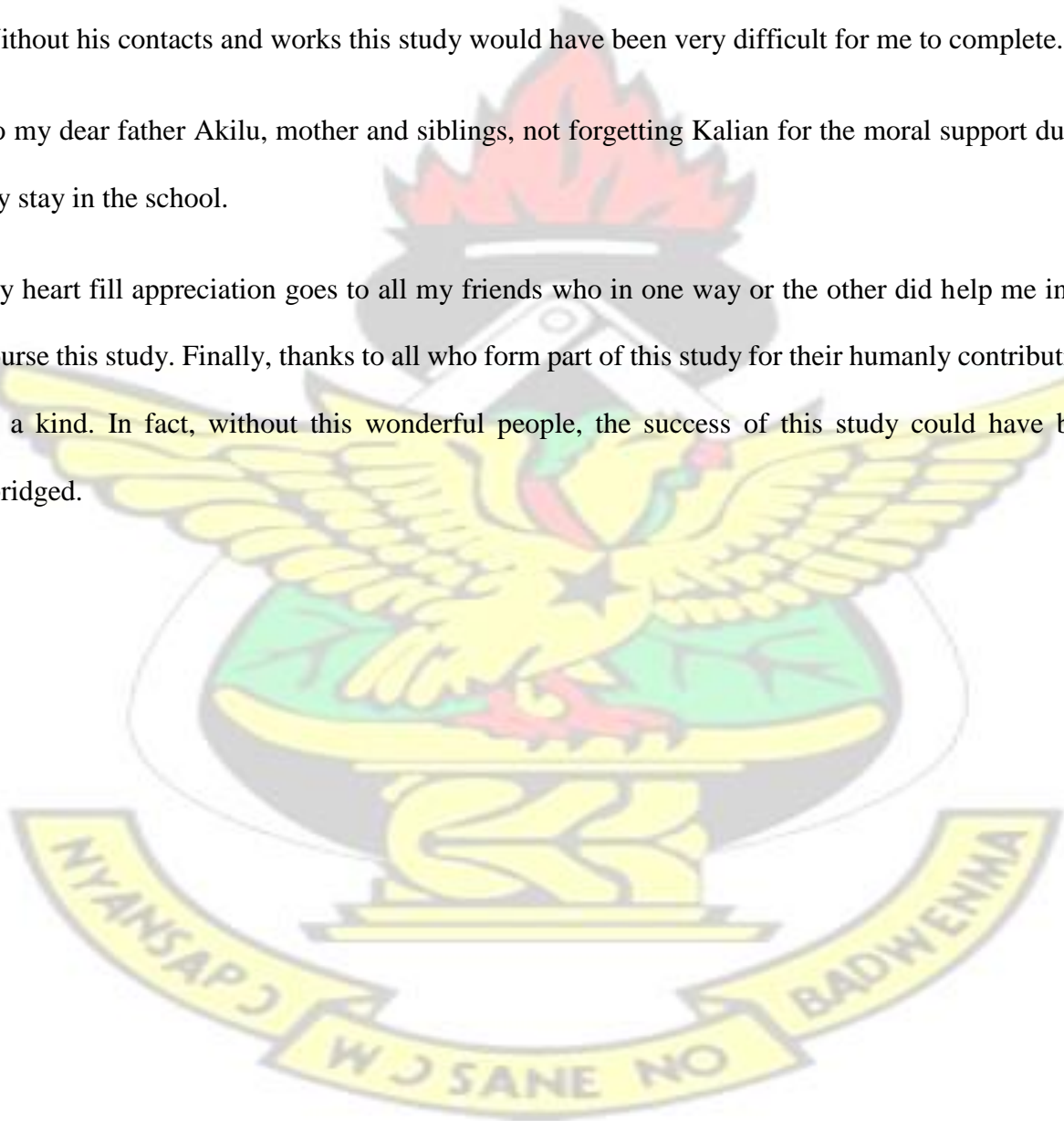
All praise and honour be to Allah the most high for all the wonderful things he has done for me in the successful completion of this study.

I sincerely acknowledge the inexorable assistance and endurance of my supervisor, Dr. Emmanuel Nakua for guiding me throughout this research and pushing me to produce something meaningful.

Without his contacts and works this study would have been very difficult for me to complete.

To my dear father Akilu, mother and siblings, not forgetting Kalian for the moral support during my stay in the school.

My heart fill appreciation goes to all my friends who in one way or the other did help me in the course this study. Finally, thanks to all who form part of this study for their humanly contributions of a kind. In fact, without this wonderful people, the success of this study could have been abridged.



LIST OF ABBREVIATIONS/ACRONYMS



CDD	Centre for Democracy and Development
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women
CRA	Child Rights Act
DHS	Demographic health survey
EPMM	Ending preventable maternal mortality
GAD	Gender and Development
GDP	Gross Domestic Product
IDEG	Institute for Democratic Governance
ISODEC	Integrated Social Development Centre
MDGs	Millennium Development Goals
MMR	Maternal Mortality Ratio
MRH	Maternal and Reproductive Health
NCWD	National Council for Women and Development
NETRIGHT	Net Work for Women's Right
SDGs	Sustainable Development Goals
SEND	Social Enterprise Development
SHR	Sexual and Reproductive Health
UNESCO	United Nations Educational, Scientific and Cultural Organization
WHO	World Health Organization
WID	Women in Development

ABSTRACT

BACKGROUND: Maternal deaths continuous to be a public health problem in Ghana and conditions that prevent women from seeking health care must be critically investigated. Populations affected by armed conflict experienced severe public health problems due to population displacement, food scarcity, and the collapse of basic health services resulting into poor maternal and child health care. This study aimed to determine the extent to which the conflict restriction has affected health indicators such as maternal health and challenges in accessing health care during restricted hours in Bimbilla.

METHOD: The study was a descriptive cross-sectional study. Quantitative technique was used to collect primary data for the study using a multistage sampling technique with structured questionnaire to collect data at household level.

RESULTS: The study agrees with other researches that curfew pose a threat against accessibility of health care services among women.

CONCLUSION: The study concludes that, unlike other studies, the study showed that the presence of curfew hours has not pose an increase in the rate of pregnancies among the women of Bimbilla. However, the study agrees with other researches that curfew pose a threat against accessibility of health care services among women.

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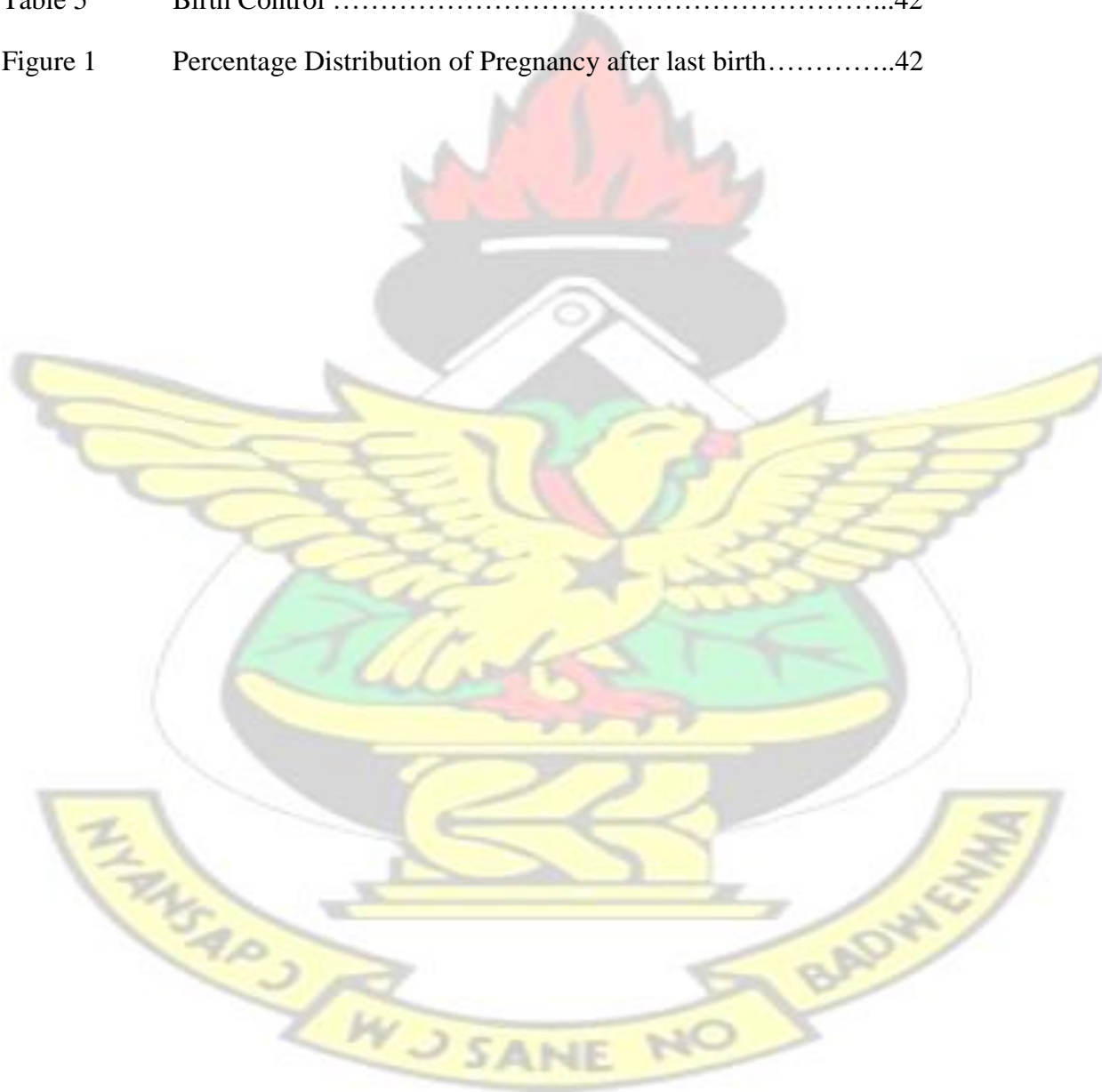
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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Conflicts is one of the man-made disasters among others which usually displaces human from their settlement and their normal way of life in most communities and environment, with approximately about 27 million people being internally displaced across the world including Middle East and Africa at large combined (Ferris and Stark, 2012, Statistics, 2010). It is normally a fight among people or colonies over beliefs, rights or position, supremacy and access limited resources with the usual goals of conflicting parties pronouncing their values (Thangjam, 2005). About 40% of this population which are reported to be from some 21 African countries have been hit with internal conflict (Ferris and Stark, 2012). Most of the times, the thought of being displaced itself causes some form of psychological trauma that a victim may have to endure for a relatively longer period which can cause illness and even death (Mowafi, 2011). Survivors of these disasters are faced with problems of shelter, food security, loss of livelihood, social marginalization, decrease access to healthcare services, sexual and economic exploitations (Mowafi, 2011). The breakdown of these systems always necessitate for humanitarian supports for the displaced population. It is obvious that these internal displacement crises are common in developing countries and plays a major role in the cause of deaths and illness (Ferris and Stark, 2012). For instance it was reported that, during the Yugoslavia and Georgian conflict there were high records of injuries, communicable disease, neonatal condition and malnutrition due to the broken down health and other social support systems (Noji, 2005)(Piot and Quinn,2015) . During conflicts, people who need requiring health care services finds difficulty in accessing health it difficult to get. It is either health facilities are closed down or people are afraid to go out or they are displaced (Ager et al., 2015). This poses

severe tasks to access especially and valuable maternal and reproductive health services, therefore exposing women to maternal morbidity and mortality (Chi et al., 2015). In demand to achieve the objective of health for all, for everyone primary health care initially was established 1978 with the following core activities to ensure equity in the health delivery system. But ironically some countries and communities have not been able to realize that objectives due to the prevalence of conflicts and civil riffles (Ager et al., 2015, Ferris and Stark, 2012, Mowafi, 2011).

Primary Health Care is vital health care established on applied generally tolerable ways and know-how made generally available to persons and peoples in the public by their complete involvement and at an acceptable price the people can afford. According to the 1978 Declaration of Alma-Ata, recommended that these activities under primary health care should consist of, Education relating to the main health issues that are difficult to manage, and the means of vetting and regulating them, Promotion of food supply and good nutrition

Under a conflicting community, important components of Maternal and child health care, including family planning, vaccination against the key communicable diseases avoidance and control of locally endemics diseases. Correct proper treatment of common diseases and injuries, access to simple research laboratory services station and providing provision of needed essential medications, access to referral services and Sexual and reproductive health literacy are likely to be all affected as mentioned by Ager et al. (2015) and Mowafi (2011).

The health of children under five years of age, easily deteriorates under unpleasant conditions compared to older persons due their weak immunity which makes them vulnerable to diseases and other infections. It is estimated that over 10 million offspring below sixty month die annually from various causes (You et al., 2015, Black et al., 2003). The situation is worsen when we have

the potentials of losing more in conflict areas, where there is inequalities in the distribution and access to proper health care services (Wagstaff, 2000). For instance, a household survey conducted in Iraq by UNICEF between 1974 to 1999, revealed that infant mortality declined steadily for the last one and half decade preceding the gulf wars. But these figures quickly rose to almost 200% around the period of the war. This rise in figures were mainly attributed to the war (Ali et al., 2003). It is not obvious that most of these conflicts and wars are usually targeted at civilians (Noji, 2005), which majority of them constitute the vulnerable. During these difficult situations, coupled with breakdown of security the vulnerable most mothers and the weak always fear for their lives and even in the event where they are required to seek for their health needs are affected. Even in the event were a sick person is able to visit the health facility, they are usually met with non-availability of health professionals to attend to the health needs and the entire community (Ager et al., 2015). The problems facing access to health care due to conflict is not only limited to countries with massive wars and conflicts, they also affect smaller communities which have been hit with these calamities. Ghana as a whole over the years has enjoy a peace, without any major war or conflicts hitting the whole country. However, there have been couple of civil and tribal conflicts that have occurred pop up over time now. Among the famous ones are the Kokomba and Bimbila conflict (Bogner, 2000, Talton, 2003), Alavannyo and Nkonya conflict (Yakohene, 2012, Agyei, 2015), Abudus and Andani land disputes and Bimbila conflicts (Mahama, 2003).

Therefore, it is not out of place to state that Ghana, just like other African countries have contributed to the world conflicts statistics and have experience a relatively fair share of the hardships that comes along with these conflicts. Among one of the prominent conflict to be recorded in this history of Ghana was the one that broke up between the people of Konkomba and

Nanumba which occurred at around the surrounding villages the capital of Nanumba north district; Bimbila in 1981(Bogner, 2000).

These disasters brought along with it all the already known challenges that a community experience as a result of war or conflicts. Since then several studies have been conducted commence to with various objectives on the subject. However much seems not to have been done to ascertain the role of these conflicts on our health systems in the Ghanaian setting. Although It has been widely documented throughout literature that conflict affect access to basic health care needs throughout the world (Mowafi, 2011), there are veracity of reports on specific aspects in basic healthcare services, which conflict has negatively impacted on. Couple of the studies have focused on post-conflict promotion of primary health and other aspects of public health (Noji, 2005), others on family planning and contraceptive use after (Scucchi et al., 1991, McGinn et al., 2011), torture, pain and post-traumatic mental outcomes after civil conflicts among others (Steel et al., 2009). However, throughout my search of literature not much studies appeared to have been conducted about the effect of the civil crises ongoing in Bimbila, on maternal health outcomes. Specifically, on its effects on women health; in the aspect of birth intervals and pregnancy rates, access to general care.

It is on record that one in sixteen mothers and pregnant women in Sub-Saharan Africa are risk of death during pregnancy and delivery as compared to women in developed countries (Ronsmans et al., 2006). An indication of a great disparity between the poor and rich woman's access to health care. These disparities do not happen between countries alone, it sometimes also happens within countries too. One of the surest ways to overcome this problem is ensuring availability and access to health care resources. Access to health care and other relates services are believed to be difficult in areas which has been hit with civil conflict as mentioned by (Ager et al., 2015). Such areas are

usually tense and as part of security measures like curfews which restricts movement at certain times of the day. During these hours life activities in affected communities becomes standstill, including access to health care. Continuous experience of this condition may undermine achievement of the ultimate goal of making primary healthcare accessible to everyone that aimed at addressing maternal mortality which is crucial to achieving SDG3. The study was there was carried with the aim of exploring the exact influence of conflict on reproductive health in Bimbilla in the Nanumba North District of the Northern Region of Ghana.

1.2 Problem Statement

When the global commitment was first made in 2000 to achieve the Millennium Development Goals (MDGs) and now the Sustainable Development Goals. All member states pledged their support to achieve the target of reducing maternal mortality by close of 2015 to an acceptable level; 52 per 100, 000 live births, however Ghana was more than several miles away from achieving the target (Lozano et al., 2011). Reports from UNDP, indicates that as of the time the MDGs were folding up Ghana had only achieved 164 per 100, 000 with a deficit of about 110 to meet the target (Binka et al., 2007). The United Nations member states pledged to work towards the three –quarter reduction in the 1990 maternal mortality ratio maternal death per 1000 live births by the year 2015 which was not achieved, a transformative new agenda for maternal health has being laid out as part of the Sustainable Development Goal (SDGs) to reduce the global MMR to less than 70 per 100,000 live births by the year 2030 (SDG3.1). Even though the deadline for this new target has not been realized. However, there are certain conditions when not controlled, will make achieving this SDG goal very difficult. Among some of the key challenges that were documented from MDG included barriers to access to critical health services by families and communities, difficulty in responding to referrals (Binka et al., 2007). Although these problems

may be argued to be multifaceted, but some may arrive due to problems arising from internal wrangling and conflict, which act as one of the major factor that displace humanity and halts development. It is a known fact that during civil unrest and conflicts normal way of living of people affected are altered as movement is restricted. Access to social amenities and other social services including health care is restricted. Most health workers vacate their post for security reasons (Ager et al., 2015). In the event where there is an emergency or the need for one to access any health service, it becomes impossible, which may lead to death or some form of disability. Bimbilia township for more than three and half decade has seen an overwhelming number of civil unrests ranging from tribal conflicts to chieftaincy disputes (Bogner, 2000). These crises have impacted negatively on the town just like any other town with post war experience by halting socio-economic development.

The current World Health Organization publication, Strategies toward ending preventable maternal mortality, institutes additional national target that no country should have an MMR greater than 140 per 100 000 live births (WHO 2016).

Despite relatively modest progress since the implementation of MDGs and safe motherhood strategies, Ghana continues to face a number of significant challenges in the health. Although these challenges exit among almost all communities, there are others that are doing better. (Lozano et al., 2011). Bimbila happens to be one of the districts which is poorly performing in terms of reaching the universal health goals. The district is believed to be challenged due to the continuous civil unrest.

According to Ghana Annual Report 2013 annual report on Reproductive child health report, maternal mortality ratio was 306.9 and supervised delivery was 27.5 for Nanumba North District. The patient, doctor ratio was at 47,195 in 2010(GDHS 2014).

For five years now the Nanumba district has been experiencing curfew due to chieftaincy disputes which has been affecting health delivery service. The curfew in Bimbilla is believed to have affected individuals who want to receive health care especially during the curfew hours. The most likely to be affected are women. Most women go into labour during the night, because of the curfew, movement is restricted which makes accessing the health facilities difficult. The fear of being arrested during curfew hours deters families of women in labour to access professional care and sometime this cause delay in accessing health services thereby prolonging labour leading to a possible complication and even death. Even in the even where one wish to rely on ambulance services, the bad road network makes it almost impossible to seek medical attention. This compel some people to resort to motorbikes, tricycles and bicycles to carry women in labour to the hospital. These conditions go a long way to increase the maternal mortality and child mortality situation in the district. Aside the bad roads and ambulance services, the issue of youth migration to capital cities in search for greener pastures and for safety is also issue crippling development in the district. The youth who usually provide some form of social support in times of medical emergency are known to migrate to other cities living the weak, aged both women and children behind. This means in the event of an emergency such as labour both day and night, getting the women medical assistance is usually delayed.

These problems couple with other are believed to compound the already soaring health statistics in the district. Which has become a major source of worry and underscores the importance and relevance of this study. Based on the above problem, the study intended to measure the pregnancy rate among women since the renewal of the 2012 curfew in Bimbilla town, assess whether these curfews and conflict restrictions has any bearing on pregnancy increment and identify the challenges encountered in accessing care during the curfew hours. For five years now the Nanumba

district has been experiencing curfew due to chieftaincy disputes which has been affecting health delivery service. The curfew in Bimbilla has affected individuals who want to receive health care especially during the curfew hours. The most affected is likely to be maternal cases because most women go into labour during the night. The poor ambulance service coupled with a bad road network might increase the maternal mortality and child mortality situation in the district. To worsen the situation young people in the district migrated leaving the aged who cannot offer any assistance to both women and children in the district when they fall sick or in labour both day and night, the only means available is motorbikes, tricycles and bicycles to carry women in labour to the hospital and the fear of being arrested during curfew hours causing delay in accessing health services thereby prolonging labour leading to complications and even death.

1.4 Research Questions

1. Has the conflict restriction in Bimbilla influence the birth intervals of women?
2. Has the conflict restriction cause an increase pregnancy rate in the district?
3. What are the challenges encountered in accessing health care during curfew hours?

1.5 Main Objective

The main objective of the study is to determine the effect of conflict restriction on women in the reproductive age in Bimbilla in the Nandom north district of the northern region

1.6 Specific Objectives

The specific objectives of the study are to:

1. determine whether conflict restriction has affected the birth intervals of women in their reproductive age in Bimbilla

2. To assess whether the conflict restriction has resulted increase in pregnancy rate in Bimbilla.
3. Identify challenges encountered in accessing health care during restriction hours in Bimbilla.

1.7 Rationale of the Study

According to GDHS REPORT 2014, the Bimbilla District hospital had three doctor, a medical superintendent/doctors supported by two Cuban doctors delivering health service to the in the district. In addition, the people come to seek for health care very late. They usually come when their health condition becomes worse. This applies to all the services rendered at the health facility, which include both preventive and curative service. In addition, some of them indulge in self-medication to seeking health from health providers, since they accessing health during curfew hours is difficult. In addition, pregnant mothers come to the health facility in second stage of labour with complication. Information from the Nanumba North District Health Directorate shows a drastic declined in the skill birth attendance as well as increasing maternal mortality for the four-year period (2013, 2014, 2015and 2016 half-year review). The district has not been able to identify the reasons for the decline, increasing maternal mortality ratio. Also, no research has been conducted in the district to that respect and since pregnant women health is paramount in achieving MDG5. Also, Programme managers and policy makers have often recommended that knowing the cause of a problem is 50% solving the problem. Therefore, good knowledge about the causes of the problems mentioned above in the Nanumba North District can act as the centre point for solving the problem. Based on this observation, the researcher finds it imperative to assess the effect of conflict restriction on maternal health of women in their reproductive age since no

research has been conducted in that respect such that information derived from this research can be used to find lasting solution to the problem.

1.8 Definition of Terms

Maternal Mortality: It is the demise of a mothers while expecting or in 42 days of abortion of cases, notwithstanding the time and place of the cases, from any effect associated to force the foetus out but not from unintentional origins

Pregnancy-related death: The death of a mother while gravid within forty-two days of dissolution of cases, regardless of the root cause of death.

Late maternal death: The death of a lady from through or incidental obstetric sources, more than forty-two days but not as much as twelve months later than the dissolution of gravidity.

Maternal mortality ratio: Is the sum of maternal death in a given year per thousand live births during the same period.

Maternal mortality rate: Is the number of maternal deaths in a given period per hundred thousand womenof reproductive age (usually 15-49 years).

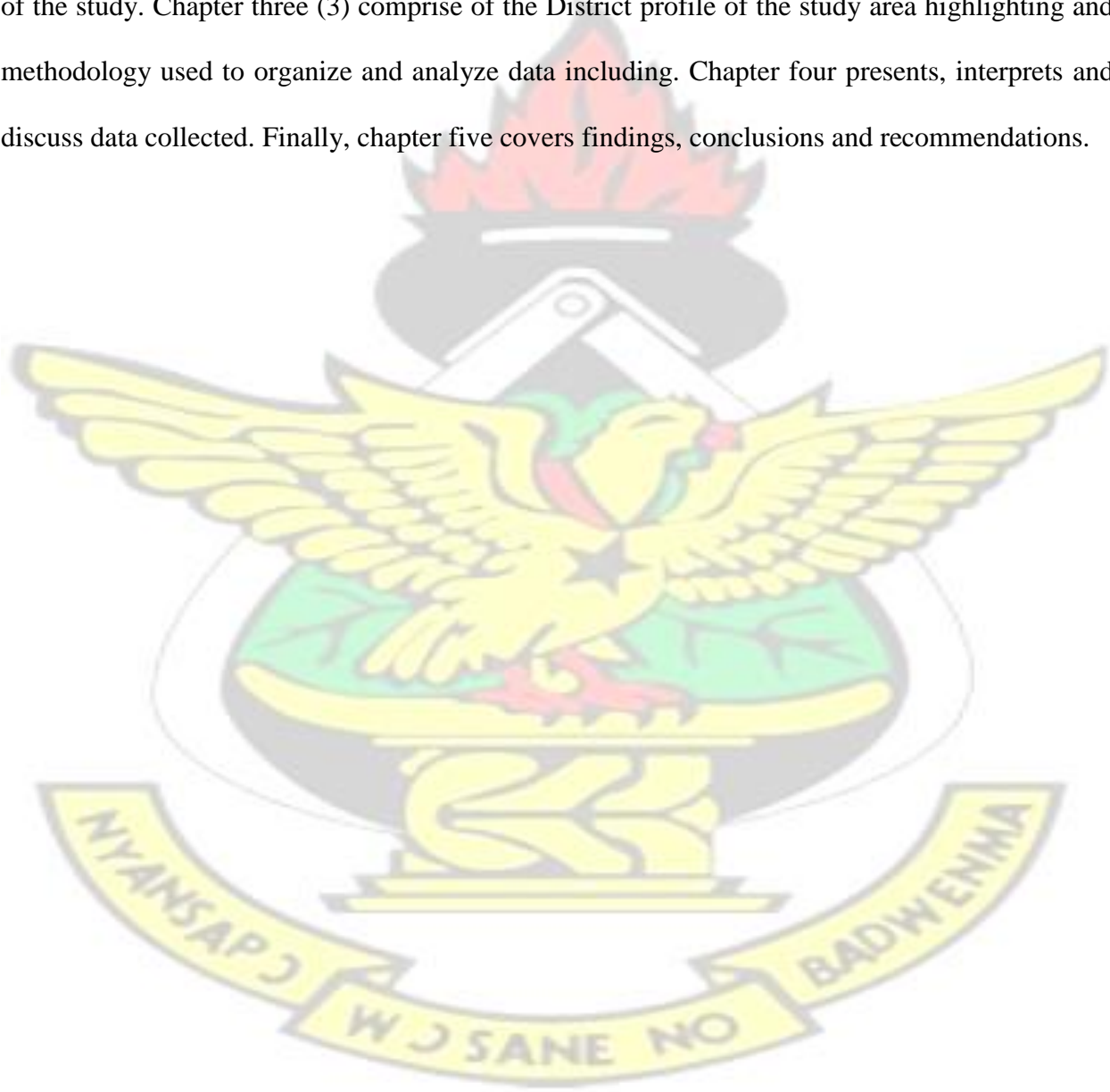
Adult lifetime risk of maternal death: The likelihood of dying from a maternal cause during a woman's reproductive lifespan

Clinical causes/perspective

Conservative obstetric deaths are those brought about from obstetric problems of the pregnant state (pregnancy, delivery, and postpartum), from involvements, oversights, inappropriate management, or from a series of actions causing any of the above. Indirect obstetric deaths are those resulting from former prevailing sickness, or illnesses that occur through prenatal period, and which were not due to direct obstetric causes but motivated by biological properties of pregnancy exape malaria, anaemia, diabetes, cardiac disease, renal disease or HIV (Say L et al, 2014)

1.9 Chapter Disposition

The study is organized into four chapters. These include the following: Chapter one contains introduction of the study. It highlights the study background, statement of the problem and study objectives, questions relating to the research, justification, scope and significance of the study of the study, and organization of the study report. Chapter covers detailed reviewed literature of the study. Chapter three (3) comprise of the District profile of the study area highlighting and methodology used to organize and analyze data including. Chapter four presents, interprets and discuss data collected. Finally, chapter five covers findings, conclusions and recommendations.



CHAPTER TWO

LITERATURE REVIEW

2.1 OVERVIEW

Maternal losses are the tip of an iceberg of poor maternal health. Maternal deaths are defined as any death that arises in the course of pregnancy, childbirth, or within two months after the birth or termination of pregnancy according to the World Health Organisation. (WHO,2010)

Globally it is estimated that over 585 thousand pregnant mothers are expected to die during pregnancy and delivery on average every, more than one woman dies very minute of a pregnancy related cause (Rogo et al.2006). Complications relating to pregnancy account for 18.5% of the global burden of disease in their fertility age. The burden on reproductive health is very high among sub-Saharan African women. According to Berg et al., (2010), almost all the maternal deaths has majority of about 99% coming from developing countries, which could have avoided. These figures increase the level of responsiveness to maternal and new born health in underdeveloped nations. The cause of maternal death cut across all over the world but there is a great dissimilarity in a woman's chance enduring and surviving these complications among the developed and underdeveloped countries (Person et al., 1997).

For instance, AbouZahr and Wardlaw (2001) reported that most of the population in the crises areas are usually affected by inadequate access to reproductive health care services including unavailability of family planning supplies and methods, especially in conflict prone areas. Similarly, a study in three African countries (Sudan, Northern Uganda and DR Congo) who have all experience conflict reported that, access basic care, reproductive health services, trained medical personnel have been constrained by the presence of conflicts and this has significantly

lead to the neglect of family planning (McGinn et al., 2011). A situation which possibly explains some of the disparities mentioned by Person et al., (1997).

2.2 Effect of Conflict Restriction on Birth Intervals of Woman in their Reproductive Age.

2.2.1 Lack of Education

Conflict and political instabilities has shown to have damaging effect on access to certain social amenities including, education, quality health care delivery and its related services (Ager et al., 2015). Maternal mortality is usually an issue that is on the rise among countries with past or current conflict history. About eighty percent of countries which have experience conflict in one way or the other has a record of high mortality rate, which is mostly attributed to lack of access maternal health needs. (Organization, 2010). Poverty is one of the major determinants of maternal health outcomes and is usually as the end result of conflicts and also deprives people from access to quality care. Most health profession finds it insecure to work in conflict torn areas as at times abundant their post for the fear of their lives (Ager et al., 2015). In situation like this, there are low access to all social amenities including access to health education and other services, meanwhile, knowledge and contraceptive use has been established to have a strong bearing in several studies. Dozens of research have reported that, there is a strong relationship between education and maternal mortality rates. According to (Harrison and Rossiter, 1985), women with education recorded lower mortality rate compared to those with no education. He further reported that mortality was relatively higher in northern Nigeria compared to the southern part due high number of educated women in the south compared to the north. Education is believed to alter the behaviour of human beings in general. For instance (Rutenberg et al., 1991) established in their study that, education was a greater determinant of contraceptive use, such that, the use of some form of

modern contraceptive method was high among women with higher education compared to those with no or lower education. But the question remains whether, people living in conflicts affected are usually able access these basic services. For instance (Ager et al., 2015) reported that health care access and education was dwindling in the Yobo state in Nigeria due to Military insurgency in the region. Although there is not any clear-cut study on the relationship between conflict and health education but Considering the level of poverty and low education rate in Bimbilla it would be very difficult for the people to utilized family planning service which can give rise to short birth intervals among woman in their reproductive age as a result of low contraceptive prevalence. However, a study in West Darfur and Northern Uganda point out that prevalence was low among women, but this finding is relatively subjected to the site and size of the population (McGinn et al., 2011). Although, in Sub-Saharan Africa, there is a relatively low rate because of lack of knowledge on contraceptive use across board (Rutenberg et al., 1991). It would therefore be inaccurate to make a conclusion that the low utilization of family planning contraceptive was due to women not patronizing the contraceptives. In fact, the women were interested in spacing their birth with 30% to 40% wish to not have child within two years but would like to have a child after two years (McGinn et al., 2011). Low prevalence can however be attributed to the limited or lack of supply of family planning contraceptives and services, including inadequate resources facility and health staff to render family planning services to the people especially in conflicts areas. (Rutenberg et al., 1991).

2.2.2 The Role of Poverty and Socio-Economic Status

Poverty is known to be one of the outcome of conflicts which intends also determine in some ways maternal health outcomes. One of the most cited factor which impede individuals access health care service is their inability to afford or pay for the cost of health services. According to (Ensor

and Cooper, 2004), cost of access to health care by the poor and the vulnerable is one of the barriers which affect the principle of healthcare for all, and for such problems to be mitigated, there has to be interventions to overcome for everyone to enjoy from public spending. (Amoakohene, 2004) He however did not mention the exact intervention to take care of such a problem. Even though there has been several attempts by several NGOs aimed at refining the position of woman by empowering them to work and support families and also take active part in decision-making their life particularly within area of sexuality and reproduction (Anyidoho and Manuh, 2010, Cheston and Kuhn, 2002). Yet the position of both young and old women position rests near to the ground in most part of Africa which Ghana an exception is not (Gyimah et al., 2006, Adjetey, 1994). This motivated (AbouZahr, 2003) to conclude that any attempt to improve maternal and child health is near impossible if we fail to involve non-formal decision makers in like husbands and other household heads. In the African context women rely greatly on their husband approval to make their reproductive health choices and decisions. Men are usually regarded as the sole breadwinner of families, due to women financial independency, most of the decision are accepted without questions (Eleje and Eke, 2010). Even though the safe motherhood emphasized on the essence of women liberation to realize their self - worth and make choices about the health on their own. This may not be achieved if men are not re-oriented on the importance of liberating their partners to take personal decision on their reproductive health. (Eleje and Eke, 2010). Poverty does not allow any form of transaction in sexual relationship among women in relationships as they do not have the authority to deliberate any form of protection from infection and pregnancies. How due to the economic needs of women, most of them had no option to engage in sexual relationship based on give-and-take in a form of either cash or rock-hard benefit with old men (sugar dadies) to provide them with their needs (Ankomah, 1998). A study by (Luke, 2003) on transactional sex among

women in the Sub-Saharan Africa reveal that most women in long and continued relationship had lesser control on their reproductive health decision including choice of family planning methods. However, the study added that the level of authority rest bestowed to the women was high among young ones who go into sexual partnership with older men and even with that, they authority is limited to partnership formation and continuity of the relationship but not within the relationship, regarding their sex lives. Most women were motivated by money to enter into such a relationship. (Ankomah, 1998) revealed in his study that, women who tried to insist on their reproductive reductive rights in transactional relationship stand the chance of losing the benefits associated with such relationships and for that matter embrace whatever decision that comes from their male partners. These behaviour therefore predisposed women to greater peril for gravidity that is generally unwelcome including STIs. The situation becomes worse in environment were access to reproductive health service is limited due to various reason including conflict and civil unrest as with the case of Bimbilla town. A situation that could increase adolescent leading to unintended pregnancy and short birth interval.

2.2.3 Unsafe Customary and Traditional Practices.

The central part of community health is prerequisite to make available sufficient medical information and care at the right time. Unluckily, mis-information continues to confuse, mislead and maltreat women in some parts of the world. Socio cultural impacts have been recognized as an obstacle in reducing maternal health challenges in some parts of Africa. A research on Nigeria cited harmful cultural practices and traditions as playing a lead role in soaring the mortality rate of women and children (Ogu et al., 2016).. Even though, meticulous and assiduous family planning and contraceptive use in unindustrialized nations have been found to reduce maternal deaths, there are however, certain beliefs and practices that prevent women from utilizing certain health

interventions that seeks to protect their health (Keele et al., 2005, Ensor and Cooper, 2004). . Report on the low use of modern contraceptive in has been attributed to several factors around the including; lack on information on the methods, unavailability of preferred commodity and general stockout, religious and cultural beliefs (Tucker, 1986, Wood and Jewkes, 2006, Grossman et al., 2006). However cultural beliefs play a major role as barrier to contraceptive use in most part of Africa (Keele et al., 2005). Several studies in the African context has reported it to be the main obstacle for family planning and contraceptive uptake in many countries including Ghana (Kamau et al., 1996, Keele et al., 2005, Sarkar, 2008, Addai, 1999) Meanwhile (Ahmed et al., 2012) after their analysis of maternal deaths in 177 countries recommended that proper and consistent rely of modern contraceptive uptake could decrease maternal mortality and could prevent over fifty-percent of maternal deaths when we are able to meet the full demand for it is met(Ahmed et al., 2012). Therefore in order to achieve substantive results on Maternal health,intervention programmes must call for a blend of indigenous coordination of facts and health practices. The traditional perspective may be crucial to answer for both health and illness in the communal settings.

2.2 Relationship between Pregnancy Rate and Conflict Restriction

Conflict and civil unrest is known to have significant influence on the health outcomes of the jurisdiction it affects(Ali et al., 2003, Noji, 2005, Ferris and Stark, 2012) and these influences usually turns out be bad especially when strong measures are not in place to handle its aftermath. Generally, it is known that post war or conflict area normally suffers breakdown of social services systems including health care. It is believed that during the period of conflict and right after it accessing medical care becomes relatively difficult compared with areas that have experienced any of these turmoil and the Public health system is not spared either(Ager et al., 2015, Banatvala and

Zwi, 2000, Levy and Sidel, 2007, Noji, 2005). Health officials managing the health facilities normally vacate their post and also seek security for themselves, just like anybody else (Burnham et al., 2009). This implies that mothers and women in reproductive ages may face the problem of unmet need of certain health services including access to modern contraceptives and other family planning methods and safe delivery (Ladek, 2007). Free movements in areas under conflicts are normally restricted for security reasons, in a lot of instances residents are placed under a compulsory curfew until the place is calm. During this periods men and women may engage in sexual activities, without any effective protective measure, prostitution, rape and other sexual violence may go up (Chynoweth, 2008) which in most times leads to the spread of sexually transmitted diseases like HIV, syphilis among others documented by (Noji, 2005). This means women are likely to experience more unintended pregnancies in such areas, since access to available effective birth control methods has been cut. A situation like this is likely to defeat the developmental goals that sought to reduce maternal mortality, pregnancy related complication and population growth. These goals cannot be achieved since women in Bimbilla are marginalize with some of them and children have become victims in the conflicts. This situation is likely to increase pregnancy rate in the town.

2.3 Challenges Accessing Health Care Services during Conflict Restricted hours.

Getting access to health is a major challenge around the globe including Ghana. Therefore, efforts have been made to ensure equitable access to health care and related services. This led to the birth primary health care concept aimed at bringing healthcare to door steps of every individual irrespective of your location in the world (Starfield, 1992). The onset of conflict or war in a town or community may disrupt this agenda of universal health coverage as there are loads of evidence which indicate the effect of war on the public health (Levy and Sidel, 2007, MILLWOOD, 1996).

In a conflicting situation the health system may breakdown leaving victim who require health needs helpless. Most of the times conflict refugees and displaced population are faced with several problems like malnutrition, deaths from diarrhoea, respiratory infections, and other communicable diseases (Levy and Sidel, 2007). leading to high mortality. Due to the damaged or broken infrastructural system, gaining access to water and proper sanitation, access to good medical services becomes an issue, leaving victims no choice than to resort to unapproved ways of handling issues. (Banatvala and Zwi, 2000). Physical accessibility of health centers has been one of the most significant elements inducing client usage of health service. For instance the after declaring a state of emergency in zones taken over by Boko Haram in Nigeria, access to their health became difficult as citizens were scared of coming out from their homes (Ager et al., 2015).

Generally, residents from conflict affected area experience some unusual conditions ranging from, displacement, poor nutrition, family and other support system. There is an assumption that, most people from conflict areas experience high level mortality and morbidity and also challenging health needs, dislocation, isolation among others (Ali et al., 2003, Noji, 2005, Ferris and Stark, 2012). With the existing disparity in the distribution of health service among developing countries, victims of conflicts who are already vulnerable are sometimes cut off, because they may migrate to an environment which they may be classified as aliens. These problems may properly be managed where the war victims are given official refugees status and recognized as legitimate dwellers of the land. (Thomas and Thomas, 2004) reported their study of the demographics of different population displaced by conflict concluded that, refugees who voluntarily migrate and are officially accepted shows better health outcomes than, those who remain in the war-torn zones. This may be implied that, victims receive better care when they leave their communities legitimately than those who are forced to relocate. For instance (Khawaja, 2004) in a comparative

study among same population displaced by war among the Palestinian refugees revealed that those who relocated to legitimate refugee camps recorded lower mortality rate than their counterpart they left home. Possible reasons why the health of those in their actual domicile were that, access to quality lifestyle and health was gradually diminishing due to clasped health systems and other social support. The situation appeared to so because most refugee camps for displaced persons are usually inspected by supervisory authorities which compels managers of such facilities to standards that is accepted was observed to have improve access to health services (Chi et al, 2015).

This indicate that areas that have been hit with conflicts, may have access to good health care system through actors like the government and other humanitarian agencies. But the reality of the situation is that, population usually affected by relatively smaller internal conflicts do not enjoy such supports, even though access to the existing systems are have been compromise by the conflict. Even though the situation in Nanumba North is not properly document, access to social amenities like banking services, health care is perceived to be greatly affected as there has been a curfew imposed on the town which restricts commercial activities to less than the usual twelve business hours daily.

In times of conflict where population displacement is eminent, women and girls suffer a great deal of gender inequity, as majority suffers from sexual violence including rape and because there is mostly lawless and chaos, legal rights of the victims are overlooked (Chynoweth, 2008). To topple the issue, because health systems are down women who have undergone various abuses and those who want to access care on their own will are not able to do so due to nonexistence of health professional to manned the facilities. For instance (Burnham et al., 2009) reported medical official usual vacating their post because of the presence of conflict and violent in Iraq. The international organization on migration revealed that as high as 14% of conflict displaced person are not able to

access health care,(Ladek, 2007) a situation which is believe to be a reflection in conflict areas across board with Africa experiencing more of the problem. It is obvious from the above information that access to health care in conflict affected areas is challenging and this goes a long way to affect the vulnerable who are mostly children and women.

2.3.1 Reproductive Health Rights

The rights of women have been undermined from time immemorial as it evident because it has been rooted in most religions, cultures and social setups (Kirkpatrick, 1993, Brandt and Kaplan, 1995, Radford Ruether, 2008). However, with rise of feminism and pressures from civic groups have been working assiduously to restore these lost right of women, which led to significant support of women movements including the united nations (Hazarika, 2009, Wirth, 2001, Klatch, 2010). These rights ranges from their civil right to their health rights. This transformation has been able to achieved significant impact on the confidence of women generally. Governments of countries realizing the importance of these rights since its declaration and has been working hard to promote it across. This has resulted in the increase in the number of empowerment programmes for women the world is seeing now (Shaw, 2006). Ghana government like the others in order to achieve this have introduced a number of support programmes introduced to speak about women's reproductive rights (Shaw, 2006). These Interventions varies and are being implemented population control, reproductive health needs; Increasing access to and use of family planning service to reduce the unmet needs, encouraging sexual and procreative health, together with HIV/AIDS concerns, promoting obligatory and complete recordkeeping on birth (Cleland et al., 2006, Schrappe and Lauterbach, 1998, Casterline and Sinding, 2000). Despite these efforts by government and other agencies, implementers failed to maintain the course of achieving to total independence as far as women reproductive health rights are concerned. For instance Prenatal and

postnatal services as well as delivery is supposed to be free with the establishment of the National Health Insurance Scheme, but the reality is not the same when women attempt to access these services as they have to make financial commitment for some of the services provided (Asante and Aikins, 2008, Sodzi-Tettey et al., 2012). Most poor and vulnerable may access health care even when there is a need to. These problems that have not been address affects the health seeking behaviour of most people including pregnant women thereby creating some health disparity in the system (Awusabo-Asare and Anarfi, 1997). Meanwhile health per the WHO's view is an inalienable right and for that matter nobody is supposed to be denied that right (Epstein, 1997). However, the situation is different in developing world as problem of health inequity is predominant especially in rural areas (Anyangwe and Mtonga, 2007, Schellenberg et al., 2003, Sanders and Chopra, 2006).

The concept of good health is comparative in the healthcare framework and ethics call for that code of 'access according to need' and 'equal access of need' is monitored (Mooney, 1992).

Access here includes the circumstance with which healthcare is acquired (Lawthers *et al.*, 2003) or the liberty to observe healthcare (Thiede, 2005). However, the constantly unfair landscape of health systems confines the access of quality healthcare to the deprived who need them the most (Gwatkin *et al.*, 2004). Health systems are often unsuccessful in getting to the underprivileged, create less profit for the underprivileged than the rich, and inflict slip back cost heaps on poor households abandonment, misuse and relegation by the health system are part of their daily practise (WHO, 2002). Experience proposes that poor people will be commendably omitted except services are purely accessible to decent quality, equitably financed and quick to respond (Narayan *et al.*, 2000). Deprived people are defined as 'groups with reduced capacity to take benefit from chances for better health and who are often left without those opportunities, whether due to external or

internal influences (UNI-SOL, 1999). They are categorized by lack of ability to take part wholly in social and economic undertakings, as well as those concerning decision making and this social omission disagree with them on the essential good services such as healthcare that are accessible for others (Santana, 2002). Large number of these shortcomings in health arise from the socioeconomic conditions in which they live and make them susceptible to disparity of treatment by the health system of the society as well as numerous financial, socio-cultural and communications obstacles (Woolf, 2004). For example, disadvantaged patients such as those with mental problems disabled and aged in the society.

Findings from a study in Nanumba South discovered that most of the people from the area are farmers with relatively low formal and lower income and most of the people did not have good health seeking behaviour (Mohammed, 2012). The study further revealed that certain ethnic members like Konkombas were more likely to seek health when they are sick compare their Nanumba counterparts in Nanumba south which has not seen a curfew for more than decade. The multi-million question remains how the situation is going to be in Bimbilla were almost the inhabitants are from the Nanumba ethnicity and has been under curfew with restricted movement for almost a decade.

These imply that, there may several other factors which has some form of influence on their health seeking behaviour. An individual health seeking behaviour is known to be influenced by several factors which includes but not limited to the following education, wealth, age, decision from partner or spouse, accessibility of health facility, perceived quality of service delivered among others(Dong et al., 2008, McCombie, 2002, Sanders and Chopra, 2006).

The Bimbilla town has suffered from conflict for a very long time and the imposition of the curfew is assumed to have alter the health seeking behavior of the people living in there resulting in

unplanned pregnancies and increase birth rates it based on that premise on which the researcher is embarking on such as study.

KNUST



CHAPTER THREE

METHODOLOGY

3.1 INTRODUCTION

This chapter provides a description of the study type, population of interest, the sampling size and technique, instrumentation, data collection procedure as well as tools for statistical analysis.

3.2 Study Design

The study was a descriptive cross-sectional study. Quantitative approach was used to collect secondary and primary data for the study.

3.3 Study Population

The study population comprise of women in the reproductive age in Bimbilla in Nanumba North District of Northern Region of Ghana. Women in their reproductive age who have lived in Bimbilla for the past three years were recruited. Women in their reproductive age visiting Bimbilla who have not stayed in Bimbilla for the past three years were excluded from the study.

3.4 The District Profile

District lies between lat. 8.5° N & 9.25° and long 0.5° E & 0.5° W of the Greenwich Meridian, which more or less divides the district into two parts. The district is found in the eastern corridor of the Northern Region of Ghana (GSS 2010). Nanumba – North District shares boundary with:

- ❖ Yendi District toward the North
- ❖ East Gonja toward the West and South – West and
- ❖ Nanumba South District to the South and the east
- ❖ Zabzugu to the East

The district lies in the Tropical Continental climatic zone with the mid- day sun always overhead. The climate is classified as tropical and has two distinct seasons; wet season from April to September and dry season from October to March. As a result, temperatures are fairly high ranging between 29°C and 41°C. Just like any part of West Africa, the district is under the influence of the Wet South – West Monsoon and the dry North – East Trades winds. Annual rainfall averages 1268mm with most of it falling within five (5) months i.e. April to September, leaving the rest of the year dry (i.e. when the region comes under the influence of the NE Trades with its associated dry harmattan conditions. Rainfall pattern in the district was irregular which affects farming activities negatively. The vegetation is that of Guinea Savannah woodland consisting of short deciduous trees widely spaced on the flat land and ground flora grass which gets burnt by fire or scorched by the sun during the very dry season. Bush fires and erosions is very rampant in most the communities during this period. The most common economic trees found here are the Sheanut, dawadawa, acacia, baobab and other draught and fire-resistant trees.

The main occupation of the people is farming. Crops grown are mainly roots and tubers, cereals, legumes and tree crops such as teak and cashew nuts. In the dry season those along rivers, valleys and irrigated dams cultivate tomatoes, okro, pepper, vegetables etc for sale and consumption. Also, cattle, sheep, goats, pigs and others were reared on free range and in small and large scale both for sale consumption. Poultry such as chicken, guinea fowls, ducks, and pig farms are widely kept.

Employment in the district is mostly in the informal sector. Most people are self-employed traders, fisher folk, dressmakers, hairdressers, electronic repairers, fitters, electricians, welders, cobblers, contractors, carpenters, phone repairers, etc.

Government employees formed the rest of the work force. These include teachers, Health workers of all kinds, soldiers and police, Agricultural extension workers and other civil servants.

Roads in the district are mostly feeder roads. There is one main international road from Accra through the centre of Bimbilla to Yendi, and Gushegu through Bawku in the upper east region to Burkina Faso. This road however, is not all the time motorable especially in heavy wet season. The district is inter connected by 108km of trunk roads radiating from the district capital, Bimbilla and 80.8km of ‘‘maintainable’’ feeder roads. Others are farm tracks, which are motorable only during the dry season. Long vehicle, heavy trucks, motor cycles, private transport busses, bicycles are the most common means of transport in the district (GSS 2010).

Telecommunication facilities in the district include Ghana Post, and Ghana telecommunication. Private mobile phone networks such as MTN, Tigo, Vodafone, Zain, expresso, GLO, are also accessible throughout the district. An Affiliated Gmantambu Fm to Radio XYZ is widely accessed anywhere in the district. Ghana television (GTV) is the only television station in the district. However, most People with Multi TV and Satellite discs have access to all the other TV stations.

Bimbilla, the district capital was hooked onto the national electricity grid in March, 1998 and since then; almost half of the communities are hooked onto the national electricity grid under the Self – Help Electrification Programme (SHEP).

The district politically has one constituency with the District Assembly which is the highest legislative and administrative authority in the district located in the capital, Bimbilla. The district is headed by the District Chief Executive who represents the Central Government. District Chief Executive is assisted by the District Coordinating Director who coordinates the other staff of the assembly for effective running of the affairs of the whole district. The various Assembly persons

from each of the sub-districts electoral areas meet to make By-Laws to be implemented by the District Chief Executives. Unit Communities in the various electorate areas identify Community needs, address them and also ensure law and order. The district has six (6) Area Councils(Ghanadistrict.com.gh)

The Nanumba North traditional area is headed by a paramount chief, NanumNaa who is supported by traditional sub- chiefs and linguist. The sub- chiefs rule the various villages and communities. At least each tribal grouping regardless of its size has a tribal chief or leader in their locality who owes allegiance to the paramount chief the area. The chiefs are the custodians of the people, ensuring the integrity of the people reserved as well as their welfare. The landlords on the other hand, are the custodian of the land and also perform customary rites such as pouring of libation and sacrifices especially in times of needs.

The predominant religious groupings are; Christians, Muslims, and Traditional religion.

The majority of the people are Muslims. Traditional believers and Christians follow in that order. Among the Christians, the Roman Catholics are the majority. The other Christians religious bodies are the Presbyterians, Assemblies of God, Pentecost, Methodists, etc.

Solid waste management in the district is basically by crude dumping. Refuse generated is gathered at vantage point in refuse containers and later conveyed to final disposal site by trucks. The ZOOMLION Company is responsible for this type of refuse management.

On the liquid waste management, open defecation is very common, especially in the rural areas. There are 62 public toilets in use in the whole district as at now and these are allocated in the urban areas. These include, KVIPs, Septic tanks, latrines for public use in the towns and traditional pit

latrines in the villages. Household latrines are mostly found in government premises and smaller communities. A few WCs are also found in some Government offices and bungalows.

Currently, the district has one (1) pipe borne water system serving Bimbilla and Dangbe-nayili, about 52 functioning boreholes, some hand-dug wells which dry-up in the dry season, 20 dams/dugouts, and of course streams.

Bimbilla, the district capital as well as the seat of the paramountcy of Nanumba Traditional Council has a population of 44446. Nanungli is the main language spoken and most of the people are farmers, government workers, self-employed artisans and traders. Bimbilla provides administrative, banking, educational, marketing, and health services to its periphery. Almost all the other tribes are found in Bimbilla. Makayili, the second largest sub-district located north of Bimbilla has a population of 41272. Makayili renders health, marketing, educational services to its inhabitants. Their main languages spoken are Likpakpah and Nanungli. Chamba, the third largest sub-district located 28.8km west of Bimbilla and has a population of 41272

The common language spoken widely are Likpakpah and Nanungli. Chamba renders health, marketing and educational services to its surrounding communities.

The last and smallest sub-district is Bincheratanga with a population of 31747. They render the same services as above. Their main languages spoken are Likpakpah and Nanungli

There is seasonal emigration by the youth, especially, the female to southern Ghana for commercial activities, greener pastures and other workforce thereby reducing the labour force in the district.

There is also intra-district migration from the west to the fertile east for farming leading to many scattered settlements. The migration of the youth has serious implications for the embryonic economy of the district, as the potentials for production are lost to other districts. Out migration

by young girls due to child trafficking and peer pressure to engage in ‘kayaye’ and prostitution exposes them to all forms of sexual abuse and low female school enrolment. These migrants also import disease conditions like cholera, STIs, and HIV/AIDS among others into the district.

The health sector in the district can be categorized into two, public and private. Ghana Health Service runs the public sector for curative, preventive and health promotion activities in the facilities. The Private sector comprises of the Alafie Clinic and the drug outlets. The drug outlets include the chemical sellers and drug peddlers. The chemical sellers are trained personnel on license to sell over the counter drugs. The following are three categories of the drug peddlers in the district; peddlers of biomedicine, Herbal Medicines and “Neo-herbalists”. Peddlers of biomedicine are found in rural areas and move from community to community and market to market on bicycles to sell their products. The “neo-herbalists” sell both herbal and modern drugs and sometimes use modern instruments along with traditional medicines. The herbalists include bonesetters, circumcisers of male and female clients, and traditional birth attendants. There is endowed with many herbalists whose services are equally well patronized compared with modern medicines. The spiritualists see bodily ailments as manifestations of the spiritual beings and depend highly on rituals.

The district is made up of six sub-district with eight health center, four chips zone and one district hospital situated in Bimbilla the district capital the district. Staff t strength of about seventy this include both medics and paramedics. The district health management team sees to the running of the district health services.

3.4.1 Community-Based Disease Surveillance Volunteers (CBSVs)

There are about three hundred Community-Based Disease Surveillance Volunteers (CBDSVs) who assist in surveillance and growth promotion activities in the District.

3.4.2 The District Health Management Team (DHMT)

The DHMT is the prerogative management body of health services in the district. The core DHMT membership is 7 members: The District Director of Health Services (leader of the team), the District Administrative manager, the Disease Control Officer, the District Nutrition Officer, the District Mental Health Officer, the Accounts Officer, and the District Stores Keeper. The team has the ultimate responsibility for planning, managing, and implementation of policies in the health care system for the district. The major functions of the DHMT are:

- Implementation of national and regional health policies and formulation of district health policies.
- Capacity building through in-service training
- Establishing and maintenance of links with other organizations in the district in health
- Collect and use information for planning, monitoring and evaluation.
- Ensure efficient management of resources, both human and material
- Hold weekly and monthly meetings to analyze past week's/ month's activities and plan for the ensuing weeks/months.
- Supervise the sub-districts on monthly/quarterly basis
- Hold monthly full house meetings and quarterly performance reviews with the sub districts and partners in health.
- Monitor and evaluate the process of health care activities in the district.

Besides these managerial functions, each member of the team has responsibility for a technical area as follows:

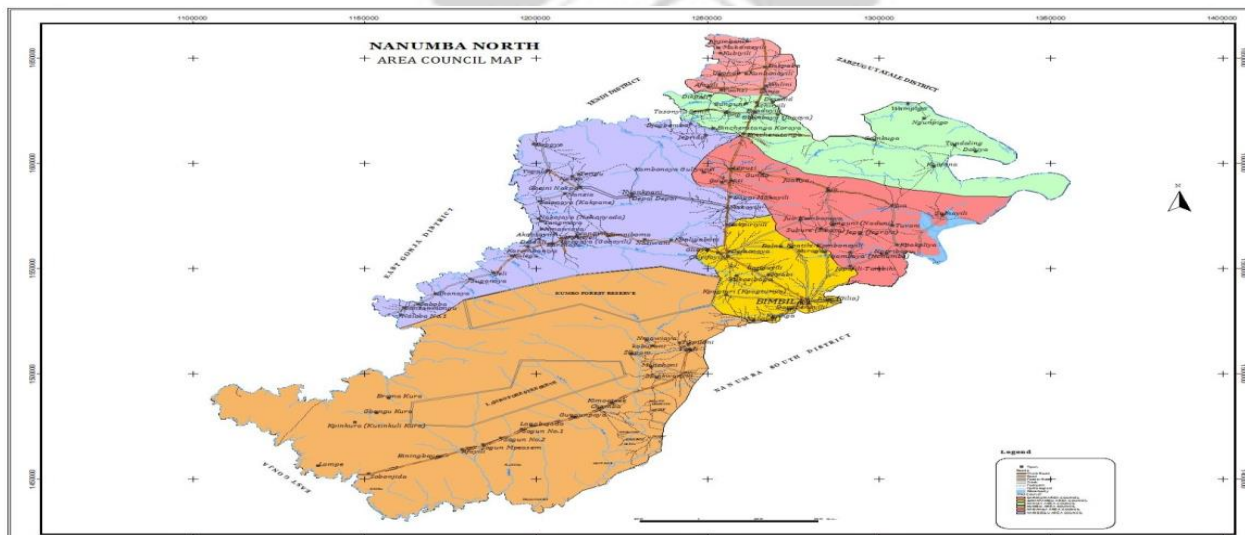
1. Disease control and surveillance
2. Surveillance of the nutritional status of the district and interventions

3. Reproductive Health, Family Planning, School Health and Adolescent Health
4. Health Information, Education and Communication.

3.4.3 Sub-District Health Team (SDHT)

The SDHT comprises of the technical staff in the facility. There is a Sub-district health Management Team (SDHMT), which comprises of health staff and representatives of community members as well as other stakeholders in the community. The chief or an opinion leader in the community is the Chairperson for the SDHMT. The team has the sole responsibility to hold quarterly meetings augment and deliberate over health issues concerning the various communities.

3.5 Map of Nanumba North District



Source: GSS (2010)

3.6 Sample Size

A sample size of four hundred (400) respondents of age fifteen (15) years to forty-nine (49) at Bimbilla from the target population was recruited for the study. The total sample size of the study group was obtained from a sample size calculator

$$n = \frac{Z^2 p(1 - p)}{C^2}$$

Where:

Z = Z value (e.g. 1.96 for 95% confidence level)

p = percentage picking a choice, expressed as decimal

(.5 used for sample size needed)

c = confidence interval, expressed as decimal

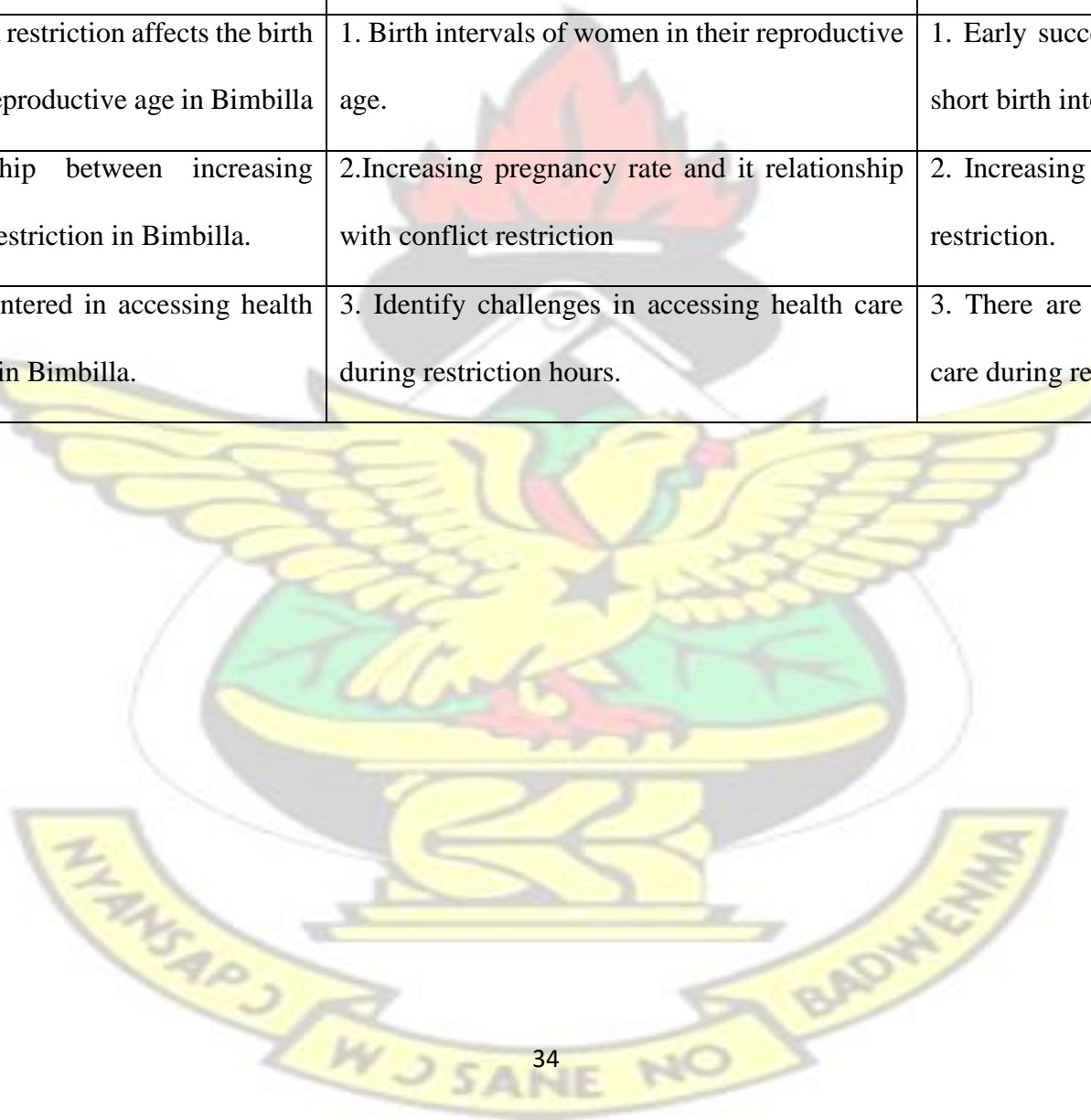
(e.g., .04 = ±4)

3.7 Sampling Method/Sampling Technique (multistage sampling)

The Bimbilla town was divided into four parts and each part treated as a cluster. Systematic sampling was used to select the households while simple random sampling technique was employed to recruit respondents in the household. In a situation where there was more than one eligible respondent as well as the selection of the four hundred (400) respondents from households. This was done by writing “Yes” and “No” on pieces of papers folded and mixed thoroughly in a bowl. Women and teenagers in households at the time of the study were asked to pick one of the folded papers in the bowl. Those who pick “Yes” was chosen and interviewed until the four hundred (400) respondents were obtained from the selected communities.

Study Variables

OBJECTIVE	STUDY VARIABLE	OUTCOME VARIABLE
1. Determine whether conflict restriction affects the birth intervals of women in their reproductive age in Bimbilla	1. Birth intervals of women in their reproductive age.	1. Early succession of pregnancy leading to short birth interval.
2. Identify the relationship between increasing pregnancy rate and conflict restriction in Bimbilla.	2. Increasing pregnancy rate and its relationship with conflict restriction	2. Increasing pregnancy rate due to conflict restriction.
3. Identify challenges encountered in accessing health care during restriction hours in Bimbilla.	3. Identify challenges in accessing health care during restriction hours.	3. There are challenges in accessing health care during restriction hours.



3.8 Data Collection Technique

A structured questionnaire was used to collect primary data from respondent at the household level. Questionnaire was administered in a friendly atmosphere. That is establishing rapport between the data collector and the respondents in order not to inflict pain on participant's who might have experienced unfortunate incidence due to the conflict and to ensure compliance. All misconception concerning the questionnaire would be adequately explained and addressed for respondents. Information's such as first birth, most recent birth, currently pregnant, are they prepared for the pregnancy, how they access health services during restriction hours etc will be collected.

Ten (10) Research Assistants were recruited and given two day's training on how to collect data. The questionnaires was reviewed and questions were translated into the local language for standardization to ensure that the questions are well understood and asked in the same way by every Research Assistant. Each respondent was interviewed separately and responses entered appropriately in the interview guide in other to avoid interference.

3.9 Pretesting of tool

Forty (40) questionnaires was administered to women in their reproductiveage in Bimbilla using systematic sampling method, since it enabled the researcher to discern, alter or change some of the question. Particular attention was given to questions that might be too sensitive to be asked without offending people. It also helped to determine whether the questions are acceptable, questionable, answerable, analyzable and applicable.

3.10 Ethical Consideration

Ethical clearance was sought from the Committee on Human Research, Publication and Ethics (CHRPE) and Ghana Health Service. The District Health Directorate and the sub-district was contacted and a consultative discussion held with chiefs, assembly members, opinion leaders and all stakeholders for their support and approval of the study. The consent of the respondents was sought before administering the questionnaire; confidentiality during and after the interview was assured.

3.11 Data Management and Statistical analysis plan

STATA was used for the general analysis of the Data, into frequency tables to give more meaning to the data; this was done to allow the data from being representation simple. The primary data was analyzed by coding the responses of the respondents. The codes were entered into STATA program

3.12 Limitations to the Study

It was difficult in some cases to obtain information from the respondents as many of them did not know their exact ages. Also, due to the poor road networks within the district, intermittent outbreak of conflicts, curfew and limited means of transport, community was visited once.

CHAPTER FOUR

RESULTS

4.1. INTRODUCTION

This chapter presents the results and discussions of data collected from respondents for the study. It begins with the demographic information of respondents, followed by, the research questions posed in the study with the aim of finding solutions to the questions which will in effect help the researchers to achieve the study objectives.

4.2.1 Demographic Characteristics of Respondents

Table 1 below represents the demographic characteristics of respondents. This result indicated that more than half 57.25% of the respondents between 15 years to 25 years, 29% are from the age of 26 years to 35 years, 10% from 36 years to 45 years and the remaining 3.75% were 46 years and above. Also, more than half of the respondents had never attended school 57.75%, 18.25% had attended school up to the Secondary/SHS level, 15.75% up to the Middle/JHS level, 5.25% up to the Primary school level and 3.0 had attended a higher educational level. The distribution of respondent by occupation 40% were trader, 24.75% were artisans, 19.75% were other categories of work and 15% were famers. The result in the table shows that most of the respondents 87.25% were married, 11% were living with a man, 6.75% were had single, 6.00% were divorced and widows.

Table 1: Demographic characteristics of respondents

Characteristics	Frequency	Percentage
Age group		
15- 25	229	57.25
26-35	116	29.00
36-45	40	10.00
46+	15	3.25
Educational level		
Never attended	231	57.75
Primary	21	5.25
Middle/JSS	63	15.75
Secondary/SHS	73	18.25
Higher	12	3.00
Occupation		
Famer	60	15.00
Trader	162	40.50
Artisan	99	24.75
Others	79	19.75
Marital status		
Single	27	6.75
Married	349	87.25
Divorce/Separated/Widow	24	6.00

Source: *Author's construct, 2017*

4.2.2 Pregnancy and Birth Interval

Table 2. The result shows that 40.75% had given birth for 3 to 4 times, 29% for 1 to 2 times, 26.25% for 5 times and above and 3.5% had not given birth. Overall there were 243 children who died from 144 women. However, only a few of these deaths were due to curfew.

The respondents, on whether or not they were pregnant at the time of the study, the results indicate that, majority of them 72.75% were not pregnant while the remaining 27.25% were pregnant. The fear of wanting to have more when curfew is ongoing seem to not be a problem as only 2.5% of the cases. Whether or not they want to more children, the results showed that, more than half of the respondents 59% were going to have more children, 20.5% preferred not to have more children and 17.5% were not certain. The distribution of how long the respondents would like to wait from

the time of the study before the birth of another child. The responses show that 41.50% would like to wait for up to 4 years and above, 26% for 3 years, 18.75% for 2 years, 3.25% would like to give birth in the following year and 10.50% would not like to give birth at all.

Table 2: Pregnancy and Birth Interval

Characteristics	Frequency	Percentage
Number of births		
None	14	3.50
1-2	118	29.50
3-4	163	40.70
5+	105	26.25
Number of children Dead		
1	93	23.25
2	27	6.75
3	24	6.00
Not applicable	256	64.00
Currently pregnant		
Yes	109	27.25
No	291	72.75
Want more children		
Another child	12	3.00
Prefer not to have	82	20.50
More children	236	59.00
Not certain	70	17.50
Want child later		
Yes	84	21.00
No	302	75.50
Not applicable	14	3.50
Birth interval		
1 year	13	3.25
2 years	75	18.75
3 years	104	26.00
4+ years	166	41.50
Not applicable	42	10.50

Source: *Author's construct, 2017*

4.2.3 Access Health Care Services

Table 3 below shows whether or not the respondents were able to access health care services during the curfew. The result shows that 46.50% are not able to access health care during curfew. For the reasons why, respondents could not access health care services during curfew hours. The result shows that majority feared they would be beaten by the police if they went out during the hours.

Table 3: Health Access

Characteristics	Frequency	Percentage
Able to access health during curfew hours		
Yes	185	46.25
No	186	46.50
Not applicable	29	7.25
Reasons for unable to access health during curfew hours		
I don't want to be arrested and beaten	97	53.3
I am afraid	14	7.7
Avoid being beaten by police	71	39.0

Source: *Author's construct, 2017*

4.2.4 Consequences of Conflicts

Table 4 below represents the number of daughters of respondents who had traveled and their destination. From the result, 79.25% had their daughters who had not travelled, 10.62% had 1 daughter who had travelled, 6.67% had 27 daughters who had travelled, while the remaining 3.46% had 2 daughters who had travelled, 6.5% had travelled to Accra, 8.75% had travelled to Tamale, while the remaining 5.75% had travelled to other places

Table 4. Consequences of Conflicts

Characteristic	Frequency	Percentage
Number of daughters leaving the community due to conflict		
1	43	10.26
2	14	3.46
3	27	6.67
None	316	78.02
Where?		
Accra	26	6.50
Tamale	35	8.75
Others	23	5.75
Note applicable	316	78.02

Source: *Author's construct, 2017*

4.2.4 Birth Control

Table 5 is a representation of the views of respondents on the type of artificial method they had used to try to avoid getting pregnant. From the table, 75.50% had not used any of such method, 21.00% had used short term method while the remaining 3.50% had used the long-term method. The table below is a representation of the views of respondents on the type of artificial method they had used to try to avoid getting pregnant. From the table, 75.50% had not used any of such method, 16.75% had used injection, and 4.25% had used pills while the remaining 3.50% had used the implants.

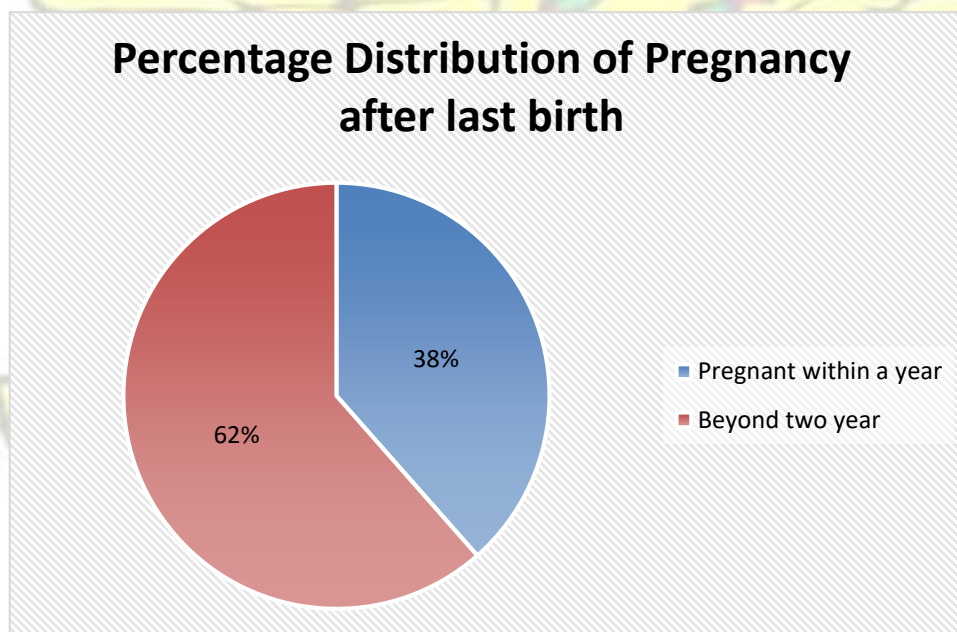
TABLE5: Birth Control

Characteristics	Frequency	Percent
Birth control method		
Short term	84	21.00
Long term	14	3.50
None	302	75.50
Family Planning Types		
Injectable	67	16.75
Implants	14	3.50
Pills	17	4.25
Not applicable	302	75.50

Source: *Author's construct, 2017*

4.2.5 Pregnancy after Last Birth

The figure below shows the proportion of women who were pregnant in less than two years during the study. The figure shows that out of the 109 who were pregnant 38% of them got pregnant in less than two years.



Source: *Author's construct, 2017*

CHAPTER FIVE

5.1 DISCUSSION

5.2.1 Demographic Characteristics

The health of women in general is of public health importance especially those in their reproductive age since they contribute to national development. From the studies, most of the women were those from the ages of 15 to 25 years, as they represented more than half of the total women. The ages of the women as well decreases almost by half from 26 to 35 years, 36 to 45 years and then 46 years and above. The study thus involved more women in their reproductive ages from the age of 15 to 45 years, as they represented a cumulative percentage of 96.25%.

The world conference that was held first by United Nations on Women in Mexico City in 1975 among other relevant facets of lives stressed on the importance of improving the education of women to change their situations mainly in the unindustrialized continent such as Africa. Again, there have been pressure from Home and Worldwide Women's System of government since the Beijing Forum among other things stemmed in the establishment of acts counter to discrimination and violence against women, in crusades to increase women's right to education, their legacy civil rights and the institution of institutions to handle women matters. Despite the global approach and strategies mapped out to get more women educated, the study results showed that close to 57.75% of the women involved in the study had no educational background. As low as 3% of them had had their highest educational level at a higher institution. This shows a clear picture of a low socioeconomic level among the women in the Bimbilla Community. This study result confirms findings from the Nigeria DHS report that indicated a low socio-economic status of women. Numerous Studies have shown a positive relationship between the socio-economic status of women and their ability and or likelihood to assess the services of healthcare facilities.

Marriage, especially child marriage has been the topic of discussion of most feminist and advocates of gender equality. A number of studies has stressed and or established the relationship between the marital status and or the condition of marriages and the wellbeing of women. The study results show a higher percent of 87.25% of women were married at the time of the study. The results also show that 6.75% of the population under the study were not married, but were staying with men. Among the married, the study result shows a low level of divorce rate in the Bimbilla community as more than half of the population of women involved in the study had married only once. This means that among 349 women who reported that they were married, 24 of them were separated.

One of the issues confronting women and their health is birth. A study reviewed in this work shows that a woman in sub-Saharan Africa has a 1 in 16 chances of dying in pregnancy or childbirth, compared to a 1 in 4,000 risks in a developing country – the largest difference between poor and rich countries of any health indicator. At the level of prenatal care, pregnancy complications and childbirth are the leading causes of death among women of reproductive age 15-45 years. The study results show that 82.12% of the women had had live births. The results also showed that 70.2% of the women had not experienced any child-death, while 29.8 had had one or more of their children dying after birth. This means that of the 82% of women who had had live birth, 17.88% of them had their children dying later in life. The study again shows that of those who had had instances of fetal deaths, majority of them had died at the first trimester, while the remaining at the second trimester. This shows that the women need great attention before their third trimester during pregnancy in order to increase the chances of live births.

A study results shows less than one percent of maternal related death and child death occur in developed countries with 99% occurring developing count Berg et al.,2010 . This shows that such

deaths could be avoided if resources and services were available. In the case of Bimbilla, maternal related and child death would have been prevented with the availability of health care resources within curfew hours. The study results showed that 64% of the women attributed the cause of the child-death to the presence of curfew in the community.

5.2.2. Effects of Conflict Restriction on Birth Intervals of Women in their Reproductive Age in Bimbilla

Maternity or child-bearing has long been an important subject in the issues affecting women. Literatures reviewed have demonstrated the relationship between improper handling of child bearing and women. Other writers have also identified such factors as low socio-economic status of women and lack of women empowerment as contributing factors to increased child-bearing rate. The study results show a high fertility rate in the Bimbilla community as all the respondents in the study had given birth for at least once. Majority of the women had given birth for 3 or 4 times. The cultural beliefs of the people play a major role as barrier to contraceptive use in most part of Africa. Several studies in the African context has reported it to be the main obstacle for family planning and contraceptive uptake in many countries including Ghana (McGinn et al.,2011). Meanwhile

Studies have shown that poor educational training attainment can have an impact health when it limits young women's awareness about adequate nutrition, birth spacing, and contraception. As indicated in the findings of this study, majority of the women are non-literates. The study results on the year of first birth and the year of most recent births indicate that, there is an appreciable high birth spacing of two years and above. Again, the study results show that 59% of the total

number of women involved in the study would like to have more children, with 3%, interested in having only one subsequent child.

5.2.3 The Relationship between Increasing Pregnancy Rate and Conflict Restriction in Bimbilla

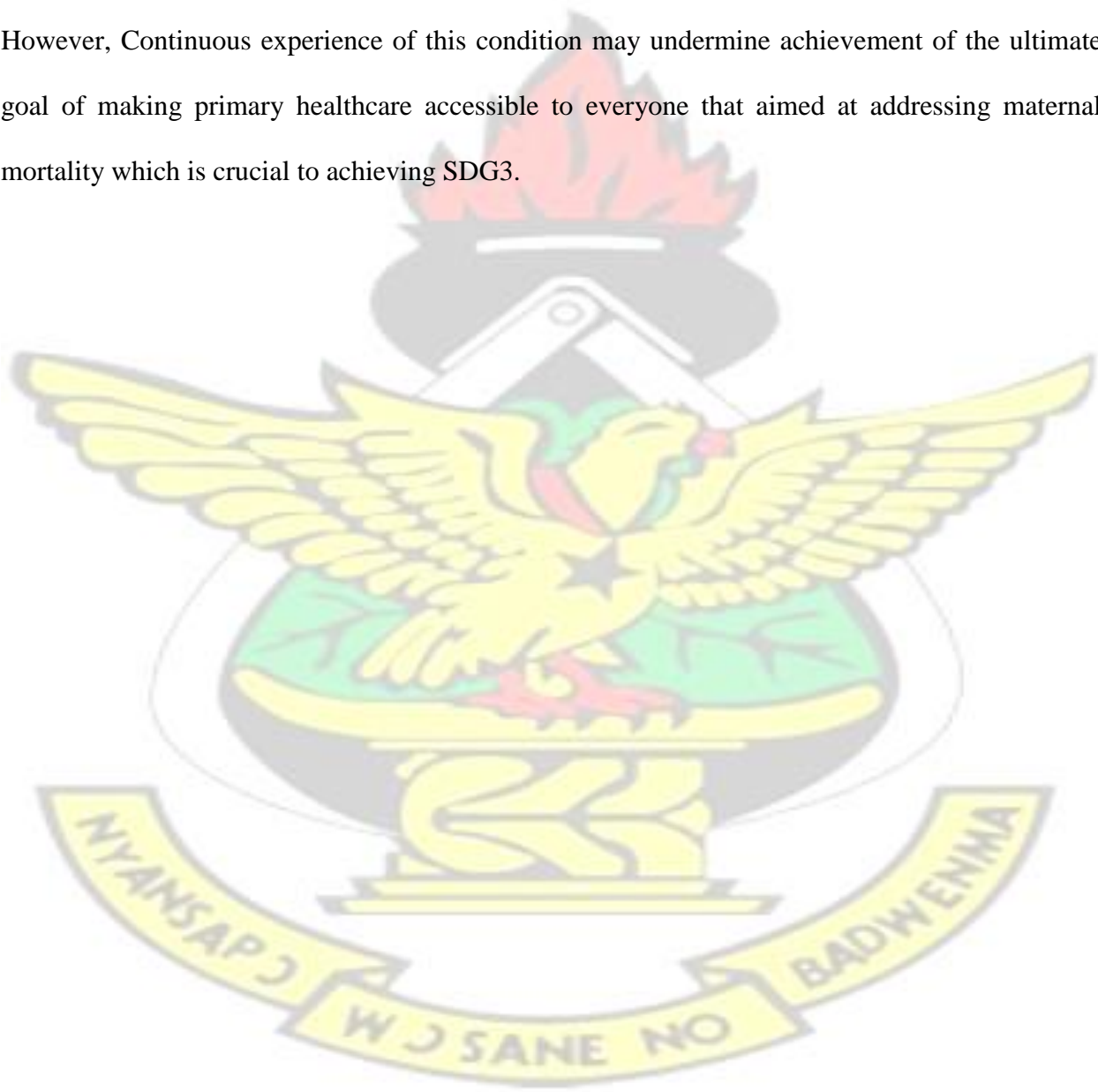
Accurate and persistent use of contraceptive underdeveloped countries have been shown to have declined. The rate at which pregnant mothers die could have been prevented by more than half of all maternal deaths if the full request for birth control is met. These paybacks are attained through decreasing the number of unintended pregnancies that consequently result in treacherous abortions and avoiding pregnancies in those at high risk. The study results showed a very low level of unplanned pregnancy in the Bimbilla community. Less than 30% of the women had indicated that they were not prepared for the pregnancy, with the remaining 72.75% showing readiness for their pregnancies. This figure gives the indication that, these unplanned pregnancies occurred as a result of the curfew. Out of the 109 (27.25%) women who experienced these unplanned pregnancies, 38% of them conceived in less than two years. The possible explanation could be that, men in the Bimbilla town sleeps early and may engage in sex with their partners due to the restriction on outings and movement imposed by the curfew.

5.3.3 Challenges Encountered in Accessing Health Care during Restriction hours in Bimbilla.

Curfew poses restriction on movement of people, including seeking for health care services. The study confirms this almost half of the women indicated their inability to access health care services during curfew hours. For being afraid, not wanting to be arrested, and the beaten, most of the respondents indicated that they could not access health care services during curfew hours.

However, for those who were able to seek health care despite the curfew hours, most of them did so by seeking for permission from the police at post. The fear of being arrested during curfew hours deters families of women in labour to access professional health care. This cause delay in accessing health services, prolonging labour leading to complication and even death thereby increasing maternal mortality rate in the district and country at large.

However, Continuous experience of this condition may undermine achievement of the ultimate goal of making primary healthcare accessible to everyone that aimed at addressing maternal mortality which is crucial to achieving SDG3.



CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.1 INTRODUCTION

This section presents the study findings, conclusion, recommendation, study contribution to knowledge and pointers for further studies.

6.2. Challenges Encountered in Accessing Health Care During Restricted hours in Bimbilla

The study realized that almost half of the women finds it difficult to access health care services during curfew hours. One of the most common reasons they associate with their inability to access health care services during curfew hours is their fear of being beaten up by the police or being arrested. However, of those who could do so, majority of them mastered courage, or sought for permission from the police available at the time they wanted to access health care services. This finding gives an indication Bimbilla may record high maternal death since most labour occur at night. This would be crucial in preventing the four delays in accessing maternal health services, resulting to prolonging labour leading to complication and even death thereby increasing maternal mortality rate in the district and country at large.

The continuous experience of this condition may undermine achievement of the ultimate goal of making primary healthcare accessible to everyone that aimed at addressing maternal mortality which is crucial to achieving SDG3.

6.3 Conclusions

The result of this study also discovered that migration of youth from Bimbilla at its peak which an indication that the level of poverty is going to increase since population is going to be mainly the aged which would adversely affect development. It was again realized that many children under

five years of age are dying which an indication that survival of children under five is questionable. The study concludes even though most of the women in their reproductive ages were below 26 years old, education is a great challenge among the women in the Bimbilla community. That notwithstanding, the study dissociates itself from the findings in most studies that the ability of one to have proper birth spacing depends on the level of education of the individual and planned or unplanned pregnancies. Unlike other studies, the study showed that the presence of curfew hours does not pose an increase in the rate of pregnancies among the women of Bimbilla. However, the study agrees with other researches that curfew pose a threat against accessibility of health care services among women.

6.4 Recommendations

With regards to the findings from the study, the researcher recommends that

1. More emphasis should be placed on educating women. The form of educating women shouldn't only be emphasized on the informal or semi-formal education alone, but also the formal education.
2. While curfew may be relevant to maintain the peace of societies, policy makers must consider the health of women and their babies, whether born or unborn during those curfew hours. There should be some form of relaxation of restriction on movement during the curfew hours for health needs by the security agencies.
3. Further studies on the effect of Curfews on Women and Children's health could be conducted using some comparative studies with communities that do not have curfews.

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APPENDIX

QUESTIONNAIRE

**KWAME NKURUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY
QUESTIONNAIRE ON INFLUENCE OF CONFLICT RESTRICTION (CURFEW) ON
MATERNAL HEALTH AMONG WOMEN IN THEIR REPRODUCTIVE AGE IN
NANUMBA NORTH DISTRICT OF THE NORTHERN REGION OF GHANA**

My name is _____ and I am a student from Kwame Nkrumah University of Science and Technology, and the. We are conducting a local survey that asks women about various reproductive health issues. We would very much appreciate your participation in this survey. This information will help us inform the government to better plan health services. The survey usually takes between 15 and 20 minutes to complete. Whatever information you provide will be kept strictly confidential and will not be shown to anyone other than members of our survey team. Participation in this survey is voluntary, and if we should come to any question you don't want to answer, just let me know and I will go on to the next question

DATE AND RESPONDENT'S IDENTIFICATION

Date of interview..... Respondent ID:

DEMOGRAPHIC CHARACTERISTICS

1. . How old were you at your last birthday?
 - A. 15-25
 - B. 26-35
 - C. 36-45
 - D. 46+

2. What is the highest level of school you attended?
 - A. Never Attended
 - B. Primary
 - C. Middle / JSS
 - D. Secondary / SSS
 - E. Higher

3. Are you currently married or living together with a man as if married?

- A. No, never in union
- B. Yes, currently married
- C. Yes, living with a man
- D. Not currently in union: Divorced / separated
- E. Not currently in union: Widow

4. Have you ever been married or lived with a partner ?

- A. No
- D. Only once
- C. More than once

5. What is your occupation?

- A. Famer
- B. Trader
- C. artisan
- C.others

BIRTHS AND BIRTH INTERVALS

Now I would like to ask about all the births you during your life?

6. How many times have you given birth?

- A. None
- B. 1-2
- C. 3-4
- D. 5+

7. Were all of those live births?

- A. Yes
- B. No

8. Do you have any sons or daughters who you have given birth to who are living with you?

- A. Yes
- B. No

9. IF Yes how many are male and how many are female

- A. How many sons.....
- B. How many daughter.....

10. Have you ever given birth to a boy or girl who was born alive but later died?

- A. Yes
- B. No

11. If Yes, How many have died?

- A. 1
- B. 2

- C. 3
- D. 4
- E. 5+

12. When did the child die?
A. During delivery
B. After delivery

13. If before delivery, at what trimester?
A. First trimester
B. Second trimester
C. Third trimester

14. Do you think the death would be prevented If there were no curfew hours?
A. Yes
B. No

15. When was your first birth in year (penultimate birth)?.....

16. When was your most recent birth in year?.....

CURRENT PREGNANCY

Now I would like to ask about family planning.

17. Are you pregnant now?
A. yes
B. No

18. If yes were you prepared for this pregnancy?
A. yes
B. No

19. Would you like to have.....
A. Another child
B. Prefer not to have any
C. More children
D, Not certain

20. How long would you like to wait from now before the birth of a/another child?
A. 1year
B. 2years
C. 3years
D. 4+years

21. At the time you became pregnant, were you expecting any pregnancy by then Did you want to become pregnant then?

- A. Yes
B. No
22. If Were you expecting it later
A. Yes
B. No
23. Did you not want to have any / any more children at all after this pregnancy?
A. Yes
B. No
24. Have you ever used anything or tried in any way to delay or avoid getting pregnant?
A. Yes
B. No
25. If yes which ways or methods have you ever used?
A. Natural
B. Artificial
26. If it is artificial, what type of method?
A. Short term
B. Long term
27. Which type?
A. Female sterilization
B. IUD
C. Injectables
D. Implants
E. Pill
F. Condom
28. If No to question 22, why?.....
29. Have ever had a miscarriage /abortion?
A. Yes
B. No
30. If yes was it
A. Spontaneous
B. Induced
31. If induced what was the reason
32. If spontaneous, what time of the day did it happen?
A. Before curfew hours
B. During curfew hours

C. After curfew hours

ACCESS TO HEALTH CARE

33. Did you report to the hospital?

- A. Yes
- B. No

34. If yes, by what mean?

35. If no why?

36. Are you able to access health care service during curfew hours?

- A. Yes
- B. No

37. If yes, how.....??

38. If no,why.....??

CONSEQUENCES OF CONFLICT

39. How many daughters have traveled?

40. Where?

- A. Accra
- B. Tamale
- C. Kumasi
- D. Others specify

41. What was the reason for traveling?

- A. Kayayo
- B. Trade
- C. Shop
- D. visit

KNUST

