# CAUSES AND IMPACT OF UNSAFE ABORTION IN NIGERIA

**Yau Garba Abbas**
**Nigeria**

50th International Course in Health Development
September 16, 2013 – September 5, 2014

KIT (ROYAL TROPICAL INSTITUTE)
Development Policy & Practice
Vrije Universiteit Amsterdam

**CAUSES AND IMPACT OF UNSAFE ABORTION IN NIGERIA**

A thesis submitted in partial fulfillment of the requirement for the degree of Master of Public Health

By

Yau Garba Abbas

Nigeria

Declaration:
The thesis "Causes And Impact of Unsafe Abortion in Nigeria" is my own work. Where other people's work has been used (either from a printed source, internet or any other sources) this has been carefully acknowledged and referenced according to international guidelines and school requirement.

Signature... 

50th International Course in Health Development (ICHD)
September 16, 2013 – September 5, 2014
KIT (Royal Tropical Institute)/ Vrije Universiteit Amsterdam
The Netherlands

September 2014

Organized by:

KIT (Royal Tropical Institute), Development Policy and Practice
Amsterdam, The Netherlands

In co-operation with:

Vrije Universiteit Amsterdam/ Free University Amsterdam
Amsterdam, The Netherlands

## Table of Contents

Table of contents.....i
Acknowledgement.....iii
List of abbreviations.....iv
Abstract.....v
Introduction.....vi
**Chapter 1: Background information on Nigeria**.....1
1.1 Geographical location.....1
1.2 Demography and population.....1
1.3 Socio-economic indicators.....1
1.4 Health indicators.....2
1.5 Health system organization.....2
1.6 Women`s sexual and reproductive health.....3
**Chapter 2: Problem statement, Study objectives and Methodology.....4**
2.1 Problem statement.....4
2.2 Objectives.....5
2.2.1Overall Objective.....5
2.2.2 Specific Objectives.....5
2.3 Methodology.....6
2.4 Study limitations.....6
2.5 Conceptual framework .....6
**Chapter 3: Magnitude of Unsafe Abortion in Nigeria.....**8
**Chapter 4: Factors responsible for unplanned pregnancy.....**12
4.1 Early start of sexual activities.....12
4.2 Unmet need for family planning.....12
4.3 Knowledge about family planning.....13
4.4 Lack of sexual education in schools.....15
4.5 Sexual violence (rape).....16
**Chapter 5: Reasons why women resort to abortion.....**18
Marital status.....18
Fear of parental disapproval.....18
Expulsion from school.....18
Sexual Violence.....18
Financial responsibility of child bearing.....19
Infidelity from the side of the man or woman.....19
Stigma and discrimination from the society.....19
Child spacing.....19
Sex preference.....20
**Chapter 6: Factors responsible for unsafe abortion.....**21
6.1 Socio-economic factors.....21
6.2 Socio- cultural factors.....22
6.3 Educational qualification.....23
6.4 Healthcare services .....23
6.5 Legal restriction.....24

**Chapter 7: Impact of unsafe abortion on the reproductive Health of women**.....26
7.1Early complications.....26
7.2 Late complications.....28
7.2.1 Secondary infertility.....28
7.2.2 Maternal mortality.....29
7.2.3 Ectopic pregnancy.....30
7.2.4 Chronic pelvic inflammatory disease.....30
**Chapter 8: Discussion**.....31
**Chapter 9: Conclusions and Recommendations**.....35
9.1 Conclusions .....35
9.2 Recommendations.....35
9.2.1 Policy.....35
9.2.2 Healthcare services.....35
9.2.3 Community.....36
9.2.4 Research.....36
**References**.....37
**Annexes**.....44
Annex 1: Map of Nigeria showing 36 states and the capital.....44
Annex 2: Nigeria Health indicators.....45
Annex 3: Complications of unsafe abortion.....46

**Acknowledgement**

First of all, I wish to express my sincere gratitude and thanks to "Almighty Allah" for giving me the courage and strength to pursue this rigorous training, and for keeping me healthy and strong throughout the entire program.

My special gratitude goes to Jigawa State government under the able leadership of his Excellency governor Sule Lamido for granting me scholarship to study for a Masters in Public Health at the Royal Tropical Institute (KIT) in Amsterdam, The Netherlands. Many thanks also to the head of service of Jigawa state Dan Iyan Dutse Alhaji Mustapha Aminu for facilitating my sponsorship.

To my great family for being the source of inspiration and moral support- my mum, my wife and my beautiful children I appreciate and love you all.

My special appreciation goes to the KIT course coordinators Prisca Zwanikken and Sumit Kane and course secretariat Rinia Sahebdin and Maud Molenaar for their wonderful support and guidance throughout the year. My special thanks go to my thesis advisor and back stopper for their support, guidance and encouragement throughout the thesis writing process.

To my classmates from 19 different countries, it has been wonderful being with you throughout the year, my special gratitude also to my Nigerian classmates Joshua Owoleye Olatunji and Oluwakemi Aderibigbe for their support throughout the year. My acknowledgement will not be complete without mentioning my Ghanaian friends Charles adjei and Philominor Edem Hotor for being wonderful classmates, friends and neighbors. I appreciate you all.

## List of abbreviations

| | |
|---|---|
| AIDS | Acquired Immunodeficiency Syndrome |
| CDC | Centers for Disease Control |
| D&C | Dilatation and Curettage |
| DFID | Department For International Development |
| FGD | Focus Group Discussion |
| GDP | Gross Domestic Product |
| HRFN | Health Reform Foundation of Nigeria |
| HRFH | Human Resource For Health |
| HIV | Human Immunodeficiency Virus |
| IPAS | International Projects Assistance Services |
| IUCD | Intrauterine Contraceptive Device |
| MVA | Manual Vacuum Aspiration |
| NDHS | Nigerian Demographic and Health Survey |
| NPHCDA | National Primary Health Care Development Agency |
| NGO | Non Governmental Organization |
| PID | Pelvic Inflammatory Disease |
| STI | Sexually Transmitted Infection |
| TFR | Total Fertility Rate |
| UMMC | University of Maryland Medical Center |
| UNAIDS | Joint United Nations Program on HIV/AIDS |
| WHO | World Health Organization |

**Abstract**

**Background:** Nigeria is one of the countries with the highest maternal mortality in the world and a significant proportion of it has been attributed to unsafe abortion. There are several factors that expose women to the risk of unsafe abortion like; unplanned pregnancy and for various reasons the pregnancy becomes unwanted. Unsafe abortion can have several health consequences from short term of bleeding, sepsis or perforation of the uterus to the long term of chronic pelvic pains or secondary infertility.

**Methodology:** Literature review of articles, data and reports on unsafe abortion using search engines like PubMed, Google and Google Scholar.

**Results:** Several factors are responsible for unplanned pregnancy like; lack of sexual education in schools, early sexual debut, sexual violence, and unmet need for contraception. Financial constraints, being single, not ready for motherhood, rape and the like have been identified as some of the reasons that force women to seek abortion. Legal restrictions, poverty, failures of the health system are some of the main factors that make abortion unsafe in Nigeria.

**Conclusion and recommendation:** Women continue to procure dangerous abortions being unaware of the health, social and legal consequences. And it continues to threaten the lives of so many young women in the country. Most of these young women are single and in schools. The effort should be made to expand the legal indications for abortion. Meanwhile healthcare workers need to be trained to deliver qualitative abortion and post abortion care. The community, nurses and midwives need resources to sensitize and promote uptake of contraception as one of the measures to reduce unwanted pregnancies.

**Key words:** "Unsafe abortion", "Nigeria", "unplanned pregnancy", "maternal morbidity", and "maternal mortality".

**Word count:** 12,980

## Introduction

Globally, about 210 million pregnancies occur each year and out of which 80 million pregnancies are unintended (Singh et al. 2009). A report by the World Health Organization (WHO) in 2008 reveals that, about 21.6 million unsafe abortions were performed from which 5.3 million women suffer disabilities, and unsafe abortion was responsible for 13% or 47,000 maternal deaths worldwide (WHO 2011). Nigeria is one of the countries with the highest fertility rate in the world, which is on average 5.7 children per woman (DHS 2008). In Nigeria, unsafe abortion is a serious public health problem, according to Health Reform Foundation of Nigeria (HRFN); and Nigeria contributes significantly to the global burden of unsafe abortion related mortality (HRFN 2006).

According to available research, annually 760,000 abortions are performed in the country, at the rate of 25 abortions for every 1,000 women of childbearing age (Henshaw et al. 1998). This resulted in 142,000 complications, severe enough to warrant admissions (Bankole et al. 2006). To ascertain the correct figure of mortality from unsafe abortion is difficult, but the Society of Gynecologist and Obstetrician Of Nigeria and Henshaw revealed that each year about 3,000 women are dying as a result of complications due to unsafe abortions and more than half of them are adolescents (Orisaremi 2012; Henshaw et al. 2008). This could be one of the reasons why maternal mortality is very high in the country (WHO 2007). Unfortunately no evidence exists to suggest that the authorities have any tentative programs in place to improve the situation.

For over fourteen years I was working in maternity and gynecological wards, where I witnessed a lot of horrible complications and mortalities related to unsafe abortion. Oftentimes young girls confronted me with cases of unwanted pregnancies seeking abortions, but law has tied my hands. The only assistance I could render is to tell them where they could get a safe abortion if they can afford. The question I have been asking myself always is; what can we do to reduce the incidence of unwanted pregnancies and unsafe abortions in Nigeria? This is one of the reasons I developed an interest in reproductive health, especially the area of unsafe abortion.

The idea of this thesis is to explore the factors responsible for unsafe abortions, determine the reproductive health impact of unsafe abortions and to find out specifically why women resort to abortion. The findings of this study will be an evidence-based fact that will be used to make recommendations to all the relevant stakeholders responsible for promoting maternal health in the country.

## Chapter 1: Background information on Nigeria

This chapter is about geographical location, demographic characteristics, health system, health indicators and women's sexual and reproductive health.

### 1.1 Geographical location

Nigeria is located in the coastal area of West Africa in the Gulf of Guinea; it has an area of 923, 768 square kilometers that includes 13,000 square kilometers of water (Nigeria geography 2014). Nigeria shares boarders with Niger and Chad in the north, Cameroon in the east, Benin republic in the west and Atlantic Ocean in the south (Nigerian geography 2014).

### 1.2 Demography and population

Nigeria is the most populace country in Africa with a population of about 170,123,740 according to July 2013 estimate (CIA 2013). The country is divided into 36 states and federal capital (Abuja). It has over 250 ethnic groups, with the predominant ones being Hausa/Fulani, Yoruba and Igbo (CIA 2013; HRFH 2008). The official language is English, but other languages like Hausa, Yoruba, and Igbo and more than 500 others are spoken in the country. The predominant religions are Islam, which constitutes about 50%, followed by Christianity 40% and other traditional religions 10%. Muslims are predominantly in the northern part while the Christians are mostly in the central and southern parts of the country (CIA 2013). See annex 1

### 1.3 Socio-economic indicators

The majority of Nigerians are subsistence farmers and agriculture is the major source of employment. However the country has abundant reserves of natural resources like crude oil, natural gas, coal, tin and so on. In spite of abundant natural resources in the country, about 54% of youth are unemployed (NBS 2012). And more than 70% of the population is living below poverty line (UNDP 2008).

Education plays a vital role in prosperity; about 77% of the men aged 15-59 in the country are literate as against only 54% of women of childbearing age 15-49 (DHS 2008). However the literacy level differs between urban and rural, northern and southern part of the country (DHS 2008). Generally it is higher in the southern part; while in the northern part about 75% of the women are illiterate (DHS 2008).

## 1.4 Health indicators

Nigeria is one of the countries with the poorest health indicators in the world. Life expectancy at birth is 52 and 54 years for males and females respectively (WHO 2011). The average total fertility rate is 5.7 children per woman with some regional disparity (DHS 2008), which ranges from as low as 4.5 in the Southwest to as high as 7.3 in the north (DHS 2008). Maternal mortality is among the highest in the world: 545 per 100,000 live births (DHS 2008), which also ranges from 474 in the South to as high as 2,849/100,000 live births in the northern part of the country (Kullima et al. 2009). Among the married women aged 15-49 only 10% are using modern methods of family planning, while the unmet need for family planning for married women is about 20% (DHS 2008). The antenatal care coverage by the skilled providers is 58% in the country, with the lowest coverage in the north 31% and the highest in the south about 81% (DHS 2008). See annex 2.

## 1.5 Health care system

Generally the health system in the country reflects the three tiers of government, where the facilities belong to the Federal, States and Local governments (HRFH 2008). The health system can also be divided into orthodox, traditional and alternative systems, but most of the data is from the orthodox health care provision (HRFH 2008).

Both the government and private health care providers in Nigeria are providing health care services. The government health care system is divided into three levels of care namely; primary health care, which is the responsibility of the local government and is regulated through national primary healthcare development agency (NPHCDA) by the Federal government. Secondary health care which is the responsibility of the states and tertiary care which comprises of federal medical centers and teaching hospitals which are the responsibility of the federal government (Asuzu 2004; HRFH 2008).

The national health care insurance scheme was established by the federal government in 1999 to provide social cover for all the Nigerians especially the civil servants, vulnerable groups like pregnant women, children under five years, prison inmates and the like (Aderounmu 2004).

Nigerian government expenditure on health is very low; the GDP per capita expenditure on health is $139 while the percentage of GDP spent on health as of 2011 is only 5.3% (WHO 2011). In all, the Nigerian government provides only 30% of the overall total health expenditure, while the private out of pocket expenditure constitutes 70% (WHO 2011).

## 1.6 Women's sexual and reproductive health

The average age of sexual initiation for girls in Nigeria is 15 years (DHS 2008). Generally women in the north start sexual intercourse earlier than their counterparts in the south, furthermore those in the rural areas start earlier than those in the urban areas (Sedgh et al. 2009). There is a difference between south and the north in terms of premarital sexual experience because in the north girls marry much earlier than in the south. As a result the prevalence of premarital sexual experience is only 1-4% in the north, while in the Southern part of the country is about 35% (Sedgh et al. 2009). This could be one of the reasons why the incidence of unsafe abortion is higher in the southern part of the country.

Majority of the women of childbearing age in Nigeria face enormous challenges as regards to sexual and reproductive health issues. Poor access to health services and government policies targeting young women's sexual and reproductive health has not been fully implemented (UNAIDS 2012). There are various attempts by government to improve the situation especially with the enactment of the "reproductive health policy" (1999) but due to lack of commitment and poor funding the programs have not been successful (UNAIDS 2012).

## Chapter 2: Problem Statement, Justification, Study Objectives and Methodology

This chapter gives a brief description of unsafe abortion, justification and objectives, and the methodology that will be used to answer the objectives applying a conceptual framework. Also the study limitations will be presented.

### 2.1 Problem Statement

Unsafe abortion is a serious global problem that needs urgent attention. It has a great implication in a life of a woman and her reproductive health (WHO 2014). Unsafe abortion is defined by World Health Organization (WHO) as "a procedure for terminating unwanted pregnancy either by person lacking the necessary skills or in an environment lacking the minimum standard or both'' (WHO 2014).

It is one of the leading causes of maternal morbidity and mortality all over the world, especially in developing countries like Nigeria. Annually about 20 million unsafe abortions are performed, most of which are in the developing countries with restrictive abortion laws (Adinma 2011). According to WHO, 550 unsafe abortions are performed every day (WHO 2014).

In Nigeria unsafe abortion is a serious problem that significantly contributes (30-40%) to the maternal mortality in the country (Adinma 2011). Even though there is no official data on abortion due to the restrictive law, however, a significant number of abortions are carried out in the country annually (Adinma 2011), out of which many women die as a result of complications (Otoide, Oronsaye & Okonofua 2011; Henshaw 2008). Non-physicians are performing about 60% of the abortions and the majority of those are done in the private health facilities or at home (Adinma 2011).

Nigeria permits abortion only if the life of the woman is in danger; otherwise the perpetrators (woman and the abortionist) will be imprisoned for a prescribed number of years (Adinma 2011). The implication of this law is that, a woman with unwanted pregnancy cannot get a safe abortion in the government facilities; instead she has to use the service of unqualified quacks which most of the time results in serious unwanted consequences (Adinma 2011).

Unsafe abortion often results in serious medical consequences, such as sepsis, hemorrhage and injury to the uterus bowel or genital organs. Others are renal failure and death from complications (Ibrahim et al. 2011; Bankole et al. 2006). If the woman survives she may end up with some serious related complications, such as secondary infertility, chronic pelvic pains, ectopic pregnancy that will jeopardize her future

reproductive life (Ibrahim et al. 2011) and consequently her economic wellbeing. Most of these complications arise due to the fact that, abortions in most cases (68%) are carried out in the late first and second trimesters, only 20% are carried out early in the first three months (Ibrahim et al. 2011).

Unsafe abortion is a serious problem in Nigeria and it does not receive the required attention it deserves. There is a need to really understand the factors responsible for unsafe abortion and unveil the social and health consequences to the life of a woman and find effective ways to deal with the problem. However we have to acknowledge the efforts made by few abortion-rights activists who are pressing to promote safer conditions and to liberalize the abortion law state by state. But even the reproductive rights activists are very cautious in discussing the issue for fear of undermining the progress made in other areas, such as access to contraception, because Nigeria is a highly religious country (Cordingley 2014).

In 2012 Nigerian president Goodluck Jonathan promised $33 million for free contraceptive provision in the public hospitals (Cordingley 2014). But the program generated controversy, with the Catholics calling for the money to be redirected to education and other health issues. Meanwhile the same year the southern state of Imo passed a law that would have permitted abortion in cases of rape, incest, mental or physical health consequences for the mother. Abortion right activists considered this as a victory, but after intense lobbying by the Catholic Medical Practitioners Association, the law was repealed by the state assembly (Cordingley 2014).

This unfortunate preventable tragedy continues to threaten the lives of young women in Nigeria. Unless something serious is done, the illegal abortionists will continue to ruin the lives of young Nigerian women while siphoning their meager resources. The question is why women resort to abortion despite it being illegal in the country and having so many negative health outcomes?

## 2.2 Objectives

### 2.2.1 overall objective

The overall objective of this thesis is, to describe the causes and impact of unsafe abortion on the reproductive health of the women in order to make recommendations to the stakeholders responsible for promoting maternal health in the country.

### 2.2.2 Specific objectives

- To determine the magnitude of unsafe abortion in Nigeria.
- To explore the reproductive health impact of unsafe abortion.
- To describe the factors responsible for unplanned pregnancy.

- To explore specific reasons why women resort to abortion
- To explore the factors responsible for unsafe abortion.
- To make appropriate recommendations on how to reduce unsafe abortions and its complications in Nigeria, specifically to reduce unwanted pregnancy and to provide safe abortion for those in dare need.

## 2.3 Methodology

This thesis is a literature review of relevant materials such as articles and reports on unsafe abortion. The articles were obtained using search engines like, Pub med, Google and Google scholar. Some publications from international organizations working in the area of reproductive health such as World Health Organization (WHO), UNDP, Guttmacher Institute, DHS Nigeria, National Bureau of Statistic, and Population Council Nigeria were used. Grey literatures from other sources like Nigerian Government and NGOs which are published or unpublished but are not available online were also used. Experts on the issues were contacted for more resources.

The key search terms and combinations used include; Abortion, unsafe abortion, maternal mortality, maternal morbidity, Nigeria, unplanned pregnancy, health policy, abortion law, abortion and socio-economic factors, unmet need for family planning, abortion laws in other countries,

## 2.4 Study limitations

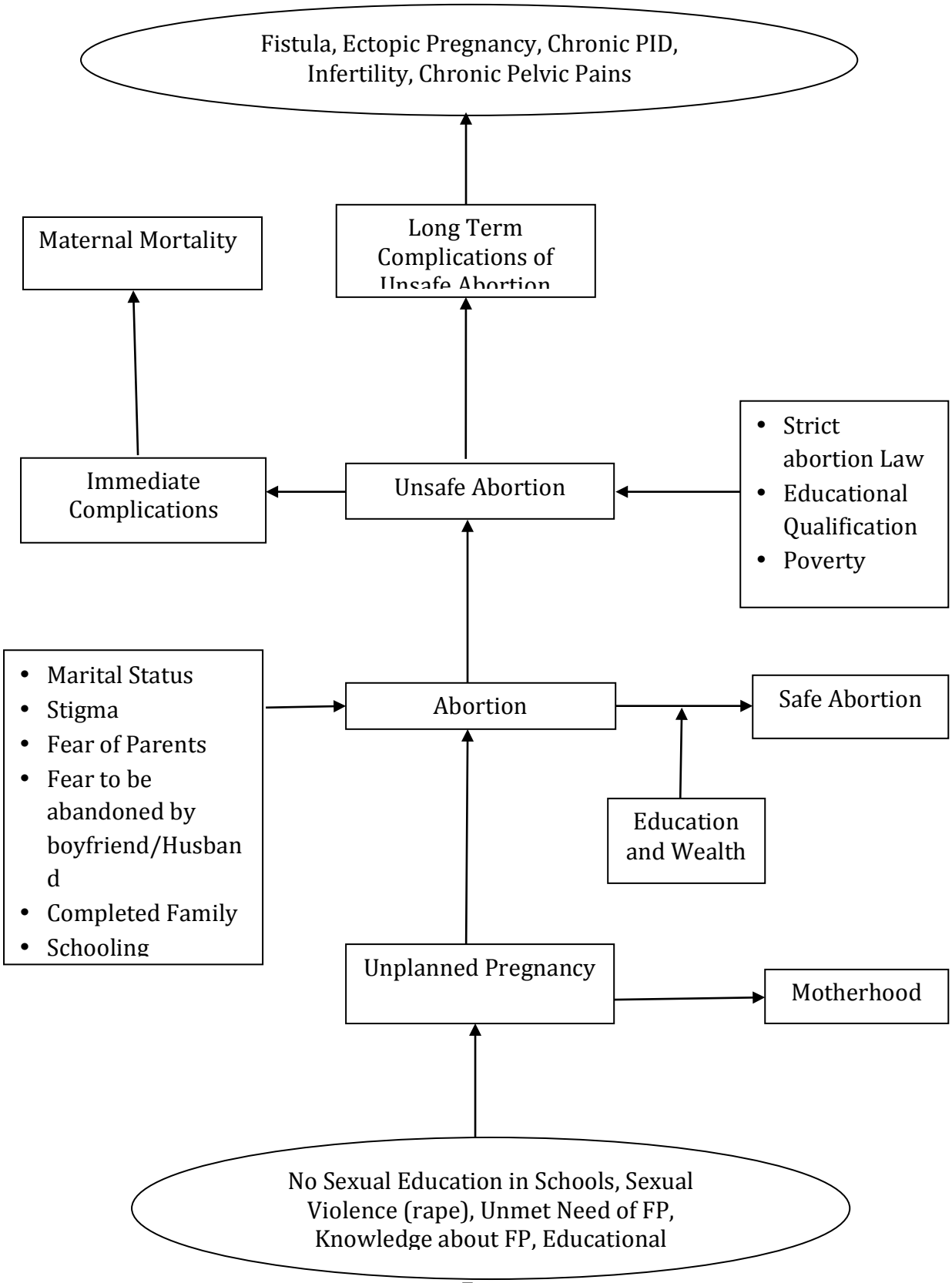
The thesis is mainly a literature review, several studies on abortion have been reviewed and analyzed, because of time constraints and limited resources primary data could not be collected. All the materials used were in English language and there is no age limit to the publication, considering the fact that nothing has changed in the country as far as the abortion law is concerned. However I tried to use current publications if available.

## 2.5 Analytical Framework

There is no comprehensive analytical framework that analyzes unsafe abortion and specifically why women resort to abortion. Therefore the author based on the problems identified in the problem tree has developed a conceptual framework. Many factors are responsible for unsafe abortion in Nigeria. It starts with factors responsible for unplanned pregnancy, like unmet need for family planning and lack of sex education in schools. Others are low educational status, sexual violence (rape) and lack of knowledge about family planning. To some extent the unplanned pregnancy may lead to motherhood but it is not always the case. Most unplanned pregnancies end in abortion. Certain factors like social responsibilities, culture, economic situation and education predispose women to seek abortion. Women may get safe abortion if they are Wealthy and educated. While factors like strict abortion law, educational

qualification and poverty make abortion unsafe. See the conceptual framework below.

**Conceptual Framework for Unsafe Abortion**

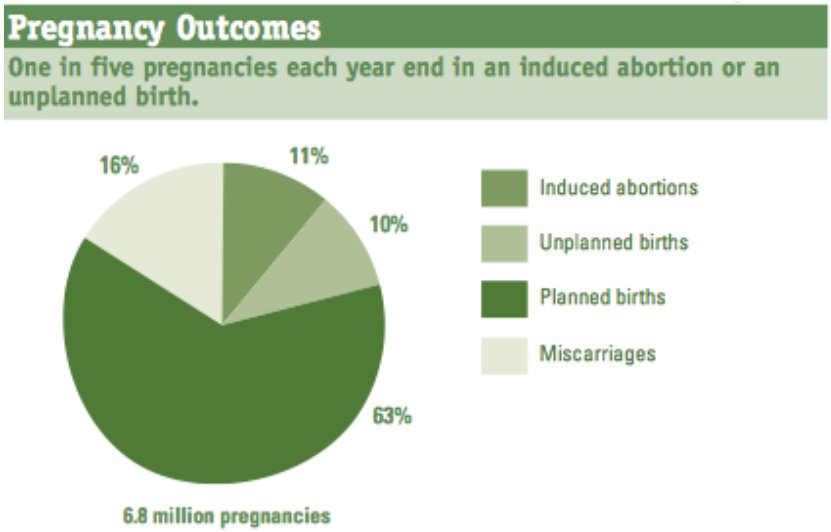


## Chapter 3: Magnitude of unsafe abortion in Nigeria

This chapter explores the magnitude of unsafe abortion in Nigeria, its distribution, the providers and techniques involved.

In all parts of Nigeria, women experience unplanned pregnancy and many of those women tend to terminate their pregnancies for one reason or another, through safe or unsafe methods (Henshaw et al. 1998). It was reported that, annually about 6.8 million pregnancies occur in Nigeria (Guttmacher Institute 2006). And for every five of those pregnancies one is unplanned, of which half end as an induced abortion (Guttmacher Institute 2006). See figure 3.1 below

Figure 3.1




Source: Guttmacher Institute 2008

Termination of pregnancy in Nigeria is permitted only if there is an indication that the woman's life is in danger (the woman has cardiac failure, uncontrolled diabetes or congenital anomaly of the baby), but still it is performed mostly under unhygienic, unsafe, clandestine conditions (Guttmacher Institute 2008). Statistical data on unsafe abortion is difficult to obtain because abortion is highly restricted and stigmatized. An estimate revealed that, every one out of ten women of childbearing age in Nigeria has had an abortion (Guttmacher Institute 2008). The same estimate reveals that four out of ten of those women have had abortion twice (Guttmacher Institute 2008).

Women from all parts of Nigeria procure abortions, but the proportions differ from southern to northern parts of the country (Bankole et al. 2006). The proportions are higher in the southern part. This may not be unconnected to the fact that, women in the south are more prosperous and have more access to health facilities that perform abortion than their

northern counterparts from where most of the data were collected (Bankole et al. 2006). Another reason is that, the average age of marriage in the north is 15.2 years while majority of the girls in the south of the country marry seven to eight years later at an average of 22.8 years (NDHS 2008). Because of these disparities, majority of the girls in the north normally start sexual intercourse after marriage, while those in the south are likely to start sexual intercourse before marriage and thus are likely to get pregnant and end with unsafe abortion and its complications. This could be one of the explanations why the incidence of unsafe abortion in the south is generally higher than in the north.

Moreover religious beliefs are another factors that influences abortion in the country. One report shows that the proportion of abortion is higher among the Catholic Christians (19%), followed by Protestants (11%) and Muslims (5%) (Bankole et al. 2006). The above religious differences could be another reason why the incidence is higher in the south than the north, which is predominantly Muslim. The proportion of abortion among women with university education is higher (18%) than in women with only primary education (5%) (Bankole et al. 2006). Prosperity also plays a vital role in seeking abortion as prosperous women procure abortions (15%) more than poor women (8%) (Bankole et al. 2006; Basinga et al. 2012). The prevalence of abortions cuts across all the ages, marital and parity groups in the country: 55% of women seeking abortions are younger than 25 years, while 63% have never married and 60% do not have children (Bankole et al. 2006).

Abortions are widely provided across the country and across both public and private facilities, but are more in the private facilities (Henshaw et al. 1998). Women themselves oftentimes try to terminate their unplanned pregnancies, and only when it failed they go to hospital (Henshaw et al. 1998). Majority of the hospitals do provide abortions only when the pregnancy is about 8 weeks and over 76% of the providers do not provide abortion when the pregnancy is beyond twelve weeks from the last menstruation (Henshaw et al. 1998). However gestational age is hardly a contra-indication for women who are desperate to terminate their pregnancies.

The methods used to terminate the pregnancy also differ from region to region, even though both dilatation and curettage (D&C) and manual vacuum aspiration (MVA) are used. In the southeast of the country, the physicians mostly prefer dilatation and curettage; in the northeast they mostly use manual vacuum aspiration while in the southwest and northwest they use both the two methods equally (Henshaw et al. 1998). Unqualified providers mostly use dilatation and curettage as their preferred method to terminate pregnancy, however some use drugs such as misoprostol tablet, and injections such as menstrogen. Using sharp objects like bicycle spike, chicken bones and harmful chemicals to induce abortion is also common among unqualified abortion providers (Henshaw

et al. 1998; Grimes et al. 2006). Women also use various methods to induce abortion to terminate their pregnancies. Some of the methods employed by women are: solvent, detergent and other decoctions inserted into the vagina. Other methods include alcohol drink, quinine, chloroquine and traditional herbs (Henshaw et al.1998; Grimes et al. 2006).

A four-year retrospective study performed in one of the teaching hospitals in southeastern Nigeria revealed that, among those admitted with unsafe abortions, teenagers constitute 31,8%, while 55.5% had never delivered and the majority of them had primary education (Ibrahim et al. 2011). This study confirms the findings by Henshaw et al. (1998) and Bankole et al. (2006) as regards to age distributions, parity and marital status of the women with unsafe abortions. As can be seen teenagers are the worst affected, because they mostly engage in risky behavior without any prevention due to peer pressure or poverty and no access to contraceptives if not married. As a result they end with unplanned and ultimately unwanted pregnancy, and being young and poor, low-income women and girls cannot afford the high cost of safe abortion. Because they are ignorant of the dangers posed by the illegal abortionists and unsafe procedures, they stand a high risk of losing their lives.

Physicians perform about 40% of all abortions in Nigeria (Ibrahim et al. 2011;Henshaw et al. 1998); however significant proportions are performed by non-physicians (nurses, midwives, pharmacist, traditional healers) including women themselves (Ibrahim et al. 2011; Henshaw et al. 1998). From my clinical experience, abortion is sometimes provided openly in the country despite the restrictive law; clinics and pharmacists do provide abortions that are paid under the table. Illegal abortion providers are destroying the morality and economy of our people. Many of them are poorly trained and the market is poorly regulated, even though abortion is illegal, it still happens everywhere in the country.

To conclude the epidemiology of unsafe abortion in Nigeria, below is a story of young girl that lost her life as a result of unsafe clandestine abortion in northern Nigeria.

*"Her lifeless body lies in the morgue. A mere sight of it evoked pity, regret and compassion. That is the body of Sarah Liman, a 21-year-old girl. The corpse was retrieved by the security men from two young men who wanted to dispose of it with a Ghana Must Go Bag, penultimate week around Mullang village, and a suburb in Bauchi. Sarah was a victim of unsafe and failed abortion. She was a lover to 24-year-old Ali Auwalu who was alleged to be responsible for her pregnancy. Auwalu was further alleged to have sought the assistance of his friend, 45-year-old Yakubu Mohammed for the termination of the three months old pregnancy. But fate cheated Sarah. She developed complications. Three days later, she died in her lover's apartment. In an attempt to secretly dispose the*

*corpse, which was put in a bag the two partners in suspect were sighted and later arrested by the police".*

Sarah is just one example of many young girls dying of unsafe abortion in Nigeria (Umeha 2006). This tragic phenomenon is a serious public health crisis that warrants urgent attention.

## Chapter 4: Factors responsible for unplanned pregnancy

This chapter explores the factors responsible for unplanned pregnancy in Nigeria.

Unplanned pregnancy is a serious public health concern all over the world especially among the adolescents. It is responsible for majority of the death and morbidities among 15-19 year old girls (WHO 2014).

Apart from health implications, it also has financial, educational and psychological implications for the women and their families in general (Olaitan 2010). Unplanned pregnancies occur to both married and unmarried women and the reasons differ depending on the circumstances.

### 4.1 Early start of sexual activity

Some of the reasons are lack of sexual education in schools that teaches young girl how to deal with sexuality and fertility issues, sexual violence (rape and coercive sex) and unmet need for contraception which is very high in the country (NDHS 2008; Olaitan 2010; Illika & Anthony 2004). Material gain is another reason that pushes young girls to become pregnant, because of absolute poverty especially in the rural areas. A study conducted in Anambra state Nigeria reveals that, over 98% of teenagers had sex or became pregnant because of material gratification (Illika & Anthony 2004). Some women become pregnant out of ignorance and the belief that, during breast feeding it is not possible to conceive. I witnessed a lot of these cases in my clinical practice. Some young girls might become pregnant simply because they are seriously in love or they just want to have sex.

### 4.2 Unmet need for family planning

Unmet need for family planning is "the percentage of married and unmarried women who want to space their next birth or to stop childbearing entirely but are not using any method of contraception" (NDHS 2008). According to DHS of 2008, one fifth of all sexually active women in Nigeria experience such an unmet need (NDHS 2008). 15% express desire to space their children while 5% wanted to limit the size of the family. The prevalence of unmet need cuts across the country, but it is low in the north about 11% and highest in the south about 25% (Family Planning West Africa 2005).

The characteristics of the women with unmet need also differ. Women with a limited number of children want to space their births, while on the other hand those with a large number of children want to limit the size of the family. Unmet need in order to space the children is common among younger women while the older women have unmet need to limit the number of the children. Educational background does not play any significant role with regards to unmet need, however the percentage is

slightly lower among those with university education (Family Planning West Africa 2005). The intentions to use modern contraceptives in the future also differ among those with unmet need, about 53% do not have any intention to use any form of contraception, while the remaining percentage express desire to use in the future (Family Planning West Africa 2005).

Women without desire to use modern methods of contraception despite the unmet need are afraid of infertility in the future. Some express religious and others cultural reasons. Attitudes of the health workers and side effects of the drugs are reported to sometimes discourage women from using contraception (Family Planning West Africa 2005; Adebara & Ijaiya 2010). Among those desiring to use contraception 30% prefer injectable, 25% pills, 2% Norplant and 19% do not have any preferred method.

During my clinical practice, I met a lot of women with the desire to limit or to stop childbirth, but accessibility and affordability of the products becomes an issue. A woman in a village being poor is unable to afford the family planning products despite those being rather cheap. There were a lot of instances whereby I had to buy the commodity for some of my patients. And for those in the urban areas the main problem is availability, only in few of the government facilities the products are readily available. Most of the time they have to rely on medicine vendors or private health facilities, and in some of those venues the quality is very unreliable. These issues are some of the serious impediments to the use of the family planning products in my region.

### 4.3 Knowledge about Family Planning

Overall, the contraceptive prevalence rate in Nigeria is very low and stood at only 10% for modern methods, while 5% more are using traditional methods (NDHS 2008; Guttmacher Institute 2008,). The use of modern contraception differs between rural and urban settings. In the urban areas about 17% mostly use the modern methods while those in the rural areas are only 7%. As most of the development indices, the use of the modern contraception also differs between the southern and northern part of Nigeria. The use of modern contraception is more in the south about 21% than in the north, which is only 3% (NDHS 2008), Where the preferred method is injectable (3%), followed by pills and male condoms (2%) while intra uterine devices (IUD) use is only (1%). 30-34 years age group are the highest users of contraceptives, while 20 years and below are the lowest users (Adebara & Ikaiya 2010). This is a serious cause for concern considering the fact that these age groups are the most vulnerable when it comes to unsafe abortion.

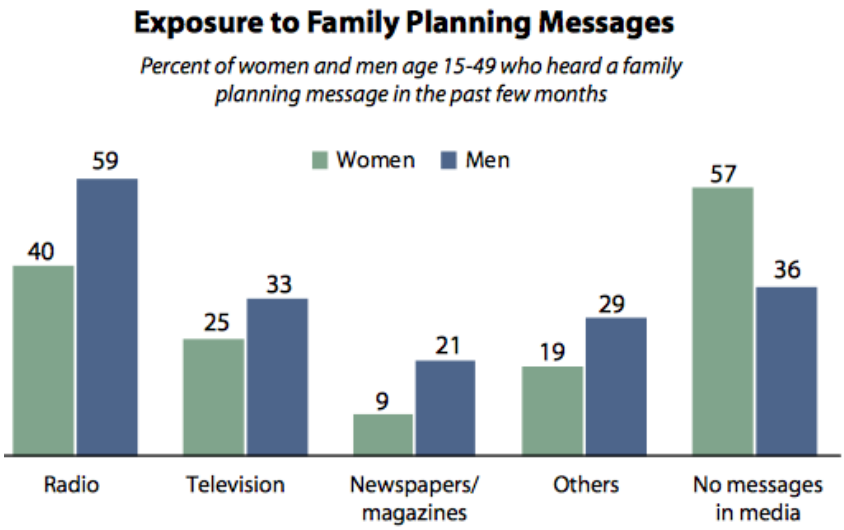
Knowledge about contraception is very crucial, because without adequate information young girls and women may not know where to obtain and

how to use the products. 38% of those not using contraception said they are not even aware of the product, while 19% had the perception they will not get pregnant. Most of the time the husbands or the mothers in law prevent the women from using any form of contraception especially in the northern part of the country where mother in-laws are very powerful and have the final say. Desire of a large family may prevent some women from using any form of contraception (Guttmacher Institute 2008; Monjok et al. 2010).

Knowledge or exposure to family planning information varies between men and women. According to NDHS of 2008, men are more informed about family planning than women mostly because they are more socially exposed. Therefore men have a prominent role to play in determining the uptake of contraception. On the other hand, knowledge about family planning is more developed in the urban than in the rural areas. Moreover women in the southern part are more prosperous and more educated; hence they are more likely to know about family planning than their northern counterparts (NDHS 2008; Guttmacher Institute 2008).

The majority of the population is exposed to the message of family planning through different media sources; the main source is the radio, followed by television, newspaper and other sources (NDHS 2008; Guttmacher Institute 2008). See graph 4.1. The healthcare workers are supposed to play a vital role in promoting the family planning messages, and to be the main source of information. But in Nigeria the healthcare providers are often not friendly enough to discuss the issues with their clients especially with the youth (NDHS 2008; Guttmacher Institute 20089, Monjok 2010). Most of the providers are not youth friendly, and that is why majority of the unmarried youth are unable to access the products because of fear of being accused of promiscuity (Monjok 2010).

**Graph 4.1. Sources of Exposure to Family Planning Messages**



Source: NDHS (2008)

The sources of family planning commodities are very important, according to NDHS of 2008, the main sources of family planning products are private pharmacies, chemists and private hospitals. The above sources provide about 60% of the contraceptives that are used in the country, whereas the government facilities provide only 23% (NDHS 2008; Monjok 2010).

### 4.4 Lack of sex education in schools

"Sexuality education is a lifelong process of acquiring information and forming attitudes, beliefs, and values. It encompasses sexual development, sexual and reproductive health, interpersonal relationships, affection, intimacy, body image, and gender roles" (Kann, Telijohann & Wooley 2007). Sex education in Nigeria is considered as a taboo, and most of the parents do not speak about sexuality with their children until shortly before marriage. The thinking is that, if children are exposed to the sexuality education at an earlier age, it may increase promiscuity even though evidence has shown that it does not (Dienye 2011; Akpama 2013).

In 2004 sex education (Family Life and HIV Education) was introduced in some schools in Lagos and in 2007 it was scaled up to the entire state. After extensive advocacy from parents, politicians and religious organizations, currently the program is being implemented across the 36 states of the federation with the support from the Global fund. The aim of the program is to target students between 11 and 14 years of age to deliver 27 lessons on sexuality education in three years (Samuels et al. 2012). However, still it met a lot of resistance in the northern part of the country.

Teacher's attitudes towards sex education in schools also vary depending on the age, religion and level of education. A study conducted in Lagos shows that older and more educated teachers are of the opinion that sex education will really benefit the students. They believe that it would reduce unwanted pregnancies and death from unsafe abortions, curve the spread of HIV which is high in the country, and are more willing to teach the subject. On the other hand the younger teachers believe that introducing sex education to secondary schools, will encourage promiscuity and its social consequences (Onwuezobe & Ekanem 2009).

Sex education is very important considering the fact that, adolescents in Nigeria constitute about 36% (Adetunji 2013) and they are constantly faced with many challenges in life especially due to early sexual initiation. A study conducted in Plateau, a state in north central Nigeria reveals that, there is a decrease in the age of sexual debut. At 13 years of age, more than one quarter of the secondary school students in the region had

already started sexual intercourse (Slap et al. 2003). Decrease in the age of sexual debut is worrisome. Without adequate information young boys and girls might be exposed to so many sexual problems such as unwanted pregnancies at an earlier age and possible complications of unsafe abortions.

Some of the negative implications of lack of sexual education in schools include: sexual coercion, unprotected sex, failure or don't know how to use contraception. These would lead to STI including HIV, unplanned and ultimately unwanted pregnancies with possible death from the complications of unsafe abortions. According to a report from the Federal Ministry of Health of 2003, adolescents age 20-24 have the highest HIV prevalence in the country (FMOH 2003). All these problems arise because the adolescents are not adequately informed about the above consequences. (Adetunji 2013).

A study conducted in Calabar, South-eastern Nigeria, shows that 72% of the patients admitted with abortion complications in the gynecological ward were teenagers 13-19 years old (Archibong 1991). 58.1 % are students either in primary or secondary schools (Archibong 1991). Another study by Brabin et al in 1995 in a rural community of Rivers state reveals that, about 80% of the adolescent girls, aged 17-19 were sexually active and 24% of them had experienced pregnancy termination (Brabin et al. 1995).

According to WHO about 14% of all unsafe abortions in the resource constrained countries are among adolescents (WHO 2014). Most of the time, adolescents suffer the complications more than the adults and they carry the highest burden of diseases and morbidities (WHO 2014).

### 4.5 Sexual Violence

Sexual violence can be defined as "any sexual act, attempt to obtain a sexual act, unwanted sexual comments or advances, or acts to traffic, or otherwise directed, against a person's sexuality using coercion, by any person regardless of their relationship to the victim, in any setting, including but not limited to home and work" (WHO 2002). Sexual violence has profound implications to the lives of young girls, which includes effect on mental and physical health. It is also responsible for many sexual and reproductive health problems including HIV/AIDS and unplanned pregnancy (WHO 2002).

Sexual violence in Nigeria is very common, even though the statistical data is difficult to obtain because majority of the cases are not reported. According to Mirabel, a sexual assault referral center in Lagos supported by UK Department for International Development (DFID), some of the health implications of sexual assaults are: STI including HIV/AIDS, physical injuries and unwanted pregnancies (Mirabel 2013).

Rape is a serious problem in Nigeria. According to statistical data, annually about 32,000 pregnancies occur in Nigeria as results of rape (Okoro-Eweka 2014). The crime is being committed in all sectors of the society from churches to mosques, and from domestic residencies to workplaces. The crime perpetrators include pastors, Imams, military, and the police and sometime the victim's relatives are the ones committing the crime. The victims range from one-year-old boys and girls to 80 years old women and most of the time the perpetrators escape any form of punishment. This has largely contributed to the high incidence of unsafe abortion in the country. Because if a victim of rape becomes pregnant, she will do everything possible to get rid of the pregnancy no matter the consequences (Okoro-Eweka 2014).

Above are some of the factors responsible for the number of unplanned pregnancies in Nigeria. These reasons are partially responsible for unsafe abortions in the country.

## Chapter 5: Reasons why women resort to abortion

This chapter explores the reasons why women resort to abortion, especially considering the potential consequences.

There are various reasons why women resort to abortions. One of the most common reasons women give for terminating pregnancy is being single (Sedgh et al. 2006; Adebusoye, Singh & Audam 1997). A study conducted by Guttmacher institute in Nigeria reveals that 31% of the adolescents 15-19 year old cited being single as the main reason of wanting to procure abortion. While 30% revealed that they are too young to carry the responsibility of child bearing or they are in schools (Sedgh et al. 2006; Adebusoye, Singh & Audam 1997). Another reason women give for wanting to terminate pregnancy is the financial difficulties in raising the kids while continuing with their education (Ibrahim et al. 2011; Adebusoye, Singh & Audam 1997). Most of these young girls are in schools and it will be difficult for them to take care of themselves and the kids without any financial assistance and because of that they prefer to abort the pregnancy.

For the young girls in schools, the fear of expulsion from school is one of the reasons they resort to abortion. In Nigeria once the school finds out that a student is pregnant, she will automatically be expelled from that school. And most of the time there is no provision for her to go back to school to complete her education after delivery (Okunofua et al. 2009). And for the young girls the only guarantee to the future is education especially in southern Nigeria where girl child education is highly valued. Because of this fear and wanting to secure a better future, the young unmarried girl opts for abortion in order to continue with her education (Koster 2010; Sedgh et al. 2006; Okonofua et al. 2009).

Fear of the parents to find out about the pregnancy and disapprove the young girl is another reason for pregnancy termination. Most of the time, a young girl who is pregnant will try to conceal the pregnancy so that the parents will not find out because of fear they might disapprove her for bringing shame to the family (Bankole et al. 2006; Okonofua et al. 2009). And sometimes the parents will refuse to continue paying her school fees. In some instances she will be forced to marry the father of the baby even if it is against her wish, so as to save the dignity of the child and the family (Sedgh et al. 2006; Okonofua et al. 2009; Koster 2010).

Rape or incest is another reason for pregnancy termination in Nigeria (Otoide, Oronsaye & Okonofua 2001; Okonofua et al. 2009). According to report by the IPAS country director Nigeria, most of the rape victims will do everything possible to abort the pregnancy if conceived not daring the consequences (Orisaremi 2012; Okoro-Eweka 2014).

In some parts of southern Nigeria, the young girl has to prove her fertility before being considered as a wife. In this way a lot of young girls were lured into sexual activities by men with the promise to marry them but were turned down after becoming pregnant and at the end of the day they have to abort the pregnancy (Koster 2010; Otoide, Oronsaye & Okonofua 2001). Young girls also have their share of the blame, as most of them will do everything possible to lure rich men into sexual activities to get pregnant so that they can tie them to marriage, and if they refused, the pregnancy has to be aborted (Koster 2010; Otoide, Oronsaye & Okonofua 2001).

A study was conducted in 2012 among Tarok people in north central Nigeria about their perceptions on abortion. The findings mostly justify the above reasons why women resort to abortions. The reasons they gave mostly are: refusal of the father of the child to accept the pregnancy, fear of stigma if people find out, poverty and availability of abortion methods especially the availability of pills over the counter. Others believed that the reasons for pregnancy termination include; failure of upbringing from the parents, moral decay, fear of not getting a husband in the future, sex and getting pregnant with total stranger. (Orisaremi 2012; Sedgh et al.2006; Okoknofua et al. 2009).

Married women terminate pregnancy for different reasons. Infidelity is one of the reasons among married women and it may be from the side of the husband or wife, inability of the husband to care for the family, financial constraints and stigma because of short pregnancy intervals. Others terminate the pregnancy if the mother is too sick and the continuation of the pregnancy is dangerous for her life (Orisaremi 2012; Sedgh et al. 2006). Sometimes women terminate pregnancy out of frustration, fight with the husband or divorce (Orisaremi 2012). Below is the story of a young woman that terminated her pregnancy after fighting with her husband and died in the process, as narrated by a participant in a FGD (Orisaremi 2012).

"*The husband could not take good care of her and her two children yet he was dating another woman outside. When she confronted him he beat her up and she got angry and took abortion tablets, in the process she died alongside the twins she aborted. She was buried with the twins in the same coffin, in the same grave"*

This is one example of too many abortions provoked by anger and divorce that has largely contributed to the reasons why women resort to abortions, and ultimately contributed a lot to the maternal mortalities in the country.

Child spacing is another reason given by married women for terminating the pregnancy especially among older women 35-40 years of age (Sedgh et al. 2006). The reasons also differ between religious groups, as not

being married is the main reason for terminating pregnancy among Catholics while for the majority of the Muslims the main reason is for spacing and stopping the births (Sedgh et al. 2006). Husband decision is very important because most of the women in Nigeria are not financially independent; because of this to keep the pregnancy is solely the husband's decision. Some fear the financial implication of taking care of the child (Ibrahim et al. 2011; Sedgh et al. 2006) In some cultures in the southern part of Nigeria women are ashamed to conceive too soon after birth, because of that they usually terminate the pregnancy (Sedgh et al.2006).

Sex preference is another reason of pregnancy termination. In some parts of Nigeria the desire for a male child is quite obvious. The majority of the men and women believe that a girl child is only meant to marry and continue bearing children. While on the other hand the boy is likely to take care of the parents when they become old. Because of these reasons sometimes the pregnancy is terminated if the woman or the man finds out it is a girl child especially if they have all girls in the family (Okonofua et al. 2009).

These are some of the reasons men and women give for wanting to terminate pregnancies.

## Chapter 6: Factors responsible for unsafe abortion

Even though abortion is illegal in Nigeria, still safe abortion services are available. This chapter explores the structural factors that necessitate women to use an unsafe abortion method in spite of the availability of safe abortion procedures in the country. Economic, service related and socio- cultural factors and lack of knowledge about the existence of safe abortion services were explored.

### 6.1 Economic reasons

Poverty is one of the reasons women procure unsafe abortions in spite of the availability of safe abortion methods in the country (Koster 2010). The cost of abortion services is proportional to the qualification and the skills of the provider. Generally the cost is higher if a medical doctor or a trained nurse provides the services and it is cheaper when provided by traditional healer, non-trained provider or induced by the women themselves (Ibrahim et al. 2011; Henshaw et al. 1998; Adebusoye, Singh & Audam 1997).

A study conducted on the perception of health care providers about induced abortion in Nigeria revealed that, the majority of the prosperous women both in the rural and urban areas use the services of qualified health professionals (Adebusoye, Singh & Audam 1997). While rural and urban poor cannot afford the exorbitant cost charged by the professionals, they instead patronize the services of cheap untrained personnel or herbalists for the services (Adebusoye, Singh & Audam 1997). A report by the Guttmacher Institute in 2006 reveals that, only 44% of the poor women patronize the services of trained healthcare providers against 66% of prosperous women. And 30% of poor women procure the services of traditional healers while only 14% of the non-poor utilized their services (Guttmacher Institute 2006).

Disparities also exist between the south and the north in terms of safe abortion services affordability. The women in the southern part of the country being more prosperous are more likely to be able to afford the services of trained qualified professionals such as doctors, nurses and midwives (Adebusoye, Singh & Audam 1997). On the other hand, the northern women being poor cannot afford such professionals, are more likely to use the services of unqualified quacks, traditional healers and chemists (Adebusoye, Singh & Audam 1997).

A study conducted by Henshaw (2008) shows that unsafe abortion has serious economic consequences for the women, their families and the healthcare setting. In spite abortion being illegal in Nigeria, with available resources women can get a safe abortion in the private hospitals by qualified personnel (Henshaw et al. 2008). The study also indicated that the cost of abortion is directly related with the techniques involved

and the type of the provider and many women will find it difficult to afford the services of medically trained providers (Henshaw et al. 2008). The safety of the procedures involved also determines the cost of the abortion. The MVA is generally considered the safest and most expensive followed by D&C, while tablets obtained from physicians are generally cheaper (Henshaw et al. 2008).

Age and maturity are also important factors in making abortion unsafe. Married or older women are more prosperous and can afford the services in private hospitals, while young girls in school do not have the privilege to afford such expensive hospital charges (Koster 2010). Also the young girls may not have the experience to recognize pregnancy at an early stage, majority realizes they become pregnant at an advanced stage, mostly in the second trimester. Because of this the young inexperienced are most likely of having complications of a late unsafe abortion (Henshaw et al. 1998; Koster 2010; Adebusoye, Singh & Audam 1997).

## 6.2 Socio-cultural factors

One of the reasons why abortion is unsafe is the stigma within the community attached to the termination of the pregnancy. Women because of confidentiality issue don't discuss the pregnancy with anyone for the fear of being exposed. Because of the same fear they delay in seeking healthcare services till the pregnancy is too advanced, and this increases the possibilities of complications. Sometimes they prefer the services of unqualified personnel far from their communities because of stigma in spite the availability of safe procedure in their communities. The idea is that if they go to the qualified personnel, the pregnancy will be known (Henshaw et al. 1998; Koster 2010). Even when a complication arises they remain at home until it becomes worst before they seek health care. All these factors contribute to the reasons why abortions are unsafe.

Religion is another obstacle to obtaining safe abortion in Nigeria, it is considered as a sin by most of the religious organizations. As mentioned before, recently, there was a move to liberalize abortion law by the southern state of Imo, but it met a very high resistance from both religions. The state chairman Christian association was quoted saying "the right to life of the unborn child is inherent to the child and antecedent to all human rights". The catholic women association of Nigeria also believed that, abortion is a murder of the unborn innocent child, which has to be prevented at all cost (Baptist press 2001).

Muslim clerics also were not left behind as one of the Lagos Imams said abortion is manslaughter and any perpetrator should be treated as such. He even quoted a verse from the holy Koran chapter seven verses 31 to 33 where Allah says "kill not your children for fear of what the lord shall provide, sustain them as well as the mother. Verily the killing of them is a

great sin." In essence the verse is saying don't kill because of fear you cannot provide for yourself and the child, God is the overall provider. Because of all these religious views, women will find it difficult to procure safe abortion freely in Nigeria (Baptist press 2001).

### 6.3 Educational Qualification

An educational qualification plays a vital role in determining the safety of abortion. Evidence has shown that educated women always try to access safe abortion services. Being educated gives them the advantage of differentiating between professional health providers and quacks, and to be aware of the possible complications of unsafe abortions. At the same time, they are more likely to discuss the issue with their friends to obtain a good advice of where to secure safe abortion. Moreover, the educated are likely to be working and financially independent. In that regard they can afford to pay for the services in the private hospitals to get safe abortion (Ibrahim et al. 2011).

### 6.4 Healthcare services

Another barrier to accessing safe abortion services in Nigeria is poor quality and non-availability of health services (WHO 2011). The majority of the private hospitals in Nigeria that provide the services are not sufficiently equipped and the doctors or the midwives are not well trained to handle such cases (Henshaw et al. 1998; WHO 2011). One of the safest means of pregnancy termination is the MVA, but most of the doctors prefer D&C because they don't know how to carry out an MVA (Henshaw et al. 1998; Etuk, Ebong & Okonofua 2003). Sometimes the distance women have to travel to access the services is the main barrier to obtaining safe abortion especially in the rural areas (Henshaw et al. 1998).

Healthcare providers, especially medical doctors are supposed to be the advocates of safe abortion services, but this is not always the case in Nigeria. A study conducted in Calabar to explore the knowledge, attitudes and practice of private medical practitioners towards post abortion care reveals that, majority of the doctors said they will not terminate unwanted pregnancy. The reason being it is unethical, religiously wrong, and against the medical profession. But majority of them said they offered assistance to women with post abortion complications (Etuk, Ebong & Okonofua 2003). Overall the attitude of the staff is one of the main obstacles to accessing safe abortion services for many Nigerian women (Etuk, Ebong & Okonofua 2003; WHO 2011).

Stigmatization of the abortion providers and health facilities by the community are some of the reasons doctors or the nurses are not willing to offer the services. Back in my hometown in northern Nigeria, I knew of two private facilities that were well known to openly provide abortion

services. Northern Nigeria being predominantly Muslim, the police and the community constantly harassed the doctors and the nurses. Even though they were doing well to the community without realizing, at the end they had to relocate to another state.

The distribution of the health facilities shows that most of the private facilities that provide abortions are concentrated in southern Nigeria, while only few in the north do provide such services. Even in the northern part, the majority of the hospitals are located in the urban areas. This disparity leaves the rural dwellers at the mercy of traditional healers (Adebusoye, Singh & Audam 1997). This further reiterated the reasons why women in the north are more likely to procure unsafe abortion and even worst for those in the rural north.

## 6.5 Legal Restriction

Abortion is legal in Nigeria only to save the life of the mother. According to section 228 of the criminal code, "any person who with intent to procure miscarriage of a woman, whether she is, or not with a child, unlawfully administers to her or causes her to take any poison, is guilty of felony and is liable to 14 years imprisonment." Section 229 of the same criminal code gives any woman involved in the crime a minimum of seven years imprisonment, while according to section 230, the doctor involved will be jailed for three years (Ilumoka 1991).

However, section 297 states that "A person is not criminally responsible for performing in good faith and with reasonable care and skills a surgical operation upon any person for his benefit, or upon an unborn child for the preservation of the mother's life, if the performance of the operation is reasonable, having regards to the patient's state at the time and to all circumstances of the case" (Ilumoka 1991).

The interpretation of these laws is that any act of pregnancy termination without the purpose of saving life of the woman, the perpetrators will be imprisoned for prescribed years (Adinma 2011). See table 6.1 below

**Table 6.1: Penalties of the Criminal Code Related to Abortion**

| Section | Pregnancy Offence | Penalty |
|---|---|---|
| 228 | Termination of Pregnancy | Felony, by 14-year jail |
| 229 | Submission of a woman to termination of her pregnancy | Felony, by 7-year jail |

| | | |
|---|---|---|
| 230 | Supply of instrumental substances by any individual | Felony, by 3- year jail |
| 328 | Prevention of an unborn child from being born | Felony, by 3- year jail |

Source: (Adimma E, WAJM 2011)

Because of these legal restrictions, abortion has been swept under the carpet at an exorbitant price and the services by skilled providers are not available for most of the women who need them. This means a woman that needs abortion has to rely on the service provisions of unskilled providers in an ill-equipped setting (Adinma 2011). Even correct information about abortion in Nigeria is difficult to get because of social stigma and restrictive legal environment (Adebusoye, Singh & audam 1997). This is partly responsible for the high number of abortion complications in the country

A study by Berer in 2004 reveals that, the countries where abortion remains illegal, continue to have the highest burden of unsafe abortion in the world. Those countries have the prevalence as high as 23 per 1000 women of childbearing age (15-49 years). While on the other hand, those countries with liberal abortion laws, have a very low unsafe abortion prevalence of 2 per 1000 women of childbearing age (Berer 2004). Mortalities from unsafe abortions are also higher in those countries with a restrictive abortion law, which are about 34 deaths per 100,000 live births. The countries that allow abortions on demand continue to have a very low maternal death rate from unsafe abortions, as low as 1 or less per 100,000 live births (Berer 2004).

Another example of how restrictive laws influence unsafe abortion is the case of Romania, where they had a liberal law in place until 1966. In 1960 maternal mortality ratio from unsafe abortion was 20 per 100,000 live births. In 1966 they introduced a new law, which made abortions illegal all over the country, until the year 1989, the maternal mortality ratio skyrocketed to 148 per 100,000 live births. When they reversed the law in the same year, within one year the mortality ratio fell to 68 per 100,000 live births. By the year 2002 maternal mortality ratio from unsafe abortions in Romania was 9 per 100,000 live births (Haddad 2009).

The social norms and culture, religious restrictions together with the law make abortions highly criminal, expensive and mostly performed by the quacks under unsafe unhygienic conditions, but restrictive laws do not reduce the number of abortions in the country (Adinma 2011; Adebusoye, Singh & Audam 1997).

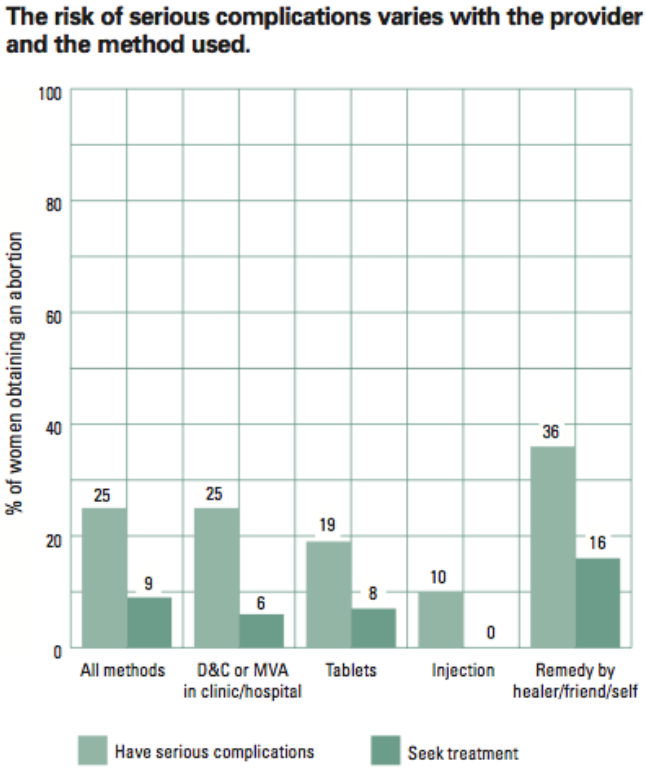
## Chapter 7: Impact of unsafe abortions on the reproductive health of the women

In this chapter, the reproductive health consequences (both short and long terms) of unsafe abortions including maternal mortality will be discussed.

### 7.1 Early complications

Worldwide unsafe, clandestine abortions carry a lot of risks to the health lives of the women involved. The main factors responsible for most of the problems are: chronic ill health of the women, existing sexually transmitted diseases, skills and experience of the providers, the methods involved, hygienic conditions, gestational age of the pregnancy and the legality of the procedure (WHO 1997). A study conducted by Guttmacher Institute in Nigeria reveals that one out of every four women that underwent abortion has developed one form of complication or another. With 25% of them developing a serious life threatening complication ranging from severe bleeding, high-grade fever to injury to the visceral organs (See annex 4). These complications warrant admission and about 10% requiring abdominal surgery (Bankole et al. 2006). The complications are more severe with increasing gestational age of the pregnancy. 58% of the women develop complications if the procedure is performed after 12weeks, while only 20% will experience complications if the pregnancy is less than 12weeks. This equals similar results of studies conducted elsewhere (Bankole et al. 2006; Ibrahim et al. 2011; Fetters et al. 2008). The level and severity of the complications also depend on the methods and the skills of the providers. The complications are more severe among women that use traditional remedies (36 %) and less among those that use injections or tablets: (10%) and (19%) respectively (Bankole et al. 2006). See graph 3.1 below

**Graph 3.1**




*"Source: Guttmacher Institute (2008)"*

The complications are more in the northern part of the country than in the southern part. This may not be unconnected with the higher prosperity among women in the south than in the north (NDHS 2008). Therefore it is more likely for women in the north to use the service of a cheap unskilled provider. While on the other hand, her southern counterpart can more often afford to pay for safe abortion services in the hospital. There is no difference between rural and urban areas (Bankole et al.2006).

In Nigeria induced unsafe abortion is a serious cause of morbidity and mortality among women of childbearing age. Although the real magnitude of the problem can only be estimated because only a small proportion (9%) of those complicated cases are presented to the hospitals. And because abortion is illegal in the country, most of the pregnancy terminations are carried out by illegal unqualified quacks or by the women themselves. The terminations are by using all sorts of instruments in dirty environments (Okonofua 1991). Unfortunately, even the registered medical practitioners in the country sometimes lack the necessary skills and motivation to perform the procedures safely. And the worst part of it is that most of the hospitals lack the necessary equipment and skilled personnel to handle such complications when they arise (Okonofua 1991)

The most common early complications of unsafe abortion are: hemorrhage, sepsis, uterine perforation, bowel perforation, trauma to the

cervix mostly by the instruments used, acute renal failure, bladder injury, deep vein thrombosis, tetanus, bowel fistulae and death from anesthesia (Ibrahim et al 2011; Bankole et al 2006; Okonofua 1991; Rehan 2011).

Sepsis is the commonest early complication of unsafe abortion. It normally manifests itself with high-grade fever and purulent offensive vaginal discharge. It mostly arises due to use of unsterilized instruments by quacks or by the women themselves. It accounts for 50-80% of all complications from illegal abortion in the country. The finding is in line with a study conducted in Niger Delta in 2011, which shows that genital sepsis carried 88.9% of all the complications of unsafe abortions followed by retained products of conception 82.5% (Ibrahim et al. 2011). Sepsis is considered as the main cause of maternal mortality and if the woman survives she might end up with long-term health consequences.

## 7.2 Late complications

Some of the late complications of unsafe abortion include: secondary infertility, chronic pelvic pains, chronic pelvic inflammatory diseases and maternal mortality, which is devastating for the woman and her family.

### 7.2.1 Secondary infertility

Secondary infertility is one of the serious complications of unsafe abortions worldwide. According to WHO estimate, 20-30% of unsafe abortions cause reproductive tract infections and 20-40% of which is responsible for the upper genital tract infection and secondary infertility (Grimes et al. 2006). Furthermore the report revealed that 2% of women of childbearing age 15-49 years are infertile as a result of unsafe abortion (Grimes et al. 2006). In spite of the high fertility rate in Nigeria (5.7 children per woman) (NDHS 2008), infertility is still very high and varies among the ethnic groups. It ranges from 10.5 in the north to 14.6 in the southwest and to as high as 19.1 among the Igbos in the southeastern Nigeria (Araoye 2003). Infertility is defined as "failure of couple to establish pregnancy within one year of unprotected regular sexual intercourse" (Shah 2009). In the case of primary infertility there has not been any pregnancy, but in secondary infertility there is a history of pregnancy in the past, either delivered or aborted (Shah 2009). The growing rate of secondary infertility due to abortion has been attributed to the various methods used by both trained and untrained illegal abortionist, such as inserting different instruments in the uterus. Others are cervical dilatation, introducing chemicals or traditional remedies to induce abortions. Sometimes-foreign bodies such as needles, bones and tree's back are inserted. These result in multiple injuries to the reproductive organs especially the vagina, tubes and the uterus. Such injuries result to various forms of long term complications from vaginal atresia, uterine synecae, cervical incompetence and cervical fibrosis to complete tubal blockage that consequently lead to secondary infertility

(Eyo, Epuji, & Ukpong 2012). Sometimes infertility results because of complete removal of the uterus to treat complications of unsafe abortions (Okonofua 1991).

A study conducted in Southwestern Nigeria reveals that 37% of the 59 women with secondary infertility had never had any child after an induced abortion either due to failure to conceive or due to repeated abortions (Koster 2010). Another study conducted in Southeastern Nigeria also revealed that, among women that had a pregnancy termination by instruments, 88% of them are infertile as against only 8% among those that terminated their pregnancies by medications only. This study has shown that, using instruments is the worst method of terminating pregnancy in terms of causing secondary infertility. The study further stated that, among women attending fertility clinics, only 4% out of 100% had never terminated a pregnancy (Eyo, Epuji, & Ukpong 2012). This study has further justified the findings of Friday Okonofua in 1994 which shows that induced criminal abortion predisposes to secondary infertility (Okonofua 1994).

### 7.2.2 Maternal mortality

"Maternal mortality is the death of a woman while pregnant or within forty two days of termination of the pregnancy, irrespective of the site or duration of the pregnancy, from causes that are directly related or aggravated by the pregnancy or its management, but not from accidental or incidental causes" (WHO 2014). Maternal mortality from unsafe abortion is a serious global problem that continues to threaten the lives of many women. According to (WHO), every eight minutes a woman is dying of unsafe abortion, at the rate of 367 maternal deaths per 100,000 unsafe abortions (Grimes et al. 2006). And more than 97% are in the developing countries with restrictive abortion laws and poorly organized healthcare services. Among those that survive the early complications; over 5 million will suffer serious long-term complications (Haddad 2009).

Unsafe abortion is responsible for about 30-40% of maternal mortality in Nigeria (Henshaw et al. 1998), and the estimate is likely to be higher considering those dying at home and before reaching the health facilities (Henshaw et al. 1998). Another study conducted in some of the hospitals in the country shows that unsafe abortion is responsible for up to 51% of maternal deaths. That study shows that unsafe abortion is one of the leading causes of all maternal mortality in the country. The case fatality rate ranges between 1.0% and 1.5%, which means that, for every 100 illegal abortions performed one woman will die. This is three times higher than the global estimate (Bankole et al. 2006).

### 7.2.3 Ectopic pregnancy

Another serious long-term complication of unsafe illegal abortion is ectopic pregnancy in subsequent pregnancies "Ectopic pregnancy is a pregnancy that occurs outside the uterus (womb) which is considered life threatening to the woman" (UMMC 2014). According to the Guttmacher Institute, unsafe abortion increases the chance of ectopic pregnancy, premature labor and recurrent spontaneous abortion in the subsequent pregnancies (Grimes et al. 2006; Okonofua 1991). Another study revealed that, post abortive infection as a result of unsafe illegal abortion increases the chance of ectopic pregnancy five-fold in women that had pelvic abscess and adhesions because of a complicated unsafe abortion (Chung et al. 1982).

### 7.2.4 chronic pelvic inflammatory disease

Pelvic inflammatory disease (PID) is "an infection of the woman's reproductive organs (uterus, fallopian tubes and ovaries) and upper genital tract" (CDC 2014). PID is one of the late complications of unsafe abortions. It normally presents with lower abdominal pains, vaginal discharge and sometimes-adnexal tenderness. A study conducted in India shows that, there is a link between induced illegal abortions and PID. The study has further shown that in India 26% of women with PID attending gynecological clinic has had unsafe abortion, and the same study reported 23% in Pakistan (Patel, Baxi & Diwanji 2010). PID is a result of an infection already existing in the women's reproductive tract or introduced by the abortionist through the instruments used to terminate the pregnancy. Sometimes the infection is within the unhygienic environment in which the abortion was performed. And if it is not properly treated can lead to chronic pelvic pain and secondary infertility.

Apart from the above medical consequences of unsafe abortion, women and their families also suffer social and psychological consequences (Ogiamien 1991). If a girl becomes pregnant or had an abortion that is known, the family has to contend with social stigma attached to the condition. And if she drops out of school or could not work, the family has to bear the economic burden of supporting her. For the young girl that had unwanted pregnancy and abortion, the psychological trauma is huge and sometimes the psychological and social implications become indelible for life (Ogiamien 1991).

As can be seen from the above, unsafe abortion has so many tragic consequences for the women. In spite of the social, health risks and life threatening complications caused by illegal abortions, women continue to procure very dangerous abortions.

## Chapter 8: Discussion

In this chapter, the main findings of this thesis are discussed.

The specific objectives of the thesis are: to determine the magnitude of unsafe abortion in Nigeria, to determine the health impacts of unsafe abortion to the reproductive health of the women, explore the factors responsible for unplanned pregnancy, to explore specific reasons why women resort to abortion and to explore the factors that make abortion unsafe.

The overall objective of the thesis is to describe the causes and impacts of unsafe abortion on the reproductive health of the women in order to make appropriate recommendations. The first part highlighted the magnitude of unsafe abortion; the second part revealed the factors responsible for unwanted pregnancy, why women resort to abortion and what makes abortion unsafe. The last part revealed the main impacts of unsafe abortion on the reproductive health of the women. The author develops the conceptual framework used in this thesis based on the problems identified on the problem tree.

Evidence has shown that unsafe abortion has a lot of consequences to the lives and reproductive health of the women. One of the main findings of the study is that one out of every four women that underwent abortion has developed some complications, and this is a very serious issue considering the large number of abortions in the country.

The severity of the complications depends on the skills and the abortion method of the provider and the women's economic status. The findings reveal that, abortion induced by women themselves has the highest complication rate and poor women are more likely to get complications than non-poor women. This thesis confirms the finding in Rwanda which shows that 55% of the abortions among poor rural and urban women are complicated as against 38% of non poor rural and 20% of non poor urban women (Basinga et al. 2012). The same study also revealed that, the possibility of complications is directly related to the type of provider (Basinga et al. 2012).

Sepsis has been identified as one of the commonest complications encountered by women with unsafe abortion and it is responsible for most of the mortality from unsafe abortion. The findings of this study also agree with the study conducted in Cambodia, which revealed that more than 35% of the women admitted with post abortion complications had high temperature (Fetters 2008). Similarly, a study in South Africa revealed that, sepsis was the main cause of mortality before legalization of the abortion in 1996 (Mhalnga 2003).

The findings of this thesis also points out that infertility encountered by many couples as one of the long-term complications after unsafe abortion

and sharp curettage method of abortion has been identified as one of the main causes of infertility. Nigeria being a country where fertility is highly valued, having one or two children is considered as subfertility. Certainly not having children has a lot of psychological and social consequences for the woman. And to reduce the incidence of infertility among women in the country, there is a need to reduce the level of unwanted pregnancy, which is responsible for the unsafe abortions causing high burdens of secondary infertility.

Maternal mortality from unsafe abortion is another finding that revealed the devastating effect of unsafe abortion to the Nigerian women and their families. It was estimated to be between 30 to 40% of the maternal mortality in the country is attributable to abortion. This agrees with the finding of Okonofua (1991), which shows that mortality due to unsafe abortion in Nigeria is three times the global average that for every 100 unsafe abortions performed one woman will die. Another study seems to confirm that 3,000 women are dying of unsafe abortion in Nigeria annually (Henshaw et al. 2008). This could be one of the reasons why maternal mortality in Nigeria is very high (NDHS 2008). The MDG target of reducing maternal deaths can never be reached without reducing mortality from unsafe abortion.

Unplanned pregnancy is one of the main factors responsible for the number of unsafe abortions in the country. Annually out of the 6.8 million pregnancies in Nigeria, 20% are unplanned (Guttmacher Institute 2006). Family planning is one of the most important factors in preventing unplanned pregnancies. The finding reveals that the overall contraceptive prevalence rate in the country is very low both in the rural and urban areas. This may not be unconnected to the fact that exposure to family planning messages is very low among the population. Socio-cultural and religious factors could be other reasons for low utilization of the contraceptives. To increase the use of modern methods there is a need to sensitize the community, men and women in particular, create awareness through different media especially through the radio. Healthcare workers should play an active role in promoting family planning and uptake of the commodity.

Lack of sex education in schools has significantly contributed to the level of unwanted pregnancies in the country. The finding reveals that at 13 years of age most of the boys and girls are sexually active (Slap et al. 2003). Without adequate information provided by sex education the young boys and girls may not know about condom use, STI/HIV, the use of contraception and pregnancy prevention. Sex education in Nigeria has suffered a serious setback especially in northern Nigeria, where both religious organizations and the parents oppose it. The region being the worst affected by poverty, illiteracy, maternal and infant mortality, HIV/AIDS, early marriage and its complications certainly sex education has to go a long way in reducing these problems. The Dutch success story

of sex education in schools has been greatly applauded all over the world. Evidence has shown that sex education in schools reduces teenage pregnancies and sexually transmitted infections among the adolescents. And it doesn't increase sexual activities neither does it reduce the age of sexual debut among adolescents. The Netherlands has one of the lowest teenage pregnancy rates in the world (Adolescents sexual health 2006).

Sexual violence (rape) is another factor that contributes to unplanned pregnancy in Nigeria; 32,000 pregnancies occur because of rape annually in the country. Most of the time the victim, if she becomes pregnant, will do everything possible to terminate the pregnancy. A report by the World Health Organization reveals that 17% of rape victims in Ethiopia and 15-18% in Mexico became pregnant (WHO 2002). This further justifies the fact; indeed rape is one of the causes of unplanned and ultimately unwanted pregnancies.

Women terminate pregnancies for various reasons; being single, in school, not ready for motherhood, fear of parents are some of the reasons for pregnancy termination (Sedgh et al. 2006). The findings corroborate with the findings of the study in the United States about the reasons given by women for wanting to terminate their pregnancies (Finer et al. 2005). Being single means the young girl has no financial and moral backing to bear the responsibility of child bearing. Most of these young girls are in schools and it will be difficult for them to take care of themselves and the kid without any financial assistance and because of that they prefer to abort the pregnancy. If a girl becomes pregnant in Nigerian school, she will be expelled automatically from that school .

Material gratification is another important finding that pushes young girls to engage in sexual activities and become pregnant. Because of poverty in the country, many young girls engage in sexual activities with older men popularly known all over Nigeria as sugar daddies. These sugar daddies provide everything the girl needs in exchange for sex. This phenomenon has largely contributed to the teenage pregnancies and ultimately abortions in Nigeria. In some parts of Southern Nigeria, the young girl has to prove her fertility before being considered as a wife, because of that many young girls became pregnant with the hope of getting marriage but later to be abandoned by their boyfriends or sugar daddies.

Sex preference is another finding that causes pregnancy terminations in Nigeria (Okonofua et al 2009). Most of the Nigerian men and women prefer boys with the perception that the boy will carry the family name, help in the farm or with their businesses and remain within the family compound even after marriage. While on the other hand the girl is likely to be married away from the family. Because of that they invest more in the boy's education with the hope of getting social security during the old age. However I do not totally agree with the findings, because girls are

equally important and more caring than the boys when properly educated. A study conducted on "changing the perceptions of the value of daughters and girls education among the Isoko of Nigeria" shows that there is a significant paradigm shift in attitude among the participants towards girl's education. Many believed that girls are hard working and more caring compared to the boys and have started investing more in their education (Edewor 2006).

Legal restriction is the main factor responsible for making abortion unsafe in Nigeria. Because of this legal restriction, safe abortion services are not readily available to the women that need them; instead women have to procure the services of unqualified quacks under the carpet. Evidence has shown that where abortion is legal, the procedure is safe and death from it is very negligible (Berer 2004). This finding agrees with the finding of a study in South Africa, which shows that, before 1996 South Africa has one of the highest maternal mortality in the world from unsafe abortion. In 1996 abortion was legalized in the country and since then mortality from complications of unsafe abortion is decreasing steadily (Mhalnga 2003). Another example is the abortion law in Romania that clearly shows that legal restriction is one of the main causes of mortality from unsafe abortion (Haddad 2009).

The legal restriction of abortion in Nigeria and most of Africa in general is not an African tradition; rather the colonial rulers imposed it long ago. All those colonial powers have long liberalized their own abortion laws, but Nigeria and most of the other African countries are still carrying the old burden of their colonial masters. Restrictive abortion laws have never been able to reduce the incidence of it. In countries where there is abortion on demand the rate is definitely not higher than in those countries where it is very much restricted.

## Chapter 9: Conclusion and Recommendations

### 9.1 Conclusion

Unsafe abortion is a serious public health crisis in Nigeria that requires collective efforts of all the relevant stakeholders (government, healthcare professionals, non-governmental organizations, the media, religious organizations and other professionals). The mortalities and health impacts from unsafe abortion is highly devastating to the women, their families and to the society. As such, unsafe abortion has to be treated by government of Nigeria as a national priority if we are to meet the target of reducing maternal mortality. Confronting this silent killer will not only reduce maternal morbidity and mortality, but will improve the socio-economic wellbeing of the families and the nation in general. Below are the recommendations that should be made available to Nigerian government and all the other stakeholders responsible for promoting maternal health in the country.

### 9.2 Recommendations

#### 9.2.1 Policy

- The government and other policy makers should expand legal indications for abortion in the country, which will be more acceptable to the large segment of the society and could improve and enlarge safe abortion services in the public health facilities.
- The Nigerian government should make sex education mandatory in all secondary schools across the nation as one of the measures to reduce unwanted pregnancies, to replicate the success recorded in Lagos State.
- The government should make contraception available to all Nigerian men and women at all facilities.
- The government should make it as a policy if a girl becomes pregnant she is allowed to come back to school to complete her education after delivery.

#### 9.2.2 Healthcare services

The government of Nigeria should be more responsive to the health needs of the population. Specifically to provide resources and materials needed for effective healthcare provision targeting reproductive health services such as:

- Train and strengthen the capacity of medical doctors in abortion provision and management of post abortion complications.

- Make contraception available, accessible and affordable in all healthcare facilities across the states from tertiary hospitals to the primary health care facilities.

- Build the capacity and sensitize nurses and midwives to actively promote uptake of contraception within the hospital and their communities.

- Establish and strengthen youth friendly services across the country so that adolescent boys and girls can walk in and access contraception and condoms.

### 9.2.3 Community and media

Advocacy campaigns should be intensified to:

- Sensitize the general public about the magnitude and high rate of maternal death from unsafe abortion in the country.

- Engage politicians, community and religious leaders and women organizations about the consequences of criminalizing abortion.

- Sensitize the community about the importance of contraception.

- Empower women within the community to reduce poverty and make them financially independent.

### 9.2.4 Research

- Research should be conducted as to determine magnitude of unsafe abortion in the country, its causes and its health and social consequences.

- Research should be conducted to why women prefer to use unsafe methods in spite the availability of safe methods.

- An exploratory study should be conducted to find out to which extent abortion law in the country affects the safety of the procedure.

**References**

Adebara, IO & Ijaiya, MA 2010, 'Recent trends in pattern of contraceptive usage at a Nigerian tertiary hospital,' *Journal of Clinical Medicine and Research*, vol. 2, no. 11, pp. 180-184

Adebusoye, MP, Singh, S & Audam, S 1997, 'Nigerian Health Professional's Perceptions About Abortion Practice,' *International Family Planning Perspectives*, vol. 23, pp. 155-161

Adeniran, BAO, Umoh, AV & Nnatu, SN 2001, 'Complications of unsafe abortion, a case study and the need for abortion law reform in Nigeria,' *Reproductive health matters*, vol. 10, no.19, pp. 18-21.

Adetunji, OS 2013, 'Attitude of Parents in the Metropolis of Lagos towards Inclusion of Sexuality Education in the School Curriculum', *Journal of Studies in Social Sciences,* vol. 3, no. 2, pp. 129-137.

Aderounmu, AO 2004, 'National health insurance scheme in Nigeria,'

Adinma, E 2011, 'Unsafe abortion and its ethical, sexual and reproductive right implication,' *West African Journal of Medicine,* vol. 30, no 4, pp. 245-249

Adolescent Sexual Health in Europe and the United States 2006, The Case For A Right, Respect, Responsibility, Advocates for youth. http://www.advocatesforyouth.org/storage/advfy/documents/adolescent_sexual_health_in_europe_and_the_united_states.pdf

Akpama, EG 2013, 'Parental Perception of the Teaching of Sex Education to Adolescent in Secondary School in Cross River State, Nigeria,' *Journal of Research & Method in Education*, vol. 1, no. 3, pp. 31-36

Araoye, MO 2003, 'Epidemiology of infertility: social problems of infertile couples,' *West African Journal of Medicine*, vol. 22, no. 2, pp. 190-196

Archibong, EI 1991, 'Illegal induced abortion- a continuing problem in Nigeria, *Int. J. Gynecol. Obstet.,* vol. 34, pp. 261-265.

Asuzu, MC 2004, 'The necessity of health system reform in Nigeria,' *Journal of community medicine and primary health care*, vol. 16, no.1, pp.1-3

Bankole, A, Oye-Adeniran, AB, Singh, S, Adewole, IF, Wulf, D, Sedgh G & Hussain, R 2006, 'Unwanted pregnancy and induced abortion in Nigeria: Causes and Consequences,' *Guttmacher Institute.*

Baptist Press 2001, 'Nigerian religious leaders oppose proposed law to

legalize abortion,' Viewed 27 June 2014, bpnews.net/10600/nigerian-religious-leaders-oppose-proposed-law-to-legalize-abortion

Basinga, P, Moore, AM, Singh, S, Remez, L , Birungi F & Nyirazinyoye L 2012, 'Unintended Pregnancy and Induced Abortion in Ruwanda: Causes and Consequences,' *Guttmacher Institute*

Berer, M 2004, 'National Laws and Unsafe Abortion: The Parameters of Change,' *Reproductive Health Matters*, vol. 12, no. 24, pp. 1-8.

Brabin, L, Kemp, J, Dollimore, N, Obunge, OK, Ikimalo, J, Briggs, ND, Odu, NN & Hart, CA 1995, 'Reproductive tract infections and abortion among adolescent girls in rural Nigeria,' *The Lancet*, vol. 345, no. 8945,

Center for Disease Control (CDC), '*Pelvic Inflammatory Disease*,' Viewed 18 May 2014, http://www.cdc.gov/std/pid/stdfact-pid.htm

Central Intelligence Agency (CIA) 2013, 'Nigeria People 2013,' *The CIA World Fact Book.*

Chung, CS, Smith, RG, Steinhoff, PG & Pi, MM 1982, 'Induced abortion and ectopic pregnancy in subsequent pregnancies,' *American Journal of Epidemiology,* vol. 115, no. 6, pp. 879- 887.

Cordingley K 2014, 'Underground Abortions in Nigeria,' Viewed 13 March 2014, http://www.borgenmagazine.com/underground-abortions-nigeria/,

Demographic and Health Survey Key Findings, Nigeria 2008. 51.

Dienye ,VU 2011, 'The Educational and Social Implications of Sexuality and Sex Education in Nigerian Schools,' *African Journal of Social Sciences* vol. 1, no. 2, pp. 11 -19.

Edewor, AP 2006, 'changing the perceptions of the value of daughters and girls education among the Isoko of Nigeria,' *African Population Studies*, vol. 21, no.1, pp. 55-70. Viewed 8 July 2014 http://www.bioline.org.br/request?ep06004

Etuk, SJ, Ebong, IF & Okonofua FE 2003, 'Knowledge, Attitude and Practice of Private Medical Practitioners in Calabar towards Post- Abortion Care,' *African Journal of Reproductive Health*, vol. 7, no. 3, pp. 55-64.

Eyo, UE, Upuji, FI & Ukpong, EI 2012, 'Termination of pregnancy (top) related infertility in women in Akwa Ibom State,' *Journal of Academic Research International*, vol. 3, no. 3, pp. 120-124.

Federal Ministry of Health (FMOH 2003), National HIV/AIDS and Reproductive Health Survey

Fetters, T, Vonthanak, S, Picardo, C & Rathavy T 2008, 'Abortion related complications in Cambodia,' *International Journal of OBG*, pp. 957-968.

Finer, LB, Frohwirth, LF, Dauphinee, LA, Singh, S & Moore AM 2005, 'Reasons U.S. Women Have Abortions: Quantitative and Qualitative Perspectives*,' Perspectives on Sexual and Reproductive Health*, vol. 37, no. 3, pp. 110–118.

Grimes, DA, Benson, J, Singh, S, Romero, M, Ganatra, B, Okonofua, FE & Shah IH 2006, 'Unsafe abortion: the preventable pandemic,' *WHO Sexual and Reproductive Health Series,* vol. *4,* pp. 1-13.

Guttmacher Institute 2006, 'Fact on Unwanted pregnancy and Induced abortion in Nigeria,'

Guttmacher Institute 2008, 'Reducing Unsafe Abortion In Nigeria, no. 3, Viewed 14 April 2014, http://www.guttmacher.org/pubs/2008/11/18/IB_UnsafeAbortionNigeria.pdf

Haddad, LB 2009, 'Unsafe abortion: Unnecessary maternal mortality,' *Journal of Obstetrics and Gynecology*, vol. 2, no. 2, pp. 122-126.

Health Reform Foundation of Nigeria 2006, 'Maternal health in Nigeria,' *Nigerian Health Review*, pp. 103-122

Henshaw, SK, Singh, S, Oye-Adeniran, BA, Adewale, IF, Iwere, N & Cuca, YP 1998, 'The incidence of induced abortion in Nigeria,' *International Family Planning Perspectives,* vol. 24, no. 4, pp. 156-164

Henshaw, SK, Adewole, I, Singh, S, Bankole, A, Oye-Adeniran, B & Hussain, R 2008, 'Severity and cost of unsafe abortion complication treated in Nigerian hospitals,' *International Family Planning Perspectives*, vol. 34, no.1, pp. 40-50.

Human Resources for Health Country Profile 2008, 'Nigeria, Africa Health Workforce Observatory'

Ibrahim, IA, & Onwudiegwu, U 2012, 'Socio-demographic determinants of complicated unsafe abortions in semi urban towns in Nigeria: a four year review,' *West Indian Med J*, vol. 61, no. 2, pp.163.

Ibrahim, IA, Jeremiah, I, Abasi, IJ & Adda, AO 2011, 'patterns of complicated unsafe abortion in Niger Delta Teaching Hospital Okolobiri, a four year review,' *the Nigerian health journal*, vol. 11, no. 4,

Illika, A & Anthony, I 2004, 'Unintended Pregnancy among Unmarried Adolescents and Young Women in Anambra State, South East Nigeria,'

*African Journal of Reproductive Health*, vol. 8, no. 3, pp. 92-102.

Ilumoka, A 1991, 'Policy and Law Relating to Abortion in Nigeria: The Quest for Balance, Prevention of Morbidity and Mortality from Induced and Unsafe Abortion in Nigeria,' *Critical Issues in Reproductive Health*, A Seminar Series, pp. 73-80.

Joint United Nations Programme on HIV/AIDS (UNAIDS) 2012, *Nigeria: Country Situation Analysis,* Viewed 28 February2014, <http://www.unaids.org/en/CountryResponses/Countries/ nigeria.asp

Kann, L, Telijohann, SK & Wooley, SF 2007, 'Health Education: Results from the School Health Policies and Programs Study 2006,' *Journal of School Health*, vol. 77, no. 8, pp. 408 – 434.

Koster, W 2010, 'Linking two opposites of pregnancy lost: Induced abortion and infertility in Yoruba society, Nigeria,' *Journal of Social Science and Medicine,* vol. 71, pp. 1788-1795.

Kullima, AA, Kawuwa, MB, Audu, BM, Geidam, AD, & Mairiga, AG 2009, 'Trends in maternal mortality in a tertiary institution in Northern Nigeria,' *Annals of African Medicine*, vol. 8, no. 4, pp. 221-224.
Mhalnga, RE 2003, 'Abortion: developments and impact in South Africa,' *British Medical Bulletin*, vol. 67, no. 1, pp. 115-126.

Mirabel Centre 2013, 'A Sexual Assault Referral Centre, J4A (DFID), Viewed on 22 June 2014, http://www.j4anigeria.org/index.php?option=com_content&view=article&id=303:j4a-sarc&catid=43:component-four&Itemid=89

Monjok, E, Smesny, A, Ekabua, JE & Essien, J 2010, 'Contraceptive practices in Nigeria: Literature review and recommendation for future policy decisions,' *Open Access Journal of Contraception*, vol. 1,pp. 9-22.

National Bureau of Statistics (NBS 2012), [Assed on 27/02/2014] http://www.informationng.com/tag/national-bureau-of-statistics

Nigeria: Geography. [Assessed on 20/02/2014] http://www.mongabay.com/reference/new_profiles/183ng.html

Ogiamien, TBE 1991, 'A legal framework to legalize abortion in Nigeria,' *a seminar Prevention of morbidity and mortality from induced and unsafe abortion in Nigeria,* Population Council, Nigeria, pp. 95-96

Okonufua, F 1991, 'Clinical consequences of unsafe and induced abortion and their management in Nigeria, a seminar Prevention of morbidity and mortality from induced and unsafe abortion in Nigeria,' *Population Council*, pp.19-28

Okonofua FE 1994, 'Induced abortion: A risk factor for infertility in Nigerian women,' *Journal of Obstetrics and Gynecology,* vol. 14, no. 4, pp. 272-276.

Okunofua, EF, Hammed, A, Nzeribe, E, Saidu, B, Abbas, T, Adeboye, G, Adegun, T & Okolocha C 2009, 'Perceptions Of policy Makers in Nigeria Towards Unsafe abortion and Maternal Mortality,' *International Perspectives on sexual and Reproductive health*, vol. 35, no 4, pp. 194-202.

Okoro- Eweka, R 2014, 'The Magnitude and Burden of Rape in Nigeria,' *The Nigerian Observer*, Viewed 24 June 2014, http://www.nigerianobservernews.com/04092013/features/features9.html#.U6nXRRYxHFI

Olaitan, OL 2010, 'Perception of university students on unwanted pregnancy in southwest Nigeria,' *American Journal of Social and Management Sciences*, vo. 1, no. 2, pp. 196-200

Onwuezobe, IA & Ekanem EE 2009, 'The Attitude of Teachers to Sexuality Education in a Populous Local Government Area in Lagos, Nigeria,' *Pak J Med Science*, vol. 25, no. 6, pp. 934-937.

Orisaremi, TC 2012, 'An exploratorative study of abortion among the Tarok in central Nigeria,' *African Sociological Review*, vol. 16, no. 1, pp. 61-76

Otoide, VO, Oronsaye, F & Okonofua, FE 2011, 'Why Nigerian adolescents seek abortion rather than contraception, evidence from focus group discussions,' *International Family Planning Perspective*, vol. 27, no. 2, pp. 77-81.

Patel, VS, Baxi, KR, Diwanji, M 2010, 'Association between pelvic inflammatory disease and abortions,' *Indian Journal of Sexually Transmitted Diseases*, vol. 31, no. 2, pp. 127-128

Perspectives on Unmet Need for Family Planning in West Africa 2005, Nigeria, *Conference on Repositioning Family Planning in West Africa*, Accra Ghana.

Rehan, EN 2011, 'Cost of the treatment of complications of unsafe abortion in public hospitals,' *Journal of Pakistani Medical Association,* pp. 61:169

Samuels, F, Kivela, J, Chetty, D, Heart, J, Castle, C, Ketting, E & Baltussen, R 2012, 'Advocacy for school-based sexuality education: lessons from India and Nigeria,' *Sex Education*, pp. 1-10.

Sedgh, G, Bankole, A, Oye-Adeniran, B, Adewole, IF, Singh, S & Hussain, R 2006, 'Unwanted Pregnancy and Associated Factors Among Nigerian Women,' *International Family Planning Perspectives*, vol.32, no. 4, pp. 175–184.

Sedgh, G, Bankole, A, Okonofua, F, Imarhiagbe, C, Hussain, R & Wulr D 2009, 'Meeting young women's sexual and reproductive health needs in Nigeria,' *Guttmacher Institute*.

Shah, PZ 2009, 'On behalf of knowledge synthesis group of Determinants of preterm/LBW Births, induced termination of pregnancy and low birth-weight and preterm birth: A systematic review and meta-analyses, *BJOG*, vol. 116, pp. 1425 – 1442.

Singh, S, Wulf D, Hussain, R, Bankole, A & Sedgh, G 2009, 'Abortion worldwide: a decade of uneven progress,' *Guttmacher Institute*,

Slap, GB, Lot, L, Huang, B, Daniyam, CA, Zink, TM & Succop, PA 2003, 'Sexual behavior of adolescents in Nigeria: cross sectional survey of secondary school students 2003,' *British Medical Journal,* vol. *326* no. 7379 pp. 15

Umeha, C 2006, 'Unsafe Abortion: Threat to Nigerian Women,' *Daily Champion,* Viewed 25 May 2014 http://allafrica.com/stories/200606120979.html

UNDP 2008 Human development report 2008-2009,
University or Maryland Medical Center, '*Definition of Ectopic Pregnancy*,' Viewed 18 May 2014, http://umm.edu/Health/Medical/Ency/Articles/Ectopic-pregnancy

World Health Organization (WHO 1997), '*Unsafe Abortion: Global and Regional Estimates of Incidence of Mortality Due to Unsafe Abortion with a Listing of Available Country Data*,' Viewed 15 May 2014, http://www.who.int/reproductive-health/publications/MSM_97_16/MSM_97_16_chapter2.en.html

World Health Organization (WHO 2002), 'Sexual and Reproductive Health, Sexual Violence, World Report on Violence and Health,'

World Health Organization (WHO 2007), 'Maternal mortality in 2005: estimates Developed by WHO, UNICEF, UNFPA and World Bank,'

World Health Organization 2011, 'Unsafe abortion, Global and regional estimates of the incidence of unsafe abortion and associated mortality in 2008',

World Health Organization (WHO 2011), 'Nigeria Country Health Profile,'

World Health Organization (WHO), 'Health statistics and information system,' Viewed 18 May 2014, http://www.who.int/healthinfo/statistics/indmaternalmortality/en/

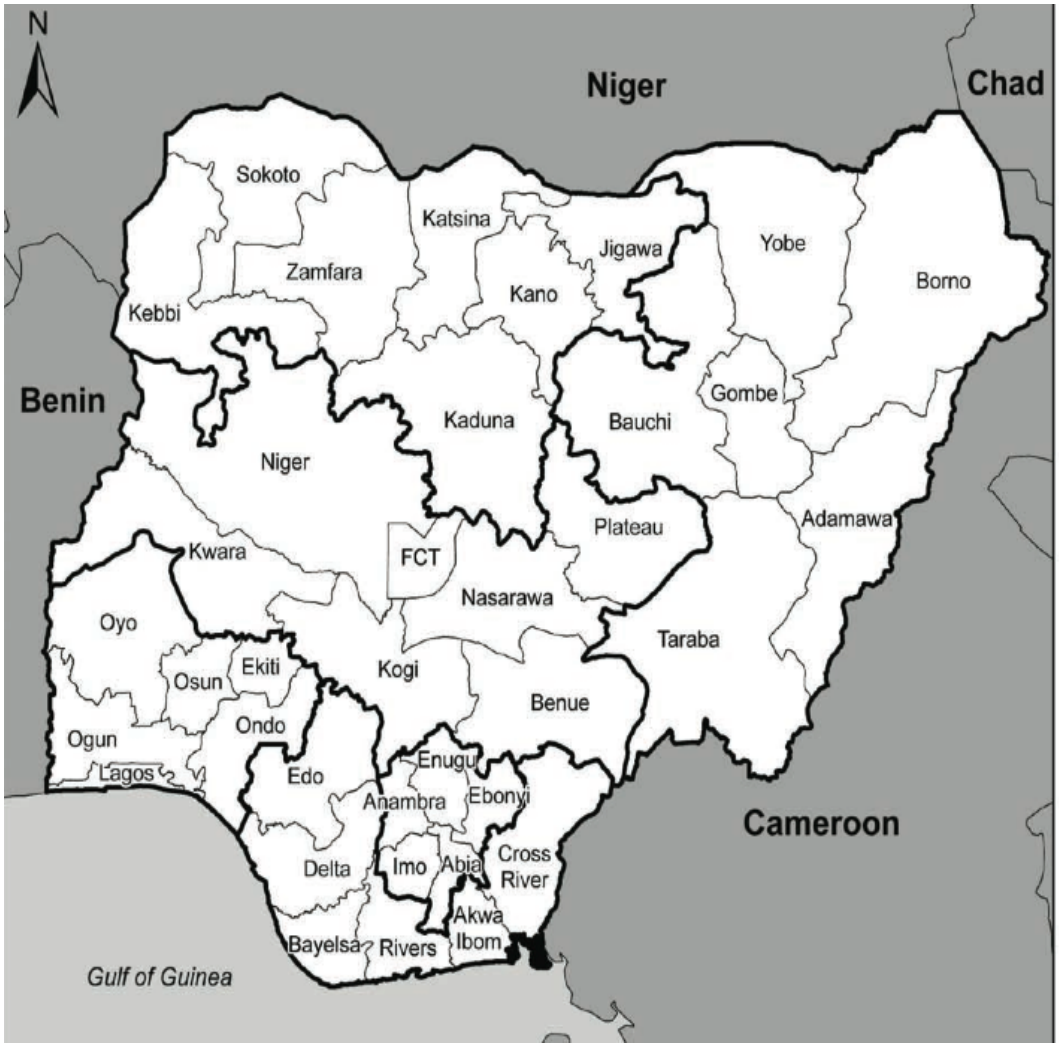
World Health Organization (WHO), 'Intervention for preventing unintended pregnancies among adolescents,' *WHO Reproductive Health Library,* Viewed 21 June 2014, http://apps.who.int/rhl/adolescent/cd005215_ramoss_com/en/

World Health Organization (WHO), 'Maternal, newborn, child and adolescent health,' Viewed 22 June 2014, http://www.who.int/maternal_child_adolescent/topics/maternal/adolescent_pregnancy/en/

World Health Organization (WHO 20014), 'Preventing Unsafe Abortion,' Viewed 9 July 2014 http://www.who.int/mediacentre/factsheets/fs388/en/

## Annexes

Annex 1: Map of Nigeria showing 36 states and the federal capital



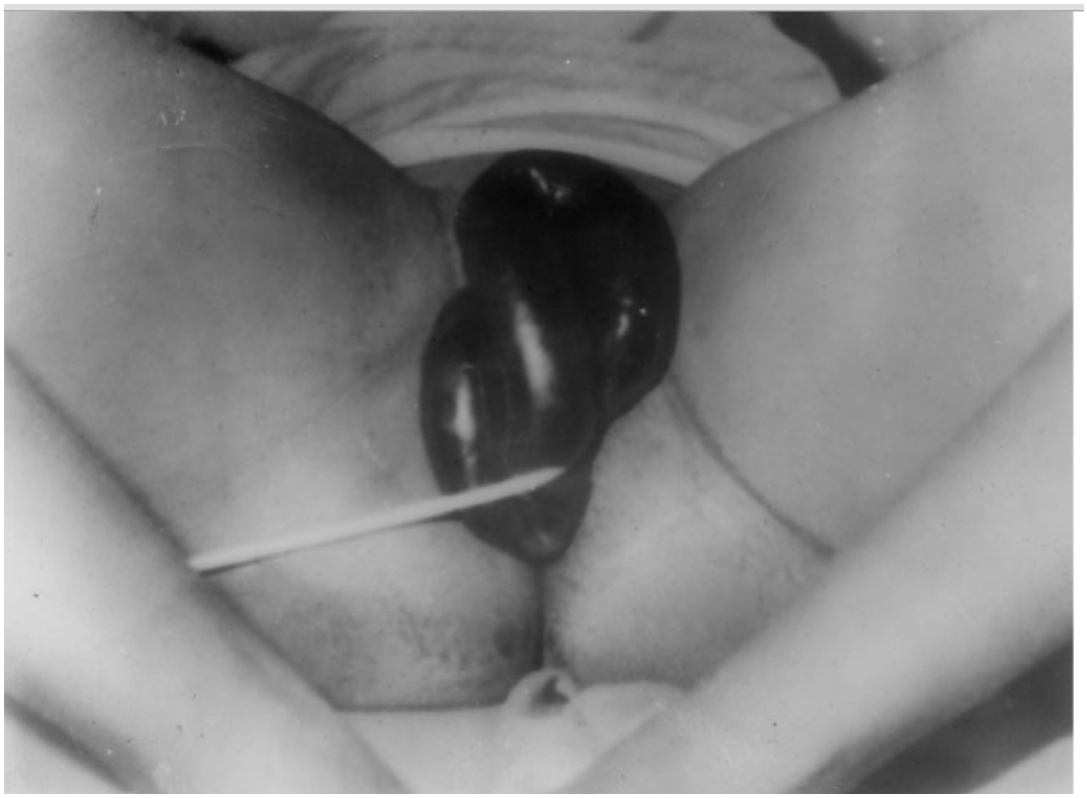

Source: Nigerian Demographic and Health Survey (2008).

Annex 2: Some selected Nigerian health indicators

| Indicator | 2003 | 2008 | 2015 Target |
|---|---|---|---|
| Population | 124 million | 158 million* | |
| Life expectancy at birth | 46.5 | 47 years | 70 years |
| TFR | 5.7 | 5.7 children | |
| Modern method CPR | 8% | 10% | 36% |
| Unmet need for FP | 17% | 20% | 0% |
| Maternal Mortality Ratio | 800/100,000 LB | 545/100,000 LB | 136/100,000 LB |
| Women with at least 4 antenatal care (ANC) visits | 48% | 45% | |
| Births delivered by a skilled provider | 43% | 39% | 100% |
| Infant mortality rate (IMR) | 100/1000 LB | 75/1,000 LB | 30/1000 LB |
| Under-five MR | 201/1000 LB | 157/1,000 LB | 75/1000 LB |
| Proportion of 1 year old children immunized against Measles | 60% | 41 % | 95% |
| Children under 5 who are underweight for age | 29% | 23% | 18% |
| Children under 5 who slept under an ITN the night before the survey | 1.2% | 23% | 60 % |
| HIV prevalence | 5.0% | 4.1% ** | 1% |

Source: Nigeria's health statistics and trends (2012).

Annex 3. Loops of gangrenous small intestine protruding from the vagina, 20-year-old girl, Lagos University Teaching Hospital, Nigeria (one of the life threatening complication of unsafe abortion)



Source: Oye-Adeniran BA et al, Reproductive Health Matters (2002)