CHAPTER ONE

INTRODUCTION

1.1 Background to the study

More than a decade of maternal researches has shown that small and affordable measures can significantly reduce the health risks that women face when they become pregnant (WHO,2001; Obanya, 2003;Leitch, 2006) This is because most maternal deaths could be prevented if women had access to appropriate health care during pregnancy, childbirth, and immediately afterwards (WHO, 2000). WHO (1992:16) defined maternal death as;

> *death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental cause (p.16).*

In any discourse on maternal death, maternal mortality ratio and maternal mortality rate are the major indicators that are employed in measuring the progress and magnitude of maternal death. Among other indicators is the general health indices of the population. In Nigeria, the general health indices of the population show that poverty and disease levels are significantly high (WHO, 2007). Also, there exists a high number of the anopheles mosquito that causes the endemicity of malaria. Furthermore, the HIV prevalence rate among pregnant women is over five percent (National Agency for the Control of STIs and AIDS (NACA, 2001). The available records have shown that the maternal mortality rate in northern Nigeria is about 1000 deaths per 100,000 live births which is almost one third higher than the national average of 740/100,000 live births (WHO,2001). More so, about 80 percent of the women deliver at home, often in unhygienic and unsafe

circumstances with the absence of a doctor or nurse, thus leading to death of most women and newborn. (Ejembi , 2004). According to WHO (2001) this is as a result of ill-equipped government owned community health care systems.

Apart from the problem of high maternal morbidity and mortality index, the teenage morbidity index also remains a big challenge in Nigeria. According to available statistics from the National Demographic Health Survey (NDHS) (2003), the median age of sexual debut in Nigeria is 15 years and one third of the girl-child in Nigeria have had sexual intercourse before age 15. This early sexual exposure is more common in the northern part of the country than the southern part due to a combination of both religious and socio-cultural factors (NDHS, 2003). Studies have shown that generally in Sub-Saharan Africa, more than half of the women give birth before age 20. (NDHS, 2003). The rate of teenage mothers by geo-political zones in Nigeria showed that the North east and North central have 45.2 percent and 44.4 percent respectively compared to 4.7 percent in the South west. (NDHS, 2003).

Evidences have shown that most teenagers in Nigeria do not see modern contraception as a means of preventing unwanted pregnancy because of the cultural restrictions and strict abstinence always expected from them by the society (Cleland &Rodriguez, 1988; NDHS, 2003). Despite the high knowledge of contraceptives among Nigerian women, NDHS (2003) reported that only 22.7 percent of all women have ever used modern contraceptive methods with only 8.9 percent currently using modern contraception. Among the women that use modern contraception, only 4 percent of age 15-19 years consistently use the modern contraceptive methods. As a result of non-use

of contraceptives, most teenagers resort to unsafe abortion as a means for termination of unwanted pregnancy.

Okonofua (2000) reported that females are often married off to older men when they are pre-teens mainly in northern Nigeria. They are unable to negotiate sex let alone contraception or 'safe sex' and there is no such crime as rape in marriage. This status of women has made them vulnerable to sexual desires of the male with resultant early or unintended pregnancy and difficult childbirth.. Thus, WHO (2004) reported that the highest numbers of vesico-vaginal fistula (VVF) are found in Northern Nigeria. Therefore, complications of pregnancy and childbirth are the leading causes of death among women of reproductive age because of early marriages (between ages 12-15) (Ejembi 2000). Though, more than one woman dies every minute from such complications; 585,000 women die every year worldwide but less than one percent of these deaths occur in developed countries while 99 percent of maternal deaths reported occur in developing countries, Nigeria inclusive (WHO, 1996). In addition to maternal death, women experience more than 50 million maternal health problems annually (WHO/UNICEF 1996). This shows that such deaths could be avoided if resources and services were made available.

Evidently from the above, the two major challenges facing sustainable development drive in Nigeria as envisioned in the United Nations Millennium Development Goals (MDGs) in the context of maternal health are present not only in the northern part of the country but across all states (WHO 2001). These two challenges are those of reducing by three quarters the maternal mortality ratio as well as the reduction

by two-thirds of the mortality rate among children under five. However, as noted by Obanya (2003), the issues relating to sustainable development in the context of women in any society are limited but not exclusive of a disenabling socio-cultural environment (factors) which denies women a good number of basic rights. These rights are: rights to property, inhuman treatment of widows, successions and inheritance rights, and even the right to be seen and heard. Associated with Obanya's submission are such other factors as: lack of access to credit facilities, low girl-child social value and status,, lack of recognition of human welfare roles that women play, prevalence of women with low or no-income, unattractive and back-breaking jobs and occupations. All these factors directly influence the primary causes of maternal mortality and morbidity (Okonofua, 2001; WHO 2003)

In most Nigerian culture, male dominance reduces women decision making power in family issues to its barest minimum. Women are rarely allowed to own property, land, animals or business. Wife inheritance and polygamy are common practices. These cultural inhibitions targeted at women generally increased the rate of maternal mortality in northern Nigeria. In addition to the above, malaria the leading cause of death among under-fives and a major cause of maternal death has continued to increase the strain on health resources in Nigeria. The African Summit on Roll Back Malaria (RBM, 2000) resolved to initiate appropriate and sustainable actions to strengthen health systems towards tackling this challenge by the year 2005. This was to ensure that at least 60 percent of those at risk of malaria, particularly pregnant women and children under five years of age, benefits from the most suitable combination of personal and community protective measures. The RBM summit recommended that insecticide-treated mosquito

nets and other interventions be made accessible and affordable to prevent infection and suffering of victims of mosquito bites. Insecticide Treated Nets (ITNs) are the principal weapons against maternal and infant malaria, There are indications that donor agencies are making efforts to provide at least one for every home in Nigeria (UNICEF, 2002). The problem however is that most pregnant women in many rural areas in the Northern part of Nigeria still sleep without the net while the husband sleeps alone under the ITN (Leitch, 2006).

Although, culture, has been shown to be an important factor in determining women's access to available reproductive health facilities, several socio-cultural factors such as early marriage, male dominance, superstition, widowhood practices, traditional birth practices, female circumcision, age at first pregnancy, marital status, education particularly in northern Nigeria still require significant degree of empirical data to determine their effects on maternal death. This study provided insight into the impact of these socio-cultural variables to maternal morbidity and mortality in Benue and Borno states respectively.

1.2 Statement of the Problem

The 2006 census estimates that there are about 65 million females in Nigeria, out of which 30 million are of reproductive age (15-49 years) (NPC, 2007). Each year, about 6 million women become pregnant; 5 million of these pregnancies result in child birth (WHO 2006, UNICEF 2007, UNFPA, 2007). Available data indicate that 59,000 women die yearly as a result of complications in child birth (WHO, 2007). A Nigerian woman is 500 times more likely to die in childbirth than her European counterpart

(WHO, 2007). For every 100,000 women that delivers, between 800 - 1,500 dies in the process (NDHS, 2003). However, there is marked variation between geo-political zones - 165 in south west compared with 1,549 in the North- east and between urban and rural areas(NPC, 2008). Nigeria has the second highest number of absolute maternal deaths, only outranked by India in the world (NARHS, 2005).

More disturbing is the 2005 report of the Society Of Gynecologist and Obstetricians of Nigeria that revealed a maternal mortality of 3,380 in Borno state, 783 in Enugu, 2,977 in Cross Rivers State, 846 in Plateau state, 727 in Lagos state and 7,523 in Kano state. Thus indicating very serious health system failure in the country. One in every 20 Nigerian women dies of pregnancy/delivery related causes compared to 1 in 61 for all developing countries, and 1 in 29,800 for Sweden and Finland. (Advocacy Brief, 2007). Thus for all human development indicators, maternal mortality ratios show the greatest disparity between developed and developing countries. Equally of concern is that yearly, about 1,080,000 – 1,620,000 Nigerian women and girls will suffer disabilities caused by complications during pregnancy and childbirth (Hill, AbouZahr & Wardlaw, 2001). Obviously, these complications and deaths are largely preventable.

For every one that dies, 20 - 30 more suffers long term and short term disabilities such as Chronic anaemia, Maternal exhaustion or physical weakness, Vesico-vaginal or Recto-vaginal fistulae, Stress Incontinence, Chronic pelvic pain, Pelvic Inflammatory Disease, Infertility, Ectopic Pregnancy, and Emotional Depression. (UNFPA, 2003). The UNFPA (2003). estimates that 2 million women suffer vesico vaginal fistulae globally and about 40 percent of 800,000 are in Nigeria. Majority of which are due to prolonged obstructed labour that often terminate in stillbirth or neonatal death(UNFPA, 2003).

Child survival is equally affected too as the chances of survival of a child in the absence of his or her mother is greatly reduced. In Nigeria, 340,000 infants die annually during delivery and shortly after delivery especially if the mother dies in child birth.

This therefore raises the salient question of what could be responsible for this. Could it be due to the woman's age at first pregnancy, occupation, educational qualification, ethnic group, religion, marital status or number of wives in each matrimonial home? Or could it be due to such cultural factors like female circumcision, male dorminance, wife inheritance and subsequent desire to have children for the new husband notwithstanding the number of previous pregnancies for the late husband, traditional birth practices, superstition and early marriage ? It is on these basis that this study examined the extent to which socio-cultural factors correlated with maternal morbidity and mortality in Benue and Borno states, Nigeria.

1.3 Objectives of the Study

The general objective of the study is to examine the socio-cultural factors influencing maternal morbidity and mortality in selected communities of Benue and Borno states of Nigeria. However, the specific objectives are to:

(i) Determine the extent to which socio-cultural factors determine maternal morbidity and mortality in the two states;

(ii) Identify the extent to which the components of social factors (age at first pregnancy, occupation, educational qualification, ethnic group, religion, marital status, and number of wives in matrimonial home) correlates with maternal morbidity and mortality in the two states;

(iii) Examine the extent to which the components of cultural factors (female circumcision, male dominance, wife inheritance, traditional birth practices, superstition, and early marriage) correlate with maternal morbidity and mortality in the two states; and

(iv) Assess the extent to which provision of health intervention programmes (provision of maternal health services, free distribution of health materials, provision of health posts, counseling and health talks/campaign) correlate with maternal morbidity and mortality in the two states.

1.4. Research Questions

The following research questions were raised to guide the study.

RQ1 To what extent will socio-cultural factors influence maternal morbidity and mortality in Benue and Borno States?

RQ2 . To what extent will the components of social factors (Age at first pregnancy, Occupation, Educational Qualification, Ethnic Group, Religion, Marital Status, and Number of Wives in Matrimonial Home) correlate with maternal morbidity and mortality in the two States?

RQ3 . To what extent will the components of cultural factors (female circumcision, male dominance, wife inheritance, traditional birth practices, superstition, and early marriage) correlate with maternal morbidity and mortality in the two States?

RQ4. To what extent will the provision of health intervention programmes (provision of maternal health services, free distribution of health materials, provision of youth services, counseling and health talks/campaign) correlate with maternal morbidity and mortality in the two states?

1.5 Significance of the Study

This study attempted to improve upon the body of knowledge on socio-cultural variants of female circumcision, male dominance, wife inheritance, traditional birth practices, superstitions and early marriages as contributing factors to maternal morbidity and mortality in Borno and Benue states. Several studies (Okonofua 2003, Ladipo 2006, WHO 2007) have provided information that relates to direct and indirect causes of maternal morbidity and mortality in Nigeria, but socio-cultural factors that influence maternal health still require more evidence-based results in several northern states in Nigeria. Secondly, the project provided information that formed the basis for government health planning and intervention programmes towards achieving the specific Millennium Development Goals (MDGs). The study also formed the basis for replication of the research in other communities where similar socio-cultural factors predominate.

The findings from this study enhanced the current understanding of social-cultural characteristics as risk factors for increased maternal death. The study provided data on community perception of socio-cultural contributors to maternal deaths in the two states. The research findings helped to develop strategies on the gap identified. Most funding organizations require data on the magnitude of socio-cultural inputs to maternal death. The findings therefore have increased the body of information required to ensure organization and governments intervening in maternal and child health programs achieve the desired result towards the attainment of the Millennium Development Goals (MDGs). This study also provided empirical evidences on the roles of various service providers in Benue and Borno states in terms of their strategic intervention towards reducing the

socio-cultural factors. This study provided evidence-based data for individual and community willing to intervene on the maternal issues particularly in northern Nigeria.

1.6 Scope of the Study

The study focused on the extent to which socio-cultural factors influenced maternal morbidity and mortality in Benue and Borno states, Nigeria. The study was delineated to women of child bearing age and female teenagers from 15 and 18 purposively selected local government areas of Benue and Borno states respectively.

This is because maternal death occurs among women of child bearing age and health providers are responsible for the management of women at the pre-natal, antennal, post-natal and peuperium stages. The high rate of post abortion complications occur among adolescents and young female adults.

Besides, this study was also restricted to Benue and Borno states as a result of the unique nature of the two states in terms of their high prevalence of maternal morbidity and mortality associated with the independent variables in the northern part of the country. More importantly, the two states have distinct cultural settings, which influence the people's adaptive behaviour and pattern of social activities coupled with their age-long practice of traditional beliefs which recognizes women as insignificant aside child-bearing and domestic assistants.

The variables covered in terms of cultural factors are; female circumcision, wife inheritance, early marriages, superstition, traditional birth practices, male dominance while the social factors include age at marriage, occupation, education, ethnic group,

religion, marital status and number of wives in matrimonial homes in selected communities from Benue and Borno states, Nigeria. The under-listed LGAs in Borno and Benue were the focus of this study.

Borno state: Focused LGAs (18)	Benue state: Focused LGAs (15)
Abadan, Askira/Uba, Bama, Bayo, Biu, Chibok, Dambao, Dikwa, Gubio, Guzumala, Gwoza, Hawul, Jere, Kaga, Kale/Balge, Konduga, Kukawa and Kwaya –Ku	Ador, Agatu, Apa, Buraku,Gboko,Gwer East, Gwer West, Guma, Ito, Katsina-Ala, Konshisha, Kwande, Logo, Makurdi and Obi
Social Factors	Cultural Factors
Age at first pregnancy, occupation, ethnic group, educational attainment, religion, marital status, and number of wives in matrimony	Female circumcision, male dominance, wife inheritance, traditional birth practices, superstition and early marriage

1.7 Operational Definition of Terms

This study will employ certain terms which are unique in application. To avoid misconception of such terms, they are hereby operationally defined.

Teenagers: This refers to girls between the ages of 9-19 years in the selected local government areas of Benue and Borno states.

Teenage Pregnancy: A situation whereby a girl–child within the age bracket of 9 -19 years whether married or not is pregnant.

Criminal Abortion: It refers to termination of pregnancy, irrespective of the gestational age, done by any person whether a health care provider or not, that has not received special training on Manual Vacuum Aspiration (MVA) and other termination procedures or is not licensed to carry out the procedure.

Abortion: This refers to the termination of pregnancy with the use of medicament or instruments in a bid to eliminate the life of the unborn fetus.

Traditional Birth Attendants: These are culturally approved midwives who have not attended any form of approved health institutions but went through some kind of apprenticeship from 'family heritage' on the art of child delivery and care in the community.

Maternal Morbidity: It refers to the presence of illness or disease relating to pregnancy, delivery and peuperium.

Maternal Mortality: This is the death of a woman resulting from conception, delivery or peuperium.

Social factors: This refers to all forms of social indices associated with selected communities in Benue and Borno states, Nigeria. Such factors as age at first pregnancy, occupation, educational qualification, ethnic group, religion, marital status, and number of wives in matrimonial home

Cultural factors: This refers to all forms of cultural indices associated with maternal morbidity and mortality such as female circumcision, male dominance, wife inheritance, traditional birth practices, superstition and early marriage among others.

Correlate Independent variables as compared with the dependent variables in Benue and Borno state

Composite The components of the dependent variables as they jointly influenced the concept of maternal morbidity and mortality in Benue and Borno state.

Relative	The components of dependent variables as they separately influenced the concept of maternal morbidity and mortality in Benue and Borno states.

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

This chapter contains the literature review and theoretical framework in this study.

2.1 Overview of Maternal Health Issues, Services, Data and Indicators in Nigeria

In the year 2000, Nigeria and other members of the United Nations agreed on a number of Millennium Development Goals (MDGs) to improve the welfare of the people in their countries in the 21st century. Two of the health related goals relate to reducing death among children under 5years old by two-thirds (MDG 4) i.e. reduction from 230 - 77 per 100,000 live births) and reducing maternal deaths by three-quarters (MDG 5) by the year 2015. (Ladipo, 2008). When compared with the 1990 figures, this translate to reducing maternal mortality from 1000/100,000 live births to 250/100,000 live births. Three years to 2015, Nigeria still records a higher maternal and neonatal, infant and under-fives mortality rates compared with developed countries. Although many of these deaths are preventable, the coverage and quality of health care services in Nigeria continue to fail women and children. A review of the health services pre and post independence will place us on a strong footing to assess the situation of maternal health services in Nigeria and the right way forward. (Ladipo, 2008)

Maternal Health Services in the Pre- Independence Era:

National Health Conference (NHC) (2009) reported that the Nigeria government has been involved in the provision of health care since 1946, much progress was not made especially in the rural areas - where most of the population resided, until after independence in 1960.(NHC, 2009)

Post- Independence Era:

National Health Conference (2009) reported that in 1975, the Nigerian government started utilizing a Primary Health Care (PHC) approach in the provision of national health care. PHC encompasses basic treatment, maternal and child health (MCH) and family planning services, the prevention and control of infectious diseases and the provision of essential drugs and supplies.

Although MCH was an integral part of PHC, high maternal mortality in Nigeria first received international attention through a paper by an obstetrician and gynaecologist, Kelsey Harrison, in the British Journal of Obstetrics and Gynecology (Harrison,1985). Also in 1985 across the Atlantic, Rosenfield and Maine (1985) published a paper titled ''Maternal Mortality – a neglected tragedy: where is the M in MCH?''. The ''M'' which should have stood for maternal health instead often stands for maternal death, missed opportunities, muddled thinking, mistaken priorities and messy organization of health services. This provided the impulsion for convening an international safe motherhood conference in Nairobi, Kenya in 1987 which launched a global safe motherhood movement. Nigeria was committed to achieving the objective of ''reduction in the number of maternal deaths by half by the year 2000'' as agreed at the conference. A safe mother hood committee was subsequently established by the federal Ministry of Health and the Society for Gynecology and obstetricians of Nigeria (SOGON) intensified efforts to promote maternal mortality reduction (Ladipo, 2008).

Harrison, (2003) explained that Columbia University established the Prevention of Maternal Mortality Network saddled with conducting formative researches aimed at

informing interventions. However, these initiatives were not scaled up and activities stagnated under the military rule. WHO 2001 also reported that in 1988, the Nigerian government adopted the National Health Policy and Strategy to achieve health for all Nigerians and established PHC as an integral part of the national health system and a priority for national development. The policy articulated the goal of enabling all Nigerians to achieve socially and economically productive lives. According to the policy, health is 'an essential component of social justice and national security'. In 1992, the importance of PHC system was reinforced by the establishment of the National Primary Health Care Development Agency (the ''Agency'').

Ladipo (2008) stated that the Agency sought to implement the National Health Policy by revising existing health policies where necessary, translating policies into feasible strategies, and providing technical support to the management of the PHC system. Prior to this, other polices relating to health were formulated. For example, in 1988, in response to the perceived adverse socio-economic consequences of rapid population growth, the government adopted the National Policy on Population for Development, Unity, Progress and Self –Reliance (the ''National Policy on Population). This policy provided the framework within which family planning services were provided (Ladipo, 2008).

Harrison (2003) reported that the policy framework is predicated upon the principle that couples and individuals have the right to determine the number and spacing of their children. Reduction of maternal mortality was not explicitly on the agenda. However, the situation changed following Nigeria's transition to democratic rule in 1999, and the pressure of the 2000 MDGs. With the creation of National Economic

Empowerment and Development Strategy (NEEDS) - a poverty alleviation program which has developed into a national framework for social change, maternal mortality was explicitly listed as an objective. (Nigerian Central Bank, 2004). Also, growing concern among the civil society about the unacceptable level of maternal mortality in Nigeria has spearheaded efforts to improve maternal and child health. For example, The Planned Parenthood Federation of America (PPFA), The Association for Reproductive and family Health (ARFH), Planned Parenthood Federation of Nigeria and Pathfinder International Nigeria have worked throughout the last decade to expand reproductive health services for Nigerians. The Campaign for Unwanted Pregnancy and Ipas have made the sensitive issue of safe abortion a subject of public discourse and this has increased efforts to improved post-abortion care in the country(Oye-Adeniran, Long and Adewole, 2004; Ipas, 2005)

Federal Ministry of Health (FMOH) (2006). adapted the WHO African regional plan of reproductive health and launched the Population Development Agenda. All components of reproductive and sexual health services including MCH, Integrated Management of Childhood Illnesses (IMCI), Safe Motherhood, Adolescent Sexual and Reproductive Health (ASRH), Post Abortion Care (PAC) and management of abortion complication were integrated in the guidelines and standing orders for primary health care which was developed post-International Conference on Population and Development (ICPD). The Federal Ministry of Health produced a national reproductive health policy in 2001 (FMOH, 2001) and a national reproductive health strategic framework in 2002 with specific maternal mortality reduction aims (FMOH, 2002). A revision of the National Policy on Population for Sustainable Development in 2004 clearly called for

reduction of MMR to 75 by the year 2015(FGN, 2004). Furthermore, the Ministry established a multi-sectoral national Commission on Safe Motherhood. In 2005, the government with the support of the World Health organization adopted a roadmap to attain the maternal and child health MDGs (WHO, 2005).

The MDG has been a strong basis for commitment to maternal mortality reduction in Nigeria. The Nigerian Road Map is an outcome of the one developed by the Regional Reproductive Health Task Force in collaboration with all partners in October 2003 in Dakar –Senegal and February, 2004 in Harare Zimbabwe. The Road Map is to provide a framework for strategic partnerships for increased investments in maternal and newborn health at institutional and program levels. The aim is to focus on the availability of emergency obstetric and neonatal care, skilled attendance during pregnancy, childbirth and family planning as well as provision of essential equipment and supplies that will save the lives of women and newborns at all levels. The implementation is in 2 phases of 5 year each; Phase 1-2005 - 2009, Phase 2 – 2010 - 2014 and final reporting year will be 2015. The Road Map is expected to impact on the health and survival of mothers and their newborns as a means of attaining the MDGs. It is also expected to build on the ICPD Program of Action, the Cairo +5 and the UN Millennium Summit agreements. Furthermore, the Integrated maternal, Newborn and Child Health (IMNCH) strategy 2007 was put together to fast-track a program designed to revitalize primary health care in every local government to reduce maternal and under 5 mortality.

The Ministry of Health in 2009 through the National Primary Health Care Development Agency (NPHCDA) established a pilot compulsory one year midwifery

services scheme (MSS) in order to increase the number of deliveries supervised by health personnel particularly in the rural areas. The MSS complemented the 2006 FMOH nationwide implementation of the commodity logistics management systems (CLMS) aimed at making contraceptive supplies available at all times across the country to address the unmet need for either limiting birth or spacing pregnancies. (Berer, 2010)

Despite the wide range of maternal health services available, the maternal mortality in Nigeria continues to rise. This is not unconnected to the weak management and un-coordinated implementation of health policies and services which is compounded by socio-economic and cultural factors. (Ejembi, 2001). For instance, in a 2003 report of comprehensive survey of health facilities in 12 randomly selected states in Nigeria, only 4.2 and 1.2 percent of the public facilities met the Basic Essential Obstetric Care(BEOC) and Comprehensive Essential Obstetric Care (CEOC) standard respectively. (Fatusi & Ijadunola, 2003). Only Lagos State met the criteria of 4 BEOC facilities per 500,000 populations, and 7 states met the standard of 1 CEOC per 500,000 population. For the few that met these criteria, the distribution of Essential Obstetric Care (EOC) facilities was uneven with most of them located in the urban areas while the rural areas where most of the population reside are highly underserved. (Fatusi, 2005)

Similarly, only 13.9 percent of the estimated annual births for the 12 states took place in health facilities and a total of 35,790 obstetric complications were recorded across facilities and states over a 12 month period of the study. Haemorrhage and prolonged labour were the commonest. These findings reflect poor provision of maternal health services and low utilization of available ones. (Fatusi, 2005). Furthermore, it is of concern because it gives a picture of inadequate access to reproductive health services

including family planning by the population most deserving of it. Although increasing access to use of family planning is not one of the MDGs, analysis has shown that it contribute positively to achieving some of the MDGs especially the ones relating to improvement of maternal health and reduction in infant mortality.

Nigeria has one of the lowest contraceptive use rates (8 percent ie about 1 in 12 women of reproductive age).(UNFPA, 2002). The potential contribution of family planning to maternal mortality reduction is not fully realized, particularly, by the very poor, disadvantaged and uneducated Nigerian. The most obvious demand problem was the resistance against small family idea which resulted in very limited demand for contraception as a way of ending child bearing. The resistance of males against male condom shifted emphasis to the targeting of women within the clinic context. The associated supply problems include narrow range of methods that are available within a weak and urban oriented family planning system.

Current unmet need for family planning is estimated at 18percent. Many pregnancies are high risk pregnancies: many women have 6 children on the average; about one in four mothers in Nigeria is a girl of 15- 19 years. One in seven (15percent) pregnancies yearly in Nigeria is unintended (NDHS, 2003) and one in six (17percent) of married women who want to space or limit the number of births have no access to FP/Child Birth Spacing information and services. High risk pregnancies and abortion are pre-requisite to maternal mortality. Therefore, factors that influence the incidence of pregnancy will also influence the level of maternal mortality.

Part of the response to the limited impact of the safe motherhood initiative was the development of the national program for the prevention of maternal morbidity aimed at expanding and strengthening advocacy projects for safe motherhood. The programme was aimed at creating a better access to antenatal care facilities for the 27 million women of reproductive age in Nigeria (Okonkwo, 2002)

2.2.1 Socio-cultural Demographic Indicators, Maternal Morbidity and Mortality in Nigeria

The leading direct causes of maternal deaths in the developing world include hemorrhage, infection, toxemia, obstructed labour and illicit abortion (Maine, 1987). These medical factors when examined in the context of socio-cultural and economic point of view help to explain why maternal mortality are high in Nigeria. For instance, little or no research on women's perception of the complications of pregnancy and childbirth exist in Nigeria (Asowa-Omorodion, 1999). Generally, the African culture puts premium or value on the existence of children in the family. The absence of one tends to threaten the stability of marriage life (Owumi, 2002). In most societies in West Africa, marriage is never initiated unless the woman is already pregnant.

> *In most of Africa, a man's wealth is measured, in part, by the number of children he has. Children are Important as farm workers and as a source of support in old age for their parents especially in rural areas (Centre for Disease Control (2002) (p 15).*

Among the Hausa- Fulani of northern Nigeria, marriages are stable only after a child is born. In this vein, women who are childless are socially stigmatized and called various derogatory names such as witch, outcast, and barren (Kigozi, 1992). Onwuejeogwu

(1981) observed that among the Ibo in Nigeria, the number of children a woman bears and their sex enhances her social status. Many women continue to bear children till death comes, in pursuit of cultural value related to motherhood and male child preference (Owumi, 2002). For women who are yet to born, pregnancy and childbirth are two experiences they greatly look forward to in marriages. Children are generally perceived as a gift of God and a blessing in a marriage.

Among the Esan women in Edo, Nigeria, there is positive relation between the status of a women and her fertility. Hence, woman with higher number of surviving children have higher status both at home and in the society at large .It is also observed that most women obtain clothes as gifts from their husbands after successful delivery. The higher the number of successful deliveries, the more times the husband purchase new clothing for their wives (Asogwa- Omorodion, 1999). The study also revealed that children are the future social security for the elderly and disable, because, they will care for them and bear the costs of their maintenance when they are unable to work. Therefore, the more children a couple has the more care they get at their old age. These socio-cultural reasoning may be useful to view women‘s vulnerability to maternal mortality and capacity to access services as mediated by their degree of physical, sexual, economic, social and political autonomy. (NDHS, 2004).

Women‘s vulnerability to maternal mortality may be increased by poor health or physical violence and abuse, which are manifestations of their lack of physical and economic autonomy. Their capacity to seek care may be limited by restrictions on mobility by both economic e.g. lack of independent resources to access transport), and

social reasons/factors (norms which limit women‘s freedom of movement) (Sundari, 2000). Thus, such socio-cultural factors that have been found to influence maternal mortality in Nigeria includes: female genital mutilation, wife inheritance (levirate marriage), decision making process in homes, early marriage, male dominance and widowhood practices. (NPC/NDHS, 2003)

Ladipo (2008) reported that socio-cultural factors that relate to low status of women (gender disparity in education, access to productive resources etc), poverty, harmful traditional practices and other factors that act as barriers to utilization of available health services have negatively influenced the maternal mortality rate in Nigeria. Traditional practices that affect maternal health outcomes include early marriage and female genital cutting. Child marriage is a violation of human rights, compromising the development of girls and often results in early pregnancy and social isolation, with little education and poor vocational training reinforcing the gendered poverty. Women married at tender age tend to drop out of school and experience high fertility and maternal morbidity and mortality.

Ladipo (2008) further reported that in Nigeria, over 15 percent of the women of reproductive age (15-49years) marry before age 15 and 40 percent of the women aged 20-29 years married before age 18. Early marriage is a problem of the poor where 25percent of girls in the poorest quintile are married early compared to 5percent of the richest quintile. It increases northwards from 5percent in SW or 6percent in SE to 11percent in NC and 33 percent in most northern states. Pregnancies in adolescent girls, whose bodies are still growing and developing, put both the mothers and their babies at risk for negative health consequences.

Female circumcision, also known as female genital cutting or genital mutilation, is a practice that involves removing all or part of the external genitalia and/or stitching and narrowing the vaginal opening (which is called infibulation). The practice still goes on in some parts of Nigeria. Social, cultural, religious, and personal reasons support the persistence of this practice. Some of these reasons include maintaining tradition and custom, promoting hygiene or aesthetics, upholding family honour, controlling women's sexuality and emotions, and protecting women's virginity until marriage (Population Reference Bureau. 2001). According to WHO, the rate of maternal death is doubled by genital mutilation and the risk of stillbirth increased several times. Female genital cutting can have profound effect on the outcome of pregnancy, cause difficulties and intense distress during intercourse and obstruction in time of delivery. They often also experience psychological and sexual problems.

Educational status is highly associated with health-seeking behaviour in pregnancy and delivery. Maternal mortality is much higher in women with no education as compared with those with secondary or higher education. Traditional practices still hold sway as major determinant of maternal death; WHO (2005) stated that pregnant women may be expected to make dietary changes that reduce their intake of foods high in substances they need such as calcium and protein. Milk and green vegetables are forbidden during pregnancy in some part of northern Nigeria for reasons including a belief that the foetus is located in the stomach. Women receive fewer than the additional calories required during pregnancy and such practices contribute to the poor health of mothers and the vulnerability of infants to disease and death. In some ethnic groups, it is common for religious rituals to be performed in order to assist the woman in labour.

Traditional birth attendants who carry out these rituals may have no conception of aseptic techniques and fail to wash their hands or sterilize their instruments. (Ejembi, 2000).

Among these dangerous practices are vaginal examinations during labour, use of unclean objects for cord-cutting, and the application of cow dung. The ill effects of these practices include postpartum urinary infection, tetanus, genital infection and sepsis, thereby putting women at risk of maternal death. Treatment for obstructed labour by untrained attendants is dangerously frequent. Herbal medicines for relief are given according to tradition in many parts of Africa, particularly in the East. This practice is widely reported to cause uterine rupture. Traditional practices after labour which may include more dietary restrictions, massive sodium intake, daily scalding hot baths, insertion of unclean caustic substances into the vagina to restore it to pre-delivery condition and other harmful purification techniques, contribute to maternal death. (Ascadi, 1991)

2.2.2. Female Circumcision, Maternal Morbidity and Mortality

Harmful traditional birth practices are often justified on cultural and religious grounds, and they include female genital mutilation, harmful delivery practices, food taboos, child/early marriage, teenage pregnancy, widowhood rites, male preference, child sexual abuse, gender relations, child labour and denial of access to functional education, medical and health care services, and to adequate nutrition (Federal Ministry of Women Affairs (FMWA), 1998; Inter African Committee on Gender Equality (IACGE, 1999). Of the harmful traditional birth practices in Africa and by direct implication in Nigeria, female genital mutilation has remained the most destructive to the girl child and the adolescents. Most African culture has held tenaciously to the cultural practice that

advocacies and policies formulated towards the practice have yielded little result (IACGE, 1999).

Most reproductive health issues on the girl child, adolescents and women in Africa that borders on harmful tradition practices revolves around the social, physiologic and psychologic impact of such practices on the girl child and the adolescents. It is of import to review the practice of FC as a major reproductive health problem in this research because of its direct consequences on maternal morbidity and mortality in Nigeria. (Dahiru 2008). In reviewing the concept of FC, it should be emphasized that in some communities, female genital mutilation (FC) forms an important rite of passage ceremony, marking the coming of age of the female child. Aside from this, it is believed that to control the virginity of girls and women as well as their sexuality, female circumcision must be carried out. Every year, approximately two million girls are genitally mutilated while several million women approach childbirth knowing that the risks of delivery will be greater because some or all of their genitalia has been cut away by the traditional practice (IAC, 1999).

The issue of female genital mutilation has been the most controversial and widely discussed of all the harmful cultural practices particularly as it is generally believed by tradition, that the practice does more good for the females than harm. Since the late 1970s, individuals and African non-governmental organizations (NGOs) broke the silence surrounding FC and began questioning the practice and its effects on the lives and welfare of the women folk. Reports have shown that untold numbers of African women and girl-children have been routinely subjected to a wide range of harmful practices that

undermine their basic human rights and general well-being thus exposing them to greater health hazards including vesico-vaginal fistula (VVF) and HIV/AIDS (IACGE, 1990).

Historically a school of thought suggests that FC dates back to about 5000 years ago originating from Egypt, while another suggests that it is an old African tradition that spread to Egypt by diffusion and became known in Sudan as 'pharaohnic circumcision'. {Encyclopedia Britannica, 2005) However, the reports show that from the east to the west coast of Africa, the southern parts of the Arabian Peninsula, along the Persian Gulf and among some migrants from parts of Europe, the Middle East and South East Asia, North America, and among the Ditta Pitta Australians and some minority groups in India, Malaysia and Indonesia (Encyclopedia Britannica, 2005). FC is a practice rooted in the culture of the community practicing it (United Nation Family Planning Agency (UNFPA), 1997; FMWA, 1998). Records also show the practice among the populations in Peru and Mexico and the Skoptsi Christian sect in Russia who use the excision and infibulations as routine. Today, FC is commonest in Africa among Islamic and non-Islamic population (Rushwan, 1996). It is practiced by a large number of ethnic groups in over 27 countries in sub-Saharan Africa including Nigeria, Egypt, Ethiopia, Kenya, Ghana, Cameroon, Niger and Somalia. The practice cuts across followers of major religions such as Islam and Christianity, although reports indicate that FC is more connected to cultural practice than religious beliefs. (UNFPA 2004).

Female genital cutting (FGC) which is also referred to as 'female genital mutilation' (FC), or 'pharaonic circumcision' is a traditional practice in which a person, sometimes unskilled or a health worker cuts off parts or the whole of the female genitalia

using a knife or razor blade, which for most part is non-sterile (Adebayo, 2000). It is a practice that leaves horrifying harmful effects on the health of girls and women although health consequences vary in gravity according to the severity of the procedure. Across the world, African women and girls remain most vulnerable and endangered by this practice especially because it undermines their basic human rights and general well-being (UNFPA, 1997; IAC, 1999).

Customs, rituals, myths and taboos have encouraged the practice for centuries in sub-Saharan Africa despite the fact that it has maimed or killed untold numbers of women and girls. Female genital cutting, according to the WHO (1990) comprises all procedures involving partial or total removal of the external female genitalia or other injury to female genital organs for cultural or any other non-therapeutic reasons. WHO (1997) reported that depending on the ethnic group and region, circumcision may be performed at any age ranging from eight days old through to the seventh month of a first pregnancy. In Nigeria, FC is practiced on infant children and adults (IAC, 1998). In the South West, majority of female children circumcised are between the ages of 1-10 years, often times between the first eight days of birth. (Population Council, 2007).

The trend in the South South zone is similar to the South west but ceremonies are usually performed. Girls between ages 12-18 years undergo annual festival of circumcision. The South East zone performs FC between the ages of 1-12 years while majority of circumcision in the North Central is also done between the ages of 1-12 years. (AHIP 2007). Circumcision done in the Federal Capital Territory is usually done between the ages of 18-24 years. North east zone have recorded about 11percent of those

circumcised above 25 years old. (IAC 2001). Circumcision was traditionally the specialization of a native doctor, a traditional doctor or a member of the community known for the trade. In an attempt to modernize the practice and respond to criticisms, it has been taken over by modern health care providers (Owumi, 1996). In some States like Abia, Delta and Edo, substantial number of health clinics perform the operation. Lay practitioners (mothers, grandmothers and fathers) also feature in most states as well as 25percent in Cross River, Ogun, Bauchi, Bornu and Kwara States (IAC, 1999)

The WHO expert working Group on FC refined the four type classification into the following to take cognizance of those yet to be classified (WHO 1990).

Type I Excision of the prepuce or clitoral hood with or without excision of parts of or the entire clitoris. This is also known as *sunna* (traditional) circumcision, which medically can be likened to male circumcision. It is practiced in parts of northern Nigeria

Type II Excision of the hooded clitoris together with partial or total excision of the labia minora (inner vagina lips). It is the most common practice conducted throughout Africa, Asia, the Middle East and Arabian Peninsula.

Type III Excision of part of or all of the external genitalia with or without the stitching of the raw edge together/narrowing of the vaginal opening (infibulations). This is the most severe of the all three procedures. What is left is a very smooth surface and a small opening to permit urination and the passing of menstrual blood. This artificial opening is sometimes not larger than the head of a match.

Type IV Unclassified. Scraping, Anguruya or Gishiri Incision extending from the vaginal opening anteriorly or posteriorly into surrounding tissue with damage to the urinary bladder/urethral opening or rectum and anus.

- prickling, piercing or incision on the clitoris or labia
- scraping and/or cutting of the vagina
- stretching of the clitoris and/or labia
- cauterization by burning of the clitoris and surrounding tissues
- introduction of corrosive substances or herbs into the vagina to cause bleeding or tightening or with the aim of tightening or narrowing the vagina and
- Any other procedure that falls under the definition of FC.

In Nigeria, research findings on female children show that Excision Type 1, the most prevalent is commonest in the South East, South South and South West, Kwara in the middle belt, Kaduna in the North West and Borno in the North East than elsewhere.

This review will attempt to unveil the factors behind the adherence to the cultural practices of FC. Adebayo (2000), in one of the researches on FC explained that the practice is deeply rooted in cultures (myths and traditions) and the contextualization of FC to culture has made it very difficult to eradicate. According to him, it is a heritage which they can not leave because it is part and parcel of culture (Afonja, 1999). It is believed that-

- FC enhances sexual pleasure in men and it will not pose competition to the penis,

- Prevents promiscuity by reducing libido in women and girls. The uncircumcised girl is believed to have insatiable urge for sex and such girls would always find it difficult staying with one sexual partner and thus do not marry. Circumcision keeps the woman's sexuality under check,
- Increases fertility, prevents stillbirths and makes delivery easy. An uncircumcised girl would face lots of complications in pregnancy and childbirth and a baby will die if its head touches the uncircumcised clitoris,
- Is an integral element of a woman's rite of passage from childhood to adulthood. It is the 'passport' initiating her into the 'beyond', to womanhood and social integration,
- Is a form of decoration, beauty, pride and female identity that makes a woman real while helping to maintain personal hygiene. It is feared that an uncircumcised girl harbors evil spirits,
- Protects the family's honour and promotes social and political cohesion. Uncircumcision is a curse to both the girl child and her family,
- Is believed that an uncircumcised woman cannot bear children or the children will die in childbirth. Apart from dying, there will be increased pain during delivery,
- Promotes the culture and tradition of the people. People are afraid to throw away traditions left behind by their forefathers, risking being cursed and punished by their ancestors. For example, a woman said she became ill after hearing that she had to stop circumcising girls. She said she slept badly and was beaten by her ancestors in her sleep and had to enter a dialogue with her ancestors giving them some milk and local brew spilled on the earth.

- If a female child cries the whole night long, it has to be circumcised,
- The social pressure on young uncircumcised girls and women are tough in some areas. Such girls are disowned by their grandparents for refusing to be circumcised and they have to leave their families if they do not agree to be circumcised. If married, the young woman risks being unaccepted by her in-laws. Her mother in-law will not cook for her even when she delivers a child. She might not even eat the food that the daughter in-law prepares.(Afonja, 1999)

2.2.3 Wife Inheritance, Maternal Morbidity and Mortality in Nigeria.

Wife Inheritance legally referred to as Levirate marriage, is a condition where a "family member inherits a married woman whose husband is dead" (Bamgbose, 2002). The widow is seen as the property of the former husband's family. (Owino 2004). Levirate marriage is considered a custom of the Yoruba, the Igbo, and the Hausa-Fulani and continues to be practiced in rural communities (Bamgbose 2002). However, increased education and urbanization are thought to have reduced this practice. It is also thought that women in Nigeria who have greater economic independence are less likely to accept a levirate marriage (Ewelukwa, 2002). The practice of levirate marriage has been identified as one of the causes of maternal morbidity and mortality in Nigeria (UN, 2004).

According to a 2005 *Daily Champion* article, following the burial of an Igbo husband, the widow is asked to choose "a man from the kindred that will stand for her and her children" (8 Nov. 2005). The woman either agrees to pick a man from the kindred, or she refuses to do so and "face[s] persecution from the family" (*Daily*

Champion 8 Nov. 2005). The woman is expected to have children from the new husband irrespective of the number of children she had from the dead husband. (CREAW 2008)

There has not been any concerted action by women's movement towards enhancing inheritance rights of women in Nigeria. Their work has been disjunctive and as such, no desired national impact has been made. (Dahiru 2008). The reason for this may be partly because the status of women in Nigeria with respect to inheritance is not the same everywhere. Some women, particularly women married under the Act (statutory marriage), enjoy better inheritance rights and may not be bothered about the situation of other women subject to customary laws. (Ezeilo, 2000). The work of NGOs concerned with the promotion of women's rights in Nigeria has been mainly at the level of advocacy – creating awareness about the type of marriage that will give a woman better inheritance rights and encouraging men to make wills. This lopsided type of advocacy that is not targeted at influencing laws and policies pertaining to inheritance rights have not improved in any way the status of women in Nigeria vis-à-vis inheritance rights.

Furthermore, Ezeilo, (2000) reported that there is lack of economic and political will to use existing governmental structures – for example, Federal and State Ministries of Women Affairs and Social Justice and National Commission on Human Rights - to improve women's rights to inheritance.

The Nigerian government has ratified the Convention on Elimination of All forms of Discrimination Against Women (CEDAW: 1979) without any reservation and also the African Charter on Human and Peoples Rights (1981),which requires states to eliminate

all forms of discrimination against women recognized in International Conventions and Declarations. (Ezeilo, 2000)

Consequently, it is expected that the government will adopt appropriate legislation and actions aimed at modifying discriminatory laws, regulations, customs and practices against women. As at now, there is no national committee charged with the supervision of implementation of CEDAW in Nigeria. Women's social status is still very low. This is mainly due to illiteracy, poverty and cultural practices, which treat women as mini persons, objects of inheritance rather than subjects of inheritance. The traditional, cultural and religious beliefs that women are inferior and subordinate to men tend to perpetuate widespread practices involving violence and which are very harmful to women. The discrimination in education of girls and boys is borne out of this patriarchal attitude including male dorminance ideology. (Ezeilo, 2000).

Frequent importation of native law and custom of inheritance to execution of wills of a testator duly made under the Wills Act results in hardship to even wives of statutory law marriage. For example, if a testator bequeaths his matrimonial home to his wife in perpetuity, objections are raised to the execution of that bequest on the ground that by native law and custom of Igbos, for example, a man's dwelling house (matrimonial home) belongs to his eldest son or to his male next-of-kin where he is not survived by any male issue. (Ezeilo, 2000)

Women's economic status has further jeopardized their inheritance rights. Women, owing to several factors, lack access to means of production and since a woman's right to property is subject to varying traditional and cultural practices, her

ability to secure credit is undermined. (Bongaarts,1978). Women in Nigeria perform multiple economic and household responsibilities in the face of systematic discrimination in accessing the basic technologies and resources which are required in order to function in an economically productive and efficient manner. This discrimination imposes considerable limits on women's capacity to participate in development. The role of women in Nigerian economy is largely unrecognized. Both religions practiced in Nigeria – Christianity and Islam - militate against women's rights to inheritance. A woman is not viewed as man's equal; consequently both religions will hardly concede equality of share in inheritance. The varying systems of religion relegate woman to the background thereby reinforcing the inferiority of women.

2.2.4 Male dominance, Maternal Morbidity and Mortality

Male dominance is the practice of favoring male children while disregarding daughters, a form of discrimination that often starts before a female child is even born. In some African communities, prayers for fecundity are either for sons or for sons and daughters. The wish for sons almost always takes precedence over a desire for daughters: the hope is that there are sons and daughters, never daughters and sons. Food distribution in the average household of a developing country is frequently skewed in favour of the male because it is the male who is viewed as the earner or potential earner in the family (Sohoni, 2001*)*. The crave for the male child in Africa culture cuts across almost every ethnic groups and this have led to high fertility among women who have few or no male child. High fertility is associated with high levels of maternal mortality, both because more pregnancies mean more chances of pregnancy-related deaths, and because the risks of pregnancy and childbirth increase after the third child. And yet in many developing

countries there is still a strong pressure on women to bear many children despite the risks. There are a number of reasons for this. (Hodges 2001). Gender identities, that is, what it means to be a man or a woman in a particular society, are shaped and defined by patterns and expectations of reproductive behaviour. In traditional cultures, parents follow strict nutritional and intercourse guidelines believed to facilitate the conception of a male child. (Iduseri & Ogbeide 2005). But even in developed countries, anecdotal and other evidence points to the widespread use of baking powder, Epsom salt, and vinegar douches as well as certain coital positions to enhance the probability of a male fetus. In recent decades technology has made it possible to use genetic planning and sex screening to prevent the female from ever being conceived, much less from being born. (Sohoni, 2000).

Data from an Indian hospital documented by Ramanamma and Bambawale (2000) show that of a sample of 700 women, only four per cent of those expecting daughters chose to carry their pregnancies to term. The remaining 96 per cent had abortions. By contrast, 100 per cent of those expecting sons carried their pregnancies to term, even when a genetic disorder was considered likely. Similarly in the United States, studies reveal a preference for male babies over female babies, especially when the baby is the first or only child. Asked how many children he had fathered, former American boxing champion Muhammad Ali answered unabashedly, "One boy and seven mistakes." Male preference also biases the grieving process. An American study of 236 parents who had experienced the death of a child concluded that parental grief was greater for the male than the female child. (Sohoni, 2000). The implication is that women who are not lucky to have male children continue to have children even at the detriment of her health.

For women in many cultures in Nigeria, the surest route to social and economic security is to bear many children, preferably sons (Family Care International, 1991). Fear of infertility, of divorce or of polygamous marriage resulting from not having a male child also act as pressures on women to bear more children. Where male children are accorded more importance than females, women may go on bearing more children in order to have a boy, or more boys.

Property and inheritance laws which limit the rights of females can reinforce male dominance. In most cultures in Southern and Central Nigeria, the equal rights of sons and daughters to inherit are not practiced (Adeyemi, 2000). All these have far reaching consequences to maternal morbidity and mortality. The root causes of male dominance among African families include the social roles ascribed to men and to women. Sons ensure the perpetuation of the family name, while a girl loses her identity with marriage (although male dominance is also the norm in societies where girls retain their fathers' names in marriage). Responsibility to care for aging parents often falls to sons, who also perform their parents' burial rites. Thus not having a son is a source of vulnerability for parents, while having daughters only is a social stigma. (Adeyemi, 2000).

Interpretations of religious teaching may also contribute to male dominance. In Orthodox Hinduism, only a son can perform the funeral rites for his father, so a Hindu with no sons risks being reborn as a lower form of life (Royston, 1989). The practice of dowry, where a family must hand over wealth with the marriage of their daughter to her new family, makes having daughters an economic burden, whilst sons are an asset because it is known that their work will benefit the family.(WHO, 1998). This makes women to continue to have children until they are secured with the number of male

children in the family. In Guraj Indian, Balakrishnan, 1994 reported that some married women now seek abortion among traditional birth attendants after undergoing sex selection. When they found out that the fetus is a male, they keep baby however most of the abortions procured are female babies. Consequently, in the last few years there had been an increase in the number of women and girls going to a traditional birth attendant for abortions. This factor contributed to an increase in female mortality in the community.

Maternal events in Africa are prone to crises for several reasons. Women are subjected to repeated childbearing at short intervals either to satisfy their husbands' quest for large family size or as a means of adjusting to the very high infant morbidity and mortality in the continent. The situation is exacerbated by cultural beliefs and practices and poor medical system that hinder access and use of hospital facilities during emergencies. In some communities, women's socio-economic status is significantly low and this prevents them from contributing meaningfully to family discourse. Consequently, men take sole decisions that affect members of their families. This exclusivity notwithstanding, it has been noted that a large majority of men in Africa are indifferent to reproductive health. The implication of such attitude, in a male dominated society, is that activities that influence maternal outcomes are taken for granted, ultimately resulting in maternal crises typical of the situation in Africa. This concern was expressed by Isiugo-Abanihe (2003) when he observed:

> *Before the current concern for male involvement began, reproductive health issues and services had become synonymous with women's reproductive health, and men were assumed to have no special interest in such matters. However, the tacit exclusion of men from active involvement in these issues represents a lack of appreciation of the social reality of daily living in most developing societies, particularly in Africa. Indeed, the characteristic lack of male involvement in*

> *reproductive initiatives, including family planning, is a major obstacle to a speedy fertility decline in sub-Saharan Africa given the considerable authority and power vested on men as decision makers in the home and society (p8)*

The above insight highlights the essence of male involvement in pregnancy outcomes. Male role, however, derives from patriarchy which defines activities of individuals in the society. Its influence is felt in virtually all aspects of human endeavor. In most societies, men dominate and in some cases absolutely control the interactions and actions of members of their families in virtually all spheres of social relationships, as of rule. Max Weber had a similar observation when he conceived patriarchy as a particular type of household organization in which the father dominated other members of an extended kinship network and controlled the economic production of the household (Barrett, 1988). The implication of such control is that the economic structure is significant in coordinating other structures within the social system. Patriarchy seen in the light of wholesome inequity has been perceived as an over-arching category of male dominance (Barrett, 1988), a situation carefully sustained by men through ages (Sen, Barret &Barth., 1994).

While it has been claimed by some men that such gender relationship is responsible for peace at homes and the society generally, skepticism and suspicion about the genuineness of such assertion among women and the likely consequent breakdown in spousal/household communication can have indirect impact on maternal outcomes. The tendency is high for couples that lack confidence in themselves to seek assistance from other people. The consequence in the long run is that the intimacy and agreement that should necessarily follow decisions on family planning, pregnancy, prenatal and postpartum care are lost. Pregnancy outcomes then become events that result from

randomness (Gray. 1982). The pervasiveness of patriarchy as a system that does not discriminate against either patrilineal or matrilineal societies but conceived in terms of the difference in magnitude of its application to both societies has been highlighted. Gray (1982) argued that men are always in control of the myth system, even in matrilineal societies. Ottong (1993) expressed the same view when he stated:

> *The male plays a very dominant role in the social structure; he is, as of right, the head of the family, and is seen and regarded in certain circumstances by the wife (or wives) as the lord and master whose decision is always final. Even in the exceptionally few matrilineal societies, authority relations are still patriarchal, although patterns of descendancy and inheritance might be governed by the principles of matrilineal (p1)*

Consciousness about the consequences of male dominance on women folk for the past few decades has been increasing and appears to be getting stronger by the day. Mill (1970) observed that the principle, which regulates the existing social relations between males and females, is not only wrong in itself, but also one of the chief hindrances to human development. She observed that such principle should be replaced by an alternative, which will be embedded in perfect equality, admitting no power or privilege on the one side, or disability on the other. Consensus among feminist and liberal writers on the negative implications of male dominance is evident (Nwokocha& Eneji, 2004). Patriarchy is viewed in some quarters as an institutional mechanism that serves to limit women's economic autonomy relative to men's. The result is that women unwittingly depend almost entirely on men, which has implication for the former's involvement in family decisions, including reproductive health, even when they are directly affected.

Studies have shown that socialization into sexuality and gender roles begins early in the family and community and are reinforced through the interplay of familial, social, economic and cultural forces, which are subsumed in patriarchy (Isiugo-Abanihe, 2003;

Moore & Helzner, 1996, Sen *et al.,* 1994; Obura, 1991). Similarly, Isiugo-Abanihe (1994a) maintained that cultural dictates shape behaviours; one's environment affects her reproductive attitudes, perceptions and motivations. Oke (1996) has observed that the use and non-use of health services are determined by one's socio-cultural environment, which, in most cases, is shaped by its patriarchal structure. Erinosho (1998) has also noted that many culture bound syndromes are effectively managed through an informed knowledge of their cultural contexts and the background of patients. Some socio-cultural factors, which not only prevent women from getting out of their homes to utilize maternal health facilities, even in emergencies, but also prohibit them from eating certain foods, have been identified (Jafarey and Korejo, 1995). For instance, in parts of Nigeria, cultural taboos discourage pregnant women from eating some fruits, vegetables, rice and other high-calorie foods that ordinarily reduce susceptibility to diseases and malnourishment during the period (Mbugua, 1997). Most of these restrictions are given in order to sustain the myth surrounding a particular tradition or to emphasize the sacredness of a custom conceived as inviolable. Among the Ibani of Rivers State, Nigeria for instance, pregnant women are prohibited/prevented from coming out of their homes, during the popular *Nwaotam* festival which lasts for up to 3 days, notwithstanding their conditions.

It is believed among the people that pregnant women who sight the festival masquerade would inevitably incur the wrath of the *Ikuba* god. The implication is that women whose conditions are critical hardly receive emergency obstetric care during the period. Consequently, the number of maternal mishaps among the Ibani within the period of the festival might be higher than other times. Furthermore, it has been pointed out that culture, which in most African societies is defined by men, determines habits related to

food, which in turn has some implications on the health status of individuals in the community.

Among the Ibani for instance, it is common to see men and women of various ages drinking locally made gin *etee-te* in the public. Pregnant women in their various trimesters are not restrained from such alcohol use. Invariably, men unwittingly support their wives' consumption of alcohol which increases their susceptibility to pregnancy complications. Hence, data on pregnancy outcomes related to drugs or alcohol exposure are relevant for a deeper understanding of the factors that influence people's behaviour considering medical concerns about the consequences of exposure to alcohol for maternal outcomes. For instance, according to the Noah Health (2001), drinking alcohol during pregnancy can cause physical and mental birth defects. Report shows that no level of alcohol use during pregnancy has been proven safe.

Each year, more than 50,000 babies are born with some degree of alcohol-related damage. Many women are aware that heavy drinking during pregnancy can cause birth defects, but many do not realize that moderate or even light drinking also could harm the fetus (Center for Disease Control 2003; Noah Health, 2001). The specific effects of alcohol at different trimesters have been pointed out by Ling & Langtang. (1996); alcohol interferes with organogenesis in the first trimester while it leads to mental retardation and spontaneous abortions during the second. In the third trimester, alcohol is associated with significant depression of fetal growth. Other anomalies that are ascribed to toxic effects of alcohol on the fetus include spinal defects, congenital heart disease among others (Ling et al. 1996). Among the Ibani, the rate of alcohol (specifically local gin) consumption is very high among pregnant women. This attitude, coupled with

inadequate health facilities, explains the high rate of maternal and infant mortality and morbidity among the people.

A combination of these factors makes the choice of the Ibani, for the study, very appropriate. Individual and communal values, norms and perceptions are noted as responsible for the persistence of some cultural and religious practices and demographic behaviour in Africa and other parts of the world (McQuillan, 2004). For instance, female circumcision, which is commonly practiced in Africa and Middle East, has been implicated in maternal deaths (Odebiyi& Aina, 1998). It has been observed that infection and obstetric complications that arise as a result of such practice place considerable strain on already inadequate health facilities (Odebiyi & Aina, 1998).

Records show that female circumcision is widely practiced in 26 African countries, revealing the wide nature of the practice in the continent (Mbugua, 1997). The foregoing highlights the role of male-dominated culture in shaping maternal health conditions and outcomes among individuals in sub-Saharan Africa. In addition, it has been pointed out that since over 60 percent of the population of Africa are rural based, cultural norms and practices still exert a strong influence on reproductive health care, especially in relation to pregnancy, delivery and child rearing. The implication is that women's contributions to maternal health are limited (Njikam, 1994). Such limitation affects maternal-outcomes generally considering that some of these women are compelled to observe culturally-approved activities, even when they undermine their safety.

It has been observed that most women are beginning to emphasize the limiting capacity of their motherhood activities in relation to childbearing. Grimshaw (1986), for

instance, pointed out that motherhood has often been ideologically constructed in ways that have served to legitimize the dependence of women on men. Her position that motherhood annihilates women and should therefore for sometime be totally rejected re-echoes the position of most feminists that being a mother not only obliterate one's freedom but also a means to capitulate to patriarchy. But going by the African value that places premium on children, the emphasized limitation of motherhood is clearly contradictory. Moreover, the status of women in most societies in Africa is confirmed by their fertility and especially in having male children. Motherhood thus becomes an agonizing experience for women that have only female children and those that are infertile, in places where male-child-syndrome is emphasized (Nwokocha, 2007).

Ladipo (2008) stated that to exclude men from family planning information, counseling and services is to ignore the important role men's behaviour and attitude may play in the couples reproductive health choices. Traditionally, in Nigeria, men have played the role of decision makers. Improving their participation in the promotion of maternal health would strengthen their roles as promoters at the family, community and national levels. When men are involved, both men and women are more likely to communicate with each other, make joint decisions about contraceptive use, discuss how many children they would like to have and be actively involved in child rearing and domestic chores

2.2.5 Early Marriage, Maternal Morbidity and Mortality

Marriage in Nigeria, as in many other societies, provides the primary social setting in which the biological event of childbearing occurs. It is one important proximate determinant of fertility. Marriage is universal, and most child births among adolescents,

particularly in northern Nigeria, occur within its institution. For this study, marriage was defined as any stable union, irrespective of whether the male partner has performed certain traditional rites or not. Thus, both formal and informal unions were taken to mean marriage because of the significant effects both have on childbearing. In any case and within Nigerian cultural contexts, marriage is a union between persons of opposite sexes which involves rights and obligations fixed by law and custom. Age at marriage is crucial factor in women's lives, not only because of its association with overall completed fertility and with the meaning and consequences of adolescent fertility, but also due to its relation with the status of women. (UNICEF, 2010).

Early marriage in fact is favored in different contexts. Legal codes governing family law usually establish the minimum age at first marriage. In spite of the existing legal minimum age for marriage however, more often than not these are not, enforced, especially in the rural areas. The cultural definitions of acceptability usually have much more force in the resulting outcome, than those imposed by law and removed from the realities of the people to whom they are supposed to apply. In most of these areas, early marriages are usually performed without the informed consent of the girl and often involve important age differences with the spouse, one element of unequal power relations between the spouses and of difficulty for empowerment. A common perception about teenage marriage and childbearing, particularly among government, development agents, international agencies and NGOs, is that the behaviour is a problem and should be discouraged. (UNICEF, 2010).

The age at which girls or women are first married is a significant distant factor influencing maternal outcomes and varies greatly between countries. (UNFPA 2004).

For example, in Botswana and Namibia, the average ages at first marriage are around 24 and 25 respectively, whereas in Mali, Niger and Yemen and Northern Nigeria half of all women are married before their 16th birthday (WHO, 2005). The younger women are married, the more likely it is that they will not have fully developed pelvis and therefore will be at risk of obstructed labour. Discouraging early marriage through changes in the minimum legal age of marriage, or encouraging later marriage (e.g. through compulsory education) are therefore possible strategies to reduce maternal mortality by influencing the distant factor of early marriage (WHO, 2005).

However, even with legal sanction, changing a tradition of early marriage can prove very difficult. Where daughters are seen as a financial burden for their parents, early marriage makes economic sense. Early marriage also helps maintain male control over female sexuality and supports higher fertility. (James and Isiugo-Abanihe 2010).

First births carry special risks for both mother and child. In the northern regions, where child marriage is common, virtually all sexual activity among girls occurs within the context of marriage. The implication is high fecundity and fertility among the girl child in the northern Nigeria. The vast majority of births to adolescent girls are first births that occur within marriage. The foremost risk first births carry is prolonged or obstructed labor, which can result in obstetric fistulas in settings where access to care is limited (WHO, 2004). First births also have elevated risks of pre-eclampsia, malaria, and infant mortality. Girls who give birth during adolescence require special attention because they are less mature and are simultaneously coping with their own and their baby's physiological, emotional, and economic needs. (UNICEF, 2002). Globally,

adolescent mothers tend to be poorer, less educated, and less adequately nourished than older others; they also face greater social disadvantage (WHO, 2004)

2.2.5.1: Teenage Pregnancy in the context of early marriage and Maternal Morbidity and Mortality

Teenage pregnancy is formally defined as a pregnancy in a young woman who has not reached her 20th birthday when the pregnancy ends, regardless of whether the woman is married or is legally an adult (age 14 to 21, depending on the country). In everyday speech, the speaker is usually referring to unmarried minors who become pregnant unintentionally. The average age of menarche (first menstrual period) is 12 years old, though this figure varies by ethnicity,(National Research Centre for Women and Family, 2001) and ovulation occurs only irregularly before this. Whether the onset of fertility in young women leads to pregnancy depends on a number of factors, both societal and personal. Worldwide, rates of teenage pregnancy range from 143 per 1000 in some sub-Saharan African countries to 2.9 per 1000 in South Korea.(Treffers, 2003; UNICEF, 2001)

Pregnant teenagers face many of the same obstetrics issues as women in their 20s and 30s. However, there are additional medical concerns for younger mothers, particularly those under fifteen and those living in developing countries.(Mayor, 2004). For mothers between 15 and 19, age in itself is not a risk factor, but additional risks may be associated with socioeconomic factors.(Makinson, 1985). In developed countries, teenage pregnancies are associated with several social issues, including lower educational levels, higher rates of poverty, and other poorer "life outcomes" in children of teenage

mothers. Teenage pregnancy in developed countries is usually outside of marriage, and carries a social stigma in many communities and cultures. Many studies and campaigns have attempted to uncover the causes and limit the numbers of teenage pregnancies (The National Campaign to Prevent Teens Pregnancy, 2002). In other countries and cultures, particularly in the developing world, teenage pregnancy is usually within marriage and does not involve a social stigma.

Save the Children found that, annually, 13 million children are born to women under age 20 worldwide, more than 90 percent in developing countries. Complications of pregnancy and childbirth are the leading causes of mortality among women between the ages of 15 and 19 in such areas.(Mayor, 2004). The highest rate of teenage pregnancy in the world is in sub-Saharan Africa, where women tend to marry at an early age (Treffers, 2003). In Niger, and Northern Nigeria for example, 87 percent of women surveyed were married and 53 percent had given birth to a child before the age of 18 (Locoh &Therese, 2000). The teenage birth rate in the United States is the highest in the developed world, and the teenage abortion rate is also high.(UNICEF, 2001). The U.S. teenage pregnancy rate was at a high in the 1950s and has decreased since then, although there has been an increase in births out of wedlock (Guttmacher, 2001).

In some societies, early marriage and traditional gender roles are important factors in the rate of teenage pregnancy. For example, in Northern Nigeria, early pregnancy is often seen as a blessing because it is proof of the young woman's fertility (Locoh & Therese, 2000). In the North eastern Nigeria early marriage and pregnancy is more common in traditional rural communities compared to the rate in cities.(United Nations,

2006). The lack of education on safe sex, whether it's from parents, schools, or otherwise, is a cause of teenage pregnancy. Many teenagers are not taught about methods of birth control and how to deal with peers who pressure them into having sex before they are ready. Many pregnant teenagers do not have any cognition of the central facts of sexuality. Some teens have said to be pressured into having sex with their imposed husband when the teen was young and yet no one had taught these teens how to deal with this pressure or to say "no".(Macleod, 1999). In societies where adolescent marriage is uncommon, first intercourse at young age and lack of contraceptive use may be factors in teen pregnancy.(United Nations, 2007; Mayor, 2004).

According to information available from the Guttmacher Institute, sex by age 20 is the normal age across the world, and countries with low levels of adolescent pregnancy accept sexual relationships among teenagers and provide comprehensive and balanced information about sexuality.(Guttmacher Institute, 2005). Several polls have indicated peer pressure as a factor in encouraging both girls and boys to have sex (National Campaign to Prevent Teen Pregnancy, 2007). Adolescents may lack knowledge of, or access to, conventional methods of preventing pregnancy, as they may be too embarrassed or frightened to seek such information (National Campaign to Prevent Teen Pregnancy, 2007; Allen, 2003). Contraception for teenagers presents a huge challenge for the clinician. Young women often think of contraception either as 'the pill' or condoms and have little knowledge about other methods. They are heavily influenced by negative, second-hand stories about methods of contraception from their friends and the media. Prejudices are extremely difficult to overcome. Over concern about side-effects, for example weight gain and acne, often affect choice.(Adams & D'Souza, 2009).

Inexperienced adolescents may use condoms incorrectly or forget to take oral contraceptives. Contraceptive failure rates are higher for teenagers, particularly poor ones, than for older users (Besharov, Douglas and Gardiner 1997). Reversible longer term methods such as intrauterine devices, subcutaneous implants, or injections (Depo provera, Combined injectable contraceptive), require less frequent user action, lasting from a month to years, and may prevent pregnancy more effectively in women who have trouble following routines, including many young women. The simultaneous use of more than one contraceptive measure further decreases the risk of unplanned pregnancy, and if one is a condom barrier method, the transmission of sexually transmitted disease is also reduced. Unfortunately, adolescents in sub-Saharan African regard these as the sole prerogative of matured married women that have completed their cycle of child bearing (BBC News, January 2007).

Teenage girls in relationships with older boys, and in particular with adult men, are more likely to become pregnant than teenage girls in relationships with boys their own age. They are also more likely to carry the baby to term rather than have an abortion. A review of Nigeria's vital statistics found that men older than University school age fathered 77 percent of all births to girls (ages 16–18), and 51 percent of births to secondary school-aged girls (15 and younger). Men over age 25 fathered twice as many children of teenage mothers than boys under age 18, and men over age 20 fathered five times as many children of junior secondary school-aged girls as did junior secondary school-aged boys (Family Research Council, 2008).

Teenage pregnancy has been defined predominantly within the research field and among social agencies as a social problem. A hospital-based cohort study was undertaken over 4 months among women admitted to a rural hospital in Zaria. The study cohort consisted of teenage mothers between 15–19 years old and a control cohort of mothers between 20–24 years old. Data included demographic variables, available medical records, and complications viz. anemia, preterm delivery, and low birth weight. Anemia was defined as a hemoglobin level below 10 gmpercent during the last trimester of pregnancy, preterm delivery was defined as occurring within 37 weeks of gestation, and low birth weight was defined as babies weighing less than 2500 grams at birth. The Result: Teenage pregnancy comprised 24.17 percent of total pregnancies occurring in the hospital during the study period (Ejembi, 2002). Poverty is associated with increased rates of teenage pregnancy. Economically poor countries such as Nigeria, Niger and Bangladesh have far more teenage mothers than with economically rich countries such as Switzerland and Japan (UNFPA, 2002). Women exposed to abuse, domestic violence, and family strife in childhood are more likely to become pregnant as teenagers, and the risk of becoming pregnant as a teenager increases with the number of adverse childhood experiences.

According to a 2004 Guttmacher institute study, one-third of teenage pregnancies could be prevented by eliminating exposure to abuse, violence, and family strife. The researchers note that "family dysfunction has enduring and unfavorable health consequences for women during the adolescent years, the childbearing years, and beyond." When the family environment does not include adverse childhood experiences

becoming pregnant as an adolescent does not appear to raise the likelihood of long-term, negative psychosocial consequences (Guttmacher institute, 2005).

Studies have also found that boys raised in homes with a battered mother, or who experienced physical violence directly, were significantly more likely to impregnate a girl.(UNFPA, 2001). Studies have also found that girls whose fathers left the family early in their lives had the highest rates of early sexual activity and adolescent pregnancy. Girls whose fathers left them at a later age had a lower rate of early sexual activity, and the lowest rates are found in girls whose fathers were present throughout their childhood. Even when the researchers took into account other factors that could have contributed to early sexual activity and pregnancy, such as behavioural problems and life adversity, early father-absent girls were still about five times more likely in the Ghana and three times more likely in Nigeria to become pregnant as adolescents than were father-present girls (Ellis & Bruce, 2003; WHO, 2005). Low educational expectation has been identified as a risk factor (WHO, 2005). A girl is also more likely to become a teenage parent if her mother or older sister gave birth in her teens (East & Jacobson, 2001). A majority of respondents in a 1988 Joint Center for Political and Economic Studies survey attributed the occurrence of adolescent pregnancy to a breakdown of communication between parents and child and also to inadequate parental supervision (National Campaign to Prevent Teen Pregnancy, 2007).

Foster care youth are more likely than their peers to become pregnant as teenagers (WHO, 2005). A study conducted in 2006 found that adolescents who were more

exposed to sexuality in the media were also more likely to engage in sexual activity themselves (Ejembi, 2002).

Many biological, economic, and cultural factors—such as poverty, malnutrition, immature reproductive tract, child marriage, and gender inequities may compromise the health of a pregnant adolescent. Okonofua (2002) reported that teenage pregnancy and child marriage is complementary and composite cultural factors that work against adolescent women. Teenage pregnancy is also associated with early childbearing and multiple births among women of child bearing age.

In Nigeria, Chad, Guinea, Mali, and Niger—where teenage pregnancy and child marriage are prevalent - half of all teen women give birth before age 18. Teenage pregnancy revealed the context at which sexual intercourse occurred as unprotected and therefore also puts young women at greater risk of HIV. Results from a study in Kenya and Zambia showed that married 16- to 19-year-old females were 75 percent more likely to have HIV than their sexually active unmarried peers. Gender inequities put girls at greater risk than boys to risky consequences of sexual debut and affect many aspects of young women's lives including reduced opportunities for education, employment, and control over their own reproductive health. Adolescents aged 15 to 19 years gave birth to 35 million infants in 2000, of which 26 million were born in the developing world where 15 percent to 20 percent of all births are to adolescent mothers. Moreover, 85 percent of adolescent women are in the developing world and 35percent of all maternal deaths occur in such age group (Conde-Agudelo& Balizan 2004, Guttmacher Institute 2001). Although birth rates have dropped for adolescents in most developed countries, in sub-Saharan Africa, Latin America, and the Caribbean, only modest declines have been

reported (Guttmacher Institute 1997). Thereby, adolescent pregnancy continues to be a challenging public health issue around the world, mainly in developing countries. Adolescent pregnancy has been associated with an increased incidence of several adverse maternal and prenatal outcomes such as low birth weight (LBW), preterm delivery, small-for-gestational-age (SGA) infants, prenatal death, eclampsia, operative vaginal delivery and maternal death. (WHO, 1997)

Controversy exists in the literature about the factors responsible for higher rates of adverse pregnancy outcomes in adolescent pregnancy. Socioeconomic factors associated with young age, such as inadequate prenatal care, poverty, unmarried status, low educational levels, psychological stress, and illicit drug use have generally been put forward as the most important determinants of the adolescents' increased risks of adverse pregnancy outcomes. However, there are also studies indicating that young maternal age, independent of socioeconomic factors, increases the risks of poor pregnancy outcomes. The biologic mechanisms underlying the association between decreasing maternal age and a greater risk of adverse pregnancy outcomes remain speculative. It has been attributed to the fact that young adolescent mothers who themselves continue to grow during pregnancy could compete with the developing fetus for nutrients. Other biologic factors such as low pre-pregnancy weight and height, parity, contracted pelvis, and low pregnancy weight gain have been implicated in the poorer pregnancy outcomes in adolescents. To date, motivations for adolescent reproductive behaviour in northern Nigeria remain poorly understood, because very little research has examined motivation or predispositions towards the reproductive behaviour, particularly marriage, Teenage pregnancy and childbearing among female adolescents.

Little is also known descriptively about the kinds of predispositions that adolescents have towards reproductive behaviour. More disconcertingly, marriage and fatherhood among young men are generally poorly covered by the literature and by programs in the field of sexual and reproductive health. Thus, we know relatively little about married adolescent males and adolescent fathers in terms of their reproductive motivations, intentions and expectations.

A comprehensive understanding of adolescents' fertility behaviour requires exploring the motivations and desires of both males and females as they influence male-female relationships and how the related behavioural outcomes are modified by contexts in which they occur. Essentially, the Nigerian society is multi-cultural and the extent to which adolescent reproductive behaviour is considered problematic varies across culture.

Many cultural groups in Nigeria differ in their way of life, philosophy, and family orientation. These differences are expected to produce variations in individual attitudes, motivation and decision-making regarding fertility and adolescent pregnancy .Indeed, some studies (Bongaarts and Potter, 1983; Isiugo-Abanihe, 1999) have observed that fertility behaviour in Northern Nigeria is governed by socio-economic and cultural milieu. The prevailing high incidence of adolescent marriage and parenthood in northern Nigeria, also suggests a strong need to understand the socio-cultural perceptions and attitudes towards the phenomenon. Pregnancies that occur 'too early' – when a woman's body is not fully mature – constitute a major risk to the survival and future health of both mother and child.(WHO, 2005). Concern with the special health needs of adolescents has also recently been growing in a world where young people are particularly vulnerable to HIV/AIDS.

However, from a demographic and health perspective, early marriage and pregnancy in the context of cultural issue is seen primarily as a contributory factor to early child-bearing. And sometimes, even in this context, its role is overlooked: the phrase 'teenage pregnancy' is typically understood to mean pregnancy outside marriage. (WHO, 2005). Yet far more adolescent or teenage pregnancies occur within marriage than outside it. During the past decade, the movement for 'Education for All' has stressed the need to enroll more girls in school and to keep them from dropping out before completion. In this context, the custom of early marriage is acknowledged as one of the reasons for girls' exclusion from school, especially in cultural settings where girls are raised for a lifetime confined to household occupations and are expected to marry very young (UNICEF, 2001).

2.2.6 Patronage of Traditional Birth Attendance, Maternal Morbidity and Mortality

In the days of our grandfathers, there were neither modern hospitals nor orthodox midwives but our grandmothers were successfully delivered. Those people that were engaged in the deliveries are those we now refer to as traditional birth attendants (TBAs). Skill acquisition by the TBAs is not dependent on any form of formal education, but rather the knowledge either through spiritual means, inheritance from their parents or dedication to the community norms. Most TBAs are mainly elderly females or good character and are usually married with children of their own. The TBAs are still well accepted within the community because of the fact that they are more caring and dedicated than the orthodox medical practice. The TBAs are often respected or even feared in the community, besides members of the community have over the years learned to develop confidence in their cares. Ajayi (2004) reported that TBAs are easily

approachable and accessible. They easily understand their clients and their psychological needs are easily met, as a result of the similar customs, norms s and beliefs shared by them. It is of import to note that the TBAs are deeply rooted in the community and they are respected within the community they operate.

Ozaal (1999) reported that women may choose traditional patterns of delivery for a variety of reasons. They may prefer to give birth at home assisted by traditional attendants or relatives, rather than in the unfamiliar setting of the health facility, attended by strangers and with no family or friends around to give support. The home environment is considered normal, natural and .safe. in many developing countries, and any planning for action in the event of obstetric complications, or for a birth location other than home, may be viewed as planning for and perhaps even evoking a negative birth experience. Women may also prefer to give birth at home, and/or with traditional birth attendants in order that religious rituals can be carried out at the birth, as hospitals and modern practitioners do not perform these rites.

Research by the Prevention of Maternal Mortality Network found that women in cities in West Africa who have difficulty delivering vaginally at home are reluctant to go to the hospital for fear of being operated on and thereby stigmatized in their community. Societal expectations may be such that a woman who does not deliver vaginally may be thought to have failed in her essential role, and women may be expected to be stoic during labour. In Sokoto and Zaria in Nigeria, even the traditional birth attendant is only called in to cut the umbilical cord (Prevention of Maternal Mortality Network, 1992). There are a number of problems associated with traditional practices during pregnancy

and at birth which may endanger a woman's life. Some traditional values and practices may be beneficial to reproductive health, even if that is not their aim. In some societies, social norms prescribe that only physiologically mature girls marry, so early marriage is discouraged, and traditions such as the fattening house are part of customs for brides to be in good physical condition on marriage. Norms against a woman having a baby after she becomes a grandmother, diminish the amount of pregnancies in older women who are more at risk of maternal death. Breastfeeding suppresses ovulation and therefore helps increase birth spacing, ultimately reducing the number of children a woman has. Traditions of post-partum sexual abstinence would have a similar effect. There is much regional variation among these kinds of customs, but their erosion may have particular importance for maternal and child health as well as family planning. (Ascadi, 1991).

However, many observations have been raised against the practice by TBAs. Many have argued that TBAs serve as custodian of the culture of the community and as such perpetuate the harmful traditional birth practices of the community they serve. For example food taboos like not eating of eggs when pregnant, snails and the likes are upheld by TBAs. Other schools of thought believed that TBAs possess supernatural powers and as such perform special rituals, incantations, herbs which are usually used to appease the gods (Ajayi, 2004). Some of them also encourage force feeding, female genital mutilation and the likes. It is advocated that education of the TBAs could help to reduce the indicators of women and children morbidity and mortality in Nigeria. Sharpening their skills and encouraging referrals of complicated issues will help to reduce the criticism targeted to the TBAs.

2.2.7 Superstitions

Ajayi (2004) reported that in the olden days, tribal customs during deliveries were based on superstitious believes, taboos, charms and incantations were used to wall off evil spirits. The traditionalist has concept of treating and preventing diseases even though such methods are not acceptable to modern medicine as they cannot be proved scientifically. Several superstitious beliefs have placed the women and children in a disadvantaged position. In some cultural practices, a pregnant woman is not expected to eat snail, banana, monkeys, eggs and the likes for fear of either loosing the baby and the baby might remain an imbecile. (Ogunbode 2000). Several of these food taboos are targeted towards foods that are highly proteinous are needed by the pregnant mother to enhance the growth and development of the child. Even the woman is not expected to eat out of the choice part of the meat. Ezeilo, (2000) reported that in the eastern part of Nigeria, the two legs and gizzard belong to the husband or the male elder while the rest of the chicken is shared among the children and the mother. Women are not expected to seek medical help except with the permission of the husband even when she can afford the treatment. Ezeilo also reported that among the Fulanis, the woman in labour is not expected to show any sign of pains in order not to be hated or called a weak person by the husband. These superstitious beliefs placed the women and children in disadvantaged position particularly in relation to their health. (Umeora O.U and Onuhi 2005).

2.2.8 Decision Making Process to Seek Medical Services

Recent research in Nigeria suggests that it is often men rather than women who make the decision to have more children. Eighty eight percent of men and 78 percent of women in the study stated that men‘s views were more influential than women‘s views in

making family decisions. Among married female students, one in five gave husband‘s objections as the reason for not using contraceptives (WHO, 1998, Safe Motherhood 2000, Singh, 1997). In Northern Nigeria, policy forbids women from obtaining family planning services without their husband‘s consent. The lack of communication between couples on matters of sexuality and a desire to maintain the family with required number of children are major issues in homes. (Wall 1998).

Male dominance within the household, are primary contributors to unwanted pregnancy, according to one medical practitioner in University College Ibadan, Nigeria

> *When men migrate . .for work, they keep the wife in a continuous state of pregnancy and lactation as a way to keep her [possible] infidelity to a minimum* (P.6).

Accusations of marital infidelity may crop up at the time of delivery, for in many African societies, prolonged labour is ascribed to marital infidelity during pregnancy or at some other time. The woman may be given no assistance with the delivery until she confesses to the infidelity and the name of the man involved. The result of this may be stillbirth and sepsis leading to death. If she survives, the long term risks include ectopic pregnancy, infertility, chronic pelvic inflammatory disease, and vesico-vaginal festiculae (Ascadi, 2001). Decisions to seek health care take place in a complex web of relationships. (Timyan, Griffey and Brechin (1993). Delays in seeking care for maternal health problems can be fatal. They can occur at the level of the individual and household, in the community, or because of referral and transport problems, as well as in medical facilities themselves. Gender analysis can offer insights into the process by which the decision is made whether or not to seek health care services for pregnancy and childbirth. More attention needs to be paid to the factors that influence the value that women place on their

personal well-being and those that influence their ability to seek healthcare for themselves.

The amounts of time, money, information and authority for decision making women have at their disposal are key factors in reducing maternal morbidity and mortality. (Sundari, 1992). The value women place on their own health can be influenced by a number of factors such as informational barriers and low self esteem. Lack of information or knowledge can mean that women are unaware of the gravity of their own condition. Some health conditions may be so common in a community, and women may have suffered the symptoms for so long, that they are not even recognized as problems that need medical care, such as chronic reproductive tract infections. Some conditions, such as sexually transmitted diseases, may be hidden because they are thought to be shameful. Pregnancy can be another condition which is not perceived as requiring care, or which women do not want to admit to in early stages. Low self esteem reinforces fatalism about health conditions including maternal illness. (Ogbuagu, 2004). Women may not regard their own pain and discomfort as worthy of complaint until it is so debilitating that it may be too late. Hesitancy to seek care after domestic violence may also be attributable to women‘s lack of self esteem or embarrassment (Timyan, Griffey & Brechin (1993).

Decisions to seek medical care are often made not by a woman on her own, but by her husband, or other family (e.g. mothers-in law) and community members. Health education campaigns need to recognize this and ensure that decision makers are educated about women‘s health needs and when care should be sought. It is important to develop

women‘s own decision making authority over access to healthcare. Women‘s access to information about health and available services can be improved in a variety of ways.

Embarrassment and lack of self-esteem as reasons for not seeking care can partly be addressed by creating a more sensitive and sympathetic culture of health services. In many rural areas in Nigeria, finances reduce the decision of the family to seek medical assistance in the event of difficulty in delivery. Women‘s autonomy in deciding to seek care can be hampered by their economic dependence and the prohibitive costs of emergency intervention. Some women may have no or limited cash available in times of emergency unless they are given it by their husbands (UNICEF 2002). This can cause delays in seeking care. Adeyemi, (2000) reported that women‘s autonomy can differ according to their age and seniority within the family. For example, pregnant teenagers may be dependent on the decisions of older members of the extended family for economic reasons (Prevention of Maternal Mortality Network, 1992).

2.2.9 Violence against Women and Maternal Morbidity and Mortality

Safe motherhood initiatives should not overlook the vulnerability of pregnant women to physical violence. A study of 1200 women over three years in the United States indicated that one out of every six pregnant women were battered during their pregnancy.(Steven, 1999). Twenty percent of women who were beaten in a randomly sampled survey of 342 in Mexico City, reported blow to the stomach during pregnancy.(Royston, 2000). Studies show that women who are battered during pregnancy are twice as likely to miscarry and four times more likely to have a low birth weight baby than those who are not beaten.(WHO, 1994). In developing countries battering during pregnancy may have a particularly grave impact on women who are

malnourished and overworked. Young unmarried mothers may be particularly vulnerable to violence during pregnancy even leading to death. In Matlab, Bangladesh, homicides and suicides which were motivated by stigma over unwed pregnancy, beatings or dowry accounted for six percent of all maternal deaths between 2000 and 2006, or 22 percent of deaths due to botched abortions, many related to shame over unwed pregnancies, are included. These figures suggest that violence is a significant and overlooked cause of maternal death (Heise, 1993). Figures in Nigeria showed an increasing level of wife's battering among diverse culture in Nigeria.

In a study carried out by Inter Africa Committee (IAC) in 2000, wife assault was found to be more than 60percent across all cultures in Nigeria with more than 10percent of miscarriage caused by wife's battering. The threat of violence may also be a dimension of women's sexual and reproductive decision-making, linking to maternal deaths through increasing the likelihood of unwanted pregnancies. Rape, including marital rape, is also an issue often overlooked and yet relevant. Very little is known about girls and young women who become pregnant as a result of sexual violence and incest, though they would clearly be at risk of maternal death. Safe motherhood initiatives which remain limited to the notion of reproductive health are in danger of ignoring the importance of women's emotional and physical well-being, which are connected to issues beyond that of their reproductive anatomy (Heise, 1993). Gender violence may be amongst the most significant causes of morbidity and mental distress among women.

Female genital mutilation (FC) is the form of violence against women most commonly linked to maternal mortality and morbidity. An estimated 80 million women worldwide have been subject to female genital mutilation. According to WHO (2000) the

rate of maternal death is doubled by FC and the risk of stillbirth increased several times. FC can have a profound effect on the outcome of a pregnancy, causing difficulties and intense distress during sexual intercourse, and obstruction at time of delivery. Health services can provide both information on the health consequences of female genital mutilation, but also a forum where this complex and sensitive issue can be discussed (Royston, 1989). Support can be given to groups and organizations combating this form of violence. Another form of violence against women which may need further research and is clearly related to maternal mortality is violence in hospitals, and incidents of midwives maltreating pregnant women (Veronique Fillipi, 1999).

Deeply entrenched gender inequalities exist in many low-income countries where maternal deaths are high and health service utilization is low. The effects of gender inequality include relatively higher poverty among women than men, lower education, lack of autonomy and mobility, intimate partner violence, and, overall, lower social status and disempowerment (Freeman, 2003). Gender inequalities, like race, religion, and ethnicity in some contexts, go beyond class differences.(Iyer & Ostilin, 2008). They are often defined and perpetuated by social norms and culture, and reflect differences in power between men and women both within the household and in the wider society (Iyer & Ostilin, 2008). Such norms are particularly harmful for young women as they place them at the bottom of the family and social hierarchy. These norms may dictate early marriage for girls. Globally, around 17 million young women are married before the age of 20 and a majority of these marriages take place in low-income countries.(Gupta, 2005). Early marriage often leads to early child bearing and high total fertility, both of which are linked to higher risk of maternal mortality and morbidity. In fact, it is

estimated that between 25percent to 50percent of all young women in low- income countries give birth before they turn eighteen. Gender inequality and women's low social status and disempowerment have significant impact on women's health, maternal health, and overall demand for maternal health care services.

A study in Bangladesh showed that the probability of seeking any type of health care was 1.73 times greater among men than women. Women's and girls' limited access to education deprives them of the knowledge and tools to make informed health decisions. In many conservative communities, cultural and social norms restrict women's mobility and prevent them from seeking health care. Other family members may consider childbirth as a woman's concern and not that of the household. As a result, women may find it difficult to get the money to pay for services or to obtain transport to get to medical care. In Bangladesh, where access to preventative and curative care by most women is low, women are economically dependent on their husbands who may be unwilling to pay for care.28 In Indonesia, researchers found that the wife's share of household assets (an indicator of power relations between the spouses) affected use of antenatal care.29 While women who had no stake in household assets were found to be at a disadvantage in terms of health care decision making, small increases in their ownership had a substantial impact on uptake of maternal health care services. Owning assets made women more likely to use antenatal care and deliver in a hospital or private doctor's office.

While it is critical for policies and programs to improve and expand services, as well as reduce the burden of cost for low-income women, these actions alone may not be sufficient to guarantee access to maternal health care. Gender inequality may still limit

access and prevent women from utilizing services. Therefore, efforts to improve maternal health care utilization and outcomes must also find ways to empower women and overcome gender inequality. While not all such efforts may be within the purview of health care programs, it is important to discover those that are and to act on them, as well as to advocate for investments that improve women's overall status. Moreover, there is a need for more systematic research that better elucidates the factors contributing to women's disempowerment and their links to utilization of maternal health care. And finally, it is important to include gender indicators as part of assessments of health and development policies and programs focused on improving maternal health care utilization.

2.2.10 Education of the Girl Child, Maternal Morbidity and Mortality.

Education is a distant factor which offers the possibility of affecting the magnitude of maternal mortality in a number of different ways. One is the well known effect of education in lowering fertility. (Pathfinder International 2006). If women get pregnant less often and bear fewer children, they are less at risk of maternal death. Women‘s social status, self image and decision making powers may all be increased through education, which may be key in reducing their risk of maternal death, resulting from early marriage and pregnancy or lack of information about health services (WHO, 2003).

There is a need to consider issues relating to teenage pregnancy of girls who are in education. The psychosocial pressures on young pregnant women can be great, endangering their health through the increased likelihood of illicit abortion, or inadequate access to health care. Family pressure often forces pregnant teenagers to drop out of

school. Adolescents may seek unskilled abortions in order to avoid expulsion from school on the grounds of pregnancy (Correa, 1994). Some schools in Nigeria expel pregnant teenagers as a matter of policy. A study in Nigeria showed that 52 percent of pregnant adolescents were expelled from school (Isis International, 1992).

Educated women may have more understanding of the physiology of reproduction and be less disposed to accept the complications and risks of pregnancy as inevitable, than illiterate or uneducated women. Education has been described as a "medication against fatalism'(Royston 1989). Fatalism can take the form of a belief, such as exists in many Nigerian cultures that health problems are a punishment for an individuals lack of adherence to a set of behavioural rules, related to spiritual well-being (Family Care International, 1991).

Maternal death may be seen as an act of God. Educated women may also be less likely to accept dangerous practices aimed at alleviating complications in pregnancy. Amongst the Hausa people of Nigeria, for example, *girishi* cuts are a traditional surgical operation to treat obstructed labour by cutting the vagina with an unsterilized blade. Whilst it is commonly performed on uneducated women, educated women rarely accept the practice (Royston, 1989). Uneducated women are less likely to seek the help of professional health services because they are probably less aware of what is available, and probably find the culture of health services more alienating and frightening. Areas with low female literacy rates are also often areas where the fewest births are attended by trained personnel (Royston, 1989). Education is also significant in the way that it influences women's patterns of paid employment outside the home.(Sushia 1989) All

these parameters affect the prevalence of maternal death among women of child bearing age.

2.2.11 Economic Status of Women, Maternal Morbidity and Mortality

Research has shown that employment encourages women to limit family size by providing status and fulfilment. However, good employments are mostly available to educated women which formed the minority in Northern Nigeria. In Northern Nigeria there are high birth rates among 74 percent of working women who are in the lowly paid informal sector (Royston, 1989). Thus it is not just the fact of being employed that limits fertility, but the type and status of employment. In some cases, employment may be an important factor in women‘s decision to have an illicit abortion. Women that are educated and have good job have less likelihood to procure abortion among unqualified personnel. Women in urban areas may have no household space for more children, and have employment patterns incompatible with pregnancy and motherhood. (Singh, 1997).

Even women employed in the formal sector may have little job security and maternity leave and benefits schemes are very rare. These factors could limit the chances of having more children which invariably reduce maternal morbidity and mortality. (Family Care International, 2001). Women‘s workload may affect the intermediate factor of health status increasing risk of maternal death. Many women have a workload that consists of hard manual labour in agriculture, responsibilities for housekeeping and childcare and cooking, collecting firewood and fetching water which may result in chronic fatigue and other health problems. (Campbell and Johnson, 2005). The last three months of pregnancy should be a time when the mother rests and gains weight. However, many women in Nigeria continue with their full workload right up until the time of

labour, and resume work shortly after giving birth. This can have an extremely adverse effect on health. For example, in Benue state where women are responsible for manual labour in the yam and cassava farms, they have been found to lose rather than gain weight during the last three months of pregnancy (Idoko, 2000). Heavy workloads may also have an impact on nutrition.

A study among the Tiv women in Benue state showed that during the rainy season when the heaviest work in the fields is done, women are sometimes too tired at the end of the day to prepare a proper meal, and the whole family is reported to lose weight at that time of year (Idoko, 2000). Some pregnant women have been found to suffer from premature deliveries and maternal morbidity during these periods. There is need for an awareness of how women‘s employment and workload affects their overall health status. Decrease nutrition during pregnancy can be particularly threatening to the health of women who are pregnant or breastfeeding. Workloads are also linked to maternal outcomes through the time constraints they impose on women. Heavy workloads may mean that pregnant women do not have the time to attend pre-natal care or spend time in hospital for delivery. In rural area, the seasonality of work patterns may exert an influence on maternal and infant outcomes. (Ikeako & Onah 2006). For example, a study in Zaira showed that 13 out of 20 maternal deaths occurred during the first five months of planting and harvest, when women were reluctant to go to hospital because of the need for their work in the fields (Usman, 2000). Health service providers must ensure that their services are available at times when women can have access to them, and that waiting times in clinics are kept to a minimum.

2.3 Safe Motherhood Initiatives and Maternal Morbidity and Mortality in Nigeria

When the Safe Motherhood Initiative was launched in 1987 in Nigeria, death from the complications of pregnancy and childbirth was unknown and seriously neglected problem. Twenty years later, preventing these deaths is an international priority, and many countries have made significant progress in expanding and improving maternal health services (World Development Report, 1999). The global Initiative has become a unique partnership of governments, donors, technical agencies, non-governmental organizations and women's health advocates in more than 100 countries. These partners are now working to protect the health and lives of women, especially during pregnancy and childbirth. This phenomenon has assumed an international dimension because complications of pregnancy and childbirth are the leading causes of disability and death among women between the ages of 15 and 49 in developing countries and every woman is at risk. During pregnancy, any woman can experience life-threatening and unpredictable complications that require immediate medical care (World Development Report, 1999).

In order to reduce deaths, good-quality maternal health services must be readily available and must be used - especially during and immediately after childbirth. Services should be provided by trained health workers, clinics and hospitals located as close as possible to where women live, and must be linked by an emergency referral and transport system (World Development Report, 1999).

Even when good quality health services are available, social, economic and cultural limitations can prevent women from using these services. Safe motherhood programmes emphasize the need for action on these root causes, and also on other

reproductive health problems, including unwanted pregnancy and sexually transmitted diseases. In the last several years, safe motherhood has been embraced by governments all over the world. (Ogunkelu, 2004). They have initiated programmes to reduce maternal death, improve reproductive health services, and protect and promote women's health and well-being, especially during pregnancy and childbirth. (Adekunle & Pate 2008).

To help governments and private organizations meet their maternal health goals, safe motherhood partners from around the world met in October 1997 to identify the most efficient and cost-effective ways to improve maternal health. WHO, (2000) reported that participants discussed research results, new technologies, model programmes and lessons learned during the Initiative's first decade. The meeting identified ten essential action messages for improving maternal health and led to an agreement on the key health services that should be available to make motherhood safer. Even when good quality health services are available, social, economic and cultural limitations can prevent women from using these services. (Oladepo, 2001). Safe motherhood programmes emphasize the need for action on these root causes, and also on other reproductive health problems, including unwanted pregnancy and sexually transmitted diseases (WHO, 2000). A comprehensive package of services for safe motherhood should include antenatal care and counseling during pregnancy. Health workers should educate women about how to stay healthy during pregnancy; help women and families prepare for childbirth; and raise awareness about possible pregnancy complications and how to recognize and treat them. Health workers should also identify and manage any complications early and improve women's reproductive health and well-being through

preventive measures (iron supplements, tetanus immunization) and by detecting and treating existing problems (such as sexually transmitted diseases).

During childbirth, every woman should be helped by a health professional that can manage a normal delivery as well as detect and manage complications such as haemorrhage, shock and infection (WHO, 2000). Skilled attendants should have access to a functioning emergency and transport system so that they can refer women to an appropriate health facility for higher level medical care (such as Caesarean delivery or blood transfusion) when necessary. (WHO 2005).

Abouzahr, (2000) reported that following childbirth, women should be seen by a health worker, preferably within three days, so that any problems (such as infection) can be detected and managed early. An additional postpartum visit within the first six weeks after delivery enables health workers to make sure that the mother and baby are doing well, to provide advice and support for breastfeeding and to offer family planning information and services. Family planning counseling and services should be available to all couples and individuals, including adolescents (Action Health Incorporated 2004) and unmarried women (Abouzahr, 2000).

Family planning services should offer complete information and counseling as well as a wide choice of modern contraceptives, including emergency contraception, and should be part of a comprehensive program that addresses other sexual and reproductive health needs. High-quality services for treating and managing complications of unsafe abortion should be available through all health systems. Services require staff that are trained and authorized to treat complications; appropriate equipment; protocols for care; and effective referral networks. Women with abortion complications should also have

access to other reproductive health services, including family planning (Abouzahr, 2000). Where abortion is not against the law, safe services for pregnancy termination and compassionate counseling should be available. Health workers must be informed about the legal status of abortion and protocols for providing it. Appropriate technologies, including new methods such as non-surgical abortion, should be available where feasible. WHO, (2005) reported that all young people should have information on sexuality, reproduction, contraception, decision-making skills and gender relations in order to help them make informed decisions about sexuality and to negotiate abstinence or safer sex. Sensitive, respectful and confidential reproductive health counseling and services for married and unmarried adolescents should emphasize the prevention of unwanted pregnancy, unsafe abortion and sexually transmitted diseases (STDs). Key health topics for women and their families include how to prevent unwanted pregnancy and avoid unsafe abortion; how to recognize complications of pregnancy, childbirth and unsafe abortion and where to seek treatment; and the dangers of certain traditional birth practices during pregnancy and childbirth (WHO, 2005). Education is also needed for decision-makers — from husbands to community leaders to national policy-makers — to promote safe motherhood and improvements in women's health and status.

The best person to provide assistance during childbirth is a health professional skilled in midwifery that lives in or near to the community he or she serves. Most midwives work in hospitals and urban areas. They are scarce in rural areas — where 80 percent of developing country populations live (WHO, 2005). Skilled attendants include doctors, nurses, midwives and other health workers with midwifery skills who can diagnose and manage complications during childbirth, as well as assist normal deliveries

Fortney, (2002) reported that adequate equipment, drugs and supplies are essential to enable skilled attendants to provide good quality care. In addition, skilled attendants need to be supported by appropriate supervision.

It is of import to note that in conducting delivery in the village (at home or in a local health facility), an emergency transport system must be available to take women to facilities that can provide more advanced care. The single most important way to reduce maternal deaths is to ensure that a skilled health professional is present at every birth. However, there is a serious shortage of these professionals in developing countries. (Iyayi 2008). Whether by choice or out of necessity, 60 million women in the developing world give birth each year without skilled help - cared for only by a traditional birth attendant, a family member, or no one at all (Fortney, 2002). Skilled care during childbirth is important because millions of women and newborns develop serious and hard - to - predict complications during or immediately after delivery. Skilled attendants - health professionals such as doctors or midwives who have midwifery skills can recognize these complications, and either treat them or refer women to health centres or hospitals immediately if more advanced care is needed. (Gupta, Gauri&Khemani, 2009).

Studies have shown that 60-80 percent of birth in Nigeria occurs at home or in the village (FMOH, 2005 Safe motherhood in Nigeria). In most developing countries, access to safe motherhood services in rural areas is more limited than in urban areas. This is of particular significance to Nigeria because the majority (64 percent) of its population lives in rural areas (Population Reference Bureau. 2001). In a national survey on household practices on safe motherhood in Nigeria, data showed that only 20 percent commenced antenatal care in the first trimester, 13.7 percent of the mothers did receive tetanus toxoid.

Similarly, 57.5 percent delivered either at home, by the TBAs, relatives or did not have assistance at all at delivery (25.3 percent at home, 15.9 percent with TBAs, 9.7 percent by relatives, 6.6 percent did not have assistance -FMOH, 2005). Decision to seek care when complication occurred was made mostly by the spouses of the women and heads of families (45.2 percent, 34.4 percent respectively) while only 17.2 percent of the women made decisions.

Data on Neonatal and Childhood illnesses showed that during the first week of life, 15.5 percent of the children had fever, 10.1 percent had cough and 2.1 percent had convulsion. Less than half (43.7 percent) of these babies received treatment from government facilities while 10.2 percent received care from the private facilities. A fifth of newborn babies (20.6 percent) did not get follow-up care. Over 58 percent of females and almost 52.9 percent of males in the community knew people close to them who had been circumcised. Thirty-one percent as compared with 23.2 percent of women reported using family planning. Ensuring safe motherhood requires recognizing and supporting the rights of women and girls to lead healthy lives in which they have control over the resources and decisions that impact their health and safety. It requires raising awareness of complications associated with pregnancy and childbirth, providing access to high quality health services (antenatal, delivery, postpartum, family planning, etc.), and eliminating harmful practices. It is a continuum of care that connects essential maternal, newborn and child health interventions throughout adolescence, pregnancy, childbirth, postnatal, newborn periods and into childhood. Secondly, it is a linkage between the family, community and the health facility ensuring appropriate care in each phase. It is

an educative approach to ensure that women are assisted to develop habits that promote good health throughout the reproductive period.

In another study of 21,975 singleton Nigerian births in Zaria, young teenage girls constituted 6 percent of the survey population and 30 percent of the 174 maternal deaths, while the highly parous women aged 30 and over made up 10 percent of the survey population and 20 percent of the maternal deaths(Harrison,1985). Short inter-pregnancies interval increases the risk of low weight gains during pregnancy, anaemia, difficult labour, birth trauma and infection leading to high maternal mortality. Also, women who have given birth to 5 or more children are more likely to have pre-eclampsia/eclampsia, difficult labour, ruptured uterus, hypertension, kidney diseases and even diabetes. Thus, the contribution of safe motherhood include: to ensure postponement of first pregnancy until 20, to ensure that reproduction ceases after age 35, to ensure a gap of 2 -4 years between pregnancies and to ensure the achievement of a planned total family size (Denis, 1980).

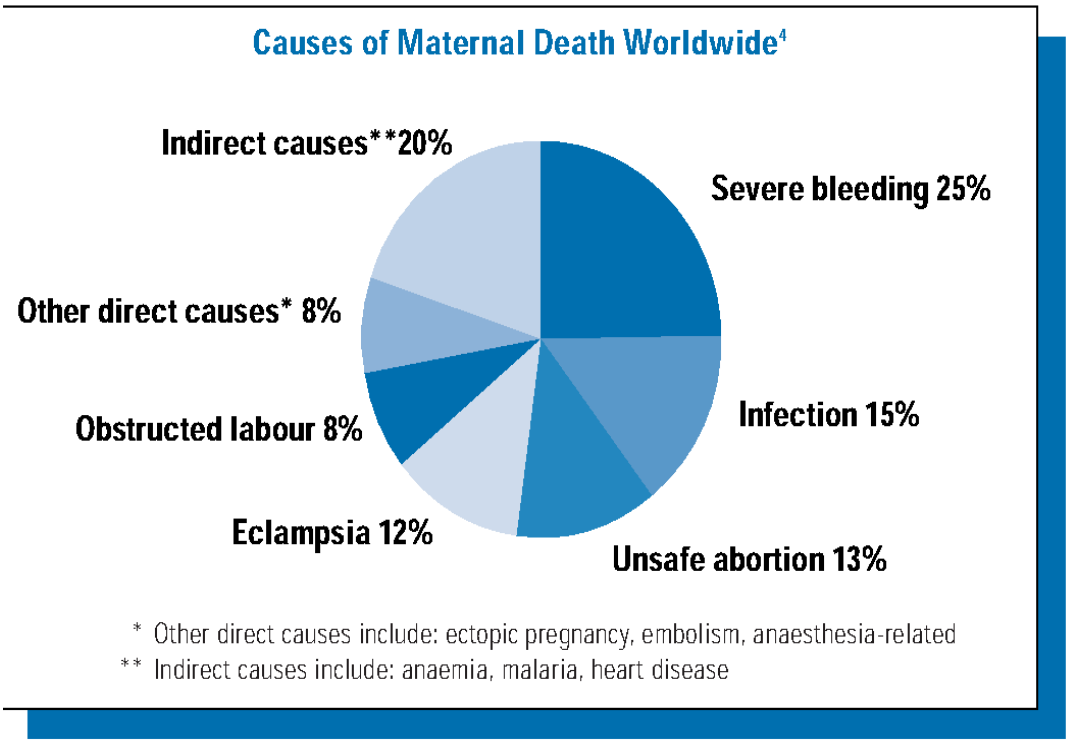
2.4: Evidence of Empirical Studies on Maternal Morbidity and Mortality.

In many developing countries, complications of pregnancy and childbirth are the leading causes of death among women of reproductive age. More than one woman dies every minute from such causes; 585,000 women die every year. Less than one percent of these deaths occur in developed countries, demonstrating that they could be avoided if resources and services were available. In addition to maternal death, women experience more than 50 million maternal health problems annually. As many as 300 million women - more than one-quarter of all adult women living in the developing world,

currently suffer from short or long-term illnesses and injuries related to pregnancy and childbirth (World Development Report, 1999)

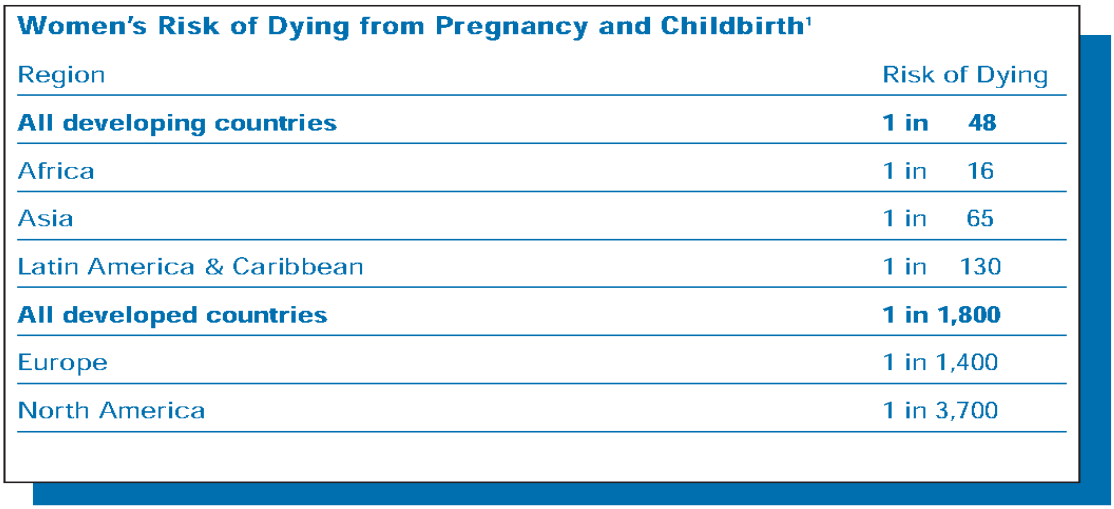
Every woman can experience sudden and unexpected complications during pregnancy, childbirth, and just after delivery. Although high quality, accessible health care has made maternal death a rare event in developed countries; these complications can often be fatal in the developing world. World Development Report, (1999) reported that each year, almost 8 million stillbirths and early neonatal deaths (deaths within one week of birth) occur. These deaths are caused largely by the same factors that lead to maternal death and disability- women's poor health during pregnancy, inadequate care during delivery and lack of newborn care. At least 40 percent of women experience complications during pregnancy, childbirth and the period after delivery. An estimated 15 percent of these women develop potentially life-threatening problems (World Development Report, 1999). Long-term complications can include chronic pain, impaired mobility, damage to the reproductive system and infertility. Women risk death and disability each time they become pregnant. Women in developing countries face these risks much more often, since they bear many more children than women in the developed world. (WHO, 2008). Major causes of maternal death globally are reflected in the bar chart below, but the prevalent of such death is more in developing countries (World Development Report, 1999).

Figure 2.1: Causes of Maternal Death Worldwide.



Source WHO, (1999) "Coverage of Maternal Care: A Listing of Available Information, Fourth Edition" cited in *Safe Motherhood Fact Sheet.* page 6. Geneva, World Health Organization.

Figure 2.2: Women's Risk of Dying from Pregnancy and Childbirth



Women's Risk of Dying from Pregnancy and Childbirth[1]	
Region	Risk of Dying
All developing countries	**1 in 48**
Africa	1 in 16
Asia	1 in 65
Latin America & Caribbean	1 in 130
All developed countries	**1 in 1,800**
Europe	1 in 1,400
North America	1 in 3,700

Country-level differences are even more dramatic: for example, in Ethiopia, 1 out of every 9 women die from pregnancy-related complications, as compared to 1 in 8,700 in Switzerland.[1]

WHO (2003) "Revised 2002 Estimates of Maternal Mortality: A New Approach by WHO and UNICEF". Cited in *Safe Motherhood Initiative Fact Sheet*, Pg. 5. Geneva, World Health Organization.

Most maternal complications and deaths occur either during or shortly after delivery. Yet many women do not receive the essential health care they need during these periods – pregnancy. The percentage of women who seek antenatal care at least once is 63 percent in Africa; 65 percent in Asia; and 73 percent in Latin America and the Caribbean (Strong, 2002). At the country level, however, use of such services can be extremely low. In Nepal, for example, only 15 percent of women receive antenatal care during childbirth. Each year, 60 million women give birth with the help of an untrained traditional birth attendant or a family member or with no help at all. Almost half of births

in developing countries take place without the help of a skilled birth attendant (such as a doctor or midwife). After delivery, the majority of women in developing countries receive no postpartum care. (Ogundeji, 2001). As few as 5 percent of women in very poor countries and regions receive proper maternal care during pregnancy and childbirth (Strong, 2002). Graham, (1997) reported that the factors that prevent women in developing countries from getting the life-saving health care they need include: distance from health services; cost (direct fees as well as the cost of transportation, drugs and supplies); multiple demands on women's time; women's lack of decision-making power within the family; the poor quality of services, and poor treatment by health providers (Graham, 1997).

Millions of women do not have access to quality health services during pregnancy and childbirth - especially women who are poor, uneducated or who live in rural areas. (Management Strategies for Africa 2005). Less than half of women in developing countries get adequate health care during and soon after childbirth, despite the fact that most maternal deaths take place during these periods. In contrast, use of maternal health services is nearly universal in developed countries (Odoi-Aguark, Dollimore and Owusu-Argyei, 2003). Access means that services are available and within reach of women who need them. Good quality services require that health care providers have adequate clinical skills and are sensitive to women's needs; that facilities have necessary equipment and supplies; and that referral systems function well enough to ensure that women with complications get essential treatment. At least 35 percent of women in developing countries receive no antenatal care during pregnancy, almost 50 percent give birth

without a skilled attendant and 70 percent receive no postpartum care in the six weeks following delivery (Safe Motherhood, 1997).

This lack of care is most life-threatening during labour, childbirth and the days immediately after delivery, since these are the times when sudden, life-threatening complications are most likely to arise. UNICEF, (2003) reported that women do not use available maternal services because: most rural women (80 percent) live more than five kilometers from the nearest hospital. Vehicle shortages and poor road conditions mean that walking is often the main mode of transportation, even for women in labour (UNICEF, 2003). In rural Tanzania, 84 percent of women who gave birth at home intended to deliver at a health facility, but could not because of distance and the lack of transport (Leslie and Guptal, 1999). Another reason is the high costs of health services Millions of women cannot afford to use maternal health services. Even when formal fees are low or non-existent, women often face hidden fees and expenses for transport, drugs, and food or lodging for the woman or her family members. Poor information is another factor. Women and community members often do not know how to recognize, prevent or treat pregnancy complications, or when and where to seek medical help (Leslie & Guptal, 1999).

In Ghana, 6400 of women who died of pregnancy complications sought help from a traditional healer before going to a health facility. Families cited cost and their belief that the woman was not ill enough as the main reasons for not seeking hospital care (Odoi-Aguark, Dollimore & Owusu-Argyei, 2003). Cultural preferences have also been cited as a factor. Formal health services can conflict with ideas about what is normal and

acceptable, including preferences for privacy, modesty and female attendants (Odoi-Aguark, Dollimore & Owusu-Argyei, 2003).

Thaddeus and Maine (2004) reported that the Sara guro Indians in Ecuador shun affordable, accessible maternity care because they feel that hospitals violate women's privacy during childbirth and because many health providers are men. Another factor is lack of decision-making power: In many parts of the world, women's power to make decisions is limited, even over matters directly related to their own health. In Nigeria, it is usually the mother-in-law and husband who make the decision to seek (or not seek) care. Studies have found that they are the least likely to know about pregnancy-related complications and their possible fatal consequences (Cook, 1997).

Impact of User Fees on Obstetric Admissions, Zaria, Nigeria[1]

	Obstetric services free (1983)	Fees for some services introduced (1985)	Increases in fees (1988)
Obstetric admissions	7,450	5,437	3,376
Deliveries	6,535	4,377	2,991
Maternal deaths	2	1	62

Figure 2.3: Impact of User Fee on Obstetric Admissions, Zaria, Nigeria

Source: AbouZahr (2001) "Improve Access to Quality Maternal Health Services". Presentation at *Safe Motherhood Consultation in Sri Lanka*, 18-23 October 2001

It is pertinent to state that maternal care is an inalienable human rights and social justice of the mother and child. It is a social injustice for a woman to die from pregnancy

and childbirth. Such deaths are rooted in women's powerlessness and unequal access to employment, finances, education, basic health care and other resources. These factors set the stage for poor maternal health even before a pregnancy occurs, and make it worse once pregnancy and childbearing have begun. Making motherhood safer, therefore, requires more than good quality health services (Abouzahir, Vlassof& Kumar, 2000). Women must be empowered, and their human rights - including their rights to good quality services and information during and after pregnancy and childbirth must be guaranteed. Fawcus, (2006) reported that millions of women in the developing world do not have the social and economic support they need to seek good health and safe motherhood. Physical and psychological barriers include: Limited exposure to information and new ideas.

In many communities pregnancy is not seen as requiring special care, and women do not recognize danger signs during pregnancy Even if they are experiencing pain and suffering, they may have been taught that these conditions are inevitable, and therefore do not seek medical care. Another is limits on decision-making. In many developing countries, men make the decisions about whether and when their wives (or partners) will have sexual relations, use contraception or bear children. In some settings in Asia and Africa, husbands, other family members or elders in the community decide where a woman will give birth and must give permission for her to be taken to a hospital. In much of Africa and Asia, 75 percent of women age 25 and over are illiterate (WHO, 2000). When girls are denied schooling, as adults they tend to have poorer health, larger families and their children face a higher risk of death. Poverty, cultural traditions and national laws restrict women's access to financial resources and inheritance in the developing

world (WHO, 2000). Without money, they cannot make independent choices about their health or seek necessary services. Health services that are insensitive to women's needs, or staffed by rude health providers, do not offer women a real choice: In many cultures, women are reluctant to use health services because they feel threatened and humiliated by health workers, or pressured to accept treatments that conflict with their own values and customs (WHO, 2000).

As reported by Singh, (1997), reported that when women are empowered, it will make motherhood safer in the following ways: women empowerment will enable women to speak out about their health needs and concerns; seek services with confidence and without delay; demand accountability from service providers and from governments for their policies; and participate more fully in social and economic development. National policy-makers can establish a legal and political basis for safe motherhood by defining maternal mortality as a "social injustice", as well as a "health disadvantage".

By doing so, they will commit their governments to: Identifying the powerlessness that women face throughout their lives as well as during pregnancy as an injustice that countries must remedy through political, health and legal systems. Ensuring that all women have the right to make decisions about their own health, free from coercion or violence, and based on full information. It is important to guarantee that all women have access to good quality care before, during and after pregnancy and childbirth (Campbell, 2001).

The international human rights charter can also be used to advance safe motherhood. International human rights treaties can be used to advance safe motherhood as reported by Cook (1997) "Advancing Safe Motherhood through Human Rights".

Presentation at Safe Motherhood Technical Consultation in Sri Lanka, 18-23 October 1997 cited in Safe Motherhood Fact Sheet, page 12 by applying the following;

— The right to life, liberty and the security of the person. These rights require governments to provide access to appropriate health care, and to guarantee that citizens can choose when and how often to bear children.

— Rights that relate to the foundation of families and of family life. These rights require governments to provide access to health care and other services women need to establish families and enjoy life within their families.

— The right to health services (including information and education) and the benefits of scientific progress. These rights require governments to provide reproductive and sexual health care to women and

— The right to equality and nondiscrimination. These rights require governments to ensure that all women and girls have access to services (such as education and health care) regardless of age, marital status, ethnicity or socioeconomic status.

Recent international conferences and conventions set explicit goals that support and protect women's reproductive health needs. Governments participating in the 1994 International Conference on Population and Development and the 1995 Fourth World Conference on Women agreed that women and men have the right to decide if, when and how often to bear children, and should have access to reproductive health services. They also pledged to cut the number of maternal deaths by half by the year 2000, and by another half by 2015. Although these commitments are non-binding, the Committee on the Elimination of Discrimination against Women, which monitors the Women's

Convention (see below), is using them as standards for the 161 countries that signed the Convention in which Nigeria is one.

The following international treaties provide frameworks that can be used to advance safe motherhood: Convention on the Elimination of All Forms of Discrimination Against Women (the Women's Convention); International Covenant on Civil and Political Rights; International Covenant on Economic, Social and Cultural Rights; Convention on the Rights of the Child; European Convention on Human Rights; American Convention on Human Rights; and African Charter on Human and Peoples' Rights. Each is monitored by a group that develops performance standards for member countries and tracks compliance through periodic reports provided by each country.(ICPD, 2000).

For safe motherhood to be relevant in achieving the desired objectives by 2015 the Governments must provide a framework for ensuring safe motherhood by: Reforming laws and policies that contribute to maternal mortality (e.g. those that restrict women's access to reproductive health services and information) and implementing laws and policies that protect women's health (such as prohibitions against child marriage and female genital mutilation). (UNFPA, 2001). Allow women greater freedom to make their own health and life choices, encourage them to question unfair practices, and give them opportunities to learn about their rights and health and to develop a feeling of entitlement to medical care and other services. Guarantee all women access to good quality maternal health care and accurate information, and involve women in planning, implementing, monitoring and evaluating health programmes. Help men understand their role in

expanding choices for women, and in ensuring responsible sexual and family life. (UNFPA, 2001).

Everyone, including women's health advocates and donors, must: Community leaders, women's advocates, private organizations and individuals must: Hold governments accountable for effectively protecting the human rights of their citizens by reporting any violations to constitutional courts and international monitoring bodies.

2.5: Challenges to Maternal Health Services in Nigeria

Despite these policies, effective delivery of maternal and child health in Nigeria is still fraught with challenges. This is because there still exist some gaps which include: Health policies, programmes and activities are sectoral, uncoordinated and limited in scope; there is yet to be a strong and cohesive network of safe motherhood champions in the government and the civil society to drive the political and social system into action. Inadequate fund allocation to programmes and delay in the release of funds allocation result in ineffective programme implementation. Health services offered to mothers, newborns and children are run as separate programmes and not integrated. In Nigeria, the federalized system of government allows for delineation of power among the three tiers in terms of responsibilities for health care. The outcome is that despite commitment at the federal level, weak and poor coordination of activities as well as overlapping of responsibilities affect implementation at the community level.(WHO, 2001)

The absence of a constitutional or other legal prescription of health-care responsibilities has resulted in a dysfunctional health-care system in which all three tiers of government have failed to prioritize their health-care duties, and have faced no political or legal repercussions for doing so (CRR, 2008). Communities' non-

involvement in planning and implementation of programmes and interventions lead to non-ownership. Only few Governors and state commissioners place safe motherhood a top priority on their agenda and offer free antenatal service. However, the introduction of free services has also been undermined by the lack of systemic capacity to sustain free services, including inadequate staffing and supplies of medication.

Consumer awareness of available programmes and services is lacking, pregnant women who access maternal health-care services face uncertain, informally levied costs, even when user fees have been waived, which has the potential to dissuade a poor or financially struggling woman from seeking maternal care. The family Planning /Child Birth Spacing policy is subsumed in several policies which fail to give it the desired attention, resulting in weak systems and structures that do not allow for efficient services at all levels of service;

Manpower in the health sector in most rural areas is mostly unskilled and inadequate. In spite of the efforts at promoting skilled attendance, the situation in Nigeria is still less than optimal. The NDHS (NPC, 2003) revealed that over 40 percent of the 6,219 births in five years preceding the survey had no trained assistance (modern birth attendants) during delivery. Urban-rural differential was equally powerful. Assistance from doctors was four times more likely in urban areas than in rural areas. Regional variations also reflect the impact of uneven distribution in the health system in the country. In the North West, North East and North-Central, the proportions receiving no skilled assistance were 61.5 percent, 51.5 percent and 43.7 percent respectively. In sharp contrast, the corresponding proportions for South-West, South-South and South-East were 9.3 percent, 11.6 percent and 6.6 percent respectively. The limited number of skilled

personnel could be attributed to low remunerations which encourages ‘’brain-drain syndrome’’ making the skilled personnel to seek for greener pasture outside the country. Female health workers are in short supply because of the lower levels of literacy prevailing in the northern regions. The importance of skilled assistance can be dramatically illustrated with the following data that shows a clear association between the low levels of antenatal care and the concomitant high MMR in Nigeria as compared with other developing countries.

Table 1: Skilled Attendance at Delivery and Maternal Mortality Ratio in Selected Countries

Country	percent Skilled attendance at Delivery	Maternal Death per 100,000 livebirths
Trinidad and Tobago	98	90
Sri-Lanka	94	140
Botswana	77	250
Bolivia	46	650
Nigeria	28	1000
Bangladesh	5	850

Source: “Skilled Care during Childbirth” Safe Motherhood Fact Sheet, 2008, Family Care International, New York. USA.

As a result of the female staff shortages, women opt for delivery at home attended by TBAs or relatives. This option allows family and friends to provide support. It also allows the performance of religious rite and other rituals during labour (Acsadi and Johnson-Acsadi, 1991) and after delivery.

However, mother's education was one of the most powerful determinants of access to skilled assistance during delivery. While 60 percent of mother's with no education relied on unskilled assistance, just 9 percent of mother with higher education had no skilled assistance. An explanation of the reliance on traditional birth attendance rather than professional especially in the northern regions is not unconnected with the practice of the pudah system. The system restricts the access of women to modern health care facilities, even at the risk of dying. The emphasis of the associated religious beliefs also restricts the access of girls to education, thus denying them the "medication against fatalism" (Royston and Armstrong, 1989). The result is a compounding of the access factor by the education factor in the risk of maternal mortality in such societies. The preference of Muslim women is for female health workers. There is no doubt that the men too share the sentiment (PMMN, 1992). The fear of delivery by caesarean section is an added disincentive to utilization of the modern health facilities.

2.6: Legal and Political Framework of Maternal Health Including Rights Issues

Nigeria is a signatory to the numerous UN conventions on the rights of women and children, population and development, women empowerment and elimination of harmful practices against women. In May, 2001, the 'First Ladies' of 14 West and Central African States met in Bamako, Mali and initiated ''Vision 2010'' as a measure to accelerate the reduction of maternal and neonatal mortalities. Nigeria, being a signatory to the Bamako Declaration adopted the Women and Children Friendly Health Services initiative (WCFHS) as a strategy towards the attainment of Vision 2010. This was launched in October, 2004 by the then First lady of Nigeria, the late Chief Stella

Obasanjo, and approved by the National Council on Health for implementation in all the states and local governments. Other right issues which have been developed exist. Implementing the national policies involves active participation of all tiers and relevant government agencies and private sector. Legal and political support is required to accelerate implementation at both federal and local levels. Many see little political value in making safe motherhood a policy priority. The legislators can make a difference by taking the following actions: accelerate speedy passage of the national bill into law and ensure its implementation; make laws to ensure compliance with policies and programmes for maternal, newborn and child health and support constitutional review to place health in the exclusive list to make implementation of national policies at state and local government levels mandatory. Delivery of effective maternal and child health services therefore in Nigeria must consider the broad nexus of social, cultural, legal and medical factors influencing maternal and child health.

2.7: Effective Strategies to Reduce Maternal Morbidity and Mortality

Since the Safe Motherhood Conference in Nairobi in 1987, a whole range of different research programmes and strategies to tackle the problem of maternal mortality have been explored. Because maternal mortality has a complex range of causes, safe motherhood initiatives need to adopt a variety of strategies aimed at influencing factors in the chain of events leading to a maternal death. While the constraint of space will not allow us to explore in detail the successes and failures of different safe motherhood programmes, this exploration of socioeconomic, political and cultural factors underlying maternal mortality suggests that certain types of strategy may be particularly important and need further research. These are: investigating and addressing violence against

women in pregnancy; setting up of maternal waiting homes; development and support for women's organizations relating to safe motherhood; improving quality of care particularly in relation to the culture of health service provision; improving the accountability of service providers to women among others.

Strategies are needed for health services to integrate training, information and research about violence. This is important in services related to safe motherhood, as it is in the field of HIV/AIDS. Health workers in family planning and services related to pregnancy, e.g prenatal and obstetrics, should have training on how to respond to violence, rape and abuse. International NGOs and development agencies have a role to play in actively supporting local grassroots groups fighting violence against women, and in sponsoring research on violence against women in pregnancy (Heise, 1993). There is an increasing recognition of the significance of violence to women's health with, for example, a new WHO program on the prevention and management of the health consequences of violence against women (WHO, 2005). In order to decrease morbidity and mortality among women victims of abuse, there is need to evaluate the effectiveness of existing interventions to prevent and deal with violence against women; work to improve the capacity of health workers at all levels to identify and respond appropriately to victims of physical and sexual abuse; and support the formulation by national governments of policies and protocols to address the issue.

Maternity health post (MHP) is lodging close to hospitals where women can stay prior to giving birth. Research suggests that Maternity health posts may provide a very effective strategy to overcome problems of poor access to hospitals in rural areas where distance is a major obstacle to reducing maternal mortality. A study in rural Zimbabwe

found that for women with antenatal risk factors, there was a significant 50 percent reduction in the risk of prenatal death for the women who stayed at the MHP compared to women who came from home during labour (Chandramohan , 1995). It may be that women who use MHP are of a higher socioeconomic status than those who stay at home because poorer women find it more difficult to take time away from work at home. Despite this, the study suggests that women of lower socioeconomic status are also at less risk of a prenatal death (though not as much) if they stay in a MHP. MHP are most effective if distance is the only factor preventing access to health services. For their effectiveness, it is also necessary that a high proportion of women attend ante-natal clinics so that those women with antenatal risk factors can be identified for referral to the MHP. The effectiveness of MHP in reducing maternal deaths must also be impeded by the fact that a proportion of women not identifiable as .high risk will nevertheless develop obstetric complications.

Part of the attraction of MHP as a safe motherhood strategy is that they require no high technology and rely mostly on human resources already present in many communities (Figa-Talamanca, 1996). But MHP rely on their connections to effective hospital care and treatment for those women developing complications, and also on being connected to the community so that women are prepared to use them. Several examples of MHP in Latin America show how the Accessibility of MHP is at its best when they are culturally sensitive and viewed as a community service. In Cuba, community groups such as the Women's Federation, local political organizations and agricultural unions participate in the management of MHP and in making these facilities comfortable and acceptable to pregnant women (Figa-Talamanca, 1996). The construction, maintenance,

funding and food supplies, and care-work for the MHP are contributed to by the community. The idea of an MHP must have credibility in the community it is intended to serve, because women and their families may not be easily convinced to move away from home before their delivery due date (Figa-Talamanca, 1996). In societies where women are in purdah, or seclusion, MHP may be considered unacceptable, so cultural compatibility needs to be taken into account when planning such facilities

The participation of women themselves, as well as families and communities, is essential for the success of safe motherhood initiatives. Women's groups and NGOs can lobby for changes to improve the provision for women's health, as well as for women's rights and legal changes to improve women's status. Community-based research can be carried out by groups and NGOs in order to determine women's own perceptions of problems relating to safe motherhood. Women's groups can also play an important role in educating women about how their bodies work and reproductive health issues, as well as providing information to the community about what services are available and where. Another aspect of this education and communication work may be raising the awareness of men and the rest of the community of maternal death risks. (WHO, 1993) However, the need for maternal education may well have been overestimated in the past, as many women are well aware of the danger signs of the onset of obstetric complications. It can be for other reasons than not recognizing risks that they do not seek medical help. Women's organizations can tackle these issues by exploring community strategies to overcome cost and transport difficulties, and by initiating dialogue with health service providers over quality of care improvements.

Although the immediate effects of women's groups and organizations may not always be obvious, or measurable in the way that medical interventions are, their potential importance in addressing maternal mortality, particularly in relation to the social, cultural, political and legal factors outlined above, should not be overlooked (WHO, 2003).

More research is needed into how to increase the social accountability of health services and community confidence in facilities. Efforts are needed to break down barriers between health workers; conceptions of childbirth as a medical event, and women's and communities beliefs about the cultural significance of birth. Importantly too planning for safe motherhood needs to analyze the relative costs of different interventions in order to assess the affordability of ongoing and proposed programmes, to help set priorities, to choose service delivery strategies, and to allocate resources effectively(WHO 2003). Cost estimating methodologies for safe motherhood programmes have been developed by Tinker and Koblinsky (1993) and Maine (1992). The duo of Tinker and Koblinsky further stress that the structure and level of public sector costs vary from one setting to another. How cost effective any one strategy is will vary according the range of other interventions and services available and the wider context. A calculation of the benefits of improved maternal health for families and communities can be used to rationalize the allocation of resources to safe motherhood initiatives. When a mother dies, the probability of her infant children also dying is greatly increased. Cost effectiveness calculations need to take into account that improving women's health has significant benefits not only for women but also for their children

and the national economy. The prevention of a maternal death can mean much more than one life saved (World Bank 1994).

Oladipo (2008) also stated some strategies to reducing maternal mortality. According to him, there are a number of life cycle events which may not be linked directly to reproduction but have profound influence on the maternal mortality. Similarly, institutional arrangements that contribute to effective planning and policies that are needed as support to reduction of maternal mortality need be addressed. FGM eradication should be made part of the antenatal health education component. It has tended to be based on bio-medical justification as well as from the human right approach because of the unintended consequences arising from the severity of the procedure. Government should legislate against female genital mutilation.

Another strategy is to formulate, domesticate and implement Girl Child Education policy: This policy should focus on the comparative disadvantaged position to which girls are exposed by the very nature of their sex and exposure to the risk of pregnancy and associated hazards in life. The core element of this policy should be to make the girl child a special resource by promoting her education which will take precedence over religious or cultural barriers to her educational development. This should be accorded a national priority as female literacy will increase access to stable employment and economic empowerment. Female education will delay age of marriage and also make the women appreciate the importance of utilization of health facility. (Ladipo, 2008).

There is an inexorable link between the timing of marriage, first pregnancy and the associated risk of maternal mortality (MM) in a young female (especially those under the age of 18). Marriage at 18 and above will reduce maternal death by 30 percent. The

element of this policy should be to set a well discussed age limit that takes as its primary focus MM reduction without prejudicing the social dysfunction that later ages of marriage might create. The faith based organizations, RH professionals and associations should be involved in such dialogue and the policy should be backed with necessary legislation. The risk of maternal death is high in women that have delivered five or more times. Strengthening of family planning services and integration into all tiers of healthcare can be a powerful component of this policy.(Fatusi, 2003).

Unsafe abortion is one of the major causes of maternal mortality in Nigeria and this is partly due to the restrictive law on abortion which forces women and girls to seek clandestine and unsafe abortions. Experience from countries such as Romania, Ghana, Ethiopia, and South Africa where abortion law was liberalized show that this has markedly reduced the maternal mortality rate without corresponding demand for abortion services or a rise in unwanted pregnancies (Sai. 2004). Infrastructure Development Policy: This should factor in elements that enhance the movement of pregnant. The improvement of roads and other transportation system has salutary effect on MM reduction.(Sai, 2004)

Bringing health professionals in the private sector into partnership with public health facilities should be promoted so that access to prompt EMOC no longer depends on the limited circumstances in the public sector but can call upon expertise in private practice. The mechanism for the accounting and financing of such a partnership comes within the purview of the National Health insurance Scheme. The advantage of such a partnership will be to give access to quality RH care irrespective of income levels of

residence I n RH disadvantaged areas. This will help in attainment of MDG 5 as MM is not a public sector tragedy but a tragedy that affects all. (WHO, 2001).

There should be development of a mechanism for periodic assessment of progress towards the realization of the goals of policies. The collection and analysis of periodic data sets on RH indicators that include lifelong risk factors as FGM status, education level, age at marriage, number of pregnancies within the framework of national RH accounting can bring the pace of progress readily to attention. The NDHS series is serving some of the purpose. But making these indicators part of regular and ad hoc surveys needs to be backed by the force of national policy. (NDHS, 2003)

Another component of this M & E policy will be development of indicators that incorporate the immediate and remote causes of MM. Free Maternal Health Policy: Free antenatal care and delivery services for pregnant women should be affected in all the states. There should be integrated approach to the delivery of health care services to mothers, newborns and children rather than the existing vertical approach in most of our primary health care centres. Provision of information and services about the family planning and contraception should integrate as well. (Oladipo, 2008)

WHO, 2000 reported that skilled personnel should be recruited and capacity of the health workers built. This will enhance efficiency in the health care delivery. Multi-sectoral approach to reduction of MM: All relevant stakeholders should be involved in planning, implementation, monitoring and evaluation of maternal and child health programmes. For example, a multi-sectoral approach should be employed whereby the Legislative Assemblies, Information, Education, Women Affairs etc should include MCH programming in their portfolios. There should be community participation and

involvement of community leaders, women association leaders, men associations' leaders, road transport union etc). Vital Registration system**:** The government should make compulsory the registration of all births, marriages and maternal deaths in all the states of the country. These will form the bedrock of sound analysis of the demographic progress in the nation. This can lead to a thrice-yearly publication that will indicate the status and trend of MM in Nigeria. Such a publication will serve as the basis of assessing the progress towards the goal of policy. There should be disease-specific preventive measures for child mortality in particular wide spread immunization coverage for childhood diseases.

2.8: Empirical studies related to maternal morbidity and mortality

WHO (2007) reported that Nigeria has one of the highest occurrences of maternal mortality in the world with figures ranging from 800 to 1,500 maternal deaths per 100,000 live births. This figure was based on the results of the 2006 Multiple Indicators Cluster Survey (MICS) which showed a wide variation from 165 per 100,000 live births in the South West to 1,549 per 100,000 live births in the North East, with a national average of 800 deaths per 100,000 live births.

Research evidence (WHO, 2001, 2004, 2007, Lancet 2008) that almost every minute, a woman dies of complications related to pregnancy and childbirth. This is more than 500,000 women annually. Almost every single one of them lives and dies in developing countries. Ejembi (2002) reported that a woman's risk of dying from treatable or preventable complications of pregnancy and childbirth over the course of her lifetime is 1 in 22 in developing countries, compared to 1 in 7,300 in developed regions. The report also reported that the risk for a woman who lives in Nigeria is 1 in 7, compared to

1 in 17,400 in Sweden. Motherless children are up to 10 times more likely to die prematurely than those with mothers, and every year more than 1 million children are left motherless.

Several other studies (Okonofua, 2000; Oladipo 2006, WHO 2007) showed that more than 70 percent of maternal deaths in Nigeria are due to five major complications: haemorrhage, infection, unsafe abortion, hypertensive disease of pregnancy and obstructed labour. Also, poor access to, and utilization of quality reproductive health services contribute significantly to the high maternal mortality level in Nigeria. The Nigeria Demographic and Health Survey (NDHS, 2003) reported that 30 percent of Nigerian women cited the problem of getting money for treatment, while 24 percent cited the problems of accessibility to health facilities and transportation. Also, 17 percent reported the problem of not getting a female provider in the hospital, while 14 percent reported the problem of not wanting to go alone. Again, 14 percent reported the problem of ignorance of where to go for treatment, while one in ten women complained of the bottlenecks in getting permission to visit hospitals.

Ogundeji, (2001), while discussing the empirical evidence on maternal mortality reported that majority of births in Nigeria (66 percent) occur at home and only one-third of live births during the five years preceding the most recent demographic health survey occurred in a health facility. A complimented study (Ogunkelu, 2004) reported that a smaller proportion of women receive postnatal care, which is crucial for monitoring and treating complications in the first two days after delivery. NDHS 2003 in the survey of Nigerian household reported that only 23 percent of women who gave birth outside a

health facility received postnatal care within two days of the birth of their last child and more than seven in ten women who delivered outside a health facility received no postnatal care at all. The Nigerian health system as a whole has been plagued by problems of service quality, including unfriendly staff attitudes to patients, inadequate skills, decaying infrastructures, chronic shortages of essential drugs and the well-known "out-of-stock: syndrome" (Okonofua, 2000; Fatusi & Ijadumol 2003; Ezeilo, 2000 & Dahiru, 2008). In a complimentary study WHO (2003) reported that in some Nigerian hospitals, equipment such as sphygmomanometers, thermometers, weighing scales, delivery kits, waste bins and mucus extractors are unavailable. Many do not have regular supply of electricity because they cannot maintain a standby generator. Some do not even have a regular water supply and thus require their patients to provide their own water. According to Campbell & Graham 1990, generally, health workers are unmotivated and demoralized by inadequate and irregular remuneration. Many have relocated to industrialized countries where they will be adequately remunerated.

Evidence (Carter & Beaulieu, 1992) exists on the relationship between the density of health workers and maternal mortality rates in Nigeria. Slightly more than one-third of births in Nigeria are attended by doctors, trained nurses and midwives and this is in spite of the fact that the level of assistance a woman receives during delivery can reduce maternal deaths and related complications. In a study conducted by Bamgbose (2002) the findings revealed that the attitude of many nurses/midwives towards pregnant women and those in labour is poor. In the course of their professional duty as nurses/midwives, they act inappropriately to the woman in labour. Such attitude raises the question of what the duties of a nurse/midwife are to a woman in labour. National Agency for the Control of

AIDs (NACA, 2001) reported worst scenario for HIV-positive women in labour. The Health care providers' attitude ranges from that of neglect to abandonment such that one questions the professional training and knowledge they had about the mode of transmission of HIV and the skill to prevent it.

Iyayi (2008) reported that most health facilities in Nigeria physically exist in the sense of bricks and mortar without the necessary functioning equipment to render basic services. According to the report, many hospitals in Nigeria are poorly equipped and lack essential supplies and qualified staff. A similar study (Population Council 2007) revealed that only 42 percent of public facilities in Nigeria have met internationally accepted standards for obstetric care. The health sector as a whole is in a dismal state. In the year 2000, the World Health Organization ranked the performance of Nigeria's healthcare system 187th among 191 United Nations member states. The prevailing problems then are still persistent and are yet to be addressed due to Nigeria's long-standing poor socio-economic situation and crises of leadership (WHO 2006).

In April 2010, The Lancet published a worldwide study on maternal mortality conducted by The Institute for Health Metrics and Evaluation (IHME) at Washington University which reported for the first time in decades, researches that showed significant drop in the number of women dying each year from pregnancy and childbirth. From total maternal deaths of roughly 525,000 in 1980 to about 342,900 in 2008, the IHME analyses utilizes new and better country data and a more sophisticated statistical method that draws from birth records, national surveys, censuses and surveys of siblings deaths. In the same report the new findings from 181 countries also show an annual decrease of 1.3% in

the maternal mortality ratio (MMR), the ratio of the number of maternal deaths per 100,000 live births. However, Nigeria moved in the opposite direction of this global trend, with a 1.4% increase each year, from 473/100,000 in 1990 to 608/100,000 by 2008 (Lancet, 2010). For every woman who dies, twenty will face serious or long-lasting medical problems (Okonofua, 2001). Women who survive severe, life-threatening complications often require lengthy recovery times and may face long-term physical, psychological, social and economic consequences (Ejembi, 2000).

The chronic ill health of a mother puts at risk surviving children, who depend on their mothers for food, care and emotional support. Reducing maternal mortality is one of the targets of the Millennium Development Goal 5 (Improving Maternal Health). It is the Millennium Development Goal that has shown the least progress since 2000 and the one that reveals the greatest disparity between rich and poor (WHO, 2007). A survey conducted by Mayor (2004) reported that poverty have become a great barrier to access to health for many Nigerian women who are not educated, and hence economically disempowered. Getting money for treatment was the problem most commonly reported by Nigerian women of all backgrounds (62%). There is also reported strong negative correlation between levels of education and wealth quintile. Maine & Wray (1997) for instance, stated the 41.6 percent of Nigerian women had no education at all while 21.4 percent had primary education. 31.1 percent had secondary education while only 5.9 percent had higher education. The report also stated that the lowest wealth quintile for women is 68.7 percent, the second being 63.3 percent, the middle 49.2 percent, the fourth 29.2 percent and the highest was 5.8 percent.

Okonofua (2000) however reported that even educated women may not have access to healthcare either due to the problem of poor attitude of health care providers or that of proximity to quality health care facility. Graham, Fitzmaurice, Bell & Caims (2009) examine the link between poverty and maternal mortality. According to them, there is evidence of major differentials in access to and uptake of maternity services across a wide variety of developing countries. These risks, they explain: are a culmination of disparities in underlying health status differential lifetime exposure to pregnancy, different access to the means to avoid unwanted pregnancy, unequal physical, economic and social access to preventive services for normal pregnancy and delivery and major discrepancies in utilization of quality emergency obstetric care.

Federal Ministry of Health (FMOH, 2001) reported that there are challenges in data management particularly in reporting maternal deaths, because of the fact that most maternal death occur in communities where there are no access to hospitals. This report is corroborated by WHO (2001) which reported that tracking changes in maternal mortality in developing countries such as Nigeria can be difficult, because the data are unreliable. Vital registration systems in rural areas of most developing countries are deficient and surveys produce estimates with wide margins of uncertainty. Nevertheless, strategies need to be more appropriately focused. This will enable pregnant women in whom complications develop have access to the medical interventions of emergency obstetrical care (Okonofua, 2001). Ejembi (2001) postulated that the panacea to drastic reduction in maternal health challenges require a focus on training cadres of health workers and developing strong referral systems between communities and health care facilities, since delays in care can be life threatening. A referral system includes means of

communication and transport as well as mechanisms for ensuring that referral facilities are able to provide services at all hours (Oladepo, 2007). However, when a functioning health-care system is in place, some interventions at the community level, such as the use of misoprostol to strengthen contractions, help expel the placenta and control bleeding before transfer to a health care facility could contribute to significant reduction in maternal mortality (WHO, 2001). The effective functioning of any facility will depend on whether pregnant women have skilled attendants at delivery–an accredited health care professional (e.g. a doctor, midwife or nurse) who can conduct normal deliveries, identify and manage complications, and refer women to the next level of care (UNICEF, 2000)

2.9: Appraisal of literature review

Literatures were examined on various areas that borders on socio-cultural factors as well as maternal indices reflecting poor maternal morbidity and mortality in Nigeria. The literature examined and stated the direct causes of maternal deaths in the developing world to include hemorrhage, infection, toxemia, obstructed labour and illicit abortion (Maine, 1987). These medical factors when examined in the context of socio-cultural point of view help to understand why maternal mortality is high in Nigeria. Several socio-cultural factors were found to have bearings with poor maternal morbidity and mortality in Nigeria. The socio-cultural factors that have been found to influence maternal mortality in Nigeria includes: female genital mutilation, wife inheritance (levirate marriage), decision making process in homes, early marriage, male dominance and widowhood practices.

The papers revealed that Female genital cutting (FGC) , also referred to as ‘female genital mutilation’ (FC), or ‘pharaonic circumcision’, is a traditional practice in which a person, sometimes unskilled or a health worker cuts off parts or the whole of the female genitalia using a knife or razor blade, which for most part is non-sterile (Adebayo, 2000). It is a practice that leaves horrifying harmful effects on the health of girls and women although health consequences vary in gravity according to the severity of the procedure. Across the world, African women and girls remain most vulnerable and endangered by this practice especially it undermines their basic human rights and general well-being (UNFPA, 1997; IAC, 1999).

Literature on wife Inheritances was also reviewed and was defined as a condition where a "family member inherits a married woman whose husband is dead" (Bamgbose, 2002). The widow is seen as the property of the former husband's family. Levirate marriage is considered a custom of the Yoruba, the Igbo, and the Hausa-Fulani and continues to be practiced in rural communities (Bamgbose, 2002). However, increased education and urbanization are thought to have reduced this practice. Male dominance was described as the practice of favoring male children while disregarding daughters, a form of discrimination that often starts before a female child is even born. In some African communities, prayers for fecundity are either for sons or for sons and daughters. The wish for sons almost always takes precedence over a desire for daughters: the hope is that there are sons and daughters, never daughters and sons (Cochrane, 1979; Cleland&Rodriguez, 1988).

Literature also shows that first births carry special risks for both mother and child. In the northern regions, where child marriage is common, virtually all sexual activity among girls occurs within the context of marriage. The implication is high fecundity and fertility among the girl child in the northern Nigeria. The vast majority of births to adolescent girls are first births that occur within marriage. In the days of our grandfathers there were neither modern hospitals nor orthodox midwives but our grandmothers were successfully delivered. Those people that were engaged in the deliveries are those we now refer to as traditional birth attendants (TBAs). Skill acquisition by the TBAs is not dependent on any form of formal education, but rather their knowledge either through spiritual means, inheritance from their parents or dedication to the community norms. Most TBAs are mainly elderly females of good character and are usually married with children of their own.

The literature search revealed that women's social status is still very low. This is mainly due to illiteracy, poverty and cultural practices, which treat women as mini persons, objects of inheritance rather than subjects of inheritance. The traditional, cultural and religious beliefs that women are inferior and subordinate to men tend to perpetuate widespread practices involving violence and very harmful to women. The discrimination in education of girls and boys is borne out of this patriarchal attitude including male dominance ideology; other socio-cultural variables reviewed include violence against women, education of the girl child and decision making process in homes. The paper suggested that in order to reduce deaths, good quality maternal health services must be readily available and used - especially during and immediately after childbirth. Services should be provided by trained health workers, clinics and hospitals

located as close as possible to where women live, and must be linked by an emergency referral and transport system (World Development Report, 1999).

2.10: Theoretical Framework

2.10.1: Health Belief Model

According to Ross and Mico, (1984) the Health Belief Model (HBM) was developed in the 1950s to explain preventive health behaviour, particularly the relation of health behaviour to utilization of health services such as antenatal clinics, immunization programmes, utilization of contraceptive services, utilization of health facilities among others. HBM is greatly indebted to Lewin, (1961) who believed that the world of perceivers determined the action of those perceivers. Thus, the developers of HBM (Rosenslock, Hochbaum, Beavers& Kurt, 1952) incorporated an important component of the behaving individual's perceptual world and motivation and the community's reaction to individual perceptions.

HBM is interactive as each step influences the others, and is based on three primary dimensions: the individual's readiness to comply with a recommended action based on perceptions of 'threat', the motivating and enabling (or conversely the discouraging and constraining) forces that determine what the individual will do, and compliance to behaviour actually exhibited and readiness depends on three sets of related variables:

1) Belief in vulnerability to illness for preventive behaviour (and vulnerability to complications for illness and sick-role behaviour and estimation of the degree of threat (perceptions of consequences-severity, seriousness, both physical and social). Teenagers would readily comply with recommendation for use of contraception if the severity and consequences of carrying an unplanned

pregnancy are unpleasant. Willingness to utilize contraception including emergency contraception by teenagers is also dependent on the societal belief about contraceptive methods. If there is a general disapproval to the use of contraception, adolescents will be indoctrinated against the use of pregnancy preventive methods. Judging by available statistics, teenagers are highly vulnerable to complications of reproductive health challenges. Ransome-Kuti (1994) emphasized that adolescent sexuality is a reality. To him, today's young people reach physical maturity earlier and marry later; therefore the society has a responsibility to ensure that they make responsible sexual choices. While supporting Ransome-Kuti, Adebusoye (2000) remarked that by the time the teenage girl child turn age 19, more than three quarters of the Nigerian girls have had sexual intercourse. Family Health International (2001) also reported that two out of every five secondary school girl interviewed in a study in North-central Nigeria, where Benue is situated, admitted to at least one previous pregnancy and 75 percent of such girls procure unsafe induced abortion. National Agency for the Control of STIs and AIDS (NACA), (2002) reported that more than one million Nigerian teenage girls acquire a sexually transmitted disease in Nigeria every year and in 1998 alone, 60 percent of all the AIDs cases reported in Nigeria were among young persons aged 12-24 years. The vulnerability of the adolescent to perceived threat and severity as well as complications of ill health resulting from reproductive disorders is quite enormous.

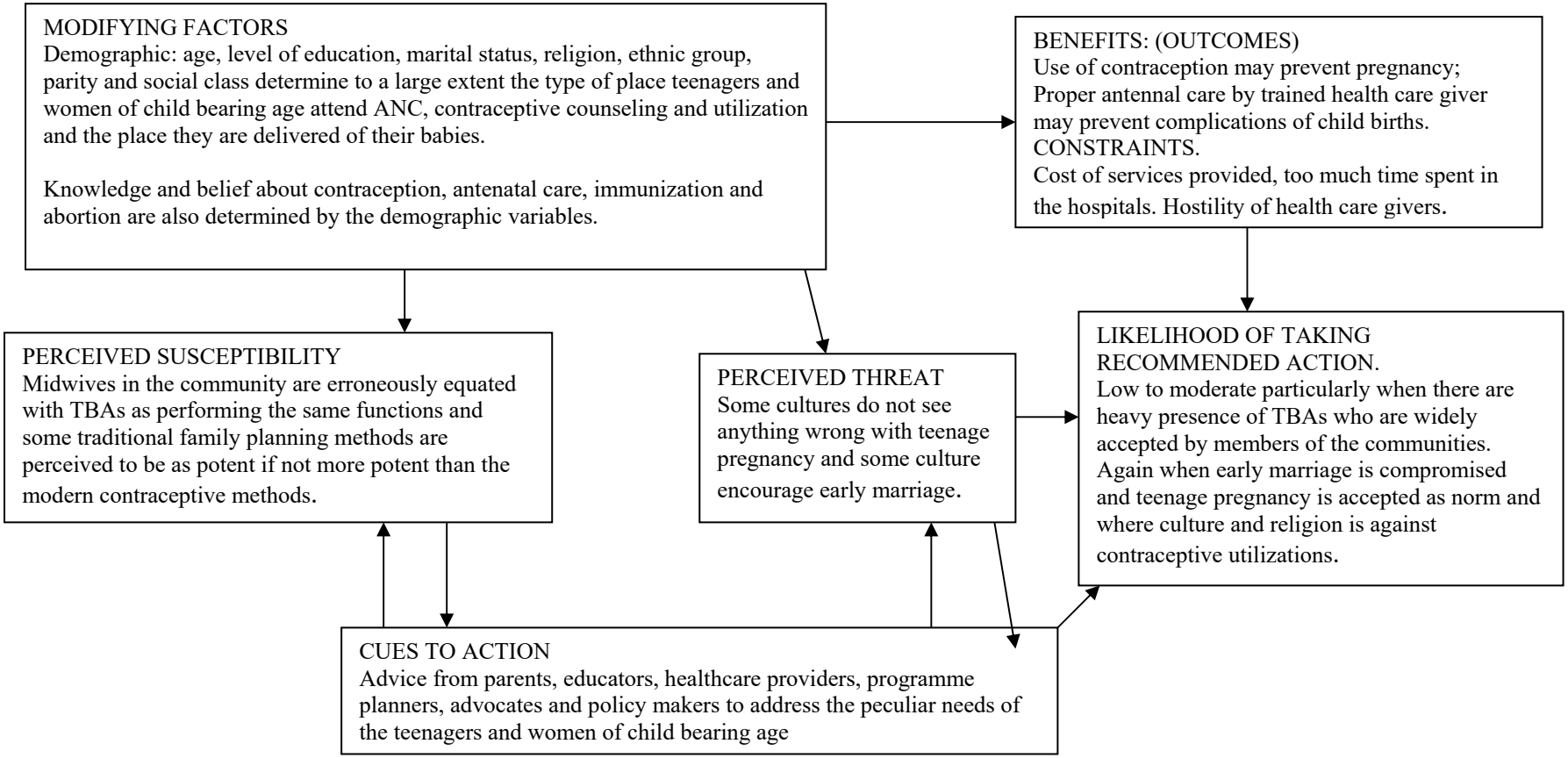
2) Motives to reduce the threat with related goals for health. Teenagers and women of child bearing age patronize health services that can provide greater benefits to

them. For example women of child bearing age will prefer to patronize traditional birth attendance rather than a trained midwife in the same locality because besides the fact that the TBA will not waste their time, they will also speak the local dialect, visit them in their houses, responds to their distress calls even in odds hours and provide support during critical situations (Okonofua, 2000). The cost of procuring the services of TBAs is quite minimal compare to the cost of a professional midwife and the consultant gynecologist (Okonofua, 2000).

3) A belief that compliance will reduce the threat, will not cost more, and will lead to good health. Young people need to learn about their sexuality and reproductive health from everyone in a position to provide accurate information and counseling. The international Conference on Population and Development (ICPD) (2000) programmes of action highlights this urgent need for parents, educators, healthcare providers, programmes planners, advocates and policy makers to address the peculiar needs of the teenagers. Government in collaboration with non-governmental organizations (NGOs) is urged to meet the special needs of teenagers and to establish appropriate programmes to respond to their needs. Information directed at young persons will increase their belief on health care providers and the fact that utilization of reproductive facilities within the community will lead to good health. Again, when cost is reduced to the barest minimum, members of the communities including women of child bearing age will be willing to access human and material facilities. For the belief in health care providers and services to achieve its desired objectives, various support mechanisms for the education and counseling of the teenagers in the

areas of gender relations and equality, responsible sexual behaviour, responsible family planning practices, family life, reproductive health, and prevention of cultural practices that inhibits teenage sexual relationships should be encouraged.

Figure 2.4: The Health Belief Model Applied to Teenage pregnancy, Maternal Morbidity and Mortality.



Source: Modified and adapted from: Brigger, W. (1999) *Change process; a social and behavioural foundation for health education* .Lagos, Macmillian. (Pp, 23-28).

Figure 2.4, attempt to explain the relationships between Health Belief Model and socio-cultural variables that affect maternal morbidity, mortality and adolescent pregnancy. The main components of Health Belief Models include Modifying factors, Benefits and Constraints, Perceived susceptibility, Perceived threat, Likelihood of taking recommended action and Cue to action.

The modifying factors component of the model relates demographic variables to factors influencing maternal morbidity, mortality and adolescent pregnancy. According to the model, the age, level of education and marital status have a direct bearing on compliance to recommended action by mothers of child bearing age and the adolescents. Educated married women above twenty five years are more likely to comply with medication, referrals and appointments from medical personnel. Also the number of children and the social class of mothers determine to a larger extent the kind of health facilities mothers will visit. Mothers who suffer from infertility or marry late are more likely to seek high level medical assistance when pregnant; in the same vein mothers with high social status prefer comprehensive care during pregnancy.

HBM also postulated that when mothers or adolescent understand the benefits they stand to achieve by use of medical products like contraception, antenatal care, immunization and the likes; they are more likely to adopt such behaviour. Strategic information directed at making mothers to understand reasons for a recommendation will help to increase access to medical care by mothers and help reduce maternal morbidity and mortality. On the other hand cost of services, time wasting by health care providers, hostilities of health care givers and the likes could prevent patronage of mothers to health care facilities.

HBM also had Perceived susceptibility as a component. When midwives are erroneously equated as performing the same roles as TBAs, there is a tendency for mothers to patronize TBAs and would not see the need for Midwives in the community. In the same vein, when the community believed that traditional family planning methods are as good if not better than modern family planning methods, the probability is that the community will rather utilize traditional family planning than modern family planning methods. The effect of these presumptions could lead to increased maternal morbidity, mortality and adolescent pregnancies. Closely related is the term 'Perceived Threat' which postulated that when some culture do not see anything wrong with teenage pregnancy and early marriage, there may be higher risk of teenage pregnancy and diseases related to early marriage e.g. VVF. HBM is of the belief that adolescents and mothers of child bearing age would utilize health facilities if they have positive reinforcement from parents, in-laws educators, program planners, advocate and policy makers as well as religious leaders. These significant orders are what HBM refers to as 'Cue to Action'.

2.10.2: Theory of Planned Behaviour

The theory of Reasoned Action was developed by Martin Fishbein and Icek Ajzen as an improvement over Information Integration theory (Ajzen & Fishbein, 1980). There are two important changes. First, Reasoned Actions adds another element in the process of persuasion, behavioural intention. Rather than attempt to predict attitudes, as does Information Integration theory (and several others), Reasoned Action is explicitly concerned with behaviour. However, this theory also recognizes that there are situations (or factors) that limit the influence of attitude on behaviour. For example, if our attitude leads us to want to go to orthodox facilities for treatment but we have no money, our lack

of money will prevent our attitude from causing us to receive desired care. Therefore, Reasoned Action predicts behavioural intention, a compromise between stopping at attitude predictions and actually predicting behaviour. Because it separates behavioural intention from behaviour, Reasoned Action also discusses the factors that limit the influence of attitudes (or behavioural intention) on behaviour. The second change from Information Integration theory is that Reasoned Action uses two elements, attitudes and norms (or the expectations of other people), to predict behavioural intent. That is, whenever our attitudes lead us to do one thing but the relevant norms suggest we should do something else, both factors influence our behavioural intent. For example, a wife's attitudes may encourage her to register early in PHC antenatal clinic, but her husband may think this will lead to waste of resources. Does the wife do what his attitudes suggest (register in the ANC despite objection by the husband) or what the directive of the husband stated (not to register in ANC yet)?

Specifically, Planned behaviour predicts that behavioural intent is created or caused by two factors: our attitudes and our subjective norms. As in Information Integration theory, attitudes have two components. Fishbein and Ajzen call these the evaluation and strength of a belief. The second component influencing behavioural intent, subjective norms, also have two components: normative beliefs (what I think others would want or expect me to do) and motivation to comply (how important it is to me to do what I think others expect). Therefore, we have several options for trying to persuade someone. The first group of options are like the strategies identified by information integration theory:

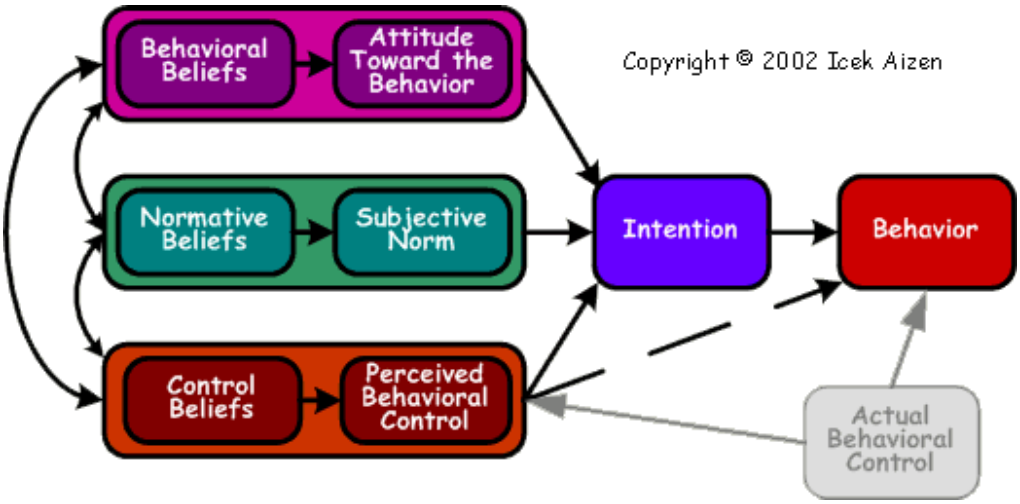
- strengthen the belief strength of an attitude that supports the persuasive goal
- strengthen the evaluation of an attitude that supports the persuasive goal

- weaken the belief strength of an attitude that opposes the persuasive goal
- weaken the evaluation of an attitude that supports the persuasive goal
- create a new attitude with a belief strength and evaluation that supports the persuasive goal

2.10.3: Core Assumptions and Statements

Theory of Planned Behaviour suggests that a person's behaviour is determined by his/her intention to perform the behaviour and that this intention is, in turn, a function of his/her attitude toward the behaviour and his/her subjective norm. The best predictor of behaviour is intention. Intention is the cognitive representation of a person's readiness to perform a given behaviour, and it is considered to be the immediate antecedent of behaviour. This intention is determined by three things: their attitude toward the specific behaviour, their subjective norms and their perceived behavioural control. The theory of planned behaviour holds that only specific attitudes toward the behaviour in question can be expected to predict that behaviour. In addition to measuring attitudes toward the behaviour, we also need to measure people's subjective norms – their beliefs about how people they care about will view the behaviour in question. To predict someone's intentions, knowing these beliefs can be as important as knowing the person's attitudes. Finally, perceived behavioural control influences intentions. Perceived behavioural control refers to people's perceptions of their ability to perform a given behaviour. These predictors lead to intention. A general rule is the more favorable the attitude and the subjective norm, and the greater the perceived control the stronger should the person's intention to perform the behaviour in question.

Fig 2.5: TPB Conceptual Model



Source: Ajzen, I. (1991). The theory of planned behaviour

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The principle of aggregation, however, does not explain behavioural variability across situations, nor does it permit prediction of a specific behaviour in a given situation. It was meant to demonstrate that general attitudes and personality traits *are* implicated in human behaviour, but that their influence can be discerned only by looking at broad, aggregated, valid samples of behaviour. Their influence on specific actions in specific situations is greatly attenuated by the presence of other, more immediate factors. Indeed, it may be argued that broad attitudes and personality traits have an impact on specific behaviours only indirectly by influencing some of the factors that are more closely linked to the behaviour in question (Ajzen & Fishbein, 1980).

The theory of planned behaviour is an extension of the theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) made necessary by the original model limitations in dealing with behaviours over which people have incomplete volitional

control. A central factor in the theory of planned behaviour is the individual's *intention* to perform a given behaviour. Intentions are assumed to capture the motivational factors that influence a behaviour; they are indications of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform the behaviour. As a general rule, the stronger the intention to engage in a behaviour, the more likely should be its performance. It should be clear, however, that a behavioural intention can find expression in behaviour only if the behaviour in question is under volitional control.

Although some behaviours may in fact meet this requirement quite well, the performance of most depends at least to some degree on such non-motivational factors as availability of requisite opportunities and resources (e.g., time, money, skills, cooperation of other). Collectively, these factors represent people's *actual* control over the behaviour. To the extent that a person has the required opportunities and resources, and intends to perform the behaviour, he or she should succeed in doing so. The idea that behavioural achievement depends jointly on motivation (intention) and ability (behavioural control) is by no means new.

2.10.4: Reasoned Health Action (RHA) Model as Applied to Maternal Mortality.

This study utilized two health behaviour theories, the Theory of Planned Behaviour (TPB) and the Theory of Health Belief Model (HBM) with the aim of determining their applicability and usefulness in predicting socio-cultural factors affecting maternal mortality. It examined the ability of HBM and TPB to predict positive health behaviour as well as unhealthy actions with clinical relevance. While the HBM aim to predict healthy actions in order to reduce or prevent the chance of disease or premature death, TPB aim to ensure that individual control behaviour takes responses of attitude, subjective norm and control with motivation to comply in relation to patronizing

health providers in static facilities. The merger of these theories resulted in a new body of knowledge – Reasoned Health Action model which focuses on both intrinsic and extrinsic determinants of preventive health behaviour. Basic assumptions and statements directed at synthesizing the two broad theories are derivable in relation to use and non-use of maternal health services in targeted states.

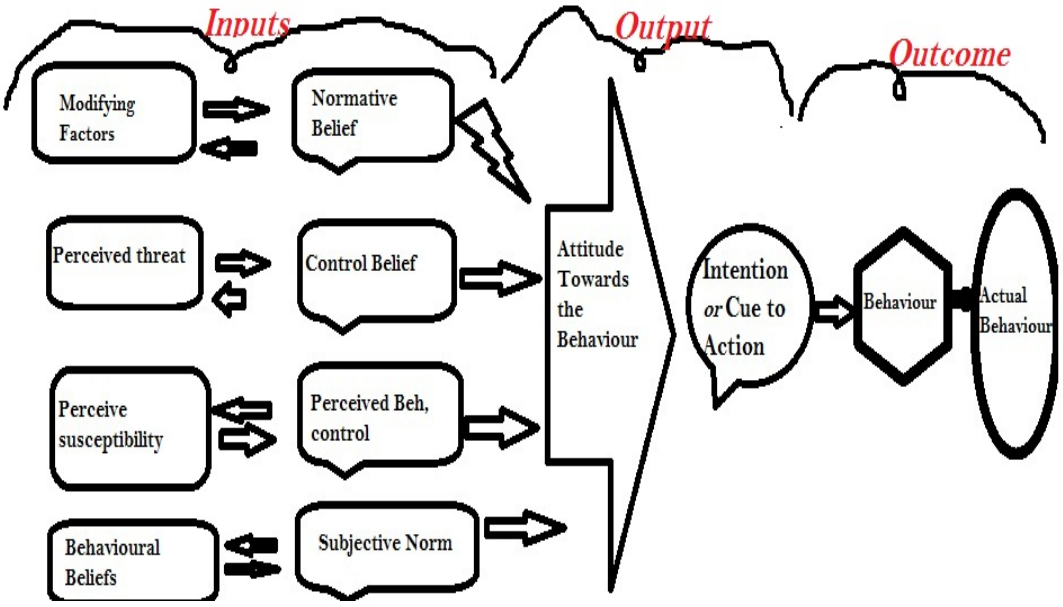
2.10.5: Core Assumptions and Statements

The Reasoned Health Action Model is based on the understanding that a person will take a health-related action (i.e., use condoms or utilize available government health facility) if that person:

1. feels that a negative health condition (i.e., HIV or maternal death) can be avoided
2. has a positive expectation that by taking a recommended action, he/she will avoid a negative health condition (i.e., using condoms will be effective at preventing HIV or attending antenatal care will prevent birth complications)
3. believes that he/she can successfully take a recommended health action (i.e., he/she can use condoms comfortably and with confidence or the belief that the community PHC have facilities and health personnel that can provide adequate maternal services
4. behavioural intention measures a person's relative strength of intention to perform a behaviour (i.e. intention to use condoms is determined by cohort of significant orders or willingness to attend available maternal health services is determined by belief of the significant others - husbands, in-laws etc, about orthodox medical services)
5. Attitude consists of beliefs about the consequences of performing the behaviour multiplied by his or her valuation of these consequences (i.e. consequences of HIV transmission will encourage condom us or fear of pregnancy complications will encourage antenatal attendants)

6. Subjective norm is seen as a combination of perceived expectations from relevant individuals or groups along with intentions to comply with these expectations (high societal expectation of individual will increase safer sex practice or encouragement from husbands, in-laws etc will increase antenatal attendants)
7. A person's volitional (voluntary) behaviour is predicted by his/her attitude toward that behaviour and how he/she thinks other people would view them if they performed the behaviour (condom use is based on persons perception of condom or access to health facilities is a result of one's opinion of orthodox medical facilities)

Fig. 2.6: The Reasoned Health Action Model As Applied to Maternal Mortality



Author: Eremutha A.F. Theory of Reasoned Health Action (RHA)

Adapted and Modified from Health Belief Model (HBM) and Theory of Planned Behaviour (TPB).

Table 2. Reasoned Health Action model at a Glance: A Guide for Maternal Health Service and Health Promotion Practice

Concept	Definition	Application to maternal morbidity and mortality
Perceived Susceptibility	One's opinion of chances of getting a condition	Expectant mothers generally perceive PHC clinics as poorly equipped and lacking health personnel.
Perceived Severity	One's opinion of how serious a condition and its consequences are	Expectant mothers believe the consequences of developing pregnancy related complications without knowledge or treatment are significant enough to try to avoid
Subjective norms	looks at the influence of people in one's social environment on his/her behavioural intentions; the beliefs of people, weighted by the importance one attributes to each of their opinions, will influence one's behavioural intention	Expectant mothers might have some friends who have avid belief on traditional birth attendants and constantly encourage you to join them. However, your spouse might prefer an orthodox medical services. The beliefs of these people, weighted by the importance you attribute to each of their opinions, will influence your behavioural intention to acess maternal health services, which will lead to your behaviour to attend ANC or not to attend.
Perceived Benefits	One's belief in the efficacy of the advised action to reduce risk or seriousness of impact	Expectant mothers believe that the recommended action of getting regularly attending ANC would benefit them possibly by allowing them to get early medical treatment or preventing them from pregnancy complications.
Self-Efficacy	Confidence in one's ability to take action	Expectant mothers receive guidance (such as information on where to get services) or training (such as practice in making an appointment).
Perceived Barriers	One's opinion of the tangible and psychological costs of the advised action	Expectant mothers identify their personal barriers to utilization of PHC clinics (i.e., getting to the clinic or being permitted by husband to visit the clinic) and explore ways to eliminate or reduce these barriers.
Cues to Action	Strategies to activate "readiness"	Expectant mothers receive reminder cues for action in the form of incentives (such as free routine drugs during antenatal visits and key holder that says, "desire healthy babies? Deliver in hospitals!") or reminder messages (such as posters that say, "95 percent of maternal death occur in developing countries, reduce the risk; deliver in hospitals").
Attitude	the sum of beliefs about a particular behaviour weighted by evaluations of these beliefs	Expectant mother might have the beliefs that access to antennal service is good for your pregnancy and delivery, that makes you look good, that ANC takes too much time, and that constant visit is uncomfortable. Each of these beliefs can be weighted (e.g., health issues might be more important to you than issues of time and comfort).

Behavioural intention	the sum of beliefs about a particular behaviour weighted by evaluations of these beliefs	Expectant mother attitudes about maternal health combined with the subjective norms about maternal health, each with their own weight, will lead you to your intention to access health services (or not), which will then lead to your actual behaviour

The HBM was spelled out in terms of four constructs representing the perceived threat and net benefits: perceived *susceptibility,* perceived *severity,* perceived *benefits,* and perceived *barriers.* These concepts were proposed as accounting for people's "readiness to act." An added concept, *cues to action,* would activate that readiness and stimulate overt behaviour. A recent addition to the HBM is the concept of *self-efficacy,* or one's confidence in the ability to successfully perform an action. While TPB focus on "the person's perception that most people who are important to him or her think he should or should not perform the behaviour in question".

Though the person's perception referred to in TPB as *attitudes and norms* are not weighted equally in predicting behaviour. Indeed, depending on the individual and situation, these factors might have very different effects *on behavioural intention*; thus a weight is associated with each of these factors in the predictive formula of the theory. For example, you might be the kind of person who cares little about regular attendants to antenatal care because you do not see the usefulness in the overall pregnancy outcome. If this is the case, *the subjective norms* would carry little weight in predicting your behaviour. The synthesis of these behaviour and health preventive theories to address the concept of maternal morbidity and mortality in the two selected states is a new body of knowledge this research project has built into the existing knowledge base in reproductive health.

2.11: Hypotheses

The following null hypotheses were generated from the study:

$H0_1$: there is no significant correlation between the components of social cultural factors (Age at first pregnancy, Occupation, Educational Qualification, Ethnic Group, Religion, Marital Status, and Number of Wives in Matrimonial Home, female circumcision, male dominance, wife inheritance, traditional birth practices, superstition, and early marriage) and maternal morbidity and mortality;

$H0_2$: there is no significant correlation between the components of social factors (Age at first pregnancy, Occupation, Educational Qualification, Ethnic Group, Religion, Marital Status, and No of Wives in Matrimonial Home) and maternal morbidity and mortality; and

$H0_3$: There is no significant correlation between the components of cultural factors (female circumcision, male dominance, wife inheritance, traditional birth practices, superstition, and early marriage) and maternal morbidity and mortality

CHAPTER THREE

METHODOLOGY

3.1 Research Design

The descriptive survey research design was adopted for this study. This was with a view to collecting data from a group of people and analyzing the data so collected as representation of the entire group. The descriptive survey enabled the researcher to collect data from an on-going phenomenon and described in a systematic manner, the characteristic features or facts about the entire population covered in the study. The design is appropriate as it enables the researcher to contextualize the problems associated with socio-cultural factors predicting maternal morbidity and mortality, the areas of strategic interventions by maternal health service providers, the benefits associated and further plans for the future especially in meeting the millennium development goal in relation to maternal health care.

3.2 Population of the study

The population of the study comprised women of child bearing age, female teenagers and health providers (doctors, nurses, traditional birth attendants and midwives) from the 15 local government areas of Benue and 18 local government areas of Borno states respectively.

3.3 Sample and sampling technique

In determining a manageable sample size which at the same time depicts a good representation of the entire population, the multi-stage sampling procedure was adopted.

Stage one

The first stage was the adoption of the purposive and proportionate sampling technique for the selection of two-third (2/3) of the local government areas from the two states. In all, a total of 33 local government areas were used for the study.

Stage two

The second stage involved the classification of the population in each of the 33 community into three strata (women of child bearing age, female teenagers and health providers) using the cluster and stratified sampling technique.

Stage three

The third stage involved the use of random sampling technique to select five health centers/hospitals and one community from each of the 33 LGA. This amounted to 75 health centers/hospitals and 15 communities for Benue and 90 health centers/hospitals and 18 communities for Borno States respectively.

Stage four

The last stage of the sampling involved the use of simple random sampling technique to select five participants in each facility which comprised four (4) women of child bearing age and one health provider (officer-in-charge of the clinic) in 165 health facilities scattered in the 33 LGAs in Benue and Borno states respectively. This resulted in selection of 660 WRA and 165 HPs participants for the study. While for the teenage respondents the simple random sampling techniques was also adopted to select 25 teenagers each from 33 communities to obtain the 825 teenage respondents. Thus, the combination of WRA and teenagers yielded a total of 1650 respondents from the two states (see table 3.1) below.

Table 3.1: Sample Size selected for the study

Selected states	Existing LGAs	Selected L.G.As (2/3)	Health Facilities & communities (HF&C)	Women of child bearing age from health facilities	Health provider (officer-in-charge of the clinics)	Teenagers from communities
Benue	23	15	5 Health facilities from each L.G.As (75 HPs in health facilities)	4 women of child bearing age from each health facilities (300 participants)	One health provider from each health facilities (75 participants	N/A
			1 Communities from each L.G.As (15 communities)	N/A		25 Teenagers from each community (375 participants)
Borno	27	18	5 Health Facilities from each L.G.As (90 health facilities)	4 women of child bearing age from each health centre (360 participants)	One health provider from each health facilities (90 participants	N/A
			1 Communities from each L.G.As (18 communities)	N/A		25 teenagers from each community (450 participants)
Total	50	33	165 Health facilities health centres and 33 communities	660 women of child bearing age	165 health providers	825 teenagers
Grand total					1650 participants	

3.4: Instrumentation

The main instruments used for data collection are four sets of questionnaire: These are Social Factor Questionnaire, Cultural Factor Questionnaire, Maternal Morbidity And Mortality Scale and Teenagers Maternal Morbidity And Mortality Scale,. However, these were complemented by Focus Group Discussion (FGD) and Key Informant Interview (KII) sessions respectively. The four scales were preceeded by the demographic information of respondents which were administered to all research participants before the main instruments. The demographic variables elicited basic data of age, occupation, educational level and religious affilliation respectively.

Several steps were taken to ensure the validity of the instrument for data collection. Experts from the Adult Education Department (AED), Public Health Nursing (PHN) and Community Development Specialists (CDS) reviewed the instruments for face content, construct, concurrence and predictive validity. The researcher distributed draft copies to the experts referred above for their criticism and suggestions. The final drafts of the sets of questionnaires incorporated the suggestions of the experts consulted and was duly certified by the supervisor before administration to the respondents. The corrections and modifications reflected by these experts contributed to the adequacy of the instruments for data collection.

3.4.1: Social Factor Questionnaire Scale (SFQS)

The social factor questionnaire attracted four point scaled questions to elicite data from participants on the subject matter. A four-point scale with options from strongly agree, agree, disagree and strongly disagree was used. The scale was scored with four points for strongly agree, three for agree, two for disagree and one for strongly disagree on a positively framed question. On the other hand negative statements were scored with strongly agree attracting one, agree two, disagree three and strongly disagree taking the maximum four points respectively.

The corrections and modifications of experts served as a major means through which the validity of the Social Factor Questionnaire was carried out. The reliability of this questionnaire was done through test retesting of the instrument on a separate 25 respondents other than those to be used for the study. Cronbach's Alpha based coefficient of reliability in SPSS version 12 was 0.750. The coefficient of reliability was acceptable before the instrument was used on the study population.

3.4.2: Cultural Factor Questionnaire Scale (CFQS)

The cultural factor questionnarie consisted of the cultural factors militating against maternal morbidity and mortality - female circumcision, wife inheritance, male dominance, superstition, traditional birth practices and early marriage. The cultural ratings contained a modified four-point rating scale; strongly agree, agree, disagree, and strongly disagree. The negative statements were rated from 1 to 4 with strongly agree rated as 1 and strongly disagree rated as 4; while the positive statements were rated from 4 to 1 with strongly agree rated as 4 and strongly disagree as 1. The question items focused on women's perception of the influence of cultural factors on maternal morbidity and mortality.

The corrections and modifications of experts served as a major means through which the validity of the Cultural Factor Questionnaire was carried out. The reliability of this questionnaire was done throught test retesting of the instrument on 40 respondents other than those to be used for the study. Cronbach's Alpha based coefficient of reliability in SPSS version 12 was 0.890.

3.4.3: Maternal Morbidity and Mortality Scale (MMMS)

This scale questionnaire was designed in a four rating scale ranging from Strongly Agree to Strongly Disagree. All positive questions carry a score of 4 for strongly agree, while a score of 3 was assigned to agree, 2 to disagree and 1 to strongly disagree. Conversely, the negative questions attract a score of 4 for strongly disagree, 3 for disagree, 2 for agree and 1 for strongly agree.

The section focused on eliciting information on participants extent of information on modern family planning and maternal morbidity and mortality and the belief about attending health facilities for reproductive health purposes while another aspect of the questionnaire was designed to elicite information on utilization of health facilities across the sampled states. The questionnaire also focuses on where mothers deliver when they are pregnant. Finally, the questionnaire elicited information on availability and use of youth friendly services and availability of Information Education and Communication materials on youth friendly services. Information on teenagers belief about use of health facilities for reproductive health services was also obtained.

A test-retest reliability test was done to determine the reliability co-efficient of the instrument after two pilot tests were conducted on similar age cohorts from different Local Government Areas other than those used for the study. Sixty respondents participated in the test-retest pilot study within an interval of two weeks on similar age cohort in Benue and Borno states respectively. Cronbach's Alpha based coefficient of reliability in SPSS version 12 was 0.762. The coefficient of reliability was acceptable before the instrument was used on the study population.

A four point scale with options from strongly agree, agree, disagree and strongly disagree was used. The scale was scored with four points for strongly agree, three for agree, two for disagree and one for strongly disagree on a positively framed question. On the other hand negative statements were scored with strongly agree attracting one, agree two, disagree three and strongly disagree taking the maximum four points respectively.

3.4.4: Focus Group Discussion

These two sets of questionnaire were complemented with Focus Group Discussion (FGD). Groups of seven youth age 15 -24 years attending youth friendly centres for at least six months prior to the survey were organized into FGD. The youth centres which were established in 2004 by the Planned Parenthood Federation of America in collaboration with the state governments are located in Maiduguri metropolis (Borno) and Zaki Biam in Benue State. Eight (8) FGD sessions (four in each state youth center) were held. Out-of-school, in-school, youth in the vocations and youth involved in reproductive health peer education activities of Non – Governmental Organizations (NGOs) attending the YFCs participated in the FGDs. This choice was deliberate to ensure balanced views on the issues to be discussed. Four FGD sessions were attended by male youth and four by female youth; this was because the youth friendly centres have separate programs for the male and female attendees respectively.

Focus group discussion technique was chosen because the researcher was interested in studying perceived realities. According to Merriam (1994), a qualitative approach assumes that there is no one objective reality but multiple, constructed realities, and each individual's perspective is valid. As a complementary technique, FGD was found to be appropriate for this study because the naturalistic focus of this study allowed

individuals to reflect on their experiences and offer objective information which can make the result of the study dependable and valid.

Also, the technique enables a process of dialogic discussion and interaction between respondents and the researcher. To Kreugger (1994) and Morgan (1997) this technique is a reliable and cost-effective method for exploring the effectiveness of various intervention strategies for change. It also constitutes a potential stimulus for exploration of issues where individual interviews prove too isolating or inhibiting. As Field (2000) observed that The hallmark of focus groups is their explicit use of group interaction to produce data and insight that could be less accessible without the interaction found in a group. Furthermore, focus groups challenge the traditional researcher power base between respondents and researcher (Field, 2000). This is particularly important in view of the fact that the researcher is not a native. The FGD provided opportunity to address communication inhibiting factors(s)-associated with strangers in the initial phase of the research. Field (2000) further stated that the technique can be useful in providing feedback to the change agents. This feature became handy during the analysis phase of the study and helped the researcher in making recommendations for future interventions.

In this study, the FGD involved the researcher and the research assistants visiting each of the youth friendly centres, meeting with key staff and youth coordinators to solicit their cooperation and assistance in identifying the program participants for the purpose of reaching out to them in their different centres. The participants were requested to select their representatives in the centers for a focus group discussion. During the discussion, the mission, aim and purpose of the research team was explained to all participants. In each of the youth centres, the FGDs reflected below:

Table 3.2. FGD conducted across the states

Location	Category of youth	No, of session	No. of participants
Youth Friendly Centre Maiduguri	In-school female teenagers	One	Seven
YFC Maiduguri	In-school male teenagers	One	Eight
YFC Maiduguri	Out-of-school female teenagers	One	Seven
YFC Maiduguri	Out-of-school male teenagers	One	Seven
YFC Zaki-Biam	In-school female teenagers	One	Eight
YFC Zaki-Biam	In-school male teenagers	One	Seven
YFC Zaki-Biam	Out-of-school female teenagers	One	Seven
YFC Zaki-Biam	Out-of-school male teenagers	One	Seven

3.4.5: The Key Informant Interviews (KII)

The Key Informant Interviews (KII), were conducted among the Maternal and Child Health Coordinators of all 33 LGAs in the selected LGAs. Eighteen KII were conducted in Borno while fifteen were conducted in Benue yielding a total of thirty – three (33).. Key informant interviews are qualitative in-depth interviews with people who know what is going on in the community. The purpose of key informant interviews is to collect information from a wide range of people -including community leaders, professionals, or residents who have firsthand knowledge about the community. These community experts, with their particular knowledge and understanding, can provide insight on the nature of problems and give recommendations for solutions. (Carter, & Beaulieu 1992). KII can

take the form of face-to-face or telephone interviews. According to Carter and Beaulieu, key informant interview is best adopted when the researcher wishes to get information about a pressing issue or problem in the community from a limited number of well-connected and informed community experts; understand the motivation and beliefs of community residents on a particular issue; get information from people with diverse backgrounds and opinions and be able to ask in-depth and probing questions; discuss sensitive topics, get respondents' candid discussion of the topic, or to get the depth of information you need and to get more candid or in-depth answers.

Also KII help to obtain detailed and rich data in a relatively easy and inexpensive way allows interviewer to establish rapport with the respondent and clarify questions; provides an opportunity to build or strengthen relationships with important community informants and stakeholders and enable the researcher to raise awareness, interest, and enthusiasm around an issue. (Field, 2000). In each of the 33 LGAs, the KIIs was conducted on the Maternal and Child Health Coordinator at the LGA Health Department. The sub-themes captured in the FGD and KII after collecting the respondent's bio-data included

1. Views about outcome of pregnancy among women of reproductive age (probe for incidence of abortion, still births, neonatal deaths, maternal morbidity and maternal mortality)
2. Views about the socio – cultural practices that negatively affects maternal morbidity and mortality
3. Maternity services for pregnant women when they are pregnant and the patronage of Traditional Birth Attendants (TBAs) and herbalists
4. Prevention of unintended pregnancies

5. The types of reproductive health services available to youth and adolescents.
6. Extent of youth and adolescent access to sexual and reproductive health information and services (Probe for locations and types of services provided).
7. Availability of Reproductive Health Information Education and Communication (IEC) materials for the young persons
8. Views on demand rate of condoms and other contraceptives among young persons. (Probe for where contraceptives are obtained and by types)

3.5 Procedure for Data Collection

The researcher obtained due authorization letter of introduction from the department. Thereafter, twelve (six in each state) research assistants were recruited and trained on the questionnaires' administration, FGD procedure and KII exercises. At the instance of some Local Government Maternal and Child Health (MCH)Coordinators, courtesy visits were conducted to very high ranking traditional/religious leaders in some of the communities in order to notify them about the aim of the study and the need for the cooperation of community members with the research staff. Thereafter, the researcher along with the research assistants visited the health centres selected in all the local government areas within a period of four months to administer the instruments to the participants. The researcher with the assistance of the twelve research assistants explained all aspects of the questionnaires to the respondents. The respondents were assured of the confidentiality of the information supplied. Of the 1650 copies of the questionnaire administered 1590 were recovered out of which 1567 were suitable for data analysis. This represent 5percent attrition rate. All administered questionnaire and

records of interview and FGDs were collated within the same time frame for data analysis.

3.6 Methods of Data Analysis

Data collected from the survey were collated and analyzed using the descriptive statistics of simple percentages, mean and standard deviation for qualitative data. The four research questions and three hypotheses were tested with analysis of variance, multiple regressions, correlational matrix and chi-square, t-test and Pearson product moment correlation test at 0.05 level of significance

CHAPTER FOUR

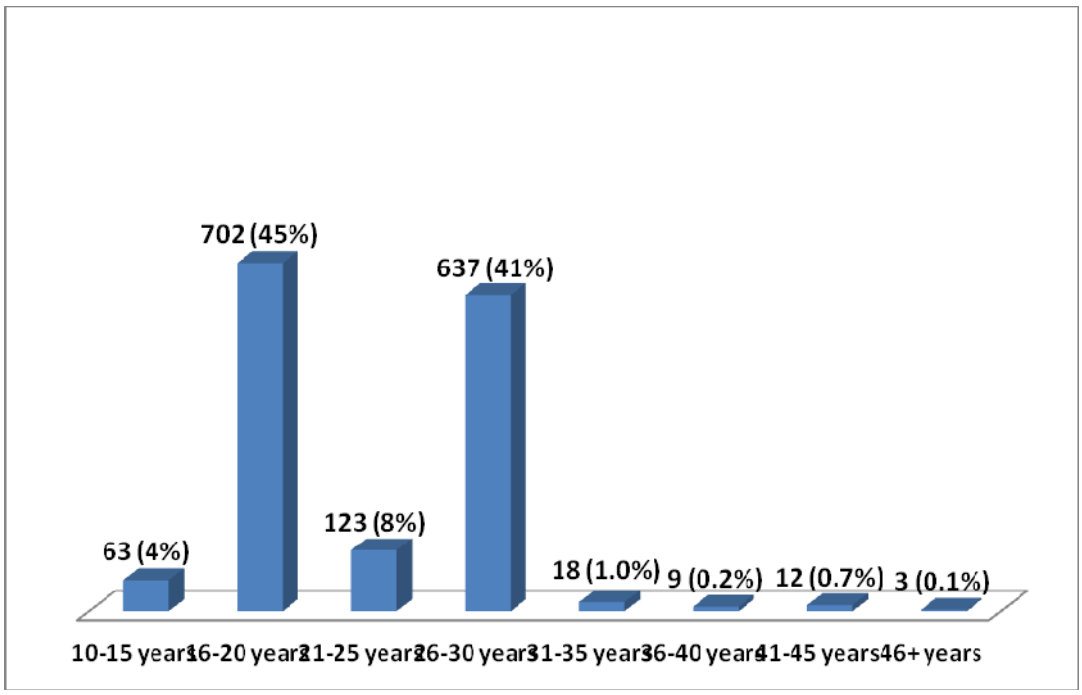
4.0 RESULTS AND DISCUSSION OF FINDINGS

This chapter contains the results of data collected and analyzed for the study. The first part of the presentation focused on the demographic data of the respondents as shown in tables, bar charts and pie charts. These include age of respondents, occupation, educational qualification, ethnic group, religion and marital status in order to determine the appropriateness of the respondents used for the study. The other part focused on discussion of findings on the socio-cultural factors of age at first pregnancy, occupation, marital status, religion, ethnic group, educational qualification, number of wives in matrimonial home of the married respondents, female circumcision, male dominance, wife inheritance, traditional birth practices, superstition, and early marriage and maternal morbidity and mortality respectively.

4.1 Results of Demographic Data of Respondents

Demographic data of the respondents consisted of age,occupation, educational qualification, ethnic group, religion and marital status. Below is the characteristics of the respondents.

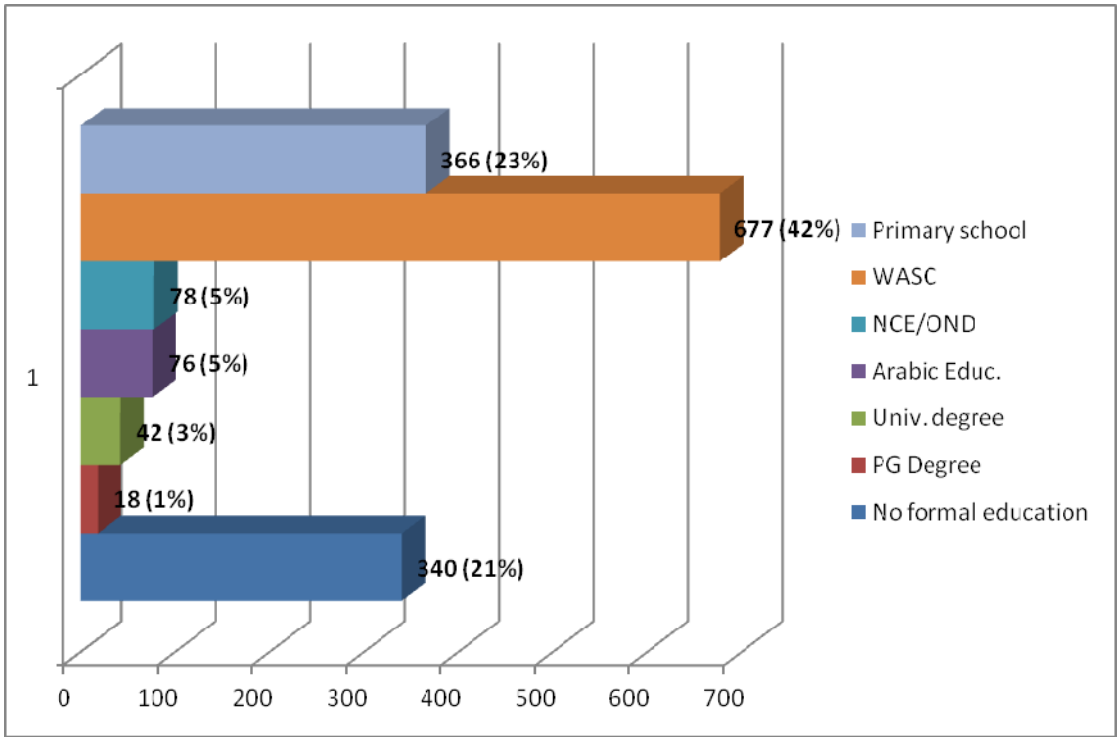
Chart 4.1.1: Frequency distribution of respondents by age



Source: Survey Data, 2009

Chart 4.1.1 showed respondents distribution by age. Majority of the respondents (45%) were between the age group of 16-20 years while 41% were within the age bracket of 26-30 years. A few (4%, 1% and 0.7%) of the respondents constitute 10-15 years, 31-35 years and 46-above years respectively. The implication that can be drawn from the distrtibution was that teenagers and nursing mothers attending antenatal clinics constituted the highest numbers that participated in the study. Findings from this cohort on maternal morbidity and mortality reflected the views of persons actively engaged in childbearing and youth friendly challenges because of the nature of participants involved in the study. This finding is in consonance with views expressed by Okonofua (2001) which stated that most information required to strategically intervene in maternal challenges in Nigeria can only be obtained from women in active child bearing ages because they bear the pains and know what is needed to prevent it.

Chart 4.1.2 Frequency distribution of respondents by educational qualification

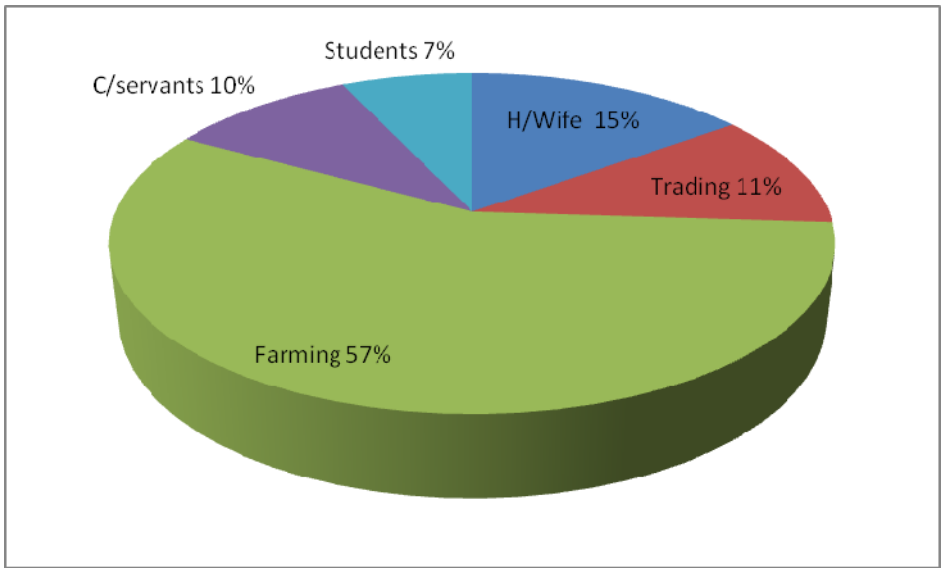


Source: Survey Data, 2009

The result of the frequency distribution of the respondents' educational qualification above showed that, majority (43%) of the respondents attained the WASC/SSCE ordinary level certificates while a significant number (21%) had only primary school certificate. However, high number (22%) of respondents did not have any formal education. Very few (9%) attended post secondary schools education. Close analysis of the findings showed some of the respondents (5%) attended Arabic school as well. The implication is that majority of the respondents (43%) either had no form of education or attended only primary school implying they were barely a little above illiterate especially when compared with their southern counterparts which showed that 40% of the girl child had at least lower national diploma or its equivalence (Oladepo,

2001). This is a factor that can predispose them to socio-cultural influence, which may constitute hindrance to preventive health behaviour and subsequently lead to maternal morbidity and mortality.

Chart 4.1.3: Frequency distribution of respondent by occupation

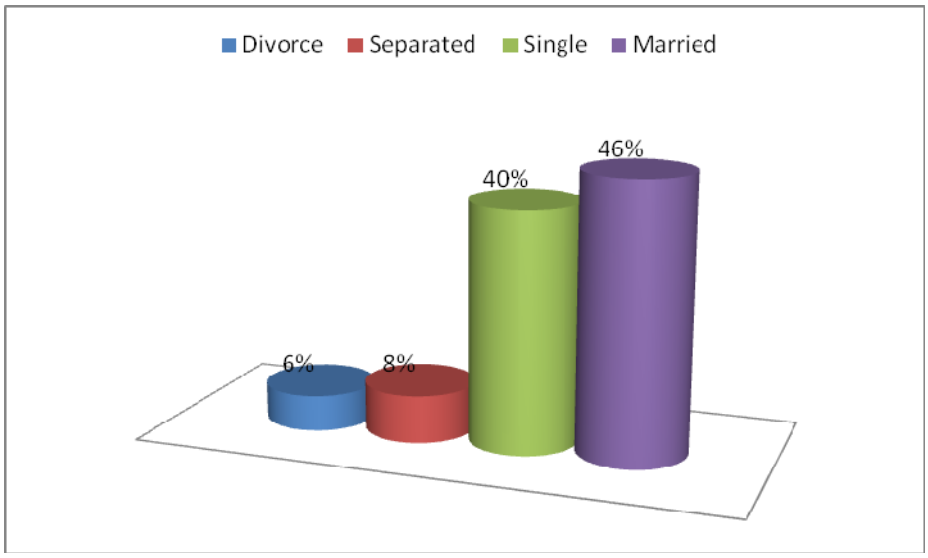


Source: Survey Data, 2009

The inference drawn from the occupational distribution of the respondents showed that majority of the respondents (57%). were farmers. Some 15 percent were, housewives while traders account for 11 percent. Only 10 percents of the respondents were civil servants while 7 percent constitute students. This finding is consistent with the educational status of respondents 86 percent do not possess any certificate beyond secondary school at the most and therefore not employeable to civil service cadre. This findings shows that most women within child bearing age also get involve in income generating activities to assist the home and ensure survival. Engagement of respondents in traditional occupations such as trading and farming as reported above also suggest that their exposure to modern safe motherhood initiatives will be limited and are more likely

to embrace traditional practices and beliefs all of which potentiate maternal morbidity and mortality. On the other hand the result also indicates that respondents were mostly secondary school students (43 %). This is a positive development which when carried forward could enhance positive attitudinal change to health seeking behaviour among the population in future.

Chart 4.1.4: Frequency distribution of respondents by marital status

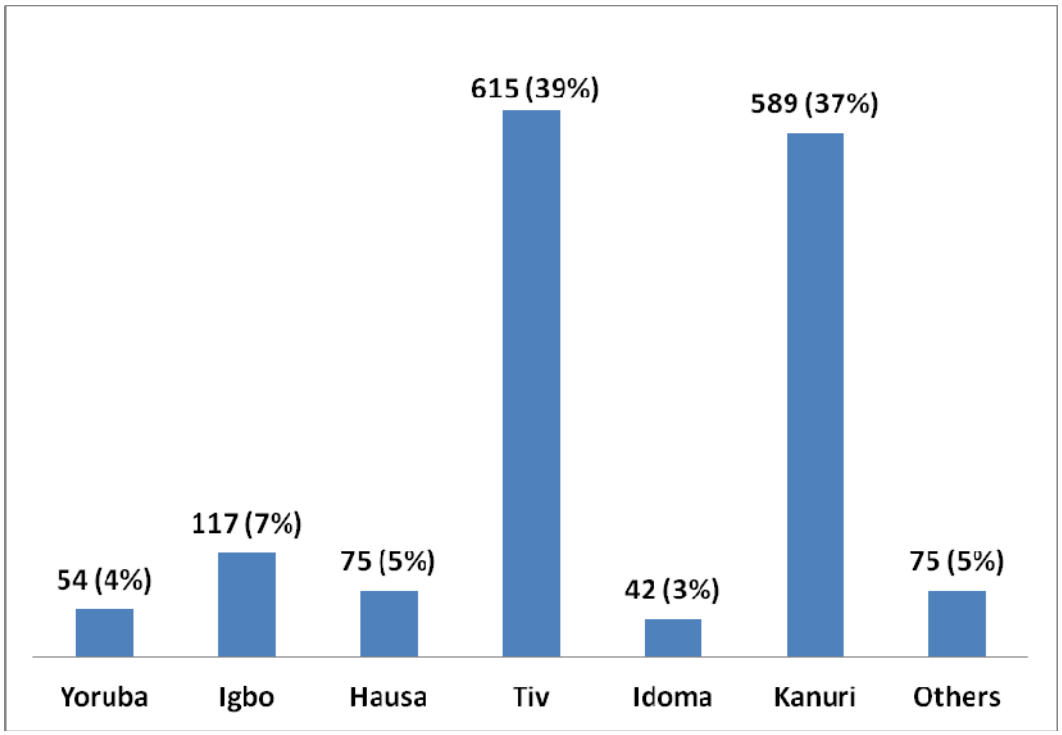


Source: Survey Data, 2009

Also associated with the respondents' personal characteristics is their marital status, a factor which is mostly linked with the cultural value system among the ethnic groups involved in this study. The chart above shows the distribution as well as graphic details associated with the distribution. It is obvious that the married (46%) and single (40%) of the respondents accounted for the highest number. percentage representation among the two groups. However, one could infer that, with most respondents accounting for 40 percent as single, it is evident that, the marriage institution no longer attracts the

values associated perhaps, due to prevailing social influence among women of child bearing age that compromises their attitude to marriage, yet they bear children under any circumstance. The implication that can be drawn from the distribution above is that there is high number of female adolescents who were already mothers. This corroborates Hodges (2001) findings which reported that fifty-four percent of North West and North East girls were married by age 15, and 81 percent were married by age 18. Early marriage reduced their access to education and decent vocation

Chart 4.1.5: Frequency distribution of respondents by ethnic groups

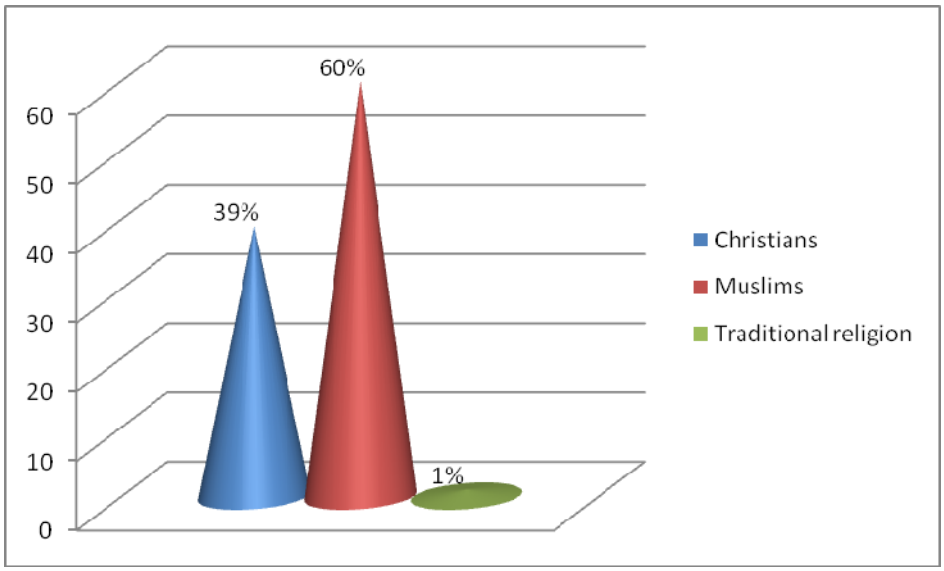


Source: Survey data 2009.

The survey shows that the highest number of respondents were drawn from Tiv (39%) and Kanuri (37%) tribes respectively. A few from Igbo (7%), Hausa (5%), Yoruba (4%) and Idoma (3%) also participated in the study respectively. Others

(Ibibio, Urhobo, Bini and Gbagyi) constituted 5 percent of the study participants. This implies that most of the sampled population emanated from Tiv (Benue state) and Kanuri (Borno state) which are the ethnic origins of the respective states. Analysis and findings from the study reflect the socio-cultural beliefs of the dominant tribes in relation to maternal morbidity and mortality.

Chart 4.1.6: Frequency distribution of respondents by religion



Survey, 2009

The study revealed that over half of the study populations (60%) were Muslims while nearly quarters (39%) were Christians. Obviously, this finding is a reflection of the religious inclinations of the North-East (Borno) and North-Central (Benue) respectively. This finding is at consolant with previous study reports (Okonofua, 2001, Ejembi, 2000 & Ogunkelu, 2004) which reported that studies conducted in Northern Nigeria have more Muslims than Christians while those in Southern Nigeria have more Christians than Mustlims. The implication of this study is that the views of the two major religions in Nigeria (Christians and Muslims) about maternal morbidity and mortality are reflected in this study.

4.2.0: Discussion of Major Findings

In order to measure the extent to which socio factors of (age at first pregnancy, marital status, occupation, ethnic group, religion, educational qualification and number of wives in matrimonial home) and cultural factors of (female circumcision, male dominance, wife inheritance, traditional birth practices, superstitions and early marriages) influence and predict maternal morbidity and mortality in the two states, the study was directed by certain research questions. This section provides results of the study.

4.2.1: To what extent will socio-cultural factors influence maternal morbidity and mortality in Borno and Benue states

Ho**:** there is no significant correlation between the components of social cultural factors (Age at first pregnancy, Occupation, Educational Qualification, Ethnic Group, Religion, Marital Status, and Number of Wives in Matrimonial Home, female circumcision, male dominance, wife inheritance, traditional birth practices, superstition, and early marriage) and maternal morbidity and mortality

Table 4.2.1a: Composite Contribution of socio-cultural factors to maternal morbidity and mortality in the sampled states

Model	Sum of Squares	df	Mean Square	F-value	Sig.
Regression	92260.714	16	5766.295	106.884	.000
Residual	83620.995	1550	53.949		
Total	175881.71	1556			

R = .724; R^2 = .525; Adj R^2 = .520

Table 4.2.1b: Relative socio-cultural factors influencing maternal morbidity and mortality in sampled states

Model	Unstandardized Correlation Coefficient		Standardized Coefficient	T	Sig.
	B	Std. Error			
(Constant)	13.163	1.406		9.363	.000
Age at first pregnancy	-1.028	.277	-.113	-3.711	.000
Occupation	-1.586	.217	-.131	-7.294	.000
Educ. Qualification	-.412	.236	-.035	-1.746	.008
Ethnic Group	1.920E-02	.157	.033	.122	.903
Religion	-1.707	.654	-.080	-2.608	.009
Marital Status	-.229	.463	-.044	-.495	.002
No of Wives in Matr	9.257E-02	.175	.013	.530	.009
Female Circumcision	-.404	.061	-.216	-6.670	.000
Male Dominance	2.268	.102	.641	22.270	.000
Wife Inheritance	-.431	.065	-.289	-6.659	.000
Trad birth Practices	-.755	.094	-.524	-8.045	.000
Superstition	.818	.069	.646	11.812	.000
Early Marriage	1.283	.099	.787	12.925	.000

Table 4.2.1c: Pearson Moment Correlation matrix showing socio-cultural variant in Borno and Benue states.

	M.M.	Age	Occup	Educ	Ethni	Reli	M.S	No of Wives	F.C.	M.D	W.I	T.P.	Super	E.M
M.M.	1													
Age	.060**	1												
Occu	.026**	-.606*	1											
Educ	.035**	.332**	-.006	1										
Ethni	.076	.588**	.403**	.100**	1									
Rel	.062**	.696**	.671**	.063*	.646**	1								
M.S.	.038**	.123**	.014	.159**	.038	.061**	1							
No w	.004**	.043	-.009	.018	.024	.060*	.660**	1						
F.C.	.071**	.219**	.147**	.194**	.248**	.208**	.051*	-.064*	1					
M.D	.448**	.172**	.232**	.195**	.200**	.167**	.085**	-.018	.684**	1				
W.I.	.225**	.102*	.149**	.124**	.130**	.032	.051*	-.003	.453**	.450**	1			
T.P.	.281**	.076**	.185**	.116**	.117**	-.005	.023	-.050	.456**	.437**	.885*	1		
Supe	.344**	.072**	.166**	.094**	.125**	-.006	.033	-.035	.327**	.361**	.820*	.317*	1	
E.M.	.389**	.093**	.134**	.066**	.091**	.005	.055*	-.001	.261**	.255**	.615*	.681*	.719**	1
X	32.95	2.94	3.62	1.96	4.65	1.39	1.47	1.02	28.32	16.09	2157	22.26	24.09	17.1
S.D.	10.60	1.17	1.55	0.90	1.63	0.53	0.56	1.45	5.67	2.99	7.09	7.35	8.36	9.50

**** sig. at 05 level;**

Table 4.2.1d: Test of differences between Benue and Borno States

Maternal Morbidity	N	Mean	Std. Dev.	Crit-t	Cal-t.	df	Sig.
Benue State	978	32.7290	10.7251	1.96	1.052	1565	.293
Borno State	589	33.3107	10.3818				

(Crit-t=1.96, Cal-t=1.052, df=1565, P>0.05 level)

Table 4.2.1a showed the extent to which socio-cultural factors influence maternal morbidity and mortality in Benue and Borno states. The findings reported that the joint effect of independent variables on maternal morbidity and mortality was significant ($F(16,1550) = 106.884$; $r = .724$, $r^2 = .525$, Adj. $r^2 = .520$; $P < .05$). About 53% of the

variation was accounted for by the independent variables. Table 4.2.1b showed the relative influence of socio-cultural factors affecting maternal morbidity and mortality in sampled states. The analysis were as follows: age at first pregnancy (β = -.113, P <.05), occupation (β = -.233, P <.05), educational qualification (β = -.035, P <.05), ethnic group (β = .033, P >.05), religion (β = -.086, P <.05), marital status (β = -.012, P <.05), number of wives in matrimonial home (β = .013, P <.05), female circumcision (β = -.216, P <.05), male dominance (β = .641, P <.05), wife inheritance (β = -.289, P <.05), traditional practices (β = -.524, P <.05), superstition (β = .646, P <.05) and early marriage (β = .787, P <.05) respectively. In the analysis above, twelve socio-cultural factors - age at first pregnancy, occupation, religion, educational attainment, marital status, number of wives in matrimonial home, female circumcision, male dominance, wife inheritance, traditional birth practices, superstition and early marriage were significant (P<0.05). Only ethnic group was not significant.

Table 4.2.1c; Pearson moment correlation coefficient matrix on relationships between maternal morbidity and mortality and socio-cultural variables of age at first pregnancy, occupation, educational qualification, ethnic group, religion, marital status, number of wives in matrimonial home, female circumcision, male dominance, wife inheritance, traditional practices, supervision and early marriage respectively. Analysis revealed significant relationships between maternal mortality and all the independent variables accordingly. While about 47 percent of the independent variation was accounted for as significant in Benue state, 83 percent of the independent variables was accounted for as significant in Borno state respectively.

In comparing the influence of the socio-cultural factors in the two states, table 4.2.1d showed that there was no significant difference (Crit-t = 1.96, Cal.t = 1.052, df =

1565, P >.05) even though the impact of the factors were more pronounced in Borno (x = 8.74) than in Benue (x = 4.31). The null hypothesis was therefore accepted.

The analysis showed that six social factors (age at first pregnancy, occupation, marital status, religion, number of wives in matrimonial homes and education qualification) and six cultural factors (female circumcison, male dominance, superstition, wife inheritance, traditional birth practices and early marriage) had joint and relative significance while ethnicity was not in Benue and Borno States.

The FGD and KII complemented the questionnaire designed to gather data for the study. The findings from the qualitative data provided further insight to the quantitative results. One of the participants about 32 years of age from Logo community in Benue State reported that:

> *Having given birth to six children, my sister of about 28 years died as a result of prolong labour which was to be the 5th child for her second husband who inherited her after the death of her first husband with whom she had six children, all female.* **Logo/FGD/female participant/Benue state**

Related to this concern was a young girl of about 17 years from Bassa village in Borno who said she was married off to her husband at the age of 12 years. According to her

> *It was by divine medical intervention that I did not die during my first conception and subsequent delivery due to complications arising from child birth conducted without medical attention till now, I still go for regular medical check as a result of birth injuries. I was only 12 years then.* **Bassa/FGD/Teenage mother/Borno state**

A health personnel with one of the Non-governmental Organizations (NGOs) NKST RH project in Benue noted that,

> *Most of the challenges faced by the professional health service providers goes beyond direct medical factors; the patronage of traditional birth attendants by women of child bearing age even at the risk of their lives……lack of funds to afford basic necessities of baby delivery kits forces many women in labour to patronize traditional birth practices with all the risks associated are major factors.* ***.Mkar/KII/Nurse/Midwife/Benue state***

The Focus Group Discussion conducted was consistent with statistical findings as it provided comprehensive insight to the contribution of social factors to maternal death. A male FGD participant in Gwoza, Borno state also corroborated the survey data thus:

> *My father married four wives and each of his wives has five children. At 22 years now my father has never paid my school fees or medical bills whenever l am sick. It is only my mother that provides money for our upkeep. The most annoying part is that my father always comes to eat the best part of the food after my mothers have worked hard to provide the meal.* **Gwoza/FGD/male participant**

Several studies (WHO 1992, 2005, 2006; Ejembi 2002, & NDHS 2004) agreed that social factors influences but are not significantly predictive of maternal morbidity and mortality in Nigeria. According to WHO 1992 besides medical (direct) causes of maternal mortality, strong cultural variance across developing countries are significantly predictive of maternal death while social factors merely potentiate the existing cultural issues in the communities. Owumi 2002 reported that most women irrespective of age and occupation rely on their husbands to make decision on issues concerning their health. The culture of silence that pervades most homes cut across age, occupation, educational qualification of the woman and number of wives in the home. According to Owumi, the level of submissiveness among married women in most African culture does not respect the age or vocation of the woman.

National Demographic and Health Survey (NDHS, 2004) reported that 65 percent of women with adequate and comfortable income level still rely on their spouses to make decision concerning their health. Sundari, 1999 stated that because of the high value placed on marriage institution, women are made to believe that failure to live successfully in the matrimonial home implies failure in other endeavours of life. UNFPA (2002) reported that educated mothers seek health care more readily compared to

uneducated. Several other studies (Oladipo, 2006; Okonofua 2000) significantly implicated social factors of age, occupation and education as contributing to maternal morbidity and mortality in Nigeria. Oladipo reported that 45 percent of working class mothers do not depend on their husbands to seek comprehensive health care in South Western Nigeria. The same study also reported that age in marriage significantly influence decision to seek health in the event of ill-health. Older women in marriage are more likely to readily seek health care independent of their spouses compare to younger mothers.

Several other research findings (Action Health Incorporated (AHI), 2007; Ayeni, 2006; Ejembi, 2002 and Alan, 2000) specifically reported that in northern Nigeria social factors such as age, occupation, education and marital status play significant roles in the choice women make particularly in decision to access medical care during pregnancy and delivery. In a research on negotiation skills conducted in Zaria Nigeria, Ejembi (200) reported that 52 percent of northern women with income generating skills deliver in government hospitals as against 10 percent of those solely dependent on their spouses to cater for the family. In similar research findings in Makurdi, Ayeni, (2006) stated that educated women are better informed about maternal health issues and are more willing to seek health care compared to uneducated women of child bearing age. According to the report, educated mothers readily adopt a behaviour based on information provided six times faster than uneducated mothers.

Adams and D'Souza (2004) stated that women who are in polygamous relationship are more likely to receive less care and attention compared to those in monogamy. According to the report, significant number of women in polygamous homes

assume economic responsibilities of their homes including the care of their children and are less likely to have their hospital bills paid by their spouses

4.2.2: To what extent will the components of social factors (age at first pregnancy, occupation, educational qualification, ethnic group, religion, marital status and number of wives in matrimonial homes) correlate with maternal morbidity and mortality in Borno and Benue states.

HO: There is no significant correlation between the components of social factors (Age at first pregnancy, Occupation, Educational Qualification, Ethnic Group, Religion, Marital Status, and Number of Wives in Matrimonial Home) and maternal morbidity and mortality.

Table 4.2.2a: Composite Contribution of social factors to maternal morbidity and mortality in the sampled states

Model	Sum of Squares	df	Mean Square	F-Value	Sig.
Regression	2949.002	7	421.286	3.798	.000
Residual	172932.71	1559	110.925		
Total	175881.71	1566			

R = .129; R^2 = .017; Adj R^2 = .012

The result on table 4.2.2a is reflective of the fact that social factors of occupation, age at first pregnancy, religion, marital status, educational level and number of wives in matrimonial home significantly influence maternal morbidity and mortality which was evident by p-value less than 0.05 statistical significance (R = .129; R^2 = .017; Adj R^2 = .012; $P < .05$) which is significant to the measure of the scores. Besides, the R-value of 0.010 implies a joint contribution of 2 percent to the prediction of maternal morbidity and

mortality. This prediction is above the probability level (0.05) which by inference implies that the joint prediction was not merely due to chance. In other words, the social factors investigated jointly predicted (2percent) the existence of maternal morbidity and mortality. Thus, the null hypothesis was therefore rejected. The analysis agreed with the views of FGD participants for the study. A participant in the female FGD conducted in Zaki Biam stated:

> *As l grow older, the rate of disagreement with my husband decreased couple with the fact that my trade help me to supplement my husband's income. When you can earn your money, it is easier to seek medical care.* **Zaki Biam/FGD/female participant/Benue state**

In a key informant interview with a community chief in Gwoza, the chief stated thus:

> *As a chief I have found out that women that are educated are less likely to visit native doctors for care. I support women education to prevent maternal death in our community.* **Gwoza/KII/Community chief/Borno state**

Several studies (WHO, 2000; Asemota, 2002; Adeosun, 2003 & Okoeghale 2010) corroborated the influence of social variables as contributory factors to maternal death. WHO, 2000 reported that ingnorance and illiteracy significantly influence increased maternal death in developed countries. Asemota, (2002) in a research conducted at Zaria, reported that women with gainful employment as well as those with a form of skill enrolled earlier in antenatal clinics and deliver in the hospitals compared to housewives with less education. Okoeghale, 2010 reported that northern Nigeria has three times more negative maternal health indicators compared to southern Nigeria. To him, social cultural issues significantly influence high rate of maternal death in northern Nigeria. The more socially and economically advantaged people are, the better their health. Years of formal education are a well-recognised indicator of social position and have been frequently used in international surveys to explore social inequalities (Morrisson, 2005).

Abba, 2009 however believed that direct medical causes are greater danger to maternal death. He reported that direct medical causes as heamorrhage, sepsis, eclampsia, malaria and the likes constitute greater challenges while social cultural influence are of less effect.

Relative social factors affecting maternal morbidity and mortality in Benue and Borno states

The relative social factors of occupation, age at first pregnancy, religion, marital status, educational level, number of wives in matrimonial homes and ethnicity affecting maternal morbidity and mortality in Benue and Borno states shall be discussed below:

Table 4.2.2b: Extent to which occupation affect maternal morbidity and mortality in the sampled states

Ho: There is no significant relationship between Maternal Morbidity and Occupation

Variable	N	Mean	Std. Dev.	Crit-t	Cal-t	Rel.	P-Value	Remark
Maternal Morbidity	1567	32.7290	10.7251	1.96	2.019	-.094**	.000	Sig.
Occupation		31.4294	7.0777					

** sig. at .05 level, (R=094; β = .131, p< 0.05)

It is shown in the above table that there was a negative significant relationship between Maternal Morbidity and Occupation (r = -.094**, N= 1567, P < .05). The null hypothesis was therefore rejected. Occupation of women of reproductive age influenced their access to health care service. With increased rate of employment of women by government, the rate of maternal morbidity and mortality correspondingly reduced. (UNICEF, 2000). Increased skill empowerment has direct relationship to women access to hospitals for maternal health.(WHO, 2000). Gainful employment increased negotiation power of the housewife and remove barrier to health provision (Ladipo, 2007).

However, most housewives particulary in Borno state are not 'permited' to work and earn a living because the husbands insist they remain in '*purdah'*-a religious obligation that keeps them indoors. Ejembi (2000) in a study on gender empowerment in northern Nigeria, reported that more than 64% of married women in the north had less than secondary education and a little over half (56%) have never worked to earn a living.

With WHO (2008) indication that northern Nigeria has the highest number of maternal Morbidity and mortality in Nigeria, one contributory factor could be lack of access to gainful employment to cater for homes. The religious practice of *purdah* among Muslims dorminated northern Nigeria further increased the risk of more women denied employment that could cause them to be exposed to the society. Ladipo, 2006, stated that even among the educated married women in northern Nigeria, there is deliberate decision by husbands to ensure they do not expose their wives to societal influence. WHO, 2001, reported that most women in purdah are either delivered by female health providers in their homes or traditional birth attendants who are regarded as part of the community.

These findings compliment the qualitative data from the FGD and KII conducted in the study. A female health provider from Gboko Benue who participated in the KII stated thus:

> *My experience as a clinician shows that more women who are gainfully employed visit the clinic for maternal and child health care. You can hardly see married women accompanied by their husbands during labour. It is better for women to work when they are married to empower them.* **Gboko/KII/female health worker/Benue state**

In an FGD conducted among community members in Bama, Borno state, a woman married with seven children stated thus:

> *I am married with seven children and I have never worked. My husband provides all what we need at home. All my children were delivered outside the hospital because my husband insists there is no need to waste money in the hospital when l can deliver at home. The last delivery l almost died.* **Bama/FGD/WRA/Borno state**

Table 4.2.2c: Extent to which age at first pregnancy affect maternal morbidity and mortality in the sampled states

Ho:There is no significant relationship between Maternal Morbidity and age at first pregnancy

Variable	N	Mean	Std. Dev.	Crit-t	Cal-t	Rel.	P-Value	Remark
Maternal Morbidity	1567	32.0427	12.3375	1.96	2.119	.119**	.000	Sig.
Age at first preg.		25.1890	2.3740					

** sig. at .05 level, (R=119; β = .113, p< 0.05)

Table 4.2.2c showed the relative contribution of age at first pregnancy (r = -.119, N= 1567, β = .113 P < .05). The null hypothesis was therefore rejected.

United Nation Funds for Population Activity (UNFPA), 2001, reported that age at first pregnancy significantly affect complications arising from child birth. According to the report, pelvic maturity is essential for successful child birth. WHO, 2002, reported that 75% of Vesicle Vigirna Fistula (VVF) in northern Nigeria arise due to third degree tear from immature pelvis and pushing against undilated cervix. The practice of child birth at early age among northern women of child bearing age negatively impact on the maternal health indicators (Shittu, 2003).

In a related study, Adeoye, 2010, reported that the emotional requirements needed to go through pregnancy and delivery are less among underaged women of child bearing age. Shammah, 1999, stated that pregnant women have labile and unstable emotions but with increasing age, emotional changes continue to increase. The significance of age at first pregnancy is not only reflected in the maturity of the pelvis but in the ability of the pregnant woman to withstand the emotional stability required from conception to delivery (WHO, 2002)

In Benue state, Abdul (2001) reported that 54% of teenagers in the region had been pregnant. Several studies (Pate, 2002; Idoko, 2002; & Ojomo 2010) traced teenage pregnancies to increased rate of maternal morbidity and mortality in northern Nigeria. In a study in Makurdi, Idoko, 2009, reported 22% maternal death as a result of teenage pregnancy. In a similar finding, Pate, 2002, reported that 20% of maternal morbidity in Zaria were traceable to teenage pregnancy. There was a significantly higher risk of death among those aged below 15 years and over 35 (compared with those aged between 20 and 25 years(Saffron 2011)),

Findings from the qualitative data supported the quantative findings as well as existing literatures. The female participant in FGD conducted at Makurdi stated thus:

> *I am a student, but I had a baby outside marriage when I was 13 years old. My parents abandoned me because I could not tell them the person that impregnated me. I suffered during child birth and I almost died; it was just God that had mercy on me.* **Makurdi/FGD/female participant/Benue state**

Several female participants that participated in the study FGD in Benue state revealed they either already had a baby or had been delivered of a baby. One of the health personnel that participated in the KII in Zaki Biam stated thus:

> *Teenage pregnancy is a serious challenge in this state. Age at pregnancy is very critical. We have had to refer some teenagers to tertiary hospitals because they were as young as 12 or 13 years and were pregnant. Some have either developed complications or die in the process of child birth.* **Zaki Biam/FGD/KII/Benue state**

The Muslim dominated state of Borno also had the challenge of underaged married teenagers who were given for marriage at a younger age of 9 years or below. The female FGD conducted at Biu, Borno state also revealed similar challenge as Benue state. One of the FGD participant stated thus:

So many women in this state drain urine from the private part because of problem with child birth. I am 13 years, but l refused to get married and my parents are not happy with me at all. They prefer to have me under a man than for me to go to school. **Biu/FGD/female participant/Borno state**

Nigeria is a signatory to the 1998 Abuja declaration of Gender equality where underage marriage was strongly discouraged. However, almost two decades of that declaration, age at first pregnancy still complicate maternal morbidity and mortality in Nigeria. Higher risk of maternal mortality was associated with maternal age at birth over 35 (1.79:1.29,2.47), not being married or cohabiting (1.60:1.24,2.07), at least one more previous birth (1.26:1.21,1.31) and at least one unit lower national public expenditure on health care (1.03:1.02,1.04).(WHO, 2001)

Table 4.2.2d: Extent to which religion affect maternal morbidity and mortality in the sampled states

Ho: There is no significant relationship between Maternal Morbidity and Religion

Variable	N	Mean	Std. Dev.	Crit-t	Cal-t	Rel.	P-Value	Remark
Maternal Morbidity	1567	32.9477	10.5978	1.96	2.513	.516**	.000	Sig.
Religion		21.0319	8.1435					

** sig. at .05 level, (R=516; β = .080, p< 0.05)

The above table showed significant statistical between Maternal Morbidity and religion (r =.516**, N= 1567, P <.05). The null hypothesis of no significant relationship between maternal morbidity and religion was therefore rejected. Religion as a social factor significantly influence maternal morbidity and mortality in Benue and Borno states respectively. The qualitative data conducted agreed with the findings. Key informant

interview conducted with a clergyman in Logo, Benue state showed insight on why religion is a social factor influencing maternal morbidity and mortality in the state. According to him:

> *The church believe in the faith of healing and there is nothing impossible for God to do. In the event a parishioner cannot afford the cost of hospital bills, churches have prayer homes and hospitals where a woman can deliver free of charge and still obtain the same result as the hospital.* **Logo/KII/Clergyman/Benue state**

Most churches cannot understand why a teenager should use any form of family planning or engage in sexually related activities when she's not married. Ladipo, 2009, stated that sex is a natural instinct which cannot be completely eliminated including in teenagers and unmarried. Idoko, 2009, suggested that health providers should adopted professional approach to counseling adolescents who engaged in illicit sex rather than their beliefs.

A teenage girl who participated in FGD stated thus:

> *My father is a pastor and when I got pregnant he drove me away from home because it was shameful for the daughter of a pastor to be pregnant outside marriage. The baby died during childbirth and I was in the hospital for two weeks due to complications.* **Makurdi/FGD/female participant/Benue state**

The belief that prevent adolescents from having access to contraceptives further increase the risk of unintended pregnancy and sexually transmitted infections (WHO, 2002).

Religion as a contributing factor on maternal morbidity and mortality was also corroborated in the muslim faith. Islam does not encourage family planning methods for unmarried women. A muslim cleric in Maiduguri during KII stated thus:

> *Though Islam is a religion that believe in procreation, we discourage women who are not married from sexual activities and contraception.* **Maiduguri /KII/Muslim cleric/Borno state**

WHO (2000), reported that abortion and post abortion complication contribute 40% of maternal death in Nigeria. With increased strong advocate against abortion by the church and Islam, religion could be a factor to maternal morbidity and mortality in Nigeria (WHO, 2000).

Table 4.2.2e: Extent to which marital status affect maternal morbidity and mortality in the sampled states

Ho: There is no significant relationship between Maternal Morbidity and Marital status.

Variable	N	Mean	Std. Dev.	Crit-t	Cal-t	Rel.	P-Value	Remark
Maternal Morbidity	1567	32.9477	10.5978	1.96	3.425	.250**	.008	Sig.
Marital status		28.9407	9.6849					

** sig. at .05 level, (R=516; β = .044, p< 0.05)

The table showed significant relationship between Maternal Morbidity and marital status (r = .250, N= 1567, p<.05). The null hypothesis was therefore rejected.

The quantative data was complimented by FGD and KII conducted among married couples in the study. Most of the married girls who were interviewed, particularly in Borno state, had their marriages arranged for them. For the most part, girls' fathers were instrumental in making the arrangements but grandmothers and the prospective husbands were also involved. Some girls readily accepted the arrangement that was being made for them, often describing the decision as an arrangement by Allah:

> ***Interviewer***. *How did you get your husband - was he selected for you?*
> ***Respondent.*** *No he wasn't selected for me. It was Allah who gave him to me. I was with my mother... he came looking for me... It was Allah who arranged it and when my father introduced me to him, he later asked me if I liked him and I said yes and he gave me to him...*
> ***Interviewer***. *Looking at you at that time, do you think it was right for you to marry?*
> ***Respondent***. *Yes, it was right for me*
> ***(Divorced girl, age 17, married at 13 to 18 year old boy, never been to school)***

A number of girls tried to resist the arranged marriage. Girls described fathers threatening them or their mothers if they did not accede to the marriage.

> *There is nothing I could have done because my father said if I refused, he will throw my mother out of the house unless I agree to marry. My auntie promised me that she is going to do everything I need so she has been sending me money and even assured me that she is going to send me to Mecca to perform pilgrimage and come back.**(Married girl, age 14, married at 13, 2 pregnancies, 1st child died, 3 years education, 2 co-wives-Gwoza, Borno state)***

Among girls who participated in qualitative interviews, many described the timing of marriage as dictated by tradition or by religion. In addition, some observed that girls who attend school tend to marry later than those who do not:

> *Every parent would like to see the daughter married. It's normal practice among the Hausa that at the age of 15 or so, one should get married. This reduces the burden on the family and brings peace to the family.* ***(Married young women, age 22, married at 15, polygamous, completed Junior Secondary School 3 [JSS])***
>
> ***Interviewer.*** *Are there some people who still marry like that [early] now?*
>
> ***Respondent****. Yes there are people who do [marry early] especially those who have not gone to school... there is delay [for those who go to school] because you must complete the school before.* ***(Married young woman, age 22, married at 18, Senior Secondary School [SSS] education, 1st child died, 2nd child two years, divorced at age 20)***

A study conducted at Zaria (Ejembi, 2002) reported that husbands alone make most of the household decisions including where the wife should deliver the children; only a few percentages make decisions by themselves or jointly with their husbands. Fatusi (2002) reported higher maternal morbidity among adolescent married couple compared to others. The incidence of Vesicle-Vagina Fistula (VVF) was higher among adolescent married girls compared to other age brackets. Shittu (2000) reported that

men's decision making was more pronounced in polygamous households, with significantly more men in polygamous marriages than monogamous marriages making decisions on visits to relatives and food to be cooked and permission to visit the hospital for treatment on the husbands. Those not married or cohabiting had almost twice the risk of death of those who were (Saffron, 2011).

Table 4.2.2f: Extent to which educational qualification affect maternal morbidity and mortality in the sampled states

Ho: There is no significant relationship between Maternal Morbidity and educational qualification

Variable	N	Mean	Std. Dev.	Crit-t	Cal-t	Rel.	P-Value	Remark
Maternal Morbidity	1567	32.7290	10.7251	1.96	2.654	.426**	.000	Sig.
Educ. Qualification		15.2730	3.3399					

sig. at .05 level, (R=516; β = .035, p< 0.05)

The above table on educational level and maternal morbidity showed that there was a negative significant relationship between Maternal Morbidity and educational level (r =.426**, N= 1567, P < .05). This finding rejected the null hypothesis formulated.

The FGD conducted agreed that education of the girl child significantly predict decision to seek health and prevent maternal morbidity and mortality in the sampled states. To further provide qualitative information on effect of social variables, some of the views of health care providers who participated in the key Informant interview are reported here:

A key stakeholder in Bama had this to say:

> *Education of the girl child is very valuable and is believed to be stabilizing homes. We have seen that most girls that are educated before marriage make better wives and are more respected by their spouses. In this community most women that die from child birth are mainly those without any form of education.* **Bama/KII/Nurse/Midwife/Borno state**

Also, another contributor in Makurdi, Benue state stated thus:

> *Here in this community, women respect their husbands and obey them to the letter even if you are a professor or minister, you must submit to your husband. Women do not just go anyhow to hospital or travel without the permission of their husbands.* **Makurdi/KII/Medical Doctor/Benue state**

A female participant in Mkar FGD group summed up her view thus:

> *I am not yet married but my mother always tell me that no matter the situation l must respect and obey my husband to be. Women that divorce for any reason has failed in life and will not be received back in their home.* **Mkar/FGD/Female Teenager/Benue state**

Most FGD groups conducted attributed women inability to access comprehensive maternal care to lack of education and meaningful vocation. They believe that age at marriage is not as significant as women's ability to have a means of livelihood and best of education in relations to seeking maternal health care and prevent maternal death. Among the FGDs conducted in Borno state, one of the discussants stated thus:

> *My mother married at age 14 and gave birth to my elder brother at age 17 years. Because my Dad is an educated person she enrolled my mother in school and today my mother has National College of Education (NCE) certificate and is teaching in one of the primary schools in Maiduguri. All five of us were delivered in the Primary Health Care Centre.* **Maiduguri /FGD/ female participant**

Maternal health studies (Oyemakinde, 2007; Okonofua 2008, FMOH, 2004 & UNFPA 2009) supported the girl child education as a measure of reducing the rate of maternal death. The reports emphasised that education provide the courage to decide to seek health services without waiting for the spouse to make that decision. Oyemakinde

(2007) while presenting a paper on maternal health seminar, reported that 65% of married women who attained up to secondary education will attend orthodox health facilities without waiting for permission from their spouse compared to only 12% who attained up to primary education or less. Okonofua, (2008), in a study in Benin on Teenage Pregnancy in Southern Nigeria, reported that rate of teenage pregnancy was very high (75%) among secondary school drop-outs compared to those with secondary schools and above (20%).

UNFPA (2009), stated that education of the girl child has a direct relationship in the reduction of maternal morbidity and mortality. According to the report, educated woman have delayed marriage, utilize contraceptive methods to delay pregnancy and visit health facility for maternal health. Saffron, 2011, reported that in the adjusted models, women with no education had 2.7 times and those with between one and six years of education had twice the risk of maternal mortality of women with more than 12 years of education Lower levels of maternal education were associated with higher maternal mortality even amongst women able to access facilities providing intrapartum care (WHO, 2007). More attention should be given to the wider social determinants of health when devising strategies to reduce maternal mortality (WHO, 2007).

Studies show that people with progressively more advanced levels of education have better health and longer lives than those without (Morrisson, 2005). But it has been argued that women's education should not be treated merely as a proxy for the social determinants of health but as an important force in its own right (Nwachukwu,2009). Women's educational levels (relative to those of men) have been found to be associated with maternal death (Arulogun, 2009). There is a positive relationship between levels of maternal education and health service use (Thaddeus, 2009) even in adverse family or

socioeconomic situations (Okonofua, 2005). Furthermore, lack of education is highlighted as one of a number of stressors (along with limited money and decision-making power) affecting women during pregnancy and childbirth, creating vulnerability and increasing the likelihood of negative outcomes (Fillipi, 2006). It is possible that much of the health disadvantage associated with low levels of maternal education can be addressed through universal access to quality health services (WHO. 2001)

Education may have both a direct and indirect relationship with maternal mortality. Increasing levels of educational attainment are likely to enhance the capacity of women to obtain, process and understand basic health information about the benefits of good prenatal care and the reproductive health services needed to make appropriate health decisions.(Okonofua, 2005). For example, more educated women may be less likely to accept traditional explanations for life and death and instead take on broad information about birth spacing, the signs of pregnancy complications and the need to improve their nutritional status to reduce the risk of iron deficiency anaemia, all of which are of key importance in the drive to reduce maternal deaths. (Okonofua, 2005). Furthermore, more educated women are likely to be more confident about asking questions about their health care needs and are more likely to be listened to by health care professionals (Nwachukwu, 2009). The indirect relationship between educational levels and maternal mortality may be ehnanced through increasing women's self-esteem and thus their empowerment to make health related decisions. Women's improved access to education is also indicative of their more equal position in society [Arulogun, 2009]. The importance of progress on MDG3 (to promote gender equality and female empowerment, including with regard to education) for the achievement of MDG 5 should not be underestimated [The Lancet, 2010; Okojie, 2010; Green, 2005 & Yandev,2004).

The relationships between education and status provide more highly educated women with more autonomy to make decisions about the number of children they have, their nutrition during pregnancy and their access to health care (Arulogun,2009). The education of women changes the balance of familial relationships which has profound potential for beneficial effects on maternal mortality. The increased risk of maternal mortality among non-married/cohabiting women is indicative of the ways in which women's social and economic disadvantage combine with attitudes towards childbearing outside marriage to affect women's lives (Adeosun,2009).

Level of education has a strong correlation with seeking and accessing health care, and education beyond primary school has a significant impact. With education, women are less likely to engage in harmful practices; beliefs in supernatural causes of illness or death are reduced and accessible and functional health facilities are more likely to be used resulting in safer pregnancy and childbirth (Harrisons, 2007)

Table 4.2.2g: Extent to which number of wives in matrimonial home affect maternal morbidity and mortality in the sampled states

Ho: There is no significant relationship between Maternal Morbidity and Number of wives in matrimonial home

Variable	N	Mean	Std. Dev.	Crit-t	Cal-t	R	P-Value	Remark
Maternal Morbidity	1567	32.9477	10.5978	1.96	2.452	.359**	.000	Sig.
No. of wives in Matrimony		21.7077	6.8999					

sig. at .05 level, (R=516; β = .013, p< 0.05)

The table showed that there was a negative significant relationship between Maternal Morbidity and Number of wives in matrimonial home (r = .359**, N= 1567, P < .05). The

signified that the formulated null hypothesis was therefore rejected.

The findings showed that 15.8% of research participants were in a polygamous marriage with women as young as 15 years old. As wives in patrilineal society, their value is the ability to have children, contributing to maternal morbidity and mortality related high parity (Beischer, 2002), since with every marriage a woman feels obliged to produce children for the new husbands in such a family system. Meaning that women in polygamous marriages are more prone to maternal morbidity and mortality as they may not want to use family planning services in order to give more births to please their husbands and matain their value as women. In addition, considering the economic status of the communities, involvement in polygamous marriage may have inadequate material support as resources are shared between several wives.

Polygyny is one of the cultural practices underlying various facets of reproductive health, with implications for safe motherhood. Polygyny is a common cultural practice among the Muslims of Northern Nigeria (Abdul, 2001), According to NDHS 2008, 46% of married women are in polygynous unions. Some of its implications are frequency of exposure to sexual activity and fertility with resultant maternal and child health complications. Idoko (2002) also highlight other consequences of polygyny to include intense competition among cowives to fulfil the reproductive expectations of their husbands and his family. The number of children to which they give birth (in particular male children) affects the esteem and value placed on the woman in the household and may also directly determine the size of her monthly allowance. Hence, large numbers of children and the competition among co-wives for a share of limited resources and emotional support from the husband have adverse implications on safe motherhood, maternal morbidity and mortality. (Ojomo, 2010).

Fatusi (2008), reported that large family size reduces women's fundamental rights and expose them to poor maternal care. The probability of women from polygamous relationship to suffer from maternal morbidity is twice higher than that of one wife in a home. Recent studies in Northern Nigeria (Asemota, 2002; WHO, 2006; Anya, 2008 & Abba, 2009) suggest that it is often men rather than women who make the decision to have more children, that is, men's views are more influential than women's views in making family decisions, Studies among some major ethnic groups in Borno State (Gazali, (2006), Waziri,(2004), and among the Hausa of Kano state (Adamu (2001) indicated that men, because of their position in a patriarchal society, make it difficult for the women to regulate and control birth rate or in short adopt family planning without the consent of their husbands who usually oppose the idea. This increased the rate of maternal morbidity and mortality in the region.

Among some of the major ethnic groups in Borno state, particularly the Kanuri, Shuwa and Ba'aru, large family symbolise higher status for members of the family. Politically, it makes the family more relevant and religiously, it gives them the satisfaction of fulfilling an obligation – to marry and reproduce, so that the *ummah*-(followers of Prophet Mohammed) will increase (Gazali, 2006 and Waziri 2004). Royston, (2009) reported that in northern Nigeria women are still under pressure to bear many children despite the risks associated with the cultural demand and the attendant maternal health implications. The reasons for this among others are gender identities and husbands' recognition in the home. This also increased the maternal mobidity in the region, Family Care International, (2001) reported that, for women in many parts of the world, the surest route to social and economic security is to bear many children, preferably sons. Wong (2007) observed that having many children causes resources constraints, which have a negative effect on health care utilization

4.2.3: To what extent will the components of cultural factors(early marriage, superstition, male dominance, traditional birth practices, wife inheritance, and female circumcision) correlate with maternal morbidity and mortality in Borno and Benue states.

H0 3: There is no significant correlation between the components of cultural factors (female circumcision, male dominance, wife inheritance, traditional birth practices, superstition, and early marriage) and maternal morbidity and mortality

Table 4.2.3a: Composite Contribution of cultural factors influencing maternal morbidity and mortality in the sampled states

Model	Sum of Squares	DF	Mean Square	F	Sig.
Regression	88760.230	9	9862.248	176.254	.000
Residual	87121.479	1557	55.955		
Total	175881.71	1566			

R = .710; R^2 = .505; Adj R^2 = .502

Table 4.2.3a showed that the joint effect of cultural variables (early marriage, superstition, male dominance, traditional birth practices, wife inheritance and female circumcision, on Maternal Morbidity/Mortality was significant F(9,1557) = 176.254; R = 710, R^2 = 505, Adj. R^2 = 502; P < .05). About 51 percent of the variation was accounted for by the independent variables. It is shown in the analysis that all the independent variables (early marriage, superstition, male dominance, traditional birth practices, wife inheritance and female circumcision,) are significant. In the multiple response question a total of 1662 responses emanated from 747 adolescents respondents while 1414 responses were obtained from 820 women of child bearing age (WCBA) .

Wife inheritance, female circumcision and male dominance were strongly expressed by adolescents respondents (18.7percent; 18.6 percent & 17.9 percent

respectively) compared with WCBA who believed that female circumcision, wife inheritance and superstitions are more likely to influence maternal morbidity and mortality (22.8 percent, 16.2 percent & 16.1 percent respectively). Of all the cultural factors under investigation, early marriage was the least expressed as accounting for maternal morbidity and mortality adolescents (16.5 percent) and WCBA (7.7percent).

The Focus Group Discussion conducted was consistent with statistical findings as it provided comprehensive insight to the contribution of cultural factors to maternal death. A male FGD participant in Zaki Biam, Benue state stated thus:

> *I have seen more than three women in this community dying from pregnancy related causes because their husbands believed traditional medicine is better than going to the doctors. They say doctors will charge you more money and only very serious diseases should be reported to the doctor.* **Zaki Biam /FGD/ male participant**

The research finding corroborated other previous studies. Marchie and Anyanwu (2009) and WHO (2005) reported that besides medical causes, cultural factors like traditional birth practices (female genital mutilation, food restrictions and taboo), male dominance and wife inheritance significantly contribute to maternal morbidity and mortality in Nigeria. WHO (2000) reported that about 4 percent of maternal death was attributed to traditional birth practices.

Findings (Ejembi, 2000, Ladipo, 2007) reported that early age at marriage/child bearing significantly contribute to inability of the girl child to continue any form of education and economic livelihood. Ejembi, 2000 reported that educated women are more understanding and supportive in their homes compared to the uneducated. Ejembi in the report stated that of the 500 married women interviewed in Kaduna 65 percent of the educated participants attest to delivery all their children in the hospital while only 13 percent of the uneducated utilize the hospital for maternal services.

Relative cultural factors affecting maternal morbidity and mortality in Benue and Borno states

The relative influence of cultural factors of early marriage, superstition, male dominance, traditional birth practices, wife inheritance and female circumcision on maternal morbidity and mortality in Benue and Borno states are discussed below:

Table 4.2.3b: Extent to which early marriage affects maternal morbidity and mortality in Borno and Benue states

Ho: There is no significant relationship between Maternal Morbidity and Early Marriage

Variable	N	Mean	Std. Dev.	Crit-t	Cal-t	Rel.	P-Value	Remark
Maternal Morbidity	1567	32.9477	10.5978	1.96	2.712	.313**	.000	Sig.
Early Marriage		21.5858	7.5742					

**sig. at .05 level, (R=313; β = .787, p>0.05)

The above table showed that there was a negative significant relationship between Maternal Morbidity and early marriage (r =.313**, N=1567, P<.05). The null hypothesis was rejected.

In the concept of early marriage participants agreed it was a common practice in their communities, particularly in Borno state but acknowledge that early marriage is a muslim religious injunction that is beneficial to the girl child. A female participant from one of the rural communities captured the general feelings of the group thus:

> *Marriage is the pride of a woman and every Muslim and Christian girl is commanded to marry. So you mean if Allah brings a husband to a girl at age 12 years, she should reject the offer? To me, she should go ahead and marry, and if Allah gives her children immediately, Alhamdulillah (glory be to God), since it is Allah that brings children. What do you expect from a girl that is not schooling? Since we are discouraged from schooling and what every girl is doing here is to marry early, you have to join them. And when you are married, pregnancy and childbearing should be expected anytime. To me, I feel it is right since our parents*

did the same and nothing happened to them negatively. **Kwaya-ku/FGD/Female participant**

One of the high level care providers interviewed stated thus:

In my years of practice as a medical doctor, nothing affects me negatively as losing a pregnant woman on a delivery table. I do everything professionally possible to avoid such disaster as maternal death; candidly the death of a woman in child birth is a tragedy and an unnecessary and wasteful event that carries a huge burden of grief and pain. **Makurdi /KII/ Medical Doctor**

Similarly, another male participant remarked:

We are not going to follow the culture and traditions of the west; any girl who has suitors means that her time has reached to be married. Let's just depend on Allah as Muslims knowing that anything that happens to us is His wish. **Kukawa/FGD/Male participant**

Ogunkelu (2002) reported that health care providers in northern Nigeria identified maternal morbidity and mortality, particularly Vesical Vagirna Fistula as risk associated to teenage marriage and childbearing. This corroborate KII survey conducted in Benue state which commented thus:

Child marriage result to physical and emotional trauma. Many pregnant adolescents deliver with difficulty and some end up with third degree tear. **Obi/KII/Nurse/Midwife**

Thus, female participants perceived a number of concrete physical, social, and economic problems associated with early marriage and childbearing.

The FGD participants agreed that parents decide when a girl marries, though some families allow her to choose her husband herself especially if she is educated to at least secondary school level, and insisted on her choice of partner.

One currently married female participant explained:

> *Our culture insists that the first marriage is decided by parents because the girl is very young in most cases and may not know who is good for her; more so if there are many suitors. So in that case, the father and/or his brothers or mother decide when and who she marries.* **Biu/FGD/Female participant**

A male adolescent participant provided further insights and summed up the discussants' fear, which was also heard in most of other FGDs:

> *Even if teenage marriage and child bearing is a problem we can't speak against it openly, because our people use religious rationale to do whatever they are doing; but let us encourage girl-child education, and by so doing early marriage will be discouraged in the long run. Teenage marriage might not be right, but who are you to stand up against your parents' wishes; they will curse or disown you, and every child in this environment seeks and desires parental blessings in everything, so even if it is displeasing to us to marry at teenage age, we still obey and comply. If we can find our way, our parents should allow us to acquire formal education, and with that we will find something doing to take care of ourselves and our children if the worst comes.* **Jere/FGD/Male participant**

Olowonefa (2001) reported that the fear of premarital pregnancy is related to the high value which is still placed by a prospective husband on marrying a virgin, and therefore early marriage is in the interest of both the husband and girl's family. Pate (2002) stated that the adolescent Hausa girl is called a *budurwa,* a word which signals the onset of puberty, most noticeably in the formation of breast-buds. Though a *budurwa* has some social freedoms, she is expected to assume a more modest demeanor appropriate for someone approaching womanhood. Ejembi (2000) stated that in order to ensure proper control and to prevent potential sexual misconduct, marriage usually occurs early for Hausa girls, frequently before menarche. Pate (2002), reported that girls are commonly married between the ages 12 and 14 and sometimes as early as 9 or 10 years of age. This practice stems from the cultural requirement that female reproductive capacity be under strictly acknowledged and well-defined male control (Wall, 1998).

Schacht (1994) and Hinchcliffe (2006) reported that in Islam women do not receive an equal share of an inheritance as males, nor is their legal testimony given the same weight as that of a man. Women are excluded from communal Islamic religious activities because of the recurring states of impurity associated with menstruation and childbirth. As a result, females must undertake their religious devotions within their own compounds. They are forbidden to participate in the communal prayers. According to Tremearne (2004), in male Hausa eyes, female sexuality is dangerous and disruptive.

WHO (2008) described death of a woman during pregnancy, labor and pueperium as a major public health concern in Northern Nigeria. Most studies (WHO 2008; Marchie (2009); Chukuezi (2010) have also shown that early marriage&early child bearing increased the risk of maternal mortality and that young mothers have more risk of dying during childbirth. Findings also revealed that early marriage/child bearing makes the girl child to lose out of school early with few employment options (Ladipo 2007).

UNICEF (2007) assessment reported that "culturally-based limitations on the exercise of women's reproductive rights are among the key factors underlying the high levels of maternal, infant and under-five mortality". In Nigeria it is common practice for parents to arrange the marriage of their young daughters, particularly to older men. Hodges, 2001, reported that 26.5 per cent of marriages in northern Nigeria are characterized by age difference of 20 years or more between husband and wife. Statistics showed that 24.4 per cent of girls in northern Nigeria between the ages of 15 and 19 are married, while the figure for boys of the same age is just 2.2 per cent.(NDHS, 1999). The figures for ages 20-24 showed that 57.6 per cent of women are married, while only 14.2 per cent of men in the same age group are married. Men marry later than women: their median age at first marriage is 26 years, compared with 18 years for women (NDHS,

1999). In Nigeria age of marriage and of sexual activity is largely culturally determined. In the northern states, the average age is 14 years, whereas in the south it is 18 and 20 years.(WHO, 2009). UNICEF, (2002) stated that in Kebbi and Borno states, the average age of marriage for girls is just over 11 years, against a national average of 18 years. UNFPA (2004) stated that issue of child marriage is a health issue as well as a human rights violation; because it takes place almost exclusively within the context of poverty and gender inequality, it also has social, cultural and economic dimensions.

According to UNFPA (2010) report, child marriage are typified by: large spousal age gaps, limited social support due to social isolation, limited educational attainment and no schooling options, intense pressure to become pregnant, increased risk of maternal and infant mortality, increased vulnerability to HIV and other STIs, restricted social mobility/freedom of movement and lack of skills to be viable to the labour market. Section 18 of the marriage Act at the Federal level recognizes a person less than 21 years of age as a minor, but allows minors to marry with parental consent. Childhood marriage has many implications. It robs girls of power over their bodies and their freedom to make decisions about their own reproductive health. Early childbirth has negative demographic, socioeconomic and socio-cultural consequences (NDHS 2003). It compounds the general inability of girls and women to claim their constitutional and universal right to education.(UNICEF, 2009). More severe is the harmful effects of child pregnancy on the health of the mother. In the northern part of Nigeria for example, early pregnancy accounts for high incidences of maternal mortality and for very bad conditions such as vesico-vaginal fistula (VVF) which results in incontinence of the bladder and bowel. VVF occurs because the pelvic bones have not developed enough to cope with childbirth. Corrective operations often require the consent of the spouse, and more often than not the

sufferers are abandoned by their husbands and ostracized by their communities. (WHO, 2007).

Table 4.2.3c: Extent to which superstition affect maternal morbidity and mortality in Borno and Benue states

Ho:There is no significant relationship between Maternal Morbidity and Superstition

Variable	N	Mean	Std. Dev.	Crit-t	Cal-t	Rel.	P-Value	Remark
Maternal Morbidity	1567	32.9477	10.5978	1.96	2.386	.305**	.000	Sig.
Superstition		23.4959	8.7341					

** sig. at .05 level, (R=305; β = .646, p<0.05)

The table showed the relationship between superstion and maternal morbidity and mortality. Analysis of results have showns a significant relationship between Maternal Morbidity and Superstition (r = .305**, N= 1567, P < .05). The null hypothesis which stated no relationship between the variables was therefore rejected.

The finding from this study agreed with the qualitative data elicited from the FGD and KII. The KII with the chief of Gwoza, Borno state provided more insight on the need for superstition in their culture. He stated thus:

> *What we call superstition are strong cultural beliefs that keeps our community safe and protect our people. For example we forbide snails for pregnant women in this community, because it makes the baby to drop saliva.*

Simillar belief was also present in Benue state. In Gboko, a community chief empharsised thus:

> *As traditional rulers, it is our responsibility to preserve the culture and norms of this community. For example, pregnant women in this community do not come out after 7pm because of fear of spirits*

The survey (Adeosun, 2009), conducted at Jos, Plateau state corroborated this findings and also reported superstitions as an influence on maternal morbidity and

mortality in the study areas. This is corroborated by several other studies. Ogunbode (2000) reported that Nigeria is a country where women and (men) hold strong superstitious beliefs which sometimes act as barriers to the utilization of available maternity services. Such beliefs for example, are responsible for women sometimes refusing caesarean section or blood transfusion needed to save their lives, and accounts for their use of alternative sources of antenatal and delivery care rather than evidence-based orthodox sources.

Morrisson (2005), stated that some culture do not permit pregnant women to eat some food that could have improved the nutrition of the woman. According to the report, food items like snails, crabs, grasscutters and the likes are forbidden by the pregnant women (Morrisson, 2005). In Nigeria pregnant women are not encouraged to eat snails, which are rich in calcium, to avoid their babies drooling (Oladepo, 2001). Denial or avoidance of such foods can adversely affect the health of pregnant women by increasing their chances of suffering from anaemia. Cultural beliefs, practices and taboos organized according to mainstream societal values dominated by patriarchal values of male superiority and preference exacerbate difficulties

Table 4.2.3d: Extent to which male dominance affect maternal morbidity and mortality in Borno and Benue states

Ho: There is no significant relationship between Maternal Morbidity and Male Dominance

Variable	N	Mean	Std. Dev.	Crit-t	Cal-t	Rel.	P-Value	Remark
Maternal Morbidity	1567	32.9477	10.5978	1.96	2.321	.442**	.000	Sig.
Male Dominance		15.1832	2.9587					

** sig. at .05 level, (R=442; β = .641, p<0.05)

As shown in the above table there was a negative significant relationship between Maternal Morbidity and Male Dominance (r = .442**, N= 1567, P < .01). The null hypothesis of no significant relationship between male dominance and maternal mortality and morbidity was therefore rejected.

In Nigeria, there are patriarchal values that stress the importance of male children for various kinship, family succession and old age insurance (Gerald, 2008). Even though some of these expectations do not stand the test of reality, women, who have no male children in the bid to satisfy this traditional value, go on bearing children even when their health is at risk (Oluyode, 2002). High parity is linked to both complications of pregnancy and childbirth and eventual death (WHO, 2001). Anokute (2005) asserted that "the pattern of maternal mortality with parity showed a relatively less number of deaths of females in their second through to sixth pregnancies and a greater number of deaths in females in their seventh pregnancy and above…….and age 35 years and over."

Several reports captured in the FGDs agreed with the finding. A female participant in Mkar FGD group summed up her view thus:

> *I am the fourth daughter of my mother. My mother did not have a son until the sixth child. The boy is now five years old, yet the boy is valued more than the rest of us. The best of clothes, shoes, foods is allotted to him. When he is ill, my father will be very concerned. I don't understand why they give more respect to the males than females.* **Mkar/FGD/Female Teenager/Benue state**

A Key Informant Interview conducted in Bama Borno state, a participant provided insight on cultural interplay on gender issues thus:

> *Several factors such as cultural definitions of appropriate sex roles, expectations of roles within relationships, belief in the inherent superiority of males, values that give men proprietary rights over women and girls notion of the family as the private sphere and under male control as well as customs of marriage and acceptability of violence as a means to resolve*

> *conflict among couple continue to create questions on how the society can help to save the girl-child from the hook of their male counterparts.* **Bama/KII/Medical Doctor/Borno state**

Male dominance is also incriminated for the delay in seeking professional health services by wives during critical maternal health challenges such as haemorrhage, eclampsia and even labour. A Key Informant Interview conducted in Maiduguri, Borno state, participant buttressed the near helpless negative consequence of male dominance on maternal morbidity and mortality thus.

> *My cousin with five children and pregnant of the sixth child began to bleed around 6.pm while the husband was away on a journey. Despite the severity of the bleeding, none of the other wives could persuade her to go to the hospital which was a mere two hours travel away from the village because the husband did not leave a word to that effect and was expected back that night. The man returned at about 12 midnight and decided that he will take the bleeding wife to hospital the following morning because it was too late to travel the distance. By 8.00am in the morning when they arrived the hospital gate, my cousin died. If the culture allowed married women some powers over their body, she would have gone early and would perhaps still be alive today Under this kind of culture, why will people not prefer male children?* **Maiduguri/KII/Community Health Officer /Borno state**

In a research conducted in Kaduna (Ejembi, 2002), northern Nigeria, findings from the univariate regression analyses of associations between maternal mortality and male dominance, indicated that the risk of maternal mortality increased with husbands denying their wives access to maternal health care. There was a statistically significant variation in the risk of maternal mortality among those who provided access of their wives to patronize the hospitals compared with those with those resisting their wives access to hospitals. Women with no education had almost four times the risk of being dominated by their husbands (odds ratio 3.92: 95% confidence interval 2.60,5.92) and those with between one and six years of education had almost less than twice the risk of being influenced by their husbands (odds ratio 1.88: 95% confidence interval 1.26,2.79)

of maternal mortality compared with women with more than 12 years of education. (Ejembi, 2002). In another report, The Lancet (2001) reportd that there was a higher risk of maternal mortality among women married to men who dominate decision in marriage with less capacity to provide means of livelihood (1.02:1.01,1.03).

Table 4.2.3e: Extent to which traditional birth practices affect maternal morbidity and mortality in Borno and Benue states

Ho: There is no significant relationship between Maternal Morbidity and Traditional Practices

Variable	N	Mean	Std. Dev.	Crit-t	Cal-t	Rel.	P-Value	Remark
Maternal Morbidity	1567	32.9477	10.5978	1.96	2.112	.231**	.000	Sig.
Traditional Practices		21.6043	7.0479					

** sig. at .05 level, (R=231; β = .524, p<0.05)

The above table showed that there was a negative significant relationship between Maternal Morbidity and Traditional Birth Practices (r = .231**, N= 1567, P < .05). The null hypothesis was rejected.

Several studies also corroborated findings of the survey on traditional birth practices. Dahiru (2008) reported that the traditional birth practices of wankan *Jego (hot bath)* in northern Nigeria perhaps stands alone as one of the predominant harmful practice on women after delivery. According to Dahiru, the practice varies among different areas in Hausa land but include taking hot bath, lying on hot bed and taking large amount of *kunun kanwa* [a lake salt rich in sodium]. Pate (2000) stated that the complications of *wankan jego* include burns injury, severe hypertension, eclampsia, heart failure, and, maternal death.

Cultural, traditional birth practices, beliefs and taboos impact upon outcome of delivery in several ways. According to Iyayi (2008) they lead to some form of desability

or post partum injuries and death. This has implication for population growth, the incidence of child and maternal mortality and the number in the population seeking access to health care.

UNCEF (2010) stated that depending on the quantity and quality of food available, a pregnant woman who eats left-over may also lack sufficient nutrition. Severe anemia plays a part in up to 40 per cent of the estimated 600,000 maternal deaths each year in the developing world. (UNFPA, 2002). Denial or avoidance of selected nutritious food items can adversely affect the health of pregnant women by increasing their chances of suffering from anemia. (WHO, 2002) Cultural beliefs, practices and taboos organized according to mainstream societal values dominated by patriarchal values of male superiority and preference exacerbate difficulties of pregnancy and childbirth often leading to maternal mortality or morbidity (Adeosun, 2000).

Table 4.2.3f: Extent to which wife inheritance affect maternal morbidity and Mortality in Borno and Benue states

Ho: There is no significant relationship between Maternal Morbidity and Wife Inheritance

Variable	N	Mean	Std. Dev.	Crit-t	Cal-t	Rel.	P-Value	Remark
Maternal Morbidity	1567	32.9477	10.5978	1.96	2.523	.296**	.000	Sig.
Wife Inheritance		14.4927	2.4340					

** sig. at .05 level, (R=296; β = .289, $p<0.05$)

The field analysis as tabulated above showed that there was a negative significant relationship between Maternal Morbidity and Wife Inheritance (r = .296**, N= 1567, P < .05). Considering the extent to which wife inheritance affect maternal morbidity and

mortality in selected states, the null hypothesis of no signficant relationship between maternal morbidity and wife inheritance was therefore rejected.

Centre for Rights, Education and Awareness (CREAW) 2008, while discussing wife inheritance stated that it is a cultural 'cleansing' ritual related to widowhood that involves obligatory sex for the widow with one of her deceased husband's male relatives. The practice expects a widow to marry a male relative of her deceased husband, usually a brother or cousin, to provide for continuity in the family structure.(WHO, 2001). A report by the African Medical and Research Foundation quoted by Owino (2004) revealed that in Nigeria, the practice occurs to varying extents. The figure of inherited widows stands at 64 percent in eastern Nigeria, 56 percent in Borno and 13 percent in Kanuri (Owino, 2004). The same report shows that 74 percent of the widows in the east have undergone a form of 'cleansing.'

Wife inheritance is widespread in Nigeria and is historically grounded in the belief that a widow who is 'inherited' copes better with the loss of her husband and at the same time preserves the contract between his family and hers. (Ladipo, 2001). In some communities such as the Nupe kingdom, the eldest son is also eligible to inherit his father's widows, with the exception of his own mother.(Yandev, 2006). As a cultural practice, Owino (2004) reported that wife inheritance disadvantaged women and even violates their human rights in a number of ways. It ignores their right to sexual autonomy by prescribing sexual intercourse with a certain man and places them at significant risk of exposure to HIV & AIDS and other sexually transmitted infections (STIs). FMOH stated that wife inheritance does not give opportunities for practicing safe sex as the use of a condom is considered failure to fulfil the cultural requirement of inheritance. This

exposes her to multiple pregnancies and deliveries with dire consequences including maternal death (Ejembi, 2002). This is a violation of the widows' right to enjoy, or at the least pursue, the highest possible standard of sexual health.(CREAW, 2008). Wife inheritance has been noted for its role in the spread of HIV & AIDS because a widow whose husband dies from AIDS is likely to pass the virus on to her 'inheritor' and him in turn to his other wives. (WHO, 2001).

It is important to remember that the widows are not passive victims of a cultural practice but participants. Some of them embrace the practice out of respect for culture and/or the leaders of their communities. (Ladipo, 2001). It can, therefore, be argued that they consent to their circumstances. It can, however, also be argued that the widows' contribution in the matter is greatly constrained by the lack of any 'real' available options. (Owino, 2004). For example, widows who 'choose' not to be inherited are banished from their communities and some end up starving because they lose their livelihoods which were tied to their communities. Similarly, some of them 'choose' to be inherited because refusal to do so means that they have to give up whatever property they inherited from their deceased husband. (Owino, 2004).

Table 4.2.3g: Extent to which female circumcision affects maternal morbidity and mortality in Borno and Benue states

Ho: There is no significant relationship between Maternal Morbidity and Female Circumcision

Variable	N	Mean	Std. Dev.	Crit-t	Cal-t	Rel.	P-value	Remark
Maternal Morbidity	1567	32.9477	10.5978	1.96	2.214	-.145**	.000	Sig.
F. Circumcision		31.9266	6.3213					

** sig. at .05 level, (R=145; β = .216, p<0.05)

It is shown in the above table that there was a negative significant relationship between Maternal Morbidity and Female Circumcision (r =-.145**, N=1567, P<.01). The null hypothesis was therefore rejected.

To provide qualitative information on the effect of female circumcision to maternal mortality, some of the views of health care providers who participated in the

Key Informant interview are reported here:

A key stakeholder in Maiduguri had this to say:

> *Female circumcision still remains a strong reason for maternal death in our community. Despite the dangerous implications, parents particularly in traditional communities encourage and insist on circumcision of the girl-child. As a clinical provider, l witnessed bleeding from the scar of the site of circumcision due to third degree tear which resulted in blood transfusion for the mother. The earlier we legislate against and prohibit female circumcision the better for the health of our mothers.* **Maiduguri/KII/Nurse/Midwife/Borno state**

Also, another contributor in Gboko, Benue state stated thus:

> *Female circumcision does not reduce sexual desire or libido. I know of some women that are circumcised and still move from one man to another with the simple reason that the husband cannot satisfy them. Many women are dying from child birth due to female circumcision and my personal view is that dangerous cultures as female circumcision should be abolished Gboko.* **KII/Medical Doctor/Benue state**

The practice of female circumcision (FC) is wide spread in Nigeria and varies from one state and cultural setting to another. In some cultures it is carried out at infancy or childhood as a "rite of passage" to adulthood. In some other it is at first pregnancy and in some at death (UNICEF, 2002). The UNICEF (2005) situation assessment reported that given the size of Nigeria's population, Nigerian women constituted one quarter of the 115 – 130 million circumcised women throughout the world – the highest number of cases in absolute terms in the whole world. According to National Demographic and Health Survey (NDHS, 2003), the prevalence rate by zone is as follows: South-west 56.9 percent, South-south 34.7 percent, South-east 40.8 percent, North-west 0.4 percent, North-east 1.3 percent and North central 9.6 percent. Infibulations the most extreme form of mutilation is conducted in the north, which accounts for 10 percent of all FC practiced in Nigeria (WHO, 2001). FC can be considered vital in maintaining the high numbers of maternal mortality in Nigeria as it is a major risk factor for obstructed labour.

A study by WHO (2007) showed that women who have had FC are significantly more likely to experience difficulties during childbirth and that their babies are more likely to die as a result of the practice. Serious complications during childbirth include the need to have a Caesarean section, dangerously heavy bleeding after the birth of the baby and prolonged hospitalization following birth. (Ojegbende, 2005). The study

showed that the degree of complications increases according to the extent and severity of FC. Although the practice is globally and nationally prohibited, there is no legislation for effective discontinuation in Nigeria.(CREAW, 2004). Recently State laws banning FC have been introduced in Cross River, Delta, Edo and Ogun States, with similar laws under consideration in Akwa-Ibom and Bayelsa. None of the northern states have aligned with the legislative prohibition of FC. (CREAW, 2004). The national policy on women recognizes the harmful effects of FC and other such practices and recommends that the "*government should legislate the mandatory provision of maternal health services…… to all women to protect them from such disabilities as vesico-vaginal fistula (VVF), FC and other harmful traditional practices* (Federal Ministry of Women Affairs and Youth Development 2000).

4.2.4: To what extent will the provision of health intervention programmes (provision of maternal health services, free distribution of health materials, provision of youth services, counseling and health talks/campaign) correlate with maternal morbidity and mortality in the two states?

Table 4.2.4a: Composite contribution of health intervention programmes' influence on maternal morbidity and mortality in the two states

Model	Sum of Squares	DF	Mean Sq.	F	Sig.
Regression	73750.210	7	7862.228	156.254	.000
Residual	76120.470	1247	45.995		
Total	175881.71	1546			

$R = .710$; $R^2 = .505$; Adj $R^2 = .502$, $P<0.05$

Table 4.2.4b: Relative table on provision of health intervention programmes (Provision of maternal health services, free distribution of health materials, provision of youth services, counseling and health talks/campaign) and maternal morbidity and mortality in sampled states

Model	Unstandardized Coefficient		Standardized Coefficient	T	Sig.
	B	Std. Error			
(Constant)	9.404	1.292		4.279	.000
Prov of MHS	-.533	.026	-.165	-8.436	.000
Free distr of HM	1.691	.076	.233	10.692	.000
Prov of youth Serv	-.111	.016	-.275	-3.273	.000
C.Hth talks	-.481	.023	-.376	-5.390	.000

sig. at .05 level P<0.05

Table 4.2.4c: Correlation matrix showing provision of health services (free distribution of health materials, provision of youth services, counseling and health talks/campaign) as related to Maternal Morbidity and Mortality in Borno and Benue states.

	M.M.	Prov of MHS	Free distr of HM	Prov of HP	C.Hth talks
MM	**1**				
Prov of MHS	**.061****	**1**			
Free distr of HM	**.438****	**.684****	**1**		
Prov of yth serv	**.215****	**.453****	**.450****	**1**	
C.Hth talks	**.281****	**.422****	**.437****	**.885****	**1**

****sig. at .05 level P<0.05**

The tables above reflected provision of health services as they influence maternal morbidity and mortality in the sampled states. Table 4.2.4a shows that the joint effect of health intervention programmes (provision of maternal health services, free distribution of health materials, provision of youth services, counseling/health talks/campaign) on

Maternal Morbidity/Mortality was significant F(7,1557) = 156.254; r = 710, r^2 = 505, Adj. r^2 = 502; P < .05). About 43 percent of the variation was accounted for by the independent variables. Table 4.2.4b shows the relative contribution of each of the independent variables on the dependent thus; Provision of maternal heath services (β = -.165, P <.05), Free distribution of health materials (β = .233, P <.05), Provision of youth services (β = -.275, P <.05), Counseling and health talks/campaign (β = -.376, P <.05) are significant. Table 4.2.4c shows that there is significant relationship between maternal mortality and all the factors in the utilization of maternal health intervention programs.

The survey reported five specific areas of intervention by maternal health service providers toward ameliorating impact of socio-cultural factors on maternal morbidity and mortality. The study specifically seek to explore extent of intervention by maternal health service providers as opined by respondents in the areas of:- provision of maternal health information; free distribution of maternal health materials; establishment of 'Health Posts' in working communities; counseling on Youth Friendly Services and regular maternal health campaign visits. The qualitative component of this survey is in consonance with the above findings. FGD conducted supported the survey on the influence of Youth Friendly Services in reproductive health information and counseling among adolescents and distribution of maternal health 'materials' like contraceptive commodities, free maternal services among women of child bearing age particularly by Non-governmental organizations. A peer educator who participanted in the FGD stated thus:

> *l have been working as peer educator on reproductive health for planned parenthood federation of Nigeria for three years, l have so much information on how to prevent HIV/AIDS, pregnancy and all kinds of social vices. We conduct sensitization campaigns in schools, garages, football fields, playgrounds and many other places.* **Maiduguri /FGD/Peer Educator**

Management Strategies for Africa (2005) in an evaluation report carried out in Planned Parenthood Federation of America (PPFA) project sites in Northern Nigeria reported increased youth friendly information and services among young persons. According to the report young persons are provided with increased reproductive health information and services in the centers particularly non-prescriptive contraceptives (including pills), Information Education and Communication (IEC) materials and referrals for further services as well as recreation facilities (table tennis, ludo and an audio/video machine) at the centers. Several complementary youth focused programs supported by donor agencies are known to have focused on Northern Nigeria. David and Lucile Packard Foundation is one donor agency that has invested on reproductive health issues since 2000 in Northern Nigeria among others. Action Health Incorporated (2004) also acknowledged expanded access to sexual and reproductive health information and services for youth in Northern Nigeria with support from David and Lucile Packard Foundation.

Adekunle & Pate,(2008) in PPFA evaluation program reported that the Youth Friendly Centres (YFCs) operated by the implementing partners are popular and patronized by young persons of all sexes in the respective sites. They have helped to increase the level of awareness among youths about sexual abstinence, appropriate and consistent condom use, healthy living, life saving skills and strategies against HIV/AIDS and STIs. The report further stated that knowledge and awareness level about child spacing was high among young persons. Unfortunately, service provision at established 'health post' (PHC centres) still remain a daunting challenge as reflected in the survey by both adolescents and women of child bearing age. Many researchers have adduced

possible reasons for this finding. First, WHO (2005) reported acute shortage of skilled attendants and few functional PHC centers in rural communities particularly in Northern Nigeria. Iyayi (2008) in an assessment of the health care system in Nigeria indicate that PHC centres are not only dismal; efforts to improve them over the years have been insignificant.

A key informant interview conducted among clinical providers in Gwoza, Borno state provided further qualitative import to the poor state of PHC centres in rural communities. One of the KII experienced nurse/midwife stated thus:

> *What we find in this community are empty two or three bedroom flats with no qualified doctor or nurses and a health post attendant that visit the centre once every week. Doctors or Nurses do not believe they should practice in PHC centers. The result is increased mortality among our women and children who could have been treated had there been deliberate commitment on the part of the government to sustain the bedrock of health care which is the PHC system.* **Gwoza /KII/ Nurse/Midwife**

Fatusi and Babalola (2009) reported that provision of maternal health services is associated with improved maternal and neonatal health outcomes and corresponding enabling socio-cultural determinants in Nigeria. Considering global and national interests in the Millennium Development Goal and Nigeria's high level of maternal mortality, understanding the factors affecting maternal health use is crucial and necessary. Studies (WHO, 2005, Fatusi & Babalola, 2009 & FMOH,2005) on the use of maternal care services have largely overlooked community and other contextual. Enabling factors that are determinants of maternal services provision in Nigeria are beginning to assume the front burner in the search to ensure women of child bearing age are given the needed maternal health care in Nigeria with a focus on individual, household, community and state-level factors which are crucial and essential in the provision of maternal health

services (WHO, 2005). The findings from the study corroborate with data from the 2005 National HIV/AIDS and Reproductive Health Survey - an interviewer-administered nationally representative survey - were analyzed to identify individual, household and community factors that were significantly associated with provision of maternal care services among 2148 women who had a baby during the five years preceding the survey.

The findings from the study reported that approximately three-fifths (60.3%) of the mothers used antenatal services at least once during their most recent pregnancy, while 43.5% had skilled attendants at delivery and 41.2% received postnatal care as a result of free maternal health services rendered in the community compared with less than 5% patronage when free services were unavailable. There are commonalities and differences in the predictors of the three indicators of maternal health service utilization.

According to Mohammend & Nasir (2006) education is the only individual-level variable that is consistently a significant predictor of maternal services, while occupation of the mother is a consistent significant predictor at the household level. At the community level, provision of affordable services and improved skilled attendants are consistently strong predictors. In contrast, some factors are significant in predicting one or more of the indicators of use but not for all. These inconsistent predictors include some individual level variables (the woman's age at the birth of the last child, ethnicity, the notion of ideal family size, and approval of family planning), a community-level variable (prevalence of the small family norm in the community), and a state-level variable (ratio of PHC to the population). The findings from the report agrees with most FGD conducted in Benue and Borno states. In an FGD conducted among health workers in Borno and Benue states participants stated:

Most pregnant mothers will patronize government own hospitals if adequate equipment and facilities are provided with the mindset of ensuring free or very affordable services particularly in rural area. **Maiduguri /FGD/ Nurse/Midwife**

In this community anytime we organize free medical outreach unprecedented numbers of pregnant mothers besiege us and are given services. Free or very subsidized medical services will improve the number of clients that visit the hospitals. **Koinshisha /FGD/ Nurse/Midwife**

While available evidence indicates limited benefit from traditional antenatal care services, focused antenatal care provides opportunity for early detection of diseases and timely treatment. It also provides opportunities for preventive health care services such as immunization against neonatal tetanus, prophylactic treatment of malaria through the use of intermittent presumptive treatment approach, and HIV counselling and testing (WHO,2005). Furthermore, enabling environment and availability of skilled personnel exposes pregnant women to counseling and education about their own health and the care of their children. Thus, free maternal care may be particularly advantageous in resource-poor developing countries, where health seeking behaviour is inadequate, access to health services is otherwise limited, and most mothers are poor, illiterate or rural dwellers.(Hill, Thomas, AbouZahr & Walker, 2005). With the strong positive association that has been shown to exist between the level of care obtained during pregnancy and the use of safe delivery care, improved skilled attendants also stands to contribute indirectly to maternal mortality reduction (Bloom, Wypij & Gupta, 2001). According to the 2003 Nigeria Demographic Health Survey (NDHS) 37 percent of women who had births within the five years prior to the survey received no antenatal care for their most recent delivery while only 35.2% were assisted at delivery by a skilled attendant.

Several studies (Fatusi & Babalola (2002), Kuslako, Ronsmans & Der (2000)) have assessed the individual and household determinants of provision of maternal

services. These studies have not yielded a consistent pattern of relationships between service provision and individual and household predictors in relation to maternal mortality in Nigeria. In some cases, even when a strong association has been reported, such as in the case of the positive relationship between education and the use of skilled health attendants at birth, the extent and nature of the relationship are not uniform across social settings. For example, whereas studies in Enugu (Nwankwo, 1992) and Zaria (Goldman & Pebley, 2004) showed that women with secondary level education were more likely to utilize maternal health services compared to those without any formal education, some studies in North-East Nigeria (Mohammend & Nasir, 2006) and Northern Nigeria (Hussain 1999) did not record any significant difference between the two educational groups. Distances to health services and rural locations have been generally reported to be strongly and negatively associated with the use of maternal health services (Hussain 1999).

Some studies conducted in Ibadan (Fatusi and Babalola 2009) and Lagos (Ojegbende, 2009), show significant difference in the use of antenatal care between urban and rural women. Association between age and service provision has also been consistent across studies. Whereas many studies found a positive correlation between age and the use of skilled attendants at child birth (Fatusi & Babalola 2009, Ojegbende, 2009 & Bhatia, 1995). Others have found a curvilinear relationship (WHO,2005, NDHS,2003). Religion has also shown variable pattern of association with service provision, with significant association in some settings (Glymah, Takyi & Addai, 2006) but not in some others (Nurudeen,2002). In contrast, parity has been consistently shown to be negatively correlated with the use of skilled attendants (Mohammend & Nasir, 2006, Bhatia, 1995, Obermeyer & Potter, 1991, Ekele & Tunau, 2007). A number of studies have reported

positive association between occupation of women and use of medical settings for delivery [Nurudeen, 2002, Mohammend & Nasir, 2006 & Gertler & Rahman 2003) whereas others have not found such an association [Goldman, 2006 &,Fagbolagun, 2000).

It is reasonable to assume that provision of maternal health services depends on individual and household factors, as well as factors operating at the community or policy levels. The review of literature showed that very few studies have gone beyond individual and household factors to consider factors at the community and higher levels. The implication of this omission is that some determinants are inadvertently missed, leaving a serious research and programmatic lacuna. Secondly, failure to consider factors operating beyond the household level in service provision may result in serious bias in the estimates. Individuals are nested within families, which are in turn nested within communities.(Goldman, 2006), It is important to take this nested structure into account. This demands the use of multi-level modelling, which would calculate the standard errors more accurately and reduce the chance of misestimating the significance of variables, as some of the assumptions inherent in traditional regression methods are not valid for nested data (Adetokunbo, 2008)

Very few population-based studies have been carried out in Nigeria regarding determinants of maternal service provision with socio-cultural implications; most maternal health studies in the country have been institution-based. Most of the population-based studies were small-scale research, focusing on a handful of communities, usually small-sized rural communities [Okafor, 2001, Osubor 2006). Their geographic scope limits the applicability of their result on a large scale, particularly

considering the complex multi-ethnic setting of Nigeria. In addition, most did not control for important confounding variables. This study clearly fills the gap highlighted by previous researches because of its reach and applicability in two states (North Eastern and North Central states). Paul & Rumsey (2002) reported that 11 percent of deliveries were attended by trained personnel, and the rest were attended by traditional birth attendants (TBAs) in Benue state. Multivariate analysis shows that delivery complications were the most important factor determining use of modern health care resources for childbirth followed by parental education and prenatal care. Improving access to hospitals and trained TBAs can reduce the risks of infant and maternal morbidity and mortality in Nigeria.

A longitudinal study conducted between 2006 through February 2009 in Kano Nigeria, identified 15 maternal mortality provision studies using traditional birth attendants (TBAs) and midwives. Five of the five programs using maternal mortality as an outcome measure showed a decline in maternal mortality ratios; two of three studies measuring morbidity-related indicators showed some improvement; six of seven showed improved referral rates, and three of three found high levels of knowledge retention among trained TBAs. Programs having the greatest impact used TBAs and village midwives in multi-sectoral activities (Salihu, 2009). These findings give credence to value of improve skilled attendants and training of TBAs to compliment maternal health services in the rural areas.

Senah (2007) reported that creating a village health post staffed by a midwife improved access to maternal health care in a rural area of Ondo state. Other services included training the midwife in life saving skills, training TBAs to refer women with

complications, placing new equipment in the Local Government hospital and educating the community and the drivers' union on the need for prompt medical attention in case of obstetric emergencies. Over a 43-month period, the midwife attended 702 antenatal clients, delivered 86 women, and made 20 referrals. The midwife was able to treat all minor and some major complications. Access remained a problem because the health post was not open 24 hours a day and some communities were located far from the post.

Nigeria lags behind many other African countries on various health indicators. A World Health Organization (WHO 2008) evaluation of the health situation in different parts of the world placed Nigeria 187 out of 191 countries that were surveyed in 2000 (FMOH, Health Sector Reform Program: 2004 -2007). Indeed UNDP's 2005 Human Development Index (HDI) Report (2005) ranks Nigeria 158 out of 177 countries in the world in terms of overall human development. Ghana is ranked 138 while South Africa is ranked 120 on the HDI. Compared with South Africa and Ghana, the indices for life expectancy, infant mortality and maternal mortality rates are much higher in Nigeria than in these other countries.

Given the fact that PHC has been accepted in Nigeria as the *central function and main focus* of health delivery, the overall performance of the health system in Nigeria can be seen as a direct consequence of the dismal situation at the level of Primary Health Care. As Ogunkelu, (2004), reported in a survey of the situation of some primary health care facilities in Nigeria, 'simple treatments' for easy to diagnose conditions such as childhood diarrhoea, that is Oral Rehydration Solution (ORS) sachets, were not available in 70 percent of the facilities surveyed. Strengthening of policies on preventive health care is also urgent in light of evidence that public health surveillance is particularly poor in rural areas.

Iyayi (2008) also found out that morale was typically low among PHC staff. These findings support the observations from an earlier study by Ogundeji (2001) who reported acute staff shortages in PHC facilities in several states across the country. While the poor performance of the health system in general and PHC in particular in Nigeria can be attributed to different factors, socio-cultural factors play a predominant role. For this reason, efforts to improve the performance of PHC must understand the nature of the contribution of these factors and how they can be more adequately managed.

Iyayi (2008) reported that the level of staff motivation is largely a function of the available conditions of service. The level of motivation tends to be lower at the PHC level than at the secondary and tertiary levels of care because of poor conditions of service; salaries tend to be lower for health professionals with the same qualifications and payment of salaries tends to be more irregular at the primary level of care. This has obvious negative implications for commitment and dedication to work as well as productivity of health professionals. As a result of the combination of all the above factors, performance is consistently lower on all major health outputs at the Primary Health Care level than at the other levels of care (Gupta, Gauri and Khemani, 2009).

CHAPTER FIVE

5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

The main purpose of the study was to investigate the influence of socio-cultural variables on the occurrence of maternal morbidity and mortality in Benue and Borno states. Twelve of thirteen socio-cultural factors covered namely : age at first pregnancy, occupation, religion, marital status, educational qualifications, number of wives in matrimonial homes, female circumcision, wife inheritance, male dominance, traditional birth practices, superstition and early marriage) had implications for predicting the interplay that exist in the high prevalence of maternal morbidity and mortality in the selected states. Only ethnicity had no influence. The presence of the studied variables influenced adoption of recommended preventive health behaviour relating to maternal health even when the preventive maternal services were provided in the facilities serving the community members and information about their availability disseminated. This has subsequently negatively impacted on the social, economic, cultural and physiological domain of the entire population. Four research questions and three hypotheses were answered and tested respectively. The major findings are that:

- The social factors of age at first pregnancy, occupation, educational qualification, marital status, region, ation, literacy level, employment status, occupation, income level, religion and marital status of women of child bearing age and teenagers who participated in the study were found to have significant influence on their choice to or not to adopt recommended

preventive maternal health behaviours that reduce maternal morbidity and mortality.

- Teenage mothers indicated strong resentment to early marriage, wife inheritance and male dominance and viewed them as strong factors militating against women inability to improve their educational level, economic status and decision to seek health needs as required.
- The findings showed that socio-cultural factors, namely, age at first pregnancy, occupation of the mother, marital status, educational qualification, number of wives in the matrimonial homes, religion, female circumcision, wife inheritance and desire to have children for the new husbands, male dominance in decision making process – including those concerning the health of the woman, traditional birth practices, superstition and early marriage significantly influenced maternal morbidity and mortality in the selected communities.
- The twelve socio-cultural factors (independent variables) had significant joint and relative impact on maternal morbidity and mortality with strong correlation indices across segmented communities covered in the study. In other words, age at first pregnancy, occupation of mothers, marital status, educational qualifications, female circumcision, male dominance, wife inheritance, traditional birth practices, superstition and early marriages accounted for 60 percent of the variance of joint impact and 57 percent relative impact on the dependent variable (maternal morbidity and mortality).
- There was significant relation between educational level of mothers and their decision to seek health needs. Women of child bearing age with higher

education were more assertive and autonomous in seeking maternal health services than women of child bearing age without any form of education

- There were various areas of interventions by maternal health care service providers such as provision of maternal health services, free distribution of health care materials, provision of youth friendly services and regular issue specific counseling, health talks campaign on maternal health issues.
- FGD conducted with participants in both states revealed that the choice of location for citing PHC clinics were implemented without conducting needs assessments and opinion of target population, which consequently resulted in citing of PHC clinics far away from communities, more for political reasons than ease of access by intended users..
- All cultural factors significantly predicted maternal morbidity and mortality in both states.
- There was significant composite (joint) and relative impact of all but one socio-cultural factors (ethnicity) on maternal morbidity and mortality.

On the basis of the above results, it is empirically evident that new policy options need to commit to interventions that address socio – cultural factors in order to make a success of the national, state and local efforts aimed at reducing maternal morbidity and mortality in the selected states.

5.2 Conclusion

Considering the influence of socio-cultural factors on maternal morbidity and mortality, it is obvious that if certain traditional birth practices and beliefs are not jettisoned, little will be achieved in the drive to achieve those MDGs relating to maternal health. This is underscored by the fact that, expectations of achieving the 50 percent

reduction in maternal morbidity and mortality can only subsist when good practices with respect to maternal health care services are not only promoted, but adopted by communities where traditional health practices hitherto predominate. While noting the fact that institutional framework for reduction in maternal morbidity and mortality is weak, poorly co-ordinated and meagerly funded, positive changes will only occur if institutional and policy framework are re-oriented to focus on community health education on the benefits of maternal health care services and the danger posed by harmful socio-cultural practices.

5.3 Health imnplications of the findings

- Male dominance as a cultural practice frankly established her position and influence on maternal health. The reduced involvements of women in family issues have grave implication for their health. With limited decision making power, women's contribution to the attainment of positive maternal outcomes are hampered especially as some of them are compelled to observe culturally approved behaviours even when they undermine their safety.
- Early marriage and age at first pregnancy carry special risk for both mother and child as both factors has variously been implicated for the increase in obstetric fistulas particularly vesico-vaginal fistula because pregnancy at pre-puberty exposes the women to obstructed and prolonged labour due to immaturity of the pelvis.
- Superstitions and traditional birth practices jointly endangers maternal health because they cause myths, misconceptions and or harmful health practices including delay in seeking orthordox care.

- Female circumcision causes a narrowing of the birth canal and consequential obstructed labour. It exposes the young mother to severe health hazards.
- Wife inheritance places reproductive pressure on the woman as she is expected to have children for the new husband despite the number she already have for the dead husband, to the detriment of her health.
- Lower educational attainment leads to poverty and poorer life outcomes. Educated women are less likely to accept dangerous practices. The amount of time, money, information and authority for decision making women have at their disposal are keys in reducing maternal morbidity and mortality.
- Productive employment keeps women fully engaged, encourages limited family size, enhances status and fulfillment.
- Health providers need to educate community leaders so that they fully understand the risks which the socio-cultural practices place on women- and therefore the need for good reproductive health care to help reduce pregnancy related diseases, disabilities and deaths. Health providers need to implement models that are a true reflection of the very best to address harmful socio-cultural practices. Models that are not subversive nor dismissive of local traditions, cultures and norms. Models that address the understandable socio-cultural barriers to access and have helped the communities themselves dismantle them one by one as they come to understand the best way to reduce maternal mortality.

5.4 Policy implications of the findings

The findings of this study have various policy implications, which are consistent with the quest for sustainable maternal health care delivery. Among other policy implication, it is:

- Expected that states should enact edicts which are consistent with national legislation on right protections as related to adolescents and women of child bearing age. Such laws should take into cognizance male domineering status, level of women economic status and devolution of power from husbands on decision to seek particularly maternal health services within the family and communities.
- Government should as a matter of urgency institute a free and compulsory maternal services nationwide and implement a " No Maternal Death" policy in all public health institutions – making it compulsory for all maternal deaths to be investigated so causes can be established to forestall re-occurrence
- A Socio- cultural issues specific advocacy group should be constituted to address the myths and misconceptions inhibiting the uptake of maternal health services.
- A maternal health information, education and communication media strategy that address harmful socio-cultural practices should be developed and implemented to enable mothers unfettered access to information on maternal health care.
- A maternal death reduction policy should be developed and implemented at all levels of government. Experts in public health, law, human rights, education, epidemiology, child health, population and reproductive health,

community development and gender issues should form the core of consultants to draw the policy.

- All interventionist agencies should through the instrumentality of a policy framework, mainstream community education on maternal health into future programs in order to both speed up and sustain currents efforts at reducing maternal morbidity and mortality.
- In order to preserve the health of our future generations, young persons, (especially adolescents) should be provided with youth friendly facilities at no - cost at various community development centres. These youth friendly facilities should promote healthy living and social integration.
- A policy statement that specifically direct all primary and secondary health facilities nationwide to establishment youth friendly clinics to address the need of teenagers is recommended to address current challenges of access by adolescents and youth desiring reproductive health services.
- A reform on the present reproductive health position in Nigeria that does not allow legal and safe abortion especially on the ground of rape and incest should be encouraged. The present abortion law in Nigeria should be expanded to include victims of rape and incest particularly as it pertains to adolescents and minors.

These health and policy implications among others provide adequate basis on which the study can be concluded.

5.5 Recommendations

Based on the findings of the the study, the following are my recommendations:

1) Major development partners as well as government ministries, departments and agencies should sponsor conferences, workshops, seminars and other intellectually stimulating events that will cause public discourse on the socio-cultural hindrances to the expected improvements in maternal health indices and hence raise awareness and build a society that is sensitive to the plight of pregnant woman
2) Development agencies whatever their nature, should always undertake detailed needs assessment prior to commencement of intervention actions to guide both focus and speed as well as articulate depth and breadth of plans and actions in order to achieve maximum results.
3) Intervention program aimed at addressing reproductive health needs of women of child bearing age and targeted at the grass-root should take cognizance of the religion, marital status, literacy level, occupation and employment status, and age of targeted beneficiaries. All of these should be considered at planning, design and implementation stages.
4) It is also recommended that reproductive health experts should ensure the cultural relevance of their programs to the prospective beneficiary groups
5) Existing training curriculum for both adult and youth health care providers should be reviewed to address provider skills on socio-cultural consultation and counseling in order to meet current skill requirement to address this need
6) Community health education on maternal health should be a major focus of all internationalist agencies and NGOs in order to clarify community members'

values and transform their attitudes towards improved maternal health seeking behaviour. This is expected to promote positive and preventive maternal health behaviour amongst mothers and teenagers.

7) Basic information on maternal health care issues, practices and services should be made accessible to intended users in order to promote good practices. This will reduce the prevalence of maternal morbidity and mortality.

8) Traditional birth attendants and other traditional providers need to attend regular skill improvement programs for recertification on an annual basis for quality improvement.and hence minimize the potential risk which their practice pose to community members.

9) Program providers and curriculum experts in reproductive health education of adolescents should seek to undertake proper needs assessment or situation analysis of characteristics of adolescents and best ways to reaching them in relation to vital demographic data. Such information can help them develop teenage specific curriculum that meets the need of the present generation.

10) Considering the fact that teenagers reproductive health needs are continuously neglected by both family and educational institutions, government at all levels should provide appropriate budgetary allocation for youth friendly centres and services at all local government headquarters, states and federal health institutions to meet the reproductive health needs of adolescents and youth.

11) In considering the provision of vocational and recreational needs of the teenagers, program planners should take a critical look at the linkages that such needs will have on the socio-cultural context of the target groups. This

will demand an in-depth community analysis through which each of these broad contexts will be subjected to detailed and critical analysis

In addition to the above, there would be a need to raise institutional capacity to deliberately deal with high poverty level, chronic underdevelopment, harmful cultural strongholds militating against the attainment of the desired reduction in maternal morbidity and mortality in northern Nigeria in the following key areas:

I) **Establishment of adult education centres and poverty reduction units in all local government areas in Northern Nigeria** These units should be manned and managed by at least 75percent women who are educated and experienced in community development, adult education and preventive health matters. This unit should take advocacy responsibility for women involvement in popular participation in development-oriented activities that enhance gender equity, freedom and rights to health through rural community campaigns, enlightenments and role plays. The unit should also ensure that the centre for training programs are suitably located to provide for all inclusive women focused innovative economic activities.

II) **Establishment of skill acquisition centre training units** in all local government areas in Northern Nigeria. Findings from the survey shows that very few women in sampled locations have any form of gainful employment due to high level of illiteracy among women of reproductive age. Deliberate encouragement and establishment of skill and vocational skills centre that are skewed towards women economic growth will reduce high level dependency on the male counterparts. Without doubt,

vocational skill establishment will help increase the economic status of women and consequently their ability to afford cost of medical bills.

5.6 Contribution to Knowledge

The study is unique in its import and contribution to knowledge on how to tackle particularly the MDG 5 - improved maternal health. The study revealed that socio-demographic variables like age at first pregnancy, marital status, religion, educational qualification, occupation, and number of wives in matrimonial homes ; as well as cultural variables such as female circumcision, wife inheritance, male dominance, traditional birth practices, superstition and early marriage significantly jointly and relatively influence maternal morbidity and mortality. It is possible therefore that intervention programs designed and implemented through the top-bottom approach are always at variance with maternal health services and culturally appropriate needs of target population as these factors could hardly be considered in this approach. Consequently, such intervention programs do not produce significant impact on the socio-cultural domain of the target group. This, possibly, is the reason for the non reduction in maternal death in the region despite the increase number of interventionist groups in the communities. This also could be why there is palpable indifference to development programs among people in Northern Nigeria. To this extent, this study revealed that the needs of the people, social, cultural and demographic variables are important factors for consideration when designing the reproductive health intervention programs for the people. Again, in order to achieve the participation of the target population in recommended preventive health programs for the desired reduction in maternal morbidity and mortality, the people must be involved right from the outset and through the program cycle - needs identifications, planning, implementation and evaluation of proposed intervention programs. Basically,

therefore, the contribution of this study to knowledge rests in the confirmation of the premium position of and influence of socio-cultural factors as on maternal morbidity and mortality and how addressing these factors through sustainable women involvement and participation in remmended preventive health intervention programs for particularly, the deprived, neglected and oppressed women of child bearing age and teenagers in Northern Nigeria.

5.7 Suggestions for Further Studies

1). A replication of this this study in other parts of the country, to come up with the findings that will sustain the momentum of change both in the academia and the society. In doing this, a larger sample of the population should be used to enable generalization of the results and findings.

2). An in-depth separate study of each socio-cultural factors constituting the variables in this study is desired as that will help ranking their significant variability in relation to maternal morbidity and mortality.

3). Being a survey research design study, it is suggested that other scientific tools such as quasi-experimental or expo-facto design could be tried in investigating the extent to which socio-cultural variables influence maternal morbidity and mortality in the communities.

5). A study of Men's only, perception of the socio-cultural variables as they influence maternal morbidity and mortality in northern Nigeria is desired.

7). Finally, a study of the Socio-cultural enhancers of early marriage and teenage pregnancy in Northern Nigeria is suggested.

5.8 Limitation of the study

There were some limitations which may affect the generalizations of the findings of this study. These include:

- The researcher investigated some perceived socio-cultural factors which tend to predict maternal morbidity and mortality among women of child bearing age in two northern Nigeria states. These factors include age at first pregnancy, religion, occupation, educational qualification, ethnicity, number of wives in matrimonial homes, male dominance, wife inheritance, traditional birth practices, superstition, early marriage and female circumcision. These factors are not exhaustive and therefore, basing the findings strictly on them may tend to affect the generalization of the results. The study only focused two states, Benue and Borno states and drew samples from only fifteen communities in Benue and eighteen in Borno state within a limited area in North east and North central Nigeria. These factors may limit the extent of inference drawn for the purpose of generalization in Northern Nigeria.
- Retrieval of data was quite tasking, being a volatile zone and being a time when manifestation of hostilities in the research area was high as a result of the Boko Haram and religious militia activities. These experiences affected the time and raise the financial burden of the researcher. Some of the un-retrieved data lost to attrition were as a result of this factor.
- This study was further constrained by financial resources available to researcher. The financial implication of collecting data from a vast research area that was not even contiguous was enormous. The cost of training research assistants and their

deployment to the field to assist in data administration and collection was quite grave. All the same, this did not affect the results of the study.

- The study of social phenomenon in a volatile cultural setting made it impossible to extend the study beyond the present scope in terms of the social and cultural variables. This is why it is important that this study be replicated in other parts of the country to enhance generalization.
- Data collection from particularly the LGA maternal and child health coordinators who were medical doctors was very challenging as repeated visits had to be made before reaching the personnel while plenty of patience was required as there was usually,very long waiting period before being called in to be attended.

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Appendix A

University of Ibadan, Ibadan
Department of Adult Education

Demographic information of respondents

Dear Respondent,

I am conducting a study on the correlates of socio-cultural factors influencing maternal morbidity and mortality in selected communities of Benue and Borno. The information you provide will be kept strictly confidential and used for research purpose. Your cooperation by honest responses to the questionnaires will therefore be highly appreciated. Thanks for your cooperation.

Survey Identification Number_____ Date of questionnaire administration_____

Name of location/community where questionnaire was administered_____

Please tick (✓) where appropriate to your response and write where necessary

SECTION A: DEMOGRAPHIC INFORMATION

1. Age 10-15 years ☐ 16-20years ☐ 21-25 years ☐ 26-30 years ☐ 31-35 years ☐ 36-40 years ☐ 41-45 years ☐ 46 years and above ☐
2. Occupation: Civil servant ☐ Farming ☐ Trading ☐ Housewife ☐ Others (Please specify)_____
3. Educational qualification: First Leaving School Certificate ☐ WASC/SSCE ☐ NCE/OND ☐ Arabic education ☐ HND/First degree ☐ Post-graduate degree ☐ No formal education ☐
4. Ethnic group: Yoruba ☐ Igbo ☐ Hausa ☐ Tiv ☐ Idoma ☐ Kanuri ☐ Fulani ☐ Others (Specify)_____
5. Religion: Christianity ☐ Muslim ☐ African Traditional Religion ☐
6. Marital Status: ☐ Single ☐ Married ☐ Separated ☐ Divorced
7. If married, number of wives in matrimonial home: ☐ one ☐ two ☐ three ☐ four or more
8. How many children do you have? _____ Male(s) _____ Female(s)_____

Appendix B

University of Ibadan, Ibadan
Department of Adult Education

Social Factors Questionnaire scale (SFQS)

Dear Respondent,

I am conducting a study on the correlates of socio-cultural factors influencing maternal morbidity and mortality in selected communities of Benue and Borno. The information you provide will be kept strictly confidential and used for research purpose. Your cooperation by honest responses to the questionnaires will therefore be highly appreciated. Thanks for your cooperation.

Survey Identification Number_____ Date of questionnaire administration_____

Name of location/community where questionnaire was administered_____

INFORMATION ON SOCIAL FACTORS

In your own view tick (√) as appropriate, your belief on the influence of the followings on maternal morbidity and mortality in your community

Age at first pregnancy

Please tick (✓) as appropriate to your opinion on the following statement questions using the four point scale provided below.

S/N	Statements	Strongly agree	Agree	Disagree	Strongly disagree
1	Pregnancy at age below 15 years have adverse effect on maternal morbidity and mortality				
2	To prevent maternal morbidity and mortality, only women aged 18 years and above should be pregnant.				
3	The high prevalence of Vagina tear among teenagers at birth is sufficient reason to discourage pregnancy among women under				

	15 years of age				
4	Teenage pregnancy is a crime against humanity and should be discouraged				

(ii) Occupation of the woman

Please tick (✓) as appropriate to your opinion on the following statement questions using the four point scale provided below.

S/N	Statements	Strongly agree	Agree	Disagree	Strongly disagree
5	Married women should be allowed to work to support the family and take care of their health				
6	Once you are married, religious enjoined that you remain in purdah				
7	The work environment of married women exposed them to immorality and other vices				
8	Occupation of the woman has nothing to do with their ability to access maternal services				

(iii) Educational qualification of the woman

Please tick (✓) as appropriate to your opinion on the following statement questions using the four point scale provided below.

S/N	Statements	SA	Agr	DA	SDA
9	Women that are educated are better informed and readily access maternal health services				
10	Educated women are not delivered by TBAs				
11	Education of the woman does not influence maternal services				
12	Education of the mother is critical in the care of the family and prevent maternal complications				

13	All married women-whether educated or not-must be permitted by their husbands before they go to the hospital for maternal services				

(IV) Ethnic Group

Please tick (✓) as appropriate to your opinion on the following statement questions using the four point scale provided below.

S/N	Statements	Strongly agree	Agree	Disagree	Strongly disagree
14	It is important to respect our ethnic cultures affecting women				
15	Every ethnic group have its laws and traditions prescribing the role of women in marriages.				
16	Irrespective of social status and age, ethnicity plays a role in how much decision any married woman can make concerning her health without the support of her husband				
17	Ethnicity directly dictates our belief system and the observance of our cultures and traditions as it affects pregnancy and deliveries.				

V Religion

Please tick (✓) as appropriate to your opinion on the following statement questions using the four point scale provided below.

S/N	Statements	Strongly agree	Agree	Disagree	Strongly disagree
18	"Go ye and multiply" is a religious injunction and should be obeyed by all women				
19	Since children are gifts from God, it is ungodly to prevent pregnancies by any means				
20	Only natural methods of birth control should be practiced by all religious faithful				

21	Consulting hospital workers during pregnancy is a sign of unbelief in Gods power to protect mother and the unborn child				

(Vi) Marital status of the woman

Please tick (✓) as appropriate to your opinion on the following statement questions using the four point scale provided below.

S/N	Statements	SA	Agr	DA	SDA
22	A woman that is married is less likely to die from pregnancy and delivery.				
23	One way to prevent maternal morbidity and mortality in Nigeria is to encourage marriage				
24	Marriage does not contribute to reduction in maternal morbidity and mortality				
25	Marital status of the woman has nothing to do with her ability to access maternal services				

(Vii) Number of wives in matrimonial home

Please tick (✓) as appropriate to your opinion on the following statement questions using the four point scale provided below.

S/N	Statements	Strongly agree	Agree	Disagree	Strongly disagree
26	The more the number of wives in matrimonial home , the more the competition for more children by each wife				
27	Women in polygamous marriages pay their health/hospital bills themselves				
28	Women in polygamous marriages abide by socio-cultural prescriptions more in order to secure the husbands' love				

Thank you

Appendix C

University of Ibadan, Ibadan
Department of Adult Education

Cultural Factors Questionnaire Scale (CFSQ)

Dear Respondent,

I am conducting a study on the correlates of socio-cultural factors influencing maternal morbidity and mortality in selected communities of Benue and Borno. The information you provide will be kept strictly confidential and used for research purpose. Your cooperation by honest responses to the questionnaires will therefore be highly appreciated. Thanks for your cooperation.

Survey Identification Number_____ Date of questionnaire administration_____

Name of location/community where questionnaire was administered_____

CULTURAL FACTORS INFORMATION

Please indicate your opinion on the relationship between the following socio – cultural practices and maternal morbidity and mortality.

(i) Female Circumcision:

1. Your community carries out female circumcision ☐ Yes ☐ No

2. If yes, at what age are females circumcised? ☐ At birth ☐ before the child reaches maturity ☐ they are usually circumcised during age grade ceremonies ☐ shortly before marriage ☐ it can be done at anytime ☐ (v) others please specify----------

3. Were you circumcised? ☐ Yes ☐ No

Please tick (✓) as appropriate to your opinion on the following statement questions using the four point scale provided below.

S/N	Statements	Strongly agree	Agree	Disagree	Strongly disagree
4	Female circumcision helps to maintain the virginity of the girl child				
5	Female circumcision should be preserved				
6	Female circumcision should be abolished				
7	A girl child that is not circumcised is				

	naturally dirty				
8	The clitoris of the female looks like the male penis and should therefore be removed				
9	Female circumcision prepares the girl child for marriage				
10	Female circumcision reduce promiscuity				
11	Females that are circumcised are likely to encounter any of the followings				
A	• Hemorrhage (bleeding)				
B	• Tetanus				
C	• Vagina Tear during delivery				
D	• Obstructed labour				
E	• Anaemia during pregnancy				
12	Circumcision is a prerequisite for immediate pregnancy				
13	Any uncircumcised woman in this community risk being afflicted by the gods for undermining tradition				

(ii) Male dominance

Please tick (✓) as appropriate to your opinion on the following statement questions using the four point scale provided below.

S/N	Statements	Strongly agree	Agree	Disagree	Strongly disagree
14	Male child is more valued at birth in this community				
15	Female child is more valued at birth in this community				
16	The male child takes the inheritance of the parents in this community				
17	The female child takes the inheritance of the parents in this community				
18	Both male and female children shares the inheritance of the parents in this community				
19	If l were to have only one child l will prefer a male child				
20	If l were to have only one child l will prefer a female child				

(iii) Wife Inheritance

Please tick (✓) as appropriate your level of agreement or disagreement with the following statements

S/N	Statements	Strongly agree	Agree	Disagree	Strongly disagree
21	When a husband dies in this community the younger of the deceased husband automatically marries the wife				
22	The wife of the deceased husband remains in the family but she is not married to anyone in the family				
23	The wife can live the family of the deceased husband and remarry to anyone she pleases				
24	In this community wives can inherit the properties of the deceased husband				
25	When a husband dies in this community the parents inherit his properties				
26	The siblings are expected to inherit the properties upon the death of a husband				
27	The following are acceptable traditional practices in this community				
A	The wife mourns the husband for a period of time in a secluded room				
B	The wife shaves her hair when the husband dies				
C	The wife wears one dress for a period of time to mourn her husband				
D	The wife may be required to drink water used in bathing the dead husband to prove her innocence				
E	The wife could be required to eat with unwashed plate throughout the period of mourning				

	The wife suffer certain deprivation if she refuses to be inherited by the parent's relations when he dies				
28	An inherited wife enjoys greater respect and love if she delivers for the new husband				
29	An inherited wife is deprived inheritance benefits from her new husband if she fails to deliver children for him while the marriage last				

(4) Traditional Birth practices

Please tick (✓) as appropriate to your opinion on the following statement questions using the four point scale provided below.

S/N	Statements	Strongly agree	Agree	Disagree	Strongly disagree
30	If a woman is assisted during delivery by only old women who have delivered before that means her hands are clean				
31	Any delivery by operation in hospital is a proof that the woman has committed some cultural taboos.				
32	Traditional birth attendants are more capable hands than most orthodox health professionals when it comes to delivery because they inherited the trade from their parents				
33	Only women should assist women during labour				
34	Traditional rituals performed during labour helps smooth delivery and safety of mother and child				

(5) Superstition

Please tick (✓) as appropriate your level of agreement or disagreement with the following statements

S/N	Statements	Strongly agree	Agree	Disagree	Strongly disagree
35	Traditional Birth Attendants are better in child delivery				
36	When labour is difficult there is need to invite experienced traditionalists				
37	When labour is difficult orthodox medical practitioners should be				

	invited				
38	Pregnant woman should not eat the following food items:				
A	Eggs				
B	Banana				
C	Snails				
D	Vegetables				
E	Meat/fish				
39	Pregnant women should conduct prescribed traditional /cultural rituals to ensure safe delivery				
40	Any delivery referred by Traditional Birth Attendant (TBA) to hospital is a sign of incompetence of the TBA				

(6) Early marriage

Please tick (✓) as appropriate to your opinion on the following statement questions using the four point scale provided below.

S/N	Statements	Strongly agree	Agree	Disagree	Strongly disagree
41	The ideal age of a girl getting married in this community is usually below 9 years				
42	The ideal age of a girl getting married in this community is usually between 10 and 13 years				
43	Most girls usually get married between the ages of 14-18 in this community				
44	In this community most girls marry between ages 19 and 25 years				
45	Usually most females get married above 25 years of age				
46	There is usually no specific age of marriage in this community				
47	There are dangers associated with early marriage				
48	Early marriage is the solution to early sexual exposure of the female child				

49	Contraceptive education should be given to girls who marry early				
50	Blood group and genotype are identified before marriage				
51	The first menstruation of any girl should happen in her husband home				

Thank you

Appendix D

University of Ibadan, Ibadan
Department of Adult Education

Maternal Morbidity and Mortality scale (MMMS)

Dear Respondent,

I am conducting a study on the correlates of socio-cultural factors influencing maternal morbidity and mortality in Benue and Borno. The information you provide will be kept strictly confidential and used for research purpose. Your cooperation by honest responses to the questionnaires will therefore be highly appreciated. Thanks for your cooperation.

Survey Identification Number_____ Date of questionnaire administration_____

Name of location/community where questionnaire was administered_____

Section B: Information on Maternal Morbidity and Mortality

Provision of Maternal Health Care Services

Please tick (✓) as appropriate to your opinion on the following statement using the four point scale provided below.

S/N	Statements	Strongly agree	Agree	Disagree	Strongly disagree
1	Modern family planning methods are provided in the clinics in my community				
2	Ante-natal services are provided in the clinics in my community				
3	Delivery services are provided in the clinics in my community				
4	Post – natal services are provided in the clinics in my community				
5	Child welfare services are provided in the clinics in my community				
6	Going to the health centres for medical treatment is simply waste of time				
7	It is better to patronize traditional birth attendants than go to the				

	hospital for deliveries				
8	Use of modern family planning methods could cause infertility				
9	Doctors, Nurses and midwives are the best hands when it come to deliveries				
10	Since pregnancy is not a disease, pregnant women should go to hospital only when she is in labour				
11	It is better for women to abide by all prescribed socio-cultural practices especially during pregnancy to avoid the wrought of our ancestors				
12	Only female health workers should be allowed to take deliveries in hospitals				
13	Use of family planning is against God's injunction of " go and multiply" which is in the Holy Books				
14	Adolescents have no reason at all to use family planning methods				
15	I am aware of a modern health centres in this community that provide maternal health services				
16	The nearest health centre to my community is less than 5 minutes trekking distance				
17	I always need a motorcycle or vehicle to get to the health centre for service				
18	There is no maternal health centre in my community				
19	I have attended the health centre in my community to deliver or treat my children				
20	In the health centre in your community, there are usually no health personnel				
21	No drugs in the health centre				

22	Health personnel in the health centre are very hostile				
23	I know a woman that have died from child birth or soon after delivery since the last 6 months in this community				
A	Planned Parenthood Federation of America (PPFA) is funding health services in our community				
B	United State Agency for International Development (USAID) is funding health services in our community				
C	Packard Foundation is funding health services in our community				
D	World Health Organization (WHO) is funding health services in our community				
E	Society for Family Health (SFH) is funding health services in our community				
F	NKST Reproductive Health project is funding health services in our community				
I	Borno medical Clinic Reproductive Health project is funding health services in our community				
J	Planned Parenthood Federation of Nigeria (PPFN) is funding health services in our community				

Please tick (✓) as appropriate

24. Who delivered you of your last pregnancy? ☐ A traditional birth attendant ☐ A nurse/midwife ☐ A medical doctor ☐ A traditional doctor/herbalist ☐ By myself

25. Where was your last pregnancy delivered? ☐ At home ☐ At church /mosque ☐ At health centre ☐ At private hospital

Thank You

Appendix E

University of Ibadan, Ibadan
Department of Adult Education

Teenager Maternal Morbidity and Mortality scale (TMMMS)

Dear Respondent,

I am conducting a study on the correlates of socio-cultural factors influencing maternal morbidity and mortality in selected communities of Benue and Borno. The information you provide will be kept strictly confidential and used for research purpose. Your cooperation by honest responses to the questionnaires will therefore be highly appreciated. Thanks for your cooperation.

Survey Identification Number_____ Date of questionnaire administration_____

Name of location/community where questionnaire was administered_____

Section B: Information on Teenage Maternal Morbidity and Mortality

Use of Youth Friendly Services (For Teenagers (9-19 years) only)

S/N	Statement	Strongly agree	Agree	Disagree	Strongly disagree
1	I am aware of a youth friendly centre in this community				
2	The facilities in the youth friendly centre include				
A	Snooker game				
B	Table tennis court				
C	Video club centre				
D	Chess				
E	Scrabble				
F	Seminar room for lectures				
G	Internet facility				
3	The youth friendly centre offer the following services				
A	HIV/AIDS voluntary counseling and testing				
B	Reproductive health education				
C	Condom distribution				
D	Life building skills				
E	Career guidance				
F	Secondary school certificate revision classes				

G	Pre – university entrance lectures				
H	Moral studies				
4	The following Information Education and Communication (IEC) materials are available at the youth friendly centre				
A	Posters on HIV/AIDS				
B	Posters on Malaria and Tuberculosis				
C	Posters on healthy living				
D	Posters on safer sex				
E	Posters on family planning methods				
F	Posters on career guidance				
5	I will want more of such youth friendly centres in this community				
6	Culturally speaking, youth should not be exposed to too much sex education so they don't become promiscuous				
7	The organization funding the youth centre include				
A	Planned Parenthood Federation of America (PPFA) is funding youth friendly health services in our community				
B	United State Agency for International Development (USAID) is funding youth friendly health services in our community				
C					
D					
E	Packard Foundation is funding youth friendly health services in our community				
F					
G	World Health Organization (WHO) is funding youth friendly health services in our community				
H	Society for Family Health (SFH) is funding youth friendly health services in our community				
I					
	NKST Reproductive Health project is funding health services in our community				
	Borno medical Clinic Reproductive Health project is funding youth friendly health services in our community				
	Planned Parenthood Federation of Nigeria (PPFN) is funding youth friendly health services in our community				
	I don't know the name of the organization				

8 I attend the youth friendly centre for counseling services: Yes ☐ No ☐

9. attend the youth friendly centre for reproductive health services:
   Yes ☐ No ☐

Thank You.

Appendix E

University of Ibadan, Ibadan
Department of Adult Education

Key Informant Interview Guide

Introduce yourself and explain the purpose of the discussion to participants

Greetings

Hello, my name is----------and l am a researcher from the University of Ibadan, Faculty of Education, Department of Adult Education. I am conducting a research on the correlates of socio-cultural factors influencing maternal morbidity and mortality in selected communities of Benue and Borno states, Nigeria. I will like to ask some questions with regards to the above topic. All information obtained shall be treated as confidential.

SECTION 1- Area Identification

1. State _____
2. LGA_____
3. Town _____
4. Location_____
1. Person/position _____

SECTION II- Guiding questions

1. What are the traditional practices in this community that you think negatively affects the health of pregnant women and girls? (probe for wife inheritance, FGM, male dominance, superstition, nutritional taboos etc)
2. How many health centres are available in this community? (probe for numbers of health centres, personnel and cadre, facilities, distance and types of services offered)

3. Are you aware of women in this community that patronize Traditional Birth Attendants (TBAs)? (probe for characteristics of the women, reasons for patronage, types of persons offering TBA services, whether practicing TBAs received any training,)
4. What are the prevalence of maternal morbidity and mortality in this community? (probe for incidences, major causes – too close pregnancies, too many births, teenage pregnancies, abortions, Harmful traditional practices, unsupervised delivery, etc)
5. What are the types of health facilities available to young persons in this community? (probe for availability of youth friendly centres, types of services offered, recreational facilities available in the centre, level of patronage by youth, and the organization sponsoring the centre)
6. How are young persons in this community informed and educated about their reproductive health? (probe for cultural restrictions on reproductive health information, extent of freedom to talk about sexuality in the community)
7. What is the demand rate of contraceptives including condoms among young persons in this community (probe for frequency, categories of young persons, sex, tribe, religion and where to obtain contraceptives including condom when needed}
8. How available are Information Education and Communication (IEC) materials for the young persons in this community?

9. How consistent are young persons in their use of available reproductive health services in this community? (probe for confidence in seeking services at will)
10. What would you suggest this community do to reduce maternal morbidity, mortality and teenage pregnancies?

Thank you.

Appendix F

University of Ibadan, Ibadan
Department of Adult Education

Focus Group Discussion Guide for adolescents and youth

Dear Adolescents and youth,

I am conducting a study on the correlates of socio-cultural factors influencing maternal morbidity and mortality in selected communities of Benue and Borno. The information you provide will be kept strictly confidential and used for research purpose. Your honest opinion about the issues to be discussed will be highly appreciated. Thanks for your cooperation.

SECTION 1- Area Identification

1. State _____
2. LGA_____
3. Town _____
4. Location_____

SECTION II- Guiding questions

1. What are the major challenges of the girls with respect to reproductive health in this community?
   _____
   _____
   _____
   _____
   _____
2. What specific areas of youth and adolescent sexual and reproductive health are of concern to this community?
   _____
   _____
   _____
   _____
3. Do you think young people in your community have adequate access to sexual and reproductive health information, education and services? If not, what services and information are lacking?

_____
_____
_____
_____
_____

4. What are the communities' cultural beliefs and practices concerning Adolescent Sexual and Reproductive Health?

   _____
   _____
   _____
   _____
   _____

5. What should be done to reduce Sexual and Reproductive Health related risks to the youth?

   _____
   _____
   _____
   _____
   _____

6. What is your comment over the quality of services being provided to the in and out-of school youth in this town? Do you think the services satisfactorily address the Sexual and Reproductive Health (e.g. Family Planning) need of the youth?

   _____
   _____
   _____
   _____

7. Are there any linkage between schools based Sexual Reproductive Health programmes and other out-of-school Sexual Reproductive Health service facilities?

   _____
   _____
   _____

8. Any other recommendation you have for the future of Adolescent Sexual Reproductive Health programs in this town?

   _____
   _____
   _____
   _____

9. List some cultural practices that negatively affect adolescent sexual and reproductive health in this community

_____
_____
_____
_____

THANK YOU ALL FOR THE TIME AND CONTRIBUTIONS

Appendix G:
Hausa Translation of Questionnaire on Maternal Morbidity and Mortality Instruments

Tanadi na Farko

Jami'ar Ibadan, Ibadan

Sashin ilimin manya

Tambayoyi na mizanin auna al'amura da suka jibinci al'adu Gaisuwa ga mai amsa tambayoyi

Ina gudanar da bincike bisa dangunan al'amura na zamantakewa da kuma al'adu da suke shafar cututtuka da mace-mace a tsakanin mata masu haihuwa cikin wasu zababbun al'ummu na Benue da Borno. Dukkanin bayanai da zan samu cikin amsoshin wadannan tambayoyi zasu kasance cikin matukar sirri kuma zanyi amfani da su ne bisa dalilan gudanar da bincike. A bisa Wannan dalili ne, zanyi matukar jin dadin amsoshi na hakika da zan samu daga wurin ki/ka. Na gode matuka da hadin kai da zan samu.

Lambar bincike_____Ranar gabatar da wadannan tambayoyi_____

Sunan wuri/al'umma da aka gabatarwa wadannan tambayoyi_____

Sanya alama () da ta dace da amsar ki/ka, kana ki/ka yi rubutu inda hakan ya wajabta

Bayanan rayuwar mai amsa tambayoyi

1. Shekaru: Shekara 10-15 Shekara 16-20 Shekara 21-25 Shekara 26-30 Shekara 31-35 Shekara 36-40 Shekara 41-45 Shekara 46 zuwa sama
2. Sana'a: Aikin gwamnati Noma Kasuwanci Matar aure Saura (A fayyace)_____

3. Matakin Ilimi: Takaddar shaidar kammala karatun Firamare; takaddar shaidar kammala karatun sakandare; Takaddar shaidar ilimi ta kasa/takaddar shaidar kammala difloma; Ilimin Arabiyya; Babbar shaidar karatun difloma ta kasa/Digirin farko; Digirin digirgir; rashin ilimin rubutu da karatu
4. Kabila: Yarbanci Inyamuranci Hausa Tivi Idoma Kanuri Fulani Saura (A fayyace)_____
5. Addini: Masihiyya Musulunci Addinin gargajiya na Afrika
6. Auratayya: Mara aure Mai aure An rabu An yi shika
7. In da aure, matan aure nawa ne cikin gidan?: Daya Biyu Uku Hudu ko ma fiye
8. 'Ya'ya nawa gare ki/ka?_____Maza_____Mata_____
9. Kin/ka auradda ko da daya daga 'ya'yan ki/ka mata? Eh A'a
10. Idan eh ne, nawa ne shekarun 'ya'yan ki/ka mata a sa'ilin da aka auradda su Shekara 9-12 Shekara 13-15 Shekara 16-20 Shekara 21-25 Sama da shekaru 25
11. 'Yan kabilar ki/ka ne ke auren 'ya'yanki/ka? Eh A'a

Sashi na biyu: Bayanan ayyukan al'ada

Bayyana ra'ayinki/ka bisa dangantakar dake tsakanin wadannan al'amura na zamantakewa da al'adu da kuma cututtuka da mace-macen mata a harkar haihuwa.

- **Kaciyar mata:**

12. Al'ummar ki/ka na gudanar da kaciyar mata? Eh A'a
13. In Eh ne, a wadanne shekaru ne ake yi musu kaciyar? A lokacin haihuwa Kafin yarinya ta balaga Yawanci ana musu ne a yayin bukukuwan ranar sa'anni Jim kadan kafin aure Za'a iya yi ko da yaushe Saura (A fayyace)_____

14. An yi miki Kaciya? Eh A'a

Sanya alama () abinda ya dace da ra'ayin ki/ka bisa wadannan zantuttuka na tambayoyi ta hanyar amfani da mizani mai matakai hudu da aka tanadar a kasa

S/N	Zantuttuka	Kwak kwara r amince wa	Aminc ewa	Rash in amin cewa	Kwakkw arar rashin amincew a
15	Kaciyar mace yana taimaka mata wajen ci gaba da kasancewa bakarara				
16	Ya kamata a ci gaba da kiyaye wa da kaciyar mata				
17	Ya kamata a kauda kaciyar da ake yiwa mata				
18	Duk yarinyar da ba'a yiwa kaciya ba ta kan kasance kazama				
19	Dan tsakan mace ya kan kasance tamkar mazakutar namiji don haka ya kamata a cire shi				
20	Kaciyar mata ya kan kimtsa 'ya mace don fuskantar auren ta				
21	Kaciyar mata yana rage sha'awa				
22	Mata da aka yiwa kaciya na iya kamuwa da daya daga wadannan				
A	• Kwararar jini				
B	• Tetanus				
C	• Tsagewar farji a yayin haihuwa				
D	• Katsewar nakuda				
E	• Karewar jini a yayin juna biyu				
23	Yiwa mace kaciya wani sharadi ne na samun juna biyu nan take				
24	Duk wadda ba'a mata kaciya ba cikin Wannan al'umma zata fuskanci hadarin gamuwa da dodanni sabili da keta al'ada				

- **Kaka gida da maza ke yi**

Sanya alama () da ta dace da ra'ayin ki/ka bisa wadannan tambayoyi na zantuttuka ta hanyar amfani da mizani mai matakai hudu da aka tanadar a kasa.

S/N	Zantuttuka	Kwakkwarar amincewa	Amincewa	Rashin amincewa	Kwakkwarar rashin amincewa
25	A yayin haihuwa an fi mutunta da namiji cikin Wannan al'umma				
26	A yayin haihuwa an fi mutunta 'ya mace cikin wannan al'umma				
27	Da namiji ne ke gadon dukiyar iyaye cikin Wannan al'umma				
28	'Ya mace ce ke gadon dukiyar iyaye cikin Wannan al'umma				
29	Ana raba gadon iyaye ne a tsakanin diya maza da mata a Wannan al'umma				
30	In har da daya kawai Allah zai bani, zan fi son ace da namiji ne				
31	In har da daya kawai Allah zai bani, zan fi son ace 'ya mace ce				

- **Gadon matar aure**

Sanya alama () da ta dace da amincewa ko rashin sa da wadannan zantuttuka

S/N	Zantuttuka	Kwakkwarar amincewa	Amincewa	Rashin amincewa	Kwakkwarar rashin amincewa
32	A cikin Wannan al'umma in maigida ya rasu kanin marigayi mai gidan ne ke auren matar sa nan take				
33	Matar marigayi mai gidan zata ci gaba da zama a cikin iyali amma babu daya daga cikin iyalin da zata aura				
34	Matar zata iya barin gidan marigayi mai gidan nata kuma ta auri duk wanda ya kwanta mata a rai				
35	A cikin Wannan al'umma mata kan ci gadon dukiya da mazajen su da suka rasu suka bari				
36	A cikin Wannan al'umma, a yayin da mai gida ya rasu iyayen sa ke gadon dukiyar da ya rasu ya bari				
37	'Ya 'ya ne ake tsammanin su gaji dukiyar da mai gida ya rasu ya bari				
38	Al'adun Wannan al'umma sun amince da wadannan dabi'u				
A	Matar marigayin zata yi makokin sa har na tsawon wani lokaci cikin wani kebabben daki				
B	Matar zata aske gashinta a yayin da mai gidanta ya rasu				
C	Matar zata sanya tufafi iri guda ne kawai na tsawon wani lokaci don makokin mutuwar mai				

	gidanta				
D	**Mai yiwuwa ne a bukaci matar marigayin ta sha daga ruwan wankan gawar mai gidanta don tabbatar da cewa ba ita ce sanadiyyar mutuwar sa ba**				
E	**Ana iya bukatar matar ta kasance tana cin abinci cikin kwano da ba'a wanke ba har na tsawon lokacin makoki** **Matar zata fuskanci wani kangi, muddin ta ki amincewa da auren 'yan uwan marigayin**				
39	**A kan fi mutuntawa da nuna kauna ga matar da aka gada in har ta haihu wa sabon mai gidanta**				
40	**A kan kange matar da aka gada daga cin moriyar gadon dukiya daga sabon mai gidanta in har ta gaza Haifa masa 'ya 'ya a yayin zaman su na aure**				

- **Ababen haihuwa na al'ada**

Sanya alama () na abinda ya dace da ra'ayin ki/ka a wadannan zantuttuka na tambayoyi ta hanyar yin amfani da mizani mai matakai hudu da aka tanada a kasa

S/N	**Zantuttuka**	**Kwak kwarar amincewa**	**Aminc ewa**	**Rashin amince wa**	**Kwakk warar rashin amince wa**
41	Idan har tsoffin mata da suka taba haihuwa suka tallafawa mace a yayin haihuwa, yana nufin kenan bata da aibi				
42	Duk wadda aka yiwa aikin fida don fidda yaro a cikin ta, manuniya ce na cewa ta aikata				

	wasu ababe da suka saba da al'ada				
43	Ngozoman gargajiya ta fi kwarewa fiye da kwararrun jami'an lafiya na zamani in dai maganan haihuwa ake yi, domin kuwa gadon sana'ar suka yi daga iyaye				
44	Mata ne kawai ya kamta su tallafawa mata a yayin nakuda				
45	Ababen al'adu da ake yi a yayin nakuda na taimakawa a haihu babu matsala kana kuma da tabbatar da kariya ga uwar da danta				

(5) Chamfi

Sanya alama () da ta dace da amincewa ko rashin sa da wadannan zantuttuka

S/N	Zantuttuka	Kwakkwarar amincewa	Amincewa	Rashin amincewa	Kwakkwarar rashin amincewa
46	Ngozoman gargajiya sun fi kwarewa a harkar haihuwa				
47	In nakuda na bada wahala akwai bukatar gayyatar kwararrun 'yan gargajiya				
48	In har nakuda na bada wahala, ya kamata ne a gayyato kwararru a harkar jinya ta zamani				
49	Bai kamata mace mai ciki ta rika cin wadannan ba				
A	Kwai				
B	Ayaba				
C	Dodon kodi				
D	Abincin ganye				

E	Nama/Kifi				
50 51	Ya kamata mata masu juna biyu su rika ke gudanar da wadansu abubuwa na al'ada don samun haihuwa lafiya Duk wani haihuwa da ya gagari ngozoman gargajiya har ya kai ta tura zuwa asibiti, manuniya ce ga rashin kwarewar ngozomar ta gargajiya				

- **Aure da wuri**

Sanya alama () na abinda ya dace da ra'ayin ki/ka bisa wadannan zantuttukan tambayoyi ta hanyar yin amfani da mizani mai mataki hudu da aka tanada a kasa

S/N	Zantuttuka	Kwak kwarar amincewa	Amincewa	Rashin amincewa	Kwakk warar rashin amincewa
52	Shekarun 'ya mace da ya dace a auradda da ita a cikin Wannan al'umma shine kasa da shekaru tara				
53	Shekarun 'ya mace da ya dace a auradda ita a cikin Wannan al'umma shine akasari shekaru tsakanin goma zuwa sha uku				
54	Mafiya yawan 'yan mata sukan yi aure ne galibi a tsakanin shekaru sha hudu zuwa sha takwas a cikin wannan al'umma				
55	Mafiya yawan 'yan mata a cikin Wannan al'umma su kan yi aure ne a tsakanin shekaru sha tara zuwa ashirin da biyar				
56	Galibi mafiya yawan mata su kan yi aure ne baicin sun haura shekaru 25				

57	Galibi babu wani kayyadadden shekaru da aka kebe don auradda ‘yan mata a cikin Wannan al’umma tamu				
58	Akwai illoli tattare da yiwa ‘yan mata aure da wuri				
59	Auradda ‘yan mata da wuri ne mafita ga abkawa cikin zina da ‘ya ‘ya mata ke yi tun suna ‘yan yara				
60	Ya kamata a samarwa ‘yan mata da suka yi aure da wuri ilimin daukar ciki				
61	Akan gano ajin jini da kuma daidaituwar kwayoyin halitta kafin kulla auratayya				
62	Ya kamata ne ace mace ta fara ganin jinin ta na al’ada na farko a dakin mijin ta				

Na gode

Tanadi na biyu

Jami'ar Ibadan, Ibadan

Sashin ilimin manya

Mizanin tambayoyi bisa al'amura da suka jibinci halin zamantakewa

Gaisuwa ga mai bada amsa,

Ina gudanar da bincike bisa dangogin al'amura da suka jibinci halin zamantakewa da al'adu da suke shafar cututtuka da mace-mace a tsakanin mata cikin wasu zababbun al'ummu na Benue da Borno. Bayanan da zasu fito daga Wadannan tambayoyi zasu kasance cikin matukar sirri kuma zanyi amfani ne da su a bisa dalilai na bincike. Domin haka zan yi matukar jin dadin amsar da zan samu ta hakika ga wadannan tambayoyi. Na gode da hadin kai.

Lambar bincike_____Ranar gabatar da wadannan tambayoyi_____

Sunan wuri/al'umma da na gabatarwa wadannan tambayoyi_____

Sanya alama () a inda ya dace na amsar ki/ka kana ki/ka yi rubutu inda hakan ya wajabta

Sashi na daya: Bayanan rayuwar mutum

1. Shekaru: Shekara 10-15 Shekara 16-20 Shekara 21-25 Shekara 26-30 Shekara 31-35 Shekara 36-40 Shekara 41-45 Shekara 46 zuwa sama
2. Sana'a: Aikin gwamnati Noma Kasuwanci Aure Saura (a fayyace)_____
3. Matakin ilimi: Takaddar shaidar kammala karatun firamare Takaddar shaidar kammala karatun sakandare Takaddar shaidar ilimi ta kasa/takaddar shaidar kammala difloma ta kasa Ilimin arabiyya Takaddar shaidar samun babban difloma/Digirin farko Digirin digirgir Babu ilimin rubutu da karatu

4. Kabila: Bayarbe Inyamuri Hausa Tivi Idoma Kanuri Fulani Saura (a fayyace)
5. Addini: Masihiyya Musulunci Addinin gargajiya na Afrika
6. Auratayya: Mara aure Mai aure An rabu An yi shika
7. In da aure, matan aure nawa ne a cikin gidan: Daya Biyu Uku Hudu ko fiye
8. 'Ya 'ya nawa gare ki/ka?_____Maza_____Mata_____
9. Kin/ka taba auradda daya daga diyan ki/ka? Eh A'a
10. Idan Eh ne, shekaru nawa ne ga 'ya 'ya mata da aka aurar? Shekara 9-12 Shekara 13-15 Shekara 16-20 Shekara 21-25 Sama da shekara 25
11. 'Yan kabilar ki/ka ne diyan ki/ka mata ke aure? Eh A'a

Sashi na 2: Bayanai bisa al'amura da suka jibinci halin zamantakewa

Sanya alama () na ra'ayin ki/ka a bisa ko wanne ko kuma duka na al'amura da a ra'ayin ka kake ganin suke kawo cututtuka da yawan mace-mace a tsakanin mata a yankin ki/ka

S/N	Al'amuran zamantakewa	Kwakkwarar amincewa	Amincewa	Rashin amincewa	Kwakkwarar rashin amincewa
12	Shekaru a yayin aure				
13	Sana'ar matar				
14	Zurfin ilimin matar				
15	Kabilar matar				
16	Addinin matar				
17	Matar mai aure ce ko a'a				
18	Yawan matan aure a gidan				

Shekaru a yayin aure

Sanya alama () da ta dace da ra'ayin ki/ka bisa wadannan tambayoyi na zantuttuka ta hanyar yin amfani da mizani mai mataki hudu da aka tanadar a nan kasa.

S/N	Zantuttuka	Kwakkwarar amincewa	Amincewa	Rashin amincewa	Kwakkwarar rashin amincewa
19	Aure da wuri ka'idar addini ne kuma dole a yi biyayya a gare shi				
20	Ya kamata a doradda batun aure da wuri don gujewa karuwar ayyukan fasikanci				
21	Yawan tsagewar farjin mata a tsakanin 'yan mata a yayin haihuwa ya isa dalili na hana auradda 'yan mata da wuri				
22	Iya yawan shekaru cikin aure, iya yawan daidaito a tsakanin auratayya				
23	Yin aure da wuri laifi ne ga dan adam, don haka ya kamata a dakatar da shi				

Sana'ar mace

Sanya alama () da ya dace da ra'ayin ki/ka bisa wadannan tambayoyi na zantuttuka ta hanyar yin amfani da mizani mai mataki hudu da aka tanadar a kasa.

S/N	Zantuttuka	Kwakkwarar amincewa	Amincewa	Rashin amincewa	Kwakkwarar rashin amincewa
24	Ya kamata a ke kyale matan aure suna aiki don tallafawa iyali da kuma kulawa da lafiyar su				
25	Muddin kika yi aure dokokin addini sun tanadar da cewa dole ki kasance cikin kulle				
26	Yanayin aikin mata ya kan ingiza su shiga cikin ayyukan fasikanci da sauran ayyukan assha				
27	Iya yawan shekaru a gidan aure, iya yawan daidaito a auratayya				
28	Sana'ar mace bata da wata alaka da kokarin ta na gudanar da ayyukan uwa				

(i) Matakin ilimin mace

Sanya alama () na ra'ayin da ya dace da ra'ayin ki/ka bisa wadannan zantuttuka na tambayoyi ta hanyar yin amfani da mizani mai mataki hudu da aka tanada a kasa.

S/N	Zantuttuka	Kwakkwarar amincewa	Amincewa	Rashin amincewa	Kwakkwarar rashin amincewa
29	Mata masu ilimi sun fi fahimta kuma sukan yi amfani da asibitocin gwamnati sosai				

30	Mata masu ilimi ba sa haihuwa a hannun ngozomar gargajiya				
31	Ilimin mace ba ya shafar ayyukan ta na matantaka				
32	Ilimin uwa yana da matukar muhimmanci ga aikin kula da iyali kuma yana rage matsalolin matantaka				
33	Al'ada ta tanadar da cewa dole ne matan aure su amshi izini daga mazajen su kafin tafiya asibiti don amsar ayyukan matantaka				

(ii) Kabila

Sanya alama () da ta dace da ra'ayin ki/ka na wadannan zantuttukan tambayoyi ta hanyar yin amfani da mizani mai mataki hudu da aka tanadar a kasa.

S/N	**Zantuttuka**	**Kwakkwarar amincewa**	**Amincewa**	**Rashin amincewa**	**Kwakkwarar rashin amincewa**
34	Yana da muhimmanci mu ke rika mutunta al'adun mu da suka shafi mata				
35	Ko wace kabila tana da ire-iren nata dokoki da al'adu da suka tanadar da rawar da mata zasu ke rika takawa				
36	Ba tare da la'akari da yanayin zamantakewa da shekaru ba, yare yana taka muhimmiyar rawa dangane da irin matakin da ko wace macen aure zata iya dauka na abinda ya shafi lafiyar ta ba tare da tallafin mai gidan ta ba				
37	Yare yana da tasirin gaske bisa				

	yanayin halayyar mu da kuma yin biyayya ga dabi'u da al'adu				

(V) Addini

Sanya alama () da ta dace da ra'ayin ki/ka bisa wadannan zantuttuka na tambayoyi ta hanyar yin amfani da mizani mai mataki hudu da aka tanadar a kasa.

S/N	Zantuttuka	Kwakkwarar amincewa	Amincewa	Rashin amincewa	Kwakkwarar rashin amincewa
38	"Ku watsu cikin kasa ku hayayyafa" umurni ne na addini da ya kamata duk mata su yiwa biyayya				
39	Tunda dai diya kyauta ne daga Allah, haramun ne a dakile ciki ta ko ta wace hanya				
40	Sai kawai hanyoyi na Allah da Annabi ya kamata masu tsoron Allah su bi na tsara iyali				
41	Tuntubar ma'aikatan lafiya a asibiti wata manuniya ce na rashin yarda da ikon Allah na bada kariya ga uwa da dan da yake cikin ta				

(iii) Matsayin auratayya na mace

Sanya alama () da ta dace da ra'ayin ki/ka bisa wadannan zantuttuka na tambayoyi ta hanyar yin amfani da mizani mai mataki hudu da aka tanadar a kasa

S/N	Zantuttuka	Kwakkwarar amincewa	Amincewa	Rashin amincewa	Kwakkwarar rashin amincewa
42	Yana da matukar wahala ace matar da ke da aure ta mutu daga matsaloli masu alaka da haihuwa				
43	Hanya guda na dakile cutuuttuka da mace-macen mata a yayin haihuwa a Nigeria ita ce na karfafa kwarin gwiwar yin aure				
44	Aure baya taimakawa wajen yaduwar cutuuttuka da mace-macen mata masu haihuwa				
45	Iyakacin yawan shekarun mace cikin aure, iyakacin daidaito a harkar auren ta				
46	Sana'ar mace bata da tasiri ga kokarin ta na neman ayyukan lafiyar matantaka				

(iv) Yawan matan aure a gida

Sanya alama () da ta dace da ra'ayin ka bisa zantuttuka na tambayoyi ta hanyar yin amfani da mizani mai mataki hudu da aka tanada a kasa.

S/N	Zantuttuka	Kwak kwar ar amin cewa	Amin cewa	Rash in amin cewa	Kwa kkw arar rash in ami nce wa
47	Iya yawan matan aure a gida iya yawan gasar samun 'ya 'ya				
48	Matan aure masu kishiyoyi, su ke biyan kudaden jinyar su da kansu				
49	Mata masu kishiyoyi su kan yi biyayya ga yanayin zamantakewa da al'adu sosai don samun soyayyar mazajen su				

Na gode

Tanadi na uku

Jami'ar Ibadan, Ibadan

Sashin ilimin manya

Muhimman bayanan matashiyar tambayoyi

Ki/ka gabatar da kanki/ka kana ki/ka bayyana makasudin Wannan tattaunawa ga mahalarta

Gaisuwa

Barka dai, suna na ---------- kuma ina gudanar da bincike ne daga jami'ar Ibadan, tsangayar nazarin malanta, sashin ilimin manya. Ina gudanar da Wannan bincike ne bisa dangogin al'amura da ke da alaka da cututtuka da mace-mace a tsakanin mata cikin wasu zababbun al'ummu na jihohin Benue da Borno, na Najeriya. Zan so in gabatar da wasu tambayoyi da suka jibinci darasi da na ambata a sama. Dukkanin bayanai da zan tattara zasu kasance cikin sirri matuka.

Sashi na daya – Shata yanki

1. Jiha
2. Karamar hukuma
3. Gari
4. Wuri
5. Mutum/matsayi

Sashi na biyu – Matashiyar tambayoyi

- Wadanne abubuwa na al'ada ne a cikin Wannan al'umma naki/ka ki/ka ke tunanin suke illa ga lafiyar mata masu juna biyu da 'yan

mata? (Binciken gadon matar aure, FGM, Kaka gida na mazaje, Chamfi, Ababen Allah wadai)

- Cibiyoyin lafiya nawa ne Wannan al'umma take da su? (Binciken yawan cibiyoyin lafiya, Ma'aikata da matsayin su, Kayayyakin aiki, Nisa da irin ayyuka da ake gudanarwa)
- Kina/kana da masaniyar mata a cikin Wannan al'umma dake zuwa wajen Ngozomomi na gargajiya? (Binciken siffofin mata, Dalilan su na zuwa wurin Ngozomar gargajiya, Yanayin mai gudanar da aikin Ngozomar gargajiya, Shin ko ana amsar wani horo na musamman kafin shiga aikin Ngozoma na gargajiya)
- Yaya yawan cututtuka da mace-mace a tsakanin matan wannan al'ummar yake? (Binciken yawan aukuwar cututtuka da mace-mace, Manyan ababe da ke musabbabi, Ciki a tsakanin 'yan mata, Zubda ciki, Al'adu masu illa, Haihuwa da ba'a zuba idanu a kansu)
- Wadanne ire-iren kayayyakin lafiya ne na matasa da Wannan al'umma take da su? (Binciken yawan cibiyoyin kyautata jin dadin matasa, Ire-iren abubuwa da ake gudanarwa a cibiyoyin, Ababen shakatawa a cibiyoyin, Yanda matasa ke ziyartar cibiyoyin, kana da wace hukuma ko kungiya ne ke gudanar da cibiyar)
- Ta wace hanya ake sanarwa tare da ilmantar da matasan Wannan al'umma bisa lafiyar su a yayin haihuwa? (Binciken kangi na al'adu bisa bayanan lafiyar masu haihuwa, Yanayin 'yancin zantuttuka bisa jima'I a cikin al'ummar)
- Ya ya yawan bukatar abubuwan jima'I da suka hada da kororon roba yake a tsakanin matasan Wannan al'umma? (Bincike bisa yawan bukata, Nau'oin matasan, Jinsin su, Kabilar su, Addinin su, kana kuma da inda suke nemo wa hada da kororon roba a lokacin da suke bukata
- Yaya ake samun litattafai masu dauke da bayanai, ilmantarwa da kuma sadarwa ga matasa a cikin Wannan al'umma?

- Yaya yawan amfani da ayyukan lafiyar masu haihuwa da ake da shi cikin Wannan al'umma yake? (Binciken kwarin gwiwar matasa wajen neman ire-iren wadannan ayyuka na lafiya ba tare da an tilas ta su ba)
- Wace shawara zaka baiwa Wannan al'umma wajen rage yaduwar cututtuka, yawan mace-macen mata da kuma yawan samun juna biyu a tsakanin 'yan mata?

Na gode

Tanadi na hudu

Jami'ar Ibadan, Ibadan

Sashin ilimin manya

Matashiyar tattaunawa a tsakanin nau'in da bincike yake maida hankali a kai don baligai da matasa

Gaisuwa a gareku baligai da matasa

Ina gudanar da bincike bisa dangogin al'amura dake janyo cututtuka da mace-mace a tsakanin mata a wasu zababbun al'ummu na Benue da Borno. Bayanan da zaki/ka bani zasu kasance cikin matukar sirri kuma zan yi amfani ne da su bisa dalilan harkar gudanar da bincike. Zan matukar jin dadin bayanai na hakika bisa al'amura da ake zance a kai da zan samu. Na gode da hadin kai.

Sashi na daya – Shata yanki

1. Jiha
2. Karamar hukuma
3. Gari
4. Wuri

Sashi na biyu – Tambayoyi

- Wadanne kalubale ne ‘yan mata ke fuskanta dangane da sha’anin lafiyar haihuwa a cikin Wannan al’umma?

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- Wadanne takamammun fannoni ne na lafiyar matasa da baligai wajen jima’I da haihuwa dake tada hankalin wannan al’umma?

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- Ke/Kai a tunanin ki/ka Kina/Kana ganin cewa matasa dake cikin Wannan al’umma taka suna da kyakkyawar hanyar samun ayyukan bayanai da ilmantarwa bisa lafiyar masu haihuwa? In har ba haka ba ne, wadanne ayyuka ne da kuma bayanai suke karanci?

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- Wadanne ayyuka ne da kuma al’adu na Wannan al’umma da suka jibinci sha’anin lafiyar baligai a fannonin jima’I da lafiyar masu haihuwa?

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- Me ya kamata a yi don rage hadarin dake fuskantar matasa a fagen lafiyar su wajen jima'I da haihuwa

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- Menene bayanin ki/ka dangane da ingancin ayyukan da ake tanadar wa matasa na ciki da wajen makaranta a Wannan gari? Kina/kana ganin cewa wadannan ayyuka sun cimma biyan bukatun sha'anin lafiyar masu haihuwa da wadanda suka jibinci jima'I (Misali tsara iyali) na matasa?

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- Shin akwai wata dangantaka a tsakanin ayyukan shirye-shiryen tsarin haihuwa na makarantu da kuma sauran kayayyakin ayyukan lafiyar masu haihuwa dake wajen makaranta?

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- Akwai wata shawarar ta daban don tsara shirye-shirye da za'a bullo da su a nan gaba da suka jibinci sha'anin jima'I da lafiyar masu haihuwa a cikin Wannan gari?

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- Lissafo wasu daga al'adu dake shafar yanayin jima'I a tsakanin baligai da kuma sha'anin lafiyar masu haihuwa a cikin Wannan al'umma

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NA GODE MUKU BAKI DAYANKU SABILI DA BANI LOKACI DA KUMA HADIN KANKU

Appendix H

Schedule time-table for KII and FGD in Benue state

State	LGA	Dates for activities	Type of activities
Benue	Mkar-Gboko	May 3rd-6th, 2009	Training of Research Assistants
✓	Ayim	May 8th-9th, 2009	Fieldwork experience for research assistants
✓	Gboko	May 12th-15th	KII and FGD
✓	Ador	May 16th and 17th	KII and FGD
✓	Agatu	May 19th	KII and FGD
✓	Buraku	May 21st-22nd	KII and FGD
✓	Apa	May 23rd	KII and FGD
✓	Gwer West	May 24-26th	KII and FGD
✓	Gwer East	May 26th and 27th	KII and FGD
✓	Guma	May 30th	KII and FGD
✓	Ito	June 2nd	KII and FGD
✓	Kastina-Ala	June 3rd -5th	KII and FGD
✓	Konshisha	June 5th-7th	KII and FGD
✓	Kwande	June 8th	KII and FGD
✓	Makurdi	June 10-14th	KII and FGD
✓	Obi	June 15th	KII and FGD
✓	Logo	June 17th and 18th	KII and FGD

Appendix I

Schedule time-table for KII and FGD in Borno state

State	LGAs	Dates	Type of activities
Borno	Bama	July 2nd –5th ,2009	Training of research assistants
✓	Damaturu	July 7th and 8th	Field work experience for research assistants
✓	Kwaya-ku	July 10th-11th	KII and FGD
✓	Kukawa	July 12th and 13th	KII and FGD
✓	Abadan	July 14th-16th	KII and FGD
✓	Askira/Uba	July 17th-18th	KII and FGD
✓	Bama	July 20th-22nd	KII and FGD
✓	Konduga	July 23rd	KII and FGD
✓	Biu	July 24th and 25th	KII and FGD
✓	Chibok	July 28th-29th	KII and FGD
✓	Dambao	July 29th-30th	KII and FGD
✓	Dikwa	August 2nd-3rd	KII and FGD
✓	Gubio	August 5th	KII and FGD
✓	Guzumala	August 6th and 7th	KII and FGD
✓	Gwoza	August 9th-12th	KII and FGD
✓	Hawul	August 13th -14th	KII and FGD
✓	Jere	August 15th-16th	KII and FGD
✓	Kaga	August 20th	KII and FGD
✓	Kale/Balge	August 21st -22nd	KII and FGD
✓	Bayo	August 23-25th	KII and FGD