

# NIGERIAN SOCIOLOGICAL REVIEW

**VOL. 5 No. 1** 

# CONTENTS

ARTICLES	PAGES
Global Neo-Liberalism And The Deepening Dependency Capitalist Status Of Nigeria - Babalola Ademola	1
Globalization And Feminization Of Poverty In The Niger Delta Region Of Nigeria - Chioma Joseph-obi, Ph.D	13
Globalization Of Prostitution And Sex Trafficking In Nigeria - Philomena I. Ozo-Eson, Ph.D.	27
The Dynamics Of Marketing Strategies In Nigerian Party Politics - Worla Rowland E.	i. 41
The Role Of The Mass Media In Attaining Vision 20/2020 In Nig - Ben, U. Nwanne	eria 57
Mothers' Utilisation Of Programme Interventions To Reduce Maternal Mortality In South - Western Nigeria AMOO, Emmanuel Olagunju & Azuh, Dominic (PhD)	69
Globalization And The Latent Problems Of Development In Nigo - Victor Teddy Jike Ph.D	eria 83

**A PUBLICATION OF NSS - 2010** 

# NIGERIAN SOCIOLOGICAL REVIEW

VOL. 5 No. 1

# **CONTENTS**

ARTICLES	PAGES
Global Neo-liberalism And The Deepening Dependency Capitalist Status Of Nigeria - Babalola Ademola	1
Globalization And Feminization Of Poverty In	
The Niger Delta Region Of Nigeria - Chioma Joseph-obi, Ph.D	13
Globalization Of Prostitution And Sex Trafficking In Nigeria	
- Philomena I. Ozo-eson, Ph.D.	27
The Dynamics Of Marketing Strategies In Nigerian Party Politics Worlu Rowland E.	41
The Role Of The Mass Media In Attaining Vision 20/2020 In Niger - Ben, U. Nwanne	ria 57
Mothers' Utilisation Of Programme Interventions To Reduce Maternal Mortality In Southwestern Nigeria	
AMOO, Emmanuel Olagunju & Azuh, Dominic (PhD)	69
Globalization And The Latent Problems Of Development In Niger Victor Teddy Jike Ph.D	<b>ia</b> 83

# MOTHERS' UTILISATION OF PROGRAMME INTERVENTIONS TO REDUCE MATERNAL MORTALITY IN SOUTHWESTERN NIGERIA

### AMOO, Emmanuel Olagunju

e-mail: emman\_amoo2007@yahoo.com and,

#### Azuh, Dominic (PhD) e-mail: dazuhc@yahoo.com

Demography and Social Statistics Program, Department of Economics and Development Studies, School of Social Sciences, College of Development Studies, Covenant University, Canaanland, Ogun State, Nigeria

#### **Abstract**

Twenty three years after the safe motherhood initiative, maternal mortality is still soaring, as more than half a million women die from pregnancy and related causes annually. Improving programme utilization would likely reduce the incidence of maternal deaths in Nigeria. The paper examines the socio-economic factors influencing maternal mortality. The study used face-to-face structured interview and focus group discussion with a two level analytical approach capturing both the qualitative data and information from the discussion segment. The findings show that mother's age, education, health centre distance, occupation and husband occupation are significant enhancers of antenatal clinic registration and utilization of medicare facilities among mothers at 'p values' of 0.002, 0.001, 0.007 and 0.000 respectively. While the paper provided a guide for informed decision on maternal health services in the country, it also suggests compulsory maternal health education and job empowerment for the prospective mothers.

Key words: maternal mortality, health centers, utilisation, pregnancy, antenatal care, etc

#### INTRODUCTION

Several governments within Africa (like others around the globe) have made concerted efforts in reducing the trends, patterns and rates of maternal and infant mortality. The rate has drastically plummeted in several advanced countries and while relative achievements in some Africa nations have been observed (e.g. in Ghana, Egypt, South Africa and Morocco), its perpetual high incidence in Nigeria is raising concern despite her natural endowed resources and its acclaimed giant of Africa (Horgan et al, 2010). Specifically, while most countries in other part of Africa have reduced their infant and maternal mortality to about 50 and 90 per 1000 births respectively, the situation in Nigeria is more pathetic compared with other nations of the world. Out of every 100,000 women given births in Nigeria, 1,100 die every year (Idu, 2008; USAID, 2009). While the rate is as low as 4, 1 and 45 per 1000,000 in Germany, Ireland, and China respectively, Nigeria is second only to India as countries where the safety of mothers is the lowest in the world (Idu, 2008; USAID,

2009). Also, in terms of antenatal care, Nigeria is rated as the poorest. Infant death in Nigeria is 103 per 1,000 live birth compared with 5.5 per 1000 live births in other developed nations (USAID, 2009).

The global initiatives have been intensifying on policy intervention for maternal mortality with the emergence of Safe Motherhood Initiative in the same year 1987 (Hogan, et al 2010). This was directly a response to growing recognition that primary health-care programmes in many developing countries were not adequately focused on maternal health. Another effort was the 1994 International Conference on Population and Development that strengthened international commitment to reproductive health of which reduction in maternal mortality became an integral component. This drive continues and more sharpened when reduction in maternal mortality was enshrined as one of eight cardinal goals for development in the Millennium Declaration (Millennium Development Goal 5) (Hogan, et al 2010).

However, Nigeria as a victim of this phenomenon has joined other league of nations advocating for the reduction in maternal mortality. Efforts have been made in the area of health-care services to secure a lasting solution to the maternal and infant mortality ravaging the country. Other actions include but not limited to the following: advocacy for reproductive rights of women in Nigeria, Safe Motherhood Initiative, Midwives Scheme of the MDGs, that includes training and re-training of nurses and midwives in reproductive health-care and services and National Programme on Immunisation (NPI) to rescue babies from killer diseases. Coupled with these are the recent initiative by Nigeria first lady on awareness campaign on maternal and child health, stakeholders' sensitisation, model quality health service delivery intervention programmes in some states of the federation in Nigeria and the recently launched of African Union Continental Campaign on Accelerated Reduction of Maternal Mortality in Africa (CARMMA) (Constance Athekame, 2009). Also included is the Journalists Alliance for Prevention of Mother-to-Child Transmission of HIV/AIDS and several coalitions in attempt to stop harmful traditional practices like unsafe abortion, female genital cutting, blood births, premature marriages, etc (WHO, 1995; NPC and USAID, 2004, WHO/Hill-2005, USAID, 2009).

Development progress and genuine durable reduction in infant and maternal mortality might be elusive in Nigeria and other sub-Saharan nations without objective analysis of the community's perspectives and evaluation of their attitude towards all handed-down programs and services by the governments or other concerned agencies. Thus, it is imperative today to ask what are the current statuses of facilities already provided, how accessible are these facilities to the public especially the women, what is the utilisation rate? What are the challenges women faces in patronizing these facilities? What is an average woman perception of the inherent benefits she can derive from these provisions and programs? What are the personal strategies and steps put in place to stem these types of deaths in the community? These

are some of the bugging questions that this study will attempt to answer.

The specific objectives of the study include the following:

- To assess the prevalence of maternal mortality in the study locations 1.
- To assess the awareness of mothers on the various programs by governments 2. towards reduction of maternal and infant deaths and.
- To examine the socio-economic correlates of maternal health education 3.

Considering the fact that most research questions raised here could be possibly answered by frequency distributions and cross tabulations, only two hypotheses were formulated. These were framed to find out whether socio-demographic factors of mother are significantly related to knowledge of maternal health education and, whether individual's attitude towards government programmes of intervention is significantly related to their socio-demographic characteristics like age, education and working status.

#### Literature Review

Maternal mortality implies the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes (WHO, 2003). On one hand, it is primarily referred to, as direct obstetric deaths such as issues emanating from obstetric complications like prolonged labour, puerperium, omissions, incorrect treatment and indirect obstetric deaths from previous existing disease or disease that developed during pregnancy and aggravated psychological problems of pregnancy. Infant mortality on the hand means the death of an infant that is between age 0 and 1 year (Lamb and Siegel, 2004). Irrespective of the definition, it is a known fact that death at any stage, especially that of mother and infants, could pose challenge to development. Death is a recurrent phenomenon and remains one of the demographic processes that touch certain unsuspected aspects of social and economic life.

Mortality measurement is more complex, varied and its control has been elusive than other demographic components. Mortality index constitutes a major demographic statistic for determining the level of development of a nation in terms of health care and services. It is a measure of human survival that represents an essential prerequisite to the existence and continual survival of the society and remains indispensable as the overriding objective of all developmental endeavours.

Specifically, the three distinct measures of maternal mortality include maternal mortality ratio, the maternal mortality rate, and the lifetime risk of maternal death. Out of these only the maternal mortality ratio is widely use which measures the number of maternal deaths during a given time period per 100 000 live births during the same time period (Lamb and Siegel, 2004). It specifically captures the risk of death once a woman has become pregnant. This mortality rate reflects the frequency with which women are exposed to risk through fertility.

Globally, until about the end of 17th century, mortality rates were astronomically high and characterized by violent fluctuations as a result of epidemics and famines (Kitagawa, 1977). During the 18th century, several European nations demonstrated a steady but slow reduction in their mortality levels and by 1850 life expectancy was about 40 years. Gradual improvements in mortality reduction continued in these advanced regions and life expectancies rose from 50 years to 70 years in 1950s (United Nations, 2005). In New York, between 1890 and 1940, death rate plummeted to about 25 to 30 per 1000 population and was later interrupted by the influenza epidemic of 1918. Between 1940 and 1950, there was a downward trend in mortality to a crude death rate (CDR) as low as 10 per 1000 population. However, the trend of mortality in less developed nations followed different patterns. The transition from high to low mortality levels started around 1900 and continued at low pace till 1940s. According to Kitagawa (1977), life expectancy in the 1930s was about 30 years, 40 years and 40 years in Africa and Asia and Latin America respectively. These figures appreciated greatly to 43, 50 and 60 years respectively amongst these regions (Preston, R. 1973).

Although, death generally is detestable but the most pathetic is maternal and infant mortality. Round the globe, more than 536,000 women are estimated to be losing their lives annually from pregnancy/childbirth matters and about 10 million suffer debilitating illnesses and lifelong disabilities through the same course. It is amazingly sad to note that 90% of these deaths occur in developing nations alone and over 75% of these are avoidable. It has been reported that Africa alone contributes up to 47 percent of global maternal mortality and that the sub-Saharan African region accounted for the highest rates. 34 percent of all maternal deaths in Africa are due to unsafe abortions.

However, mortality until date has been so much affected by haphazard research, ineffective measurements and modeling in the world allover and virtually all data in use these days are products of estimates or projection and not precisely on the current happening. According to Kitagawa (1977), the neglect of mortality studies has been attributed to the fact that mortality is presumed to have little relevance to policy because health and longevity are 'near-universal' human values and governments are duly expected to spend all that they can to promote health and longevity of their citizens.

In Nigeria, maternal mortality ratio estimated at 800 deaths per 100,000 live births is assumed to be unacceptably high (Nigeria National Reproductive Health Policy and Strategy, 2001; National Population Commission (NPC) and United States Agency for International Development (USAID), 2004). Another estimate indicated that

about 54,000 of Nigerian women and girls die annually due to pregnancy related complications and about 1.1 and 1.6 million will suffer from disabilities caused by complications during pregnancy and childbirth each year (WHO, 1995). In another report, the annual global number of maternal deaths was about 525,000 in 2000 (WHO, 2000). Whereas Nigeria's population constitutes only about 2% of the world's total, the country (Nigeria) accounts for a whopping proportion of about 10% of the world total number of deaths (WHO, 2000). Beside this sorry state, about 26% of other women suffer long term debilitating illness. These signaled that larger numbers of women are vulnerable to high risk of death in Nigeria and the end seems not in view.

Against the backdrop of increased maternal deaths in Nigeria and, indeed, Africa, the recently concluded Kampala Conference, like other fora, identified some interventions regarded as sufficient for maternal mortality reduction. These include proper ante-natal care, adequate emergency obstetric care, trained attendants at child births and more family planning programmes (Fred Kalyowa and Jitta J.N.S. and Kaharuza, F. 1996; Daily Champion, 2009). All these were suggested with a colossal oversight on the community utilisation of these intervention approaches. However, since, proper executions of programs are best evaluated by the degree of public utilization or consumption of such services, it is expedient to conduct a community assessment of these facilities now.

However, the identification of causes has remained a none-issue likewise the birth of program. What should be of paramount importance is what people (the vulnerable groups) are doing to safeguard the reoccurrence within their domain. This study is therefore instituted to unearth Nigerian women attitude towards the advocacies, programs and facilities provided against maternal mortality and the likely preçautionary measures exercised by them to avert the reoccurrence or at least stem the tide of mothers' and infant's death.

# **Research Design**

A combination of quantitative and qualitative research methods was adopted in this study. Four wards were randomly selected from the sixteen wards in a local government area (LGA) that was purposively selected for the study in Ogun State of Nigeria. The quantitative method was applied using a structured questionnaire technique in addition with the sisterhood system used in eliciting information on maternal death in the area. In-depth interviews were held with specific stakeholders in the community, some officials of the four primary healthcare units in the wards selected and staff of the general hospital residing in the LGA. Other staff of few identified private clinics and maternity homes within the LGA and Traditional Birth Attendants (TBAs) were also interviewed. In addition, direct observations were made regarding the facilities available in each of the medical center visited

**Sampling Techniques** 

A stratified sampling technique was adopted in selecting the respondents who were ever married women in child bearing age (15-49) and age 10-14 years who have resided in the place for over 6 years. Age 10-14 was deliberately included because of the preponderance of high teenage pregnancy and early marriages in this part of the world. Overall, 226 female respondents were randomly selected from four out of the sixteen wards in the LGA. They were interviewed through a face-to-face approach. The questionnaires were designed to adequately cover all the necessary segments of the study and were mostly pre-coded. A two level analytical approach was used independently but complimentarily in data analysis.

The survey data were analyzed statistically using statistical package for social sciences (SPSS) while information from the focus group discussions were transcribed and analyzed using content analysis. A combination of univariate and bivariate analyses were conducted to ascertain maternal and infant mortality awareness and attitude of women towards those facilities available in the area. The univariate analytical segment featured descriptive statistics such as frequency distributions, to assess the demographic characteristics of the respondents. Bivariate analysis contained the cross-tabulations that were employed to identify the interrelationship between the selected background variables and attitude towards health facilities and other programs designed to curb maternal and infant deaths. Pearson product moment correlation coefficient (r) coupled with the coefficient of determination (R<sup>2</sup>) were incorporated to ascertain relationships, direction and the strength of the association between the variables of interest.

#### **Results and Discussions**

# Socio-Demographic Characteristics of the Respondents

The target population were widowers however where the husbands are not available, the next head of the households (such as mother-in-laws, step wife) closed to the deceased were requested to give the detail information as canvassed by in the questionnaire. Overall 61% of the respondents were male and about 29.6% were female.

Apart from traditional religion affiliation (6.2%), the inhabitants of the location used for pilot study were inhabited by Christians (64.3%) and Muslim (29.5%). 62.3% belong to polygamous family type, loose union and divorced were only 28.6%. The occupational status indicates that larger proportions of the respondents are artisan but with majority that are skilled and about 23.8% are traders. Farming (either peasant or professional) are relatively not visible among occupational classifications used in the study. The highest level of education attained by majority of the respondents interviewed is secondary level accounting for 55.2% of the total respondents. The proportions that have only primary education is 17.1% and tertiary stands at 16.2%

while those that never attended were only 4 respondents (7.6%).

The distribution of population by dwelling unit shows general deplorable conditions of living among the population. Many of the respondents interviewed, precisely 66.2% are living in rooming and room-parlour. Those that occupied flats of block are only 16.2%, and mud/grass occupied about 11.9% of the total dwelling units of all the respondents. Respondents residing in rooming/room and parlour almost account for about two-third of the total respondents interviewed. Respondents living in wood/iron and detached houses account for the least proportion of 3.8 percent and 1.9 percent respectively. It was observed also that only 1.8 percent of the respondent 'terrazzoed' the floor survey of their living room, 24.8% are living on the bare earthly mud/earth surface while 39% have stone brick/ cement. Only 34.8% have rug or carpet in their homes. In addition to the above, more than two-third of the respondents use kerosene stove and firewood as their cooking fuel. About 20.4% uses firewood and charcoal exclusively as their cooking fuel. Only 2.9% claimed they are using gas cooker or electricity as cooking fuel.

While 21.4% believed in ideal family size of 6 children and above, more than half of the respondents (55.4%) considered four and up to six children as ideal size. The general perception of respondents manifest in repeated pregnancies among the respondents. This high ideal family size depicts the rural nature and cultural attachment culminating on high risk pregnancies.

The main sources of water supply to the community for domestic activities, like drinking, cooking, bathing and washing are water from nearby boreholes (56.2%). 11 percent have tap outside their homestead while 8.1% and 7.1% depend on cover well and streams for their water use respectively. It is no gainsaying that the responsibility of fetching water is a natural obligation of women irrespective of her condition in this part of the world. This implies additional pressure and stress during before, during pregnancy and after delivery.

Assessment of respondents' social economic level will not be completed without indicating the waste disposal especially human waste disposal. About 75% of the respondents uses pit latrine which are in most cases shared with neighbours and 8.6% excretes in nearby bush and field. This category do not have permanent or specific toilets. Water closet with manual flushing is 17.6%. Solid wastes are disposable through unapproved open dump sites and these are located in around the living areas.

# **Maternal Mortality and Morbidity**

The study revealed some basic pregnancy complications such as ectopic pregnancy (48.2%) and hypertension/high blood pressure (48.2%). The awareness of antenatal care (ANC) is fascinating as overwhelming proportion of the respondents admitted knowledge of ANC (92.9%). However, the common reasons deduced to hinder attendance or registration are poverty or lack of money and religion. The providers of ANC as identified are nurses, midwives, doctors and TBAs

While majority claimed their wives delivered at hospital, majority of these deliveries were concentrated in the private hospital / clinics (26.8%). Only 23.2% of respondents' wives attended government health centers during delivery. However, a worrisome figure of about 16.1% respondent's wives delivered at homes and 7.1% delivered at traditional medicine homes.

The study was done on random selection with no prior knowledge of maternal death in the location selected. However, the finding shows that 18 (8.6%) out of 210 respondents interviewed have experienced wife's deaths during pregnancy and child birth. The time of occurrence include during pregnancy (1.8%), during delivery (1.8%) and after delivery (7.1%). The places of occurrence also range from home of the deceased (3.6%), government hospitals (1.8%) and private clinics (5.4%). Access to treated mosquito net is limited and distance to the closest government health centre is above 6km. This is at variance with the maximum distance of 4 km recommended by World Health Organisation (WHO). Private health post or clinic abounds but the charges are daring according to the respondents. The implication is that pregnant women become lethargic to access the facility for ANC, delivery and treatment.

While overwhelming majority agreed that malaria and fever are the most common ailments in the community, 10.7% of the respondents also indicted cough and cold as common in the area. Cholera (5.4%), typhoid (5.4%) and diarrhea (1.8%). It is however interesting to note that over half of the respondents diagnosed their illness by themselves. The attitude toward consulting medical personnel in time of health challenges is relatively low. Only 19.9% consult medical personnel, 23.2% prefer going to traditionalist for treatment, about 17.9% also will only go their pastors/imam while 39.3% will want to treat the sickness themselves. Notwithstanding, however, overwhelming proportion of the respondents (82.1%) indicated their satisfaction with the services they receive from the health center (82.1%).

Contraceptive knowledge is interestingly high but the usage is abysmally low. Awareness range from oral pills (53.6%), condoms (41.1%) and injectables (64.3%). More than half of the total respondents have never used condom but incursion of concoction among persons in the area is 17.9%. Decision on what contraception to use, where to go for treatment and who pays the treatment costs are all under the domain of the husband who is apparently the head of household. Likewise, the payment for treatment or medical bill is borne by the husband.

### Regression Analysis Results

Regression analysis shows that religious affiliation, marriage type and distance to health centers are negatively related to attendance of antenatal programme in the

study locations. Relatively, Christians are more likely to be attending antenatal program than respondents in other religious affiliations. Educational attainments, knowledge of ANC centers and respondents occupational status are positively associated to attendance of ANC center. This implies that awareness of designated center for ANC programme enhances a wife's attendance in ANC programme. In addition, it shows that the higher the level of mothers' education, the more likely it is that they will attend ANC counseling. However among these variables, age, education, health facility distance, occupational status are significantly related to the registration for ANC at 0.002, 0.001, 0.007 and 0.000 respectfully. This result implies that the education of husband holds weight in the attendance of ANC whereas his occupation constitutes a major determinant in wife's attending ANC. This could be true because husband occupation or working status could enhance adequate funding of the ANC cost and support. Higher occupational level implies more income that can encourage the wife to seek for medical services. Whether the marriage is a monogamous or polygamous is significantly related to attendance of ANC. Where there are more than one wife, adequate attention from husbands might be impaired hence the support need might not be available. Also, since the F statistics calculated (7.687) is greater than the F tabulated (1.87), the hypothesis that the sociodemographic characteristics of the respondents are significantly related to the registration of ANC is upheld.

## **Policy Implications and Recommendations**

Maternal and infant death must not be seen as a natural occurrence as popularly believed in the study area. It is a social, economic and developmental problem. It affects individuals, families, communities and nations and represents a formidable barrier to sustainable social and economic emancipation and of course development. It disrupts families, work, education of children, and progress in the family and cuts short joy from the family, friends and relations. Death of mothers and infant is a colossal economic waste and should not be encouraged, influenced and must be stopped.

Among the economic implications of this study is that, a lower maternal and infant mortalities is an improvement in survival rates which improve the number of available economically viable young people. Consequently in the long run, reductions in infant mortality could enhance a change in the prevailing desire for higher family size in Nigeria and sub-Saharan African in general.

Since mothers and infants represent the future of the country, one of the vital commitments a country can make for future economic and social progress is to address the health needs of vulnerable group in a manner that will not jeopardize the economic benefit to the nations as well as the traditional values of the populace. Therefore, appropriate sensitisation of the public is extremely necessary before any program or policy is instituted. Traditional belief and attitude are inseparable

especially in this part of the world; hence, every initiative that does not take this into cognizance may unlikely impact the community. Also, the taboos hovering reporting of death can be dispelled gradually by the provision of incentives/rewards to widowers and mothers who report the death of their spouses or infants within 1-3 month of the incidence. However, it could be greatly difficult for someone who has just been bereaved to walk/travel a distance of over two kilometers on the guise of reporting the loss of a loved one. On this basis, the government should establish a Health Events Local Post (HELP) where report of all health related matters can be lodged.

#### References

- Anna Lindross and Annu-Riikka Luukkainea (2004). Public Health Program-Exchange to Nigeria. July 2004. www.uku.fi/kansy/eng/antenal care nigeria.pdf
- Boerma, J Ties and Mati, J K G (1989). Identifying Maternal Mortality through Networking: Results from Coastal Kenya Studies in Family Planning, Vol 20, No 5 (Sep Oct, 1989), pp 245-253 Population Council
- Constance Athekame (2009). Reducing maternal and infant mortality in Nigeria Sunday Trust Saturday, 12 December 2009 22:44
- CuteNews (2007). Female Genital Mutilation Education and Networking Project. Nov 14, 2007 www:fgmnetworkorg/indexphp?subaction=showcomments&id=1062426725&archive=&start\_from=&ucat=&
- GlobalGiving (2009). Reducing child and maternal mortality in Nigeria GlobalGiving, United Kingdom http://www.globalgivingcouk/pr/4100/proj4067ahtml
- Hoeuy Chandya, Yang Van Henga. Ha Samola and Hans Husumb (2007). Comparing two survey methods for estimating maternal and perinatal mortality in rural Cambodia Australian College of Midwives Elsevier Ltd Sceince Direct
- Idu Ogbe Ode (2008). Infant and child mortatity and fertility in the context of millennium development goals in Nigeria Proceedings of Nation Conference on Social Dimension of Reforms and Development organized by the Nigerian Anthropological and Sociological Association Aug 20-22, 2008 Pp 179-188
- Ismail, Edna Adan (2008). The Terror of Motherhood in Somaliland and Women's Rights to Safe Care on the Issues (OTI) Magazine, October 3, 2008
- Lamb, Vicki L and Siegel, Jacob S (2004). Health Demography in The Methods and Materials of Demography (ed.) Jacob S. Siegel and David A. Swanson. Elsevier Academic Press, Oxford, 2004 p351-370.
- Margaret C Hogan, Kyle J Foreman, Mohsen Naghavi, Stephanie Y Ahn, Mengru Wang, Susanna M Makela, Alan D Lopez, Rafael Lozano, Christopher JL Murray (2010). Maternal mortality for 181 countries, 1980-2008: a systematic analysis of progress towards Millennium Development Goal 5. Lancet Online Publication, 12 April 2010
- Okereke, H.C., Kanu, I. Nwachukwu, N.C. Anyanwu, E.C., Ehiri, and Merrick, J (2005). Maternal

- and Child Health Prospects in Nigeria. The Internet Journal of Pediatrics and Neonatology 2005 Volume 5 Number 2
- Parul Christian, Alfred Sommer, Keith P West (2006). Reducing maternal mortality where rates are greatest The Lancet, Volume 368, Issue 9553, 16 December 2006-22 December 2006, Pages 2122-2123
- Pedro Carneiro, Costas Meghir, Matthias Parey (2007). Maternal Education, Home Environments and the Development of Children and Adolescents. Discussion Paper No. 3072 September 2007. The Institute for the Study of Labor (IZA), Bonn. 2007
- Peter Heinlein (2010). African Maternal Mortality Defies Global Trend Health, Addis Ababa, April 19, 2010 http://www.lvoanewscom/english/news/health/African-Maternal-Mortality-Defies-Global-Trend-91537854html
- United Nations (2005). World population Prospects 2004 Revision New York
- United Nations Children's Fund (UNICEF), (2009). The State of the World's Children 2009: Maternal and Newborn Health United Nations Children's Fund (UNICEF), New York December 2008 http://www.uniceforg/publications/files/The\_State\_of\_the\_Worlds\_Children\_2009pdf
- USAID (2009). USAID Country Health Statistical Report Nigeria Country Health Statistical Reports
  Analysis, Information Management and Communication Activity (AIM) Project United
  States Agency for International Development USAID, May 2009
- World Health Organization (2003). Maternal Mortality in 2000. Estimates Developed by WHO, UNICEF and UNFPA WHO, 2003
- World Health Organization (2007). Maternal Mortality in 2005. Estimates developed by WHO, UNICEF, UNFPA and the World Bank World Health Organization, Geneva 2007 http://www.whoint/whosis/mme\_2005pdf
- World Health Organization, (2005). World Health Report 2005: Make every mother and child count World Health Organization, Geneva 2005 http://wwwwhoint/whr/2005/whr2005\_enpdf
- Yusuf M Adamu, Hamisu M Salihu, Nalini Sathiakumar and Greg R Alexander (2003). Maternal mortality in Northern Nigeria: A population-based study. European Journal of Obstetrics & Gynecology and Reproductive Biology, Vol. 109, Issue 2, 15 August 2003, Pages 153-159

Appendix I Table 1: So

Socio-Demographic characteristics Variables	Number	Percent
Age Group		
15-19 yrs	46	21.9
20-24 yr	10	4.8
25-29 yrs	10	4.8
30-34 yrs	36	17.1
35-39 yrs	48	22.9
40-44 yrs	50	23.8
45-49 yrs	10	4.8
Religion Affiliations	210	100.0
Christianity		
Islam	135	64.3
Traditional	62	29.5
Marital Status	13	6.2
Married (Monogamous)	139	66.2
Married (Polygamous)	60	28.6
Loose Union (Divorced/Separated)	3	1.4
Widowed	8	3.8
Occupation		
Government Worker	20	9.5
Private (Own Account)	57	27.1
Private (Employee)	41	19.5
Unemployed	92	43.8
Educational Attainment		
No Schooling	16	7.6
Up to Pry level	36	17.1
Up to 2ndary level	116	55.2
Other higher school	34	16.2
Up to university	8	3.8
Children Ever Born		7
One child	131	62.4
Two children	30	14.3
Up to three children	1	0.5
Up to four children	10	4.8
Up to five children	6	2.9
No Response	32	15.2
Centre Distance in Kilometers		
7 km & above	97	46.2
5-6 Km	52	24.8
4-5 km	21	10.0
3-4 km	19	9.()
1-2 km	21 .	10.0

Source: Field Survey 2010

Table 2: Awareness and attitude towards ANC and other initiatives towards for reduction of maternal mortality

Variable	Number	Percent
Aware of compulsory antenatal consultation		
Yes	30	14.3
No	180	85.7
Aware of campaign against maternal death		
Yes	59	28.1
No	151	71.9
Aware of Safe Moth erhood Initiative		
Yes	75	35.7
No	135	64.3
Aware of MDG reduction in maternal & infant death		
Yes	47	22.4
No	163	77.6
Most Common Complications in the community		
Ectopic Pregnancy	109	51.9
Hypertension	101	48.1
Knowledge of ANC centers		
Yes	188	89.5
No .	22	10.5
Registered for ANC in last or current pregnancy		10.0
Yes	129	61.4
No	81	38.6
Experienced complications in the last or current pregnancy		00,0
Yes	37	17.6
No	173	82.4
Common illness in the community		
Cholera	14	6.7
Malaria/fever	167	79.5
Cold/Cough	22	10.5
Diarrhea	1	0.5
Typhoid	14	6.7
Preferred Health Facility		
Faith Clinic (Spiritual Leaders, etc)	27	12.9
Medicine Vendors	40	19.0
Traditional Healers	91	43.3
Medical Doctors/Nurses	30	14.3
Indifference	22	10.5

Source: Field Survey 2010

Table 3: Regression Analysis

#### Model Summary (C)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.619(a)	.384	334	.432

a Predictors: (Constant), Health facility distance, Hospt - Ambulance, Age of Respondent, Working status, Knowledge of Place of ANC treatment, Religion Affiliations, Respondent Occupation, Social Status, Marital Status, Respondent Occupation Position, Sickness rate, Respondent Educational Attainment, Health care Centre, Cost of ANC

#### ANOVA (b)

Mode	el	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20.128	14	1.438	7.687	.000(a)
	Residual	32.356	173	.187		
	Total	52.484	187			

a Predictors: (Constant), Health facility distance, Hospt -

Ambulance, Age of Respondent, Working status, Knowledge of Place of ANC treatment, Religion Affiliations, Respondent Occupation, Social Status, Marital Status, Respondent Occupation

Position, Sickness rate, Respondent Educational Attainment, Health care Centre, Cost of ANC b Dependent Variable: Spouse registered for ANC in last pregnancy

#### Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta	В	Std. Error
1	(Constant)	1.461	.601	,	2.430	.016
	Knowledge of Place of ANC treatment	.044	.182	.016	.243	.808.
	Cost of ANC	.034	.059	.049	.575	.566
	Age of Respondent	.012	.004	.223	3.142	.002
	Religion Affiliations	071	.064	083	-1.105	.271
	Marital Status	185	.049	273	-3.758	.000
	Health care Centre	110	.040	228	-2.754	.007
	Working status	396	.112	255	-3.542	.001
	Respondent Occupation	.076	.021	.247	3.627	.000
	Respondent Occupation Position	.070	.044	.113	1.614	.108
	Respondent Educational Attainment	.004	.046	.007	.093	.926
	Hospital - Ambulance	207	.117	138	-1.766	.079
	Social Status	.102	.061	.120	1.671	.096
	Sickness rate	260	.075	253	-3.469	.00
	Health facility distance	.170	.033	.348	5.069	.000

a Dependent Variable: Spouse registered for ANC in last pregnancy

