Male Role in Emergency Obstetric Care in Rural Niger Delta, Nigeria

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ABSTRACT

In Nigeria, despite 16years of continuous democratic rule and government policies geared towards improved access to emergency obstetric care (EmOC), maternal mortality remains a fundamental public health challenge. Although, studies have emphasized the significance of male role in female reproductive health seeking behavior in the country, there is lack of specific empirical evidence on male role in accessing EmOC in rural poor settings of the Niger Delta. This study examined this phenomenon in economically restrained communities of Bayelsa in the Niger Delta, Nigeria. Data was collected via a multistage sampling technique among 616 women aged 15-49years, and men using a cross-sectional survey approach. Two methods of data collection - focus group discussion and questionnaire - were triangulated. Findings indicate that men contribute positively to women accessing EmOC in rural Bayelsa. At least eight out of ten women reported that their husbands were present during complications, 5 out of ten claimed that their husband followed them for treatment, and the men provided the finance for the specialized care during emergencies.

Keywords: Male Role, Emergency Obstetric Care, Niger Delta, Maternal Mortality, Economically Restrained Communities,

Introduction

Globally, maternal mortality has reduced by 45% between 1990 and 2013 in line with Millennium Development Goals (WHO, 2014). However, sub-Sahara Africa is still the number one high risk maternal death region in the world with an MMR of 510/100,000 live births. Nigeria accounted for 17% (40,000) of the global maternal deaths in 2013, second only to India. Currently, the country's reported MMR ranges between 576 and 560 WHO, 2014), an increase of 5.4% or 2.7% over the MMR reported in 2009 (NPC and ICF, 2014). This is regardless of series of governmental policy and programs aimed at reducing maternal mortality, by improving access to emergency obstetric care (EmOC) at different levels of health care provision in the country. One fundamental reason why policies and programmes have failed to realize the prime objective of reducing maternal death to an acceptable level in Nigeria is the inability to recognize and incorporate the implicit role men play in reproductive health (Isiugo-Abanihe and Obono, 2011; Isiugo-Abanihe, 2003; Obono, 2003; 2000) especially accessing modern critical life saving maternal health services during emergencies. To this end, it is imperative to understand the dynamics of reproductive health by focusing on male role and responsibility.

Fertility in sub-Saharan Africa is generally underpinned by pronatalist belief system regulated by patriarchal ideological structures (Caldwell and Caldwell, 1987; Ocholla-Ayayo, 1997; Obono, 2002 and 2003). This functional prerequisite "takes place within the context of complex social organization and under the influence of multiple social, cultural, and ideological realities" (Isiugo-Abanihe 1994:237). In this context, fertility of individual women reflects mostly the preferences of the men. The bias created and reinforced by patriarchy extends male dominance over health including reproductive health where their decisions are regarded as final (Isiugo-Abanihe, 2003; Nwokocha, 2008). Patriarchy as a system fosters total dependency of women on men in the family "like when to conceive, number of children, accessing antenatal and postnatal care and seeking professional help during emergency situations' when they are directly affected by such decisions" (Nwokocha, 2008).

Male reproductive motivation underpin fertility in African societies (Obono, 2002; 2003) however, failures to realize the implicit role men play in female reproductive health seeking behaviours that characterize the continent, especially among the rural populace, has contributed significantly to poor health status of women. Thus, there is need to capture the nexus of male role and access to EmOC so as to better understand the phenomenon of maternal mortality in contexts where men dominate decision-making on reproductive health. The need to give adequate attention to male role in relation to reproductive health and wellbeing of women was equally captured by Isiugo-Abanihe (2003:8). He said that "*the characteristic lack of male involvement in reproductive initiatives, … is a major obstacle … in sub-Saharan Africa given the considerable authority and power vested on men as decision makers in the home and society"*

Fertility especially in countries with high regime like Nigeria exposes women to reproductive health problems – the risk associated pregnancy and childbirth related complications – that promotes maternal mortality. In Africa, tacit male control of maternal health practices remain a bane to achieving desired safe motherhood behaviours that can reduce maternal morbidity and especially mortality to the barest minimum. Writing about maternal crisis on the continent, Nwokocha (2008: 36) observed: "*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"*. The pervasive nature of patriarchal elements on the African continent continue to produce and reproduce age long relationships (Sen et al, 1994) that subjugates women by men (Barrett, 1988) even when the former's life is at stake.` The study by Orji et al (2007) corroborating Stock (1983) also revealed that in the face of emergency obstetric situation, women mostly wait for their husbands to decide the course of action implying that male authority structures are dominant even in emergencies. This has profound repercussion for access and timely use of EmOC and maternal health outcomes.

Problem Statement

In Bayelsa, in the Niger Delta, Nigeria, available MMR figure indicates that 918/100,000 women die of maternal death related causes (Bayelsa Strategic Development Plan, 2010). This is exacerbated by limited access or total inaccessibility to functional health care delivery facilities particularly emergency obstetric care in rural communities of the state (Onokerhoraye, 1999; UNDP, 2006; Ibrahim, Owoeye and Obilahi, 2012). It is a state that is largely rural, with about 67 percent of the population living in villages of less than a 1,000 population. Onorkerhoraye, (1999), observed that compared to other regions, medical health care facilities in Niger Delta particularly Bayelsa are not only relatively poorer, but are inequitably distributed within the state. About 70% of skilled birth attendants and the majority of the few functional health facilities are located in the state capital, and in 3 out of 8 local government areas (LGAs) of the state. The situation has been aggravated by the long standing political and civil unrest especially in the last two decades. Moreover, the peculiar environmental and topographical terrain of Bayelsa in the Niger Delta characterized by poor transport and communication means (Ikporukpo, 2002; Nwokocha, 2004) is a major barrier to accessing emergency obstetric care.

Emergency obstetric care has been identified as a fundamental approach to reducing maternal mortality particularly in developing countries, and more so in economically restrained enclaves characterizing Bayelsa in Niger Delta. Beyond the physical and health service hindrances to accessing EmOC in Bayelsa, are the socio-cultural factors. The cardinal socio-cultural factor is patriarchy in form of male role in access to EmOC. Hence, achieving any meaningful reduction in maternal mortality in settings like rural Bayelsa in Niger Delta implies understanding and giving adequate attention to the role of men in the reproductive health of women.

Studies on male role in safe motherhood practices have been reported in Nigeria (Isiugo-Abanihe, 2003; Nwokocha, 2004; Orji *et al*, 2007; Lawoyin, Lawoyin, and Adewole, 2007; Nwokocha, 2008). Most of these studies focused on the primacy of men on female fertility and contraceptive behavior, reproductive health issues relating to ante-natal care and preferred place of delivery, and to a lesser extent, men's perception of maternal mortality. A majority were conducted in urban capitals or semi-urban areas and mostly outside the Niger Delta. Empirical studies within the region are mostly hospital based (Ibrahim, Owoeye and Obilahi, 2012) and without emphasis on male role in maternal health practices particularly access to EmOC in rural communities. The implication of such dearth in knowledge for reduction of maternal mortality and improved female reproductive rights and behavior is that knowledge of such complex but important phenomenon is undermined.

Methods and Data

Data was extracted from preliminary findings of a PhD thesis on Access to Emergency Obstetric Care and Maternal Mortality in Rural Communities of Bayelsa, Niger Delta. The study was cross-sectional and carried out within the framework of a survey research design. A multistage sampling approach was used; 4 local government areas (LGAs) were purposively selected based on literature finding (Onokerhoraye, 1999; UNDP, 2006), availability and location of health facilities, and terrain of Bayelsa. Communities within each LGA were clustered based on 1990 census figures and 4 communities each were selected from each cluster in the LGAs randomly, making a total of 16 communities. Households were systematically selected in each community and the final respondents were randomly selected except where necessary – when there are two eligible women in a household - the next birthday method (NBM) was used. Quantitative and qualitative instruments of data collection were triangulated; a total of 616 women of childbearing age 15-49yrs were administered an Access to Emergency Obstetric Care and Maternal Mortality questionnaire. Twelve (12) and four (4) homogenous Focus Group Discussion (FGDs) sessions were organized among women and men respectively on factors influencing access to EmOC including male role in EmOC. The FGD sessions were conducted among four (4) groups of women between age 25 and 35 years, five (5) groups of women age +35 and 49 years and three (3) groups of women + 49 years and above. The men's group had males between age 30 and 40, and +40 and 60 years; both had two groups each. The minimum number in a session was six (6) and the maximum was eight (8). This ensured adequate management of the discussion Questionnaires were analyzed using SPSS version 16 while the oral interviews were organized thematically using Atlasti 6. Findings are presented below.

Results

The age distribution indicates that the majority of the respondents are below 40 years; this reflected the usual trend in age distribution of childbearing women. Christianity is the religion practiced by an overwhelming majority of the respondents.

Table 1: Background Characteristics of Respondents

Characteristics	Frequency	Percentage
Age in group		
15-19	42	7.3
20-24	111	19.3
25-29	137	23.8
30-34	110	19.1
35-39	93	16.1
40-44	46	8.0
45-49	37	6.4
Religion		
Christianity	561	97.9
Islam	3	0.5

Traditional	8	1.4
OlumbaOlumba	1	0.2
Marital Status		
Single	67	11.3
Co-habiting	256	43.1
Married	236	39.7
Separated/Divorced	26	4.4
Widowed	9	1.5
Educational Attainment		
None	25	5.0
Primary	229	45.8
Secondary	203	40.6
Tertiary	43	8.6
Currently Employed		
Yes	373	65.6
No	196	34.4
Total Income		
Less than 18,000	70	50.0
18,000-49,999	51	36.4
50,000-99,999	13	9.3
100,000 and above	6	4.3

Eighty-two percent (82 %) of women are in a type of heterosexual union but half of those in such unions are co-habiting (table 4.1). There is a preponderance of women who have attained secondary education or less. Though, two-thirds of the women are currently employed, half of the women earn less than the national minimum wage. All the women in the FGD sessions were married or divorced or widowed; they have all had children. The major occupation among these women is farming and fishing. Similarly, men in the FGD sessions were all fathers and are mainly farmers except for a few who are employed in government civil service.

Men's Knowledge of Obstetric Complications

One key factor in accessing emergency obstetric care (EmOC) is knowledge of obstetric complications. Studies have shown that the propensity to access EmOC by women is incumbent on knowledge of obstetric complications (Thaddeus S, Maine D 1994; Doctor, Findley, Cometto, and Afenyadu, 2013); knowledge of the danger and critical signs in pregnancy, delivery and post-delivery periods. Thus, knowledge of these complications by men become critical to their role in emergency obstetric care (Iliyasu , Abubakar , Galadanci & Aliyu, 2010; Alam, Qureshi, Adil, & Ali, 2014) . To this end, during the focus group discussion sessions, both women and men were asked a general question about men's knowledge of obstetric complications. Generally, the responses of male discussants revealed that they have knowledge of obstetric complications. All the male focus group discussion session mentioned several but similar obstetric complications (direct or

indirect) that may afflict women in pregnancy, delivery or after birth. For instance, in Agrisaba community the responses to the question "What are the sicknesses/complications peculiar to women during pregnancy, delivery or after delivery here in Agrisaba?" among the men is instructive.

The first man a 38 years old man said: "*they suffer from malaria and typhoid*", the second, a 47 years old man said "*some women after two or three months of pregnancy they start bleeding*" while the third 42 years old man said " *some even run mad after delivery, and some have swollen legs*".

A similar question was asked among men in the FGD session in Abuetor and Otuasega communities, complications such as bleeding and convulsion were mentioned.

A male discussant of age 40+ in Abuetor opined:

> "Yes some bleed others may have convulsion all these cases are rushed to the hospital" (A male 42 years old, Abuetor Community).

In the same vain in Otuasega, male discussant of age 50 years among others mentioned

> "Malaria, epilepsy, weakness of body, headache, bleeding due to drinking in pregnancy, convulsion during delivery, the women suffer from this kind of problems " (A male 50 years, Otuasega Community).

The perception among rural women in Bayelsa about men's knowledge of obstetric complication is that most men if not all know one or some of the complications in pregnancy, delivery or after birth. However, some of the women in the focus group discussion sessions believe men have knowledge of pregnancy related complications but lack the knowledge of what to do. In the words of one of the discussant, a woman 30+ said: "*They may understand but not know what to do*" (A woman 33 years old, Oporoma community).

The overall perception is that men in rural communities of Bayelsa have necessary knowledge of obstetric complications. Consequently, such knowledge has implications for their role – decision making, financial support, emotional support and presence – which is considered crucial in access to emergency obstetric care when necessary such enclaves.

Male role and decision making dynamics on access to EmOC during Emergency

The measures of related variables on male role in emergency obstetric care (EmOC) among women of childbearing age in rural communities of Bayelsa in Niger Delta are shown in Table 1. The finding indicates the role men play in their wives or partners access to EmOC in the event of an obstetric emergency. A significant majority of the women (82 percent) affirmed that their

husbands were around when their complication(s) started, a little more than half (56 percent) indicated that their men followed them to the place of treatment while less than half of the men who did not accompany their wives went to meet them later.

Table 1: Male Role in Access to Emergency Obstetric Care

Measures of Related Variables of Male Role and Access to EmOC (multiple response)	**Percentage**
Husband support you when you fall ill during pregnancy, delivery and after	82.1
Husband present during complication(s)	86.1
Husband accompanied wife for treatment	56.1
Husband came to the hospital later	46.9
Husband decided the place of treatment	13.6
Husband provided finance for treatment	79.4

The opinions of those who experienced obstetric complications buttressed the above findings in the FDG sessions with women When asked about the presence of their husbands and whether he followed them to their place of treatment when complications started, most of women (16 or 64%) who had experienced one complications or another affirmed that their husbands were around when the complication occurred. The responses of two of women are indicative.

A young woman of age 25+ in Abuetor answered to a question on male presence and support during emergency complication, she said:

> "I was 6 months pregnant when I started experiencing bleeding. It came slowly and after sometime, it became serious. On that day, my husband was at home, I informed him and he accompanied me to the hospital in the next village at Agbere. We went by boat and luckily, there was a doctor (corp member) and nurses on duty. They attended to me" (A woman, 27 years old, Abuetor Community).

Similarly, a 35 years old woman during the discussion in Otuasega had this to say:

> "I had delivered at home, but my placenta would not come out and I was bleeding seriously. My husband who was not around when my labour started had come home because I called him. Seeing that I was getting weak from bleeding, he rushed me to the cottage hospital in our community" (A woman, 25 yers old, Otuasega community).

The choice and decision about place of treatment in the event of obstetric emergency has been reported as one of the delays associated with access and use of EmOC and maternal mortality (Maine, 1993; Cham et al, 2005). The importance of women contributing to decision making regarding their reproductive health has also been reported (Heise, Ellsberg and Gottemeller, 1999). Result (table 1) further showed that although a quarter of the women decided on the place of treatment during obstetric emergency, majority of the women (53 percent) jointly decided with their husbands the place of treatment during such situations. This is despite the fact that their husbands always provide the financial requirement to access such services except on few occasions.

This was corroborated by the responses of women in the FGD sessions. At Otuasega, the women all answered affirmatively that men decide the choice of place of treatment whenever complications of pregnancy or childbirth occur. One of the female participants in age group 40+ opined:

> "Most of the men decide the place of treatment with their wives in the case of emergency problem like hard labour or bleeding. They decide with wives where they will go sometimes before that kind of situation occurs, my husband and I discussed it even though some don't" (A woman, 45 years old, Otuasega Community).

Also, even though some women said their husbands give financial support occasionally, the general consensus was that men provide financial support when seeking treatment for emergency complications. Another woman, age group 25+ from Opume a drove home this point, she said:

> "For me, I have a problem, the last pregnancy I had according to hospital report resulted to me always having stomach problem. My stomach usually swells up. My husband had taken me to hospital in yenagoa, even to Glory Land Hospital to do scan. My husband spend N20,000. At Glory Land Hospital, he bought drugs of about N18,000" (A woman 28 years old, Opume Community)

The women in Opume expressed the same view about male prerogative in matters relating to decision making and divergent views on payment for services on the likely place of treatment in the event of obstetric emergency. A woman in age group 30+ had this to say about men's prerogative to decide choice of place of treatment during obstetric emergencies even though she alluded that other people (significant others) may assist in the decision making. According to her, she said:

> "Husband and people around can suggest. In summary, pregnant women will prefer to go to the hospital" (A woman 32 years old, Opume Community).

In the same discussion group, another woman age group 40 + said:

> "Some do while some don't. No, the men here do not assist their wives. The women sometimes pay for their treatment alone, they save money from their farm and fish sales in case anything happens. That was what happened to me" (A Woman 48 years old, Opume Community)

Women in Oporoma community agreed that men more often than not pay for the cost of treatment when their wives suffer complications during pregnancy or childbirth.

The opinion of the men was sought on the decision making on place of treatment during complication and the use of cesarean section emergency obstetric care. Most men would independently decide the place of treatment in such instances. In Agrisaba community, the men were asked this question, how do you determine where to carry a woman to during pregnancy challenges such as sickness or birth complications? Is it the husband that determines that or both man and wife or the family of the husband? A man age group 40+ from Agrisaba community responded, he said:

> "It is the husband that determines where to take the wife. It depends, if she delivers at home or at local midwife, and there is serious problem, we take her to the hospital here or to the one in Ogbolomabiri, the general hospital. It is the man, not his family or the wife because she is not well" (A man 46 years old, Agrisaba Community*)*.

Another man age group 40+ from the same community said:

> "If he says traditional birth attendant, they will take her there and if say otherwise either to a traditional healer or the hospital" (A man 42 years old, Agrisaba Community)

The existence of marital contract between couples confers the right of decision making on the husband. For men who are not married but have impregnated a woman, it is necessary to understand whether they have a responsibility and the right of decision making towards women they impregnated. Thus, the men were asked, what if they are not married but expecting a child does the man still have the right to decide? A man age group 40+ from Agrisaba equally answered:

> "Yes he has the right determine so long as he has impregnated the woman he is married to her already" (A man 45 years old, Agrisaba Community)

Table 2 displays a bivariate association between socio-demographic characteristic of women and male supportive role in access to EmOC in rural communities of Bayelsa. The variables include

age of the women, educational background, employment status, length of marital union and type of union, and age at first marriage. Only the length of marital union was found to be significant on women's opinion about male role in access to EmOC. This is because the length of marriage determines exposure to pregnancy (Isiugo-Abanihe, 1996) and likewise exposure to obstetric emergency since pregnancy is the basic factor determining likelihood of obstetric complications. Thus there is a significant relationship between women who have been married for at least 3years, or more and male role in access to EmOC.

Table 2: Bivariate association between socio-demographic variables and male participation in EmOC

Socio-demographic Characteristics		**Husband supportive role in EmOC (%)**	
		Yes	No
Age of Women	Below 20yrs	70.0	30.0
	20-24yrs	81.4	18.6
	25-29yrs	88.0	12.0
	30-34yrs	84.6	15.4
	35-39yrs	81.0	19.0
	40 and above	85.4	14.6
Educational Attainment	No formal education	76.4	23.6
	Primary	83.0	17.0
	Secondary	83.7	16.3
	Tertiary	80.6	19.4
Employment Status	Currently employed	84.0	16.0
	Unemployed	84.8	15.2
Length of Marriage*	1-2	66.7	33.3
	3-5	89.6	10.4
	6-10	81.8	18.2
	Above 10yrs	85.8	14.2
Age at First Marriage	Below 20	80.5	19.5
	20-24yrs	86.3	13.7
	25-29yrs	80.4	19.6
	30-34yrs	80.0	20.0
	35 and above	100.0	
Type of Marital Union	Monogamy	83.3	16.7
	Polygamy	77.8	22.2

* *Chi-square test of association is significant at p<0.05*

Discussion

Studies in Nigeria have demonstrated that men's knowledge of obstetric complications and pregnancy and/or delivery danger signs is poor (Lawoyin *et al*, 2007, Sekoni and Owoaje, 2014). Finding from group discussions in this study demonstrated otherwise. The overall perception is that men in rural communities of Bayelsa have necessary knowledge of obstetric complications. Consequently, such knowledge has implications for their role in decision making and financial support considered crucial in timely access to emergency obstetric care when necessary such enclaves. A significant majority of the women (82 percent) affirmed that their husbands were around when their complication(s) started, a little more than half (56 percent) indicated that their men followed them to the place of treatment and were responsible financially for their treatment. The cost of accessing health in rural communities is relatively high, when occupation – farming and fishing - of men and women in these communities are considered. The choice and decision about place of treatment in the event of obstetric emergency (Maine, 1993; Cham et al, 2005) and the importance of women contributing to decision making regarding their reproductive health (Heise, Ellsberg and Gottemeller, 1999) is central to timely access to emergency obstetric care and reduction of maternal death. In rural Bayelsa, the fact tha majority of the women (53 percent) jointly decided with their husbands the place of treatment during obstetric emergencies is positive and highly encouraging. Such health seeking behavior will manifestly lead to improved maternal health outcome. In the last one and half decade and perhaps or even more, programmes such as Midwife Service Scheme (MSS), Subsidy Re-investment and Empowerment Programme SURE-P funded Maternal and Child Health Programme (MCHP) and National Health Insurance Scheme (NHIS) pilot project on Millennium Development Goal/Maternal and Child Health Project aimed at reducing maternal mortality in Nigeria, failed to make male role in maternal health particularly emergency obstetric care one of its principal target. Consequently, the primary objectives of these programmes to reduce maternal and child death according to the MDG 2015 targets were undermined, maternal mortality remains unacceptably high especially in rural Nigeria. Ignoring male role in the design of the aforementioned programmes tem from a stereotypical view of what male role in reproductive health and particularly emergency obstetric care entailed (Isiugo-Abanihe and Obono, 2011). For any meaningful and sustainable achievement in reduction of maternal mortality through access to emergency obstetric, especially in economically restrained communities, men must be fully integrated into such initiatives. This is because "the socialization process makes Nigerian men influential and dominant in all spheres of life… they are at the center of decision-making in the traditional political economy and important agents of change (Isiugo-Abanihe, 2003, 133).

Conclusion

The knowledge of male role in access to emergency obstetric care is significant to reducing the scourge of maternal mortality particularly in rural economically restrained communities. This

study provides empirical evidence of male role in access to EmOC in rural Bayelsa, Niger Delta. Findings from survey data and focus group discussion sessions indicate that men contribute positively to women accessing EmOC in rural Bayelsa. Particularly, the men make decision on place of treatment with their wives, provide the finance and follow them to where they receive specialized care during emergencies. In a traditionally patriarchal society like Nigeria and more so in the rural communities such as in the Niger Delta, positive male role in access to EmOC will contribute significantly to the reduction of maternal mortality if such behaviours are promoted.

References

Alam AY, Qureshi AA, Adil MM, Ali H. 2014. Comparative study of knowledge, attitude and practices among antenatal care facilities utilizing and non-utilizing women Annals of Ibadan Postgraduate Medicine. Vol. 12 No. 2 December, 2014 94 . *J Pak Med Assoc.* 2005; 55(**2**): 53–56.

Heise, L., Ellesberg, M., and Gottemoeller, M. (1999). Ending violence against women. Population Reports Series No. 11 Baltimore, John Hopkins School of Public Health, Population Information Programme 44p.

Henry V. Doctor, Sally E. Findley, Giorgio Cometto, and Godwin Y. Afenyadu 2013. Awareness of Critical Danger Signs of Pregnancy and Delivery, Preparations for Delivery, and Utilization of Skilled Birth Attendants in Nigeria Journal of Health Care for the Poor and Underserved 24 (2013): 152–170.

Iliyasu Z, Abubakar IS, Galadanci HS, Aliyu MH. 2010. Birth Preparedness, Complication Readiness andFathers' Participation in Maternity Care in a Northern Nigerian Community. *Afr J Reprod Health*. 2010; 4(1), 21–32.

Isiugo-Abanihe, U.C. 2003. *Male Role and Responsibility in Fertility and Reproductive Health in Nigeria*. CEPEAD. Ababa Press Lagos.

Isiugo-Abanihe, U.C. 1996. *Determinants of Fertility in Nigeria*. Ibadan Sociology Series. No. 3 Department of Sociology University of Ibadan.

Isiugo-Abanihe, U.C. and Oka Obono 2011. *On Male Role and Responsibility for Reproductive Health in Africa*. The Nigerian Journal of Sociology and Anthropology, Vol 9, 158-171, 2011

Lawoyin, T.O., Lawoyin, O.O.C and Adewole, A.D. 2007. "*Men's perception of Maternal Mortality in Nigeria." Journal of Public Health Policy*. Vol. 28, 299-318.

Maine, D. 1993. Safe motherhood programs: Options and Issues. New York: Columbia University, Centre for Population and Family Health

National Population Commission [Nigeria] and ICF Macro 2009. *Nigeria Demographic and Health Survey 2008*. Abuja, Nigeria: National Population Commission and ICF Micro.

National Population Commission [Nigeria] and ICF Macro 2014. *Nigeria Demographic and Health Survey 2014*. Abuja, Nigeria: National Population Commission and ICF Micro.

Nwokocha, E.E. 2004 "Socio-cultural Factors Affecting Pregnancy Outcomes Among the Ibani of Bonny, Rivers State. A Doctoral Thesis Submitted to the Department of Sociology, University of Ibadan.

Nwokocha, E.E. 2008. Maternal Crises and the Role of African Men: The case of a Nigerian Community *African Population Studies Vol.22 No1, Pp35-56*

Obono, O.M. 2002. "Rethinking the Nigeria Population Policy: Towards a Multiculturalist Perspective". In: *Currents and perspectives in Sociology*, edited by Isiugo-Abanihe, U.C.

Isamah, A.N and Adesina, J.O. Malthouse Press Limited, P.O. Box 500, Ikeja, Lagos State, Nigeria.

Obono, O.M. 2003. "Cultural Diversity and Population Policy in Nigeria". *Population and Development Review*. 29 (1) 103-111 March.

Ocholla-Ayayo, A.B.C. 1997. "Socio-cultural theories of population and development: From general theories to operational models". A paper presented tp the 7th Conference of the Pan-African association of Anthropologist, 7-12 September. *Population Studies and Research Institute.* University of Nairobi, Kenya

Onorkerhoraye, A.G 1999. Access and Utilization of Modern Health Care Facilities in the Petroleum-Producing Region of Nigeria: The case of Bayelsa. Takemi Program in International Health, Harvard School of Public Health. June; No. 162

Orji, E.O., Adegbenro, C.O., Moses, O.O., Amos, O.T and Olanrewaju, O.A. 2007. "*Men's Involvement in Safe Motherhood", J Turkish-German Gynecol Association*, vol. 8(3); 2007:240-246.

Sekoni O.O and Owoaje E.T 2014. Male knowledge of danger signs of obstetric complications in an urban city in south west Nigeria. *Ann Ibd. Pg. Med 2014. Vol.12, No.2 89-95*

Thaddeus S, Maine D 1994. Too far to walk: maternal mortality in context. Soc Sci Med.1994 Apr; 38(8):1091–110.

World Health Organization. 2014. Trends in Maternal Mortality: 1990 to 2013. Estimates by WHO, UNICEF, UNFPA, The World Bank and the United Nations Population Division