RELATIONSHIP BETWEEN EDUCATION AND UTILIZATION OF MATERNAL HEALTH CARE SERVICES BY PREGNANT WOMEN IN IBADAN NORTH LOCAL GOVERNMENT, OYO STATE.

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Abstract
This study examined the relationship between education and maternal health care utilization among pregnant women attending maternity centres in Ibadan. Descriptive survey research design was adopted for the study. The sample study was selected from pregnant women attending maternity centres in the ten wards of Ibadan North Local Government. A sample of 120 pregnant women was randomly selected for the study. A structured questionnaire was used to collect data. The data were analyzed using Pearson Product Moment Correlation. The study revealed that there was significant relationship between basic education and utilization of maternal health services (r = .821, n= 120, P < .05).). It also showed that there was significant relationship between higher education and utilization of maternal health care services (r= .856, N= 120, P<.05). Based on these findings, it was recommended that interventions to improve the utilization of maternal health care services by women should include targeting women for medical outreach and health education. Uneducated women should be enlightened on basic and higher education.

Keywords: *Education, Relationship, Health care, Utilization*

Introduction

Maternal mortality is a serious problem in many developing countries, with an alarming rate. Majority of victims are women of reproductive age 15 to 45. These women spend most of their life fulfilling their roles in child-bearing, child-rearing and the care of adults. The current interest in maternal health and maternal mortality marks a widening of this understanding of women's health and recognition that, in the contest of maternal and child health programmes, mothers have in the past been neglected in favour of measures to improve infant and child health.

There is an increase in rate of maternal mortality in Nigeria as a result of persistent tradition of deliveries in domiciliary settings, unsafe and unhygienic conditions by untrained or poorly trained birth attendants (Begun, Aziz-un Nis and Begun, 2003; Izugbara and Ukwayi, 2004). For example, some women favoured church for delivery as it is believed that the holy setting will protect both the mother and child from malicious or evil spirit and witchcraft. Deliveries in most of these places are attended to by unskilled personnel. Although, traditional birth attendants may be

present but their knowledge on emergence obstetric care is grossly inadequate.

Maternal healthcare is the total health care for pregnant mother and under five-year-old baby. According to World Health Organization, maternal health refers to the health of women during pregnancy, childbirth and the postnatal period. It encompasses educational, social, and nutritional services and medical care during and post pregnancy. The progress and development of any country depends upon the complete health status of the mother and the child. Maternal health care as a concept includes family planning, preconception, prenatal and postnatal care. It is, however, noted that, there are a variety of reasons why women, especially those of reproductive age choose not to engage in proper pre-natal and post-natal care. Among these reasons are level of education, culture and the level of socio-economic developments. The number of women dying daily with pregnancy associated problem has been on the increase despite improvement in primary health care delivery over the world (World Health Organization [WHO], 2006a). WHO (2006b) issued estimates for levels of maternal mortality worldwide which suggest that the numbers of maternal deaths are even greater than was previously thought, an estimated 600,000 women die each year in pregnancy and childbirth. This calls for the issue to be forced into public consciousness and further into the political agenda (UNICEF, 2010).

In Africa, maternal mortality ratios are highest with figures of up to 100 per 100,000 reported in rural areas of several countries, and ratios of over 500 in some cities (WHO, 2001). In Western, Central and Eastern Africa, the risk of pregnancy is generally higher than in Northern and Southern Africa (WHO, 2006b). This is due to high fertility rate and poor access to medical services. According to the Federal Office of Statistics (2012), Nigeria is reported to have one of the highest occurrences of maternal mortality in the world with figures ranging from 704 to 1,500 maternal deaths per 100,000 live births. More than 70 percent of maternal deaths in Nigeria are due to major complications such as; hemorrhage, infection, unsafe abortion, hypertensive disease of pregnancy and obstructed labour (National HIV/AIDS and Reproductive Health Survey, 2013).

Also, poor access to and utilization of quality reproductive health services contribute significantly to the high maternal mortality level in Nigeria. The shocking maternal mortality rates in Nigeria cannot be explained by poor antenatal care attendance alone. Most maternal deaths occur during delivery or postpartum period and would be preventable with follow-up and better access to obstetric care. Apart from the problem of long distances and money, there are other social factors why women do not have access to healthcare facilities. For example, majority of women still give birth in a traditional setting, either at home or in a church, instead of hospital. This also explains the disparities in maternal mortality rates in urban and rural areas.

Literature review

Maternal health is defined by WHO as the physical well-being of a mother during pregnancy, childbirth and postpartum. Maternal health includes prenatal care and postnatal care of the mother and of the child up to the age of five years (Fadeyi, 2007). Maternal mortality remains a major challenge in Nigeria with only two percent of the world's population; Nigeria contributes ten percent of the world's maternal death (Abouzahr 2003). Utilization

of basic health services in Nigeria has remained poor and existing data indicated that inadequate facilities and poor access to available services are associated with the high maternal mortality in Nigeria. Ninety nine percent (99%) of the estimated figure for maternal deaths worldwide happened in developing countries (WHO, 2008), with an estimated 265,000 maternal deaths occurring in sub-Saharan Africa, and 840/100,000 live births in Nigeria (World Bank, 2011; UNICEF, 2008).

The Nigeria Demographic and Health Survey (2013) observed 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. Also, 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 while more than seven in ten women who delivered outside a health facility received no postnatal care at all. Findings from numerous studies (Falkingham, 2003; Ogujuyigbe and Liasu, 2007) on maternal health care and mortality conducted in developing countries over the last decade show a positive association between maternal education and maternal health care (Idowu, Osinaike and Ajayi, 2011).

Several studies have assessed individual and household determinants of utilization of maternal services. For example, education and maternal health service utilization: evidence and pathways of influence maternal health service utilization (MHSU) frequently point out female education as an important factor for the improvement of MHSU particularly in developing countries such as Nigeria (Gabrysch & Campbell, 2009; Worku, Yalew & Afework, 2013). Other studies such as Ahmed, Creanga, Gillespie & Tsui, (2010); Rai, Singh & Singh, (2012) have also reported that higher level of maternal formal education significantly increases utilization of maternal health services. Furthermore, a systematic review of the factors affecting utilization of antenatal care in developing countries reached a similar conclusion (Simkhada, Teijlingen, Porter & Simkhada, 2008). This review reported that maternal education and husband's education are among the factors that affect antenatal care uptake.

Additionally, women's school attendance has been found to have significant relationship with child survival under diverse economic circumstances (Levine & Rowe, 2009). According to Ahmed et al., (2010) a higher propensity to utilize maternal health services probably mediate this relationship. However, the pathways through which women's education operate to influence MHSU might vary within and across countries, and under different socioeconomic circumstances. First, evidence suggests that well educated women are more responsive to new health-enhancing ideas and this strengthens the demand side of health (Ensor & Cooper, 2004). This is because women's education increases their capacity to recognize illness symptoms and the desire to seek appropriate health care, and a certain quality of health is demanded, depending on availability of health services.

Second, women's education improves literacy, which in turn is associated

with a wide range of positive health outcomes as a result of advantaged 'health literacy', conceptualized as the degree to which individuals have the capacity to obtain, process and understand basic health information and services needed to make appropriate health decisions (Kindig, Panzer & Nielsen-Bohlman, 2004). These authors argued that health literacy improves the use of available health information and services, which can be linked to responsiveness to health education, use of disease prevention services and better self-management of disease (DeWalt & Hink, 2009). According to Nutbeam (2000), health literacy's association with level of schooling is an 'asset' that offers a wide range of impacts, including better communication between health providers and users.

Third, women's education modifies their traditional balance of power with men, especially in patriarchal sub-Saharan African societies and helps to eradicate bad cultural practices; it also enhances women's empowerment, and thus decision-making power at the household and community level. Educated women are able to make positive decisions about their own and their children's health (Ahmed et al., 2010; Corroon et al., 2014; Sado et al., 2014). The level of maternal education was found to have a strong relationship with MHCS utilization in the two regions of Nigeria. This is consistent with finding from other studies, both in Nigeria (Fotso, Ezeh & Essendi, 2009; Babalola & Fatusi, 2009) and elsewhere (Elo, 1992; Munsur, Atia & Kawahara, 2010).

For instance, underpowered women in North-eastern Ghana and northern part of Nigeria have been shown to be unable to decide on the place of delivery, childcare health matters and even their own nutritional needs (Moyer et al., 2014). Besides, through direct or indirect learning of health enhancement behaviours, myths and misconceptions/beliefs about disease causation are discarded. Myths and misconceptions have been shown, indifferent contexts, to thwart some of the gains expected in maternal health service utilization. Also, facility-based delivery may be considered a sign of weakness for a woman (Ganle, Parker, Fitzpatrick & Otupiri, 2014).

Studies on factors associated with maternal health service utilization and child health frequently point out that female education is an important factor for the improvement of maternal health service utilization in developing countries (Gabrysch & Campbell, 2009; Greenaway et al., 2012; Worku et al., 2013). A systemic review of factors affecting utilization of antenatal care in developing countries reported that maternal education, husbands' education, marital status, availability and cost of services, household income, women's employment, media exposure and history of obstetric complications are among the factors affecting antenatal uptake (Simkhada et al., 2009).

Women's education increases their capacity to recognize illness symptoms and the desire to seek appropriate health care. Women's education also modifies their traditional balance of power with men, especially in patriarchal sub-Saharan African societies. Well-educated women are able to make positive decisions about their own health and their children's health (Ahmed et al., 2010; Corroon et al., 2014; Sado et al., 2014). Myths and misconceptions have been shown to thwart some of the gains expected in maternal health service utilization (Ganle et al., 2015), however, better educated women are less likely to subscribe to these misconceptions.

A study in Shanghai, China found that majority of women did not know that care-seeking should be done within the first trimester of pregnancy. A large number of women did not know how to handle possible urgent problem at home, almost 40 percent of them did not know the correct actions to be taken after amniotic fluid breaks. Nearly half of the participants did not know the effects of iron-rich food on preventing anemia. Several Asian studies suggest that under-utilization of Antenatal Care (ANC) is because of lack of women's autonomy in making decision about utilization of the service. Several African studies also indicate similar findings. For instance, Bibha et al. (2008) reveal that in Hausa culture; 'God's Will' was the strongest factor in non-utilization of health facilities in Nigeria. Other factors include women's education, husband's education, parity, birth order and interval, intended and planned pregnancy, age of women at marriage or at pregnancy, marital status, religion, caste and ethnicity, family size, and knowledge of family planning and ANC.

According to the report by Pathfinder International (2013), the level of women's literacy in Nigeria is exceedingly low in the northern region, especially the North East and North West. Two important factors influencing the effectiveness of the female voice in household decision making are the extent to which female members are educated and contribute to household income (Tim and Cooper, 2004). Comparison in the country shows that about 90% of women have at least primary education in the southern region, but only 25% to 30% of women in the North East and North West regions have the same level of education. Graczyk (2007) also found out that the lack of basic education can also affect health as it limits pregnant women's knowledge about nutrition, birth spacing and the benefits of attending maternal clinics.

Statement of the problem

Maternal education is a key factor that has been shown to predict the utilization of maternal health services in developing countries (Say & Raine, 2007; Simkhada et al., 2008; Levne & Rowe, 2004). However, in most of these studies, maternal education is often used as a categorical variable to distinguish between women with no education and those with education which makes it difficult to assess the impact of different levels of education on the utilization of maternal health care services. It is against this background that the study intends to investigate the relationship between education and utilization of maternal health services in Ibadan North Local Government of Oyo State.

Hypotheses

H_1: There is no significant relationship between basic education and utilization of maternal health care service by pregnant women in Ibadan North Local Government, Oyo State.

H_2: There is no significant relationship between higher education and utilization of maternal health care service by pregnant women in Ibadan North Local Government, Oyo State.

Methodology

The descriptive survey research design was used for the study. This was considered appropriate because it enables the researcher to describe the phenomena as they occur. It is also useful in gathering data about people's attitude and behaviour. The population of this study comprised all pregnant women in the twelve (12) wards in Ibadan North Local Government Area of

Oyo State. A simple random sample technique was used to select 120 pregnant women attending maternal health centre from ten (10) selected wards in Ibadan North Local Government Area of Oyo State.

A self-constructed research instrument tagged "Education and Utilization of Maternal Health Care services Questionnaire" adapted from various sources was the main instrument for the study. The instrument has three sections. Section A, demographic data, section B, measure Educational level while section C measure utilization of maternal health centres. The instrument was validated through expert review, which helped to remove ambiguities in the questionnaire. A cronbach alpha method was used to test the internal consistency of questionnaire which yielded reliability values of 0.89. The data were also analysed using the Pearson Moment Correlation to test the hypotheses at 0.05 alpha level.

Result of findings

Table1: Socio-demographic characteristics of the respondents

Variable	Measurement	Frequency	Percentage (%)
Income	#10,000 and below	57	47.5
	#10,001 -20,000	33	27.5
	#20,001 and above	30	25.0
	Total	**120**	**100.0**
Age	20-24	10	8.3
	25-29	12	10.0
	30-34	32	26.7
	35-39	20	16.7
	Above 40	46	38.3
	Total	**120**	**100.0**
Marital Status	Single	6	5.0
	Married	94	78.3
	Divorced	11	9.2
	Widowed	9	7.5
	Total	**120**	**100.0**
Educational Qualification	Primary school level	12	10.0
	OND/BSc/HND	108	90.0
	Total	**120**	**100.0**
Religion	Christianity	92	76.7
	Islam	26	21.7
	Traditional	2	1.7
	Total	**120**	**100.0**
Occupation	Petty trading	50	35.8
	Civil servant	43	41.7
	Farming	10	8.3
	House wife	12	10.0
	Unemployed	5	4.2
	Total	**120**	**100.0**

Table 1 above shows that higher number of the respondents (90%) have higher level of education while only twelve (10%) have lower level of education.

Hypothesis 1: There is no significant relationship between basic education and Utilization of maternal health care services

Table 2: Shows Pearson Moment Correlation, showing relationship between basic education and utilization of Maternal Health Centre

Variable	**Mean**	**Std. Dev.**	**N**	**R**	**P**	**Remark**
Utilization of maternal health care services	20.1600	4.8458	120	.821	.000	Sig.
Basic Education	21.3850	3.1442				

Significant at $p < 0.05$

Table 2 shows that there was significant relationship between basic education and utilization of maternal health centre ($r = .821$, $N= 120$, $P < .05$). Thus, the hypothesis was rejected. Similarly, Graczyk (2007) also found out that the lack of basic education can also affect health as it limits pregnant women's knowledge about nutrition, birth spacing and the benefits of attending maternal clinics. In the same vein, findings from numerous studies (Kitts and Roberts, 1996; Gupta, 1997; Falkingham, 2003; Ogujuyigbe and Liasu, 2007) on maternal health care and mortality conducted in developing countries over the last decade show a positive association between maternal basic education and maternal health care.

Hypothesis 2: There is no significant relationship between higher education and utilization of maternal health care services

Table 3: Pearson Moment Correlation showing significant relationship between higher education and Utilization of Maternal Centre

Variable	Mean	Std. Dev.	N	r	P	Remark
Utilization of maternal health care services	20.1600	4.8458	120	.856	.000	Sig.
Higher Education	20.3150	4.3336				

Significant at $p < 0.05$

Table 3 shows that there was significant relationship between higher education and utilization of maternal health centre ($r = .856$, $N= 120$, $P < .05$). Thus, the hypothesis was rejected. This finding agrees with Zoe and Sally (1996), who found that higher education, affects utilization of maternal health services in a number of different ways. 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.

Discussions of Findings

The result of the first hypothesis revealed that there was a significant relationship between basic education of pregnant women and healthcare utilization. The result of the second hypothesis revealed that there was a significant relationship between higher education and healthcare utilization. Based on these findings, there is the need for the government to provide improved public health educational programmes that are designed to encourage women to use antenatal care services, to teach them to recognize danger signs in pregnancy and to encourage them to seek care at an early stage. Non-governmental organizations should also provide public enlightenment programmes to encourage women to make use of antenatal care services. Improving utilization of healthcare by women will require changes in the knowledge, attitudes and behaviours of persons, families, communities, and institutions (e.g., government and health-care settings). It is also important for religious organizations to encourage women to make use of antenatal care services.

Conclusion and Recommendations

Base on the findings of this study, it is concluded that education has significant relationship with utilization of maternal health care services among pregnant women attending maternity centres in Ibadan North Local Government, Oyo State. Pregnancy and childbirth are inextricably part of women's lives. While this should be a period of pride and joy, it is associated with pain, disability and even death for many women particularly in developing countries such as Nigeria. Most of these deaths and disabilities can be prevented through adequate access to and utilization of quality maternal health care. However, education can affect access to and utilization of such services.

For any interaction to be optimally effective in promoting maternal health services utilization, there is need to take these findings into consideration. Therefore, the government, hospital management board and health care-givers should target uneducated population. It is particularly important for them to explore effective ways of increasing service utilization among uneducated who are the least likely to use maternal health services. Attention to this factor will not only improve maternity utilization hopefully, also will reduce the high maternal mortality.

The evidence from this study suggests that public health policies aimed at reducing maternal morbidities and mortalities in Nigeria should include strategies that will improve utilization of maternal healthcare services through:

- Outreach and education by an integrated maternal and child health programme
  for uneducated women.
- Improving health literacy in women which involves more than the transmission of health information.
- Developing confidence in women to act on the health knowledge and ability to work with and support others, this can best be achieved through a community-based education outreach.

Implication of the Study

This research is an attempt to extend our knowledge and understanding of education as a determinant of utilization of

maternal health care services in Nigeria. This study adds to the body of knowledge, particularly in its application to pregnant women in the poor urban neighborhoods. The study revealed that both basic and higher education had significant relationship with utilization of maternal health care services.

References

AbouZahr, C. (2003). Global burden of maternal death and disability, *British Medical Bulletin*, 67, (I), 1–11.

Adamu Y, M, Salihu H, M, Sathiakumar N, Alexander G, R (2003) Maternal mortality in Northern Nigeria: A population-based study. *European Journal of Obstetrics & Gynecology and Reproductive Biology*109(2), 153-159.

Ahmed, S., Greanga, A. A., Gillespie, D. G. & Tsui, A. O. (2010). Economic status, education and empowerment: implications for maternal health service utilization in developing countries. *PLo5 One* 5, e11190

Babalola, S. & Fatusi, A. (2009) Determinants of use of maternal health services in Nigeria –looking beyond individual and household factors. *BMC Pregnancy Childbirth* 9, 43.

Babinard J, Roberts P. (2006). Maternal and child mortality development goals: what can the transport sector do? World Bank,

Begun, S, Aziz-un, N. and Begun, I (2003), Analysis of Maternal Mortality in a Tertiary care Hospital to Determine Causes and Preventable Factors. Pakistan: *Ayuba medical College Abbottabad*, 15(2).

Ben-Joseph, E.P. (2007), Medical Care During Pregnancy. *The Nemours Foundation.* Retrieved 22 August, 2018 from http://kidshealth.org/parent/pregnancy_newborn/index.

Bibha Simkhada, Edwin R. Van Teijlingen, Maureen Porter, Simkhada P (2008) Factors affecting the utilization of antenatal care in developing countries: Systematic review of the literature. *Journal of Advanced Nursing* 61 (3), 244–260.

Corroon, M., Speizer, I. S., Fosto, J. C., Akiode, A., Saad, A., Calhoun, L. & Irani, L. (2014). The role of gender empowerment on reproductive health outcomes in urban Nigeria. *Maternal and Child Health Journal* 18, 307-315

Dawud, O. I. (2016). Social-Economic Determinants of Maternal Mortality in Rural Communities of Oyo State, Nigeria. *International Journal of Scientific and Research Publications,* 6, 9.

DeWalt, D. A. & Hink, A. (2009) Health literacy and child health outcomes: a systematic review of the literature. *Pediatrics* 124, S265–S274.

Elo, I. T. (1992) Utilization of maternal health-care services in Peru: the role of women's education. *Health Transition Review* 2, 49–69.

Ensor, T. & Cooper, S. (2004) Overcoming barriers to health service access:

influencing thedemand side. *Health Policy and Planning* 19, 69–79.

Fadeyi A. O. (2007) Determinants of Maternal Health Care in Lagos, Nigeria. *Ife Social Sciences Review*. 22(1) 38-48.

Falkingham, J. (2003) Inequality and Changes in Women's Use of Maternal Health-Care Services. *Studies in Family Planning*, 34(1):32-43.

Fotso, J.-C. & Kuate-Defo, B. (2005) Measuring socioeconomic status in health research in developing countries: should we be focusing on households, communities or both? *Social Indicators Research* 72, 189–237.

Gabrysch, S. & Campbell, O. M. (2007). Still to far to walk: literature review of the determinants of delivery service use. *BM C Pregnancy Childbirth* 9, 34

Ganle, J. K., Parker, M., Fitzpatrick, R. & Otupiri, E. (2014) Inequities in accessibility to and utilisation of maternal health services in Ghana after user-fee exemption: a descriptive study. *International Journal for Equity in Health* 13, 89.

Ganle, J. K., Otupiri, E., Parker, M. & Fitpatrick, R. (2015). Socio-cultural barriers to accessibility and utilization of maternal and newborn healthcare services in Ghana after user-fee abolition. *International Journal of Maternal and Child Health* 3, 1-14

Graczyk, K. (2007).Adolescents Maternal Mortality: An Overlooked Crisis". From Advocates for youth. Source: http://www.advocatesfor youth.org/publication/

Greenaway, E. S., Leon, J. & Baker, D. P. (2012). Understanding the association between maternal education and use of health services in Ghana; exploring the role of health knowledge. *Journal of Bioscience* 44, 733-747

Harrison, K.A. (2010). Danger of Female Genital Mutilation. *Journal of Com Psychology*, 122 (1), 1 – 8

Hodges, A. (2001). *Children's and Women's Right in Nigeria: A Wake-up Call. Situation Assessment and Analysis.* Abuja, Nigeria: National Planning Commission and UNICEF.

Hunter M. (1994) *Counseling in Obstetrics and Gynecology*. Leicester, UK: British Psychology Society.

Idowu, A.E, Osinaike, M.O, and Ajayi, M.P. (2011) Maternal Health Challenges and Prospects for National Development: A Study of Badagry Local Government, Lagos State. *Gender and Behaviour*, 9, 20, 4224-4246.

Idris, J. (2010), Lagos State Commissioner for Health. Maternal and Child Health Status in Nigeria is poor. The Punch, May 26, 2010.

Izugbara, C. O. and Ukwayi, J. K. (2004) An Intercept Study of Persons Attending Traditional Birth Homes in Rural Southeastern Nigeria. *Culture, Health & Sexuality*. 6 (2): 101-114.

Jegede, A.S. (1998) *African Culture and Health*. Ibadan: Stirling-Horden Publishers.

Lanre-Abass, B. A. (2008) Poverty and maternal mortality in Nigeria: Towards a more viable Ethics of Modern Medical Practice. *International Journal for Equity in Health, 7.*

Levine, R. A. & Rowe, M. L. (2009). Maternal literacy and child health in less-developed countries: evidence, processes and limitations. *Journal of Developmental and Behavioural Pediatrics*30, 340-349

Lule, E., Ramana, G.N.V., Epp, J., Huntington, D. and Rosen, J. E. (2005) Achieving the Millennium Development Goal of Improving Maternal Health: Determinants, Interventions and Challenges. The International bank for Reconstruction and Development/ The World Bank: Health, Nutrition and Population (HNP) Discussion Paper.

Kindig, D. A., Panzer, A. M. & Nielsen-Bohlman, L. (2004) Health Literacy: A Prescription to End Confusion: National Academies Press

Moyer, C. A., Adongo, P. B., Aborigo, R. A., Hodgson, A., Engmann, C. M. & DeVries, R. (2014) 'It's up to the woman's people': How social factors influence facility-based delivery in rural northern Ghana. *Maternal and Child Health Journal* 18, 109–119.

NAS-The Nigerian Academy of Science (2009) Reducing child mortality in Nigeria. In: Olumide Y.M, Odunbanjo MO (eds) *Workshop Summary February, 2009*. West African Books Publishers Limited, Lagos-Nigeria.

National HIV/AIDS and Reproductive Health Survey (NARHS) (2013). Abuja: Federal Republic of Nigeria. Federal Ministry of Health.

Nutbeam, D. (2000) Health literacy as a public health goal: a challenge for contemporary health education and communication strategies into the 21st century. *Health Promotion International* 15, 259–267

Ogujuyigbe P. O. and Liasu A. (2007) Perception and Health-Seeking Behaviour of Nigerian Women about Pregnancy-Related risks: strategies for Improvement. *Journal of Chinese Clinical Medicine*, 2 (11).

Orobuloye, I.O and Oni, J.B. (1996) Health Transition Research in Nigeria in the Era of the Structural Adjustment Programme. *Health Transition Review*, 6; 301-324.

Oxaal, Z. and Baden, S. (1996) Challenges to Women's Reproductive Health: Maternal Mortality. Report Challenges to Women's Reproductive Health: Maternal Mortality. Report prepared at the Request of the Social Development Department: Department of Oversea Development (DFID), UK.

Pallikadavath S, Foss M, Stones RW (2004) Antenatal care: Provision and inequality in Rural North India. *Social Science and Medicine* 59 (6), 1147-1158.

Pathfinder International (2013) Reproductive health knowledge and practices in Northern Nigeria: Challenging misconceptions, the reproductive health/family planning service delivery project in Northern Nigeria Funds from David and Lucile Packard Foundation.

Rai, R. K., Singh, P. K. & Singh, L. (2012) Utilization of maternal health care services among married adolescent women: insights from the Nigeria Demographic and Health Survey, 2008. *Women's Health Issues* 22, e407–e414.

Riessman, Catherine Kohler (1983). Women and medicalization: A new perspective, *Social Policy*, 14 (1): 3–18.

Sado, L., Spaho, A. & Hotchkiss, D. R. (2014). The influence of women's empowerment on maternal healthcare utilization in Gujarat: analyses of district-level health survey data. *Global Health Action* 6, 1-9

Say, L. & Raine, R. (2007). A systematic review of inequalities in the use of maternal health care in developing countries; examining the scale of the problem and the importance of context. *Bulletin of the World Health Organization* 85, 812-819

Simkhada, B., Teijlingen, E. R., Porter, M. & Simkhada, P. (2008). Factors affecting the utilization of antenatal care in developing countries; systematic review of the literature. *Journal of Advanced Nursing* 61, 244-260

Tella, S.A. (2014). The affluent society: can Africa make it? The 66th Inaugural Lecture of Olabisi Onabanjo University, Ago-Iwoye, Ogun State, Nigeria.

The World Bank World Development Indicators Database, 2010. Washington, DC, The World Bank, 2010 (http://data.worldbank.org/data-catalog, accessed 1 March 2010).

Tim, E and Cooper, S. (2004). Overcoming barriers to health services access: influencing the demand side – Review article. Health Policy and Planning 19, No. 2, p9-79.Oxford University Press.

Ufford, J. and Menkiti, M. (2001) Delivery Care Is Key for Maternal Survival: a Story of Two States in Nigeria Source: Population Reference Bureau.

UNFPA (2000) *State of World population 2000: Lives Together, World Apart, Men and Women in a Time of Change*. San Francisco: UN.

UNICEF (2008) The State of the World's Children 2009: Maternal and New born Health. Retrieved 28 Aug, 2018 www.unicef.org/protection/sowco9.

UNICEF (2010). *Maternal Mortality.* Retrieved 28 Aug, 2018www.unicef.org/indocycountry/nigeria.

WHO (2006) Reproductive Health Indicator: Guidelines for their Generation, Interpretation and Analysis for Global monitoring. Retrieved 28 Aug,2018www.searo.who.int/linkfiles/publication

WHO (2006a). *Addressing Violence Against Women. Prevention and Management of Health Consequences of Violence against Women*. Geneva WHO.

WHO (2006b). Safe Motherhood. A News Letter of Worldwide Activity. Geneva: WHO.

WHO (2007) Maternal Mortality in 2005; Estimates Developed by WHO, UNICEF, UNFPA and The World Bank.

WHO (2008) Closing the Gap in a Generation: Health Equity through Action and the Social Determinants of Health. Geneva: http://whqlibdoc.who.int/publications/9789241563703.

WHO (2009). Preventing Maternal Mortality Rate in Nigeria, 95(5), 589 – 596).

WHO. (2001). *Prevention of Maternal Mortality Report of a World Organisation Inter- Regional*. Geneva WHO.

World Health Organization. Global burden of disease. Retrieved from 28 Aug 2018.http://www.who.int/healthinfo/global_ burden disease/en/index.html.

Worku, A. G., Yalew, A. W. & Afwork, M. F. (2013). Factors affecting utilization of skilled maternal care in Northwest Ethiopia: a multilevel analysis. BMK International Health and Human Rights 13, 20