ABUAD INTERNATIONAL JOURNAL OF NATURAL AND APPLIED SCIENCES
ISSN: 2955-1021
AIJNAS 2021, Volume 1, Issue 1, pp 1–7
https://doi.org/10.53982/aijnas.2021.0101.01-j

https://journals.abuad.edu.ng/index.php/aijnas

Gender Analysis of Decision Making on Maternal Health Care among Rural Farmers in Southwestern Nigeria: Implications for Food Security

***Oluwatoyin J. OLUWASUSI, Abolade O. ADEYEMO, Funmilayo O. BAMIGBOYE and Babatunde J. OLUSIPE**
Department of Agricultural Sciences, Afe Babalola University, Ado-Ekiti (ABUAD),
Ado-Ekiti, Ekiti State. Nigeria
*Corresponding author: oluwasusijo@abuad.edu.ng

Abstract
Safe childbirth is crucial to farmers' productivity and food security as farm labour plays a pivotal role for farming in most rural communities. Analysing gender roles on maternal health care (MHC) decision is of major concern in ensuring safe motherhood and poverty reduction in rural homes. Therefore, this study analysed gender concerns of MHC among rural farmers. Multistage sampling procedure was used to select 124 respondents for the study; data were collected using structured interview schedule, Focus Group Discussion, descriptive and inferential statistics. Respondents ($\bar{\chi}$ = 29 years) were in their youthful and procreating stage with average family size of 4 members. Husbands (64.5%) mainly decided the MHC utilised for childbirth. More females (54.8%) belonged to cooperative society. About (56.5%) of males and females (53.2%), respectively were crop producers having average monthly earning of #19,000. Most predicating factors to MHC decision were family tradition ($\bar{\chi}$= 2.21) and social capital ($\bar{\chi}$ = 2.18). Males (61.3%) had high level of MHC decision unlike the females (54.8%) with low contribution to MHC decision. Monthly income (r=0.521), responsibility for decision making (r=0.668) were significantly related to respondents decision on MHC. There was a significant difference in the level of decision making between males and females (t=5.28, df =31). Hence, it is recommended that non-governmental organisation should collaborate with the government to aggressively sensitise rural communities on safe motherhood and men should sufficiently empower women to contribute and participate actively in decisions on maternal health care in rural families for sustainable food production and supply.

Keywords: *Societal roles, Food security, Maternal health care, Birth Attendants, Rural*

INTRODUCTION

Maternity is celebrated as a cultural norm for sustaining family dynasty in diverse societies of the world. Moreover, maternal health of the women remains crucial to the outcomes of pregnancy and childbirth in the society. Pregnant women's tendency for safe child delivery depends on the decision made in accessing either competent skilled or quack birth attendants during childbirth. However, there is a rural-urban variation in the records of safe child delivery and maternal mortality in the country due to large concentration of obstetrics and gynaecologists with the best expertise in safe child delivery at the secondary and tertiary health facilities built in the urban areas, while the rural areas are equipped with few trained midwives co-existing with traditional birth attendants (Addai, 2000). Women are vulnerable to risks of maternal death in a bid to fulfill their inherent social expectation of reproductive life, adjudged customarily by bearing children. Moreover, it was reported in 2015, that an estimate of over 300,000 women died during pregnancy and childbirth, with virtually all the maternal deaths recorded in poor health facilities and majority would have been averted (Conde-Agudelo *et al*., 2004).

In addition, high maternal death during pregnancy and childbirth is generally a serious health concern in less advanced nations, including Nigeria (Onasoga *et al*., 2013). Women seem to die more during pregnancy and childbirth in the rural areas than the urban areas (World Health Organisation, 2014). According to Abimbola *et al.* (2012), the childbearing women in Nigeria are in millions, with a record of more maternal death in the villages compared to the towns and cities. However, women dominate the rural population, where majority of Nigerians live and farm (Nnadi *et al*., 2012). According to World Bank (2003), women play key roles in agriculture, households and domestic affairs in the villages, through their contributions toward farming and family support. Ogunlela and Aisha (2009) reported that women engage in agricultural operations more than men, particularly in sub-Saharan Africa; where they show greater drive and commitment to farm operations across the agricultural value chain.

Unfortunately, in many traditional societies of the world, women are undervalued and relegated to mere help mates, which often influence their disposition towards matters that concern them most, such as childbirth, job participation and communal engagement (Soetan, 2001). Previous studies by Omotosho (2010); Etuk *et al* (2013), reported that where modern and safe health services are provided in majority of the villages, there are hindrances to utilise them, which are connected to customary held opinions, educational level, precept, perception towards safe modern health facility and medicine, poor road network and financial capability, among others which tend to support customary health medicine and facilities that largely attract maternal mortality. Endearing customary beliefs hinder and threaten adoption of safe motherhood through usage of modern health facilities in less advanced nations (Omobuwa *et al*., 2012). Moreover, women are faced with gender imbalance and inequality in most rural homes, advancing men as slave masters and women as slaves (United Nations, 2010). This results in male dominance in the rural areas as cultural belief and stereotypes regarding the roles and responsibilities of women and men in family matters. This can limit women's control over their health needs and access to health care, which may negatively affect maternal health outcomes in rural homes. Adamu and Salihu (2002) added that because of male dominance in most traditional environments, women's right to seek help and utilise primary health facilities notable for safe maternal health is subject to approval of men and their family members, even in the case of exigent circumstances.

Harande (2009) reported that low educational level is more pronounced in the villages and among females in Nigeria. Female farmers are connected with peasantry farm practices and operations with low financial gain, because of limitations to farm resources and improved technology (Ani, 2003). Studies reported that poverty is more pronounced in the villages with higher percentage of Nigerians in this region, experiencing poor availability and accessibility to basic social amenities that limit wellbeing and wellness of the locals (International Fund for Agricultural Development (IFAD), 2011; Awotide *et al.,* 2011). Moreover, Nnadi (2008) reported that poverty is not restricted to financial constraint in meeting with individual social and economic needs, but inadequacy of basic necessities of life. Moreover, Babatunde (2008) posited that poverty is linked to low capacity building and it is a common feature in the Nigerian villages. However, escaping poverty nets could depend on effective involvement of the local people to allow their women participate in the utilisation of primary health care facilities.

O'Rourke (1998) reported that pregnancy and safe childbirth involve a nexus of personal characteristics, enlightenment on safe motherhood, mental wellbeing and patterns of human relationships in the environment. However, women farmers seem to be vulnerable to sexual abuse, domestic violence, non-dialogue fora with husbands and coercive rules on land rights for farming under the auspice of their husbands and financial gains from farming activities that may be shared on husbands' instruction and dictatorship as gender role of females in marriage. Gender roles often associate women with femininity and men with masculinity, with the later given higher value (United Nation, 2010). This increases the susceptibility of rural women farmers to vulnerability in seeking unsafe child birth homes due to poor economic condition and un-informed decision. Women's position in the society is not well recognized and rewarded with adequate rights and laws by every moral and equity indices (Kehinde *et al*., 2014). Custom and tradition in most local communities deny women the freewill to make decisions on matters of concern (Ajani, 2008). Women's access to needed farm resources have been assessed to be very low, due to social restrictions, poor awareness on improved farming practices, poor ownership and control of farm resources (Amaza *et al*., 1999; Hassan *et al*. 2002).

World Bank (2003) reported that women's contribution to food production, food security, home nutrition and moral upbringing of children in less advanced nations is undermined by mythical social constructs that place men far above women in production resources control and utilisation. Despite the prevalent constraints experienced by women in agricultural production and food security, their involvement in decisions affecting their maternal health remains unknown and seemingly threatens food security in the country. In this era of call for gender mainstreaming as a process of ensuring that men and women have equal stake and opportunities in all facets of life, it is pertinent to find out and analyse the gender influence of decision making on maternal health among rural farmers. The general objective of the study was the gender analysis of decision-making process on maternal health among rural farmers with its implications for food security

The specific objectives of the study were to:

1. Examine the socioeconomic characteristics of the rural farmers in the study area?
2. Investigate gender influence on decision making on maternal health among the rural farmers in the study area?

Hypotheses of the study

Ho1: There is no significant relationship between respondents' socioeconomic characteristics and decision making on maternal health.

Ho2: There is no significant difference between males and females contributions toward decision making on maternal health care.

MATERIALS AND METHODS

The study was conducted in south western Nigeria. There are lot of villages in the south western zone of the country. The basic infrastructure needed to drive socioeconomic growth and health development is in poor conditions. The primary occupation of the people is farming, with great involvement of women as a key driver in the various aspects of agricultural practices, transportation and distribution to the local markets. The women are also involved in animal husbandry and petty trading activities. The people are hospitable with a settlement pattern showing many people of different Nigerian ethnic background resident in rural south western Nigeria. However, most of the population residing in the area is of the Yoruba ethnic backgrounds. Traditional rulers and opinion leaders exert great influence on the people's response and involvement in intervention programmes. This area was chosen because of the similarity in the cultural language, climatic, environmental, political and socioeconomic factors. It has latitude of 50^{o} South, 90^{l} North and Longitude of 20^{o} and 80^{l} East, it shares boundary with Atlantic Ocean in the South, River Niger in the East, Republic of Benin in the West and north-central Nigeria in the North; likewise a land area of 78,505.17 square kilometres (National Population Commission, 2010). National census of 2006 has South West Nigeria to be populated by 27, 722, 432 people.

Sampling procedure and sample size

Multi-stage sampling procedure was used in selecting the respondents for this study. The first stage involved a simple random selection of 50% of the Southwestern states (Oyo, Ogun and Ekiti). Respondents were drawn from the list of registered farmers under Agricultural Development Programme (ADP) in each of the selected states. Thereafter, 10% of the Local Government Areas (LGAs) in the selected states were purposively sampled. The Local Government Areas selected were: Ibarapa East, Atisbo and Iwajowa in (Oyo State); Ipokia and Obafemi Owode in (Ogun State); Moba and Ilejemeje in (Ekiti State) as 3, 2, 2 local government areas, respectively. The third stage involved the selection of 10% of the wards in the chosen Local Government Areas. (10, 10, 8), respectively for Oyo State; (12;12), respectively for Ogun state and (11;10), respectively for Ekiti state, making a total of 73 wards. The fourth stage involved the selection of 10% of the wards to give a total of seven (7) wards. The fifth stage was the random selection of three communities from each of the wards, giving a total of 21 communities. The final stage was the random selection of six (6) households from each of the selected communities. A total of 126 respondents (62 females and 64 males) were selected from the households used for the study. Data collected was analyzed using descriptive statistics of frequency counts and percentages. Inferential statistics such as, Chi-square ($\chi 2$) and Pearson Product Moment Correlation was used to analyse the study hypotheses. Two Focus Group Discussions were conducted and used from a group of eight male participants and another group of eight female participants to elicit in-depth information from the sixteen participants that added supplementary data to the study. However, out of the 126 structured questionnaire distributed, 124 were retrieved which showed 98% returning rate, used for the study.

Measurement of Variables

Socio-economic characteristics were measured in nominal and interval levels. Respondents involvement on maternal health were asked from the list of items presented to them on the scale of to a large extent (LE) = 3, moderate extent (ME)= 2, little extent (lE) = (1) and No Extent (NE) = 0. The mean score on decision making on maternal health care was determined as 24.3, used as the index to categorize respondents' levels of decision making on maternal health care, the minimum score (19.0) and maximum score (94.0) were obtainable.

RESULTS AND DISCUSSION

Table 1 showed the socioeconomic characteristics of the men and women farmers in the study area. Result showed that the mean ages of male and female farmers were 29.10±5.20 and 28.20±5.18, respectively indicating that they were of youthful population and in their procreating stage, thus their involvement in farming activities is considered to be high. This finding is in agreement with Ugwoke, *et al.*, (2012) who reported that majority of crop farmers are in their youthful ages and contributing successively to farm population. Respondents' family size showed an average of 4 household members. Also, Christianity was the dominant religion (75.8%) among the males, likewise the females (62.9%). More than half (53.2%) of the males were illiterates just like the females (54.8%). Analysis further showed that both males (56.5%) and females (53.2%) were primarily crop farmers. The mean farming experience of the males and the females were 18.23±4.13 and 19.18±4.11, respectively. Both

male and female farmers had an average estimated monthly farm income of #19,000. Some of the male farmers (38.7%) belonged to cooperative society while more of the females (61.3%) were members of cooperative society. Husbands (64.5%) mainly decided on maternal health while more than half (59.7%) of the women decided type of maternal health they received. This finding is in line with Franklin (2007) who reported than in nine countries of Africa, women present in rural organisations, tend to comprise of a low representation in leadership and decision making.

Table 1: Socioeconomic characteristics of respondents in the study area

Socioeconomic characteristics	Male M (62)	%	Female F (62)	%	Total (124)	%
Age						
≤20 years	0	0.0	3	4.8	3	2.41
21-30 years	14	22.6	22	35.5	36	29.0
31-40 years	23	37.1	16	25.8	39	31.5
41-50 years	23	37.1	19	30.6	42	33.9
Above 50 years	2	3.2	2	3.2	4	3.20
	$\bar{x}$ =29.10±5.20		$\bar{x}$ =28.20±5.18		$\bar{x}$ =29.17±6.11	
Family size						
1-3	2	3.2	5	8.1	7	5.65
4-6	35	56.5	28	45.2	63	50.8
7-9	25	40.3	29	46.8	54	43.5
	$\bar{x}$ =4.30±0.80		$\bar{x}$ =4.28±0.90		$\bar{x}$ =4.70±1.50	
Religion						
Christianity	47	75.8	39	62.9	86	69.4
Islam	14	22.6	21	33.9	35	28.2
Traditional	1	1.6	2	3.2	3	2.4
Educational Status						
No Formal Education	33	53.2	34	54.8	67	54.0
Primary	20	32.3	20	32.3	40	32.3
Secondary	7	11.3	4	6.5	11	8.9
Tertiary	2	3.2	4	6.5	6	4.8
Primary Occupation						
Crop Farming	35	56.5	33	53.2	68	54.8
Livestock Rearing	6	9.7	8	12.9	14	11.3
Crop Farming & Livestock	14	22.6	11	17.7	25	20.2
Agricultural Processing	7	11.3	10	16.1	17	13.7
Years of farming						
Less or equal 10 years	1	1.6	0	0.0	1	0.80
11-20 years	4	6.5	15	24.2	19	15.3
21-30 years	17	27.4	14	22.6	31	25.0
31-40 years	12	19.4	32	51.6	44	35.5
40-50 years	28	45.2	1	1.6	29	23.4
	$\bar{x}$ = $\bar{x}$ =18.23±4.13		$\bar{x}$ =19.18±4.11		$\bar{x}$ =19.14±5.01	
Estimated Monthly Income	29	46.8	33	53.2	62	50.0
≤ □20,000	27	43.5	22	35.5	49	39.5
□21,000-□40,000	6	9.7	7	11.3	13	10.5
□41,000-□60,000	0	0.0	0	0.0	0	0.0
□61,000-□80,000	$\bar{x}$ = $\bar{x}$ =19,012.41±9.01		$\bar{x}$ = $\bar{x}$ =19,043.21±8.05		$\bar{x}$ = $\bar{x}$ =18,114.43±9.05	
Membership of Association	24	38.7	38	61.3	62	50.0
Cooperative Society	22	35.5	20	32.3	44	35.5
Occupational Group	16	25.8	4	6.5	20	16.1
Religious Group						
Voice in decision making						
Husband	40	64.5	37	59.7	77	62.1
Husband and Wife	12	19.4	16	25.8	28	22.6
Family members	10	16.1	9	14.5	19	15.3

Distribution of respondents influence towards decision making on maternal health care

The study revealed (Table 2) that overall, the most important components of decision making among farmers on maternal health included family tradition ($\bar{\chi}$ =2.21), social capital ($\bar{\chi}$ =2.18) and affordability of maternal health care services ($\bar{\chi}$=1.90). The least rated components of decision making on maternal health were values placed on safe maternal health practices ($\bar{\chi}$=1.53), availability of maternal health care ($\bar{\chi}$= 1.50) and self-conviction ($\bar{\chi}$ =1.41). A disaggregated result however reveals that for males decision on maternal health, family tradition ($\bar{\chi}$ =2.22), social capital ($\bar{\chi}$ =1.94) and affordability of maternal health services ($\bar{\chi}$ =1.92) were the most important components. This implies that among males, the major pre-disposable factors for having deciding on maternal health care and services patronized by wives in the farming communities were family tradition, social capital and affordability of maternal health services. On the other hand, among the female farmers, family tradition () and affordability of maternal health services were rated the most essential components for deciding the maternal health care and services utilized by the women The results of FGD corroborate this. According to a male household head in one of the communities in Ekiti:

"Our decision on maternal health care and services utilised by our pregnant wives is very useful and of tremendous benefits to sustaining our farming activities in this community. We practice farming all year and our wives are key partners in cropping, domestication of our few animals, processing of our farm produce to increase their shelf life and marketing of the farm produce to take care of our household and social responsibilities. We uphold our family tradition very high and it adds to our support for patronizing the family traditional birth attendants (TBAs) above the skilled birth attendants (SBAs) from government schools in the primary health care facilities around us. This helps us have strong wives and children with the concoctions administered to them by our TBAs unlike women who had their babies in government hospitals. In fact, a lot of farm families ensure their pregnant women patronise TBAs who are members of our families and take little or no fees from us for assisting our wives deliver their babies safely"

Another female discussant remarked:

"Many of us deliver our babies in family traditional homes because we have family rites done for the new born babies immediately they are delivered, which help us prove to our husbands that they truly own the children and the delivery bill is very cheap for us to take care without any financial stress.This has been the customary practice here, even before we were born and we wouldn't allow it go into extinction because of modernisation".

This finding is in consonance with Okten and Osili (2004) who argued that as a resource, and by virtue of networks and their associated norms and trust, people use social capital to cope with shocks, smooth consumption and improve their access to other goods and services.

Table 2: Factors influencing Decision Making on Maternal Health Care among Rural Farmers

Components of Decision Making on Maternal Health	Male (n = 62)					Female (n = 62)					Total (124)				
	LE	ME	lE	NE		LE	ME	lE	NE		LE	ME	lE	NE	
Family Tradition	53.2	35.5	11.3	0.0	2.22	62.1	22.6	0.0	15.3	2.43	57.7	29.1	5.7	7.5	2.21
Communal Belief	45.2	19.4	27.4	8.1	1.67	51.6	22.6	24.2	1.6	1.89	48.4	21.0	25.8	4.90	1.57
Family Income Utilisation	38.7	35.5	25.8	0.0	1.61	22.6	15.3	62.1	0.0	1.57	30.7	25.4	44.0	0.0	1.52
Availability of Maternal Health Care	33.7	32.5	6.0	27.7	1.72	4.4	81.1	1.1	13.3	1.77	17.3	44.3	11.1	27.3	1.50
Affordability of Maternal Health Care Services	56.5	22.6	11.3	9.7	1.92	54.8	13.7	16.1	15.4	2.01	55.7	18.2	16.7	9.4	1.90
Value placed on safe Maternal Health Practices	46.8	43.5	9.7	0.0	1.54	38.7	35.5	25.8	0.0	1.50	42.8	39.5	17.8	0.0	1.53
Self-Conviction	27.4	45.2	27.5	0.0	1.46	22.6	24.2	53.2	0.0	1.37	25.0	34.7	40.4	0.0	1.41
Accessibility to Maternal Health Care	51.6	22.6	25.8	0.0	1.81	51.7	25.9	19.4	3.0	1.97	51.7	24.3	24.0	0.0	1.87
Awareness Level on Safe Maternal Health Practices	44.6	21.7	20.5	13.3	1.78	46.8	43.5	9.7	0.0	1..81	45.7	32.6	15.1	6.7	1.68
Social Capital	59.7	25.8	14.5	0.0	1.94	64.5	19.4	16.1	0.0	1.94	62.1	22.6	15.3	0.0	2.18
Success Rate of Child delivery in Maternal Health Care Facility	40.3	50.5	9.2	0.0	1.82	45.2	40.0	13.3	1.5	1.79	42.8	45.3	12.0	0.0	1.71
Grand mean			**1.73**					**1.54**					**1.63**		

Key: LE = Large extent, ME = Moderate extent, lE = low extent, NE = No Extent

Levels of respondents decision making on maternal health care

Table 3 showed the categorization of respondents into two, based on their decision making status on maternal health care in the study area. The study reveals that more than half (52.4%) of the households across the study area had high level of stake in decision making on maternal health care by overall average of 23.4±18.2. Similar decision making on maternal health care situation is also observed among males (61.3%) while a contrast is experienced among females with a low decision making on maternal health (54.8%). This could be due to the fact that they males have dominant decision on maternal health care and services utilized by their wives, while the wives have little or no voice as customary practice in rural villages, where the bulk of farming activities in the country is carried out. This finding is in consonance with Adamu and Salihu (2002) who opined that since men hold the primary decision-making power in the society, the decision to go to a health facility in an emergency must wait until the husband or in-laws give consent.

Table 3: Distribution of respondents based on levels of decision making on maternal health

Level	Male (n=62)		Female (n=62)		Total (n=124)		Mean	SD	Mini-mum	Maxi-mum
	F	%	F	%	F	%				
High	38	61.3	28	45.2	65	52.4	24.3	18.2	19.00	94.00
Low	24	38.7	34	54.8	59	47.6				

Field Survey, 2019; F= Frequency

Ho1: Relationship between respondents' socioeconomic activities and their involvement in decision making on maternal health

The study revealed (Table 4) a positive correlation between monthly income of rural households and their voice in decision making on maternal care (r = 0.705). Disaggregates of males (r = 0.521, p<0.00) and females (r = 0.742, p <0.05) showed a positive significant relationship between their monthly income and their decision on maternal health care service utilisation. This is an indication that the type of maternal health care patronised and utilised by respondents is influenced by their monthly earning. This implies that individuals' responsibility for deciding the choice and preference of maternal health care and services utilised by farming families is premised on their financial capability drawn from their farm income on monthly basis. Also, voices in decision making by males (r = 0.468, p<0.01) and females (r = 0.742, p <0.05), respectively showed a positive significant relationship with their decision on maternal health care. This indicates that finding and having a voice in decision making lead to responsibility for decisions made in rural homes which ultimately influences the decision made on maternal health care by the male and female. These findings are corroborated by studies from International Fund for Agricultural Development (2011) and Awotide *et al.,* (2011) with their reports on poverty being severe especially in rural areas where up to 80% of the population lives below the poverty line and social services and infrastructure are both limited. In the same vein, Nnadi (2008) described poverty as a multi-dimensional concept involving

not only material deprivation but also, deprivation in terms of capability, vulnerability and influence over institutions that affect one's life.

Table 4: Pearson Product Moment Correlation (PPMC) analysis of relationship between respondents' socioeconomic status and their involvement in decision making on maternal health care

Independent variable	Males		Females		Overall	
	r	p	r	P	r	p
Monthly Income	0.521**	0.00	0.742**	0.00	0.705**	0 00
Voice in Decision Making	0.468*	0.02	0.400*	0.00	0.610*	0.01

Key: r- correlation coefficient

p- observed probability difference

* great significant value

** greater significant value

Differences in respondents' decision making status on maternal health care in rural areas

The study further revealed (Table 5) that the level of decision making on maternal health care differed significantly by voice and stake of males and females household heads in the study area. Males had significantly higher voice and stake in decision making status (than the females. This is an indication that there is male dominance in decision making in farming families. This may be due to the fact that the farming communities operate a patriarchal society whereby the females are relegated to the background in family decisions, particularly maternal health care that directly concerns the females more than the males. This shows that gender equality and equity is not maintained in decision making in such farming communities, plausibly due of their low level of education, exposure and strong customary influence, highly upheld in such families. These have a discriminatory position to women airing their opinions and having a say in decisions related to marriage and family life. Thus, putting women at risk of maternal mortality and motherless children becoming social misfits and causing mayhem in future in the society due to improper and poor upbringing.

Table 5: Differences in level of decision making between male and female on maternal health care

Decision making on maternal health care	N	Mean	SD	T	Df	P
Males	62	23.42	13.50	5.28	31	0.00
Females	62	21.51	11.83			

CONCLUSION AND RECOMMENDATIONS

The study revealed the poor decision making status of rural women in maternal health care as a major setback to government interventions on safe maternal health practices and safe motherhood in rural communities. There is low level of contribution towards maternal health care among the female respondents, as a clear indication of male dominance in maternal health care decision among other family affairs. Based on the findings of this study, the following recommendations were made towards gender decision making on maternal health care:

- There should be joint collaboration of non-governmental organisations with government on sponsorship and implementation of massive awareness campaigns through the engagement of mass media in sensitising the rural farmers on empowerment of women in decision making on maternal health care, like other family affairs for the overall wellbeing of the family.
- Government at all tiers should promote rural development policies that sanction individuals either husbands or relations that relegate women to the background and restrict them from having free will to decide the best and safe maternal health care for themselves.
- Government should make modern health care delivery services in rural areas more accessible and affordable to the rural dwellers. Also, rural infrastructure should be improved upon to enable medical staff deployed to such places stay, work with and for the rural people. This will encourage better disposition of the rural farmers and utilisation of modern health facilities to avail safe motherhood and sustenance of food production in the farming environment.

REFERENCES

Abimbola, S., Okoli, U., Olubajo, O., Abdullahi, M.J. and Pate, M. A. (2012). The midwives service scheme in Nigeria. *PLoS Med*, **9** (5):459–477.

Adamu, Y.M. and Salihu, H.M. (2002). Barriers to use of antenatal and obstetric care services in rural Kano, Nigeria. *Journal of Obstetrics and Gynecolo*gy, 22(6):600–603.

Amaza, P.S, Kwagbe, P.V. and Amos, A.A (1999). Analysis of women participation in agricultural cooperatives: Case Study of Borno State, Nigeria. *Annals of Borno* 15 (16):187-196.

Awotide, A.B., Diagne, A., Awoyemi, T.T. and Ojehomon, V.E.T. (2011). Household endowments and poverty reduction in rural Nigeria: Evidence from rice farming households. *Agricultural Journal, 6(5): 274-284.*

Babatunde, R.O. (2008). Income inequality in rural Nigeria: Evidence from farming households survey data. Australian Journal of Basic and Applied Sciences 2(1): 134-140.

Conde-Agudelo A., Belizan, J.M and Lammers C (2004). Maternal perinatal morbidity and mortality associated with adolescent pregnancy in Latin America: Cross-sectional study. *American Journal of Obstetrics and Gynecology,* 192:342–349.

Etuk, U.R. Olatunji, S.O. and Ekong, I. (2013). Analysis of health needs on self-medication among rural farmers in Akwa-Ibom State, Nigeria. *Nigerian Journal of Agriculture, Food and Environment,* 9 (1): 63-66.

Franklin, S. (2007). Gender Inequality in Nigeria. Taking IT Global ONLINE Publication, 31 May, 2007.

Hassan, C., Olawoye, J. and Nnadozie. K. (2002). Impact of International Trade and Multinational Corporations on the Environment and Sustainable Livelihoods of Rural Women in Akwa-Ibom State, Niger Delta Region, Nigeria. http://www.csae.ox.ac.uk/conferences/2000-OiA/pdfpapers/olaniyan-95.PDF

Harande, Y.I. (2009). Information Services for Rural Community Development in Nigeria. Library Philosophy and Practice (e-journal). Paper 271. Available at http://www.webpages.uidaho.edu/~mbolin/harande.htm.

International Fund for Agricultural Development (IFAD). (2011). Rural poverty in Nigeria. available at http://www.ruralpovertyportal.org/web/guest/country/home/tags/nigeria.

Kehinde, E.A., Tologbonse, E.B., Adeniji, O.B., Yemison, G.H. and Tologbonse, O.M. (2014). Assessment of women involvement in agricultural activities in Kuje and Abuja Municipal Area Councils of Federal Capital Territory, Abuja, Nigeria. *Nigerian Journal of Rural Sociology,* 15 (1): 28-37.

Nnadi, S. E. (2008). The Impact of Globalization on the Nigerian Economy, Minneapolis, Minnesota: Walden University, Dissertation; available at: http://gradworks.umi.com/33/36/3336742.html

Nnadi, F.N., Chikaire, J., Atoma, C.N., Egwuonwu, H.A. and Echetama, J.A. (2012) ICT for Agriculture knowledge management in Nigeria: Lessons and strategies for improvement. *Science Journal of Agricultural Research and Management,* 6 (2):192-200.

Omobuwa, O., Asekun-Olarinmoye, E. O. and Olajide, F.O. (2012). Knowledge and perception of reproductive health services among in-school adolescents in Ile-Ife, Osun State, Nigeria. *Journal of Medicine and Medical Sciences,* 3 (7): 481-488

Omotosho, O (2010). Health seeking behaviour among the rural dwellers in Ekiti State, Nigeria. *International Journal of Multi-Disciplinary,* 4 (3): 125-138.

Ogunlela, Y.I. and Mukhta, A.A. (2009). Gender Issues in Agriculture and Rural Development in Nigeria: The Role of women. *Humanity and Social Sciences Journal,* 4(1): 19-30.

Okten, C., and Osili, U. O. (2004). Social networks and credit access in Indonesia. *World Development,* 32 (1):1225 -1246.

O'Rourke, K.H. (1998). Impact of community organization of women on perinatal outcomes in rural Bolivia. *Revista Panamericana de Salud Pública, 3(1):9-14.*

Soetan, R.O. (2001). Culture, Gender and Development: A Report Submitted to the African Institute for Economic Development and Planning (IDEP), Dakar, Senegal, October 2001.

Ugwoke, F.O., Nnadi, F.N., Anaeto, C.F., Aja, O.O and Nwakwasi, R.N. (2012). Crop farmers' perception of and adaptation to climate change in Orlu Agricultural Zone of Imo state, Nigeria. *Journal of Agricultural Extension,* 16 (2): 217-217.

United Nations (2010). The World's Women 2010: Trends and Statistics. Department of Economic and Social Affairs. ST/ESA/STAT/SER.K/19. New York: United Nations: Pp.156-168.

World Bank (2003) Nigeria: Risk and Vulnerability Assessment Draft report, Abuja.

World Health Organization (2003). Advancing Safe Motherhood through Human Rights. World Health Organization, Geneva, Switzerland, WHO. The World Health Report: make every mother and child count. World Health Organization, Geneva, 2003.