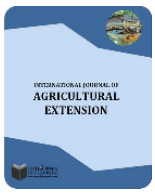

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SOCIO-ECONOMIC FACTORS AFFECTING THE UTILIZATION OF PRIMARY HEALTH CARE SERVICES AMONG CASSAVA FARMERS IN ABIA STATE, NIGERIA

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A B S T R A C T

This study examined the socio-economic factors affecting the utilization of primary health care services by cassava farmer in Abia state, Nigeria. It looked into the relationship between the socio economic status of cassava farmers and the utilization of primary health care rendered in the area. The study described the socio-economic characteristics of cassava farmers, ascertained cassava farmers' awareness level of the existence of primary health care service centres in the study area, determined the level of utilization of primary health care service centres in the study area, and determined the socio-economic factors affecting the utilization level of primary health care services in the study area. Multistage sampling technique was used to select the sample size of 180 cassava farmers for the study. Primary data were obtained using a pre-tested questionnaire administered face to face interview technique. Result revealed that the mean age of the respondents was 45.44 years, majority (67.2%) of the respondents were females while about 68.3% of the total respondents were married and average household size was 5.23. Majority (93.3%) of the respondents had good knowledge of primary health centres in their area, 72.2% utilized the PHC service centres moderately. The result of the relationship between socio economic characteristics and utilization of PHC centres showed that the value of F-ratio computed (98.094) was greater than the value tabulated at 1 % level of significance implying that the null hypothesis which states that "There is no significant relationship between the socio-economic characteristics of respondents and their utilization of primary health care services" is rejected. Thus the study concludes that there is a significant relationship between the socioeconomic characteristics of the respondents and their utilization of primary health care services in the study area.

Keywords: Primary health care, Socio-economic characteristics, Cassava farmers.

INTRODUCTION

Historically Rural farmers experience poorer health outcomes and exhibit higher health needs, health workforce shortages and mal-distribution (Productivity Commission, 2005) and higher out-of-pocket expenses are particular barriers, especially in more remote areas, poorer educational outcomes, lower incomes and generally lower socio-economic circumstances contribute to these poorer health outcomes (BITRE, 2008). Primary Health Care (PHC) is at the core of the Nigerian health system and key to providing basic health services to the people with their full participation. The principles of PHC allow individuals and groups particularly rural communities active participation in planning, implementing, monitoring and evaluating health interventions. Anyanwu, (1993) observed that the prevailing conditions in Nigeria have denied a significant proportion of Nigerians the level of health that can enable them live socially and economically productive live. Yearly budgetary allocations are given and health care services delivery has been decentralized to states and Local Governments in the Federation. At the Local Government level, Health Care Delivery System is still generally poor and struggling. Despite the recognition health has received and the substantial fund pumped to Health Care Delivery at the Local Government Areas, Health Care Delivery is yet to be satisfactory and adequate (Adeola, 2014), the health needs of many rural farmers are yet not adequately met. Residents of rural and remote communities continue to show

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poorer health outcomes than residents in metropolitan centres, while the health of indigenous communities remains unacceptable. Many rural and remote communities experience difficulties in recruiting and retaining an appropriate and adequately trained medical and health workforce, while residents face increasing difficulties in accessing appropriate care in situations where integration and continuity of care are woefully inadequate.

Health authorities and funding remains oriented to treatment and curative care services, while many of the upstream determinants of Indigenous, rural and remote health are poorly addressed (Abdulraheem *et al*., 2012). On this note, this research work was intended to provide answers to the following questions:

- What are the socio-economic characteristics of the respondents?
- Are respondents aware of primary health care centres in the study area?
- If they are aware, to what extent do they make use of the primary health care centres?
- What are the socio-economic factors affecting the utilization of PHC in the study area?

Objectives: The broad objective of this study was to analyze the socio-economic factors affecting the utilization of primary health care services by cassava farmer in Abia state. Specifically the study:

- described the socio-economic characteristics of the respondents,
- ascertained respondents' awareness level of the existence of primary health care service centres in the study area,
- determined the level of utilization of primary health care service centres in the study area and determined socio-economic factors affecting the utilization level of primary health care services in the study area.

Hypotheses: There is no significant relationship between the socio-economic characteristics of respondents and their utilization of health care services.

Relevant Scholarship: Productivity and health are intricately related. Good health contributes directly to high agricultural productivity while poor heath brings low productivity. The capacity and ability for productive agricultural and non-agricultural rural activities are endangered by poor health. A number of studies, notably, Adejare (2001), and Okoruwa &Agulana (2004) have shown that poor health affects individuals' hours of work. Okoruwa & Agulana (2004) reported the debilitating effect of sickness on farm labour and its reducing effect on farmers' efficiency level which cause low productivity. The importance of health as a determinant of labour supply has also been documented by Sagan (1987). In areas endemic to malaria, 30 to 40 percent of people are incapacitated by it at anytime during the year. This prevents people from working due to long period of fever. Marafa (2007) defined primary health care as the essential care based on practical scientifically sound and socially acceptable method and technology made universally accessible to individuals and families in the community through their full participation at a cost they and the country can afford to maintain in the spirit of self-reliance and self-determination. WHO (2010) observed that the existing gross inequality in the health states of the people particularly between developed and developing countries as well as within countries is politically, socially and economically unacceptable and is, therefore of common concern to all countries.

Health services delivery in Nigeria had evolved through a series of developments including a succession of policies and plans, which had been introduced by various administrations. The effectiveness of the country's health care delivery is central in meeting its health goals. The performance of Nigeria's health care system was seriously undermined over the last two decades. For example, between 1985 and 1993, per capita investment in health had stagnated at about 81.00 per person compared to the international recommended level of 834 per person (FMOH, 2004). More worrisome was the overall dismal performance of Nigeria's health care system, especially when compared with other less endowed African countries. For example, in 2005, Uganda allocated 11% of its total budget to health care while Nigeria, in 2006 budgeted just 5.6% and despite its high percentage of HIV citizens, Uganda was ranked the 149 out of 199 countries and came 39 steps ahead of Nigeria at 187/199 (World Health Report, 2006). As Shaw & Elmendor (1994) and Oyebola (1980) observed, rural farmers in Nigeria are vulnerable to various disease infections. Prenatal infections and parasitic diseases are common among their children while hormonal

deficiency, circulatory disease, injuries and cancers inflict some scars on adults. Whenever they fall ill, they can only have a worse fate. Healthcare facilities (maternity homes, health centres, clinics and hospitals) are sited far from farming settlements. Some of the rural healthcare facilities do not have access roads hence getting to them during emergency situations is difficult because of lack of motorable roads and unavailability of the means of transport. Where a means of transport is seen, it is always very expensive. Nigeria has a good number of primary, secondary and tertiary health care facilities in the populated or urban centres with adequate staff strength but most farming communities have never had a doctor while others have a ratio of one doctor to 80,000 people or more. Attempts to persuade doctors to serve in rural healthcare facilities have so far failed because of medical education that does not equip doctors with the skills to work in rural communities (Uchegbu, 2006).

One method of doing evaluation that is based on developing a clear understanding of the intervention process and the close collaboration with programme administrators, personnel and intended beneficiaries is the Theory-Based, Participatory Evaluation Model. This study will therefore, be based on the principle of this model. Theory in this usage does not always mean a grand theory in the traditional social science sense but, simply refers to a programme logic model of how programme is supposed to work. This model involves identifying the key service components, expected outcomes and working with programmes to make explicit the underlying assumptions about how these service components will lead to the desired outcomes (Green & McAllister, 2002). Furthermore, since programmes and projects are mostly developed in close collaboration with the stakeholders, there is therefore the need for the framework to rely extensively on collaborative process (Chen & Rossi, 2004). This process according to Chen and Rossi leads to the incorporation of the participatory evaluation approach into the theory-based approach to make it the theory-based, participatory evaluation model.

MATERIALS AND METHODS

Study Area: This study was conducted in Abia State evolving survey based research design. This is because cassava is the major food crop produced in the state. Others include yam, cocoyam, maize, telferia, okro and melon. Agriculture is the major occupation of the people. Abia state is in the South- East Agro-ecological zone of Nigeria. It has a population of 2,833,999. The state is located within the rainforest belt of Nigeria and the temperature ranges between 200 C and 300 C.

Sampling Procedure and Sampling Size: Multistage sampling was adopted for the selection of sample. The first stage was the selection of the Aba, Ohafia and Umuahia agricultural zones of Abia State. At the second stage, two local government areas were randomly selected from each of the zones-Aba zone; Osisioma and Ukwa west government areas: Ohafia zone; Ohafia and Bende local government areas: Umuahia zone; Ikwuano and Umuahia north government areas. Stage three was the purposive selection of three communities from each of the six local governments; those were the communities that have completed and functional health centres from four years and above. The fourth stage was the random selection of ten (10) cassava farmers from each of the communities which gave a sample size of 180.

Data Collection Procedure: Primary and secondary data were used to elicit information necessary for the study. The primary data were obtained with validated questionnaire, and interview schedule which were administered on the 180 respondents. Secondary data were obtained from literatures, examples include textbooks, journal, annual reviews, internet, electronic libraries and past students' thesis.

Statistical Tools and Data Analysis: Mean, frequency distribution and percentages were used to describe the socio-economic characteristics of the respondents using SPSS.

To ascertain respondents' awareness level of Primary Health Care centres in the study area, frequency count and mean were used. A five-point likert-type scale was used to get a mean. The five point likert-type scale was as follows: (1) Very much not aware, (2) Not aware, (3) Undecided, (4) Aware, (5) Strongly Aware. An index of awareness was created for each respondent. The respondents were classified as having high, moderate, or low awareness level based on this range of their overall mean score.

- 3.5-5.0 = High level of awareness.
- 3.0-3.49 = moderate level of awareness.
- Less than 3.0 = low level of awareness.

To determine the level of utilization of PHC centres in the study area, frequency count and mean were used. A

five-point likert-type scale was used to get a mean. The five point likert-type scale was as follows: (1) Very irregular, (2) irregular (3) Undecided, (4) regular, (5) very regular. An index of utilization was created for each respondent. The respondents were classified as having high, moderate, or low utilization level based on this range of their overall mean score:

- 3.5-5.0 = High level of utilization.
- 3.0-3.49 = moderate level of utilization.
- Less than 3.0 = low level of utilization.

The ordinary least square regression (OLS) analysis was use to determine the effect of primary health care delivery on the wellbeing of cassava farmers.

RESULTS AND DISCUSSION

The result of the analysis on the Socio-economic characteristics of respondents revealed that the age bracket of 42-51 years constitutes the largest age class of about 31.7% of the total respondents. The mean age of the respondents was 45.44.This implies that most of the respondents are middle aged farmers and this strongly suggests that the majority of the respondents were agile and in their productive age where their energies could be harnessed and utilized for productive ventures in agriculture. Majority of the respondents were females (67.2%) indicating that women dominated the farming sector in the studied area. About 68.3% of the total respondents were married. The household size indicated that the majority of the respondents have between 5-8 members in their household. With the mean household size of 5.23, this could be said to be a representation of a moderate household size. Majority (97.8%) of the total respondents had acquired one form of formal education or the other. This suggested therefore that there is a relatively high level of literacy among the respondents. Education is likely to increase people's accessibility to institutionally related services such as the primary health care centres. Ojukaiye (2001) noted that education is an important socio-economic factor that influences farmers' decision because of its influence on the farmer's awareness, perception, reception and the adoption of innovation that can bring about increase in production. The result also revealed that only 28.9% belonged to a cooperative society while about 71.1% do not belong to any cooperative. Non membership to a cooperative society may be a disincentive to access information on health related matters as well as to take up agricultural production opportunities that may be offered by being a member to a cooperative society.

Table 1. Distribution of respondents according to their socio economic characteristics.

Socio-economic attributes	Frequency	Percentages	Average
Age			
11 – 21	9	5.0	45.44 years
22 – 31	12	6.7	
32 – 41	45	25.0	
42 – 51	57	31.7	
52 – 62	38	21.1	
63 – 72	19	10.6	
Gender			
Female	121	67.2	
Male	59	32.8	
Marital status			
Married	123	68.3	
Single	22	12.2	
Widow	32	17.8	
Divorce	3	1.7	
Household size			
1 – 4	54	30.0	Average household size: 5.23
5 – 8	117	65.0	
9 – 12	9	5.0	

Educational status		
No formal education	4	2.2
Primary education	41	22.8
Secondary education	67	37.2
Tertiary	68	37.8
Membership of cooperative society		
No	128	71.1
Yes	52	28.9

Awareness Level of Primary Health Care Centres: The distribution of the respondents by awareness level of primary health care centres is presented in Table 2. The results showed that the rural farmers were aware of primary health care centre in their area with a mean score of 4. The overall mean score of 3.85 revealed that the respondents had better awareness level of the establishment of primary health care centres in the studied area as well as showed positive attitudes towards the relevance of the established PHC centre. Generally, the findings according to Table 3 revealed that 56.1% of the respondents have moderate awareness level of the establishment of PHC centres in the studied area, and 37.2% have high awareness level while only 6.7% of the respondents have low awareness level of the primary health care centres located in the studied area respectively. This implies that majority of the respondents had good knowledge of the primary health care centres situated in the studied area.

Table 2. Awareness level of the existence of primary health care centres.

Awareness of primary health care centre	Strongly Aware	Aware	Fairly Aware	Not Aware	Not Aware	Mean score
Are you aware of any primary health care centre in your locality?	71(39.4)	91(50.6)	16(8.9)	0	2(1.1)	4.27
Do you know the exert location of primary health care centre in your community?	62(34.4)	60(33.3)	50(27.8)	2(1.1)	6(3.3)	3.94
Do you know that it was established by the government to take care of your health challenges?	56(31.1)	77(42.8)	33(18.3)	12(6.7)	2(1.1)	3.96
Are you aware of some of the benefits you stand to gain by patronizing the primary health care centre in your locality?	32(17.8)	63(35.0)	61(33.9)	15(8.3)	9(5.0)	3.52
Do you know that medical experts at the primary health care centre can take care of your health matters?	40(22.2)	69(38.3)	49(27.2)	17(9.4)	5(2.8)	3.68
Do you know that visiting the primary health care centre in your community would help you to prevent illness more than to cure it?	49(27.2)	6536.1)	41(22.8)	17(9.4)	8(4.4)	3.72
Overall mean score						3.85

Figures in parenthesis are percentages.

Utilization Level of Primary Health Care Centres: Data depicted in Table 4 revealed that majority (72.2%) of the respondents had moderate level of utilization of primary health services (PHC) in their area while 18.9% of the respondents had high level of utilization of the primary health care centres located in their area. This implies that the primary health care facilities were well utilized by the respondents. This may be due to the easy accessibility to the health facilities, functionality of the health facilities as well as the quality of treatment and care. It is expected that continuous and consistent utilization of primary health care facilities will reduce poverty, improve health, wellbeing, and standard of living of the rural farmers.

Table 3. Distribution of respondents according to their level of awareness.

Level of awareness	Frequency	Percentage
High	67	37.2
Moderate	101	56.1
Low	12	6.7

Table 4. Distribution of respondents according to their utilization level of primary health care centres.

Utilization level	Frequency	Percentage
High	34	18.9
Moderate	130	72.2
Low	16	8.9
Total	180	100

Hypothesis: There is no significant relationship between the socio-economic characteristics of respondents and their utilization of primary health care services. The result of the ordinary least square regression (OLS) analysis used to estimate the significant relationship that existed between the socio-economic characteristics of the respondents and their utilization of PHC services is presented in Table 5.

Table 5. Regression result for relationship between the socio-economic characteristics of respondents and their utilization of primary health care services.

Variable	Linear	Exponential	Double-logL	Semi log
Age	-5841.076	0.019	1.417	-5011073
	(-2.032)**	(0.931)	(3.517)***	(-0.290)
Sex	0.207	-3.78E-06	0.257	21323.80
	(0.321)	(-0.846)	(1.198)	(0.538)
Occupation	1.916	7.89E-06	0.195	229738.4
	(0.321)	(0.320)	(1.862)*	(11.863)***
Education	0.647	1.76E-05(2.124)**	0.951	117379.9
	(0.541)		(4.502)***	(3.007)***
Marital status	-301.114	-0.011	-28.936	-2652376
	(-0.919)	(-4.680)***	(1.741)*	(3.007)***
Household size	-32170.86	-0.146	-2.166	190982.6
	(-2.806)***	(-1.844)*	(-3.936)***	(-1.878)*
Coop. Membership	-75615.07	-0.105	-0.580	-196748.6
	(-3.504)***	(-0.704)	(1.302)	(-1.228)
Frequency of illness	5262.610	0.033	0.958	36831.79
	(2.405)**	(2.184)**	(2.510)**	(0.522)
Income	0.896	9.59E-07	0.582	52543.94
	(2.770)***	(0.428)	(3.835)***	(1.874)*
Constant	-2023777.0	-64.813	-247.295	-24981609
	(-0.904)	(-4.183)***	(-1.680)*	(-0.918)
R-squared	0.923	0.935	0.952	0.908
Adj. R. Squared	0.912	0.926	0.946	0.894
F-statistics	82.593***	99.330***	98.094***	67.824***

NB: *** = Significant at 1%; ** = Significant at 5%; * = Significant at 10%. L = mean lead equation. Figures in parenthesis are t-ratios.

The result showed that age, , educational level, and income level of the respondents had positive and significant influence on utilization of PHC centres, while marital status, household size had negative influence on utilization of primary health care at varying risk level respectively. Specifically, a unit increase in the age of the respondents increased their utilization by 1.417 times. This implied that as the age of the respondents increase, the level of utilization of PHC centres increases. This in agreement with (Dias *et al.*, 2008) that age is expected to be positively related to utilization of health facilities. Similarly, the utilization of PHC centres by respondents was increased by (0.951) times for a unit increase in their educational level implying that the higher the educational level of respondents, the higher their utilization of PHC centres. The result follows the findings of Mekonnen &Mekonnen (2002) that utilization of modern health care facilities increases with educational attainment. Also unit increase in income level of respondents increased their utilization by (0.582) times. The implication is that increasing the income level of the respondents led to a corresponding increase in the utilization of PHC centres.

On the other hand, a unit increase in marital status of the respondents, decreased their utilization of PHC centres by (-28.936) times while a unit increase in household size lead to a negative and significant increase in utilization of PHC centres by (-2.166) times. This implies that an increase in household size leads to a decrease in the utilization of PHC centres and the rural dwellers will show a preference for self medication treatment. This is because larger households would spend more of the available household income on the food needs of the family. This makes the choice of primary health care a luxury for such households (Awoyemi *et al.*, 2011). Also, larger household size is a precursor to higher poverty level as it greatly depresses the per capita expenditure available to a household (Omonona, 2009). In contrast however, no significant relationship seemed to have existed between the utilization of PHC centres by the respondents and such socio economic factors as sex, and cooperative membership. From the research findings presented on Table 5, the value of F-ratio computed (98.094) was greater than the value tabulated at 1 % level of significance. The implication here is that the null hypothesis which states that "There is no significant relationship between the socio-economic characteristics of respondents and their utilization of primary health care services" is rejected. Thus the study concludes that there is a significant relationship between the socioeconomic characteristics of the respondents and their utilization of primary health care services.

CONCLUSION AND RECOMMENDATIONS

The study examined the socio-economic factors affecting the utilization of primary health care services by cassava farmer in Abia state, Nigeria. It looked into the relationship between the socio economic status of cassava farmers and the utilization of primary health care in the area and concluded that there is a significant relationship between the socioeconomic characteristics of the respondents and their utilization of primary health care services. It is therefore recommended that since there are evidences that the health centres have much potentiality for improving the health conditions of the rural farmers, all necessary supports (from government, community and donor agencies) should be given to such centres to function in full capacity. By so doing, better modern health services shall be rendered to farmers through the health centres. Health information programs should be organized as well as presented in such a way that it will motivate individuals particularly those in the rural areas to use such information for their personal benefit and the benefit of their families and community.

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