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Determinant of Demand for Health Care Services among Rural Household in Ekiti State, Nigeria

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Abstract
Rural health issues continue to be at the forefront of national and global health policies. Notwithstanding the national and global policy initiatives, rural health continues to be on the ascendancy in developing countries. This research work investigates the determinants of demand for health care services among rural household in Ekiti State of Nigeria. For appropriate policy targeting, it is imperative to investigate the factor that promote institutional health care delivery and those that retard it. Using descriptive and multinomial logit model to analyse collected data, it was discovered that majority of the respondents are males, married, in their middle age and preferred using Dispensary/Primary health care because of its proximity as source of health care services in the study area. The empirical analysis showed that, sex, marital status, household expenditure, and waiting time out of all the explanatory variables used were found to be significant factors affecting demand for health care services, among the rural households sourcing health care services from dispensary/Primary health care, private hospitals/clinics, patient medicine stores, general / teaching hospitals and traditional/spiritual homes. Patient medicine stores were used as the base category.
Keywords: Demand, Health Care, Service, Rural, Household, Nigeria.

INTRODUCTION

The issue of health care seeking (or Medical Care) behavior is to all society. All Nations rely on its human capital in the creation and pursuit of growth and/or development. The human capital is able to accomplish those desired objectives outlined by the society only on the fundamental premise that the people are in good health. Health is a basic fundamental right of all citizens and health promotion forms an intrinsic part of health care because a healthy society reflects the well being of a nation.

By Definition, Health is a state of complete physical, social and mental well being and not merely an absence of a disease or infirmity (WHO 2000). Embedded in good health is not least disease, as this is more in keeping with poor health. In recent years, the definition of health has been modified to include the ability to lead a socially and economically productive life. The goal of the national Health policy is to bring about a comprehensive health care system, based on primary health as clearly stated by the Federal Ministry of health is protective, preventive, restorative and rehabilitative to every citizen of the country within the available resources so that individuals and communities are assured of productivity, social well-being and enjoyment of living. In most rural areas in Africa, one in three women lives more than five kilometers from the nearest health facility (World Bank, 1994b). The scarcity of vehicle, especially in remote areas and poor road condition can make it extremely difficult for women to reach even relatively nearby facilities. Walking is the basic mode of transportation even for women in labour (Williams et al, 1985; World Bank, 1994b).

The role of income in health is buttressed by the fact that poverty is generally associated with poor health (Abel-Smith and Leiserson, 1978). Health status is a direct product of economic power, Propper, (2000). Andy and Cassels (2004) emphasize that ill health can cause poverty via loss of income, catastrophic health expenditures and orphan hood. A number of socio-demographic characteristics of the individual affect the underlying tendency to seek health care (Addai, 2000; Celik and Hotchkiss, 2000; Adekunle et al, 1990; Gertler et al, 1988). Poor health conditions can have a debilitating impact on the economy in terms of lower investment flows and reduced tourist traffic. Over two billion people do not have adequate health care to meet their basic

needs (Poppov Reasearch Network 2009).

Objective of the study

The main objective of the study is to analyse the determinants of household demand and delivery for health care services in rural area of Ekiti State.

the specific objectives of this study are to:

1. Identify the socio-economic characteristics of rural households in the study area.
2. To examine the different sources available to the rural households in the study area.
3. Determine factors influencing health care demand in the study area.

METHODOLOGY

The Study Area

The study was carried out in Ekiti State, South Western part of Nigeria. The State has sixteen Local Government Areas. It is located between longitude $4^{o}45'$ to $5^{o}46'$ East of the Greenwich Meridian and between latitude $7^{o}15'$ to $8^{o}5'$ North of equator. The climate, topography, vegetation and soil type supports cultivation of several crops of economic importance. The State enjoys tropical climate with two distinct seasons. These are the rainy season (April – October) and dry season (November - March). Agriculture is the predominant occupation of the people and it is the major source of income for many in the State.

Nature and Sources of Data

Data for this study were predominantly obtained from primary source. Data were collected with the aid of structural questionnaires, administered to respondents. Data were collected on general living standard which includes socio-economic and demographic characteristics. Health care providers and expenditure on health care by household members.

Sampling Procedure

The study employed multistage random sampling technique for the selection of the respondents. The first stage being the random selection of two Local Government Area (LGA) from each of the senatorial districts of the state, vis –a-vis Ekiti South Senatorial district, (Ikere and Emure LGAs), Ekiti central Senatorial district, (Ado and Ijero LGAs), Ekiti North senatorial district (Moba and Ido/Osi LGAs). The second stage was the random selection of farming households, making ≥ 20 respondents per local Government Area. A total of one hundred and twenty two (122) respondents (households) were randomly selected for the study.

Data Analysis

The study employed the use of descriptive statistics. Multinomial Logit model was also used to capture the determinants of demand for health care services among rural households.

RESULTS AND DISCUSSION

Table 1, shows that majority (76.2%) of the respondents are male while 23.8% are female. The result implies that men, being the heads of the rural households in most cases tend to have higher demand for health care services than women who are mostly submissive to the will of their husbands regarding health seeking. Majority of the respondents are within the age range of 45-54 (49.2%) followed by 55-64 (23.8%). No respondent is less than 25years. The implication of this is that majority of the respondents are strong and productive, thus, they are conscious of the importance of good health to productivity. An increase in age reduces demand for health in rural area. Respondents representing 80.3% are married. Others pulled together, represent 19.7% of the respondents. This implies that married respondents have a higher probability of demanding for health care services than unmarried respondents (divorced, widowed and separated), in rural areas. 87.7% 0f the respondents have one form of formal education or the other. While only 12.3% of the respondents have no former education. Thus making it easy for them to appreciate the need to seek for health care services in their immediate environment and willing to pay for such services as the case may be. 42.6% of the respondents seek health care services from dispensary / primary health care in the study area followed by medicine stores /private clinics with 30.3%, while 27.1% of the respondents seek health care services from other sources. The implication of this is that, majority of the rural people make use of Dispensary / Primary health care as their major source of health care because of their proximity to the rural households. Equally, they are easily accessed and their charges are moderate because of various subsidies they enjoy from the side of government.

Table 2, clearly shows that sex, marital status, household expenditure and waiting time are important factors affecting demanding for health care services, for different health care sources.

As regard sourcing health from dispensary / primary health care (PHC), Sex and waiting time positively affect the demand for health care services while marital status and household expenditure affect negatively the demand for health care services. This indicates that both sex and waiting time increase demand for health care services while marital status and household expenditure reduce it when health care services are sourced from dispensary / PHC in the study area. The coefficient of sex has a positive relationship with respect to demand for health care services and the odds ratio is equally positive for sex. The result shows that being a

male increase the likelihood of demanding for health care services from dispensary/PHC by 598% (P< 0.10). This result agrees with (Thomas et al 1997 and Maitra, 2004). Waiting time has positive coefficient and a unit increase in the waiting time index will lead to increase in demand for health care services by 849%(P< 0.10). This lends credence to the work of (Dzator and Asafu – Adjaye, 2004). This is so, because waiting time is a measure of health care quality. Also, it was found that the demand for health care services using private hospital / clinics is affected positively by marital status; the implication of this is that marital status increases the demand for health care services in the study area.

Furthermore, it was revealed in the study that, none of the explanatory variables was found to significantly affect demand for health care services either positively or negatively when health care services are sourced from general / teaching hospitals. This implies that there is non–existence of teaching hospital and negligible few numbers of general hospitals that exist in the study area.

Lastly, the demand for health care services using traditional / spiritual homes is affected positively by sex, waiting time and installment while, only household expenditure is found to be affecting it negatively. The implication of this is that, house hold expenditure reduces the demand for health care services in the study area.

CONCLUSION AND RECOMMENDATION

The findings revealed that, most of the respondents in the study area are male, married, in their middle/ active age, have one form of formal education or the other and seek for health care services from dispensary/primary healthcare as a major source of health care seeking. Also results shows that sex, marital status, household expenditure, household distance, waiting time and installment are the important factors affecting demand for health care services either positively or negatively at varying degree for each of the health care sources except general/teaching hospitals.

Based on the findings of this study, it is recommended that, government should improve health care delivery access in rural area. Better access will involve the establishment of new public health care institutions near people's dwelling place, it will also involve improved public transport services and at affordable prices for the poor. These should be feasible especially in an era of huge debt relief and high earnings from oil. The negligible few that do seek health care traditionally should be educated, advised and encouraged to embrace the modern way of health seeking in the society simply because of the advantages it possess. Government establish special low cost health care targeting programme in public health facilities. That is establishing lower charges for those that are poor and vulnerable groups, especially in public clinic in rural areas and in urban slums. This has become imperatives of attaining equity in health care delivery as stated in national policy on health. Improving the quality of health care institutions is the height of the finding, the quantity of health care institutions, especially the public ones, should be improved through rewards using the indicator of the "experience of the patients" such as longer service time or length of consultations with patient as this will go a long way in improving health outcomes.

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Table 1. Socio-Economic Characteristics of Respondents

Variables	Frequency	Percentage
Sex of respondents		
Male	93	76.2
Female	29	23.8
Age (years)		
25-34	5	4.1
35-44	16	13.1
45-54	60	49.2
55-64	29	23.8
Above 60	12	9.8
Marital status		
Married	98	80.3
Divorced	4	3.3
Separated	12	9.8
Widow	18	6.6
Educational level		
No formal Education	15	12.3
Primary Education	39	37.9
Secondary Education	35	28.7
Tertiary Education	33	21.1
According to the use of Health care source		
Dispensary/	52	42.6
State Hospital/Clinic	10	8.2
Medicine stores/Private	37	30.3
General Hospitals/Teaching Hospitals	4	3.3
Traditional/Spiritual homes	19	5.5

Source: Field Survey (2010).

Table: 2 Estimation of Determinants of Demand for Health Care Services among Rural Households Using Multinomial Logit Model

Explanatory variables	Dispensary/ PHC		Private Hospital/ clinics		General /Teaching Hospital		Traditional/ Spiritual homes	
	coefficient	Odds Ratios	Coefficient	Odds ratio	coefficient	Odds ratio	Coefficient	Odds ratio
Sex x1	1.788246(2.15)**	5.978955	1.700016(0.90)	5.474037	2.638319(1.13)	13.98967	2.097702(1.93)	8.147424
Age x2	-2840927(-1.26)	.7526969	4159216(-1.23)	.659732	12.93401(1.32)	414161.8	-0990953(-0.35)	.9056564
Age Squared x3	.0024725(1.19)	1.002476	.0029771(0.94)	1.002981	-.1236258(-1.31)	.8837104	.0007342(0.28)	1.000734
Marital Status x4	-1.885916(-2.21)**	.15169	18.88309(2.44)**	1.59et08	-1391585(0.73)	.2486807	-1.080232(-0.94)	.3395167
Educational level x5	-.0489353(-078)	.9522427	.1316942(1.02)	1.140759	-.1337257(-0.80)	.87483	-.0900702(-1.15)	.913867
Primary occupation x6	-.171187(-0.78)	.8427315	-7133326(-1.61)	4900085	-3635856(-0.48)	.6951792	-1437714(-0.52)	.8660857
Household Size x7	.1462157(0.79)	1.157446	.2314269(0.71)	1.260397	-1.294135(-1.28)	.2741348	-0505469(-0.22)	.9507093
Household expenditure x8	-000255(-1.86)**	.999745	-000352(-0.75)	.999648	-0002117(-051)	.9997883	-0005731(-2.08)**	.999427
Household distance x9	.069991(0.45)	1.072498	-1.832754(-2.11)	.1599724	.3113567(0.84)	1.365276	-0323449(-0.09)	.9681726
Waiting time x10	2.138767(2.54)**	8.488962	5.921712(2.53)	373.0497	-1.405184(-0.27)	.2453216	2.429731(2.26)	11.35582
Installment x11	4883698(0.76)	1.629657	.6768177(0.39)	1.967606	3.381745(1.47)	29.42205	1.447266(1.67)	4.251474
Constant	8.261877(1.40)		-9.663252		-330.5982(-1.33)		3.702764(0.50)	
Observations	122		122		122		122	
Pseudo R2	0.2789							
Log likelihood	-117.183221							

Absolute value of Z statistics in parentheses, ** significant at 5%. Omitted category in the dependent variables is the patient medicine stores.

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