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**ORIGINAL ARTICLE** 

# Health Care Financing and Financial Hardship among Rural and Urban Households in Ekiti State, Nigeria

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Keywords	ABSTRACT
Healthcare financing;	<b>Background:</b> Individuals and families suffer financial hardship in seeking health care. The study aimed to assess health care financing and experience of financial hardship in seeking health care among urban and rural households in Ekiti State, Nigeria.
Financial hardship;	<b>Methods:</b> This was a comparative, cross-sectional study. A multi-stage sampling technique was used to select 420 households each in the rural and urban areas. Data was collected using pre-tested, structured interviewer-administered questionnaire, and
Out-of-pocket	analysed using SPSS v20. Level of statistically significance was set at p-value of <0.05.
spending;	<b>Results:</b> One hundred and seventy-nine respondents (42.6%) in the rural area, and 156
Health	(37.1%) in the urban area had experienced difficulty in paying for health bills (p=0.105). Respondents who have had to borrow recently for seeking healthcare were 129 (30.7%)
insurance;	in the rural area, and 131 (31.2%) in the urban area (p=0.881), while 47 (11.2%) in the rural area, and 43 (10.2%) in the urban area have had to sell household assets (p=0.655).
Ekiti State	Out-of-Pocket was the main method of healthcare financing for the majority, $410 (97.6\%)$ in the rural areas, and $400 (95.2\%)$ in the urban areas. Only 10 (2.4%) of the rural respondents and 20 (4.8%) of the urban respondents were on health insurance.
	<b>Conclusion:</b> A high proportion of the study population experienced financial hardship and there is high dependence on out-of-pocket financing. This calls for increased community mobilization and acceleration of the progression of health insurance towards universal coverage in Ekiti State

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## **INTRODUCTION**

Health Care Financing (HCF), an essential component of Universal Health Coverage (UHC), refers to the collection of funds, pooling of funds and distribution of financial risk across larger groups of people, as well as the allocation of funds

for health care services.<sup>1-3</sup> Its main objective is to ensure that all individuals have access to quality health services.<sup>1</sup> UHC implies that all people receive the health services they need, which should be of appropriate quality, without exposing them to financial hardship.<sup>4</sup> Affordability of health care is a critical issue globally, yet progress towards universal health coverage has been very poor, especially in the developing countries. Studies in sub-Saharan Africa have shown that households undergo considerable stress in health-care payment, which makes healthcare inaccessible to them.<sup>5,6</sup> One of the problems developing countries including Nigeria face in their health care system is who bears the cost of healthcare. Health care funding relies on a mixture of government revenue, external funding, health insurance (social and private), and out-of-pocket (OOP) spending.<sup>7</sup> Despite the high dependence on government for funding of health care services, government financing in Nigeria, like in other developing countries has not appreciably increased in the last few years, leading to inequitable healthcare utilization.4,8 Though Government allocation to health as a proportion of total government budget increased meagerly from 3.3% in 2016 to 4.2% in 2017,<sup>9</sup> it still remained way below the minimum of 15% agreed to by African Heads of States and Government in the Abuja declaration of 2001.<sup>10,11</sup>

On the other hand, private health expenditure is estimated to constitute 66.8% of Nigeria's total healthcare expenditure; and 95.5% of this is covered through OOP payments. This percentage is unacceptably high considering its burden.<sup>12</sup> Individuals and families thus mostly bear the brunt of healthcare cost, often times with dire consequences<sup>11-14</sup> including inaccessibility of healthcare, financial hardship in utilizing healthcare spending. Kruk *et al.* defined financial hardship as when households are exposed to a less stable or worsened financial state brought about by additional costs or losses due to borrowing or selling assets.<sup>15</sup> The poor and other vulnerable groups in most developing countries have a high reliance on OOP spending on health which is not only impoverishing but also provides a major financial barrier to seeking healthcare.<sup>16-18</sup> Many households have difficulty in finding money to pay for medical expenses when they encounter illness in the family, and the majority get money by reducing spending on other household expenses like feeding, education or by selling capital asset. The resultant poor access to health services further worsens the health status of the citizens, and widens the health inequity gap within the country.<sup>19</sup>

There is a need to study the pattern of health care spending in Nigeria so as to identify challenges with meeting healthcare needs and experience of financial hardships. Findings from this research will provide vital information on health care financing and experience of financial hardship at household level in both rural and urban areas in Ekiti State. Thus, proving information for formulating health financing policies, and guiding stakeholders in planning sustainable health financing in Ekiti State. The aim of this study was to assess health care financing and experience of financial hardship in seeking health care among urban and rural households in Ekiti State, Nigeria.

#### METHODOLOGY

The study was carried out in Ekiti State, Southwestern Nigeria between March and June, 2016. The state has 16 Local Government Areas (LGAs), which are administratively divided into wards. The LGAs are classified as predominantly urban (4 LGAs), predominantly rural (4 LGAs), or semiurban (8 LGAs).<sup>20,21</sup> The total population as at 2016, projected from the 2006 population census at an annual growth rate of 2.9% was 3,540,321.<sup>21</sup> Majority of the inhabitants are farmers and traders, especially in the rural areas. Other common occupations include the civil service which is concentrated in the urban areas. The state has three tertiary health facilities, while every LGA has at least a general or specialist hospital. Each ward also has at least one comprehensive or a basic health centre, and also many registered private health facilities. All these facilities render promotive, preventive, curative and rehabilitative health services to the citizens. Payment for health services in the state is essential through OOP payments.

The study was a comparative, cross-sectional study among household within rural and urban communities of Ekiti State. All household heads, who were more than 18 years of age, who gave written consent to participate in the study, and who had been resident within the state for a minimum of 12 months were included in the study. The minimum sample size, 344, was determined for each group (rural and urban) by using the formula for calculating sample size for comparison of two proportions.<sup>22</sup> To compensate for non-response, assuming a 15% non-response, the sample size was increased to 420 for each community. Respondents were selected using a multi-stage sampling technique, as follows: In stage one, the LGAs were stratified into rural and urban. There are four rural and four urban LGAs, and two LGAs selected from each by simple random sampling (by balloting method). In the second stage, two communities were selected using simple random sampling (by balloting method) from each LGA. In

stage three, five enumeration areas (EAs) were selected from each rural and urban communities using simple random sampling by ballot method. Proportional allocation of the sample size was done on each selected EAs based on the population of those communities. In the stage four, the list of all the households in each selected enumeration area were generated to produce a sampling frame, and the number of households needed in each EA were selected from the list by systematic random sampling for questionnaire administration, based on a predetermined sample interval. The head of each household was subsequently interviewed. Where the household head was not met at home, another adult person within the household was interviewed. If no adult was around, the interviewer moved on to the next household.

Data was collected using pre-tested, structured interviewer-administered questionnaire which was developed after review of relevant literature. Six research assistants with a minimum basic Ordinary-level qualification were recruited and trained for the study, supervised on the field by the researcher and two field supervisors. Pre-test of the questionnaire was done on 40 respondents each in a rural community and an urban community, which were thereafter excluded from the study. Appropriate corrections were made to the questionnaire after pre-testing. The questionnaire was reviewed by the Consultants in the Department of Community Medicine, Federal Teaching Hospital, (FETHI) Ido-Ekiti, to ensure face and content validity.

Data collation and editing was done manually to detect omissions and to ensure uniform coding. For determining socio-economic status (SES) of households, household wealth scores based on ownership of household durable assets (adapted from the Nigeria Demographic and Health Survey, NDHS 2013)<sup>23</sup> was generated using principal components analysis (PCA), which is a statistical analysis that assigns weights for each variable, with the index being the first principal component.<sup>24</sup> The 'wealth scores' generated for each household were then used to rank the households according to their SES score; and households divided for analysis into five quintiles based on their wealth scores, Q1 being the poorest and Q5 being the richest.

Data analysis was done using the Statistical Package for the Social Sciences (SPSS) version 20 software package. The results were presented in the form of tables and figures using frequencies, percentages and summary statistics such as mean, and standard deviation. A p-value of <0.05 was taken as statistically significant. Ethical approval (ERC/2015/03/12/15A) for the study was obtained from the Health Research Ethics Committee of the Federal Teaching Hospital, Ido Ekiti. Written informed consents were obtained from all respondents after giving them an explanation on the nature, purpose and benefits of the study, as well as assurance of confidentiality. Confidentiality of information provided was ensured by using anonymous questionnaire and by keeping the data in a secured place thereafter. Also data collected were used only for the research purpose only.

#### RESULTS

Table 1 shows the socio-demographic characteristics of the respondents by place of residence. Mean age of respondents was significantly higher in the rural households,  $47.1 \pm 16.2$  years, compared to the urban households,  $41.4 \pm 12.9$  years (p<0.001). The proportion of males was higher in both groups and most of the respondents were married. Many of the households in both areas had averagely 5-6 members, 161 (38.3%) in the rural and 162 (38.6%) in the urban households.

As shown in table 2, there were significantly more people in informal employment in the rural area 299 (71.2%) than in the urban area 236 (56.2%), p<0.001. Most of the respondents were educated, with a significantly higher proportion of urban respondent 225 (53.6%) having post-secondary education compared to their rural counterparts 125 (29.8%), p<0.001. There was a significantly higher proportion of respondents earning income above N60,000 in the urban, 59 (15.5%) than in the rural group, 23 (6.4%), p<0.001. In the urban group, 53 (12.6%) of the respondents were in the highest wealth quintile compared to 80(19.0%) in the rural area. Also, there were significantly more respondents in the poorest wealth quintile in the rural group 122 (29.0%) than in the urban group 71 (16.9%), p<0.001. Table 3 shows the health status and health-seeking behaviour of households by place of residence. Most of the respondents, 390 (92.9%) in the rural area and 399 (95.0%) in the urban area reported having a household member with acute illness in the household within the last 12 months.

Characteristics	Rural (n=420)	Urban (n=420)	Test	
	n (%)	n(%)	Statistics	p-value
Age group (years)	(, , ,	(, , ,		<b>F</b>
<30	44 (10.4)	76 (18.1)	$\chi 2 = 38.281$	<0.001
30 - 39	123 (29.3)	128 (30.5)	70	
40 - 49	87 (20.7)	112 (26.7)		
50 - 59	62 (14.8)	59 (14.0)		
60 - 69	47 (11.2)	28 (6.7)		
$\geq 70$	57 (13.6)	17 (4.0)		
Mean age (years) $\pm$ sd.	$47.11 \pm 16.22$	$41.40 \pm 12.90$	t = 5.641	<0.001
Sex				
Male	291 (69.3)	280 (66.7)	$\chi 2 = 0.662$	0.418
Female	129 (30.7)	140 (33.3)		
Position of Respondent				
Head	315 (75.0)	290 (69.0)	$\chi 2 = 8.618$	0.013
Spouse	98 (23.3)	109 (26.0)		
Others	7 (1.7)	21 (5.0)		
Marital status				
Never Married	25 (6.0)	46 (11.0)	χ2 =6.79	0.009
Married	395 (94.0)	374 (89.0)		
Marriage type*	n= 395	n= 374		
Monogamous				
Polygamous	308 (78.0)	330 (88.2)	$\chi 2 = 14.31$	<0.001
	87 (22.0)	44 (11.8)		
Tribe		204 (04 4)	<b>a a i i a</b>	0.001
Yoruba	350 (83.3)	384 (91.4)	$\chi^2 = 21.19$	<0.001
Hausa	11 (2.6)	1 (0.2)		
Igbo	24 (5.7)	23 (5.5)		
Others	35 (8.3)	12 (2.9)		
Average household size	22 (7.0)	27 (0.0)	0 1 0 4 2	0.742
1 - 2	33 (7.9)	37 (8.8)	$\chi 2 = 1.243;$	0.743
5-4	155 (50.4)	159 (57.9)		
3-6	101(38.3)	102(38.0)		
>0 Maan kad	73(17.4)	02(14.8)	t = 1.245	0.170
Mean ± su. Number of children	$4.95 \pm 1.90$	$4.73 \pm 1.89$	l = 1.545	0.179
Sugars of ago				
Covers of age				
1	204 (48.6)	206 (49 0)	$\sqrt{2}$ - 1 3/1	0.719
1	1/3 (34.0)	200(49.0) 136(324)	$\chi^{2-1.3+1}$	0.719
$\sim^2$	(1+3)(3+.0) 65 (15 5)	73(174)		
~2	8 (1 9)	5(12)		
Mean + sd	$1 38 \pm 0.55$	3(1.2) 1 39 + 0 55	t – ₋0 328	0.743
Number of elderly $>65$ in	1.50 ± 0.55	1.57 ± 0.55	ι = 0.320	0.745
the household				
0				
1	303 (72.1)	315 (75.0)	$\gamma 2 = 9 292 \cdot$	0.010
2+	84 (20.0)	92 (21.9)	<u>, , , , , , , , , , , , , , , , , , , </u>	
	33 (7.9)	13(3.1)		
Mean ± sd	$1.33 \pm 0.57$	$1.13 \pm 0.37$	t = 3.056;	0.003

Table 1: Socio-demographic and household characteristics of respondents by place of residence

 $\chi^2 = chi-square; t = t-test; sd. = standard deviation; * = only married respondents$ 

Characteristics	Rural (n=420) n (%)	Urban (n=420) n (%)	Test Statistics	p-value
Occupation		. ,		•
Unemployed	18 (4.3)	30 (7.1)	$\chi 2 = 20.539$	<0.001
Informal employment	299 (71.2)	236 (56.2)		
Formal employment	103 (24.5)	154 (36.7)		
1 2		· · ·		
Educational status				
No formal education	53 (12.6)	42 (10.0)	$\chi 2 = 49.976$	<0.001
Primary	93 (22.1)	61 (14.5)		
Secondary	149 (35.5)	92 (21.9)		
Post-secondary	125 (29.8)	225 (53.6)		
Monthly Income (Naira)	(1,1,2)	40 (0 5)		
No income	60 (14.3)	40 (9.5)		0.004
< 10,000	86 (23.9)	82 (21.6)	$\chi^2 = 24.760$	0.001
10,000 - 19,999	115 (31.9)	102 (26.8)		
20,000 - 29,999	50 (13.9)	46 (12.1)		
30,000 - 39,999	45 (12.5)	35 (9.2)		
40,000 - 49,999	23 (6.4)	28 (7.4)		
50,000 - 59,999	18 (5.0)	28 (7.4)		
$\geq$ 60,000	23 (6.4)	59 (15.5)		
Average monthly income (Median ± Range)	15,000 ± (119,000)	20,000 ± (248,000)	U = 59077.0	0.001
Wealth index				
Poorest	122 (29.0)	71 (16.9)	$\gamma 2 = 35.607$	<0.001
Second	62 (14.5)	102 (24.3)	70	
Middle	103 (24.5)	144 (34.3)		
Fourth	53 (12.6)	50 (11.9)		
Richest	80 (19.0)	53 (12.6)		
Sources of sustenance for households without monthly income*				
without monthly medine	n=60	n=40		
Parents	11(183)	16(400)	$\gamma 2 = 13.48$	0.004
Spouse	5 (8 3)	8 (20 0)	χ2 = 15.10	0.004
Family	37 (61 7)	16(40.0)		
Others	7 (11.7)	0 (0.0)		
	, (11))	0 (0.0)		
Do you have a sense of job security**				
	n=360	n=380		
Yes	303 (84.2)	321 (84.5)	$\chi 2 = 0.013$	0.909
No	57 (15.8)	59 (15.5)		

U= Mann Whitney; \*= Respondents with no monthly income; \*\*= Respondents with monthly income only

The commonest reason cited for households not seeking medical attention in the health centre was that the illness was not perceived as serious in the rural 166 (69.2%) and in the urban areas 181 (73.6%). Households that reported financial barrier to access the medical help as the main reason for

not seeking healthcare in the hospital/clinic were not significantly different in both areas, 60 (25%) in the rural households and 60 (24.4%) of the urban households (p=0.153). Many of the households sought health care in publicly owned facilities in both the rural 245 (58.3%) and urban areas 201

Table 3: Health status an	d health-seeking	behaviour of	households by	place of residence
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	<b>.</b>	<b>T</b> T <b>1</b>		
Characteristics	Rural	Urban	Test	
	<u>n (%)</u>	n (%)	Statistics	p-value
Presence of acute illness (last 12 months)	n = 420	n = 420		
Yes				
No	390 (92.9)	399 (95.0)	χ2=1.69	0.193
	30 (7.1)	21 (5.0)		
Presence of chronic illness				
Yes	104 (24.8)	84 (20.0)	$\chi 2 = 2.741$	0.098
No	316 (75.2)	336 (80.0)	,,,	
Commonest chronic illness experienced*	n – 104	n – 84		
Hypertension	n = 104 28 (26.9)	1 = 04 15 (17.9)	$\gamma 2 = 10.43$	0 108
Diabatas	20(20.9)	10(17.9) 10(11.0)	χ2-10.45	0.108
Diabetes Pontie Illeer	22(21.2) 10(183)	10(11.9) 16(100)		
Arthritic	19(10.3) 16(15.4)	10(19.0) 12(14.2)		
Arumus Eve disease	10(13.4) 12(11.5)	12(14.3) 10(22.6)		
Asthma	12(11.3)	19(22.0)		
	0(3.8)	9(10.7)		
Sickle cell	1 (1.0)	3 (3.0)		
Main Source of seeking health care	n = 420	n = 420		
Public health centre	245 (58.3)	201 (47.9)	χ2=20.984	<0.001
Private clinic	69 (16.4)	119 (28.3)		
Self-medication	99 (23.6)	87 (20.7)		
Church/Mosque	4 (1.0)	10 (2.4)		
Traditional healer	3 (0.7)	3 (0.7)		
Any time healthcare was not sought in				
Nos				
Tes No.	240(57.1)	217 (58 8)	~2-0.230	0.625
NO	240(37.1) 180(42.0)	247 (30.0) 172 (41.2)	χ2-0.239	0.025
	180 (42.9)	175 (41.2)		
Main reason for not seeking health care in				
a hospital/clinic when sick	$\mathbf{n} = 240$	n = 247		
Illness perceived not serious	166 (69.2)	181 (73.6)	χ2=3.749	0.153
Lack of money	60 (25.0)	60 (24.4)		
Distance	14 (5.8)	6 (2.4)		

\*Households with presence of chronic illness

(47.9%). Majority of the respondents who had spent on healthcare in the last one year had spent less than \$5,000 on the most recent illness episode, in both groups, 311 (78.9%) in the rural, and 312 (76.8%) in the urban areas. Significantly higher proportion of respondents in the urban 28 (6.9%) than in the rural group 12 (3.0%) had a most recent health expenditure of  $\ge$  \$20,000 (p=0.032) (Table 4). Also, OOP expenditures dominated the majority of healthcare financing among the respondents, 410 (97.6%) in the rural areas, and 400 (95.2%) in the urban areas. Only 10 (2.4%) of the rural respondents and 20 (4.8%) of the urban respondents were presently on health insurance as shown in Table 4. One-fifth of the respondents in both groups, 84 (20%) preferred Health Insurance for their healthcare financing. One hundred and seventy-nine respondents (42.6%) in the rural area, and 156 (37.1%) in the urban area had experienced difficulty in paying for health bills (p=0.105). There were no significant difference in proportion of respondents who have had to borrow recently to

Table 4. Household health capenaltate and annealty in nousehold healtheat containing by place of restach
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Characteristics	Rural	Urban	Test	
	<u>n (%)</u>	<u>n (%)</u>	Statistics	p-value
Nost recent health expenditure $(\mathbf{R})^*$	n=394	n=400	$w^{2} = 10.559$	0.022
< 3000	511(78.9)	312(70.6)	χ2= 10.558	0.052
3,000 - 9,999	48(12.2)	57 (9.1)		
10,000 - 14,999 15,000 - 10,000	10(4.0)	17(4.2) 12(2.0)		
>20,000 - 19,999	3(1.3) 12(30)	12(5.0) 28(6.0)		
≥20,000	12 (3.0)	28 (0.9)		
$Median \pm (Min - Max)$	$1500 \pm (50 -$	$1200 \pm (20 -$	U = 71515	0.696
	100,000)	80,000		
	n = 420	n = 420		
Main means of paying medical bills				
Out of pocket	410 (97.6)	400 (95.2)	χ2= 3.457	0.063
NHIS	10 (2.4)	20 (4.8)		
Most preferred means of paying				
medical bills				
Out of pocket				
Health Insurance	226 (53.8)	218 (51.9)	$\chi 2 = 0.425$	0.809
Free Health scheme	84 (20.0)	84 (20.0)		
	110 (26.2)	118 (28.1)		
Ever experienced difficulty in paying				
for medical bill			$\gamma 2 = 2.627$	0.105
Yes	179 (42.6)	156 (37.1)	χ2 2:027	0.105
No	241 (57.4)	264 (62.9)		
	2.11 (07.11)	201 (0213)		
Recently borrowed to pay health bill				
Yes	129 (30.7)	131 (31.2)	$\chi 2 = 0.022$	0.881
No	291 (69.3)	289 (68.8)		
	n = 129	n =131		
Main Source of borrowing to pav				
health bills***			$\chi 2 = 4.147$	0.528
Relatives	51 (39.5)	49 (37.4)		
Friends	45 (34.9)	56 (42.7)		
Cooperative Society	19 (14.7)	16 (12.2)		
Neighbours	8 (6.2)	8 (6.1)		
Private lenders	5 (3.9)	1 (0.8)		
Bank	1 (0.8)	1 (0.8)		
Ever sold capital assets to pay hospital				
bills?	n =420	n = 420		
Yes	- I.		$\gamma 2 = 0.199$	0.655
No	47 (11.2)	43 (10.2)	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	
	373 (88.8)	377 (89.8)		

*U*= *Mann Whitney U; Min=minimum value; Max=maximum* 

\*= Only households who had spent on health care in the last 12 months

\*\*= Only respondents who had spent on personal health care in the last 12 months

\*\*\*= Respondent who recently borrowed to finance health bill

pay for their healthcare bills, 129 (30.7%) in the rural area, and 131 (31.2%) in the urban area (p=0.881). More respondents in the rural group 51 (39.5%) borrowed from relatives, while more

respondents in the urban group 56 (42.7%) borrowed from friends than from any other source (p= 0.528). Households who have sold capital assets to pay hospital bills were 47 (11.2%) in the

rural area, and 43 (10.2%) in the urban area (p=0.655).

### DISCUSSION

Affordability of health care is a critical issue in most countries. LMICs rely mostly on general revenues and OOP payments as sources of health care financing, <sup>25</sup> with inadequate health care budget being a severe problem. Our study found that two-fifth of rural households and one-third of urban households had previously experienced difficulty in paying for medical bills at the point of assessing healthcare service. An almost equal proportion of respondents from both communities have had to borrow recently to pay for their healthcare bills, either from relatives in the rural group or from friends in the urban group. Though this may reflect the power of social capital, it is actually also indicative of financial hardship in healthcare.

Financial hardship in seeking healthcare was also shown by the proportion of households in this study who have had to sell capital assets to pay hospital bills. These findings were similar to a study among semi-urban households in Northcentral Nigerian which showed that 26.1% of respondents experienced hardship in settling their medical bills; about half of these had to secure loans, while one-third had to sell their assets,<sup>26</sup> and another study in rural India, in which about 25% of the households (with any healthcare cost) had hardship financing during the year preceding the survey.<sup>27</sup> To reduce the tendency towards catastrophic health spending and impoverishment therefore, policies need to be formulated to ensure provision of protection for the households in the communities.

Many of the respondents in both the rural and urban communities earned monthly income in the range  $\ge 10,000-19,999$ , which is lower than the minimum wage expected to be paid as monthly remuneration to formally employed workers. This restricted access to funds, characteristic of Nigeria, where about 70.2% of the populace are living below the poverty line of USD 1.00 per day, results in poor access to quality health care services, and lack of financial protection to individuals and families.<sup>16,28</sup> This study showed that almost all the households in both rural and urban communities reported having a household member with acute illness within the last 12 months, yet a quarter of households in both areas who didn't seek healthcare when sick in hospital/clinic in the last 6 months reported financial barrier to access the medical help as the main reason for not seeking healthcare in the health. The implication of this is that households may subsequently resort to quarks and sub-quality health care, with worsening health status, as it is important to note that about a fifth of respondents in both groups do indulge in selfmedication, possibly due to the high cost of seeking quality health care in health facilities. There is a need to create mechanisms for removing these barriers to healthcare for individuals and households in Ekiti State, Nigeria. Viable options include more efficient government financing, which will ensure equitable resource allocation, and prepayment schemes like social health insurance schemes, and community financing schemes, which will ensure income-redistribution and risk-pooling.<sup>2</sup>

This study reported that OOP expenditures was the healthcare financing method for majority of the respondent, and more than half of the respondents in both rural and urban communities still preferred to mostly continue paying for healthcare from OOP. This may be because most households have not yet known about health insurance, a more veritable financing option, which could provide them better access to healthcare as well as protection against financial hardships. It is important to note, however, that one-fifth of the households in both the rural and the urban communities preferred Health Insurance. The health system should leverage on this interest in Health insurance to mobilize the families and communities towards enrolling in such schemes to ensure access to essential healthcare at all times.

About four-fifth of the respondents in both groups, who had spent on healthcare in the last one year spent less than N5,000 on the most recent illness episode. Though this amount is lower than the monthly wages earned by the households in both areas, a more objective assessment of financial shock is to calculate catastrophic health expenditures, which is however not within the scope of this study. In addition to facing financial difficulties when they fall sick, OOP spending often leads to CHE for the individual, families and communities, especially in LMIC, which in turn leads to poverty.<sup>1,29,30</sup> According to the WHO, 150 million people suffer financial shock each year in sub-Saharan Africa, and 100 million are pushed into poverty because of direct payments for health services.<sup>4,31</sup> Studies conducted in Nigeria have also reported various levels of catastrophic health expenditures.<sup>30,32-34</sup> The financial burden and hindrance to health care services utilization

imposed by OOP expenditures, reflects gross inequity as it makes quality health care more inaccessible to the poor, the less privileged and more vulnerable population groups, as well as pushes them further into a vicious cycle of impoverishment and ill-health.<sup>35</sup>

While health insurance provides financial protection to individuals and households, only a very small proportion of the study respondents were presently on Health Insurance (NHIS). This proportion is more in the urban areas which may be a reflection of the occupational pattern observed in the study, in which more respondents in the urban areas were in the formal employment compared to those in the rural area. The finding is also reflective of the NHIS coverage reported nationwide, <sup>36, 37</sup> showing the inequity existing in insurance coverage within the country. Such poor coverage has been reported in similar study among informal sector workers in a health district of Douala, Cameroon. <sup>38</sup> The implication of this finding of low insurance coverage is that our progress, as a nation, towards the achievement of UHC remains abysmally slow. Several studies have also shown that a very small proportion of people in Nigeria are utilizing any form of health insurance.<sup>16,39</sup> The NHIS scheme has been reported to presently covers less than 5% of the populace, and these are mostly government or formal sector workers;<sup>36,37</sup> and does not provide cover for individuals in the informal sector who form the majority of the populace, and who are mostly poor,<sup>17</sup> as well as people who live in the rural areas. It is pertinent to note that most of the populace in Nigeria, about 60%, live in rural areas, where the standard of living as well as access to quality health care is poor.<sup>23</sup> Thus, there is a need for government

and relevant stakeholders to ensure increased provision of insurance cover to individuals and communities especially in the rural areas, through community health insurance schemes, and informal sector health insurance programs.

**Limitations of the study:** The findings of this study should be considered in the light of recall bias as respondents were asked about their past experiences. To minimise this, we asked about the household's healthcare spending within the last 12 months.

Conclusion and Recommendations: The study hereby concludes that many households in both the rural and the urban communities had ever experienced difficulty in paying for medical bills at the point of assessing healthcare service. The commonest method of financing healthcare is Out-Of-Pocket, with a very minute number of households presently having a health insurance cover, signifying lack of financial protection to the vast majority. It is recommended that government and other stakeholders should increase community mobilization and awareness about Health Insurance in the State towards increasing participation and enrolment by the households. Communities should be provided the support to establish sustainable community-based health insurance schemes. There is the need also to accelerate the progression of Ekiti State in particular and Nigeria as a whole towards universal coverage through Health insurance. Further research is also recommended to explore factors associated with experience of financial hardships in seeking healthcare.

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