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Comparative Study of Enrollee Satisfaction with Private and Public Health Care Providers of Community Based Health Insurance Scheme in Edu LGA, Kwara State

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Authors' contributions

This work was carried out in collaboration among all authors. Author IMS designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Authors YFI and SAA managed the analyses of the study. Authors MDS and BEA managed the literature searches. All authors read and approved the final manuscript.

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ABSTRACT

Introduction: Many low and middle income countries keep on searching for different ways of financing their health systems. In order to ensure accessibility to quality health services by those in the rural areas, a Community Based Health Insurance Scheme was initiated which aim to integrate both human and financial resources within the rural communities to provide basic healthcare services to its resident. In recent years, level of patient satisfactions have been identified as one of the major yardsticks to measure quality of healthcare. This study was conducted to compare enrollees satisfaction of public and private providers of community based health insurance scheme in Edu Local Government Area of Kwara State, Nigeria.

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Materials and Methodology: A descriptive cross sectional study was carried out among eight hundred respondents that were selected using multistage sampling technique. Data was collected using a semi-structured interviewer administered questionnaire and Focus Group Discussion. Analysis was done with EPI info software and confidence level was held at 95% and a p-value of less than 0.05 was considered as statistically significant.
Results: The satisfaction level with private facility (4.28±0.35) was higher than that with public facilities (4.12 ±0.48). The difference was significant at a p-value of <0.001. Private providers had a higher satisfaction level than the public providers in the domains of empathy, tangibles, assurance and timeliness. The difference was statistically significant as the p-value was less than 0.05. No differences in level of satisfaction in responsiveness among the respondents of both providers as the p-value was 0.295. There was an association between marital status and satisfaction in public providers while an association occur between type of marriage and satisfaction in private provider. There was an association for both providers in occupation level, level of education and length of enrolment.
Conclusion and Recommendation: There was a higher overall satisfaction among enrollees of private providers than the public providers of Community Based Health Insurance Scheme. Health care delivery by private providers is of good quality and as such private facilities should be maintained as part of the providers of Community Based Health Insurance Scheme. Government should also strengthen monitoring and supervision to ensure good quality of health care delivery to the enrollees especially in the public health facilities.

Keywords: Enrollees; satisfaction; community health insurance scheme.

1. INTRODUCTION

Many low and middle income countries keep on searching for different ways of financing their health systems due to the fact that their health systems have been underfunded [1]. Various methods have been tried but all led to the negative effects on the demand for care by the poor households [2]. In order to ensure accessibility to quality health services by those in the rural areas, a Community Based Health Insurance Scheme was initiated which aim to integrate both human and financial resources within the rural communities to provide basic healthcare services to its residents. Community based health financing is a process whereby households in a community finance or co-finance the recurrent and capital costs associated with a given set of health services, thereby getting involved in the management of the community financing scheme and organization of health services [3]. The term Community Based Health Insurance Scheme is an umbrella term that covers a wide range of health financing mechanism for health care. These include micro-insurance, rural health insurance, mutual health organization, and revolving drug fund [4]. The most important feature of Community Based Health Insurance Scheme is the involvement of community in mobilizing, pooling and allocation, managing and supervising health resources. The second important feature is the description of beneficiary group, which are informal group and lastly principles underlying its design, which is voluntary participation [4]. With the effectiveness of healthcare services increasingly being measured according to economic as well as clinical criteria, the inclusion of patient's opinion in assessments of healthcare services has gained greater popularity over the past 25 years [5]. In recent years, levels of patients' satisfactions have been identified as one of the major yardsticks to measure quality of healthcare [6].

There are several framework to measure patients' satisfaction. The one that is commonly used in low and middle income countries is the SERVQUAL model developed by Parasuraman [7]. It consists of 22 items measured on a 5 likert scale viz: Empathy representing individual concern of doctor and staff toward the patients; Tangible means hygienic conditions of the facility and appearance of the staff; Assurance denotes technical skills of the doctor and other staff; Reliability means providers' ability to perform the promised services dependably and accurately; and Responsiveness represents willingness of the staff to respond to patients when needed [8].

The aim of this study is to assess and compare satisfaction of both private and public healthcare providers of community health insurance scheme and the determinant of enrollees' satisfaction of both private and public health care providers of Community Based Health Insurance Scheme.

2. METHODOLOGY

Edu Local Government Area is located in the Kwara North Senatorial District and it occupies a land mass of 2542 km^2 with a population of 201,642 as projected from the 2006 population census [9]. Hygeia Community Health Plan purchased health services from three public and one private health facilities in Edu Local Government. The private health facility is Ogo Oluwa Clinic and Maternity Centre Bacita, while the public health facilities are General Hospital Lafiagi, Comprehensive Health Centre Shonga and Cottage Hospital Tsaragi. General Hospital Lafiagi was established in 1973, located along secretariat road Lafiagi, Edu Local Government. It is a 60 bed capacity hospital with size of half kilometer by half kilometer. Community Based Health Insurance Scheme started in 2007 at Comprehensive Health Centre Shonga which was established in 1983 as a 20 bed capacity hospital with a staff strength of 31. Cottage Hospital Tsaragi was established in 1998 as a 10 bed capacity hospital and it began operating Community Based Health Insurance Scheme in 2011. The private hospital at Bacita established in 1985 has a 55 bed capacity and a staff strength of 76 personnel; and started the Community Based Health Insurance Scheme started in 2007.

The study was a comparative, cross-sectional and qualitative study of the enrollees of private and public providers of Community Based Health Insurance Scheme in Edu Local Government Area, Kwara State, Nigeria. The minimum sample size for the study for each group was calculated using the formula for comparison of two proportion [10]. For this study, 379 size was calculated including non-response but 400 respondents were used in each provider to assess and compare enrollees' satisfaction. A multistage sampling technique comprising of stratified sampling and systematic sampling technique was used to choose the respondents in both private and public provider facilities. For the Focus Group Discussion, respondents were selected by purposive sampling technique among the active enrollees that were not part of the quantitative study. The participants were informed a week before each session. There was a note taker, a tape recorder and photographer while the researcher was the moderator. Ten participants were involved in each session that lasted for an hour (from 5 pm to 6 pm).

Quantitative data was collected with the use of an interviewer administered semi-structured questionnaire. The questionnaire on satisfaction parameter was the revised version of SERVQUAL Model developed by Parasuraman. All the items (22items) were measured against 5 likert scale from strongly satisfied to strongly dissatisfied. Each scale had the following score. Strongly satisfied=5, Satisfied=4, Indifferent=3, Dissatisfied=2, Strongly dissatisfied=1. A scoring system was employed to determine individual's satisfaction level. At the end of data collection, on each data sheet, the score was calculated for each respondent in each provider. The result was added for four hundred respondents in each provider. The mean score was calculated by dividing the results obtained by 22 (number of items on the questionnaire) and 400 in each provider [11]. A total of 40 questionnaires for each provider was pre-tested in Asa Local Government Area for a similar Community Health Insurance Scheme already operational in the area. Data was analyzed using Epi-Info software version 3.5.1. The study objectives were explained to the respondents in both public and private facilities and only those who agreed and signed the consent form participated in the study. Anonymity and confidentiality of all information obtained from the respondents was assured and strictly maintained throughout the study process. Information collected were kept confidential and respondent names was not asked on the questionnaire. Improper comparison as a result of non-similarities of study done elsewhere was however a limitation that could not be overcomed.

3. RESULTS

Table 1A shows that the age of respondents ranged from 18 years to 80 years with mean age of 38.48 $\pm$ 14.90 for the respondents of public provider and 41.53 $\pm$ 16.45 for the private provider. There is no statistical difference in age as the P=0.053. Modal age in the two providers was 18 -28 years. Majority of the respondents of both providers were female 70.8% for private provider and 64.8% for public and more in private provider than public provider with a P=0.049. Islam is the major religion of the respondents of both private provider 85.0% and public provider 75.2% more in private provider than public with P = 0.001.

Table 2 shows that the private provider of Community Based Health Insurance Scheme has a mean score of 4.28 ± 0.35 while the public provider has a mean score of 4.12 ± 0.48. The difference of mean was statistically significant with P<0.001(CI 0.11-0.23).

Table 1A. Socio-demographic characteristics of the respondents

Variable	Service Providers			
	Public (%) n=400	Private (%) n=400	χ^2	P
Age Groups(years)				
18 – 28	140 (35.0)	122 (35.5)		
29 – 38	93 (23.3)	80 (20.0)		
39 – 48	53 (13.2)	48 (12.0)		
49 – 58	61 (15.2)	67 (16.7)		
59 and above	53 (13.3)	83 (20.8)	9.360	0.053
Sex				
Male	141 (35.2)	117 (29.2)		
Female	259 (64.8)	283 (70.8)	6.051	0.049
Marital status				
Single	54 (13.5)	48 (12.0)		
Married	340 (85.0)	349 (87.3)		
Divorced	0 (0)	2 (0.5)		
Widowed	6 (1.5)	1(0.2)	3.124[x]	0.372
Ethnic group				
Nupe	284 (71.0)	330 (82.5)		
Yoruba	74 (18.5)	50 (12.5)		
Hausa	6 (1.5)	3 (0.8)		
Igbo	8 (2.0)	4 (1.0)		
Other	28 (7.0)	13 (3.2)	15.913	0.003
Religion				
Islam	301 (75.2)	340 (85.0)		
Christianity	99 (24.8)	60 (15.0)	13.093	0.001

[x]*Yate correction*

Table 1B. Socio demographic characteristics of the respondents

Variable	Service Providers			
	Public (%) n=400	Private (%) n=400	χ^2	P
Income Group				
<₦5,000	121 (30.2)	155 (38.7)		
₦5,000 – ₦10,000	84 (21.0)	73 (18.3)		
₦10,001 – ₦20,000	76 (19.0)	61(15.3)		
₦20,001 – ₦30,000	34 (8.5)	20 (5.0)		
₦30,001 and above	85 (21.3)	91(22.7)	10.436	0.034
Type of Marriage				
Polygamy	141 (40.8)	167 (47.3)		
Monogamy	205 (59.2)	186 (52.7)	3.048	0.081
Length of Enrolment(years)				
6 month to < 1 years	30 (7.5)	19 (4.8)		
1 years to < 2 years	42 (10.5)	38 (9.5)		
3 years – 4 years	91 (22.8)	81 (20.2)		
5 years – 6 years	94 (23.5)	92 (23.0)		
>6 years	143 (35.7)	170 (42.5)	6.118	0.191
Awareness on Money Contribution				
Yes	184 (36.8)	184 (46.0)		
No	253 (63.2)	216 (54.0)	7.055	0.008
Household Size				
<5	160 (40.0)	166 (41.5)		
≥ 5	240 (60.0)	234 (58.5)	0.186	0.666

Majority of satisfied respondents of the public provider were found among the married respondents 43.2%. There was significant association with the P=0.006. Marital status was an influential factor for satisfaction in public provider. Majority of the respondents of the private provider that were satisfied were found among the widowed 100%. In contrast no significant association was observed with the P=0.284.

Greater percentage of satisfied respondents of public provider were found among primary level of education 50.8%. Level of education was an influential factor for satisfaction in public provider as the P= 0.001. Similarly, greater percentage of satisfied respondents of private provider were among the primary level of education 60.3%. There was significant association as the P= 0.002.

4. DISCUSSION

The mean age of the respondents of the public provider was 38.48 ± 14.89 years and the respondents of the private provider was 41.52 ± 16.45 years. The modal age group in both providers was 18 – 28 years. There was no significant difference with P=0.053. This is in contrast to the study carried out in rural community of Ilorin [12] and Abuja [13] with modal age group of 30 – 39 years. It is consistent with finding from Osun State, Nigeiia which was 20 – 29 years [14]. The private provider has a mean score of 4.28 ±0.35 than the public provider with 4.12 ±0.48 (P<0.05. There is a rare study done to compare public and private provider but in a related study done in India at KKVS scheme shows 92% of those patient who use the private hospital were satisfied while 84% of those who use government hospital were satisfied [15].

This is even corroborated by the FGD that was carried out among the female participants of the public provider where the participants said that if an enrollee comes to deliver in their maternity ward, they would not care to clean the beddings before they would be made to lie on it and that maternity ward is even fair compared to other wards.

“The hospital is not hygienic. If an enrollee is brought they will not bring pillow, beddings for the person. Even if a patient deliver, they will not clean the blood away from the beddings and if another patient is brought for delivery such person will be made to lie on such bed like that. The ward are not neat enough. The maternity ward is even fair compare to the other wards.”

Majority of the married respondents of the public provider was found satisfied 43.2%. There was significant association in public provider with P=0.006 This is inconsistent with the study conducted at Ahmadu Bello University Teaching Hospital Zaria [16]. This is in contrast to what was obtained in private provider where widowed respondents 100% were more satisfied with the facility and no significant association was found between marital status and satisfaction with P<0.284. This is inconsistent to the study carried out in Ethiopia [17] and FCT [12] where marital status was found not to be associated with satisfaction. Married people are burdened with number of people to take care of when they are ill. The wives or husbands have to spend on their spouses, children and other dependents. With the absence of Community Health Insurance Scheme, the health bill they will incur may be high but with subscription to the scheme the bill may be reduced. So they may be enticed by this outcome. This may be the reason for their satisfaction but the reason why it is not associated with satisfaction in private provider may be connected to other factor like cost of health services, It is expected to be associated with private provider since the difference in marital status in both provider was not significant with P=0.0988. However, the significance of this, is that married people may continue to re-enroll even if there are changes in policy that will not favour them. They may be the driver of sustainability of the scheme in the public provider.

Table 2. Overall satisfaction score of the respondents

Service Providers							
Public provider		Private provider					
Mean	SD	Mean	SD	t-test	Df	P value	CI
4.12	0.48	4.28	0.35	5.563	798	< 0.001	0.11 – 0.23

Table 3. Relationship between socio demographic factors and satisfaction

Variables	Level of Satisfaction			
	Public Provider		Private Provider	
	Dissatisfied (%) n=240	Satisfied (%) n=160	Dissatisfied (%) n=186	Satisfied (%) n=214
Age group				
18 – 28	88 (62.9)	52 (37.1)	57 (46.7)	65 (53.3)
29 – 38	48 (51.6)	45 (48.4)	42 (52.5)	38 (47.5)
39 – 48	29 (54.7)	24 (45.3)	20 (41.7)	28 (47.5)
49 – 58	36 (59.0)	25 (41.0)	32 (41.8)	35 (58.2)
≥ 59	39 (73.6)	14 (26.4)	35 (42.2)	48 (57.8)
	χ^2= 7.918	ρ= 0.095	χ^2= 2.280	ρ= 0.684
Gender				
Male	89 (63.1)	52 (36.9)	63 (53.8)	54 (46.2)
Female	151 (58.3)	108 (41.7)	123 (43.5)	160 (56.5)
	χ^2= 0.884	ρ= 0.347	χ^2=3.587	ρ= 0.058
Marital status				
Single	43 (79.6)	11 (20.4)	26 (54.2)	22 (45.8)
Married	193 (56.8)	147 (43.2)	160 (45.8)	189 (54.2)
Widowed	4 (66.7)	2 (33.3)	0 (0.0)	3 (100.0)
	χ^2= 10.264	ρ= 0.006	χ^2= 3.802	ρ= 0.284
Level of education				
Uneducated	82 (51.9)	76 (48.1)	81 (39.9)	122 (60.1)
Primary	30 (49.2)	31 (50.8)	25 (39.7)	38 (60.3)
Secondary	62 (71.3)	25 (28.7)	37 (56.9)	28 (43.1)
Tertiary	66 (70.2)	28 (29.8)	43 (62.3)	26 (37.7)
	χ^2= 15.981	ρ= 0.001	χ^2= 14.509	ρ= 0.002

Majority of the respondents of both provider that were satisfied were those with primary level of education 50.8% and 60.3% in public and private providers respectively. Level of education was an influencing factor for satisfaction in both providers with P=0.001 in public and P=0.002 in private provider. This is similar to a study carried out in India where literacy level was associated with satisfaction among the insured respondents [15]. However it was in contrast to a study carried out in Ethiopia where level of education was not associated with satisfaction [17]. Respondents with lower or primary education had lower expectation and may also reflect lower exposure, and so are contented with minimal quality of health care provisions in the facilities. This may be beneficial to the providers as these group may not be too complacent about the health care provision but quality of health care continues to degenerate if every enrollee is in this category of less educated respondents.

Forty six point seven percent 46.7% of self-employed respondents in public provider and 63.8% in private provider were satisfied. There was significant association between occupation and satisfaction with P=0.001 in both providers. This is in contrast to a study conducted in Ethiopia [17] and FCT [13] where there was no association between occupational level and satisfaction. Most of these self-employed are those with less education. The implication might be the same as in the level of education.

5. CONCLUSIONS

There was a higher overall satisfaction among enrollees of private providers than the public providers of Community Based Health Insurance Scheme. Health care delivery by private providers is of good quality than from public facilities, hence have been maintained as part of the providers of Community Based Health Insurance Scheme.

6. RECOMMENDATIONS

In view of the findings from this study, it is therefore recommended that the private provider

should continue to be maintained in the Community Based Health Insurance Scheme since they have demonstrated high level of enrollees' positive perception of quality of health care delivery. The State Government should also strengthen monitoring and supervision to ensure good quality of health care delivery to the enrollees especially in the public health facilities. It is hoped that these measures will strengthen Community Base Health Insurance and can be used as a template to set up another Community Based Health Insurance Scheme elsewhere.

CONSENT AND ETHICAL APPROVAL

Ethical approval for this study was obtained from the ethical review committee of the University of Ilorin Teaching Hospital, Ilorin. Informed written consent was also obtained from the study subjects before conducting the interview.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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