Sociodemographic Determinants of Patients' Satisfaction with the Quality of Care in the General Hospitals in Ebonyi State, Nigeria

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Abstract

Introduction: The purpose of the study was to assess sociodemographic determinants of patients' satisfaction with the quality of care in the General Hospitals in Ebonyi State. Four hypotheses were formulated for the study. Demographic characteristics of age, level of education, marital status, and income level on patients' satisfaction were ascertained.

Methods: A cross-sectional survey research design was used for the study. The population of the study comprised 1, 363, 633 (18 years and above) who attended general out-patient clinics in the General Hospitals using a sample of 400. Data were analyzed using mean ($\bar{X}$), t-test, and analysis of variance (ANOVA) were used to answer the hypothesis at 0.05 level of significance. The SPSS version 20 was employed for the analysis.

Results: Findings showed that patients who were 40–60 years ($\bar{X} = 2.96$), had tertiary education ($\bar{X} = 2.97$), earned income of N40, 000 – N59, 000 ($\bar{X} = 2.96$) and were married ($\bar{X} = 3.09$) were most satisfied. Besides, age, marital status, and income were not significantly associated ($p > 0.05$) with patients' satisfaction while the level of education was significant ($p < 0.05$).

Conclusion: The study revealed that older age, more educated, middle-class income earners, being married were more satisfied with the quality of care received. Efforts should be made by Health workers to ensure that all patients are satisfied irrespective of their demographic characteristics.

Keywords: patient, satisfaction, sociodemographic variables

1. Introduction

The health sector in any economy forms the bedrock of its growth and development. An effective and efficient health sector not only meet the health needs of the citizenry but also boost the nation's Gross Domestic Product (GDP) by generating enormous revenue to the government and a healthy citizenry. Thus the provision of quality health services is indispensable, yet the health care delivery system in Nigeria is characterized by problems of

quality of care and accessibility to care (Anyika, 2014; Shagaya, 2015). Patient satisfaction has emerged as an essential index to determine the excellence of care (Surur, Teni, Girmay, Moges, Tesfa, & Abraha, 2015). Hospital routine can be best assessed by measuring the level of patient satisfaction with communication between health workers and patients which has been reported as very poor, these have made them to be at the mercy of the health care workers in those hospitals (Alrubaiee, & Alkaa'ida, 2011; Zhang, Wang, Yu, & Zhao, 2018; Chandra, Ward, & Mohammadnezhad, 2019) For most countries, research on patients' satisfaction and patients' experience with hospitals are done most often and the feedback gotten are made available to the public together with other indicators of health care quality. The hospitals in the developed countries are aware of the consequence of delivering patient approval as a tactical variable and a vital determinant of long-term feasibility and success (Amole, Oyetoye, & Kuye, 2015). Unfortunately, patients' satisfaction with the quality of health services provided in the nation's hospitals seemed to have been for the most part overlooked by health care managers, hospital administrators, politicians, and other decision-makers in the sector. Thus, patients choose health care based on the satisfaction they received from various health facilities. Consequently, this resulted in an astronomical increase of medical tourism by Nigerians abroad for even cases that can be managed successfully by our health sector with a depletion of the nation's foreign reserves. For instance, about 78 billion naira (over 8,500 million US dollars) is spent by Nigerians yearly to seek health care services abroad mainly from seeming shortcoming in the home health care delivery organization (Megbelayin, Babalola, Kurawa, Opubiri, & Okonkwo, 2015).

Furthermore, any strategy to promote self-reliance and encourage the usage of the existing hospitals must utilize patients' voices as a guide in the design of the health sector. To reverse this ugly trend, several survey studies have been conducted to assess patients' satisfaction in Nigerian hospitals, though they are insufficient for policymaking. Even though Ebonyi state government runs 13 general hospitals that are sited in the 13 LGAs and 424 primary health care centers, there is low patronage as there is a surge of patients in tertiary and private health facilities even for ailments that can be treated at their facilities. It is to this end that this research was set to explore the Sociodemographic determinants of patients' satisfaction in state-owned General Hospitals in all the Local Government Area of Ebonyi State, Nigeria using demographic variables such as age, gender, and educational level. Four hypotheses guided this study and were tested at p< 0.05 level of significance.

1.1 Hypotheses

1) There is no significant difference in patients' satisfaction based on age.

2) There is no significant difference in patients' satisfaction based on the Educational level.

3) There is no significant difference in patients' satisfaction based on marital status.

4) There is no significant difference in patients' satisfaction based on income.

2. Methods

2.1 Research Design

The study adopted the descriptive survey research design. This design was considered appropriate and adequate for this study because it has been used in previous studies by Karaca and Durna, (2019). The researcher recruited a sample size from the larger populace to explore and interpret the status of outpatients' satisfaction with the quality of care in the hospitals in Ebonyi State.

2.2 Area of the Study

The study was carried out in Ebonyi state, which occupies a land area of 5,954 square kilometers and is situated between longitude 70 and 80 301 E and latitude 50 401 and 60 541 north of the equator. The state is part of the southeast geopolitical zone and bounded in the north by Benue state, in the west by Enugu state, in the east by Cross River State and in the south by Abia state. The population of Ebonyi state for 2016 is 2, 64,776 (projected from 2006 census of 2,173,501 with a projected growth rate of 2.8%). The population of male and female are 1,416,334 (48.62%) and 1,481,067 (51.38%) respectively, children under 5 years were 579,480 (20%), pregnant women were 144,870 (5%) and women of childbearing age is 637,428 (22%). Nearly 75% of the State population is engaged in subsistent agrarian economic activities. The economy is majorly driven by the public sector and 56% of the population lives below U$1 per day (GDP) with high levels of unemployment and underemployment and with very few industries with low output. The state runs a three-tier health care system which are primary, secondary, and tertiary levels. The Federal government is responsible for tertiary healthcare which is the apex of the healthcare delivery and provides specialized services through the Federal Teaching Hospital Abakaliki (FETHA), Vesico-Vaginal Fistula (VVF) center. The state provides care through the 13 General Hospitals and 6 Rural Mission Hospital while the Local Government Council takes care for Primary Health Care Services. There

are 555 health facilities in the state, consisting of 2 tertiary health facilities, 13 government hospitals, 424 primary health care centers, 6 rural mission hospitals, and 110 health private facilities (Ebonyi State Ministry of Health., 2016).

2.3 Population of the Study

According to the 2016 projected population, 1,363,633 constitute a population of adults 18 years and above (Figure 1), with the Abakaliki education zone having a population of 448,538, Onueke education zone 407,737, and Afikpo education zone 518,818.

District_Name		Total Population of the District (2015)	Growth Rate (2.8%)	Total Population of the District 2016 (2.8%)	Pregnant Women	Population Under 1/Birth Cohort	Population Under 5	Population Under (0-15)	above 18 years (48%)	6-59mths	6-11mths	12-59mths	WCBA
						RI	SIAs	AFP		Vita A	Vita A	Vita A	
Abakaliki	20	194,531	5,447	199,978	9,999	7,999	39,996	95,189	95,989	35996	4000	31996	43995
Afikpo North	16	200,798	5,622	206,420	10,321	8,257	41,284	98,256	99,082	37156	4128	33027	45412
Afikpo South	13	201,389	5,639	207,028	10,351	8,281	41,406	98,545	99,373	37265	4141	33124	45546
Ebonyi	20	162,624	4,553	167,177	8,359	6,687	33,435	79,576	80,245	30092	3344	26748	36779
Ezza North	15	186,705	5,228	191,933	9,597	7,677	38,387	91,360	92,128	34548	3839	30709	42225
Ezza South	19	170,788	4,782	175,570	8,779	7,023	35,114	83,571	84,274	31603	3511	28091	38625
Ikwo	30	275,154	7,704	282,858	14,143	11,314	56,572	134,641	135,772	50914	5657	45257	62229
Ishielu	30	193,666	5,423	199,089	9,954	7,964	39,818	94,766	95,563	35836	3982	31854	43800
Ivo	18	155,036	4,341	159,377	7,969	6,375	31,875	75,863	76,501	28688	3188	25500	35063
Izzi	25	300,115	8,403	308,518	15,426	12,341	61,704	146,855	148,089	55553	6170	49363	67874
Ohaozara	25	190,560	5,336	195,896	9,795	7,836	39,179	93,246	94,030	35261	3918	31343	43097
Ohaukwu	40	251,733	7,049	258,782	12,939	10,351	51,756	123,180	124,215	46581	5176	41405	56932
Onicha	25	303,648	8,502	312,150	15,608	12,486	62,430	148,583	149,832	56187	6243	49944	68673
	296	2,710,845	78,029	2,864,776	143,239	114,591	572,955	1,363,633	1,375,092	515660	57296	458364	630251

Figure 1. 2016 EBONYI STATE POPULATION PROJECTED FROM 2006

Source: Ebonyi State Ministry of Health, 2016.

2.4 Sample and Sampling Techniques

A multi-stage sampling procedure was used to select a sample of 400 out-patients that attended the State-owned General Hospitals in the thirteen LGAs. The first stage involved clustering and random sampling of the zones namely: Abakaliki, Afikpo, and Onueke education zones; the second stage involved the determination of sample size for each zone identified in the first stage: Abakaliki education (131), Onueke education (119), and Afikpo (150), to ensure equal representation of all the zones in the State. In the third stage, two General hospitals were selected per zone giving rise to a total of 6 hospitals.　Lastly, the participants were selected using a simple random technique of balloting without replacement.

2.5 Ethical approval

Ethical approval was obtained from the Review Board of the Department of Human Kinetics and Health Education,

Faculty of Education, Ebonyi State University (EBSU/FOE/KHE/018). Informed consent was also obtained from all the respondents for the study.

2.6 Instrument for Data Collection

The instrument for data collection was a self-administered questionnaire titled: Patient Satisfaction with quality of Care. The questionnaire has 10-item consisting of 2 sections: Sections 1 has 4 items on the socio-demographic characteristics of the respondents based on age, educational level, marital status, household income, and clinics attended while; 2 is made up of 6 items meant to elicit information on waiting time, communication, empathy, competency, cost, and access. The items were measured on a four-point Likert scale through 1 to 4 which indicated: 1-very dissatisfied; 2-dissatisfied; 3-satisfied; and 4-very satisfied. The reliability of the instrument was established using data collected from 30 patients in a general hospital within the study setting not included in the sample. The internal consistency of the instrument was computed using Cronbach alpha. The process yielded an overall reliability of the coefficient of 0.795 which was deemed good enough for this study. This was utilized by Otani, Waterman, Faulkner, Boslaugh, & Dunagan, (2010).

2.7 Method of Data Analysis

The returned copies of the questionnaires were cross-checked for completeness of responses. Of 400 copies distributed, 396 were retrieved representing a 99% return rate, thereafter, data were analyzed using mean (x) score, standard deviation, t-test and Analysis of Variance (ANOVA).

A criterion mean (x) of 2.50 was set for the study which was derived by adding up the scale values and dividing the sum by the number of scale options. Thus: 4+3+2+1 = 10/4 + 2.50. A criterion means of 2.50 and above was adjudged to be highly satisfied while below 2.50 was considered 'lowly satisfied'. Also, a t-test and ANOVA were used to test hypotheses at $p \leq 0.05$ level of significance (Uzoagulu, 2011).

3. Results

3.1 Sociodemographic Characteristics of Respondents

In this study, respondents ages were 18-39 years 233 (58.8%), 40-60 years 120(30.3%), and 61 years and above 43(10.9%). For the educational level of respondents, illiterates were [139 (35.1%) primary school leavers; 86(21.7%), secondary school education; 86(21.7%) while (71.9%) have attended tertiary institutions. On marital status, (55.8%) were married, 25.3% single, 16.4% widowed, and 2.5% were divorced. Majority of patients (170(42.9%) belonged to the lowest income class (<N 18,000 per month). 112(28.3%) earn N40,000 to N 79000; 13(3.3%) earned N60,000 to N 79000 monthly while 21(5.3%) earned N80,000 and above. Most of the respondents, 277 (69.9%) attended general out-patient clinic and fewer 24 (6.1%) attended dental clinic (Table 1).

Table 1. Respondents' Socio-demographic Characteristics and Clinics Attended

Characteristics	Frequency	Percent (%)
Age (Years)		
18 – 39	233	58.8
40 – 60	120	30.3
61 and above	43	10.9
Marital Status		
Single	100	25.3
Married	221	55.8
Divorced	10	2.5
Widowed	65	16.4
Educational Status		
None	86	21.7
Primary	100	25.3
Secondary	139	35.1
Tertiary	71	17.9
Income Level (N)		
Below 18,000	170	42.9
18,000 – 39,000	112	28.3
40, 000 – 59, 000	80	20.2
60,000 – 79,000	13	3.3
80,000 and above	21	5.3
Clinics Attended		
Eye Clinic	32	8.1
Dental Clinic	24	6.1
General Out-patient Clinic	277	69.9
Infant Welfare Clinic	37	9.3
Antenatal Care	26	6.6
Total	**396**	**100%**

3.2 Patients' Satisfaction Based on Socio-Demographic Characteristics

Respondents within the age group of 40-60 years got the highest mean scores in waiting time ($\bar{x} = 2.95$), communication ($\bar{x} = 3.13$), empathy ($\bar{x} = 3.20$), competency ($\bar{x} = 3.10$), cost ($\bar{x} = 2.79$) and access ($\bar{x} = 2.60$) with the grand mean of 2.96. Based on education, the primary group was the most satisfied group with the highest mean score of 2.97. Also, married respondents were satisfied most in waiting time ($\bar{x} = 2.87$) and access ($\bar{x} = 2.63$), thus most satisfied with quality of care followed by widowed respondents with the mean score in waiting time ($\bar{x} = 2.84$) and access ($\bar{x} = 2.61$). Single respondents are the least satisfied with the quality of care with a grand mean of 2.77. For income level respondents who earned N18, 000 to N39000 were satisfied most in waiting time ($\bar{x} = 2.95$), communication ($\bar{x} = 3.19$), empathy ($\bar{x} = 3.21$), competency ($\bar{x} = 3.12$) and access ($\bar{x} = 2.57$) whereas N 40,000 to N59, 000 respondents were most satisfied with the cost of service ($\bar{x} = 2.88$). Respondent, earning N80, 000 and above got the highest mean score in access ($\bar{x} = 2.90$). (Table 2)

Table 2. Patients' Satisfaction Score based on socio-demographic characteristics

Characteristics	N	Mean						
		Waiting Time $\bar{X}$	Communication $\bar{x}$	Empathy x	Competency $\bar{x}$	Cost $\bar{X}$	Access $\bar{X}$	Grand Mean
Age (Years)								
18-39	233	2.85	3.07	3.08	3.06	2.72	2.59	2.89
40-60	120	2.85	3.13	3.20	3.10	2.76	2.60	2.96*
61 & above	43	2.72	2.84	3.06	3.05	2.63	2.43	2.79
Educational Level								
None	86	2.49	2.75	2.88	2.96	2.54	2.30	2.65
Primary Education	100	2.94	3.13	3.17	3.11	2.81	2.70	2.97*
Secondary Education	139	2.92	3.12	3.18	3.04	2.78	2.67	2.95
Tertiary Education	71	2.94	3.23	3.22	3.19	2.71	2.54	2.97*
Marital Status								
Single	100	2.76	2.95	2.98	2.89	2.55	2.47	2.77
Married	221	2.87	3.08	3.14	3.11	2.72	2.63	3.09*
Widowed	65	2.84	3.13	3.23	3.23	2.99	2.61	3.01
Divorced	10	2.78	3.28	3.24	3.03	2.80	2.07	2.87
Income Level (N)								
<18,000	170	2.70	2.94	3.00	3.02	2.73	2.56	2.83
18,000-39,000	112	2.95	3.19	3.21	3.12	2.63	2.57	2.95
40,000-59,000	80	2.94	3.15	3.20	3.11	2.88	2.55	2.97*
60,000-79,000	13	2.77	3.02	3.32	3.03	2.38	2.38	2.82
>80,000	21	2.93	3.06	3.15	3.08	2.71	2.90	2.97*

3.3 Analysis of Variance (ANOVA) on Patients' Satisfaction Based on Socio-demographics

Table 3 showed the analysis of variance (ANOVA) among respondents of different ages in their satisfaction with the quality of care in the state. There was no significant difference in patients' satisfaction with waiting time, empathy, competency, cost of service, and access among the respondents of different ages ($p > 0.05$); while on communication, there is a significant difference in patients' satisfaction ($p < 0.05$) with health providers. Thus, based on age, the null hypothesis that there is no significant difference in patients' satisfaction with waiting time, empathy, competency, cost of service and access were accepted while the null hypothesis that there is no significant difference in patients' satisfaction with communication with health workers was rejected. Based on educational qualifications, there is a significant difference in patients' satisfaction with waiting time, communication, empathy of health workers among respondents of different level of educational qualification ($p < 0.05$), but there is no significant difference in their satisfaction with competency access, and cost of the service ($p > 0.05$). Thus based on educational qualifications, the null hypothesis that there is no significant difference in patients' satisfaction with competency access and cost of service is accepted and the null hypothesis that there is no significant difference in patient satisfaction with waiting time, communication, empathy, and access is rejected.

The analysis indicates that there is no significant difference among respondents of different marital statuses in their satisfaction with waiting time, communication, empathy, and access to facilities ($p > 0.05$). On competency, and cost of services, there is a significant difference among respondents based on marital status ($p < 0.05$). Thus the null hypothesis that there is no significant difference among respondents of different marital statuses on satisfaction with waiting time, communication, empath, and access will be accepted and the null hypothesis that there is no significant difference in patient satisfaction with competency, and cost of service will be rejected.

The analysis indicates that there is no significant difference among different levels of income on their satisfaction with waiting time, communication, competency, cost of service, access to facilities, and empathy ($p < 0.05$). Therefore, the null hypothesis that there is no significant difference in patients' satisfaction with waiting time, communication competency, cost of service, access to facilities, and empathy, based on income levels of the respondents was accepted.

Table 3. Summary of Analysis of Variance (ANOVA) on Patients' Satisfaction Based on Socio-demographics

Source of Variance	Sum of Squares	Df	Mean of Square	F-cal	p-value	Dec.
Age						
Waiting Time						
Between Groups	.628	2				
Within groups	179.537	393	0.314	0.687	0.503	NS
Total	180.166	395	0.457			
Communication						
Between Groups	2.581	2				
Within groups	153.029	393	1.290	3.314	0.037*	S
Total	155.609	395	0.389			
Empathy						
Between Groups	1.307	2				
Within groups	127.816	393	0.654	2.010	0.135	NS
Total	129.123	395	0.325			
Competency						
Between Groups	0.177	2				
Within groups	156.759	393	0.089	0.222	0.801	NS
Total	156.937	395	0.399			
Cost						
Between Groups	0.564	2				
Within groups	226.065	393	0.282	0.490	0.613	NS
Total	226.629	395	0.575			
Access to facilities in the Hospital						
Between Groups	1.065	2				
Within groups	318.700	393	0.533	0.657	0.519	NS
Total	319.765	395	0.811			
Educational level						
Waiting Time						
Between Groups	13.228	3				
Within groups	166.938	392	4.409	10.354	0.00*	S
Total	180.166	395	4.26			
Communication						
Between Groups	11.239	3	3.746			
Within groups	144.370	392	3.68	10.172	0.00*	S
Total	155.609	395				

Empathy

Between Groups	6.337	3				
Within groups	122.786	392	2.112	6.744	0.00*	S
Total	129.123	395	3.68			

Competency

Between Groups	2.519	2				
Within groups	154.418	392	8.40	2.132	0.96	NS
Total	156.937	395	3.94			

Cost

Between Groups	4.124	3				
Within groups	222.505	392	1.375	2.422	0.66	NS
Total	226.629	395	5.68			

Access to facilities in the Hospital

Between Groups	9.437	3				
Within groups	310.328	392	3.146	3.974	0.08	NS
Total	319.765	395	7.92			

Marital status

Waiting Time

Between Groups	8.04	3	2.68			
Within groups	179.362	392	4.58	5.86	6.25	NS
Total	180.166	395				

Communication

Between Groups	2.176	3	7.25			
Within groups	153.433	392	3.91	1.853	1.37	NS
Total	155.609	395				

Empathy

Between Groups	2.926	3	9.75			
Within groups	126.198	392	3.22	3.029	0.29	NS
Total	129.123	395				

Competency

Between Groups	5.228	3				
Within groups	151.709	392	1.743	4.503	0.04*	S
Total	156.937	395	3.87			

Cost

Between Groups	7.794	3	2.598			
Within groups	218.835	392	5.58	4.654	0.03*	S
Total	226.629	395				

Access to facilities in the Hospital

Between Groups	4.366	3	1.455			
Within groups	315.399	392	8.05	1.809	1.45	NS
Total	319.765	395				

Income						
Waiting Time						
Between Groups	5.498	4				
Within groups	174.668	391	1.374	3.077	0.16	NS
Total	180.166	395	4.47			
Communication						
Between Groups	4.889	4				
Within groups	150.720	391	1.222	3.171	0.09	NS
Total	155.609	395	3.85			
Empathy						
Between Groups	4.417	4				
Within groups	124.706	391	1.104	3.463	6.70	NS
Total	129.123	395	3.19			
Competency						
Between Groups	9.42	4				
Within groups	155.995	391	2.35	5.90	0.97	NS
Total	156.937	395	3.99			
Cost						
Between Groups	497	3				
Within groups	222.132	392	1.124	1.979	4.78	NS
Total	226.629	395	5.68			
Access to facilities in the Hospital						
Between Groups	2.839	4				
Within groups	316.926	391	7.10	8.76	4.78	NS
Total	319.765	395	8.11			

S= Significant, NS= Not significant.

4. Discussion

4.1 Association of Patients' Satisfaction and Socio-Demographic Characteristics

Regarding age, the study revealed that there was no association between patients' satisfaction and age, while older age group (40-60years) respondents were more satisfied than the younger ones ($\bar{x}$ = 2.96, p > 0.05). These assertions were also expressed by Saeed, Mohammed, Magzoub, & Al-Doghaither, (2001); Djordjevic & Vasiljevic (2007); Xiao & Barber,(2008); Jovanovic, Jankovic, & Mirilovic, (2020); and Safroneeva, Hafner, Kuehni, Zwahlen, Trelle, Biedermann, et al., (2020) who opined that older patients were more satisfied. Also, Bleich, Ozaltin and Murray, (2009); Afzal, Khan, Rizvi, and Hussain (2011); El-Nasser and Mohammed (2013); Afzal, Rizvi, Azal, Rajput, Khan and Tariq (2014); Othman, Hussein, Alfaisal and Wasfy, (2015); Gustafsson, Martinsson, Walivaara, Vikman, and Slegan (2016); Chen, Li, & Zhang, (2016); and Xesfingi and Vozikis, (2016); reported the same. While in other studies, no significant difference was reported between age and satisfaction (Ashrafun & Uddin, 2011; Abadelhatez, Alqurashi, Alziyardi, Kuwair, Shohki, & Morgrabi, 2012; Vidhya & Rajakumar, 2014; Garba, Gadanya, Iliyasu, & Gajida, 2018) Contrastingly, studies of Liu and Fang, (2019); and Karaca, and Durna, (2019) revealed that Patients who were 18–35 years old, were more satisfied with care while (Cosma, Bota, Fleseriu, Morgan, Valeanu, & Cosma, 2020) found a statistically significant relationship between patients' satisfaction and age.

The present study showed that more educated patients were significantly more satisfied ($\bar{x}$ = 2.97, p <0.05) than the illiterate ones. The finding was consistent with many other studies by Xlao & Barber, (2008); Assefa, Mosse, & Hailemichael, (2011); Bener & Ghuloum, (2013); Abodunrin, Adeomi & Adeoye (2014); Rahman, Ngadan, &

Arif (2016); and Iwu, Duru, Uwakwe, Diwe, Merenu, Chineke et al (2017); and Karaca, and Durna, (2019). In the same vein Kassaw, Tesfaye, Girma, & Agenagnew, (2020) reported that the overall percentage of patient satisfaction was having secondary and above educational status, which was significantly associated with patient satisfaction. In contrast to that, lower education respondents have shown higher satisfaction in the findings of Bleich, et al., (2009), Afzal et al. (2014), Othman, et al., (2015); Okeke, Bassey, Oduwole, and Adindu, (2019); and Jovanovic, et al (2020). Also, Ashrafun and Uddin, (2011) reported that university-educated patients were less satisfied while Sharifi, Baraz, Mohammadi, Ramezani, and Vardanjani, (2012); and Sharew, Bizuneh, Assefa, and Habtewold, (2018) reported more satisfaction among low educated people. Further revelation from other studies showed that there was no association between education and overall satisfaction (Abadelhatez et al., 2012; Vidhya & Rajakumar, 2014; Garba et al., 2018; Devi, Laishram, Singh, & Devi, 2020).

Marital status was shown to be an important factor in patients' satisfaction with the healthcare system. The present study showed that married patients were most satisfied though not significant ($\bar{x}$ = 3.09, p < 0.05). Which is in agreement with findings of Sharifi, et al., (2012); Odetola (2015), Djordjevic and Vasiljevic, (2017); Karaca and Durna, (2019); and Okeke, et al., (2019); who reported more satisfaction among married people. While Garba et al., (2018) and Devi, et al (2020) found marital status not significantly associated with satisfaction status. In contrast, the highest satisfaction was seen among widows in the studies of Afzal, et al., (2011) and Afzal, et al. (2015); while Garba, Gadanya, Iliyasu, and Gajida, (2015); Chen, Li and Zhang (2016); Iwu, Duru, Uwakwe, Diwe, Merenu, Chineke, et al., (2017); and Oluwole, Osibogun, Adegoke, Adejimi, Adewole & Osibogun (2019), found a statistically significant relationship between patients' satisfaction and marital status.

Regarding income, this study showed a higher satisfaction among those with higher income levels (N40,000 – N59,000 and >80,000) which is not statistically significant ($\bar{x}$ = 2.97, p> 0.05) (Table 2, 3). This is in line with the findings of Saeed, Mohammed, Magzous, et al., (2001) and Liu and Fang (2019) who reported that higher-income respondents have high more satisfaction while Devi, Laishram, Singh, and Devi (2020) found no significant difference between the level of satisfaction with income. In contrast, Ashrafun and Uddin (2011); and Afzal, et al., (2014) reported that respondents with a higher level of income had a lower level of satisfaction. Chen, Li, and Zhang (2016) stated there was no significant association between patients' satisfaction and family income. Contrastingly, Myburgh, Solanki, Smith, and Lalloo, (2005) stated that socioeconomic status were significant predictors of levels of satisfaction with the services of health care providers. Supported by Cosma, et al (2020) who found a statistically significant relationship between patients' satisfaction and income. Other reports revealed that lower-income respondents were more satisfied and was significantly associated with level of satisfaction (Afzal et al., 2011; Vidhya & Rajakumar, 2014; Okeke et al., 2019; Jovanovic, et al., 2020)

5. Conclusions

Conclusively the study revealed that patients of older age, more educated, middle-class income earners, married, were more satisfied with the quality of care. However, only the level of education was significant in this study. Efforts should be made by Health workers to ensure that all patients are satisfied irrespective of their demographic characteristics.

Competing Interests Statement

The authors declare that there are no competing or potential conflicts of interest.

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