

Students' Perspectives on University Health Services in Public and Private Universities in South-East Nigeria: An Internet-Based Comparative Cross-Sectional Study with Policy Implications for Higher Education in Sub-Saharan Africa

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Abstract

Background

University health services, often overlooked, play a vital role in the academic journey, particularly with the rising student population in Nigeria. This study assesses the quality of health services in public and private universities, explores student attitudes, and identifies utilization determinants. Rapid expansion of higher education and increasing privatization in sub-Saharan Africa have intensified the need for comparative evidence on student health services.

Methods

A web-based cross-sectional design was employed in this study. We used convenience sampling techniques. A semi-structured questionnaire was developed for data collection utilizing a web-based platform. The data collected were then analyzed using SPSS (version 23). Descriptive evaluation was performed to summarize the key characteristics of the study population, and the relationship between variables was determined using chi-square analysis with levels of significant at $p < 0.05$

Results

29.4% of the respondents attend private universities and 70.6% attend public universities. Private university students were younger, with a median age of 21, compared to the 23 median age of public university students. More private university students came from higher-income families. Age, marital status, education, and family income emerged as factors with significant differences between the two groups. University health service perception varied with university type but not demographics. Waiting times at healthcare facilities greatly influenced students' willingness to seek health services. Students believed service improvements could come from increased feedback, enhanced health promotion, more healthcare professionals, and expanded physical activities.

Conclusion

The study indicates that, despite higher levels of dissatisfaction with private university health services, there are many similarities between those provided by public and private universities. Overall, current services only partially meet student needs. The research also showed that the university's health services only partially satisfy the medical needs of students and emphasized how crucial it is to improve staffing, infrastructure, communication, and accessibility in order to improve health services. These findings offer distinct insights for policymakers and university administrators in Nigeria and other low- and middle-income countries facing similar challenges in expanding higher education systems.

What is known about this topic?

1. Utilization of health services in Nigerian Universities are usually poor.
2. There is limited literature on the reasons behind the poor utilization.

What does this study add?

The study takes a comparative approach between public and private universities in South-East Nigeria, which will help health professionals and policymakers understand the merits and demerits of each system. It highlighted the factors that affect health utilization which can aid intervention programs. Hence, the study sheds light on the current state of university health services in Nigeria, offering insights into students perspective between health services in public and private universities.

To our knowledge, this is among the first comparative studies of public versus private university health services in the South-East region. The findings provide distinct insights on shared challenges (particularly waiting times) and specific strengths of private institutions, with relevance for university administrators and national policymakers in Nigeria and other low- and middle-income countries facing rapid expansion of higher education.

Background

Being Youthful, is an important period of change in an individual's life. The health of young people can influence their probability of improved academic performance, a seamless move into a full-time job, the development of productive adult lifestyles, and lesser difficulty in raising children and forming families [1]. 16% of the world's population is made up of young people which sits at around 1.2 billion youths, this figure is projected to increase by year 2030[2]. According to the Nigerian university commission (NUC), it was reported that 2,159,461 students enrolled in university across levels in Nigeria and new entrance stood at 785,259 students [3]. This shows a striking rise of young people in the various universities.

In sub-Saharan Africa, rapid expansion of higher education has increased pressure on student support systems, including health services. This growth occurs alongside rising privatization of universities, raising important questions about equity and quality of care across different institutional types.

In many countries, universities have health centers that are required to offer the students competent medical treatment [4]. This is in line with goal of developing critical thinkers [5]. The supporting environment that good health services offer, directly enhances students' health and wellbeing, and may also implicitly enhance academic success [6]. Evidence has proven that illness or disease in university students impacts their academic performance, quality of life, and interpersonal interactions both during their academic careers and after they graduated [6].

It has been highlighted that factor such as religion, the expense of health service, how easily accessible healthcare facilities are, waiting times, and the standard of care to be factors contributing to the non-use

of healthcare facilities by students [4]. The private sector's delivery of healthcare in nations with low or middle incomes is allegedly better, more dependable, and durable than the governmental sector [7].

Research conducted at a private university [8] and a public university in Nigeria [9] revealed that factors such as the structure of healthcare services, the experiences of healthcare professionals, and the waiting time for care significantly influenced students' utilization of school healthcare services.

However, existing studies in Nigeria have largely focused on single institutions, predominantly in the South-West region, with limited comparative evidence between public and private universities. Regional socio-economic and cultural differences across Nigeria make South-East-specific data particularly valuable. To the best of our knowledge, no existing study has compared healthcare services between private and public universities in Nigeria. While there is a common perception that students in private universities may have access to better healthcare services than their counterparts in public universities, this belief lacks supporting evidence. Therefore, this study aims to compare the perceived quality of healthcare services offered across public and private universities in Nigeria, examine students' attitudes toward these services, and identify factors influencing their utilization.

Methods

Ethics Approval and Consent to Participate:

We received ethics approval for this study from the National Health Research Ethics Committee, Nigeria (NHREC) (NHREC/01/01/2007-15/11/2024). All participants provided informed consent before taking part in the study.

Figure 2 shows the distributions of the respondents in the public universities. Out of the 214 respondents from public universities, 124 (57.9%) came from the University of Nigeria, Nsukka. Chukwuemeka Odumegwu University has the least number of respondents from public universities with just 2 (0.9%).

Figure 3 shows the distribution of respondents from private universities. The highest number of respondents came from Godfrey Okoye university and Evangel university akaeze with 36 (40.4%) and 31 (34.8%) respondents respectively.

Table 1: Sociodemographic Characteristics of Participants

Variable	Category	Public n (%)	Private n (%)	Total n (%)	P value
Age (years)	Median (IQR)	23 (21 – 25)	21 (20 – 23)	22 (20 – 24)	<0.001
Age groups	≤20	45 (21.0)	38 (42.7)	83 (27.4)	0.001
	21-30	165 (77.1)	48 (53.9)	213 (70.3)	
	31-40	3 (1.4)	2 (2.2)	5 (1.7)	
	41-50	0 (0.0)	1 (1.1)	1 (0.3)	
	>50	1 (0.5)	0 (0.0)	1 (0.3)	
Sex	Female	105 (49.1)	54 (60.7)	159 (52.5)	0.065
	Male	109 (50.9)	35 (39.3)	144 (47.5)	
Marital Status	Engaged	0 (0.0)	1 (1.1)	1 (0.3)	0.077
	Married	3 (1.4)	4 (4.5)	7 (2.3)	
	Single	211 (98.6)	84 (94.4)	295 (97.4)	
Level of Education	First	12 (5.6)	15 (16.9)	27 (8.9)	<0.001
	Second	31 (14.5)	6 (6.7)	37 (12.2)	
	Third	33 (15.4)	16 (18.0)	49 (16.2)	
	Fourth	50 (23.4)	34 (38.2)	84 (27.7)	
	Fifth	83 (38.8)	18 (20.2)	101 (33.3)	
	Sixth	5 (2.3)	0 (0.0)	5 (1.7)	
Family's Income	< 100 000	72 (33.6)	19 (21.3)	91 (30.0)	0.021
	100 000 – 250 000	69 (32.2)	26 (29.2)	95 (31.4)	
	251 000 – 500 000	35 (16.4)	14 (15.7)	49 (16.2)	
	501 000 – 750 000	14 (6.5)	6 (6.7)	20 (6.6)	
	751 000 – 1 000 000	9 (4.2)	10 (11.2)	19 (6.3)	
	>1 000 000	15 (7.0)	14 (15.7)	29 (9.6)	

Table 1 presents the sociodemographic characteristics of participants. Private university students were notably younger (median age 21 years, IQR 20–23) compared to public university students (median age 23 years, IQR 21–25), with a statistically significant difference (p-values of 0.05 or less. These sociodemographic disparities highlight important differences in the student populations served by public and private universities in the region.

Table 2: Attitudes Toward Health Services

Attitudes	Public n (%)	Private n (%)	Total n (%)	P value
To what extent do you prioritize your health as a student				0.497
Not at all	3 (1.4)	2 (2.2)	5 (1.7)	
Slightly	15 (7.0)	7 (7.9)	22 (7.3)	
Moderately	49 (22.9)	17 (19.1)	66 (21.8)	
Very much	76 (35.5)	25 (28.1)	101 (33.3)	
Extremely	71 (33.2)	38 (42.7)	109 (36.0)	
Students should use the health services provided by universities				0.046
Strongly disagree	71 (33.2)	26 (29.2)	97 (32.0)	
Disagree	6 (2.8)	10 (11.2)	16 (5.3)	
Neither	54 (25.2)	18 (20.2)	72 (23.8)	
Agree	80 (37.4)	33 (37.1)	113 (37.3)	
Strongly agree	71 (33.2)	26 (29.2)	97 (32.0)	
How comfortable are you with seeking medical attention when needed in your school facility				0.070
Very uncomfortable	8 (3.7)	7 (7.9)	15 (5.0)	
Uncomfortable	12 (5.6)	12 (13.5)	24 (7.9)	
Neutral	62 (29.0)	19 (21.3)	81 (26.7)	
Comfortable	83 (38.8)	32 (36.0)	115 (38.0)	
Very comfortable	49 (22.9)	19 (21.3)	68 (22.4)	
How do you view students who use the health services provided by the university health centre				0.396
Very negatively	1 (0.5)	1 (1.1)	2 (0.7)	

Negatively	7 (3.3)	6 (6.7)	13 (4.3)	
Neutral	85 (39.7)	41 (46.1)	126 (41.6)	
Positively	89 (41.6)	30 (33.7)	119 (39.3)	
Very positively	32 (15.0)	11 (12.4)	43 (14.2)	
Do you agree that students who utilize the health services provided by the university are stigmatized or treated differently by others				0.483
Strongly agree	11 (5.1)	6 (6.7)	17 (5.6)	
Disagree	62 (29.0)	25 (28.1)	87 (28.7)	
Neither	79 (36.9)	26 (29.2)	105 (34.7)	
Agree	30 (14.0)	12 (13.5)	42 (13.9)	
Strongly agree	11 (5.1)	6 (6.7)	17 (5.6)	
How likely are you to encourage another student to use the health services provided by the university				0.297
Very unlikely	22 (10.3)	13 (14.6)	35 (11.6)	
Unlikely	31 (14.5)	18 (20.2)	49 (16.2)	
Neutral	65 (30.4)	24 (27.0)	89 (29.4)	
Likely	66 (30.8)	19 (21.3)	85 (28.1)	
Very likely	30 (14.0)	15 (16.9)	45 (14.9)	
Median Score Attitude (IQR)	16 (13 – 18)	15 (12.5 – 18)	16 (13 – 18)	0.248

Table 2 highlights students' attitudes toward the health services offered by their universities. Most students prioritized their health, with the majority rating their prioritization as "very much" (33.3%) or "extremely" (36.0%). There was no significant difference between public and private universities in this regard ($p=0.497$). Comfort with seeking medical attention and perceptions of stigma were largely similar across groups, indicating broadly comparable attitudes despite institutional differences.

Table 3: Sociodemographic Factors and Attitudes

Variables	Attitude score Median (IQR)	Beta Coeff (95% CI)	P value
Age (years)		0.1 (-0.1 – 0.2)	0.256
≤20	16 (13 – 18)		
21-30	16 (13 – 18)		
31-40	16 (14 – 17)		
41-50	11 (11 – 11)		
>50	23 (23 – 23)		
Sex		0.1 (-0.7 – 0.9)	0.755
Female	16 (13 – 18)		
Male	16 (13 – 18)		
Marital status		-0.3 (-1.8 – 2.1)	0.711
Engaged	19 (19 – 19)		
Married	16 (12 – 18)		
Single	16 (13 – 18)		
Level of study		-0.1 (-0.4 – 0.2)	0.555
First	17 (13 – 20)		
Second	17 (13 – 19)		
Third	15 (13 – 17)		
Fourth	16 (13 – 18)		
Fifth	16 (13 – 18)		
Sixth	17 (14 – 18)		
Family's income		0.1 (-0.1 – 0.4)	0.372
< 100 000	15 (13 – 18)		
100 000 – 250 000	16 (13 – 18)		
251 000 – 500 000	17 (13 – 19)		
501 000 – 750 000	16 (13 – 17)		
751 000 – 1 000 000	16 (12 – 19)		
>1 000 000	15 (14 – 17)		

Table 3 shows the relationship between sociodemographic characteristics and attitudes toward health services. No significant associations were observed between sociodemographic variables (age, sex, marital status, level of study, or family income) and attitude scores (all $p > 0.05$).

Table 4: Perceived Quality of Health Services

Quality of health services	Public n (%)	Private n (%)	Total n (%)	P value
How would you rate the quality of health services provided in your university				0.003
Very good	7 (3.3)	10 (11.2)	17 (5.6)	
Good	64 (29.9)	18 (20.2)	82 (27.1)	
Normal	94 (43.9)	28 (31.5)	122 (40.3)	
Bad	34 (15.9)	23 (25.8)	57 (18.8)	
Very bad	15 (7.0)	10 (11.2)	25 (8.3)	
How would you rate the accessibility of health services in your university				0.582
Excellent	12 (5.6)	8 (9.0)	20 (6.6)	
Very good	22 (10.3)	11 (12.4)	33 (10.9)	
Good	85 (39.7)	28 (31.5)	113 (37.3)	
Fair	76 (35.5)	32 (36.0)	108 (35.6)	
Poor	19 (8.9)	10 (11.2)	29 (9.6)	
How would you rate the affordability of health services in your university				0.027
Excellent	12 (5.6)	13 (14.6)	25 (8.3)	
Very good	23 (10.7)	8 (9.0)	31 (10.2)	
Good	67 (31.3)	19 (21.3)	86 (28.4)	
Fair	86 (40.2)	32 (36.0)	118 (38.9)	
Poor	26 (12.1)	17 (19.1)	43 (14.2)	

How would you rate the range of health services provided in your university	0.022		
Excellent	2 (0.9)	5 (5.6)	7 (2.3)
Very good	15 (7.0)	9 (10.1)	24 (7.9)
Good	90 (42.1)	25 (28.1)	115 (38.0)
Fair	75 (35.0)	31 (34.8)	106 (35.0)
Poor	32 (15.0)	19 (21.3)	51 (16.8)
Public universities can provide health care services to a larger student body than private universities	0.215		
Strongly agree	19 (8.9)	11 (12.4)	30 (9.9)
Agree	43 (20.1)	24 (27.0)	67 (22.1)
Neutral	85 (39.7)	28 (31.5)	113 (37.3)
Disagree	43 (20.1)	12 (13.5)	55 (18.2)
Strongly disagree	24 (11.2)	14 (15.7)	38 (12.5)
Private universities are better equipped to handle medical emergencies than public universities	0.146		
Strongly agree	59 (27.6)	21 (23.6)	80 (26.4)
Agree	68 (31.8)	24 (27.0)	92 (30.4)
Neutral	66 (30.8)	26 (29.2)	92 (30.4)
Disagree	14 (6.5)	10 (11.2)	24 (7.9)
Strongly disagree	7 (3.3)	8 (9.0)	15 (5.0)

Table 4 compares students' perceptions of the quality of health services in public and private universities. Private university students rated the overall quality of health services significantly higher than their public counterparts ($p=0.003$). They also rated affordability ($p=0.027$) and the range of

services provided ($p=0.022$) more favorably. However, accessibility ratings showed no significant difference between the two groups ($p=0.582$).

Table 5: Factors Influencing Acceptability

Acceptability	Public n (%)	Private n (%)	Total n (%)	P value
Cost of health services at the university affect your willingness to seek medical attention				0.513
Not at all	64 (29.9)	22 (24.7)	86 (28.4)	
Slightly	49 (22.9)	17 (19.1)	66 (21.8)	
Moderately	49 (22.9)	20 (22.5)	69 (22.8)	
Considerably	37 (17.3)	20 (22.5)	57 (18.8)	
Extremely	15 (7.0)	10 (11.2)	25 (8.3)	
Do you agree that the quality of health facilities at your university impacts your likelihood of seeking medical help				0.886
Strongly disagree	26 (12.1)	11 (12.4)	37 (12.2)	
Disagree	20 (9.3)	11 (12.4)	31 (10.2)	
Neutral	37 (17.3)	13 (14.6)	50 (16.5)	
Agree	81 (37.9)	31 (34.8)	112 (37.0)	
Strongly agree	50 (23.4)	23 (25.8)	73 (24.1)	
The level of privacy provided when using health services at the university affect your willingness to seek medical attention				0.162
Not at all	38 (17.8)	18 (20.2)	56 (18.5)	
Slightly	50 (23.4)	18 (20.2)	68 (22.4)	
Moderately	68 (31.8)	18 (20.2)	86 (28.4)	
Considerably	37 (17.3)	23 (25.8)	60 (19.8)	

Extremely	21 (9.8)	12 (13.5)	33 (10.9)	
Please rate the impact of waiting time when using health services at the university				0.023
Strongly discouraging	34 (15.9)	10 (11.2)	44 (14.5)	
Discouraging	73 (34.1)	28 (31.5)	101 (33.3)	
Neutral	88 (41.1)	31 (34.8)	119 (39.3)	
Encouraging	16 (7.5)	15 (16.9)	31 (10.2)	
Strongly encouraging	3 (1.4)	5 (5.6)	8 (2.6)	
The level of trust you have in the health service providers at the university for medical attention				0.665
Not at all	31 (14.5)	14 (15.7)	45 (14.9)	
Slightly	48 (22.4)	24 (27.0)	72 (23.8)	
Moderately	63 (29.4)	24 (27.0)	87 (28.7)	
Considerably	47 (22.0)	14 (15.7)	61 (20.1)	
Extremely	25 (11.7)	13 (14.6)	38 (12.5)	
Does the location and distance of health facilities from the university affect your willingness to seek medical attention				0.334
Not at all	38 (17.8)	13 (14.6)	51 (16.8)	
Slightly	51 (23.8)	18 (20.2)	69 (22.8)	
Moderately	65 (30.4)	23 (25.8)	88 (29.0)	
Considerably	34 (15.9)	23 (25.8)	57 (18.8)	
Extremely	26 (12.1)	12 (13.5)	38 (12.5)	

Table 5 examines the factors affecting students' willingness to use university health services. Waiting time at health facilities showed a statistically significant difference between groups ($p=0.023$), with a higher proportion of public university students reporting it as discouraging. Other factors such as cost, quality of facilities, privacy, trust, and location did not show statistically significant differences between public and private university students.

Discussion

The Health services in Universities are put in place to help students with health related issues, giving treatment and counsel on how to manage health better. Most Universities give the standard health services possible with the available infrastructure [4]. Provision of quantity health care service, is an important aspect of the University's function [5]. This present study was carried out on 303 students across 11 public (214) and private (89) universities. The age ranges of respondents was from ≤ 20 to >50 and had an overall median age of 22 years, the public university had a median of 23 while the private had a median of 21, which is in accordance with a similar study conducted in tertiary institutions in South west Nigeria by Obiechina et al [4], where the 22 years formed the majority of the sampled age. This may be attributed to the fact that this age grade is found to be the peak age of university students. The participants were predominantly females 159 (52%) and majority of the students were single 295 (97.9%). According to a study conducted by Abiodun et al. [8], a similar predominance of females (57.5%) was observed, with a higher proportion of single students (98.6%) sampled. These findings, however, contrast with those reported by Obiechina et al. [4].

The study highlighted that a significant number of the students in both Public (33.2%) and Private (42.7%) had expressed an extreme priority for their health services in the university. Also, the majority were of the opinion that students should use health services provided by the university. This can be seen as perceived confidence in the health services of universities. This further highlights the confidence by majority of the respondents in public (61.7%) and private universities (57.3%) towards seeking medical attention in the university. Additionally, most students held a positive view of individuals who utilize university health care facilities, reflecting a general acceptance within the student body. However, there seems to be some degree of hesitation regarding the stigma associated with using health services on campus, indicating an area for potential improvement in awareness and acceptance. Despite this, the majority of students expressed willingness to recommend university health services to their peers, underlining a general satisfaction and trust in these facilities.

A higher proportion of students (43.9%) public students and (31.5%) of private students rated the quality of health care offered at their school as normal. Our research further indicates that whereas majority (39.7%) of students at public universities rated the accessibility of health services as good, a larger percentage of students at private universities 36.0% ranked it as good.

The health care cost at private and public universities was attributed as fair by majority of the respondents 36.0% and 49.2% respectively. The range of health service was rated good by students in

public universities (42.1%) and rated fair (34.8%) by students in private universities which negates a lot of research where private universities offered a wider range of health services which may be due to private universities being better funded. From our survey, it was observed that students in public (39.7%) and private (31.5%) universities were neutral on which sector had an advantage of providing healthcare services to a larger student population, which is in agreement with another similar study [10], that implies that school based health services may not be completely adequate to serve the health care need of its students. Also, it was observed that a higher percentage of public universities students (31.8%), agreed that private universities were better equipped to handle medical emergencies which is in accordance with a study by Kuponiyi et al [11], where he stated that private schools were better equipped because they were privileged with better funding because it is a profit oriented establishment and is in competition with other schools for students. A higher percentage of private universities students (29.2%) were neutral on which sector is better equipped to handle medical emergencies which negates the study by Bisi-Onyemaechi et al [12] where private schools had better care of emergency situations and also negates the findings by Kuponiyi et al [11] that also shows that private universities were better equipped.

The research also indicates that the majority of students in both private and public universities have similar thoughts on the impact of cost on their willingness to seek medical care at the university. This finding is consistent with earlier research [13, 14], that found health service costs have an impact on students' inclination to seek medical attention. The cost of health care does not influence a substantial portion of respondents in public colleges (29.9%) and private universities (24.7%), who said that it had no effect on their willingness to seek medical attention. It is possible to link variations in family income levels to variations in the cost impact. Research has indicated that families with lower means have less access to medical care [15, 16].

In addition, majority of respondents (over 60%) in both public and private universities stated that a facility's quality affects a person's propensity to seek medical attention. This bolsters the findings of Dassah et al.[17], who suggested that healthcare facility quality is viewed in two ways: the attitude of healthcare providers and the quality of care itself, influences patients' propensity to seek medical attention. Trust was another universally accepted factor as both private and public universities had above 80% trust in their health service providers, which is in contrast to a similar findings [18], who found that there was a difference in trust between public and private establishments. Location was also found to be a significant factor influencing respondents' desire to seek medical attention; respondents from both public and private colleges indicated that where a health facility is located determines its usage and health decision making. This is consistent with the works of Tegegne et al. [19] that highlights the significance of geography in the provision of health services.

Among private university students, majority of the respondents (25.6%) indicated privacy had a considerable impact on their ability to health services while majority at public universities a modest impact (31.8%) on their ability to seek health services. Differences in demographic composition and institutional cultures are possible reasons for these differences[20]. When privacy is looked at in the

context of the university without differentiation, majority respondents indicated the privacy had a moderate impact (28.4%), with statistical insignificance highlighting the need for more investigation into the elements that contribute to students' privacy concerns in a healthcare setting. One important component of university students' experiences with healthcare is shown by the statistically significant impact of waiting time on the acceptability of health services. This aligns with studies of Bleustein et al [21] and Adamu et al [22], which stated that waiting time had a reputable influence on patient satisfaction and perceptions of healthcare services. The majority of respondents in our study from both public and private universities gave a neutral and discouraging response, which indicates that the waiting time is abysmal and a real issue that has to be addressed right away. This aligns with research on the lack of access to quality healthcare in Nigeria by Abah[23], indicating the need to lower obstacles that result in longer wait times in order to improve the acceptability of health services.

Limitations: Our study has several limitations that warrant acknowledgment. First, the use of social media for questionnaire distribution may have introduced sampling bias, potentially excluding individuals without internet access or active social media accounts. This could limit the representativeness of the sample, particularly for underserved or rural populations. Additionally, the self-administered format of the questionnaire introduces risks of response bias and social desirability bias, which could affect the reliability of the responses. To address these limitations, future research could explore alternative recruitment strategies or a mixed-methods approach to ensure greater inclusivity and reduce potential biases. For instance, combining online surveys with outreach through community organizations or other networks could help reach a broader and more diverse participant pool.

Overall, this study reveals broad similarities in student attitudes toward university health services across public and private institutions, despite private universities receiving more favourable ratings on quality, affordability, and range of services. These findings contribute to the limited body of comparative evidence in Nigeria and carry relevance for other low- and middle-income countries experiencing rapid higher education expansion and increasing privatization.

Strengths of this study include its comparative design across multiple institutions in the South-East region and the use of a web-based approach, which offers a practical model for student health research in resource-constrained settings.

Conclusion and Recommendations

This study has shown that the perception of students in both public and private universities towards health service delivery on campus are similar. A substantial number of respondents from both public and private universities utilize their university's health facilities. Notably, most students in public universities were neutral towards health services provided by their universities, while those in private universities were dissatisfied. The study highlights the importance of universities to offer a wide range of healthcare services to their students. Unfortunately, this is lacking in some universities. Various factors affecting

student's willingness to utilize their university's health facilities such as high cost of health services, low quality of care, convenience of location, longer waiting lines, lack of drugs, and delay in administration.

Overall, the findings demonstrate broad similarities in attitudes across institutional types, while revealing opportunities to strengthen service quality and accessibility, particularly in public universities.

Thus, the following are recommended:

1. Offer a wider range of specialty care services, such as dermatology, ophthalmology, dentistry, sexual health services, mental health services, chronic disease management, etc.
2. Implement appointment scheduling systems to reduce wait lines and hire additional staff to provide more timely care.
3. Implement healthcare insurance coverage at all universities by partnering with health insurance companies to provide students with affordable coverage.
4. Create a comfortable and supportive environment for students to discuss their health concerns by providing private and confidential spaces, training healthcare providers to be empathetic and patient listeners, and encouraging open communication between students and healthcare providers.
5. Conduct surveys and focus groups to gather feedback from students about their healthcare needs.
6. Conduct regular staff training and development program to ensure that healthcare providers are up to date on the latest practices and techniques.

These recommendations hold relevance not only for Nigerian universities but also for other low- and middle-income countries experiencing rapid growth in higher education enrollment and privatization.

Declarations

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Competing interests: Not Applicable

Ethics Approval and Consent to Participate:

No experiments involving humans or the use of human tissue samples were conducted in this study. However, ethics approval was obtained from the National Health Research Ethics Committee, Nigeria (NHREC), under approval code NHREC/01/01/2007-15/11/2024. The study adhered strictly to NHREC

guidelines and regulations. Additionally, informed consent was obtained from all participants prior to their involvement, ensuring full compliance with ethical standards and relevant regulations.

Author Contributions

CO: Conceptualization, study design, writing- Original draft, second and third draft and Project administration.

CO: Writing- original, analysis and second draft- review & editing

SE: Study design, writing- Original draft, and final draft, review and intellectual prosperity.

FO: Writing- original and second draft- review & editing

EE: Writing- original and second draft- review & editing

FU: Writing- original and second draft- review & editing

CC: Writing- original and second draft- review & editing

LF: Writing- original, data analysis and second draft- review & editing

AA: writing- Original draft, second and third draft, & editing

JU: Writing- original and second draft- review & editing

Manuscript writing: All

Final approval of the manuscript: All Authors.

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Figures

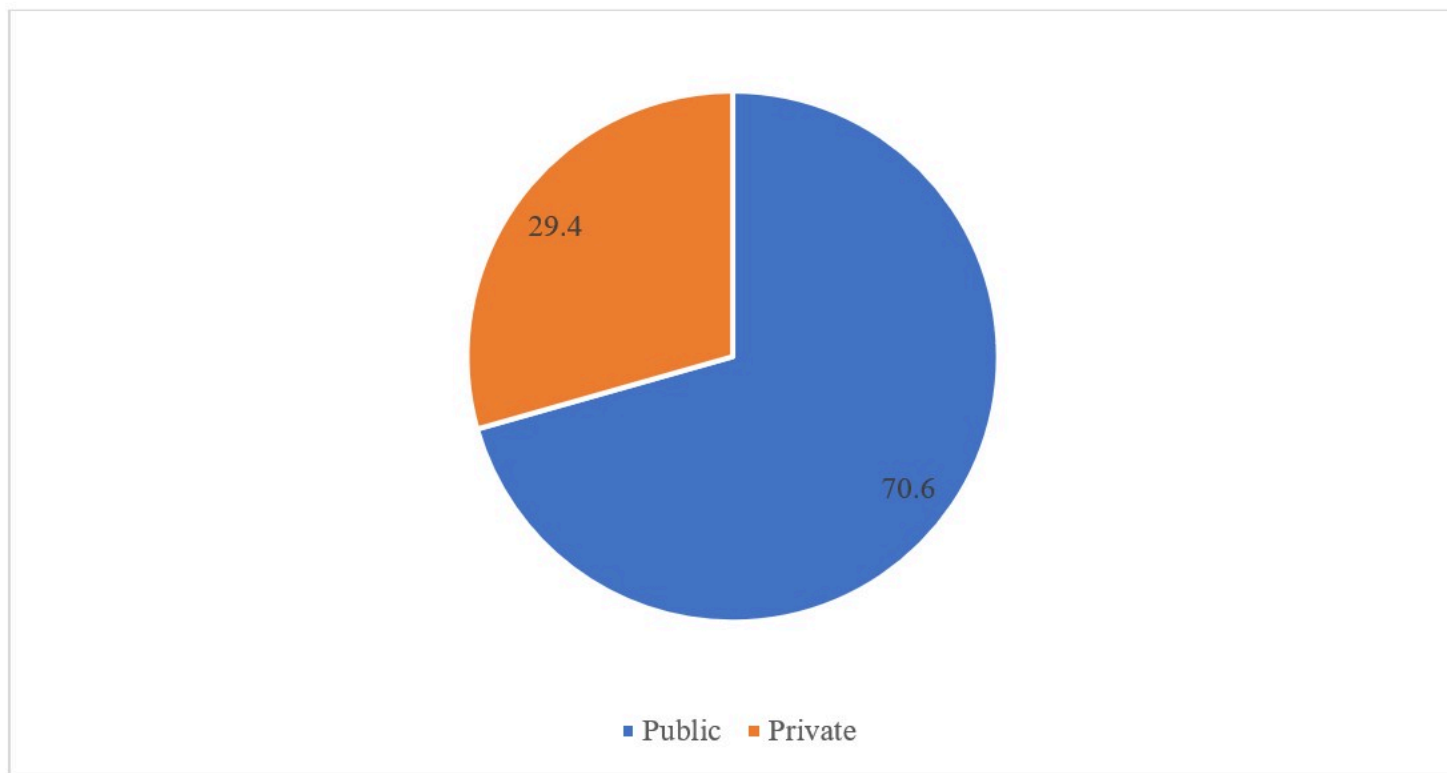


Figure 1

Distribution of participants according to type of universities.

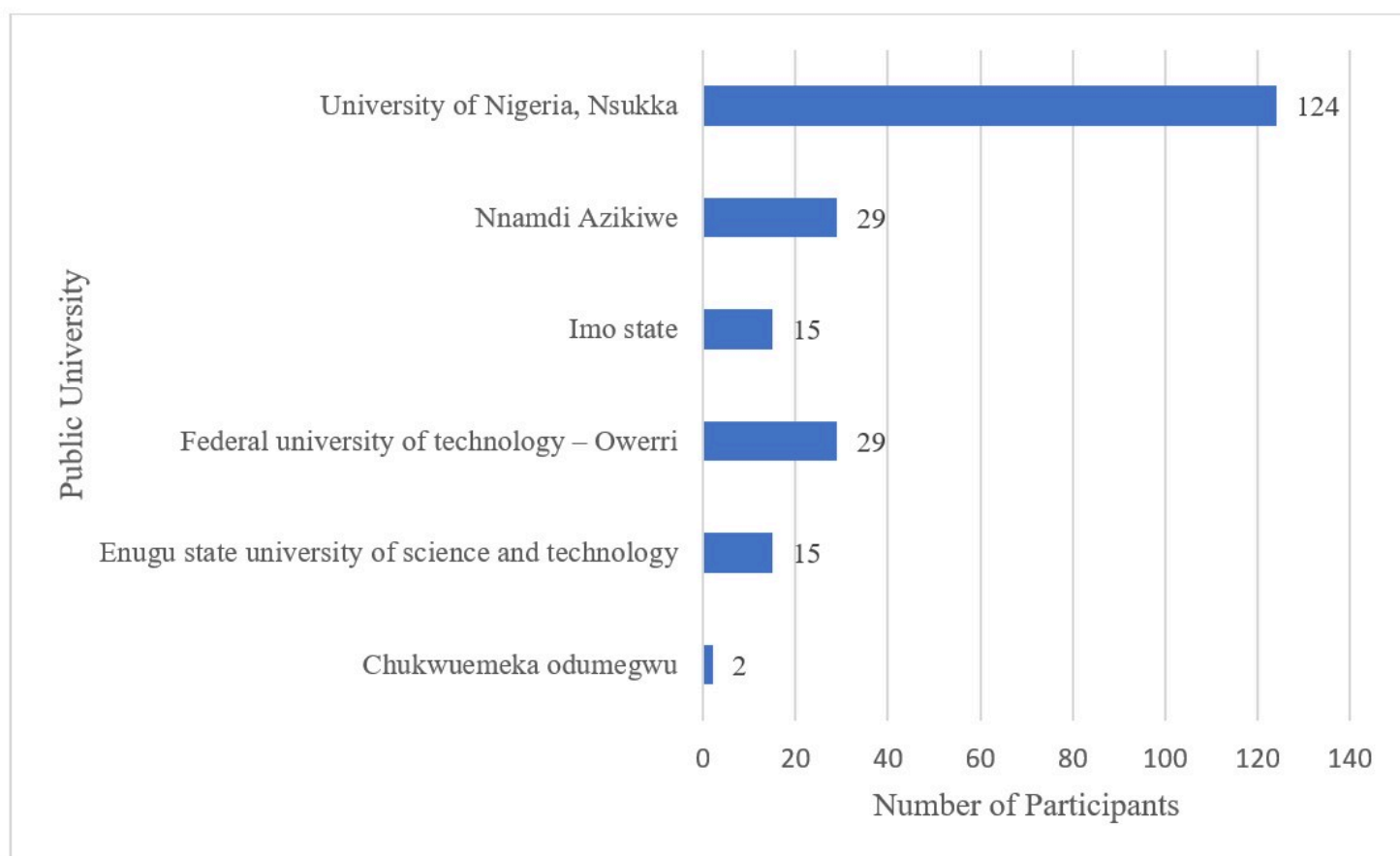


Figure 2

Distribution of participants according to various public universities

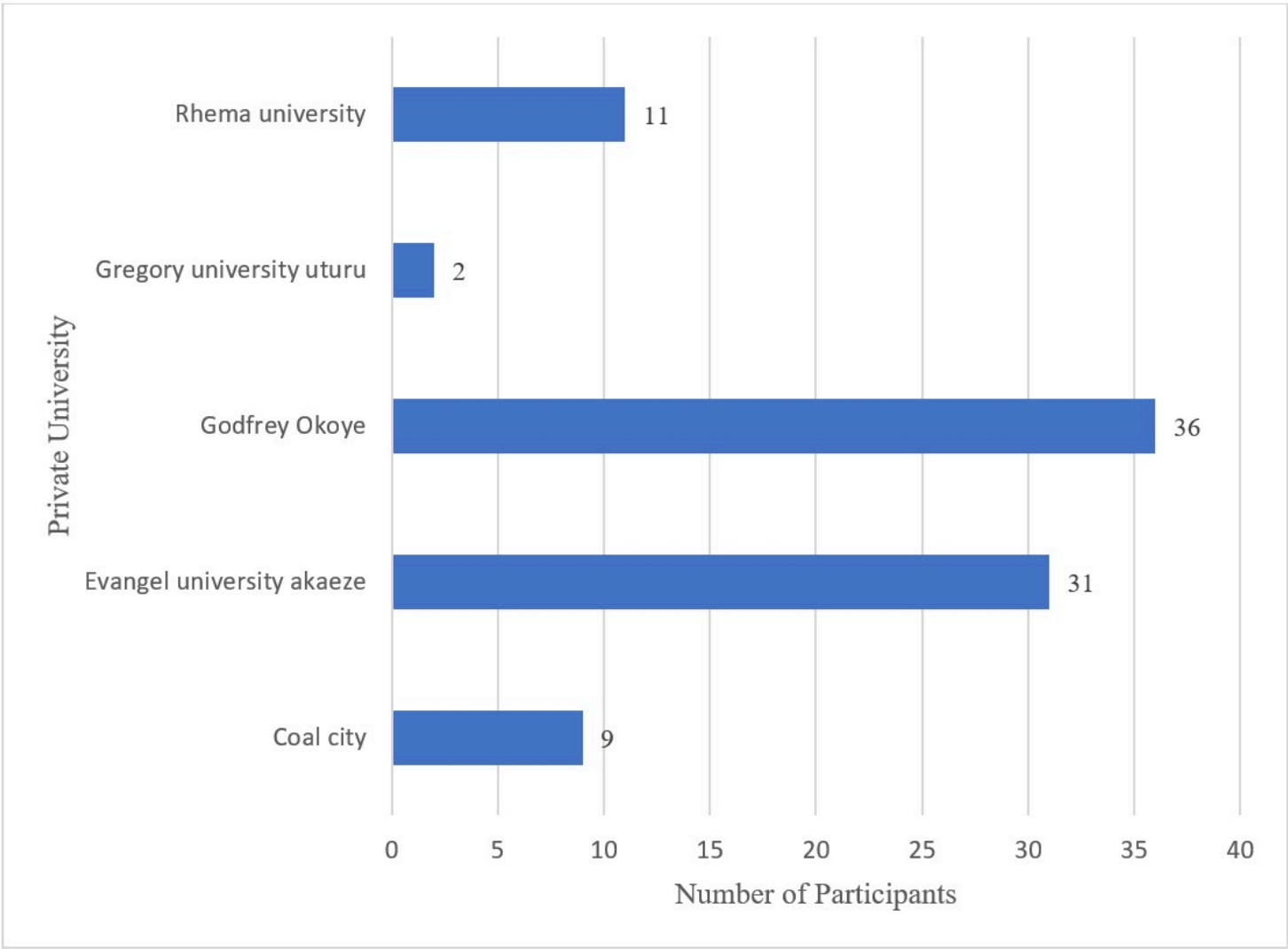


Figure 3

Distribution of participants according to various private universities

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