

# The Accessibility and Utilization of University Health Care Services among Staffs and Undergraduate Students of University of Lagos, Nigeria

Mariam Olajumoke Dawodu, Abdulazeez Opeyemi Abdulganiyu\*

Department of Sociology, University of Lagos, Lagos, Nigeria

## ABSTRACT

**Background:** Despite the critical role of knowledge development in tertiary institutions through monitoring and evaluation of health care delivery, many Nigerian universities, including the University of Lagos, conduct little or no research on health care service consumption. This study investigated how accessible health services are at the University of Lagos Health Centre, with the intention that the findings may assist the institution's health services management in improving health care planning, organization and delivery.

**Methods:** The non-experimental research design was used in this study. A cross-sectional survey was conducted and a quantitative technique was used with a questionnaire as the study instrument. The location was the University of Lagos. The study populations for this study were the staffs (both academic and non-academic) and undergraduate students in the University of Lagos, Akoka campus. A total number of 300 sample size was considered for this study. The multi-stage sampling involving snowballing and purposive sampling technique was applied to this study. To construct univariate and bivariate tables, the Statistical Package for Social Sciences (SPSS 20) computer software was utilized. The *chi-square* test was performed at the 0.05 level of significance.

**Results:** The study indicated that a significant majority of respondents have experienced difficulties in accessing the UHC (95.31%), while a very small percentage have not (4.69%). The study indicated that relationship exists between user's status and the quality of services they are provided by the Unilag health center because P value is  $>0.005$ . Also, the *chi-square* calculated indicated that a relationship exists between utilization and satisfaction with quality of services provided by the Unilag health center.

**Conclusion:** Overall, this study's comprehensive exploration provided insights that extend beyond the surface, shedding light on the intricate interplay between socio-economic factors, healthcare experiences, and perceptions within a university setting. It serves as a valuable foundation for addressing existing challenges and enhancing the overall well-being of the university community through improved healthcare services and communication strategies.

**Keywords:** Healthcare; Utilization; Access to health care services; Health system

## INTRODUCTION

The problem of poor or ill accessibility to quality healthcare care services in tertiary institutions has been reported by some researchers in different parts of the world. Healthcare systems of most tertiary institutions are fragmented; lacking information, resources, personnel, continuity and sustainability due to political instability and lack of concerted effort on the part of

stakeholders in the health sector [1]. Even in countries where infrastructure and policies are in place, unsafe care causes deaths and disabilities due to incorrect prescriptions, overdosing and poor hospital hygiene [2]. Similarly, countries with resources but no solid strategic health plan suffer from misdirected treatment, with more money spent on curative care rather than basic healthcare [3]. Primary health care facilities in many LMICs are understaffed, under-resourced and of poor quality. As a result,

**Correspondence to:** Abdulazeez Opeyemi Abdulganiyu, Department of Sociology, University of Lagos, Lagos, Nigeria; E-mail: Abdulganiyu.ao@gmail.com

**Received:** 10-Jan-2024, Manuscript No. JPCHS-24-29099; **Editor assigned:** 12-Jan-2024, PreQC No. JPCHS-24-29099 (PQ); **Reviewed:** 26-Jan-2024, QC No. JPCHS-24-29099; **Revised:** 07-Jan-2025, Manuscript No. JPCHS-24-29099 (R); **Published:** 14-Jan-2025, DOI: 10.35248/2376-0419.24.11.343

**Citation:** Dawodu MO, Abdulganiyu AO (2025) The Accessibility and Utilization of University Health Care Services among Staffs and Undergraduate Students of University of Lagos, Nigeria. J Pharm Care Health Syst. 12:372.

**Copyright:** © 2025 Dawodu MO, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

patients self-refer to hospitals and specialist hospitals, which serve as the health system's final resort [4].

The problems associated with the delivery of poor-quality care in most healthcare facilities on Nigerian campuses, such as growing incidence of chronic diseases, medical errors and the continuous increase in dollars spent on healthcare services without comparable health outcomes [5]. Most of the country's university health centers are underequipped or lack sophisticated technology to treat chronic and degenerative diseases [6], under which the medical center falls. Most of the time, there are insufficient drugs to treat infectious diseases and patients are advised to purchase them from private pharmacies [7]. Despite the key role of knowledge development in tertiary institutions through monitoring and evaluation of health care delivery, there are few or no research on consumption of health care services at numerous Nigerian universities, including the University of Lagos. This study looked at how accessible health services are at the University of Lagos Health Centre, with the hope that the findings will help the institution's health services management improve their planning, organization and delivery of health care services. This study evaluates the accessibility, utilization and experience of staff and undergraduate students at the University of Lagos Health Centre against this backdrop.

## MATERIALS AND METHODS

### Design

The non-experimental research design was used in this study since the responses consisted of selected respondents at a study location (University of Lagos, Akoka) in order to obtain the study's findings and conclusion; that is, there was no consideration for the experimental group. Furthermore, because the study was conducted at a specific time. Because the respondents included staff and undergraduates from various social and economic backgrounds, a cross-sectional survey was conducted and a quantitative technique was used with a questionnaire as the study instrument. The cross-sectional survey is appropriate for this study because it was conducted once with a predetermined sample size and study population, without recourse for future consideration as in a longitudinal study.

### Study location

The University of Lagos was founded in 1962. It presently has three campuses in Yaba and Surulere. Whereas two of its campuses are located in Yaba (the main campus in Akoka and the recently created campus at the former school of radiography), its College of Medicine is located in Idi-Araba, Surulere. It is remarkable that all the three campuses are located in the mainland of 28 Lagos. Its main campus is largely surrounded by the scenic view of the Lagos lagoon on 802 acres of land in Akoka, North Eastern part of Yaba. From a modest intake of 131 students in 1962, enrolment in the university has now grown to over 40,000. The University's staff strength is 3,365 made up as follows: 1,386 administrative and technical, 1,164 junior and 813 academic staff. University of Lagos currently has twelve faculties, namely, arts, basic medical

sciences, business administration, clinical sciences, dental sciences, education, engineering, environmental sciences, law, pharmacy, science and social sciences. UNILAG, as the university is fondly called, also offers master's and doctorate degrees in most of the aforementioned programmes. In addition, it has two centers, namely, the centre for human rights and the centre for African regional integration and borderland studies. The Distance Learning Institute (DLI) of the University also offers courses in accounting, business administration, science education and library/information sciences.

### Study population

The study populations for this study were the staffs (both academic and non-academic) and undergraduate students in the University of Lagos, Akoka campus. The university staff strength is 3365, while the undergraduate students are 31,408.

### Sampling procedure

A total number of 300 sample size was considered for this study. The sample size was arrived by selecting respondents across faculties and department in the study location after applying the appropriate sampling techniques. The multi-stage sampling involving snowballing and purposive sampling technique were applied to this study until saturation level is reached.

### Research instrument of data collection and analysis

The questionnaire was the research instrument employed in the data collection method for this study. This was appropriate for this study since it allowed for a large number of respondents to be reached in a short period of time. The questionnaire was divided into sections that measured factors in the study. Because quantitative data was acquired through a questionnaire, the statistical approach of data analysis was used to analyze the data. To construct univariate and bivariate tables, the Statistical Package for Social Sciences (SPSS 20) computer software was utilized. Because both the independent and dependent variables in the hypotheses were assessed at the nominal level, the *chi-square* test will be performed at the 0.05 level of significance.

## RESULTS

In Table 1 the majority of the respondents falls under the age range of 20-24 years (44.8%), followed by those under 20 years (7.1%). The smallest percentage falls in the 50-59 years age range (5.2%). This study indicates that the participants are primarily composed of young adults and college students. Christianity is the dominant religion within the study (71.9%), followed by Islam (19.5%) and other religions (8.57%). This suggests a diverse religious composition within the study, with a significant Christian presence. The Yoruba ethnic respondents constitute the largest percentage (71.43%), followed by the Igbo (15.24%) and Hausa/Fulani (5.71%) ethnic respondents. The "Others" category accounts for 7.62%. The respondents appear to be predominantly composed of Yoruba ethnic members.

**Table 1:** A summary of the socio-demographic data (students).

| Variables                 | Frequency | Percentage (%) |
|---------------------------|-----------|----------------|
|                           | N=210     | P=100          |
| <b>Age range</b>          |           |                |
| Under 20 years            | 15        | 7.10%          |
| 20-24 years               | 94        | 44.80%         |
| 25-29 years               | 31        | 14.80%         |
| 30-39 years               | 34        | 16.20%         |
| 40-49 years               | 25        | 11.90%         |
| 50-59 years               | 11        | 5.20%          |
| <b>Religion</b>           |           |                |
| Christianity              | 151       | 71.90%         |
| Islam                     | 41        | 19.50%         |
| Others                    | 18        | 8.57%          |
| <b>Ethnic respondents</b> |           |                |
| Igbo                      | 32        | 15.24%         |
| Hausa/Fulani              | 12        | 5.71%          |
| Yoruba                    | 150       | 71.43%         |
| Others                    | 16        | 7.62%          |
| <b>Marital status</b>     |           |                |
| Single                    | 155       | 73.81%         |
| Married                   | 21        | 10%            |
| Cohabiting                | 34        | 16.19%         |
| <b>Place of residence</b> |           |                |
| On campus                 | 146       | 69.52%         |
| Off campus                | 64        | 30.48%         |
| <b>Level</b>              |           |                |
| 100                       | 21        | 10%            |
| 200                       | 23        | 10.95%         |
| 300                       | 24        | 11.43%         |
| 400                       | 130       | 61.90%         |
| 500                       | 12        | 5.71%          |

The majority of the respondents are single (73.81%), with a smaller percentage being cohabiting (16.19%) and married (10%). This suggests that the respondents largely consist of individuals who have not yet entered into formal marital relationships. A significant portion of the respondents resides off-campus (30.48%), while a larger portion lives on campus (69.52%). This indicates that a majority of the respondents are likely composed of students who live on the college campus. The highest percentage of the respondents is at the 400 level (61.9%), followed by the 300 level (11.43%). The smallest percentages are in the 100 level (10%) and 500 level (5.71%). This suggests that a substantial portion of the respondents are in their later years of study, possibly nearing graduation.

In Table 2 the majority of the respondents consist of non-academic staff (78.89%), while academic staffs make up the

remaining portion (21.11%). This suggests that the respondents have a larger representation of non-teaching staff compared to teaching staff. The largest portion of the respondents has attained tertiary education (35.56%), followed by secondary education (23.33%). A smaller percentage have achieved primary education (14.44%), while even fewer have no formal education (10%). Postgraduate education is the highest level achieved by 16.67% of the respondents. This distribution indicates a relatively educated respondent, with a notable number having attained tertiary and postgraduate education. Monogamous marriages are much more prevalent within the respondents (87.78%) compared to polygamous marriages (12.22%).

**Table 2:** A summary of the socio-demographic data (staffs).

| Variable                                       | Frequency | Percentage |
|--|-----------|------------|
|  | N=90      | P=100      |
| <b>Kind of staff</b>                           |           |            |
| Academic                                       | 19        | 21.11%     |
| Non-academic                                   | 71        | 78.89%     |
| <b>Level of education</b>                      |           |            |
| No formal education                            | 9         | 10%        |
| Primary  | 13        | 14.44%     |
| Secondary                                      | 21        | 23.33%     |
| Tertiary                                       | 32        | 35.56%     |
| Postgraduate                                   | 15        | 16.67%     |
| <b>Form of marriage</b>                        |           |            |
| Monogamous                                     | 79        | 87.78%     |
| Polygamous                                     | 11        | 12.22%     |
| <b>Average monthly income</b>                  |           |            |
| Less than #50,000                              | 12        | 13.33%     |
| #51,000-#100,00                                | 54        | 60%        |
| #101,000-#150,000                              | 10        | 11.11%     |
| #151000-#200,000                               | 4         | 4.44%      |
| <b>Practice the same religion with partner</b> |           |            |
| Yes  | 81        | 90%        |
| No   | 9         | 10%        |

| Pattern of residence                     |    |        |
|--|----|--------|
| Shared facilities                        | 21 | 23.33% |
| Flat                                     | 54 | 60%    |
| Duplex                                   | 4  | 4.44%  |
| Family owned                             | 11 | 12.22% |
| Place of residence (physical facilities) |    |        |
| High                                     | 12 | 13.33% |
| Middle                                   | 67 | 74.44% |
| Low                                      | 11 | 12.22% |

The study shows that the majority of the individuals in the respondents are in monogamous marital relationships. The largest percentage of the respondents earns between #51,000-#100,000 (60%), followed by those earning less than #50,000 (13.33%). Smaller portions earn between #101,000-#150,000 (11.11%) and #151,000-#200,000 (4.44%). This income distribution indicates a significant number of individuals within the moderate-income range. The vast majority of the respondents practices the same religion as their partner (90%), while a smaller portion does not (10%). This suggests a strong religious alignment within the respondent's relationships. The most common pattern of residence within the respondents is living in a flat (60%). A significant number of individuals share facilities (23.33%), while only a small portion resides in duplexes (4.44%) or family-owned homes (12.22%). This pattern indicates a preference for more communal living arrangements, such as shared facilities and flats. The majority of the respondents resides in places with middle-level physical facilities (74.44%). A smaller percentage live in places with high-level (13.33%) or low-level (12.22%) physical facilities. This distribution suggests that most individuals have access to moderate living conditions.

In Table 3 the most common self-reported health rating is 8 (50.67%), followed by 7 (18.67%) and 9 (12%). A smaller percentage of respondents rate their health as 5 (10%) or 4 (8.67%). This indicates that the majority of the respondents perceives their health to be relatively good. A significant percentage of respondents have visited the Unilag health center

(85.3%), while a smaller portion have not (14.7%). The most common reason for not visiting is the preference to visit a pharmacy (20.45%). Other reasons include the belief that illness improves over time (25%), high cost/no health insurance (50%) and traditional barriers (4.55%). The majority of respondents visited the health center 2 times (51.17%), followed by 1 time (29.3%). A smaller portion visited 3 times (17.58%) and only a few visited 4 times or more (1.95%). A significant percentage of respondents very often attend the health center (80.47%), while lesser percentages attend often (12.89%) or less often (6.64%). A relatively small percentage of respondents have experienced swift diagnosis and prescription (21.48%), while a larger percentage has not (78.52%). The majority of respondents use medication regularly (95.70%), while a small percentage does not (4.30%). Health checkups are most commonly done once a year (34.77%), followed by when needed (39.45%), once in 6 months (17.58%) and once in 3 months (8.20%). The distribution of ratings for the diagnosis process is fairly balanced, with the largest percentage rating it as average (30.08%). Other ratings include excellent (12.89%), above average (21.88%), below average (30.47%) and very poor (4.69%). A significant portion of respondents believe that Unilag health center has equipment for modern diagnosis and treatment (30.47%), while a larger portion does not (69.53%). A small percentage of respondents believe that Unilag health center has modern operating room facilities (19.14%), while a larger portion does not (80.86%).

**Table 3:** Experience on the utilization of Unilag health centre.

| Variables                                 | Frequency | Percentage |
|---|-----------|------------|
|   | N=256     | P=100      |
| How healthy you are on a scale of 1 to 10 |           |            |
| 8   | 152       | 50.67%     |
| 7   | 56        | 18.67%     |

|  |     |        |
|--|-----|--------|
| 9  | 36  | 12%    |
| 5  | 30  | 10%    |
| 4  | 26  | 8.67%  |
| <b>Ever visited Unilag health center</b>                               |     |        |
| Yes  | 256 | 85.30% |
| No   | 44  | 14.70% |
| <b>If no, reason</b>   |     |        |
| Prefer to visit a pharmacy   | 9   | 20.45% |
| Illness improves over time   | 11  | 25%    |
| High cost/no health insurance  | 22  | 50%    |
| traditional barriers   | 2   | 4.55%  |
| <b>No of times you and family visited last year</b>                    |     |        |
| 1 time   | 75  | 29.30% |
| 2 times  | 131 | 51.17% |
| 3 times  | 45  | 17.58% |
| 4 and more   | 5   | 1.95%  |
| <b>Often attend the health center</b>                                  |     |        |
| Very often   | 206 | 80.47% |
| Often  | 33  | 12.89% |
| Less often   | 17  | 7.64%  |
| <b>Doctors/nurses conduct swift diagnosis and prescribe medication</b> |     |        |
| Yes  | 55  | 21.48% |
| No   | 201 | 78.52% |
| <b>Use of any medication regularly</b>                                 |     |        |
| Yes  | 245 | 95.70% |
| No   | 11  | 4.30%  |
| <b>Often get a health checkup</b>                                      |     |        |
| Once in 3 months   | 21  | 8.20%  |
| Once in 6 months   | 45  | 17.58% |
| Once a year  | 89  | 34.77% |
| Only when needed   | 101 | 39.45% |

|   |     |        |
|---|-----|--------|
| <b>Rate of diagnosis process you experienced</b>                              |     |        |
| Excellent   | 33  | 12.89% |
| Above average   | 56  | 21.88% |
| Average   | 77  | 30.08% |
| Below average   | 78  | 30.47% |
| Very poor   | 12  | 4.69%  |
| <b>Unilag health center have equipment for modern diagnosis and treatment</b> |     |        |
| Yes   | 78  | 30.47% |
| No  | 178 | 69.53% |
| <b>Unilag health center have modern operating room facilities</b>             |     |        |
| Yes   | 49  | 19.14% |
| No  | 207 | 80.86% |

In Table 4 the study shows that the majority of respondents have medical insurance (81.64%), while a smaller portion does not (18.36%). This indicates that a significant number of individuals in the respondents have access to medical insurance, which can provide financial protection for healthcare expenses. A large percentage of respondents perceive a difference between medical insurance options (86.33%), while a smaller portion does not (13.67%). This suggests that a majority of individuals are aware of distinctions among various medical insurance plans available to them. Similarly, a significant percentage of respondents

believe there is a difference in the care provided based on their insurance (86.33%), while a smaller portion does not perceive such a difference (13.67%). This could indicate that a perception exists that the level of care received might vary depending on the type of insurance coverage. The study reveals that a majority of respondents feel they have access to resources and support for their well-being (60.16%), while a substantial portion does not have such access (39.84%).

**Table 4:** Experience on the differentials in service provided.

| Variables                                    | Frequency | Percentage |
|--|-----------|------------|
|  | N=256     | P=100      |
| <b>Medical insurance as staff or student</b> |           |            |
| Yes  | 209       | 81.64%     |
| No   | 47        | 18.36%     |
| <b>Difference between medical insurance</b>  |           |            |
| Yes  | 221       | 86.33%     |
| No   | 35        | 13.67%     |
| <b>Difference in the care provided</b>       |           |            |
| Yes  | 221       | 86.33%     |
| No   | 35        | 13.67%     |
| <b>Resources and support for well-being</b>  |           |            |

|   |     |        |
|---|-----|--------|
| Yes   | 154 | 60.16% |
| No  | 102 | 39.84% |
| <b>Rate us as compared to other hospitals</b> |     |        |
| Excellent                                     | 56  | 21.88% |
| Above average                                 | 79  | 30.86% |
| Average                                       | 101 | 39.45% |
| Below average                                 | 20  | 7.81%  |
| <b>Comfortable discussing health concerns</b> |     |        |
| Yes   | 121 | 47.27% |
| No  | 135 | 52.73% |

This suggests that the respondents are split in terms of their perception of available resources to support their overall well-being. Respondents were asked to rate the healthcare facility compared to other hospitals. The largest percentage rated it as average (39.45%), followed by above average (30.86%), excellent (21.88%) and below average (7.81%). This indicates a mixed perception of the quality of care provided by the healthcare facility when compared to other hospitals. A moderate percentage of respondents feel comfortable discussing their health concerns (47.27%), while a slightly larger portion does not (52.73%). This suggests that there might be room for improvement in creating an environment where individuals feel more at ease discussing their health issues.

In Table 5 the study reveals that a significant portion of respondents are less satisfied with staff skills and competency (51.56%), while a smaller percentage are satisfied (8.98%) or very satisfied (17.58%). Additionally, 21.88% are not satisfied with staff skills and competency. This indicates that a considerable number of respondents have concerns about the skills and competency of the healthcare staff. Similarly, a large portion of respondents are less satisfied with the cleanliness of

the hospital (51.95%), while smaller percentages are satisfied (8.59%) or very satisfied (17.58%). Additionally, 21.88% are not satisfied with the cleanliness of the hospital. This suggests that the cleanliness of the hospital might be an area that requires improvement in the eyes of the respondents. A significant portion of respondents are less satisfied with the efficiency of nursing care (52.34%), while a smaller percentage are satisfied (8.59%) or very satisfied (17.19%). Additionally, 21.88% are not satisfied with the efficiency of nursing care. This indicates that there are concerns about the efficiency of nursing care provided by the health center. Similar to other categories, a substantial portion of respondents are less satisfied with the friendliness and courtesy of the staff (51.56%), while a smaller percentage are satisfied (8.98%) or very satisfied (17.58%). Additionally, 21.88% are not satisfied with the friendliness and courtesy of the staff. This suggests that the interpersonal aspects of care might need attention in order to improve overall patient experience.

**Table 5:** Experience on their level of satisfaction with quality of services.

| Variables   | Frequency | Percentage |
|---|-----------|------------|
|   | N=256     | P=100      |
| <b>Satisfied with staff skill and competency</b>  |           |            |
| Very satisfied                                    | 45        | 17.58%     |
| Satisfied   | 23        | 8.98%      |
| Less satisfied                                    | 132       | 51.56%     |
| Not satisfied                                     | 56        | 21.88%     |
| <b>Satisfied with cleanliness of the hospital</b> |           |            |



|  |     |        |
|--|-----|--------|
| Very satisfied                                   | 45  | 17.58% |
| Satisfied  | 22  | 8.59%  |
| Less satisfied                                   | 133 | 51.95% |
| Not satisfied                                    | 56  | 21.88% |
| <b>Satisfied with efficiency of nursing care</b> |     |        |
| Very satisfied                                   | 44  | 17.19% |
| Satisfied  | 22  | 8.59%  |
| Less satisfied                                   | 134 | 52.34% |
| Not satisfied                                    | 56  | 21.88% |
| <b>Satisfied with friendliness and courtesy</b>  |     |        |
| Very satisfied                                   | 45  | 17.58% |
| Satisfied  | 23  | 8.98%  |
| Less satisfied                                   | 132 | 51.56% |
| Not satisfied                                    | 56  | 21.88% |
| <b>Dislike about the health center</b>           |     |        |
| Waiting time                                     | 132 | 51.56% |
| Attention  | 23  | 8.98%  |
| Cost   | 65  | 25.39% |
| Others   | 36  | 14.06% |
| <b>Likely to recommend to friends and family</b> |     |        |
| Yes  | 78  | 30.47% |
| No   | 178 | 69.53% |

The dislikes about the health center are primarily related to waiting time (51.56%), followed by cost (25.39%), attention (8.98%) and other reasons (14.06%). This indicates that waiting time and cost are prominent issues that negatively impact the patient experience. A significant portion of respondents would not recommend the health center to friends and family (69.53%), while a smaller percentage would (30.47%). This suggests that there might be shortcomings in the health center's services and patient experiences that are impacting the respondents' willingness to recommend it.

In Table 6 the study indicates that a significant majority of respondents have experienced difficulties in accessing the UHC (95.31%), while a very small percentage have not (4.69%). This suggests that there might be barriers or challenges in terms of accessing healthcare services within the university environment. Similarly, a large portion of respondents have experienced

health challenges in the university environment (95.70%), while a small percentage has not (4.30%). This highlights that health issues are prevalent among the respondents within the university setting. Respondents' experiences with scheduling appointments at the UHC vary. A large portion finds it not easy at all (69.53%). Smaller percentages find it quite easy (21.88%), easy (5.86%) and very easy (2.73%). This indicates that there might be challenges in scheduling appointments for healthcare services at the UHC. The wait time to see a doctor or nurse beyond the appointment varies among respondents. The highest proportion waits for 4 hours or more (38.28%). Other wait times include 2 hours (17.58%), 1 hour (30.47%), 30 minutes (8.98%), and 3 hours (4.69%). This indicates that a significant number of respondents experience long wait times, which could potentially impact their overall experience and perception of the healthcare services.

**Table 6:** Experience on their challenges to access health facilities.

| Variables  | Frequency | Percentage |
|--|-----------|------------|
|  | N=256     | P=100      |
| <b>Experienced difficulties in accessing UHC</b>           |           |            |
| Yes  | 244       | 95.31%     |
| No   | 12        | 4.69%      |
| <b>Experience health challenges university environment</b> |           |            |
| Yes  | 245       | 95.70%     |
| No   | 11        | 4.30%      |
| <b>Scheduling appointment at UHC</b>                       |           |            |
| Not easy at all  | 178       | 69.53%     |
| Quite easy   | 56        | 21.88%     |
| Easy   | 15        | 5.86%      |
| Very easy  | 7         | 2.73%      |
| <b>Wait beyond appointment to be see a doctor or nurse</b> |           |            |
| 30 minutes   | 23        | 8.98%      |
| 1 hour   | 78        | 30.47%     |
| 2 hours  | 45        | 17.58%     |
| 3 hours  | 98        | 38.28%     |
| 4 hours and more   | 12        | 4.69%      |

## Test of hypothesis

In Table 7 the decision rule or *chi-square* states that the null hypothesis be accepted if the P value < 0.005. While the alternative be rejected. If P value is > 0.005, the null hypothesis will be rejected and the alternative accepted. In this case the *chi-square* calculated indicates that a significant relationship exists

between user's status and the quality of services they are provided by the Unilag health center because P value is > 0.005, therefore the null hypothesis was rejected while the alternative was accepted.

**Table 7:** There is no significant relationship between user's status and quality of services provided by the health center.

| Medical insurance status as staff or student | Rate of diagnosis process you experienced |               |         |               | Total |
|--|---|---------------|---------|---------------|-------|
|  | Excellent                                 | Above average | Average | Below average |       |
| Yes  | 56  | 79            | 74      | 0             | 209   |
| No   | 0   | 0             | 27      | 20            | 47    |
| Total  | 56  | 79            | 101     | 20            | 256   |

**Note:** X<sup>2</sup>=124.019, P=0.000, Df=3

In Table 8 the decision rule or *chi-square* states that the null hypothesis be accepted if the P value  $< 0.005$ . While the alternative be rejected. If P value is  $> 0.005$ , the null hypothesis will be rejected and the alternative accepted. In this case the *chi-square* calculated indicates that a significant relationship exists between utilization and satisfaction with quality of services

provided by the Unilag health center because P value is  $> 0.005$ , therefore the null hypothesis was rejected while the alternative was accepted.

**Table 8:** There is no significant relationship between utilization and satisfaction with quality of services provided.

| Attendance of the health center | Satisfied with staff skill and competency |           |                |               | Total |
|---------------------------------|---|-----------|----------------|---------------|-------|
|                                 | Very satisfied                            | Satisfied | Less satisfied | Not satisfied |       |
| Very often                      | 45  | 23        | 132            | 6             |       |
| Often                           | 0   | 0         | 0              | 33            |       |
| Less often                      | 0   | 0         | 0              | 17            |       |
| Total                           | 45  | 23        | 132            | 56            | 256   |

Note:  $X^2=221.914$ ,  $P=0.000$ ,  $Df=6$

## DISCUSSION

Generally, the entire hypothesis that was tested was rejected and alternative was accepted. It simply indicates that there exists a relationship between the independent variable and dependent variable. The following are the findings of the study.

The study revealed that the respondent's demographic makeup appears to be primarily composed of young adults in the age range of 20-24 years, predominantly of the Christian religion, with a strong presence of the Yoruba ethnic respondents. Most members of the respondents are single and live on campus. The educational study indicates that a significant portion of the respondents is in advanced stages of their academic journey. The study reflects the diversity and dynamics of a college student population.

The study also revealed that the respondents consist mainly of non-academic staff members with diverse educational backgrounds, including significant percentages with tertiary and postgraduate education. Monogamous marriages are common and most individuals practice the same religion as their partner. The income distribution indicates a moderate-income range and the pattern of residence leans toward shared facilities and flats. Most members of the respondents reside in places with middle-level physical facilities.

The study highlights several aspects of the respondent's healthcare experiences and perceptions. The majority of respondents rate their health positively and a significant portion has visited the Unilag health center. However, reasons for not visiting include a preference for pharmacies, cost concerns and traditional barriers. The frequency of health checkups varies and opinions about the quality of diagnosis, modern equipment and facilities at the health center are diverse among the respondents.

The study also provides insights into the perceptions and experiences of the respondents regarding medical insurance, differences in care, and available resources for well-being, facility comparisons and comfort level when discussing health concerns.

The majorities of respondents have medical insurance and perceive differences in insurance options and the care provided. The respondent's perception of available resources and support for well-being is divided and there is a varied perception of the healthcare facility's performance compared to other hospitals in their area. The comfort level when discussing health concerns shows a slight imbalance toward discomfort. Overall, these insights highlight potential areas for improvement in healthcare services and communication within the respondents.

The study revealed various aspects of patient satisfaction and dissatisfaction within the healthcare facility. There are concerns about staff skills, cleanliness, and efficiency of nursing care, friendliness and cost. Waiting time and cost are prominent dislikes. Additionally, a significant portion of respondents would not recommend the health center to their friends and family. These insights point towards areas that require attention and improvement in order to enhance patient satisfaction and overall quality of care.

The study sheds light on various challenges and experiences related to accessing healthcare services within the university environment. The majority of respondents have faced difficulties accessing the UHC, experience health challenges in the university setting and often deal with academic-related stress. Scheduling appointments can be challenging for a significant portion of respondents and there are notable wait time issues for seeing healthcare professionals beyond scheduled appointments. These insights highlight areas that require improvement to ensure timely and accessible healthcare services for the university community and to address the prevalent academic-related stress and health challenges.

Finally, the study findings revealed the respondents' unanimous agreement to understanding of the factors that contribute to the improvement of a health center. They emphasize the significance of essential facilities, patient engagement, transportation services, modern equipment, skilled staff and access to medication. These opinions highlight the importance of a

comprehensive and patient-centered approach to healthcare, focusing on both physical infrastructure and quality of care.

## CONCLUSION

In conclusion, turning to healthcare, the respondents exhibited generally positive self-rated health and a noteworthy utilization of the university health center. However, considerations of cost and traditional barriers led some to opt for pharmacies. Variability in opinions on health center quality, facilities, medical insurance and resource availability painted a nuanced panorama of perceptions. Patient satisfaction and dissatisfaction highlighted several areas requiring improvement, spanning staff skills, cleanliness, nursing care efficiency, friendliness and cost concerns. Waiting times and expenses emerged as notable sources of discontent, with a substantial portion withholding recommendations for the health center. Navigating healthcare services within the university environment was not without its challenges. Difficulties accessing the health center, coupled with academic-related stress and appointment scheduling issues, spotlighted the urgency of enhancing accessibility and addressing stressors.

Crucially, respondents unanimously converged on key factors contributing to health center improvement. These encompassed essential facilities, patient engagement, transportation services, modern equipment, skilled staff and streamlined medication access. The consensus underscored the pivotal role of a patient-centered approach, emphasizing both the physical infrastructure and the quality of care in creating a well-rounded healthcare environment. Overall, this study's comprehensive exploration provided insights that extend beyond the surface, shedding light on the intricate interplay between socio-economic factors, healthcare experiences and perceptions within a university setting. It serves as a valuable foundation for addressing existing challenges and enhancing the overall well-being of the university community through improved healthcare services and communication strategies.

## AUTHOR'S CONTRIBUTION STATEMENT

The author confirms sole responsibility and contributed to the study conception and design, data collection analysis and interpretation of results and manuscript.

## ETHICS APPROVAL STATEMENT

The research received official approval from the Research Ethics Committee within the department of sociology at the University of Lagos. All procedures conducted during the study adhered strictly to the applicable guidelines and regulations. The data collection instrument underwent a thorough evaluation by the same research ethics committee at the University of Lagos department of sociology, resulting in the granting of approval for the commencement of data collection.

## ETHICAL CONSENT TO PARTICIPATE

The researcher made sure that the respondents gave their consent to participate in the process without feeling pressured. Those who declined to participate were left alone after being verbally asked to do so by the participants. No way of identifying the responders was used. The researcher informed the respondents that only the study assistants who worked on the data collection would see the questionnaires and no one else, including the management, would be able to tell if they were the ones who responded.

## CONSENT FOR PUBLICATION

Not applicable.

## AVAILABILITY OF DATA AND MATERIALS

All data generated and analyzed for the manuscript are available upon request.

## COMPETING INTERESTS

The author declares no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

## FUNDING

The author received no financial support for the research, authorship and/or publication of this article.

## AUTHORS' CONTRIBUTIONS

Not applicable.

## ACKNOWLEDGEMENTS

Not applicable.

## REFERENCES

1. Shah NM, Wang W, Bishai DM. Comparing private sector family planning services to government and NGO services in Ethiopia and Pakistan: How do social franchises compare across quality, equity and cost?. *Health Policy Plann.* 2011;26(suppl1):i63-71.
2. Alsulami Z, Conroy S, Choonara I. Medication errors in the middle east countries: A systematic review of the literature. *Eur J Clin Pharmacol.* 2013;69:995-1008.
3. Shah AM, Mann DL. In search of new therapeutic targets and strategies for heart failure: Recent advances in basic science. *Lancet.* 2011;378(9792):704-712.
4. Kotler P, Shalowitz JJ, Stevens RJ. Strategic marketing for health care organizations: Building a customer-driven health system. John Wiley & Sons. 2011, pp. 9.
5. Abdurraheem BI, Olapipo AR, Amodu MO. Primary health care services in Nigeria: Critical issues and strategies for enhancing the use by the rural communities. *J Public Health Epidemiol.* 2012;4(1): 5-13.

6. World Health Organization. Noncommunicable disease, mental health cluster. Innovative care for chronic conditions: Building blocks for action: Global report. World Health Organization, 2002.
7. Tusubira AK, Akiteng AR, Nakirya BD, Nalwoga R, Ssinabulya I, Nalwadda CK, et al. Accessing medicines for non-communicable diseases: Patients and health care workers' experiences at public and private health facilities in Uganda. PLoS One. 2020;15(7):e0235696.