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ORIGINAL RESEARCH

Healthcare-Seeking Behaviours of Undergraduate Students and Their Perception of Health Services in a Nigerian Private University Health Centre

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Abstract

Background: Health-seeking behaviour is defined as the behaviour of people who malfunction or feel sick to find a suitable treatment. One of the critical factors influencing health-seeking behaviour is the satisfaction obtained from healthcare services, which is often linked to the quality of the service received.

Objective: To assess university students' health-seeking behaviour and perception of healthcare services provided at the Babcock University Teaching Hospital, Ilishan-Remo, Nigeria.

Methods: A descriptive, cross-sectional study of 425 undergraduate students of Babcock University was conducted using a validated structured questionnaire. The socio-demographic characteristics, health-seeking behaviour and perception of available services were analysed using descriptive statistics.

Results: About half of the respondents (50.6%) had poor health-seeking behaviour, and most (68.5%) had a positive perception of the healthcare services rendered by the institution's healthcare facility. Some factors that affected healthcare-seeking behaviour included the non-availability of medications (37.2%), the attitude of healthcare workers (32.5%), and the cost of care (13.6%).

Conclusion: The study demonstrated good health-seeking behaviour and a positive perception of the available healthcare services. However, the factors associated with poor health-seeking behaviour included unavailable medications and the poor attitude of healthcare workers. Regular appraisal and pharmacy restocking should be done to ensure an up-to-date supply of commonly prescribed medications.

Keywords: Healthcare services, Health-seeking behaviour, Nigeria, Perception, Undergraduate students.

Introduction

Health-seeking behaviour is the behaviour of people who malfunction or feel sick to find a suitable treatment. [1] The World Health Organization (WHO) defines health as physical, mental and social well-being, not

mere absence of diseases. [2,3] Students' expectations of university health centres include providing high-quality care that ensures their physical, mental, psychological and financial well-being. [4] Recent studies on patient behaviour have shown that patients expect comfortable and heartfelt contact with

physicians who appear to be professionally competent and who provide appropriate information about their illnesses. [5-7] Some authors suggested that disappointment with these expectations reduces patient satisfaction and the likelihood of sticking to treatment, returning to appointments, or cooperating. [8-9]

Patient delay in receiving health care reduces the inflow of support and affects public health services. This might lead to an increase in the uptake of care from unorthodox or unconventional treatment sources such as public pharmacies, drug vendors, herbal medicine traders, religious or spiritual institutions, and students in health-related disciplines. [10] A study [11] reported that satisfied patients were more likely to "continue to use their health services, receive treatment, have relationships with specific health care providers, and recommend health services to others."

Globally, the literature on the factors influencing health-seeking behaviour in different university population subgroups describes cultural beliefs, socio-demographics, status, women's autonomy, financial status, physical and financial accessibility, illness patterns, and medical problems. [12,13] In developed countries, student beliefs and cultural backgrounds should be emphasised as key factors in sound decision-making. [14] However, a recent multicenter study of factors influencing students in Germany and Hungary emphasised the sociocultural aspect as a determinant of student health-seeking behaviour. [15] The study also revealed that gender and year of study played a minor role in beliefs about health status, health promotion and activities or affairs of college students.

A study on healthcare-seeking behaviour and student perceptions of medical services in a university community in Nigeria found that individual treatment choices depended on the availability of medical services and the perceived severity of the disease. [16] It was also

found that most students used community pharmacies instead of university health centres. [16] Therefore, the present study sought to determine the health-seeking behaviour and perception of university students of healthcare services and to determine barriers to healthcare-seeking among the students of Babcock University Teaching Hospital, Ilishan-Remo, Nigeria.

Methods

Study area

Babcock University is a private, faith-based, co-educational Nigerian university. It is one of the 61 private universities in Nigeria, but it is operated by the Seventh-Day Adventist Church, established on 17 September 1959. The university has its own teaching hospital and health insurance scheme on campus, with fixed payments for tuition per student session and regular deductions from staff salaries. Medical services are provided in this single centre, which includes the accident and emergency department, a general outpatient department, and all surgical and medical subspecialties. The university student population is about 10,103. The university has nine schools and one college. Most students live in dormitories on the campuses with eight male halls of residence and nine female halls of residence, and about 55% of the students' population are female.

Study Design

The study was a descriptive, cross-sectional design; the data was collected over four weeks from January 2022 to February 2022 among undergraduate students across all levels.

Study Population

The target population were undergraduate students of Babcock University. All undergraduate students across all levels of study were included in the study. Postgraduate students and staff were excluded from the study.

Sample size determination

The sample size was calculated using the formula: $n = z^2 (pq) / d^2$

where n = required minimum sample size

z = standard normal deviation of 95% confidence level (1.96)

p = estimated proportion (45.8%)¹⁶

q = 1- p (0.54)

d =margin of error (5%)

$n = (1.96^2 \times 0.46 \times 0.54) / 0.05^2 = 381.7 \approx 382$

A non-response rate of 10% was added to make a total of 420.

Sampling Technique

Multistage sampling was used for sample selection. In the first stage, a simple random sampling technique was used to pick nine halls of residence from a pool of 17 halls. In the second stage, a simple random method was used to select fifty rooms out of 100. Finally, in the third stage, a simple random technique was also used to pick a student in a two-bedded room, two students in a four-bedded room, or one student in a single-bedded room.

Data Collection

Data were collected using a self-administered questionnaire. The questionnaire had six sections. Section A had 13 items on socio-demographics and self-medication practices. Section B had six items on the patronage of different types of healthcare services in the university. Section C had six items on the perceived barriers to healthcare-seeking at the university health centre, and section D had five items on the delay experiences at the various service delivery points in the university health centre. Section E had 23 items that examined the respondents' perception of service delivery points. In comparison, section F had four items that assessed the respondents' general perception of service delivery points at the university health centre.

Data analysis

Data were entered into a computer and cleaned, collated and analysed using the Statistical Package for Social Sciences (SPSS)

version 22. Descriptive statistics were used to analyse socio-demographic characteristics, health-seeking behaviour and perceptions. The health-seeking behaviour of the respondents was scored as follows: [See appendix for a copy of the questionnaire] Question 12 from section A (zero for correct scores 0 and one for incorrect scores) and the Likert scoring system was applied in section B with a score of 5 for 'Every time' and a score of 1 for 'never' for Doctor's clinic and pharmacy shop respectively, and vice-versa for the other questions (healthcare seeking behaviour). The respondents' perception of service delivery was also scored as follows: sections E and F were scored using the Likert scoring system, with 'Strongly agree' scoring 5 and "I can't say" scoring 1.

Ethical Approval

Ethical approval was obtained from Babcock University Health Research and Ethics Committee (BUHREC 21/865). Informed consent was also obtained from each respondent at the study's commencement.

Results

The majority of the respondents (95.3%) were aged between 18 and 22 years, females (72.9%), single (92.5%) and Christians (70.4%). About one-fifth (20.7%) of the respondents were medical students, while a little above half (53.1%) were Yoruba, and 40.7% were in 100-level of study (Table I). About a quarter of the respondents (22.8%) had a medical condition (11% were asthmatic), (50.6%) spent about 2000-3000 Naira on out-of-pocket expenses for medications in three months and (72.2%) self-medicated (Table II).

The scoring of the level of healthcare-seeking behaviour showed that 49.4% of the respondents had good behaviour compared to 50.6% who had poor behaviour. Most respondents (81.9%) stated that the cost of care was never a barrier to seeking health care, while 27.3% claimed that waiting time was a barrier.

Table I: Socio-demographic characteristics of the respondents

Variable	Frequency (n=425)	Percentage
Age group		
18- 22 years	405	95.3
23-26 years	20	4.7
Gender		
Male	115	27.1
Female	310	72.9
Departments		
Physical sciences	146	34.4
Medicine and Surgery	88	20.7
Social sciences	75	17.6
Nursing Science	65	15.3
Arts	51	12.0
Religion		
Christianity	299	70.4
Islam	125	29.4
Traditional	01	0.2
Ethnicity		
Yoruba	226	58.6
Igbo	114	26.8
Hausa	61	14.4
Others	01	0.2
Level of study		
100 level	173	40.7
200 level	38	8.9
300 level	77	18.1
400 level and above	137	32.3
Marital status		
Single	393	92.5
Married	32	7.5

Other barriers to good health-seeking behaviour included lack of sufficient information (49.9%), the attitude of the workers (32.5%) and out-of-stock medicines (37.2%) (Table III).

Most (77.2%) of the respondents strongly agreed that medical doctors made appropriate diagnoses of illnesses, and 68.0% strongly agreed that the consulting time with a doctor was adequate. However, most respondents (63.5%) strongly agreed that seeing doctors during off-peak periods was difficult. The respondents (68.5%) strongly agreed that their medication needs were met at the pharmacy, and 72.9% agreed that the pharmacy staff were courteous. Respondents (77.4%) strongly

agreed that the services in the medical laboratory were adequate. All the respondents strongly agreed that waiting time was long at the medical records department, and 91.1% strongly agreed that the retrieval (filing) system was inadequate in the medical records unit, as shown in Table IV. Most (68.5%) respondents had a positive perception of service delivery points at the University Health Centre (Table V).

Discussion

This study revealed that most respondents belonged to the 18-22 age group. Females

dominated, as observed in the general population of the university. This is similar to a study among university students in Lebanon [4], where most respondents were also females. [4]

As a southwestern state, the Yoruba tribe dominated the population, and Christians constituted more than a third (70.4%) of the respondents.

Table II: Factors influencing health care seeking behaviour

Variable	Frequency(n=425)	Percentage (%)
Any medical Conditions		
Yes	97	22.8
No	328	77.2
If yes to the question above / please state the medical condition		
Asthma	47	11.0
Ulcer	40	9.4
Allergies	10	2.4
Out-of-pocket expenses on medications in 3 months		
2000-3500	215	50.6
Above 3500	210	49.4
Self-medication		
Yes	387	91.1
No	38	8.9
The initial choice of care during ill health		
Self-medication with over counter	289	68.0
Visit the health centre	387	91.1
Patent medicine sellers	53	12.5
Pharmacy	367	86.4
Consultation with students in health-related academic programs	35	8.2
Use of herbal remedies	157	36.9

Table III: Perceived barriers to health care seeking at the university health centre (n = 425)

Variable	Every time	Very Often	Often	Rarely	Never
Cost of care	58 (13.6)	0 (0.0)	0 (0.0)	19 (4.5)	348 (81.9)
Waiting time	19 (4.5)	116 (27.3)	58 (13.6)	232 (54.6)	0 (0.0)
Lack sufficient information	19 (4.5)	212 (49.9)	0 (0.0)	175 (41.2)	19 (4.5)
Accessibility (distance)	0 (0.0)	57 (13.4)	117 (27.5)	232 (54.6)	19 (4.5)
Attitude (of workers)	138 (32.5)	96 (22.6)	114 (26.8)	39 (9.2)	38 (8.9)
Medicines out of stock	158 (37.2)	57 (13.4)	133 (31.3)	19 (4.5)	58 (13.6)

Figures in parentheses are percentages of the respective row.

About half of the respondents (50.6%) had poor health-seeking behaviour. This relatively low level of good health-seeking behaviour may primarily be due to the students volunteering to consult alternatives other than the

University's health care centre. This is similar to a study in Lebanon that reported that only 35.7% of the respondents sought formal healthcare from a physician or a health facility. [4] This finding is similar to a Nigerian study

that documented students consulted their peers in health-related academic disciplines rather than the university health centre. [16]

Table IVa: Respondents' perception of service delivery points at the University Health Centre (n = 425)

<i>Variable</i>	<i>Strongly Agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly Disagree</i>	<i>I Can't Say</i>
<i>Medical services</i>					
Appropriate diagnosis of illness	328 (77.2)	78 (18.4)	0 (0.0)	0 (0.0)	19 (4.5)
Personal choice of Doctor to consult	214 (50.4)	192 (45.2)	19 (4.5)	0 (0.0)	0 (0.0)
Consulting time with a doctor is adequate	289 (68.0)	117 (27.5)	0 (0.0)	19 (4.5)	0 (0.0)
Doctors need continuing education	175 (41.2)	212 (49.9)	0 (0.0)	0 (0.0)	38 (8.9)
Need more experienced doctors	231 (54.4)	137 (32.2)	19 (4.5)	38 (8.9)	0 (0.0)
You can almost predict what the Doctor will prescribe	156 (36.7)	231 (54.4)	19 (4.5)	19 (4.5)	0 (0.0)
Doctors' clinical judgment can be trusted	232 (54.6)	155 (36.5)	19 (4.5)	19 (4.5)	0 (0.0)
Doctors are approachable	157 (36.9)	230 (54.1)	19 (4.5)	0 (0.0)	19 (4.5)
Excessive waiting time to see the Doctor	310 (72.9)	96 (22.6)	0 (0.0)	19 (4.5)	0 (0.0)
Doctors' consulting hours of service are acceptable	234 (55.1)	172 (40.5)	19 (4.5)	0 (0.0)	0 (0.0)
Difficult to see a doctor during an off-peak period	270 (63.5)	155 (36.5)	0 (0.0)	0 (0.0)	0 (0.0)
<i>Pharmacy Services</i>					
Medicine needs are met	291 (68.5)	134 (31.5)	0 (0.0)	0 (0.0)	0 (0.0)
Quality medicine dispensed	157 (36.9)	230 (54.1)	19 (4.5)	19 (4.5)	0 (0.0)
24-hour service is welcome	193 (45.4)	156 (36.7)	57 (13.4)	19 (4.5)	0 (0.0)
Pharmacy staff are courteous	58 (13.6)	310 (72.9)	19 (4.5)	38 (8.9)	0 (0.0)
The waiting area at the pharmacy is convenient	173 (40.7)	195 (45.9)	38 (8.9)	0 (0.0)	19 (4.5)
Pharmacy staff demonstrate competence	156 (36.7)	231 (54.4)	38 (8.9)	0 (0.0)	0 (0.0)

Table IVb: Respondents' perception of service delivery points at the University Health Centre

<i>Variable</i>	<i>Strongly agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly disagree</i>	<i>I can't say</i>
<i>Nursing Services</i>					
Promptness of Services	212 (49.9)	174 (40.9)	20 (4.7)	19 (4.5)	0 (0.0)
Delay in administering an injection	174 (40.9)	174 (40.9)	77 (18.1)	0 (0.0)	0 (0.0)
Courteous	193 (45.4)	117 (27.5)	58 (13.6)	38 (8.9)	19 (4.5)
<i>Medical Laboratory Services</i>					
Service is adequate	329 (77.4)	20 (4.7)	38 (8.9)	38 (8.9)	0 (0.0)
Medical Records Department					
Excessive waiting time	329 (77.4)	29 (6.8)	7 (1.6)	60 (14.11)	0 (0.0)
The retrieval (filing)system is not adequate	387 (91.1)	38 (8.9)	0 (0.0)	0 (0.0)	0 (0.0)

Babcock University incorporates a mandatory medical insurance scheme which enables its students to utilise a certain level of healthcare services, including emergency medical services. Indeed, these students do not need to pay for services in most cases, unlike some other universities that do not adopt this

healthcare financing method. [4] Again, this is bolstered by the out-of-pocket expenses by the students during a semester, as half spent as much as Three Thousand Five Hundred Naira (N3,500) on medications. This is similar to another Nigerian study that reported that most (60%) respondents spent less than 10 USD on

medications. [16] The remaining fraction was used to purchase prescribed medications not covered by health insurance or available in the University's hospital. Further, in public institutions, students are exposed to multiple sources of healthcare, enabling switching among the various alternatives if one fails to meet their needs. Therefore, such students significantly visit pharmacies, the university health centre and patent medicine vendors. [16,17] A few students (4.7%) preferred to consult

religious leaders for spiritual healing in times of ill health. This is similar to the 11.1% observed in a similar study. [16] The role of spirituality in ensuring the wholeness of health must be balanced. [18] To this end, Babcock University has an elaborate social and religious support system for the sick. Nevertheless, balancing seeking medical care and spirituality is crucial, as tending solely to the latter will be presumptuous.

Table V: Scoring of the respondents' perception of service delivery points at the University Health Centre

Score	Frequency	Percentage	Remarks
102-115	291	68.5	Positive
0-101	134	31.5	Negative

Mean Score= 101.3±8.3

Overall, 68.5% of the respondents had a positive perception of service delivery at the University health centre. Most respondents reported that the doctors made appropriate diagnoses, their medical needs were met, and the medical laboratory services were adequate, as opposed to a similar study which reported that their health needs were not met and the laboratory services were inadequate. [16] However, most respondents complained of long waiting times at the medical records department due to filling and file retrieval system delays in agreement with previous reports. [16]

Specific barriers to healthcare seeking among the respondents in this study included non-availability of medications, long waiting times, and a high cost of care. Similar studies reported that the cost of care, long waiting time, lack of sufficient information on medicine use, poor attitude of health personnel, and shortage of prescribed medicines are perceived barriers to adequate patronage of healthcare facilities among university students. [16,19]

In this study, the medical records department posed the most significant delay in administering healthcare services. In a similar study, the doctors' consulting room and the

medical records unit posed the most significant delay; nursing services were, however commended for their promptness [16]. Prolonged waiting times in health centres have been shown to significantly affect patients' attitudes toward return visits, as they would instead consult pharmacies and other alternative healthcare facilities to bypass this delay. [16, 20, 21] Prolonged waiting time has been reported as the top reason for not seeking care in some health facilities. [20]

Conclusion

Although most of the students visited the university's health centre, the good health-seeking behaviour of the respondents could have been better despite the highly positive perception. The significant barriers to good health-seeking behaviour were the long waiting time at the medical records, non-availability of medications and poor attitude of health workers to students. Adopting an electronic medical record system (EMS) will help reduce the long waiting time and ensure prompt healthcare service delivery. At the same time, regular appraisal and restocking of the pharmacy's medications should be done to

ensure an up-to-date supply of commonly prescribed medications.

Authors' Contributions: BEF and AC conceptualised and designed the study, while EJC, TAA, WGO, UCU, and OTO made data analysis and interpretation. BEF and EJC drafted the manuscript. AC, TAA, WGO, and UCU revised the draft manuscript. All the authors read and approved the final version of the manuscript.

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APPENDIX: QUESTIONNAIRE

STUDY TITLE: HEALTH SEEKING BEHAVIOUR AND PERCEPTION OF BABCOCK UNIVERSITY UNDERGRADUATE STUDENTS TO HEALTHCARE SERVICES RECEIVED AT BABCOCK UNIVERSITY TEACHING HOSPITAL

INSTRUCTIONS: PLEASE FILL IN THE GAPS AND CIRCLE EITHER YES OR NO WHERE NECESSARY

SECTION A: SOCIODEMOGRAPHIC DATA

1. Age
2. Gender (a) Male (b) Female
3. Faculty
4. Hall of Residence
5. Religion
6. Ethnicity
7. Level of Study (a)100 (b) 200 (c) 300 (d) 400 (e) 500 (f) 600
8. Marital Status
9. Any medical Conditions (Yes) (No)
10. If yes to the question above / please state the medical condition(s).....
11. Out-of-pocket expenses: how much do you spend on medications in three months (one semester)
12. Do you self-medicate? Yes / No
13. Initial choice of care during ill health are:

Select the ones that apply to you:

- a) Self-medication with over-counter medications from neighbours or friends
- b) Visit to health centre
- c) Patent medicine sellers
- d) Pharmacy
- e) Consultation with students in health related academic programmes
- f) Use of herbal remedies

SECTION B

Table 2. Frequency of patronage of different types of healthcare services in the university

Types of health care services	Every time	Very often	Often	Rarely	Never
Doctor's clinic					
Pharmacy shop					
Patent Medicine vendor					
Traditional healer					
Spiritual care (religious)					
Medical Students					

Table 3: Perceived barriers to health care seeking at the university health centre

Perceived barriers	Every time	Very often	Often	Rarely	Never
Cost of care					
Waiting time					
Lack sufficient Information					
Accessibility (distance)					
Attitude (of workers)					
Medicines out of stock					

Table 4. Delay experiences at service delivery points in the University Health Centre

Service delivery points	Every time	Very often	Often	Rarely	Never
Medical records					
Doctor's clinic					
Pharmacy					
Diagnostic Lab.					
Nursing unit					

Table 5. Respondent's perception of service delivery points at the University Health Centre

Service units	Strongly agree	Agree	Disagree	Strongly disagree	I can't say
Appropriate diagnosis of illness					
Personal choice of doctor to consult					
Consulting time with doctor is adequate					
Doctors need continuing education					
Need more experienced doctors					
You can almost predict what the doctor will prescribe					
Doctors' clinical judgment can be trusted					
Doctors are approachable					
Excessive waiting time to see the doctor					
Doctors consulting hours of service are acceptable					
Difficult to see a doctor at off-peak period					
Pharmacy Services					
My medicine needs are met					
Quality medicine dispensed					
24-hour service is welcome					
Pharmacy staff are courteous					
The waiting area at the pharmacy is convenient					
Pharmacy staff demonstrate competence					
Service units	Strongly agree	Agree	Disagree	Strongly disagree	I can't say
NURSING SERVICES					
Promptness of Services					
Delay in administering an injection					
Courteous					
MEDICAL LABORATORY SERVICES					
Service is adequate					
MEDICAL RECORDS DEPARTMENT					
Excessive waiting time					
The retrieval (filing) system is not adequate					

Table 6. Respondents' general perception of service delivery points at the University Health Centre

Service units	Strongly agree	Agree	Disagree	Strongly disagree	I can't say
You need to know someone for prompt action					
Poor administration of facility					
Need to reorganize the departments					
Services are generally satisfactory					