UNDERGRADUATES STUDENTS' PERCEPTION OF QUALITY AND UTILIZATION OF HEALTH CARE SERVICES AT THE UNIVERSITY OF BENIN HEALTH CENTER

BY

AIGBE KELVIN OMOSEFE

MED1505159

AKINBOBOLA MARCUS FEMI

MED1404672

DEPARTMENT OF PUBLIC HEALTH AND COMMUNITY MEDICINE,

SCHOOL OF MEDICINE, COLLEGE OF MEDICAL SCIENCES,

UNIVERSITY OF BENIN, BENIN CITY,

EDO STATE, NIGERIA.

SUPERVISED BY

PROF. VIVIAN OMUEMU

FEBRUARY, 2024

UNDERGRADUATES STUDENTS' PERCEPTION OF QUALITY AND UTILIZATION OF HEALTH CARE SERVICES AT THE UNIVERSITY OF BENIN HEALTH CENTER

BY

AIGBE KELVIN OMOSEFE

MED1505159

AKINBOBOLA MARCUS FEMI

MED1404672

BEING A ONE-YEAR PROJECT PRESENTED TO THE DEPARTMENT OF PUBLIC HEALTH AND COMMUNITY MEDICINE, COLLEGE OF MEDICINE, UNIVERSITY OF BENIN, BENIN CITY, EDO STATE, NIGERIA

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF BACHELOR OF MEDICINE AND BACHELOR OF SURGERY (MBBS), IN THE UNIVERSITY OF BENIN, BENIN CITY

FEBRUARY, 2024

DECLARATION

We hereby declare that this project work titled "Undergraduates Students' Perception Of Quality and Utilization of Health Care Services at the University Of Benin Health Center'' was conducted under the supervision of Professor Vivian Omuemu and has not been submitted or published anywhere else for the award of a degree, certificate or for any other purpose.

_____

AIGBE KELVIN OMOSEFE

MED1505159

09136392989

kelvin.aigbe77@gmail.com

_____

AKINBOBOLA MARCUS FEMI

MED1404672

08146247221

marcusfemi31@gmail.com

CERTIFICATION

This is to certify that this research work titled "**UNDERGRADUATES STUDENTS' PERCEPTION OF QUALITY AND UTILIZATION OF HEALTH CARE SERVICES AT THE UNIVERSITY OF BENIN HEALTH CENTER** was conducted by **AIGBE KELVIN OMOSEFE** with matriculation number **MED1505159** and **AKINBOBOLA MARCUS FEMI** with matriculation number **MED1404672** under the supervision of Professor Vivian Omuemu in the Department of Community Health, College of Medicine, University of Benin, Benin City as part of the requirements for the award of Bachelor of Medicine, Bachelor of Surgery (MBBS).

_____

Supervisor

PROF. VIVIAN OMUEMU

MBBS, MPH, MD, FMCPH, FWACP

Professor/Consultant

Department of Community Health,

School of Medicine,

University of Benin,

Benin City, Edo State, Nigeria

_____

Head of Department

DR. A.I. OBI

MBBS, MPH, FMCPH, CERT,

EPID. (NORTH CAROLINA)

Associate Professor/Consultant

Department of Community Health

School of Medicine,

University of Benin,

Benin City, Edo State, Nigeria.

DEDICATION

This project is dedicated to the Almighty God, whose infinite grace, mercy, and strength sustained us from the inception of this project to its completion. Additionally, we dedicate this project to our dear parents, siblings, and friends.

ACKNOWLEDGEMENT

We are grateful to the Department of Public Health and Community Medicine, School of Medicine, University of Benin for giving us the opportunity to carry out this research. We wish to express our special gratitude to our supervisor, Prof. Vivian Omuemu for her kindness, sacrifice, patience, guidance and support in the supervision of our project.

AIGBE KELVIN OMOSEFE

I would like to thank God almighty for his grace and guidance throughout the course of this project. To my distinguished parents BARR and BARR MRS AIGBE for their unwavering support throughout the course of this one year project and of course my journey as a student. I also wish to acknowledge, my sister Amadin Aigbe and my brother Marvin Aigbe, for their support emotionally, financially physically and otherwise.

More so, I want to specially thank my friends, Amaka Chegwe, Ebede Chinedu, Dr Cj, and a few others too numerous to mention, Marcus Femi my project partner a good team player thank you too.

Lastly, I want to thank myself for believing in me and pushing me past my comfort zone to achieving this feet.

AKINBOBOLA MARCUS FEMI

I give God the all the glory for standing behind me all through this journey. I am grateful to my parents for their unwavering support, to Mummy(who took like her own son), to my beloved sister (Stella), to my Cousin bro Toye(always a shoulder to lean on), to Mr Akinsanmi, pastor Babatunde, Mrs Folorunsho, Mrs Makinwa, Reverend Father Adodo the list is endless. I will also want to appreciate my Supervisor, Prof. Mrs Omuemu for her motherly guidance all through this work and my partner Aigbe for staying strong for me. Thank you all for making this journey a success.

LIST OF ABBREVIATION

COVID-19: Coronavirus Disease 2019

HIV: Human Immunodeficiency Virus

SARS-CoV-2: Severe Acute Respiratory Syndrome Coronavirus 2

UNIBEN: University of Benin

WHO: World Health Organization.

DEFINITION OF TERMS

COVID-19 Pandemic: a global health crisis caused by the novel coronavirus (SARS-CoV-2) that emerged in late 2019, leading to widespread illness, social disruptions, and public health measures to contain the virus

Knowledge Gaps: missing or incomplete information or understanding in a particular area of study or research

Morbidity Rates: frequency or prevalence of a specific illness or health condition within a population, often expressed as the number of cases per unit of population over a specific time period

Primary Health Care: essential healthcare based on practical, scientifically sound, and socially acceptable methods and technology made universally accessible to individuals and families in the community

Psychosocial: relating to the interplay between psychological factors (mental and emotional) and social factors in a person's life, often used to describe health issues influenced by both

ABSTRACT

Background: Undergraduate students are the upcoming workforce of any country and their health is essentially linked to the social and economic development of the country. Health-seeking behaviour and health outcomes are shaped by socio-cultural beliefs, accessibility, cost and perceived quality of available health services and these affect health outcomes and indices. This study aimed at assessing the perception of, satisfaction with, major barriers to utilization, major health conditions prompting utilization of on-campus health services and factors influencing use of alternative sources of healthcare.

Methods: The study was a descriptive cross-sectional study carried out among undergraduate students of University of Benin, Benin, Edo State, Nigeria. A sample size of 430 was obtained, and a multistage sampling technique was used to select respondents. A self-administered questionnaire was used to collect the data for the study after pretesting. Data was analysed using the Statistical Package for Social Sciences (SPSS) version 25 and the level of statistical significance was set at $p<0.05$.

Results: The mean age of respondents was 23.0 ± 3.2 years. A higher proportion, 52.8% were male, Christians (58.1%) and single (67.7%). Out of 430 respondents, 61.4% resided off-campus, 52.6% received a monthly allowance of between 50,001 to 100,000 naira and 73.5% received support from their parents. From the responses, 41.4% had received care at the health center in the past year and were most commonly by joint pain (21.9%), fever (15.7%) and headaches (11.8%). Ninety-five percent and 99.0% had a good perception of health center and were satisfied with the services provided there respectively. Common barriers to seeking health care at the center were long waiting time (37.4%), out-of-pocket payments (17.9%).

Conclusion: The study showed that there was a good perception of the health center and respondents were satisfied with services at the health center.

Recommendations: The government should strengthen implementation of the Tertiary Institutions' Social Health Insurance Programme (TISHIP) of the National Health Insurance Scheme(NHIS) at the health center, increase public-private partnership to reduce health cost and encourage local production of pharmaceuticals. The health center should improve awareness of service at the center, increase number of staff and strengthen existing programmes.

Keywords: Perception, Quality, Satisfaction, Undergraduate, Utilization, UNIBEN Health center.

Word count: 363

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND

Health is essential for social and economic development of a country. The socio-cultural belief about the causation of disease and its curability has direct correlation with the treatment seeking behavior of an individual.[1] It has been observed that the timely intervention on major health problems will reduce the mortality and morbidity rates, but this is challenging in African countries where the ill often never have access to formal health care services and most deaths occur at home.[2]

Notwithstanding the implementation of Primary Health Care to bridge the gaps between availability and utilization of health care services, the overall outpatient utilization of health care services in Nigeria remains low when compared with other sub-Saharan African countries (e.g 28.3% in Eritrea, 43% in Kenya, 73% in Senegal, and 75% in Malawi).[3] The decision to seek help, where the help will come from and the quality of the health services provided in relation to health is influenced by so many factors such as; individual's educational and economic status, severity of the symptoms of illness, sociocultural influences, distance, and quality of health care facilities.[1]

Young people have specific health problems and developmental needs that differ from those of children and adult. The causes of ill health in adolescents are mostly psychosocial rather than biological. Young people often engage in health risk behaviors that reflect the processes of adolescent development: experimentation and exploration, including using drugs and alcohol, sexual behaviour.[1,4]

It is in the light of the foregoing that this research was necessitated to investigate various health seeking behaviours and the perception of the quality of health services provided exhibited by undergraduates in the University of Benin in their quest to be healthy. In order to ensure the great advantage of university, students should have healthy minds and healthy bodies. Hence, university administrators developed health care services to meet students' physical and mental health needs.[5] A cross-sectional study of 250 undergraduates found that approximately 45.8% of the students visited the university health care centre.[6]

Several health conditions were identified by students in previous literature that promote students' utilisation of health care services; these were fatigue, headaches and allergies.[7] In Africa, additional health conditions such as malaria, typhoid and stomach pains were also reported. However, university students identify some barriers that affect their utilisation of health care centre services; these are the cost, waiting time, insufficient health information, unfriendly attitude of health care employees and medication shortage.[8,9] Regardless of the driving and hindering forces behind the utilisation of health care services, university students' level of satisfaction varied greatly; while 63% of Malaysian university students were dissatisfied, the Nigerian students were satisfied.[8,10,11]

The major barriers to accessing health services among students range from socio-cultural factors to social networks, gender and economic status. Others include concerns about confidentiality, embarrassment in disclosing health issues, absence of health insurance document or limited financial accessibility, low knowledge of existing services and lack of trust in health professionals. [12,13,14,15] Relevant data on health seeking behaviour and health care use has important policy implications in every health system development.[13,16] The perception and view

that university students are exposed to a wide range of obstacles that may affect their health behaviour or need is increasing.

Few studies have systematically examined the perception of undergraduate students in accessing health care within the school environment. As it is known that every university has its own health centre, where students seek first hand health service. Students encounter problems while making attempts to access health care in the university health care; the challenges usually encountered have implications on their level of utilization and hence, it tends to affect their perception.[8] Most studies on health-seeking behavior among university students were conducted in developing and under-developed countries, but such studies are limited among universities in West Africa. However, it is important to note that, such studies aim to provide information for policy and health care providers to educate and assist this population group on appropriate health seeking behaviour which will eventually impact positively on their academic performance and quality of life.[13,14,17] In a study conducted on daily nutrition of university students that lived away from their families, different factors have been attributed to health behaviour of most university students. Life-style choices, health beliefs and resource availability affect the health perception and behaviour of individuals. It is thereby essential to assess the utilisation of university health care services among undergraduate students of Nigerian universities.[18]

The quality of health services for undergraduates since the COVID-19 pandemic appears to be a critical concern, given the significant impact of the pandemic on their mental health and quality of life. The closure of academic institutions as a preventive measure against the virus has left students isolated, fearful, and lacking proper knowledge about SARS-CoV-2, leading to mental health disorders. Research has shown that factors such as sociodemographic characteristics, physical symptoms, family support, history of COVID-19, comorbid diseases, vaccination status,

and more are related to the mental health and quality of life of students. However, the extent to which health services are effectively addressing these challenges and providing adequate support to mitigate the negative impact on students' mental health and quality of life remains a crucial area for further investigation and intervention.[19]

The perception of health services by undergraduates within the university community is influenced by factors such as accessibility, cost, quality, and the availability of alternative healthcare options. These factors shape how undergraduates view and utilize healthcare services, including the university health center, and may lead some students to seek alternatives due to perceived shortcomings in the university's health center services.[9]

1.2 STATEMENT OF PROBLEM

Insufficient information exists regarding students' attitudes and satisfaction levels towards the health services provided by their university's health centers. This lack of data hampers efforts to understand students' perceptions and experiences with the campus health center and limits the ability of university administrators and healthcare providers to identify areas for improvement and cater services to meet students' needs effectively. Additionally, there is a noticeable difference in health-seeking behavior between fresh (new) students and old (continuing) students at the university. New students, being new to the university environment, may encounter various challenges as they adjust to academic life, social interactions, and living away from home. During this transition, they may be less familiar with campus facilities, including the campus health center, leading them to rely on it more frequently when facing health issues. On the other hand, continuing students have had more time to become acquainted with the university environment and available resources. As they progress in their studies, some may have established alternative healthcare options outside the campus, resulting in reduced reliance on the campus health center for routine health concerns.[19]

Findings have indicated that healthcare facilities in universities are inadequate. Many of these facilities lack the necessary medical equipment and resources to effectively handle chronic and degenerative diseases like diabetes, asthma, and hepatitis, among others. Moreover, there is a shortage of essential drugs to treat infectious diseases such as malaria, typhoid, and dysentery, which further hampers the ability of university health centers to meet the diverse health needs of students. One of the main challenges faced by these health centers is funding issues. The poor financial support received by most universities in Africa, including Nigeria, directly impacts the resources allocated to their health centers, making them ill-equipped to address the growing

healthcare demands of the student population. Consequently, the university health care centers encounter difficulties in providing adequate and comprehensive healthcare services to students. Another issue is overcrowding and limited resources at the health care centers. The increasing student population has led to a scarcity of bed space and insufficient personnel, resulting in delays in attending to patients, especially students seeking medical attention. Additionally, poor data recording of reported illness cases further hinders the health centers' ability to efficiently manage and track student health needs. These combined deficiencies create barriers for students to access timely and quality healthcare services, negatively impacting their overall well-being and perception of the university's healthcare system. Addressing these challenges is crucial to ensure that students receive the necessary healthcare support during their academic journey.[1]

Barriers to seeking appropriate healthcare at the university health center exist, stemming from factors such as students' lack of awareness about available services, negative perceptions of service quality, potential stigma associated with seeking care, accessibility challenges due to distant locations, financial constraints, and personal preferences for alternative sources of healthcare. There is also absence of data regarding students' perspectives and opinions on the healthcare services provided at the university health center. Without such knowledge, it becomes challenging for the university authorities to assess the strengths and weaknesses of the health center and identify areas for improvement. There is also a lack of empirical data concerning the level of patronage of alternative sources of healthcare among students. These alternative sources could include community pharmacies, drug peddlers, herbal medicine, religious or spiritual care organizations, and even students in health-related academic disciplines. Without concrete data on the extent to which students are availing these alternative healthcare options, it becomes challenging to understand the factors driving their preferences and choices.[9]

A lack of information on the main health conditions driving university students to utilize healthcare services poses challenges for administrators in effectively planning and allocating resources. This deficiency can lead to inefficient healthcare services that do not adequately address students' actual needs, resulting in a mismatch between available services and the demands of the student population. Identifying key health conditions that promote healthcare utilization is crucial for implementing preventive measures such as health education, vaccinations, and screenings. Without this knowledge, opportunities for preventive interventions may be missed, allowing potential health issues to worsen and go untreated until they become more severe. Additionally, a lack of understanding about the main health conditions driving students to seek healthcare can lead to inefficient resource allocation at university health centers. For example, if the center is ill-equipped to handle prevalent health conditions among students, long waiting times and reduced satisfaction with the provided services may result. These health issues can significantly impact students' academic performance as certain conditions left unaddressed may affect their ability to focus on studies, attend classes regularly, and perform well in exams.[18]

University students often harbor significant health concerns that remain hidden and under-diagnosed, which can lead to serious consequences. Focusing on academic and social commitments might cause them to overlook early warning signs of potential health issues, resulting in complications and increased treatment costs later on. Mental health problems, such as depression and suicidal thoughts, are particularly worrying if left unaddressed, affecting various aspects of a student's life, including relationships, physical health, and overall well-being. Additionally, students' reluctance to seek help for their health concerns due to stigma,

embarrassment, fear of judgment, lack of awareness, financial constraints, and trust issues creates barriers to accessing necessary health services and support.[20]

1.3 JUSTIFICATION OF STUDY

This research is essential because understanding students' attitudes towards the campus health center and potential disparities in health-seeking behavior between fresh and old students can lead to valuable insights that can improve healthcare services on campus. Also by conducting this study, we can fill these knowledge gaps and gain valuable insights into students' experiences, preferences, and concerns related to healthcare utilization on campus. This knowledge is vital for identifying areas for enhancement and implementing evidence-based strategies to improve healthcare services and support students' well-being and academic success.[19] The study on the issues related to inadequate health care facilities, funding challenges, and overcrowding with inadequate resources at the university health care center is of utmost importance. By exploring these aspects, valuable insights can be gained to enhance the overall health care experience for undergraduate students. Understanding the extent of underequipped health centers, lack of essential medical equipment, and drug shortages is crucial for implementing targeted improvements and securing adequate resources. Investigating funding issues will shed light on the impact of financial support on health care services and identify potential avenues for increased investment. Moreover, examining the effects of overcrowding, limited bed space, and insufficient personnel will help optimize patient management and reduce waiting times.[1] Investigating the level of patronage of alternative sources of healthcare is essential to comprehend the diverse healthcare preferences and choices made by students. Understanding these preferences is vital for developing effective healthcare services that cater to the specific needs of the student population. Also, evaluating the impact of service delivery on the utilization

of the university health center provides valuable insights into the effectiveness and efficiency of the health center's operations. This allows for targeted improvements, enhanced patient experiences, and optimized resource allocation, ultimately benefiting the overall health and well-being of students. Identifying barriers to seeking appropriate healthcare at the university health center is crucial to remove obstacles that deter students from accessing timely and quality healthcare. Addressing these barriers can improve healthcare utilization within the university community, ensuring a healthier and more resilient student population.[9] Understanding the main health conditions that drive University students to utilize health care services is crucial for optimizing healthcare planning and resource allocation. Identifying prevalent health issues can also facilitate the implementation of targeted preventive measures, reducing the burden of certain health conditions. Moreover, knowledge of these health conditions can lead to the development of customized interventions, ensuring students receive appropriate and timely medical attention. Overall, conducting a comprehensive study to identify the primary health conditions promoting utilization will enable the university to enhance its healthcare services, prioritize preventive strategies, and ultimately support the well-being and academic success of its student population.[18] By understanding the prevalence and nature of concealed health concerns, healthcare providers and policymakers can develop targeted interventions and support systems to promote early detection and appropriate management. This can lead to improved overall health and well-being for students, fostering a healthier university community. Additionally, investigating the difficulty students face in asking for help regarding their health concerns is crucial for designing strategies that encourage a more open and supportive campus environment. Identifying the underlying factors contributing to this difficulty can help in awareness campaigns, reduce stigma, and improve access to confidential and reliable healthcare services. Creating a

culture that encourages seeking help when needed can lead to better health outcomes and academic performance, contributing to a positive and thriving educational experience for university students.[20]

1.4 RESEARCH QUESTIONS

1. How do undergraduate students at the University of Benin perceive the health care services on campus?

2. What are the factors associated with undergraduate students' perception of services at the University of Benin health center?

3. How satisfied are undergraduate students with the overall experience of using health care services at the University of Benin, and what factors contribute to their satisfaction?

4. What are the main health conditions that prompt undergraduate students' utilization of health care services at the University of Benin?

5. To what extent do undergraduate students at the University of Benin utilize alternative sources of healthcare, and what factors influence their preferences for these alternatives?

1.5 OBJECTIVES

1.5.1 GENERAL OBJECTIVES

To assess undergraduate student's perception of quality and utilization of health care services at the UNIBEN health center

1.5.2 SPECIFIC OBJECTIVES

1. To determine major health conditions that prompt undergraduate students' utilization of health care services at the University of Benin are.

2. To assess the perception of undergraduate students at the University of Benin on the health care services on campus.

3. To identify how satisfied undergraduate students are with the overall experience of using health care services at the University of Benin, and what aspects contribute to their satisfaction.

4. To identify the major barriers that undergraduate students face in seeking appropriate healthcare at the University of Benin's health center.

5. To determine factors that influence choice of alternative sources of healthcare among undergraduate students at the University of Benin.

CHAPTER TWO

LITERATURE REVIEW

This chapter will explore past studies and various literature related to the perception of and students' satisfaction with the experience at the university health care services. Studies that assessed the major health conditions prompting students' utilization of and barriers to utilizing the university clinic will be reviewed. All of this would help to assess the undergraduate students' perception of the quality and utilization of health care services at the University of Benin Health Center services.

2.1 PERCEPTION OF HEALTHCARE SERVICES

A descriptive cross-sectional study was conducted among first-year undergraduate students engaged in an on-campus degree program at a rural university in Australia. Data was collected through an online survey form based on the Adolescent Screening Questionnaire which was designed based on the HEADSS survey tool. The survey form consisted of open and close-ended questions. The response rate was 41% which corresponded to responses from 355 students. The mean age of respondents was 20.2 years. Most of the students reported good physical health in the past 6 months. Most of the respondents also reported having adequate access to medical doctors and support services for themselves (82%) and their friends (78%). The qualitative comments, however, showcased concerns about stigma, privacy, and anonymity in seeking counseling.[21]

A cross-sectional study was carried out to assess the attitude of university students toward on-campus Youth-friendly Reproductive health services (YFRHS) at Mizan-Tepi University, Southwestern Ethiopia between October and January 2019. A simple random sampling technique

was used to select 428 students of the university on the Tepi campus. A pretested, semi-structured self-administered questionnaire was used to collect data in the study. The collected data was analyzed using the Statistical Product and Service Solutions (SPSS) version 20. The study found that 75.2% of the respondents considered the project vision of YFHS to be inadequate, 91.6% thought that the services should be made available at no cost to the students, 53% believed that the provision of contraceptive services should be obligatory at the facilities for young people and 72.9% disagreed with the idea that female students are the only ones who needed to utilize reproductive services at the YFRHS clinic. Overall, 59.8% of the respondents had a negative attitude toward the YFRHS clinic.[22]

A descriptive cross-sectional study was conducted in South-West Nigeria in 2013 among undergraduate students of a tertiary institution to assess the students' perception of factors affecting their utilization of health care services provided in the institution. A structured self-administered questionnaire was used to collect data from 540 students who were selected via a simple random sampling technique. The response rate for the study was 82%. The study found that inadequate referral services (81.7%), high cost of drugs (72.0%), time spent waiting for treatment (67.2%), satisfaction with services (60.6%), and non-availability of essential drugs (54.8%) were factors that affected the utilization of university health care services. Students-medical staff relationship (77.6%) and accessibility to health facilities (74.3%) were, however, not considered as factors that affect the utilization of university health services.[23]

A descriptive cross-sectional study was conducted at a Federal University in South-West Nigeria to assess the behavioral patterns and factors that influence the utilization of available health services among undergraduates. Four (4) out of the 13 undergraduate faculties were selected randomly and respondents were recruited from full-time undergraduate students of the institution

who resided in the halls of residence and who were from the select faculties. Two hundred and fifty (250) students were selected using a random sampling technique and data was collected using a pre-tested self-administered questionnaire. Seventy-six percent (76%) of the respondents had registered with the university health centre. Of those who had not registered, 67.4% believed that the registration process was clumsy. Only 45.8% of the respondents who had been ill within a specified time had used the health care services. Of those who had not, 70.7% used self-medication, 15.2% went to a private clinic and 41.8% utilized alternative medicine instead of the clinic because they were more prompt, while 24.6% believed that drugs were not usually available in the health center.[24]

2.2 SATISFACTION WITH HEALTH CARE SERVICES

A descriptive cross-sectional study was conducted to determine the utilization and satisfaction with university health center services within 6 months at Jerash University, Jordan. Two hundred and forty (240) students who had registered for the second semester of the 2015 – 2016 session and were of Jordanian nationality were included in the study. The participants were recruited using a convenience sampling technique. The data was collected using a questionnaire and analyzed using SPSS version 17. The study found that overall satisfaction with the university health services among the respondents was 64.6% (155). The main reasons behind dissatisfaction among the respondents were related to the unavailability of drugs 54 (22.5%), medical staff/student relationships 41(17.1%), experience of medical staff 24 (10%), inadequate referral services 20 (8.3%) and long waiting times for treatment 12 (5%).[18]

A descriptive study was conducted to assess the utilization of the National Health Insurance Fund university students' health scheme in Arusha, Tanzania at two selected universities. The study also assessed the level of satisfaction with the services rendered at the facilities among the

students. Two hundred and twenty students were selected using both probability and non-probability sampling techniques and a semi-structured questionnaire was used to collect quantitative data and a tape recorder to record qualitative data. The quantitative data was analyzed using the Statistical Product and Service Solutions (SPSS), while the qualitative data was analyzed through coding. The study found that 20% (40) of those who had visited the clinic were very satisfied, 50% (99) were moderately satisfied, 23% (45) were somehow satisfied and 7% (14) were not satisfied.[25]

Survey research was carried out to obtain information on students' satisfaction with service delivery (including health services) in universities within Akwa Ibom and Cross River states of Nigeria. Four (4) universities were included in this study; 2 state and 2 federal universities. Simple random sampling technique was used to recruit all the undergraduate students from the universities who were enrolled in the 2015/2016 academic session. Simple random sampling technique was used to draw a sample of 1466 (915 from federal-owned and 551 from state-owned universities) students for the study. A researcher developed instrument tagged "Students' Satisfaction with Service Delivery Questionnaire (SSSDQ)" was used for data collection. The administration of the instrument was done in lecture halls in each university. The study found that 47.7%, 57.1%, 42.7%, and 41.1% of the students were moderately satisfied with the availability of doctors, time spent waiting to see a doctor, operating rooms, and enlightenment programs provided at the university clinics respectively. Concerning drug dispensation, 44.9% of the respondents were dissatisfied and 52.6% were dissatisfied with the emergency services available. Overall, the level of satisfaction among the students with the university health services was: very satisfied – 27%, moderately satisfied – 49.9%, and dissatisfaction – 31.1%.[26]

A cross-sectional descriptive study that assessed the satisfaction of students with university health services at a University in South-West, Nigeria between April 2016 and March 2017. One hundred and forty-one (141) students participated in this study and data was collected Short Assessment of Patient Satisfaction (SAPS) questionnaire. The data generated was analyzed using the SPSS version 17.0. One-hundred and ten (78%) of the respondents were satisfied with the effect of the treatment received, 95 (67.4%) were satisfied with their communication with the doctors, 102 (72.4%) were satisfied with physical examination by their doctors, 105 (74.6%) were satisfied with their involvement in decision-making concerning their health, 83 (58.9%) were satisfied with the respect accorded to them by the doctors, 57 (40.4%) were satisfied with duration of time spent by the doctor with them. Overall satisfaction using the total SAPS scores showed that 73 (51.7%) were satisfied with the care.[27]

2.3 MAJOR HEALTH CONDITIONS PROMPTING UTILIZATION OF HEALTH CARE SERVICES

A descriptive survey of the College Health Surveillance Network (CHSN) which included the methodology, demography, epidemiology, and health care utilization across twenty-three (23) 4-year universities in the United States between January 2011 and May 2014. The electronic health records from the student health services were uploaded and analyzed using the SPSS version 21. Within the 41 months that made up the study period, 802,255 individual students utilized the health centers of the universities amounting to 41.17 million patient encounters. Sixty percent of visits (2.5 million) were classified as primary care, 13% (530,000) as mental health, 9% (360,000) as vaccination, and 31% (1.3 million) as miscellaneous other. Based on diagnostic categories, the commonest reasons for visits were preventive 49.0% (393,220), respiratory 36.7% (294,240),

non-specific 28.9% (232,018), dermatologic 15.5% (124,436), infectious (non-STI) 14.3% (114,894), and mental health 12.9% (103,844).[28]

A retrospective study was conducted to investigate the utilization of health care services and common disease diagnoses among university students enrolled at Chiang Mai University during the academic year of 2018. The study involved reviewing the medical records of students who had utilized the health services within the time of the study using the electronic health records (EHR). Out of the 35,249 students enrolled at the university in 2018, 17,284 students (49.03%) visited the clinic. This total number constituted 65,150 outpatient department visits and 458 in-patient admissions. The diagnoses of the students that warranted their visiting the clinic were summarized based on the ICD-10 classification of diseases and represented in tables and charts. The five most common reasons for inpatient admission for male students were: Injury, poisoning, and certain other consequences of external causes (50, 22.8%), diseases of the digestive system (35, 15.98%), diseases of the musculoskeletal system and connective tissue (27, 12.3%), diseases of the nervous system (21, 9.6%), and diseases of the respiratory system (16, 7.3%). Among female students, inpatient admissions were more commonly from diseases of the digestive system (38, 15.9%), neoplasms (36, 15.1%), injury, poisoning, and certain other consequences of external causes (29, 12.1%), mental, behavioral and neurodevelopmental disorders (29, 12.1%), and diseases of the musculoskeletal system and connective tissue (19, 7.95%). For outpatient visits, the commonest diagnoses among female students were: factors influencing health status and contact with health services (8908, 24.5%), diseases of the respiratory system (5145, 14.1%), mental, behavioral, and neurodevelopmental disorders (2890, 8.2%), injury, poisoning, and certain other consequences of external causes (2537, 6.97%), and diseases of the skin and subcutaneous tissue (2112, 5.8%). Among male students, the common diagnoses were factors

influencing health status and contact with health services (5508, 25.3%), diseases of the respiratory system (3416, 15.7%), injury, poisoning, and certain other consequences of external causes (1880, 8.6%), certain infectious and parasitic diseases (1795, 8.3%), and diseases of the musculoskeletal system and connective tissue (1463, 6.7%).[29]

A descriptive cross-sectional study was conducted to determine the utilization of university health center services within 6 months at Jerash University, Jordan. Two hundred and forty (240) students who had registered for the second semester of the 2015 – 2016 session and were of Jordanian nationality were included in the study. The participants were recruited using a convenience sampling technique. The data was collected using a questionnaire and analyzed using SPSS version 17. The study found that the most frequent health conditions for utilization were influenza 24 (23.5%); headache 15 (14.7%), and abdominal pain 12 (11.8%). Less frequent health conditions were eye problems 2 (2%), insect sting 1 (1%), and burn 1 (1%). Also, less than 50% of the student population had utilized the health services within the duration of the study.[18]

A cross-sectional descriptive study was conducted in a Federal university in South-West Nigeria to know the behavioral patterns and factors that influence the utilization of available health services among undergraduates. Using random sampling technique, 250 students were selected from four (4) out of the thirteen (13) faculties in the university. A pre-tested self-administered questionnaire was used to collect the data which showed that of the 142 students who had been ill in 6 months, 65 (45.8%) had utilized the university health center. The prevailing reasons for accessing health care at the university health center within the period of the study were malaria/fever (40, 61.5%), diarrhea (6, 9.2%), sore throat/cough (2, 3.1%), abdominal complaint (7, 10.1%), and others (10, 15.4%).[24]

2.4 MAJOR BARRIERS FACED IN SEEKING APPROPRIATE HEALTHCARE

An exploratory, descriptive study was conducted at the University of Alberta to characterize the experiences of international students navigating on-campus healthcare resources. Using snowball sampling, 59 international students were interviewed using a 44-item semi-structured online questionnaire which measured specific experiences including barriers faced in obtaining health care services from on-campus healthcare resources. Data collected was managed using Qualtrics Software. The most common challenges encountered by the students were: difficulties navigating the Canadian healthcare system to receive needed care (18.60%), treatment cost (17.44%), lack of time (17.44%), language difficulties (11.63%), difficulty transitioning to a new health care system (10.47%) and sociocultural barrier (10.47%).[30]

A cross-sectional study was conducted among undergraduate students of Addis Ababa University, Ethiopia in 2022 to assess sexual reproductive health services and associated factors that prevented their utilization among the students. Four hundred and nineteen (419) students were randomly selected and data was collected using a pre-tested semi-structured questionnaire. The data collected was entered into Epi 7.0 and exported to SPSS version 21.0 for analysis. The study found that the most common reasons why students were unable to utilize the healthcare center were distance from the facility (138, 39.5%), less than the required age (62, 15.7%), lack of knowledge of the location of the health center (38, 9.6%), inconvenient time (16, 4.1%), culture is against it (20, 5.1%), and fear of parents (14, 3.5%).[31]

A descriptive study was conducted to assess the utilization of the National Health Insurance Fund university students' health scheme in Arusha, Tanzania at two selected universities. Two hundred and twenty students were selected using both probability and non-probability sampling techniques and a semi-structured questionnaire was used to collect quantitative data and a tape

recorder to record qualitative data. The quantitative data was analyzed using the Statistical Product and Service Solutions (SPSS), while the qualitative data was analyzed through coding. The study found that only 10% (22) of the participants had not utilized the health services in the past 12 months. The reasons for non-utilization of the health facilities included that they were not sick (9, 54%), facilities were located too far (3, 23%), lack of awareness of facility (3, 15%), financial constraints (1, 8%), long waiting hours (1, 8%).[25]

A descriptive cross-sectional study was done to assess the students' perception and students' attitudes toward the utilization of healthcare services provided in a tertiary institution in South-West Nigeria. The study also aimed to assess the factors that affected the utilization of the university healthcare services among the undergraduate students in the institution. Simple random sampling technique was used to select 540 respondents, comprising 390 males and 150 females. A structured and self-administered questionnaire was used to collect data for the study. The study found that the factors that affected utilization included the high cost of drugs (72.0%), non-availability of essential drugs (54.8%), time spent waiting for treatment (67.2%), inadequate referral services (81.7%), and satisfaction with services (60.6%).[23]

2.5 FACTORS THAT INFLUENCE CHOICE OF ALTERNATIVE SOURCES OF HEALTHCARE

A descriptive qualitative study was done to examine college students' perceptions of health care providers, specifically in the context of accessing sexual health resources. The study, conducted among college students from colleges in Midwestern states in the United States of America, identified on- and off-campus resources utilized by the students as concerns their sexual health. Seventy-eight students were interviewed out of which 52 provided information that was relevant to the study. Participants were recruited from two- and four-year students across campuses in the

states via a quota to maintain diversity of the participants' gender, race/ethnicity, and class year. A self-structured interviewer guide was used to collect data for the study after which inductive analytical analysis was conducted on the obtained data. The study found that more than half (57.7%) of the respondents considered college personnel (like professors, academic advisers, sport trainers, hall managers and other non-health members of staff) as resources for sexual health and 23.1% considered their peers as worthy of said role. The study found that as much as 33% of the respondents considered possession of personable characteristics (being caring, welcoming, understanding, friendly and nonjudgmental, making a student feel comfortable, ensuring students' care was confidential, and listening carefully) rather than designation as the reason for choosing the resources they used to meet their sexual health needs. [32]

A descriptive qualitative study was done to assess the perceptions of clients that relate to awareness and the geographical location of the sexual health clinic which is a sub-division of the Campus Health Services at Stellenbosch University's main campus, South Africa. The study also identified the reasons for non-utilization of the services as the sexual health clinic. Purposive sampling was used to select 15 key participants. A semi-structured interview guide was used to collect data for the study. The study found that the factors that influenced the non-use of the sexual health clinic included the location of the health clinic, awareness of the sexual health clinic, and the services provided at the facility. [33]

A descriptive cross-sectional study was conducted among first-year students attending three universities in Johannesburg, South Africa. This study aimed to understand perceived barriers to the uptake of general health services, especially the uptake of HIV testing and TB screening services, among first-year university students in Johannesburg, South Africa. The study also identified the challenges HIV-positive students might have in accessing care as well as the

alternatives to the on-campus health resources utilized by the students. A convenience sample technique was used to recruit 792 first-year students. Data was collected using a structured self-administered questionnaire. The study found that 48.9% of the students indicated that they would rather go to a public hospital or health care center, 29.2% to a private doctor or private clinic, 0.7% to a traditional healer, and 6.2% to other providers. Only 15% reported to that they would go to their campus clinic. The most common reasons highlighted by respondents for utilizing alternatives to the health clinic included needing to pay to travel (35.9%), needing to spend a day away from lectures (23.5%), and needing to pay a fee at the clinic (21.2%). [34]

CHAPTER THREE

MATERIALS AND METHODS

3.1 STUDY AREA

The study was conducted at the University of Benin Health Centre, Benin City, Edo State. The health centre was established on 1st January 2000 to provide primary healthcare services to University of Benin students, staff members, and their families. The health centre has a triage lounge, a medical emergency lounge, consulting rooms, wards for male and female patients, a surgical unit, a medical records section, a pharmacy and drug dispensing unit, medical laboratories and a radiology unit. Patients are quickly evaluated and categorised based on the risk of their condition in the triage lounge. critical patients receive emergency medical care in the four-bed emergency room. There are five (5) general practice consulting rooms to provide non-specialised care for patients on an out-patient basis. The medical records unit registers new undergraduates into the healthcare system, creates case files for new patients and retrieves them when needed and manages patients' clinical data. The facility has a male and female ward each with ten (10) beds and nurses bay for in-patient care. The surgical unit is equipped to perform life-saving emergency surgeries like appendectomies. The Pharmacy and drug dispensing unit handles the supply and dispensing of prescribed medication. The radiology unit has an X-ray machine which is used for performing investigating procedures and for health screening of newly admitted undergraduates. The facility also has two ambulances for emergency care. Other clinical activities carried out in the facility ward rounds, clinics, surgeries, screening for common illnesses and vaccination and health education.

The health centre is headed by a medical director and staffed by forty medical doctors of different cadres like Medical Officers, Principal Medical Officers and Chief Medical Officers who carry out clinical duties like consulting in clinics, ward rounds and performing surgeries. There are thirty-four nurses of various ranks like Nursing Officers, Senior Nursing Officers and Chief Nursing Officers who render nursing services and manage the wards. The facility has twenty-two pharmacists who dispense drugs and counsel patients on their usage. Twenty-five medical laboratory scientists of different cadres like Principal Medical Laboratory Scientists and Chief Medical Laboratory Scientists collect and analyse specimens for haematological, biochemical and microbiological investigations. Twelve radiographers perform radiological investigations like chest x-rays while twenty medical records officers create case files, record and safeguard patients' data. Fifteen administrative staff run the day-to-day activities like clerical work. An average of three hundred and eighty-eight children are served by this array of professionals per month. In addition to the investigative, screening and curative services rendered by the health centre, it also carries out health education and promotion by organizing health talks and distributing educational infographic materials to patients and loved ones presenting at the facility.

The UNIBEN health centre is located within the Ugbowo campus of the university. The University of Benin is located in Benin city, Edo state at 6020.022'N 5036.009'E. The institution was founded in 1970 as an institute of technology and was accorded the status of a full-fledged university by National Universities Commission on 1st July, 1971. The University offers courses at various levels: undergraduate, postgraduate, JUPEB and certificate. Presently, the total student enrolment stands at over 75,000, made up of both full-time and part-time shared among the 13 faculties of the institution.62 The faculties in UNIBEN include Agriculture, Arts, Education,

Engineering, Law, Life Sciences, Management Sciences, Pharmacy, Physical Sciences, and Social Sciences and a College of Medical Sciences which comprises the Schools of Medicine, Dentistry, Basic Medical Sciences and Institute of Child Health. The University has a student enrolment range of 40,000 - 44,999 students made up of both full-time and part-time students; and 4,000 – 4,499 academic staff. The University of Benin has a second main campus located at Ekehuan aside from the Ugbowo campus, where this study will be conducted. The faculties in UNIBEN include Agriculture, Arts, Education, Engineering, Environmental Sciences, Law, Life Sciences, Management Sciences, Pharmacy, Physical Sciences, and Social Science, and a College of Medical Sciences which comprises the School of Medicine, Dentistry, Basic Medical Sciences and Institute of Child Health.[35]

3.2 STUDY DESIGN

A descriptive cross-sectional study design was used in this study.

3.3 SCOPE OF STUDY

This study was done to assess the perception of undergraduate students at the University of Benin towards the health care services delivered on campus at the University health centre. The study also determined the level of satisfaction with the health services at the university health centre, the major health conditions that prompt their usage of the health care services, the barriers they faced in seeking health care, and the factors that influenced their choice of utilizing alternative care. The study also provides relevant information required for implementing proper programs and policies to enhance the health and well-being of the students.

3.4 STUDY DURATION

This study was carried out from January to December 2023.

3.5 STUDY POPULATION

The study was conducted amongst full-time undergraduate students of the University of Benin, Benin City, Edo State.

3.5.1 Selection Criteria

Inclusion Criteria

All full time undergraduate students of the University of Benin who were present at the time of data collection and who consented to the study.

Exclusion Criteria

Full time undergraduate students who did not give consent.

Full time undergraduate students who were unable to provide an appropriate response due to a mental health problem or any other reason.

3.6 SAMPLE SIZE DETERMINATION

The minimum sample size (n) was calculated using the Cochran formula used for descriptive studies.

$$n = \frac{Z^2pq}{d^2}$$

Where:

n = minimum sample size

Z = Standard normal set at 1.96 (at 95% confidence interval)

p = Prevalence rate of a particular characteristics of the target population. In this case p = 51.7%, a figure obtained from a study conducted to assess the satisfaction of students with university health services at a University in South-West, Nigeria. The level of satisfaction was 51.7%. [27]

q = 1- p

d = degree of precision set at 0.05.

Therefore, p = 51.7 /100

= 0.517

q = 1 – 0.517

= 0.483.

Using the formula stated above, $n = \frac{1.96 \times 1.96 \times 0.517 \times 0.483}{0.05 \times 0.05}$

$$n = \frac{0.9592897776}{0.0025}$$

$$n = 384.$$

To account for non-response, a 10% non-response rate was added to the minimum sample size, using the formula for non-response rate.

$$n_f = \frac{n}{1 - nr}$$

Where;

n_f = Final Minimum Sample Size

n = Minimum Sample Size

nr = Non-response rate at 10% = 0.1

Thus;

$$n_f = \frac{384}{1 - 0.1}$$

$$= 426.$$

Thus, the final minimum sample size for this study was 430.

3.7 SAMPLING METHOD

The 430 respondents were selected using a multi-stage sampling technique with six (6) stages.

Stage 1: Selection of Campus

Simple random sampling using a coin toss was used to select one of the two campuses of the University of Benin.

The Ugbowo campus of the University of Benin was chosen for the study.

Stage 2: Selection of Faculties

The list of faculties obtained from the student affairs was used as a sampling frame. The selection of five (5) out of thirteen (13) faculties from the sampling frame was done using simple random sampling by balloting.

The following faculties were selected: Faculty of Management Sciences, Faculty of Engineering, Faculty of Arts, Faculty of Life Sciences and Faculty of Agriculture.

Stage 3: Selection of Departments

The list of departments of the five faculties selected served as a sampling frame for this stage. Ten (10) departments will be selected from the sampling frame using a systematic sampling technique. Two (2) departments each from each of the five (5) faculties were selected.

The sampling interval will be calculated using this formula

Sampling interval = $\frac{Population\ size}{Sample\ size}$

Where;

Population size = Total number of departments in the selected faculties (44)

Sample size = Ten (10) departments

Therefore,

Sampling interval = $\frac{44}{10}$ = 4.4 ≈ 4

Sampling fraction = $\frac{1}{sampling\ interval} = \frac{1}{4}$

The first department will be selected using simple random sampling by balloting. Subsequently, every other department will be selected using the sampling interval of 4.

The selected departments include: Department of Accounting, Department of Banking and Finance, Department of Chemical Engineering, Department of Computer Engineering, Department of English and Literature, Department of Philosophy, Department of Biochemistry, Department of Optometry, Department of Animal Science and Department of Fisheries.

Stage 4: Selection of Academic Level

The ten departments formed a sampling frame and levels in each department will be selected by balloting.

Stage 5: Selection of Number of Respondents in each department

Each department formed a sampling frame from which Students was selected using systematic sampling technique by proportionate allocation.

Proportionate allocation = $\frac{Minimum\ sample\ size}{Population\ size}$ × Number of students in each stratum

Minimum sample size = 430 as calculated in the methodology using Cochran's formula

Population size = Total number of students in the ten (10) selected departments

Number of students in each department = Total number of students in each department on the sampling frame.

1. Department of Accounting; $\frac{430}{5081}$× 455 = 38
2. Department of Banking and Finance; $\frac{430}{5081}$×558 = 47
3. Department of Chemical Engineering; $\frac{430}{5081}$×530 = 45
4. Department of Computer Engineering; $\frac{430}{5081}$×493 = 42
5. Department of English and Literature; $\frac{430}{5081}$×894 = 76
6. Department of Philosophy; $\frac{430}{5081}$×418 = 35
7. Department of Biochemistry; $\frac{430}{5081}$×390 = 33
8. Department of Optometry; $\frac{430}{5081}$×420 = 36
9. Department of Animal Sciences; $\frac{430}{5081}$× 564 = 48
10. Department of Fisheries; $\frac{430}{5081}$×359 = 30

Stage 6: Selection of Number of Respondents in each level

The class list obtained from each level form a sampling frame from which the number of students was obtained from each level by proportionate allocation was selected using a systematic sampling technique.

The sampling interval was calculated using this formula;

Sampling interval = $\frac{Population\ size}{Sample\ size}$

Where;

Population size = Total number of students on the class list

Sample size = Number of students obtained by proportionate allocations

The first student will be selected using simple random sampling by balloting. Subsequently, every other student will be selected using the sampling interval.

3.8 DATA MANAGEMENT

3.8.1 Tools for data collection

The data was health care center services among university students.[18,36] Questions on satisfaction were adapted from the Short Assessment of Patient Satisfaction (SAPS).[37]

The questionnaire collected using a pretested structured self-administered questionnaire. The questionnaire was adapted from the research tools from the studies by Al-jabri et al. to assess patients' perception of healthcare quality and Alkhawaldeh to evaluate utilization of university

has six sections (A – F).

Section A contained questions on sociodemographic characteristics of respondents.

Section B included questions on health conditions prompting utilization of the health center

Section C assessed the perception of quality of health care services

Section D assessed the level of satisfaction with health care seeking experience

Section E identified the barriers to utilizing health services at the health center

Section F explored the factors influencing utilization of alternative health services

3.8.2 Pre-testing

A pretest was conducted to assess the effectiveness of the questionnaire and identify possible flaws, and proper adjustments made. This was carried out among fifty (50) undergraduate students at Igbinedion University, Okada, Edo state.

3.8.3 Data scoring

Ten (10) questions were used to assess perception of quality of health care services. Questions were designed as 5-point Likert questions with the following options: “Strongly disagree”, “Disagree”, “Undecided”, “Agree”, and “Strongly agree”. The options were assigned scores as follows: Strongly agree = 1, Disagree = 2, Undecided = 3, Agree = 4 and Strongly Agree = 5. Scores were computed to obtain a composite score which was then converted to percentages. Percentages of ≥50% were considered to have good perception and percentages of <50% were considered poor perception.

Eight (8) questions were used to measure satisfaction with health care services. Questions were designed as 5-point Likert questions with the following options: “Very satisfied”, “Satisfied”, “Neither satisfied or dissatisfied”, “Dissatisfied”, and “Very dissatisfied”. The options were assigned scores as follows: Very satisfied = 5, Dissatisfied = 4, Neither satisfied nor dissatisfied = 3, Dissatisfied = 2 and Very dissatisfied = 1. Scores were computed to obtain a composite score which was then converted to percentage. Percentages of ≥70% were considered as satisfied and percentages of <70% were considered not satisfied.

3.9 METHOD OF DATA ANALYSIS

The questionnaires was checked for completeness. Data entry, cleaning and analysis was carried out using the Statistical Package for Social Sciences version 25.0.

Categorical data was presented using frequencies and proportions. Continuous data was presented as means and standard deviation (if normally distributed) and as median and modes (if skewed). Univariate analysis was carried out for relevant variables. Bivariate analysis was done to test for associations of categorical variables (e.g. age group, sex, religion, level of satisfaction), using Chi square test and Fisher's exact. A p-value of less than 0.050 was considered statistically significant.

3.9.1 DATA PRESENTATION

Data was presented using frequency tables, proportions and pie charts and prose.

3.10 ETHICAL CONSIDERATIONS

Ethical approval was obtained from the University of Benin Teaching Hospital Ethics and Research Committee. Before administering the questionnaire, the respondents were asked for their informed consent. To maintain confidentiality, names and addresses were withheld. Respondents were informed that they have the right to withdraw from the interview at any moment and that there were no consequences if they do so.

3.11 LIMITATION OF STUDY

The study relies on the information provided by the respondents and may be limited by errors that may be introduced due to recall bias, and false information. This will be reduced through careful structuring of the questionnaire to promote understanding and recall by respondents, asking only relevant and specific questions to ensure that the questionnaire is easy to complete and conducting a pilot survey to assess the effectiveness of the questionnaire.

Also, the results cannot be generalized to health centre services in other private and governmental universities.

To ensure an adequate response rate from the sample population, a non-response rate was included in the sample size calculation. Relevant previous research studies were revised to identify gaps in methods, instruments and techniques and adjustments made to this study.

CHAPTER FOUR

RESULTS

A total of 430 undergraduate students participated in this study. The results are presented in the following sections in line with the specific objectives:

SECTION A: Socio-demographic characteristics of respondents

SECTION B: Major health conditions prompting respondent's use of health care services on campus

SECTION C: Perception of the health care services on campus among respondents

SECTION D: Satisfaction with on-campus healthcare services among respondents

SECTION E: Major barriers faced by respondents in seeking appropriate healthcare at the University of Benin's health center

SECTION A

SOCIO-DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

Table 1a: Socio-demographic characteristics of participants

Variable	Frequency (n = 430)	Percent
Age group (years)		
15 – 19	68	15.8
20 – 24	191	44.4
25 – 29	168	39.1
> 30	3	0.7
Mean age (± SD)	**23.0 ± 3.2**	
Sex		
Female	203	47.2
Male	227	52.8
Marital status		
Single	291	67.7
Cohabiting	71	16.5
Married	65	15.1
Separated/Divorced	2	0.5
Widowed	1	0.2
Religion		
Christianity	250	58.1
Islam	147	34.2
Atheism	31	7.2
African traditional religion	2	0.5
Faculty		
Arts	111	25.8
Engineering	87	20.2
Management Sciences	85	19.8
Agriculture	78	18.1
Life Sciences	69	16.0
Department		
English literature	76	17.7
Animal Sciences	48	11.2
Banking & Finance	47	10.9
Chemical Engineering	45	9.8
Computer Engineering	42	9.8
Accounting	38	8.8
Optometry	36	8.4
Philosophy	35	8.1
Biochemistry	33	7.7
Fisheries	30	7.0
Residence		
Off campus	264	61.4
On campus	166	38.6
On campus residence (n = 166)		
School hostel	127	76.5
Staff quarters	39	23.5

Table 1b: Socio-demographic characteristics of participants

Variable	Frequency (n = 430)	Percent
Level		
100	68	15.8
200	93	21.6
300	111	25.8
400	126	29.3
500	18	4.2
600	14	3.3
Father's Level of education		
None	23	5.3
Primary	57	13.3
Secondary	100	23.3
Tertiary	250	58.1
Mother's Level of education		
None	21	4.9
Primary	49	11.4
Secondary	125	29.1
Tertiary	235	54.7
Father's Skill level		
Skill level 0	3	0.7
Skill level 1	3	0.7
Skill level 2	211	49.1
Skill level 3	45	10.5
Skill level 4	168	39.1
Mother's Skill level		
Skill level 0	2	0.5
Skill level 1	4	0.9
Skill level 2	227	52.8
Skill level 3	32	7.4
Skill level 4	165	38.4
Monthly allowance (₦)		
0 – 50,000	156	36.3
50,001 – 100,000	204	47.4
100,001 – 150,000	36	8.4
150,001 – 200,000	22	5.1
> 200,000	12	2.8
Source of income		
Parents	316	73.5
I support myself	226	52.6
Relatives	61	14.2
Guardian	24	5.6
Husband	20	4.7
Fiancé	4	0.9
Scholarships	3	0.7
Friends	1	0.2

One hundred and ninety-one (44.4%) of the respondents were within the age group 20 - 24 years. The mean age was 23.0 ± 3.2 years. With respect to sex, the study recorded slightly more males 203 (52.8%) than females 227 (47.2%). Most of the respondents were Single 291 (67.7%) and Christian 250 (58.1%). The faculty of Arts 111 (25.8%) and the department of English and Literature 76 (17.7%) had the highest proportion of respondents. Most of the respondents reside off-campus 264 (61.4%) and of those who reside on campus, majority live in the school hostels 127 (76.5%). The highest proportion of respondents, were in 400 level 126 (29.3%). Most of the respondents' fathers 250 (58.15) and mothers 235 (54.7%) had tertiary level of education. The highest proportion of respondents' fathers 211 (49.1%) and mothers 227 (52.8%) were classed as skill level. The highest proportion of respondents had a monthly allowance of between 50,001 and 100,00 naira and the commonest sources of income were from parents 316 (73.5%) and self 226 (52.6%).

Table 2: Respondent's perception of current health status

Perception	Frequency (n = 430)	Percent
Excellent	225	52.3
Good	163	37.9
Fair	42	9.8
Poor	0	0.0
Very poor	0	0.0

Most of the respondents were of the opinion that they had an excellent 225 (52.3%) health status at the time of the study.

SECTION B

MAJOR HEALTH CONDITIONS PROMPTING RESPONDENT'S USE OF HEALTH CARE SERVICES ON CAMPUS

Table 3: Pattern of use of health care services on campus among respondents

Variable	Frequency (n = 430)	Percent
Ever visited UNIBEN health center		
Yes	420	97.7
No	10	2.3
Type of care at last visit (n = 420)		
In-patient care	177	41.2
Was there for another sick person	170	39.5
Outpatient care	61	14.2
Was there for health clearance	7	1.6
Was referred to another facility	5	1.2
Received care in the past 12 months		
Yes	178	41.4
No	252	58.6
Reason for visit in past 12 months		
Joint pain	39	21.9
Fever	28	15.7
Headache	21	11.8
Catarrh	17	9.6
Cough	17	9.6
Vomiting	16	9.0
Sore throat	15	3.5
Dizziness	13	7.3
Rash	12	6.7
Diarrhea	10	5.6
Abdominal pain	10	5.6
Cuts & bruises	9	5.1
Shortness of breath	9	5.1
Fracture/Dislocation	8	4.5
Chest pain	7	3.9

Nearly all 420 (97.7%) had ever visited the health center. One hundred and seventy-seven (41.2%) and 170 (39.5%) of those who had visited the health center received in-patient care and were there for another sick person respectively. One hundred and seventy-eight (41.4%) of the respondents had visited the health center in the past 12 months. The commonest reasons for visiting the health center among respondents were joint pain 39 (21.9%), fever 28 (15.7%) and headaches 21 (11.8%).

SECTION C

PERCEPTION OF THE HEALTH CARE SERVICES ON CAMPUS AMONG RESPONDENTS

Table 4: Perception of the health care services on campus among respondents

Variable	Strongly disagree Freq(%)	Disagree Freq (%)	Undecided Freq (%)	Agree Freq (%)	Strongly agree Freq (%)
The health centre is an essential part of the Institution	11 (2.6)	4 (1.0)	6 (1.4)	93 (22.1)	306 (72.9)
Health care provided is based on standard Practice	9 (2.1)	15 (3.6)	112 (26.7)	144 (34.3)	140 (33.3)
Response to health needs at the health centre is prompt and timely	14 (3.3)	55 (13.1)	77 (18.3)	135 (32.1)	139 (33.1)
Staff at health centre are student friendly	15 (3.6)	15 (3.6)	46 (11.0)	187 (44.5)	157 (37.4)
There are enough staff to handle students' health needs	15 (3.6)	54 (12.9)	131 (31.2)	107 (25.5)	113 (26.9)
Students seeking health care are treated with respect by staff at health centre	15 (3.6)	16 (3.8)	46 (10.7)	186 (44.3)	157 (37.4)
Health seekers are allowed to and participate in their care	12 (2.9)	11 (2.6)	35 (8.3)	197 (46.9)	165 (39.3)
Questions about health conditions are welcome and receive adequate attention	9 (2.1)	18 (4.3)	40 (9.5)	190 (45.2)	163 (38.8)
The health centre is adequately equipped to attend to basic health needs of students	18 (4.3)	44 (10.5)	148 (35.2)	105 (25.0)	105 (25.0)
The overall quality of services at the health centre is excellent	18 (4.3)	16 (3.8)	55 (13.1)	201 (47.9)	130 (31.0)

n = 420

Three hundred and six (72.9%) of the respondents strongly agree that the health center was an essential part of the institution. One hundred and forty-four (34.3%) of the respondents agreed that the health care provided at the health center was based on standard practice. On hundred and thirty-nine (33.1%) of the respondents strongly agree that response at the health center is prompt

and timely. One hundred and eighty-seven (44.5%) of the respondents agree that the staff at the health center are student friendly. One hundred and thirty-one (31.2%) of the respondents were undecided concerning the adequacy of staff to handle students' health needs at the health center. One hundred and eighty-six (44.3%) of the respondents agree that students seeking health care are treated with respect by the staff at the health center. One hundred and ninety-seven (46.9%) of the respondents agree that health seekers are allowed to participate in their care at the health center. One hundred and ninety (45.2%) of the respondents agree that questions about health conditions were welcome and received adequate attention by staff at the health center. One hundred and forty-eight (35.3%) of the respondents were undecided about the capacity of the health center to adequately attend to the basic needs of students. Two hundred and one (47.9%) of the respondents agree that the overall quality of services at the health center is excellent.

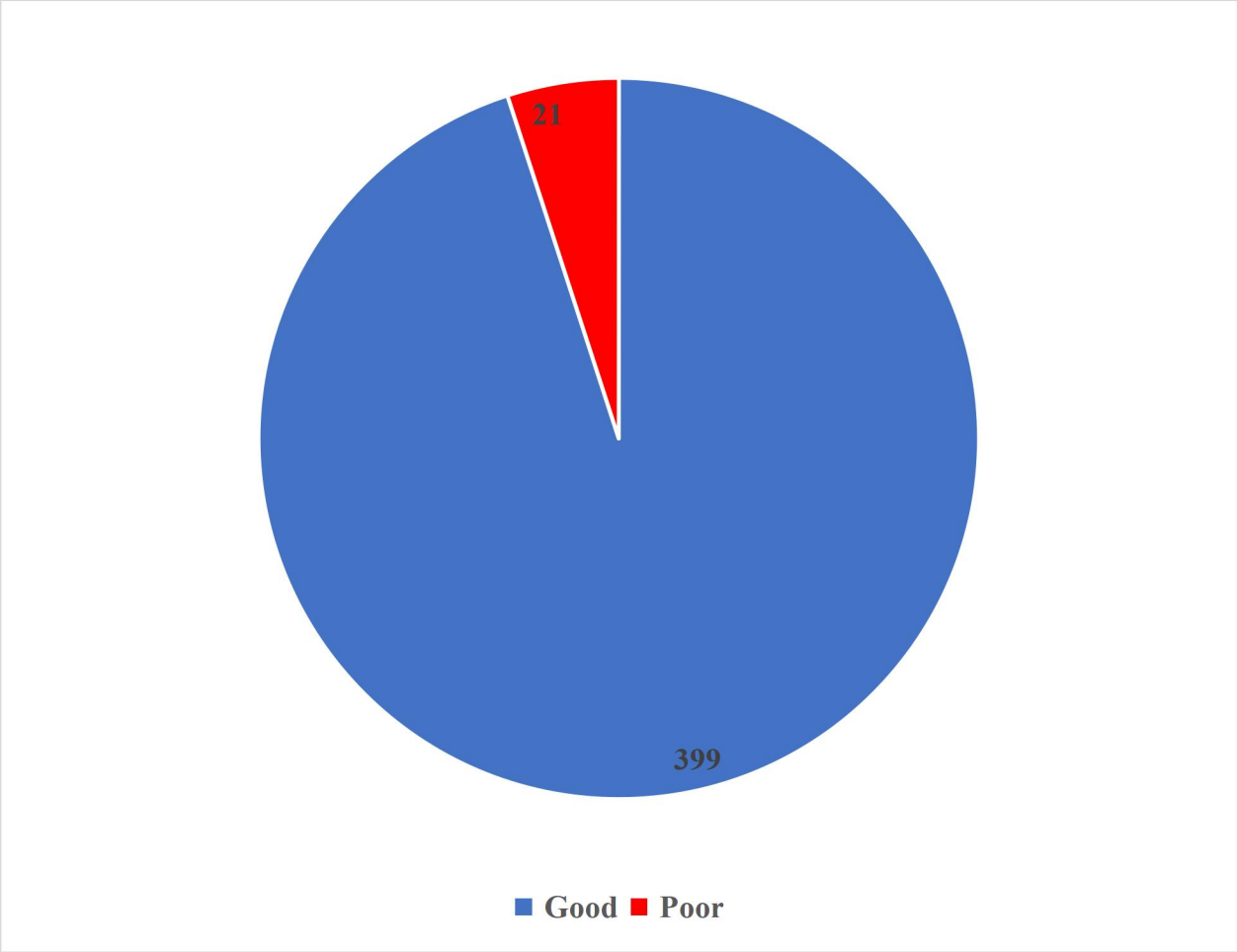

Figure 1: Overall perception of residents of the health care on campus

Three hundred and ninety-nine (95.0%) of the respondents had a good perception of the health center while 21 (5.0%) had a poor perception of the health center.

Table 5a: Association between perception and socio-demographic characteristics

Variable	Perception of health care services		Test statistic	p-value
	Good (n = 399) Freq (%)	Poor (n = 21) Freq (%)		
Age group (years)				
15 – 19	67 (98.5)	1 (1.5)	8.633*	0.032
20 – 24	175 (91.4)	16 (8.6)		
25 – 29	159 (97.5)	4 (2.5)		
> 30	3 (100.0)	0 (0.0)		
Sex				
Female	192 (96.5)	7 (3.5)	1.750†	0.262
Male	207 (93.7)	14 (6.3)		
Marital status				
Single	265 (93.3)	19 (6.7)	6.520*	0.245
Cohabiting	63 (98.4)	1 (1.6)		
Married	68 (98.6)	1 (1.4)		
Separated/Divorced	2 (100.0)	0 (0.0)		
Widowed	1 (100.0)	0 (0.0)		
Religion				
Christianity	224 (92.2)	19 (7.8)	9.900†	0.016
Islam	142 (98.6)	2 (1.4)		
Atheism	31 (100.0)	0 (0.0)		
African traditional religion	2 (100.0)	0 (0.0)		
Faculty				
Arts	101 (92.7)	8 (7.3)	8.122*	0.074
Engineering	78 (92.9)	6 (7.1)		
Management Sciences	85 (100.0)	0 (0.0)		
Agriculture	74 (94.9)	4 (5.1)		
Life Sciences	61 (95.3)	3 (4.7)		
Residence				
Off campus	246 (96.1)	10 (3.9)	1.651†	0.251
On campus	153 (93.3)	11 (6.7)		
Level				
100	62 (96.9)	2 (3.1)	13.529*	0.010
200	92 (100.0)	0 (0.0)		
300	98 (90.7)	10 (9.3)		
400	119 (95.2)	6 (4.8)		
500	17 (94.4)	1 (5.6)		
600	11 (84.6)	2 (15.4)		

† = Chi-square test, * = Fisher's exact test

All the respondents >30 years old 3 (100.0%) had a good perception of health services at the health center and there was a statistically significant relationship between respondents' age and their perception of health services at the health center ($p = 0.032$) A higher proportion of female 192 (96.5%) respondents had a good perception of health services at the health center and the relationship between respondents' sex and their perception was not statistically significant ($p = 0.262$). All the respondents who were separated/divorced 2 (100.0%) and widowed 1 (100.0%) had a good perception of health services at the health center and the relationship between respondents' marital status and their perception was not statistically significant ($p = 0.245$). All the respondents who were atheists 31 (100.0%) and practiced African traditional Religion 2 (100.0%) had a good perception of health services at the health center and the relationship between respondents' religion and their perception was statistically significant ($p = 0.016$). All the respondents who were from the faculty of Management sciences 85 (100.0%) had a good perception of health services at the health center and the relationship between respondents' faculty and their perception was not statistically significant ($p = 0.074$). A higher proportion of the respondents who stayed off-campus 246 (96.1%) had a good perception of health services at the health center and the relationship between respondents' residence and their perception was not statistically significant ($p = 0.251$) All the respondents in 200 level 92 (100.0%) had a good perception of health services at the health center and the relationship between respondents' level and their perception was statistically significant ($p = 0.010$).

Table 5b: Association between perception and socio-demographic characteristics

Variable	Perception of health care services		Test statistic	p-value
	Good (n = 399) Freq (%)	Poor (n = 21) Freq (%)		
Father's LOE				
None	20 (87.0)	3 (13.0)	3.926*	0.243
Primary	55 (96.5)	2 (3.5)		
Secondary	91 (93.8)	6 (6.2)		
Tertiary	233 (95.9)	10 (4.1)		
Mother's LOE				
None	19 (90.5)	2 (9.5)	3.234*	0.334
Primary	45 (91.8)	4 (8.2)		
Secondary	117 (96.7)	4 (3.3)		
Tertiary	218 (95.2)	11 (4.8)		
Father's Skill level				
Skill level 0	0 (0.0)	3 (100.0)	25.027*	<0.001
Skill level 1	2 (66.7)	1 (33.3)		
Skill level 2	194 (95.1)	10 (4.9)		
Skill level 3	41 (93.2)	3 (6.8)		
Skill level 4	162 (97.6)	4 (2.4)		
Mother's Skill level				
Skill level 0	0 (0.0)	2 (100.0)	13.203*	0.009
Skill level 1	4 (100.0)	0 (0.0)		
Skill level 2	213 (95.9)	9 (4.1)		
Skill level 3	30 (96.8)	1 (3.2)		
Skill level 4	152 (94.4)	9 (5.6)		
Monthly income (₦)				
0 – 50,000	136 (89.5)	16 (10.5)	12.479*	0.008
50,001 – 100,000	195 (98.0)	4 (2.0)		
100,001 – 150,000	35 (97.2)	1 (2.8)		
150,001 – 200,000	21(100.0)	0 (0.0)		
> 200,000	12 (100.0)	0 (0.0)		
Perception of current health status				
Excellent	206 (93.2)	15 (6.8)	4.156†	0.122
Good	151 (96.2)	6 (3.8)		
Fair	42 (100.0)	0 (0.0)		

† = Chi-square test, * = Fisher's exact test

The highest proportion of respondents whose father's had primary level of education 55 (96.5%) had a good perception of health services at the health center and the relationship between

respondents' father's level of education and their perception was not statistically significant (p = 0.243). The highest proportion of respondents whose father's had secondary level of education 121 (96.7%) had a good perception of health services at the health center and the relationship between respondents' mother's level of education and their perception was not statistically significant (p = 0.334). The highest proportion of respondents whose father's had skill level 4 162 (97.6%) had a good perception of health services at the health center and the relationship between respondents' father's skill level and their perception was statistically significant (p < 0.001). The highest proportion of respondents whose mother's had skill level 1 4 (100.0%) had a good perception of health services at the health center and the relationship between respondents' mother's skill level their perception was statistically significant (p = 0.009). All the respondents who had a monthly income of between 150,001 and 200,000 naira 21 (100.0%) and > 200,000 naira 12 (100.0%) had a good perception of health services at the health center and the relationship between respondents' monthly income and their perception was statistically significant (p = 0.008). All the respondents who had a fair perception of their current health status 42 (100.0%) had a good perception of health services at the health center and the relationship between respondents' perception of their current health status and their perception was not statistically significant (p = 0.122).

SECTION D

SATISFACTION WITH ON-CAMPUS HEALTHCARE SERVICES AMONG RESPONDENTS

Table 6: Satisfaction with on-campus health services

Variable	Very dissatisfied Freq (%)	Dissatisfied Freq (%)	Neither Freq (%)	Satisfied Freq (%)	Very satisfied Freq (%)
Satisfied with outcome of treatment	1 (0.2)	11 (2.6)	39 (9.3)	257 (61.2)	112 (26.7)
Satisfaction with explanation provided by doctor/health professional	0 (0.0)	4 (1.0)	35 (8.3)	270 (64.3)	111 (26.4)
Satisfaction with doctor's attention to Detail	2 (0.5)	4 (1.0)	32 (7.6)	261 (62.1)	121 (28.8)
Satisfaction with doctor's examination process	4 (1.0)	3 (0.7)	38 (9.0)	245 (58.3)	130 (31.0)
Satisfaction with involvement in choice making for care options	2 (0.5)	7 (1.7)	52 (12.4)	247 (58.8)	112 (26.7)
Satisfaction with waiting time	6 (1.4)	61 (14.5)	105 (25.0)	149 (35.5)	99 (23.6)
Satisfaction with consultation time	3 (0.7)	10 (2.4)	38 (9.0)	252 (60.0)	117 (27.9)
Overall satisfaction with the health center	2 (0.5)	11 (2.6)	52 (12.4)	257 (61.2)	98 (23.3)

n = 420

Two hundred and fifty-seven (61.2%) of the respondents were satisfied with the outcome of their treatment. Two hundred and seventy (64.3%) were satisfied by the explanation of provided by the doctor/health professionals at the health center. Two hundred and sixty-one (62.1%) of the respondents were satisfied with the attention they received from their doctors. Two hundred and forty-five (58.3%) and 247 (58.8%) of the respondents were satisfied with the doctor's examination process and their involvement in making a choice from their treatment options respectively. One hundred and forty-nine (36.6%) and 252 (60.0%) were satisfied with the waiting time at the health center and the consultation time respectively. Two hundred and fifty-seven (61.6%) of the respondents were satisfied with the overall services received at the health center.

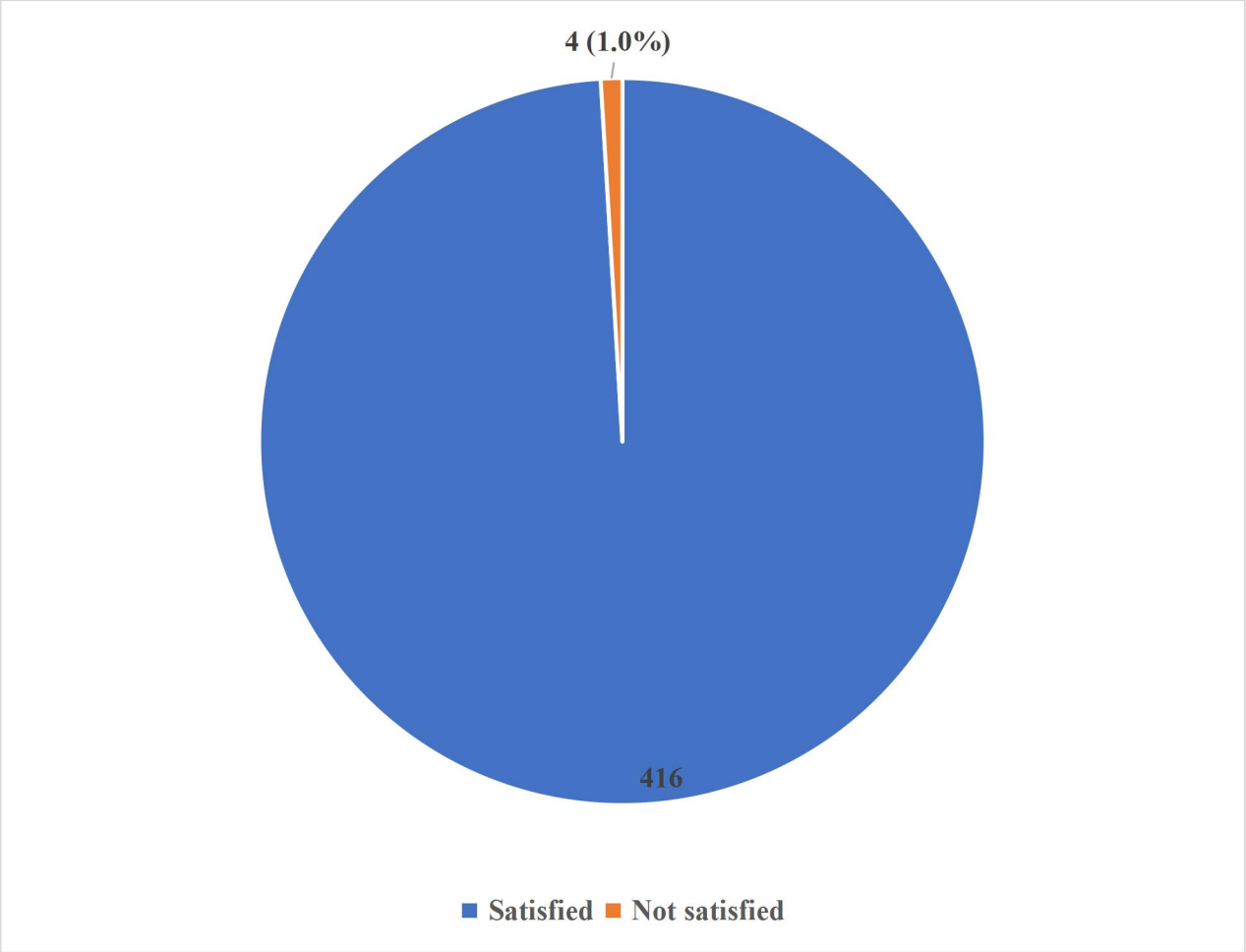

Figure 2: Satisfaction with health care services on campus

Four hundred and sixteen (99.0%) of the respondents were satisfied with services at the health center while 4 (1.0%) were not satisfied.

Table 7a: Association between satisfaction and socio-demographic characteristics

Variable	Satisfaction with health care services		Test statistic	p-value
	Good (n = 416) Freq (%)	Poor (n = 4) Freq (%)		
Age group (years)				
15 – 19	68 (100.0)	0 (0.0)	5.432*	0.195
20 – 24	182 (97.8)	4 (2.2)		
25 – 29	163 (100.0)	0 (0.0)		
> 30	3 (100.0)	0 (0.0)		
Sex				
Female	198 (99.5)	1 (0.5)	0.855*	0.625
Male	218 (98.6)	3 (1.4)		
Marital status				
Single	280 (98.6)	4 (1.4)	5.752	>0.999
Cohabiting	69 (100.0)	0 (0.0)		
Married	64 (100.0)	0 (0.0)		
Separated/Divorced	2 (100.0)	0 (0.0)		
Widowed	1 (100.0)	0 (0.0)		
Religion				
Christianity	239 (98.4)	4 (1.6)	4.326*	0.497
Islam	144 (100.0)	0 (0.0)		
Atheism	31 (100.0)	0 (0.0)		
African traditional religion	2 (100.0)	0 (0.0)		
Faculty				
Arts	109 (100.0)	0 (0.0)	5.385*	0.078
Engineering	81 (96.4)	3 (3.6)		
Management Sciences	84 (98.8)	1 (1.2)		
Agriculture	78 (100.0)	0 (0.0)		
Life Sciences	64 (100.0)	0 (0.0)		
Residence				
Off campus	254 (99.2)	2 (0.8)	0.204*	0.645
On campus	162 (98.8)	2 (1.2)		
Level				
100	63 (98.4)	1 (1.6)	12.696*	0.003
200	91 (98.9)	1 (1.1)		
300	108 (100.0)	0 (0.0)		
400	125 (100.0)	0 (0.0)		
500	18 (100.0)	0 (0.0)		
600	11 (84.6)	2 (15.4)		

† = Chi-square test, * = Fisher's exact test

All the respondents within the age groups of 15 – 19 years 68 (100.0%), 25 – 29 years 168 (100.0%) and >30 years old 3 (100.0%) were satisfied with health services at the health center relationship between respondents' age and their satisfaction with health services at the health enter was not statistically significant (p = 0.195). A higher proportion of male respondents 198 (99.5%) respondents were satisfied with the health services at the health center and the relationship between respondents' sex and their satisfaction was not statistically significant (p = 0.625). All the respondents who were cohabiting 71 (100.0%), married 65 (100.0%), separated/divorced 2 (100.0%) and widowed 1 (100.0%) were satisfied with the health services at the health center and the relationship between respondents' marital status and satisfaction was not statistically significant (p > 0.999). All the respondents who were muslim 144 (100.0%), atheists 31 (100.0%) and practiced African traditional Religion 2 (100.0%) were satisfied with the health services at the health center and the relationship between respondents' religion and satisfaction was not statistically significant (p = 0.497). All the respondents from the faculties of Arts 109 (100.0%), Agriculture 78 (100.0%) and Life sciences 64 (100.0%) were satisfied with the health services at the health center and the relationship between respondents' faculty and their satisfaction was not statistically significant (p = 0.078). A higher proportion of the respondents who stayed off-campus 254 (99.2%) were satisfied with the health services at the health center and the relationship between respondents' residence and their satisfaction was not statistically significant (p = 0.645). All the respondents in 300 level 108 (100.0%), 400 level 125 (100.0%), and 500 level 18 (100.0%) were satisfied with the health services at the health center and the relationship between respondents' level and their satisfaction was statistically significant (p = 0.003).

Table 7b: Association between satisfaction and socio-demographic characteristics

Variable	Perception of health care services		Test statistic	p-value
	Good (n = 416) Freq (%)	Poor (n = 4) Freq (%)		
Father's LOE				
None	23 (100.0)	0 (0.0)	1.669*	0.694
Primary	57 (100.0)	0 (0.0)		
Secondary	97 (100.0)	0 (0.0)		
Tertiary	239 (98.4)	4 (1.6)		
Mother's LOE				
None	21 (100.0)	0 (0.0)	2.228*	0.544
Primary	49 (100.0)	0 (0.0)		
Secondary	121 (100.0)	0 (0.0)		
Tertiary	225 (98.3)	4 (1.7)		
Father's Skill level				
Skill level 0	3 (100.0)	0 (0.0)	7.005*	0.208
Skill level 1	3 (100.0)	0 (0.0)		
Skill level 2	201 (98.5)	3 (1.5)		
Skill level 3	43 (97.7)	1 (2.3)		
Skill level 4	166 (100.0)	0 (0.0)		
Mother's Skill level				
Skill level 0	2 (100.0)	0 (0.0)	4.140*	>0.999
Skill level 1	4 (100.0)	0 (0.0)		
Skill level 2	220 (99.1)	2 (0.9)		
Skill level 3	31 (100.0)	0 (0.0)		
Skill level 4	159 (98.8)	2 (1.2)		
Monthly income (₦)				
0 – 50,000	148 (97.4)	4 (2.6)	6.095*	0.170
50,001 – 100,000	199 (100.0)	0 (0.0)		
100,001 – 150,000	36 (100.0)	0 (0.0)		
150,001 – 200,000	21 (100.0)	0 (0.0)		
> 200,000	12 (100.0)	0 (0.0)		
Perception of current health status				
Excellent	219 (99.1)	2 (0.9)	1.652*	0.549
Good	156 (99.4)	1 (0.6)		
Fair	41 (97.6)	1 (2.4)		

† = Chi-square test, * = Fisher's exact test

All the respondents whose father's had no formal education 23 (100.0%), primary 57 (100.0%) and secondary 97 (100.0%) level of education were satisfied with the health services at the health center and the relationship between respondents' father's level of education and their satisfaction was not statistically significant (p = 0.694). All the respondents whose mother's had no formal education 21 (100.0%), primary level of education 49 (100.0%) and secondary level of education 121 (100.0%) were satisfied with the health services at the health center and the relationship between respondents' mother's level of education and their satisfaction was not statistically significant (p = 0.544). All the respondents whose fathers were skill level 0 3 (100.0%), skill level 1 3 (100.0%) and skill level 4 166 (100.0%) were satisfied with the health services at the health center and the relationship between respondents' father's skill level and their satisfaction was not statistically significant (p = 0.208). All the respondents whose mothers were skill level 0 2 (100.0%), skill level 1 4 (100.0%) and skill level 3 31 (100.0%) were satisfied with the health services at the health center and the relationship between respondents' mother's skill level and their satisfaction was not statistically significant (p > 0.999). All the respondents who had a monthly income of between 50,001 and 100,000 naira 199 (100.0%), 100,001 and 150,000 naira 36 (100.0%), 150,001 – 200,000 naira 21 (100.0%) and > 200,000 naira 12 (100.0%) had a good perception of health services at the health center and the relationship between respondents' monthly allowance and their satisfaction was not statistically significant (p = 0.170). The highest proportion of respondents who had a good perception of their current health status 156 (99.4%) were satisfied with the health services at the health center and the relationship between respondents' perception of their current health status and their perception was not statistically significant (p = 0.549).

Table 8: Association between satisfaction with and perception of health services on campus

Perception of health center	Satisfaction with health services		Fisher's exact test	p-value
	Satisfied (n = 416) Freq (%)	Not satisfied (n = 4) Freq (%)		
Good	397 (99.5)	2 (0.5)	17.217*	0.013
Poor	19 (90.5)	2 (9.5)		

A higher proportion of the respondents who had a good perception 397 (99.5%) of the health center were satisfied with the health services at the health center and the relationship between perception and satisfaction was statistically significant (p = 0.013).

Table 9: Reasons for satisfaction and dissatisfaction with on-campus health services

Variable	Frequency (n = 420)	Percent
Reason with satisfaction		
Good/caring attitude of staff	303	72.1
Prompt access to healthcare	229	54.5
Easy access to emergency services	215	51.2
Quality healthcare services	186	44.3
Affordable healthcare services	108	25.7
Affordable charges	69	16.4
Reasons for dissatisfaction		
Long queues	119	28.3
Difficulty in accessing services	47	11.2
Poor reception	22	5.2
Unfriendly/poor attitude of staff	17	4.0
Expensive drugs/services	9	2.1
Ineffective treatment	9	2.1
Unclean environment	7	1.7
Will recommend health center to others		
Yes	384	91.4
No	36	8.6
Suggestions for improvement of health center		
More staff	119	27.7
Provide more advanced equipment	100	23.3
Create more awareness of health center and emergency contacts	44	10.2
More staff renumeration	37	8.8
Free wi-fi	23	5.5
Regular staff training to maintain standards	19	4.5
Research to improve health services standards	9	2.1
Discounts on services for students	9	2.1
Provide more ambulances	6	1.4
Provide more drugs	5	1.2
Cleaner environment	3	0.7
Hand sanitizers at the entrance	1	0.2
Faster test results	1	0.2

The commonest reasons areas of satisfaction were the good/caring nature of the staff 303 (72.1%), promptness of access to healthcare 229 (54.5 %) and ease of access to emergency

services 215 (51.2%). The commonest areas of dissatisfaction among the respondents were long queues 119 (28.3%), difficulty in accessing services 47 (11.2%) and poor reception 22 (5.2%). Majority of the respondents 384 (91.4%) would recommend the health center to other people. The commonest suggestions for improvement were provision of more staff 119 (27.7%), provision of advanced equipment 100 (23.3%) and creation of more awareness of the health center and emergency contacts 44 (10.2%).

SECTION E

MAJOR BARRIERS FACED BY RESPONDENTS IN SEEKING APPROPRIATE HEALTHCARE AT THE UNIVERSITY OF BENIN'S HEALTH CENTER

Table 10: Barriers to seeking health care services at the health center

Variable	Frequency (n = 430)	Percent
Long waiting time	161	37.4
Out-of-pocket payments	79	18.4
Unavailability of drugs	77	17.9
Unavailability of ambulance services	39	9.1
Poor attitude of staff	31	7.2
Unavailability of medical staff	21	4.9
Bad network affecting payment transfers	3	0.7
Lack of awareness of emergency number	2	0.5

The commonest barriers to seeking health care services were long waiting time 161 (37.4%), out-of-pocket payments 79 (18.4%) and unavailability of drugs 77 (17.9%).

Table 11: Utilization of alternatives

Variable	Frequency (n = 430)	Percent
Alternatives utilized		
Pharmacy/Chemist	215	50.0
Other public hospital	199	46.3
Private clinic	154	35.8
Native medicine	33	7.7
Reasons for not utilizing health center		
Parental preferences	178	41.4
Distance	147	34.2
Personal preferences	77	17.9
Not registered at clinic	35	8.1
Previous unpleasant experiences	21	4.9
Cost of services	20	4.7
Referred to another facility	2	0.5

The commonest alternatives utilized by respondents instead of the health center were a pharmacy/chemist 215 (50.0%), another public hospital 199 (46.3%) and a private clinic 154 (35.8%). The commonest reasons for not utilizing the health center were parental preferences 178 (41.4%), distance (147, 34.2%) and personal preferences 77 (17.9%).

CHAPTER FIVE

DISCUSSION

The study was conducted among 430 undergraduate students of University of Benin, Benin city. The sociodemographic distribution of the respondents showed that more of the respondents were aged between 20 – 24 years with a mean age of 23.0 ± 3.2 years and this was similar to that of another study among undergraduate students at Jerash University, Jordan.[18] There were more males (52.8%) than females and most of the respondents were single and Christians. This is consistent with expectations since the predominant religion in the South-South region of Nigeria is Christianity.[38] Almost two-thirds of the respondents reside off-campus and of those that reside on campus, majority stay in the school hostels. Nearly half of them have a monthly allowance of between 50,001 to 100,000 naira, the respondents were mostly dependent on their parents financially, and over half of them thought their current health status to be excellent.

Nearly all the respondents (97.7%) had ever visited the university health center, although only just over two-fifths of them had received care at the health center in the preceding year. The commonest symptoms prompting visits to the health center were joint pain, fever, and headaches followed by respiratory symptoms like cough and catarrh. This prevalent symptomatology may be explained by the high incidence of infectious diseases like malaria and upper respiratory tract infection in the region with a majority of the population being at risk of malaria.[39,40] Also, with most of the students residing in school hostels and off-campus student communities around the institution and the risk of overcrowding in such settings, upper respiratory tract infections are easily transmissible and therefore prevalent.[41] This was similar to findings from a study conducted at the University of Ibadan which showed that malaria was the commonest reason for seeking health care at the university clinic.[8] Another study in Jordan, identified influenza as the

most common reason followed by headaches.[18] These findings highlight the endemicity of malaria in the region and the importance of intensifying efforts at prevention such as encouraging the use of bed nets and use of insecticides. Relevant attention towards the prevention of prevalent health conditions such as malaria helps to reduce strain imposed on the health system if left unchecked.[39]

Of the respondents who had visited the health clinic, a vast majority had a good perception of the health center. The age group, religion, level, father's skill level, mother's skill level, and the monthly income of the respondents had a statistically significant relationship with the perception of the respondents. This could be as a result of the availability of a wide variety of health services at the clinic, the location of the clinic within the campus making it accessible to most of the respondents and the university community, and the availability of health care professionals at any time of the day. This is in keeping with findings from a study conducted at Babcock University, Ogun state, Nigeria which showed most of the respondents had good perception of the availability, accessibility, type and number of providers, availability and experience of staff, organization of health care and cost of treatment.[9,42] A good perception of a health institution could positively aid its contribution to the community it is made to serve. This is because members of the community are more likely to utilize the services provided at the health center, trust the advice from the medical personnel, improve patient satisfaction, and reduce utilization of alternative sources of health care which may not be as effective.[43,44]

Almost all the respondents were satisfied with the services at the health center and the respondent's level and the perception of the health center had a statistically significant relationship with their level of satisfaction. Over nine-tenth of the respondents (91.4%) were also willing to recommend the health center to others. This level of satisfaction was much higher than

the overall satisfaction from a study conducted at the University of Medical Sciences, Ondo state, Nigeria (51.7%) [27] and at the University of Port Harcourt, Rivers state, Nigeria (60.6%).[23] The difference in the level of satisfaction may be from the difference in timeline in both studies. By the time of this study, the provision of health care for tertiary students has been incorporated into the National Health Insurance Scheme thereby reducing the cost of health care for undergraduate students which had not been implemented at the time of the previous study at the University of Port Harcourt. Another reason could be the ease of referral to the nearby University of Benin Teaching Hospital which is just next to the university and easily accessible using the available emergency services at the health center if required. A high level of satisfaction is an indicator of high-quality healthcare services for the students and university community which correlates to improved student well-being, better academic performance and better health outcomes.[45] Also, the feedback is an encouragement to the administrators and staff of the health center to strengthen existing programs and health interventions provided by the health center.

The common barriers to seeking health care services at the health center among the respondents were long waiting times, out-of-pocket payments, and unavailability of drugs. This was similar to findings from a study conducted at the University of Ibadan, Oyo state.[8] This could point to the similarity of problems faced by the health systems in the country. The long waiting times may be attributed to the low physician-patient statistics in the country which is way less than recommended by the WHO.[46] These statistics are even more discouraging when considering the number of available physicians at the health center (about 40) and the estimated population of the students they are expected to reach (about 45,000)[35,47]. Prevailing out-of-pocket payments can be from low awareness and implementation of the Tertiary Institutions' Social Health Insurance Programme (TISHIP) of the NHIS. The barriers identified have direct implications in

reducing the level of utilization of the health center which directly impacts student health, equitable distribution of health care, academic performance, and overall productivity of the respondents and the university community at large.[48]

CONCLUSION

The major health conditions prompting respondent's use of the university health center are joint pain, fever, and headache. The overall perception of the health center was good and almost all the respondents were satisfied with the health services provided at the health center. The major barriers to utilizing services at the health center were long waiting time, out-of-pocket payment, and non-availability of drugs.

RECOMMENDATIONS

To the Federal/State Ministry of Health

- Strengthen the implementation of the Tertiary Institutions' Social Health Insurance Programme (TISHIP)we of the NHIA to reduce out-of-pocket payments
- Foster the development of private-public partnerships to reduce the cost of health care and drugs
- Encourage the establishment of local drug-producing companies to reduce the cost of drugs and other pharmaceuticals

To the UNIBEN Health Center administration

- To keep up efforts in creating awareness of the university health center
- To improve awareness of the availability of emergency services at the health center
- Strengthen existing programs to provide health care services to the university community
- Increase number of health care providers at the center to improve access to care.
- Pay attention to prevention programmes for common diseases like malaria within the university community.

To the students/university community

- Maintain a good health-seeking behavior
- Participate in campaigns focused on prevention of common health conditions to ease the burden on the health center and health system in general

REFERENCES

1. Ajaegbu OO, Ubochi II. Health Seeking Behaviour among Undergraduates in the Faculty of Health Sciences and Technology, University of Nigeria Enugu Campus. International Journal of Evaluation and Research in Education. 2016 Sep;5(3):181-8.
2. World Health Organization (WHO), "Global Strategy for Health System Appraisal: Health for All in 2020," 2010. Retrieved from http//www.who.int in 20th August, 2014.
3. Demographic Health Survey (DHS), "Measure DHS stat-compiler database," 2012. Retrieved from http://www.statcompiler.com 27th October, 2014.
4. Campus Health and Safety (CHS), "Health Seeking Attitudes of the Young," 2013. Retrieved from http://www.chs.com on 27th October, 2014.
5. Graf L. "An Online Survey of the Healthcare Needs of Undergraduate Students at an Urban University". College of Science and Health Theses and Dissertations 2015; Paper 100.
6. Rotimi O, Olubukola O, Benjamin FA. Health behavior of undergraduates and service utilization of university health centre. IOSR J Dent Med Sci. 2015;14(12):2279-861.
7. Hussain R, Guppy M, Robertson S, Temple E. Physical and mental health perspectives of first year undergraduate rural university students. BMC public health. 2013 Dec;13(1):1-1.
8. Ogundele TA, Abdulkarim IA, Enyinnaya EC. Accessibility and utilisation of university health care services (Jaja) among undergraduate students of university of Ibadan, Oyo State. Sciences. 2014;1(4):35-41.
9. Afolabi MO, Daropale VO, Irinoye AI, Adegoke AA. Health-seeking behaviour and student perception of health care services in a university community in Nigeria.

10. Rezaian S, Selamat HB. Patient satisfaction in a university health center: A Malaysian study. Journal of Health Informatics in Developing Countries. 2014;8(2).
11. Obiechina GO, Ekenedo GO. Factors affecting utilization of university health services in a tertiary institution in South-West Nigeria. Nigerian journal of clinical practice. 2013 Sep 16;16(4).
12. De Guzman AB, Ho NA, Indunan MD. A choice experiment of the health-seeking behavior of a select group of Filipino nursing students. International Journal of Health Promotion and Education. 2021 Jul 4;59(4):198-211.
13. Tan LY, Chua SS. Health Seeking Behavior towards Minor Ailments among University Students in Malaysia. International Journal of Pharmacy and Pharmaceutical Sciences. 2021;13:39-43.
14. Frimpong E. Factors Influencing Health Seeking Behaviour - Empirical Review. Dama Int J Res. 2018;3(08):89-93.
15. Sawalha, K., Sawalha, A., Salih, E., Aldhuhori, N., et al. Health Seeking Behavior among Medical Students in the University of Sharjah. Journal of Pharmacy and Pharmacology. 2017 Aug 28;5(8).
16. Ram D, Eiman N. A study of attitude toward medication and medical help-seeking among medical and pharmacy students. J Behav Health. 2018;7(01):14-9.
17. Zhang D, Zhan W, Zheng C, Zhang J, Huang A, Hu S, Ba-Thein W. Online health information-seeking behaviors and skills of Chinese college students. BMC Public Health. 2021 Dec;21(1):1-9.
18. Alkhawaldeh A. Utilisation of university health care centre services among university students. Int J Health Sci Res. 2017;7(4):340-5.

19. Karuniawati H, Sari N, Hossain MS, Ismail WI, Haq AH, Yulianti T, Taufik T, Sudarsono GR. Assessment of Mental Health and Quality of Life Status of Undergraduate Students in Indonesia during COVID-19 Outbreak: A Cross-Sectional Study. International Journal of Environmental Research and Public Health. 2022 Sep 22;19(19):12011.
20. Adeniyi WO. Assessment of Attitudes of Undergraduate Students of Obafemi Awolowo University, Ile-Ife, toward the Utilisation of Campus Health Care Facilities. Rivers State University Journal of Education. 2020 Nov 30;23(1&2):200-16.
21. Rafat Hussian R., Guppy M., Robertson S., and Temple E. Physical and mental health perspectives of first-year undergraduate rural university students, 2013; 13(1), pp.1 – 11. doi:10.1186/1471-2458-13-848
22. Getachew S, Abate L., Asres A., and Mandefro A. Knowledge, Attitude, and Practice toward Youth-Friendly Reproductive Health Services among Mizan-Tepi University Students, South-Western Ethiopia, 2022. The Scientific World Journal. Available at https://doi.org/10.1155/2022/2312407
23. Oboiechina G.O., and Ekenedo G.O. Factors affecting utilization of university health services in a tertiary institution in South-West Nigeria. Nigerian Journal of Clinical Practice (2013);16(4). DOI: 10.4103/1119-3077.116888
24. Oluyombo R., Akinleye C.A., Oluyombo O., Babatunde O.A, and Fajewonyomi B.A. Health Behaviour of Undergraduates and Service Utilization of University Health Centre. IOSR Journal of Dental and Medical Sciences (IOSR-JDMS), 2015; 4(12), pp. 72 -78.
25. Katerengabo B., Yugi P., and Kositany-Cheruiyot J. Assessment of the utilization of National Health Insurance Fund students' health scheme: A case of selected Institutions

of Higher Learning in Arusha region, Tanzania. IOSR Journal of Nursing and Health Science (IOSR-JNHS), 2020; 9(6): pp. 7 – 15

26. Ekpoh U.I. Assessing university students' satisfaction with service delivery: implications for educational management. Global Journal of Arts, Humanities and Social Science, 2018;6(6): pp. 67 - 79
27. Adejumo O.A., Abolarin O.S., Akinbodewa A.A., Enikuomehin O.C., and Lawal O.M. Assessment of students' satisfaction with university health care services in a medical university in southern Nigeria. Res. J. of Health Sci., 2019; 7(1): pp. 48 – 56. DOI: http://dx.doi.org/10.4314/rejhs.v7i1.6
28. James C. Turner & Adrienne Keller. College Health Surveillance Network: Epidemiology and Health Care Utilization of College Students at US 4-Year Universities. Journal of American College Health, 2015; 63(8): pp. 530-538, DOI: 10.1080/07448481.2015.1055567
29. Pliannuom S., Pinyopornpanish K., Angkurawaranon C., Pinyopornpanish K., Wisetborisut A.,n Likhitsathian S., and Jiraporncharoen W. Utilization of Health Care Services and Common Disease Diagnoses among University Students: An Analysis of 35,249 Students from Thailand. Int J Environ Res Public Health. 2021; 18(13): 7148. doi: 10.3390/ijerph18137148
30. Lee, D. and Guirguis, L. “International Students and Their Experiences Navigating Through On-Campus Health Care Services: A Mixed-Methods Study.” Interdisciplinary Undergraduate Research Spectrum, 2021; Issue No. 7. doi:10.29173/spectrum104

31. Mekbib B., and Demissei D. B. Sexual reproductive health service utilization and associated factors among undergraduate students of Addis Ababa University in Ethiopia. J Health Popul Nutr 2023; 42(21). doi: https://doi.org/10.1186/s41043-023-00363-9
32. Garcia CM, Lechner KE, Frerich EA, Lust KA, Eisenberg ME. College students' preferences for health care providers when accessing sexual health resources. Public Health Nurs. 2014;31(5):387-394. doi:10.1111/phn.12121
33. Adams R, Van Der Heever MM, Damons A. Perceptions of clients on awareness and the geographical location of a South African university sexual health clinic. Afr J Prim Health Care Fam Med. 2017;9(1):e1-e9. Published 2017 Sep 27. doi:10.4102/phcfm.v9i1.1350
34. Musakwa NO, Bor J, Nattey C, et al. Perceived barriers to the uptake of health services among first-year university students in Johannesburg, South Africa. PLoS One. 2021;16(1): e0245427. Published 2021 Jan 22. doi:10.1371/journal.pone.0245427
35. University of Benin: Ranking and Review-unirank International College of Universities 2019 available @ https://www.4icu.org/reviews
36. Al-Jabri FYM, Turunen H, and Kvist T. Patients' Perceptions of Healthcare Quality at Hospitals Measured by the Revised Humane Caring Scale. J Patient Exp. 2021; 8: 23743735211065265. DOI: 10.1177/23743735211065265.
37. Sansoni J, Hawthorne G, Marosszeky N, Moore K, Fleming G and Owen E. Technical Manual and Instructions for the Revised Incontinence and Patient Satisfaction Tools. Centre for Health Service Development, University of Wollongong; 2011. Available at https://www.continence.org.au/sites/default/files/2020-05/Academic_Report_Short_Assessment_of_Patient_Satisfaction_SPAS.pdf

38. Reed H.E., Mberu B.U. (2015). Ethnicity, Religion, and Demographic Behavior in Nigeria. *The International Handbook of the Demography of Race and Ethnicity; 4*. ISBN: 978-90-481-8890-1. Available at https://link.springer.com/chapter/10.1007/978-90-481-8891-8_21

39. World Health Organisation. (2023). Reports of malaria in Nigeria 2022. Available at https://www.afro.who.int/countries/nigeria/publication/report-malaria-nigeria-2022 (Accessed on 6th February, 2023)

40. The Federal Republic of Nigeria. National Malaria Strategic Plan 2014-2020. Roll Back Malaria 2014;1-110. Available at: www.nmcp.gov.ng. (Accessed on 6th February, 2023)

41. Thomas M., Bomar P.A. (2024). Upper Respiratory Tract Infection. Treasure Island (FL): StatPearls Publishing; 2024 Jan. Available at https://www.ncbi.nlm.nih.gov/books/NBK532961/. (Accessed on 6th February, 2023)

42. Abiodun O., Ovat F., & Olu-Abiodun O. (2019). Provider-Related Predictors of Utilization of University Health Services in Nigeria. Ethiopian journal of health sciences, 29(2), 239–250. https://doi.org/10.4314/ejhs.v29i2.11

43. Akinyinka M. R., Oluwole E. O., and Odusanya O. O. Community Perception of Quality of Health Care Received and Client Satisfaction in Lagos, Nigeria. Journal of Community Medicine and Primary Health Care. 31 (2) 47-65,

44. Cronin, C. E., Singh, S. R., Turner, J. S., & Evashwick, C. J. (2022). Hospitals' contributions to their communities: Should they be regulated? Frontiers in public health, 10, 1064210. https://doi.org/10.3389/fpubh.2022.1064210

45. Manzoor, F., Wei, L., Hussain, A., Asif, M., & Shah, S. I. A. (2019). Patient Satisfaction with Health Care Services; An Application of Physician's Behavior as a Moderator.

International journal of environmental research and public health, 16(18), 3318. https://doi.org/10.3390/ijerph16183318

46. World Health Organisation. (2024). The Global Health Observatory. Available at https://www.who.int/data/gho/data/indicators (Accessed on 6th February, 2023)
47. University of Benin. (2022). University of Benin – About us. University of Benin ICTU/CRPU. Available at https://www.uniben.edu/about-uniben.html. (Accessed on 7th February, 2023)
48. Ahinkorah, B.O., Ameyaw, E.K., Seidu, AA. et al. (2021). Examining barriers to healthcare access and utilization of antenatal care services: evidence from demographic health surveys in sub-Saharan Africa. BMC Health Serv Res 21, 125. doi: https://doi.org/10.1186/s12913-021-06129-5

APPENDIX I

QUESTIONNAIRE

UNDERGRADUATES STUDENTS' PERCEPTION OF QUALITY AND UTILIZATION OF HEALTH CARE SERVICES AT THE UNIVERSITY OF BENIN HEALTH CENTER

Good day. We are final year medical students conducting a survey to assess the perception of quality and utilization of health care services at UNIBEN health centre among undergraduate students. The aim is to make recommendations to the appropriate authorities to improve the quality of services provided to students and other users.

Please provide accurate answers to each question. Your answers will only assist us in learning more about the needs of people like you. You are free to decline participation or withdraw at any point and will not face any penalties as a result of refusal to participate or withdrawal. It is on this note that we seek your consent.

SECTION A: SOCIODEMOGRAPHIC DATA

1. Age (as at last birthday): _____
2. Sex: Male ( ); Female ( )
3. Marital status: Single a.( ); Married b.( ); Cohabiting c.( ); Separated/Divorced d.( ); Widowed e.( )
4. Religion: Christianity a.( ); Islam b.( ); Traditional religion c.( ); Others, (specify)_____
5. Faculty: _____
6. Department: _____
7. Level (please specify): _____
8. Father's level of education: No formal education [ ] Primary [ ] Secondary [ ] Tertiary [ ]
9. Mother's Level of education: No formal education [ ]Primary [ ] Secondary [ ] Tertiary [ ]
10. Father's Occupation: …….
11. Mother's occupation: …….
12. Residence: On campus [ ] Off campus [ ]
13. Residence, if on campus: School hostel [ ] Staff quarters[ ]
14. How much income/allowance do you receive in a month? _____

15. What are your sources of income/allowance (you can tick more than one option) Parents a.( ); Guardians b.( ); I support myself c.( ); Relatives d.( ); Scholarships e.( ); Others(specify)_____

16. How would you rate your current health status? Excellent [ ] Good [ ] Fair [ ] Poor [ ] Very poor [ ]

SECTION B: HEALTH CONDITIONS PROMPTING UTILIZATION OF HEALTH CENTER

17. Have you ever visited the UNIBEN health centre for healthcare in the past: Yes ( ); No ( )

18. What type of care did you receive at your last visit to the health centre: In-patient care ( ); Outpatient care ( ); None, was there for the sake of another sick person ( ); None, was sent away ( ) Was referred to another facility ( ); Others, specify …….

19. Have you utilized the health centre in the past 12 months: Yes ( ); No ( ). **If No, skip to question 21**

20. What health condition prompted you to use the health centre: cough ( ); Catarrh ( ); Sore throat ( ); Headache ( ); Fever ( ); Abdominal pain ( ); Diarrhoea ( ); Vomiting ( ); Rash ( ); Shortness of breath ( ); Chest pain ( ); Dizziness ( ); Cuts & bruises ( ); Fracture/Dislocation ( ); Joint pain ( ); Others, pls specify…….. **multiply responses are allowed**

SECTION C: PERCEPTION OF QUALITY OF HEALTH CARE SERVICES

		Strongly disagree	**Disagree**	**Undecided**	**Agree**	**Strongly Agree**
21.	The health centre is an essential part of the Institution					
22.	Health care provided is based on standard Practice					
23.	Response to health needs at the health centre is prompt and timely					
24.	Staff at health centre are student friendly					
25.	There are enough staff to handle students' health needs					
26.	Students seeking health care are treated with respect by staff at health centre					
27.	Health seekers are allowed to and participate in their care					
28.	Questions about health conditions are welcome and receive adequate attention					
29.	The health centre is adequately equipped to attend to basic health needs of students					
30.	The overall quality of services at the health centre is excellent					

SECTION D: LEVEL OF SATISFACTION WITH HEALTH CARE EXPERIENCE

		Very satisfied	Satisfied	Neither Satisfied nor Dissatisfied	Dissatisfied	Very Dissatisfied
31.	Satisfied with the outcome of care/treatment					
32.	Satisfied with the explanations provided by doctor/health professional about health condition and care/treatment					
33.	Doctor paid attention to the details given to questions asked					
34.	Doctor was very careful to check Everything when examining you					
35.	Satisfied with choices you had in making decisions concerning your care					
36.	Satisfied with amount of time spent waiting to assess health care					
37.	Adequacy of time spent with doctor					
38.	Overall satisfaction with the health centre					

39. If you are satisfied with services, what is/are the reason(s) (**multiple response question**)? Prompt access to healthcare [ ] Quality healthcare services [ ] Affordable healthcare services [ ] Good/caring attitude of staff [ ] Easy access to emergency services [ ] Affordable charges [ ] Others, specify_____

40. If you are dissatisfied, what is/are the reason(s) (**multiple response question**)? Long queues [ ] Poor reception [ ] Expensive drugs/services [ ] Difficulty in accessing services [ ] Ineffective treatment [ ] Unclean environment [ ] Unfriendly/poor attitude staff [ ] Others, specify_____

41. Would you like to recommend UNIBEN health centre to others? Yes [ ] No [ ]

42. What do you think can be done to improve the services?

_____

_____

SECTION E: BARRIERS TO UTILIZING HEALTH SERVICES AT HEALTH CENTER

35. What barriers have you faced in trying to use the health services at the health centre: Long waiting time for treatment ( ); Unavailability of medical staff e.g. doctor ( ); Unavailability of ambulance services ( ); Unavailability of drugs ( ); Out-of-pocket payments ( ); Poor attitude of staff ( ); Others, please specify…… **multiply responses are allowed**

SECTION F: FACTORS INFLUENCING UTILIZATION OF ALTERNATIVE HEALTH SERVICES

36. Which of the following have you utilized in the past while on campus because you were sick instead of the health centre: Private clinic ( ); Other public hospital ( ); Pharmacy/Chemist ( ); Native medicine ( ); Acupuncture ( ); Homeopathy ( ) Others, pls specify……
multiply responses are allowed

37. Reason for not using the health centre: Not registered at the clinic ( ); Distance ( ); Cost of services ( ); Parental preference ( ); Previous unpleasant experience ( ); Others, pls specify…… **multiply responses are allowed**

UNIVERSITY OF BENIN TEACHING HOSPITAL

P.M.B. 1111 BENIN CITY NIGERIA

Telephone: 052-600418
Telex: 41120 NG
Website: ubth.org

CHAIRMAN, BOARD OF MANAGEMENT: CHIEF ADEDOJA ADEWOLU, MFR

CHIEF MEDICAL DIRECTOR: PROF. DARLINGTON E. OBASEKI
MBBS (Benin), FMCPath
E-mail: darlobaseki@gmail.com

DIRECTOR OF ADMINISTRATION: M.O. JIMOH-KADIR
B. Sc, (Hons)FJPMD, Dip. Theo. AHAN

HEALTH RESEARCH ETHICS COMMITTEE APPROVAL

PROTOCOL NUMBER: ADM/E 22/A/VOL. VII/14830112965

PROPOSAL TITLE: "UNDERGRADUATES STUDENTS' PERCEPTION OF QUALITY AND UTILIZATION OF HEALTH CARE SERVICES AT THE UNIVERSITY OF BENIN HEALTH CENTER"

PRINCIPAL INVESTIGATOR(S): AIGBE KELVIN OMOSEFE, AKIBOBOLA MARCUS FEMI

DEPARTMENT/INSTITUTION: DEPARTMENT OF PUBLIC HEALTH AND COMMUNITY MEDICINE, COLLEGE OF MEDICAL SCIENCES, UNIVERSITY OF BENIN, BENIN CITY, EDO STATE, NIGERIA

DATE CONSIDERED: JANUARY 26TH, 2024

DECISION OF THE COMMITTEE: APPROVED

THIS APPROVAL DATES 26/1/2024 TO 25/1/2025. IF THERE IS DELAY IN STARTING THE RESEARCH, PLEASE INFORM THE HREC SO THAT THE DATES OF APPROVAL CAN BE ADJUSTED ACCORDINGLY

REMARK:

CHAIRMAN: PROF. (MRS) A.N. OFILI **SIGNATURE & DATE..** A.I. 26/1/2024

SUPERVISOR (S): PROF. VIVIAN OMUEMU

DECLARATION BY INVESTIGATOR(S):
PROTOCOL NUMBER (please quote in all enquiries)
Note that no participant accrual or activity related to this research may be conducted outside of these dates. All informed consent forms used in this study must carry the HREC assigned number and duration of HREC approval of the study. In multiyear research, endeavor to submit your annual re-port to the HREC early in order to obtain renewal of your approval and avoid disruption of your research. No changes are permitted in the research without prior approval by the HREC except in circumstances outlined in the Code. The HREC reserves the right to conduct compliance visit your research site without previous notification.

Signature & Date.....