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Determinants of Healthcare Service Utilization among Undergraduates of Ignatius Ajuru University of Education, Nigeria.

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Abstract

Healthcare service utilization remains a critical determinant of health outcomes among university students, yet the extent to which various factors influence its utilization is not fully understood. This study investigated the determinants of healthcare service utilization among undergraduates of Ignatius Ajuru University of Education, Port Harcourt, Nigeria. An institutional-based cross-sectional survey design was employed. The study population comprised 27,850 undergraduates. A sample of 500 students was selected using the Taro Yamane formula. Data were collected using a self-developed instrument titled Determinants of Healthcare Service *Utilization Questionnaire.* The reliability of the instrument was established using Cronbach's alpha, yielding a coefficient of 0.79, indicating acceptable internal consistency. Data were analyzed using appropriate inferential statistics, and hypotheses tested at 0.05 level of significance. The findings revealed significant relationships between healthcare service utilization and knowledge of healthcare services, attitude towards healthcare services, socioeconomic status, availability of healthcare services, and belief systems at ($p < .001$) respectfully. These results suggest that students' utilization of healthcare services was significantly influenced by their awareness and understanding of available services, personal attitudes, economic circumstances, cultural and religious beliefs, and the accessibility of healthcare facilities. The study concluded that healthcare service utilization among undergraduate is a multifactorial phenomenon shaped by individual, socioeconomic, and institutional factors. It is recommended that university authorities strengthen healthcare service delivery by ensuring adequate availability of medical supplies, qualified personnel, and health promotion programmes aimed at improving students' knowledge and attitudes toward healthcare utilization.

BACKGROUND TO THE STUDY

The purpose of establishing healthcare service in the university community was to address the dwindling health issues that affect that students, staff and others in order to promote and maintain good health status. Utilization of healthcare services among undergraduate students is influenced by a complex interplay of personal, social, economic, and institutional factors. Undergraduate students commonly face a range of health challenges, including physical illnesses (e.g., flu, infections), mental health conditions (e.g., anxiety, depression), reproductive health needs, and injuries. Mental health issues, in particular, are increasingly prevalent, with studies showing high rates of depression, stress, and anxiety among this population (American College Health Association, ACHA. 2023). One of the major factor that determine healthcare utilization is students' awareness of the services available to them. Many students are unaware of the full range of services offered by campus health centers or external providers, which leads to underutilization (Xiao et al., 2022). Among students, low perceived need or minimization of symptoms often leads to delayed care (Turner & Keller, 2021).

Accessibility issues such as long waiting times, limited clinic hours, and location can discourage students from seeking care (Becker et al., 2020). Students may also find it difficult to balance academic schedules with clinic appointments. Financial concerns are a significant barrier, some students lack

health insurance or are underinsured, while others may avoid using services due to co-pays or hidden fees (Lee et al., 2021). Even when university health centers offer free or low-cost services, misconceptions about costs can deter use. Mental health services, in particular, are underutilized due to stigma. Students often worry about being judged or having their confidentiality breached, especially in tight-knit campus environments (Eisenberg et al., 2009). Cultural background can affect attitudes toward seeking healthcare. International students or those from minority backgrounds may face additional barriers due to language, unfamiliarity with the healthcare system, or cultural stigma (Yorgason et al., 2020). Utilization is typically reactive students tend to seek care when symptoms become severe or when illnesses interfere with daily activities (Becker et al., 2020). Although mental health needs are rising, utilization rates remain relatively low. ACHA (2023) reports that only about 40% of students with anxiety or depression seek formal check. Preventive care, such as vaccinations, STI screenings, and health education, is often underutilized unless made mandatory or heavily promoted (Xiao et al., 2022).

Universities can increase service utilization through orientation programs, peer education, and digital campaigns that inform students of available services. Integrated Health Services: Offering combined physical and mental health services within one facility improves convenience and reduces stigma (Turner & Keller, 2021). These reduce logistical barriers and improve access, especially for students who are hesitant to visit clinics in person (Lee et al., 2021). Healthcare utilization among undergraduate students remains suboptimal despite increasing health challenges, especially in mental health. Improving awareness, reducing stigma, enhancing accessibility, and addressing cultural and financial barriers are critical steps toward better service utilization. Institutions must adopt a holistic, student-centered approach to healthcare delivery to ensure students get timely and appropriate care.

The expectation that health care will serve as a catalyst for significant transformation, leading to enhanced health care delivery and better overall health was unrealistic. Primary health care is not easily accessible for many people in many nations (Rutherford, 2009). Government healthcare managers' inability to incorporate community feedback regarding healthcare requirements, limited resources, and difficulties with the primary care model are all factors that contribute to this disease (World Health Organization (WHO)., 2018, Higgs et al., 2011). Community mortality and morbidity rates are high due to avoidable causes, and many people get sick needlessly (World Bank, 2016). Several factors have been found to be associated with maternal care administrations in different contexts, including the type of care, the distance to the health center, transportation issues, people's low socioeconomic status, age, standing, religion, educational attainment, family income, lack of autonomy and social standards (Masters et al., 2013). Few studies have looked at the personal and familial factors that influence whether or not mothers utilise their medications, according to Babalola and Fatusi (2009). Even those that have tried have failed to consistently find any evidence of links between maternal medication usage and any of these factors.

Age may be a factor in people's willingness to use delivery services; younger generations may be less likely to do so when the need arises, since they are less likely to be able to make complex decisions, like whether or not to use medical care services, compared to older generations. Consistent visits to a

prenatal clinic were reported by 51.4% of adults aged 25 and up in a study by Awasthi et al. (2018). In order to get enough information or attention to prevent diseases, many older adults use the health care service during their prenatal visits. Similarly, Boachie (2017) uncovered that the use of medical care service utilization especially among outpatient people increases among more seasoned people. A statistically significant positive association was established between student age and utilization of medical care services ($p < 0.001$) (Boachie, 2017). Evidence showed that majority (93.3%) of people at the pinnacle of reproductive age (20 to 34 years) make somewhere around four healthcare visit while less (9.7%) of them were under 20 years are disgrace of visiting the wellbeing facility (Ayele, et al., 2014). Accordingly, age is a significant factor that influence the way life of the individual in light of the fact that as one become more established, so as she is ready to make rightful uses.

Proximity to the wellbeing facility could influence the utilization of delivery services. Regarding the WHO recommendation that medical care facility ought not to be more than 4 kilometer from the spot of residence. It is obvious that if medical care service is not reachable from the spot of residence it would influence the using the wellbeing facility. Studies of Ohiyemi, et al. (2019) affirmed that the use of wellbeing facility is dependent on distance from the home (5.1%), quality service and professional skill. The expense of transportation to the wellbeing facility will be much if the location of medical care place is excessively far from the compass of the general population. That is, if wellbeing facility is somewhat more streak able, people will not have a hesitation about how is the medical care facility and there will be simple utilization of medical services service. Studies of Ayele et al. (2014) detailed that (95%) of people will approach wellbeing facility if it is ever closer 1.8% have no admittance to wellbeing facility. Income level of moms determines the rise and comprehensiveness of medical care service. Accordingly, socio-economic status plays an influential job on the utilisation of medical care services. Most people with low socio-economic status, for example, have no sensible occupation may not be willing to pick medical care service as analyzed with people of high socio-economic status. Studies of Kimani et al. (2016) uncovered that low business status significantly lessens the interest of wellbeing services. The size of the family and abundance index is a determinant factor of medical care service utilization (Mwami et al., 2017). Thusly, family with sensible measure of income will not find it difficult to manage the cost of medical care service at all level. In any case, the destitution striking people might not have been utilizing medical care service on the grounds that they would perceive that medical care service is exorbitant. There are striking inequalities in the use of healthcare services in Nigeria including those facilities that are established by the university or tertiary educational institutions. The prevalence of low socio-economic status and poverty among the citizen (which is more prevalent in most part of Nigeria, Rivers State inclusive with more than half of population in lowest wealth index) have the financial risk of not utilizing healthcare services. The differences in socioeconomic status of population including students determine the inequality of healthcare service utilization since it is cost effective. This indicates or reflects inequalities and poor utilization of healthcare services. In spite of university management efforts to ensure that students has access to healthcare service and utilize it, there also exists deep variation between the rich and poor undergraduates. It is noted that undergraduates who choose to use healthcare facilities have moderate to high level of socio-economic status and have high level of literacy

whereas majority of women who are poor with low socio-economic status and or have not paid their school fees would have access to healthcare service if the receipt of the fees paid is criteria. In Ignatius Ajuru University of Education Port Harcourt, Rivers State, the utilization of healthcare service becomes a problems especially among students who are yet to pay their academic tuition fees, that is the use of university healthcare service is solely dependent on students' academic fees paid. Students in the hotels lamented over poor attitude of workers in the university healthcare facility towards delivery of service to students. This habitual pattern exhibited by healthcare workers to students affect the extent to which they use the facility for the intended purpose. Consequent upon this, the study sought to unravel the factors that determine healthcare services utilization among undergraduate students.

Objectives of the Study

The objectives of this study was to investigate the determinants of healthcare service utilization among undergraduates of Ignatius Ajuru University of Education Port Harcourt, Rivers State. In specific term, the study sought to;

1. Ascertain the extent knowledge of healthcare services determine utilization among undergraduates of Ignatius Ajuru University of Education Port Harcourt, Rivers State.
2. Ascertain the extent attitude of healthcare workers determine healthcare service utilization among undergraduates of Ignatius Ajuru University of Education Port Harcourt, Rivers State.
3. Examine the extent socio-economic status determine healthcare service utilization among undergraduates of Ignatius Ajuru University of Education Port Harcourt, Rivers State.
4. Assess the extent availability to healthcare service determine healthcare service utilization among undergraduates of Ignatius Ajuru University of Education Port Harcourt, Rivers State.
5. Ascertain the extent religious belief system determine healthcare service utilization among undergraduates of Ignatius Ajuru University of Education Port Harcourt, Rivers State.

Hypotheses

The following hypotheses were formulated and tested at 0.5 level of significance to guide the study.

1. There is no significant relationship between knowledge of health matters and healthcare service utilization among undergraduates of Ignatius Ajuru University of Education Port Harcourt, Rivers State.
2. There is no significant relationship between attitude of healthcare workers and healthcare service utilization among undergraduates of Ignatius Ajuru University of Education Port Harcourt, Rivers State.

3. There is no significant relationship between socio-economic status and healthcare service utilization among undergraduates of Ignatius Ajuru University of Education Port Harcourt, Rivers State.
4. There is no significant relationship between availability to healthcare facility and healthcare service utilization among undergraduates of Ignatius Ajuru University of Education Port Harcourt, Rivers State.
5. There is no significant relationship between belief system and healthcare service utilization among undergraduates of Ignatius Ajuru University of Education Port Harcourt, Rivers State.

METHODOLOGY

Area of the Study: Ignatius Ajuru University of Education, formerly known as Rivers State College of Education, is located in Rummuolumeni, Port Harcourt, Rivers State. The core campus of this university is situated in Rummuolumeni in the Obio/Akpor local government area of Rivers State, while the other two campuses are situated in Ndele and St. John, respectively.

Research Design: For this study, a cross-sectional survey with an institutional focus was used. In order to describe, explore, explain, and evaluate occurrences or phenomena in a specific institution like IAUE Port Harcourt without intending to influence any variables, the research employed a descriptive cross-sectional design. Thus, the design looks at the factors that influence IAUE undergraduate students' use of health care services. Statistical analysis was performed on the gathered data without any variable manipulation.

Study Population: Twenty-seven thousand eight hundred fifty (27,850) male and female undergraduate students at Ignatius Ajuru University of Education in Port Harcourt made up the study's population (Directorate of Academic Planning, 2022).

Sample and Method of Sampling: 500 IAUE undergraduate students made up the study's sample size. The Taro Yamene technique formula was used to estimate the study's sample size.

$$\text{Formula:} \quad n = \frac{N}{1+N(e)^2}$$

N = total number of population from each selected department.

n = sample size

e = level of significance (0.05)

The investigation implemented a multistage sampling techniques. The first phase entails the utilisation of a simple random sampling technique to select four faculties from the existing six faculties, namely

Natural and Applied Sciences, Social Sciences, Administration/Management, and Humanities, respectively, through balloting without replacement. In the second stage of the research, a basic random sampling technique was employed to select four departments from each of the selected faculties. The following departments have been chosen: Natural and Applied Sciences (human kinetics, health and safety education, biology, chemistry, and computer science), Social Sciences (sociology, political science, economics, and social works), and Administration/Management (marketing, public administration, accounting, and banking/finance). Humanities: departments of French and fine/applied art, religious and cultural studies, and English studies and communication art. In the third stage, a systematic sampling technique is employed to select 32 undergraduates from each of the designated departments in IAUE for this study.

Data collection instrument: The Determinants of Healthcare Service Utilisation Questionnaire (DHSUQ) was a self-structured questionnaire that was used to collect data. The instrument was composed of three sections: A, B, and C. The socio-demographic characteristics of the undergraduates, including their age at their most recent birthday, gender, marital status, religious affiliation, and level of study, are described in detail in section A. Section B elucidated the factors that influence the utilisation of healthcare services among undergraduates who reside in the university hotel, while section C provided data on the extent of healthcare service utilisation among undergraduates using a four-point Likert scale: Always-4, Sometimes-3, Rarely-2, and Never-1.

Instrument Reliability: The instrument's internal consistency was assessed using the split-half method. At the same time, 40 duplicates of the instrument were administered to undergraduate students at Rivers State University, which is homogeneous to the field of study. Cronbach Alpha was implemented to ascertain the reliability index. A reliability coefficient of 0.79 was obtained, suggesting that the investigation was reliable.

Method of Data Analysis: The Statistical Product for Service Solution (SPSS) version 25.0 was employed to analyse the data that was collected.

RESULTS

Test of Hypotheses

Hypothesis One: There is no significant relationship between knowledge of health matters and healthcare service utilization among undergraduates of Ignatius Ajuru University of Education Port Harcourt, Rivers State.

Table 1: Pearson Correlation between knowledge of health matters and healthcare service utilization among undergraduates of IAUE

Variables		Utilization	Knowledge	Decision
Utilization	Pearson correlation	1	0.44	H_o Rejected
	Sig		0.00*	
	N	487	487	
Knowledge	Pearson correlation	0.44	1	
	Sig	0.00*		
	N	487	487	

*Significant; p<0.05.

The Pearson Correlation between health awareness and healthcare service use among IAUE undergraduates was shown in Table 1. With a p-value less than 0.05 (n = 487, r = 0.44, p = 0.00), the results showed that there is a notable correlation between knowledge and the use of healthcare services. As a result of this, we can reject the null hypothesis that undergraduates at IAUE, Rivers State do not differ significantly in their health awareness and their use of healthcare services.

Hypothesis Two: There is no significant relationship between attitude towards health matters and healthcare service utilization among undergraduates of Ignatius Ajuru University of Education Port Harcourt, Rivers State.

Table 2: Pearson Correlation between attitude towards health matters and healthcare service utilization among undergraduates of IAUE

Variables		Utilization	Attitude	Decision
Utilization	Pearson correlation	1	0.47	H_o Rejected
	Sig		0.00*	
	N	487	487	
Attitude	Pearson correlation	0.47	1	
	Sig	0.00*		
	N	487	487	

*Significant; p<0.05.

Table 2 displayed the Pearson Correlation between health attitudes and healthcare service use among IAUE undergraduates, . There was a statistically significant correlation between attitude and healthcare service utilisation, as shown by the following: n = 487, r = 0.47, p = 0.00. Because of this, we can reject the null hypothesis that undergraduates at IAUE, Rivers State do not differ significantly in their attitudes regarding health issues and their use of healthcare services.

Hypothesis Three: There is no significant relationship between socio-economic status and healthcare service utilization among undergraduates of Ignatius Ajuru University of Education Port Harcourt, Rivers State.

Table 3: Pearson Correlation between socio-economic status and healthcare service utilization among undergraduates of IAUE

Variables		Utilization	Socio-economic status	Decision
Utilization	Pearson correlation Sig	1	0.72 0.00*	H_o Rejected
	N	487	487	
Socio-economic status	Pearson correlation Sig	0.72 0.00*	1	
	N	487	487	

*Significant; p<0.05.

The Pearson Correlation between socioeconomic level and healthcare service utilisation among IAUE undergraduates was displayed in Table 3. The findings showed a statistically significant correlation (p<0.05) between socioeconomic level and healthcare service utilisation (n = 487, r = 0.47, p = 0.00). As a result, the null hypothesis which claimed that there is no meaningful correlation between socioeconomic level and the use of healthcare services among IAUE, Rivers State undergraduates was rejected.

Hypothesis Four: There is no significant relationship between availability of healthcare facility and healthcare service utilization among undergraduates of Ignatius Ajuru University of Education Port Harcourt, Rivers State.

Table 4: Pearson Correlation between availability of healthcare facility and healthcare service utilization among undergraduates of IAUE

Variables		Utilization	Availability	Decision
Utilization	Pearson correlation	1	0.56	H_o Rejected
	Sig		0.00*	
	N	487	487	
Availability	Pearson correlation	0.56	1	
	Sig	0.00*		
	N	487	487	

*Significant; p<0.05.

Table 4 displayed the Pearson Correlation between the availability of healthcare facilities and healthcare service use among IAUE undergraduate students. The study found a substantial correlation (p<0.05) between availability and utilisation of healthcare services (n = 487, r = 0.56, p = 0.00). Thus, the null hypothesis, which indicated that there is no significant association between healthcare facility availability and healthcare service utilisation among undergraduates at IAUE in Rivers State, was rejected.

Hypothesis Five: There is no significant relationship between belief system and healthcare service utilization among undergraduates of Ignatius Ajuru University of Education Port Harcourt, Rivers State.

Table 5: Pearson Correlation between belief system and healthcare service utilization among undergraduates of IAUE

Variables		Utilization	Belief system	Decision
Utilization	Pearson correlation	1	0.32	H_o Rejected
	Sig		0.00*	
	N	487	487	
Belief system	Pearson correlation	0.32	1	
	Sig	0.00*		
	N	487	487	

*Significant; p<0.05.

Table 5 showed the Pearson Correlation between belief system and healthcare service utilization among undergraduates of IAUE. The result revealed a statistically significant relationship between belief system and utilization of healthcare service as $p<0.05$ ($n = 487$, $r = 0.32$, $p = 0.00$). Thus, the null hypothesis which stated that there is no significant relationship between belief system and healthcare service utilization among undergraduates of IAUE, Rivers State was rejected.

DISCUSSION OF FINDINGS

The findings of this study are discussed in detailed below:

Knowledge and Utilization of Healthcare Service

The result of this study revealed that there was a statistically significant relationship between knowledge and utilization of healthcare service as $p<0.05$ ($p = 0.00$). This implies that most people who know about healthcare service may not hesitate to utilize it. Fikiri et al. (2016) nursing mothers with high knowledge are over 2 times more likely to utilize the healthcare service and vaccinate their children. Taiwo et al. (2017) added that mothers who are educated up to secondary level are 1.9 times more likely to be aware of healthcare service. Most women who have at least secondary to tertiary level of education may have good health knowledge and exhibit positive behaviour to improve good health as compared with less educated women. Studies of Kazemi and Hajian (2018) illustrated that good proportion (78.1%) of nursing mothers with high level of education expresses healthful lifestyles such as regulating the weight and health status of the child through healthcare service. Attending antenatal service in the health care facility may sharpen positive behaviour of mothers to prevent diseases. Similarly, Cyphers et al. (2017) revealed that good percentage of nursing mothers with high education grade are aware of positive actions undertaken to promote good health of the family especially through healthcare service usage. Adedokun et al. (2017) depicted in their study that mothers educational attainment are 1.63 times more likely to seek for healthcare service for different medical purposes. It could be clear that education attainment provide behaviour modification by enable them to know or discern good actions from bad. Knowledge of healthcare service provide a platform for women to understand the importance of utilization of healthcare service. Hence, level of knowledge determine healthcare service utilization.

Attitude and Utilization of Healthcare Service

The result of this study indicated that there was a statistically significant relationship between attitude and utilization of healthcare service as $p<0.05$ ($p = 0.00$). This is necessary because health workers who exhibit non-challant attitude towards the patient may preclude them from future utilization of the health service. The result of this study is in credence with Idris et al. (2013) which indicated that negative attitude of health care providers are 23.7% more likely prevent the high extent of utilising heath care service to promote and improve good health status. Olayinka, et al (2013) added that aggressive health care provider especially nurses were the major reasons while residents stop attending health care service. Emelumadu et al. (2014) affirmed that good proportion of residents were satisfied with the staff attitude (85.1%) regarding the utilization of health care service. Kimani et al. (2016) buttressed that

health workers that exhibit nonchalance attitude are less likely to satisfied clients or patients as compared with polite staff. Mwami et al. (2017) uncovered that client to be dissatisfied with health provider who are stressed and aggressive to their job. It is plausible because attitude of worker may drive users of healthcare service to patronize it. That is, most people including pregnant women who failed to utilize the healthcare services were due to negative attitude exhibited by the service providers. No prior studies was found in contrary with the outcome of this present findings. Hence, attitude of health workers significantly determine healthcare service utilization.

Socio-Economic Status and Utilization of Healthcare Service

The result of this study illustrated that there was a statistically significant relationship between socio-economic status and utilization of healthcare service as $p<0.05$ ($p = 0.00$). This implies that the utilization of healthcare services depend on the wealth index of the vulnerable population. Most people with low socio-economic status, for example, have no sensible occupation may not be willing to pick medical care service as analyzed with people of high socio-economic status. Studies of Kimani et al. (2016) uncovered that low business status significantly lessens the interest of wellbeing services. The size of the family and abundance index is a determinant factor of medical care service utilization (Mwami et al., 2017). Thus, family with sensible measure of income will not find it difficult to manage the cost of medical care service at all level. In any case, the destitution striking people might not have been utilizing medical care service on the grounds that they would perceive that medical care service is exorbitant. Notwithstanding, increase in family size significantly decline the inclination of utilizing medical care service. Evidence showed that destitution levels provided by family abundance index indicate that low income index has a negative impact on the utilization of medical care service (Mwami et al., 2017). The economic activity of people is typically low in determining the utilization of medical care services. Additionally, Garki (2013) saw that huge family size is less to utilize medical care service when contrasted with little with moderate family size. It is plausible to take note of that individuals from a huge family size will likely to go after the availability of assets henceforth forego the interest of seeking for medical care service in event of wellbeing challenges. Hence, socioeconomic status significantly determine the extent of healthcare service utilization.

Availability and Utilization of Healthcare Service

The result of this study showed that there was a statistically significant relationship between availability and utilization of healthcare service as $p<0.05$ ($p = 0.00$). This is because if healthcare service are availability 24 hourly, likelihood of utilization would increase among population. The result of this study is in credence with findings of Esmailnasab et al. (2014) which found that healthcare service utilization was significantly dependent on level of availability of service (95.0%). Ibebuike (2017) affirmed that availability of healthcare for 24 hours was 2.20 times more likely to predict the level of healthcare service utilization (OR=2.20). Nsibu et al. (2016) in their study it was indicated that utilization of antenatal care services was significantly influenced by the availability of health facilities ($p < 0.03$). Studies of Kazemi and Hajian (2018) illustrated that good proportion (78.1%) of nursing mothers with high level of

education expresses healthful lifestyles such as regulating the weight and health status of the child as health promoting behaviour. Attending antenatal service in the health care facility may sharpen positive behaviour of mothers to prevent diseases. Similarly, Cyphers et al. (2017) revealed that good percentage of nursing mothers with high education grade are aware of positive actions undertaken to promote good health of the family especially through healthcare service usage

Belief System and Utilization of Healthcare Service

The result revealed a statistically significant relationship between belief system and utilization of healthcare service as $p<0.05$ ($p = 0.00$). The belief system could be the faith professed by an individual that has influence over behaviour which comprises of set supportive beliefs such as Christian, Muslim, and traditional beliefs. Certain cultural beliefs kick against health practices because most population inherited tradition that influences behaviour such as attributing health outcome to disobedience to deity or gods. While most pregnant women indicated low levels of non-organized, organised, and religious devotion, 55% of participants said that their religion impacted all areas of their life (intrinsic religiosity), according to Cyphers et al. (2017). Rashan et al. (2021) found that health-promoting behaviours decreased by 24.1% and increased by 40% ($p < 0.001$) when social support increased by one point. Regarding the use of health care services, such as prenatal care, Christians made up the largest number of participants in terms of religion (66.1%), according to Kuuire et al. (2016). Most nursing mothers are more particular about their beliefs especially when has to do with immunizing their children. The result of this study is in consonance with findings of Esmailnasab et al. (2014) which indicated that those who equate healthcare service with their belief system are less likely to utilize it. Nsibu et al. (2016) confirmed in their prior study that traditional beliefs and customs were a correlate of the utilization of antenatal care among pregnant women. Neeta et al. (2018) affirmed that sociocultural factors, such as cultural factors, are less likely to increase the level of utilization of healthcare services among women. Rurangirwa et al. (2017) concluded that poor level of healthcare service utilization was predicted by compliance with negative cultural practices. Most families believe that sickness suffered during childhood may be attributed to disobedience to gods or a particular problem peculiar to their family. There was no contrary studies were found against the outcome of this current study. Hence, belief systems significantly determine healthcare service utilization.

Conclusion

Based on the findings of this study, it was concluded that the extent of healthcare service utilization significantly determine by certain factors such as knowledge about the service, availability of service, attitude of healthcare providers, belief system and socioeconomic status. There is a need to improve the level of healthcare service utilization by providing a social scheme for undergraduates.

Recommendations

Considering the findings and conclusion of this study, the following recommendations were made among others:

1. Stakeholders' promotion of traditional beliefs and customs that promote the utilization of healthcare services among students was recommended.
2. The residents of this research may help increase healthcare utilisation by working together with healthcare professionals, the government, and patients to address the identified causes.
3. The government should organized welfare packages for residents in remote areas to enable that procured health services since it is cost effective. Such welfare services are free medical services, giving loans for students to enable raise their income status so that they can utilize health care services when needed.
4. University management should ensure that all medical supplies and material resources are available for effective and efficient health care service delivery in the facility for the students.

Declarations

Data Availability Statement: The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.

Conflict of Interest: The authors declare that there was no conflict of interest while carrying out this research work

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Dual Publication: The authors also declare that this work has not been published or submitted for publication to any other journal.

Clinical trial number: Clinical trial number not applicable.

Consent to Publish: Not applicable

Consent to Participate

Written informed consent was obtained from the parents or legal guardians of all participating students before their enrolment in the study. In addition, written assent was obtained from the students before data collection commenced. Participants were informed of the purpose of the study, the study procedures, potential benefits and minimal risks, their right to decline participation or withdraw from the study at any stage without penalty, and the measures taken to ensure confidentiality and anonymity. Participation was entirely voluntary, and no personally identifiable information was collected or reported.

Ethics Approval and Accordance

Ethical approval for this study was obtained from the Research Ethics Committee of Ignatius Ajuru University of Education, Rumuolumeni, Port Harcourt, before the commencement of the study. Permission to conduct the study was also obtained from the Rivers State Ministry of Education. All research procedures involving human participants were conducted in accordance with the ethical principles of the Declaration of Helsinki (2013) and relevant national and institutional guidelines governing research involving human participants.

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