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Determinants of Intention to Utilize Tertiary Healthcare Services in a South-Western Nigerian State

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Abstract

Background: Specialised health services are a crucial component of universal health coverage. Underutilization of these services undermines equitable access to adequate care and good health outcomes. This study aimed to identify the determinants of intention to utilize healthcare services at University of Medical Sciences Teaching Hospital (UNIMEDTH) in Ondo West, Nigeria.

Methods: This cross-sectional study used an interviewer-administered questionnaire, adapted from the Anderson and Newman framework for healthcare service utilization, to obtain information from 500 adults. Determinants of intention to utilize healthcare services were identified using binary logistic regression. Statistical significance level was set at 5%.

Results: Mean age was 34.1 ± 13.0 years and 58.2% were males. Only 34.2% intended utilizing healthcare services at UNIMEDTH if needed. Respondents who agreed that alternative healthcare services are closer to where they live (aOR: 2.877, 95% CI: 1.513 – 5.469), disagreed that orthodox healthcare services are safer than alternative healthcare services (aOR: 2.650, 95% CI: 1.191 – 5.894), disagreed that the healthcare providers at UNIMEDTH are polite (aOR: 2.879, 95% CI: 1.228 – 6.752), disagreed that healthcare services at UNIMEDTH were affordable (aOR: 2.305, 95% CI: 1.149 – 4.624), and had ever been to UNIMEDTH (aOR: 2.253, 95% CI: 1.262 – 4.022) were significantly more likely not intending to utilize healthcare services at UNIMEDTH.

Conclusion: Most of the study participants do not intend to utilize healthcare services at UNIMEDTH if needed. A comprehensive approach combining public education, community engagement, and policy interventions aimed at improving perceptions of affordability and accessibility is necessary to effectively address this challenge.

Key words: Health service utilization, Tertiary health care, Universal health coverage, Health-seeking behaviour, Nigeria.

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Introduction

To attain the sustainable development goal 3.8 of universal health coverage (UHC), all persons must have access to the full range of essential health services. These health services should be accessible to them when and where needed without being pushed into financial hardship.[1] On the continuum of well-coordinated care, specialised health services are an essential element of UHC, hence, equitable access to these specialised services are also very crucial.[2, 3] In ideal settings, higher level of specialised healthcare services is needed only when patients' ailments cannot be handled at the lower levels of healthcare: primary and secondary. When this happens, such patients are referred from the lower levels of healthcare to the tertiary health care level.[4] Unfortunately, some referred patients do not utilize tertiary health services as prescribed by the lower levels of healthcare.

Lack of utilization of health services when and where needed, irrespective of the cause or reason, have consequences. A Taiwan study investigated the effect of health care underutilization on health outcome. In this study, it was noted that the age-sex adjusted mortality rates for diabetes mellitus and cerebrovascular disease increased with health care underutilization.[5] In another report, substantial suffering, disability, and again, deaths, were the documented effects of health care underutilization.[6] Several factors contribute to the underutilization of tertiary health services, particularly in resource-limited settings, as documented in the literature.

Among several factors, non-African studies conducted in India and United States reported influence of social networks, cost of treatment, income, race, and educational level as determinants of tertiary health service utilization.[7-9] Partner involvement in care, quality of public health services including respectful care, medical insurance status, immigration status, sex, and knowledge about health services provided were additional determinants of healthcare utilization reported by African studies conducted in South Africa and Uganda.[10, 11] Studies from Nigeria conducted in Cross-River, Borno, Kano, Kaduna, Niger, Oyo, Ogun, Edo, and Delta States as well as Abuja, the Federal Capital Territory, noted that societal determinants like family support, culture and religion; health services delivery issues like high cost of services, poor relational attitudes of providers, undue delay in service delivery, poor attention to patients, staff shortage, and sub-standard facilities; and individual factors such as awareness about health services, educational status, marital status, trust in health service providers, self-determination to utilize health services, fear and superstitious beliefs are among the determinants of tertiary health service utilization.[12-14] The numerous documented barriers influencing health service utilization globally can be summarised using the constructs of health care utilization models such as the Anderson and Newman's framework: this is a theoretical framework which views health services utilization at the intersection of the societal determinants, health services delivery system determinants and individual determinants.[15]

To address the barriers to tertiary health service utilization, peculiarities of the context should be taken into consideration. The University of Medical Sciences Teaching Hospital (UNIMEDTH) is a young tertiary health care facility in Southwestern Nigeria where specialist care is delivered to the people of Ondo City and environs. The hospital, which was established in 2018, has not experienced remarkable utilization as expected. There has been no documented evidence of the reasons for the low utilization either from the healthcare providers' point of view or from the users' point of view. Understanding the barriers to utilization of tertiary health care services peculiar to UNIMEDTH will be a useful first step towards ensuring the people of Ondo City and environs have realised access to quality specialist healthcare when needed, improved health outcomes, and reduced health disparities. In this study, we determined the intention to utilize healthcare services at UNIMEDTH. We also used the Anderson and Newman's framework to identify the determinants of the intention to utilize healthcare services from the users' point of view.

Methodology

Study design, study population and sampling technique

This cross-sectional study was conducted in Ondo West Local Government Area (LGA), Nigeria among adults 18 years and above who were permanent residents of the LGA and had been living in the LGA for more than six months as at the time of data collection. Excluded from the study were persons who were mentally challenged. A sample size of 289 was calculated using Leslie-Kish formular for single proportion (confidence level – 1.96; proportion of women from a previous study who intend to utilize a teaching hospital in the future for delivery service – 78.4%; [16] degree of precision desired – 0.05; non-response – 10%). To get a better precision, the

sample size was increased to 500. A cluster sampling design was used to recruit the study participants. In order to obtain the views of people who reside in both urban and rural wards of the LGA, one rural (Lekere) and one urban (Jilalu) ward were selected in the LGA using simple random sampling technique. From each ward, two communities were selected using simple random sampling technique. The research assistants moved from house to house and all eligible adults in the first community selected in each ward were interviewed. To complete the two hundred and fifty participants for each selected ward, the participants moved to the second community in each ward to complete the interview.

Data collection method and analysis

An interviewer administered structured questionnaire, adapted from the first version of the Anderson and Newman frame work for healthcare service utilization,[15] was used to obtain information about respondents' sociodemographic characteristics, socio-cultural perceptions about healthcare services, perceptions about provision of healthcare services at UNIMEDTH, and intention to utilize health services at UNIMEDTH. To ensure content validity, experts reviewed the contents of the questionnaire for relevance, clarity, and coverage of objectives. The questionnaire was translated into Yoruba language and then back translated into English to ensure accuracy. The questionnaire was pretested on 50 community members in Ondo East LGA of Ondo State. Appropriate amendments were made on the questionnaire after the pre-test, where necessary. Trained research assistants collected the study data over a period of two weeks in May 2024.

Intention to utilize health care services was the outcome variable and it represented the participants expressed intention to seek health care services at UNIMEDTH, if needed in the future. This was assessed using the question "If needed, will you seek healthcare services at UNIMEDTH?" Possible responses to this question were "Yes" or "No". A follow-up open-ended question was asked to understand the reason for the respondent's response to this question.

Our analysis of the determinants of intention to health care services were based on the Anderson and Newman's framework. The individual determinants were assessed using nine socio-demographic characteristics questions. The societal determinants were assessed using eleven proxy questions which assessed the respondents' sociocultural perceptions about health care services utilization. Response to each of the eleven questions was assigned a score from 1 to 4, where 1 was strongly disagree, 2 was disagree, 3 was agree and 4 was strongly agree. The health services delivery system determinants were assessed using 16 proxy questions which assessed the respondents' perception about utilization of healthcare service at UNIMEDTH. Each of the 16 questions was assigned a score from 1 to 4, where 1 was strongly disagree, 2 was disagree, 3 was agree and 4 was strongly agree.

IBM SPSS statistical software Version 27 was used for the statistical analysis. Responses to the societal and health system determinant questions were re-categorized into disagree and agree. This was done by recoding strongly disagree and disagree responses into a new variable named disagree while the agree and strongly agree responses were recoded into a new variable named agree.

Categorical variables were summarized using frequency and proportions and numerical variables were summarized using mean and standard deviation. Bivariate analysis was done using Pearson Chi-squared test to determine the association between intention to utilize healthcare services and the independent variables of interest. A multivariate analysis was done using binary logistic regression to identify the determinants of intention to utilize healthcare services in UNIMEDTH. A statistical significance level of 5% was set for all analyses.

Ethical consideration

Ethical approval (NHREC/TR/UNIMED-HREC-Ondo St/22/06/21) was obtained from UNIMED Health Research Ethics Committee. Permission to conduct the study was also obtained from community leaders. Confidentiality was maintained by not including personal identifying information in the data collection instrument. The filled paper questionnaires were kept in a locked drawer and the electronic dataset was kept on a passworded protected computer, only accessible to the researchers. A written informed consent was obtained from each participant before administering the questionnaire. All ethical principles of respect, beneficence/non-maleficence and justice were strictly adhered to in this study.

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Results

The mean age of the respondents was 34.1 ± 13.0 years and close to three-fifths (58.2%) were males. Majority of the study respondents were not health insured (89.0%). The highest proportion (48.4%) of the respondents had a monthly income of between 30,001 to 100,000 naira. This is shown in Table 1.

Table 1: Socio-demographic characteristics

Variable	Frequency	Percentage (%)
Age in years		
≤ 35	338	67.6
> 35	162	32.4
Sex		
Male	291	58.2
Female	209	41.8
Highest level of education		
Secondary and below	327	65.4
Above secondary	173	34.6
Religion		
Christian	402	80.4
Others (Islam and traditional)	98	19.6
Ethnic group		
Yoruba	420	84.0
Others†	80	16.0
Marital status		
Single	238	47.6
Married	231	46.2
Others‡	31	6.2
Family size		
≤ 5	452	90.4
> 5	48	9.6
Monthly income in naira		
≤ 30,000	195	39.0
30,001 – 100,000	242	48.4
> 100,000	63	12.6
Health insured		
Yes	55	11.0
No	445	89.0

†Hausa, Igbo, Calabar, Edo, Ibibio, Igala, Urhobo; ‡Widowed, Divorced, Separated, Cohabiting;

As shown in Table 2, more respondents agreed that alternative healthcare services are closer to where respondents live when compared to orthodox healthcare services (61.8%), agreed that alternative healthcare services are cheaper than orthodox healthcare services (78.8%), and agreed that orthodox healthcare services are safer than alternative healthcare services (75.4%).

A higher proportion of respondents agreed that their families (78.8%) and peers (76.4%) influence their decision to use healthcare services. On the other hand, a higher proportion of the study respondents disagreed with the statements that their religious belief does not permit them to utilize healthcare services (85.6%) and their cultural belief permits them to pick alternative care over orthodox healthcare (61.6%). This is also shown in Table 2.

A higher proportion of the study respondents disagreed that there are enough healthcare personnel in UNIMEDTH to attend promptly to patients' need (55.6%), disagreed that there is prompt response of ambulance services when needed (63.2%), disagreed that UNIMEDTH can be contacted through calls (63.8%), disagreed that the waiting time when seeking care at UNIMEDTH is not too long (67.2%), disagreed that healthcare services at UNIMEDTH are affordable (72.0%), and lastly disagreed that healthcare providers in UNIMEDTH always treat their patients/clients equally irrespective of their status (52.8%). (Table 3)

On the other hand, a higher proportion of our respondents in this study agreed that the healthcare providers at UNIMEDTH are polite and always ready to attend to patients/clients (66.4%), agreed that patients' health status improve after visit to UNIMEDTH (83.0%), and agreed that there is privacy during provision of healthcare services in UNIMEDTH (90.0%). (Table 3)

As presented in Table 4, although majority (71.8%) have ever been to UNIMEDTH, only 29.0% have ever been to UNIMEDTH to seek healthcare for themselves, and only 34.2% intend to utilize healthcare services at UNIMEDTH if needed.

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Table 2: Respondents' socio-cultural perceptions about healthcare services

Variable	Frequency	Percentage (%)
Alternative healthcare services are better than orthodox healthcare services		
Disagree	317	63.4
Agree	183	36.6
Alternative healthcare services are closer to where respondent lives compared to orthodox healthcare services		
Disagree	191	38.2
Agree	309	61.8
Alternative healthcare services are cheaper than orthodox healthcare services		
Disagree	106	21.2
Agree	394	78.8
Orthodox healthcare services are safer than alternative healthcare services		
Disagree	123	24.6
Agree	377	75.4
Respondent's family influences his/her decision to use healthcare services		
Disagree	106	21.2
Agree	394	78.8
Respondent's peers influence his/her decision to use healthcare services		
Disagree	118	23.6
Agree	382	76.4
Respondent's religious belief does not permit him/her to utilize healthcare services		
Disagree	428	85.6
Agree	72	14.4
There is difficulty communicating with orthodox healthcare providers due to language barrier		
Disagree	434	86.8
Agree	66	13.2
Respondent's cultural belief permits him/her to pick alternative healthcare over orthodox healthcare		
Disagree	308	61.6
Agree	192	38.4
Respondent reads/listens to health-related information from the mass media		
Disagree	115	23.0
Agree	385	77.0
Respondent has adequate knowledge about common diseases and illnesses		
Disagree	265	53.0
Agree	235	47.0

Table 3: Respondents' perceptions about provision of healthcare services at UNIMEDTH

Variable	**Frequency**	**Percentage (%)**
There are enough healthcare personnel in UNIMEDTH to attend promptly to patients' needs		
Disagree	278	55.6
Agree	222	44.4
There are adequate facilities to cater for patients' needs at UNIMEDTH		
Disagree	268	53.6
Agree	232	46.4
There is prompt response of ambulance services when needed		
Disagree	316	63.2

Variable	Frequency	Percentage (%)
Agree	184	36.8
Healthcare services at UNIMEDTH can be accessed without prior appointment		
Disagree	288	57.6
Agree	21	42.4
UNIMEDTH can be contacted through calls		
Disagree	319	63.8
Agree	181	36.2
The waiting time when seeking care in UNIMEDTH is not too long		
Disagree	336	67.2
Agree	164	32.8
Healthcare services in UNIMEDTH are affordable		
Disagree	360	72.0
Agree	140	28.0
Healthcare providers in UNIMEDTH always make decisions in patients' best interest		
Disagree	65	13.0
Agree	435	87.0
Healthcare providers in UNIMEDTH always treat their patients/clients equally irrespective of their status		
Disagree	264	52.8
Agree	236	47.2
Healthcare providers in UNIMEDTH do not make decisions that will cause patients harm		
Disagree	74	14.8
Agree	426	85.2
Patients are involved in making decisions concerning their health condition in UNIMEDTH		
Disagree	132	26.4
Agree	368	73.6
The healthcare providers at UNIMEDTH are polite and always ready to attend to patients/clients		
Disagree	168	33.6
Agree	332	66.4
Patients' health status improved after visit to UNIMEDTH		
Disagree	85	17.0
Agree	415	83.0
Better health outcome is usually gained from UNIMEDTH when compared to other health facilities		
Disagree	164	32.8
Agree	336	67.2
There is privacy during provision of healthcare services in UNIMEDTH		
Disagree	50	10.0
Agree	450	90.0
Health workers in UNIMEDTH are always willing to respond to patients' questions		
Disagree	119	23.8
Agree	381	76.2

Table 4: Intention to utilize health services at UNIMEDTH

Variable	Yes (%)	No (%)
Ever had any illness in the past requiring healthcare in a tertiary health facility	180 (36.0)	320 (64.0)
Ever been to UNIMEDTH	359 (71.8)	141 (28.2)
Ever been to UNIMEDTH to seek care for self	145 (29.0)	355 (71.0)
Ever been to UNIMEDTH to seek care for someone else	344 (68.8)	156 (31.2)
Intention to utilize health services at UNIMEDTH if needed	171 (34.2)	329 (65.8)

Further open-ended questions were asked on why a respondent intends to utilize or intends not to utilize healthcare services at UNIMEDTH if needed. Top reasons given by those who said they intend to utilize healthcare services at UNIMEDTH when needed included provision of better healthcare services at UNIMEDTH (37.4%), availability of more and better healthcare facilities (20.5%), availability of adequate health personnel (15.8%), and better health outcome (15.8%). This is shown in Supplementary File Table S1. Among those who said they do not intend to utilize healthcare services at UNIMEDTH when needed, the common reasons given included non-affordability of services at UNIMEDTH (29.5%), long waiting time (15.2%), preference for alternative healthcare (13.7%), and far distance (13.1%). This is presented in Supplementary File Table S2.

Another open-ended question seeking the opinion of the respondents on why they think patients do not use UNIMEDTH was asked. The commonly proffered reasons given for this included non-affordability of services provided at UNIMEDTH (54.4%) and long waiting time (11.0%). (Supplementary File Table S3)

The determinants of intention to utilize healthcare services at UNIMEDTH when needed are shown in Table 5. None of the socio-demographic variables were significantly determined intention to utilize healthcare services at UNIMEDTH ($p > 0.05$). (Supplementary File Table S4)

A few socio-cultural perceptions determined intention to utilize healthcare services at UNIMEDTH. Respondents who agreed that alternative healthcare services are closer to where respondent lives compared to orthodox healthcare services were approximately three times more likely not intending to utilize healthcare services at UNIMEDTH when compared with respondents who disagreed to this statement. This adjusted odds ratio (aOR) was statistically significant (aOR: 2.877, 95% CI: 1.513 – 5.469). Respondents who disagreed with the statement that Orthodox healthcare services are safer than alternative healthcare services were also three times more likely not intending to utilize healthcare services at UNIMEDTH when compared with respondents who agreed with the statement. This association was statistically significant (aOR: 2.650, 95% CI: 1.191 – 5.894). (Table 5)

The health services delivery system variables which determined intention to utilize healthcare services at UNIMEDTH in this study are reported in this paragraph. Respondents who have ever been to UNIMEDTH were approximately two times more likely not intending to utilize healthcare services at UNIMEDTH when compared with respondents who have never been to UNIMEDTH. This relationship was statistically significant (aOR: 2.253, 95% CI: 1.262 – 4.022). Respondents who disagreed that healthcare services at UNIMEDTH were affordable were statistically and significantly two times more likely not intending to utilize healthcare services at UNIMEDTH when compared with respondents who agreed that healthcare services at UNIMEDTH were affordable (aOR: 2.305, 95% CI: 1.149 – 4.624). Those who disagreed that the healthcare providers at UNIMEDTH are polite and always ready to attend to patients/clients were three times more likely not intending to utilize healthcare services at UNIMEDTH when compared with those who agreed with the statement. This aOR was statistically significant (aOR: 2.879, 95% CI: 1.228 – 6.752). Again, those who disagreed that better health outcome is usually gained from UNIMEDTH when compared to other health facilities were approximately two times more likely not intending to utilize healthcare services at UNIMEDTH when compared with their counterpart. This association was statistically significant (aOR: 2.404, 95% CI: 1.018 – 5.675). (Table 5)

A detailed table showing the results of the variables that were used for the bivariate and multivariate analysis is shown in Table 5.

Table 5: Determinants of intention to utilize health services at UNIMEDTH

Statement	Intention to utilize health services at UNIMEDTH if needed		P-value	aOR (95% CI)	P-value
	Yes (%)	No (%)			
Alternative healthcare services are closer to where respondent lives compared to orthodox healthcare services					
Disagree	98 (51.3)	93 (48.7)	<0.001	1	
Agree	73 (23.6)	236 (76.4)		2.877 (1.513 – 5.469)	0.001
Orthodox healthcare services are safer than alternative healthcare services					
Disagree	17 (13.8)	106 (86.2)	<0.001	2.650 (1.191 – 5.894)	0.017
Agree	154 (40.8)	223 (59.2)		1	
Respondent has adequate knowledge about common diseases and illnesses					
Disagree	71 (26.8)	194 (73.2)	<0.001	2.050 (1.190 – 3.531)	0.010
Agree	100 (42.6)	135 (57.4)		1	
UNIMEDTH can be contacted through calls					
Disagree	66 (20.7)	253 (79.3)	<0.001	3.363 (1.894 – 5.972)	<0.001
Agree	105 (58.0)	76 (42.0)		1	
Healthcare services in UNIMEDTH are affordable					
Disagree	100 (27.8)	260 (72.2)	<0.001	2.305 (1.149 – 4.624)	0.019
Agree	71 (50.7)	69 (49.3)		1	
The healthcare providers at UNIMEDTH are polite and always ready to attend to patients/clients					
Disagree	23 (13.7)	145 (86.3)	<0.001	2.879 (1.228 – 6.752)	0.015
Agree	148 (44.6)	184 (55.4)		1	
Better health outcome is usually gained from UNIMEDTH when compared to other health facilities					
Disagree	18 (11.0)	146 (89.0)	<0.001	2.404 (1.018 – 5.675)	0.045
Agree	153 (45.5)	183 (54.5)		1	
Ever been to UNIMEDTH					
Yes	105 (29.2)	254 (70.8)	<0.001	2.253 (1.262 – 4.022)	0.006
No	66 (46.8)	75 (53.2)		1	

Discussion

The results of this study, conducted among the general population in Ondo West, a Southwestern Nigerian State, provided valuable insights into issues which need to be addressed towards improving intention to utilize tertiary health services when needed, and thus contributing to the universal health coverage goal. A lot of our study participants do not intend to utilize tertiary health services at the young tertiary health institution in Ondo State when needed and the predictors of this non-intention included the negative socio-cultural perceptions about distance to reach orthodox healthcare services and safety of orthodox healthcare services. Other predictors of non-intention to utilize tertiary health services at UNIMEDTH were the negative perceptions about the affordability of the health services provided in the hospital, attitude of health workers, and health outcome of patients when compared to other health facilities.

Although in some settings patients bypass the lower levels of care and prefer to seek primary care at tertiary health facility for various reasons,[17, 18] this is not the ideal entry point into the health system. Tertiary healthcare level is a specialised higher level of care meant for patients referred from the lower levels of care due to inability to manage such patients.[18] It is on this basis that we found it disturbing to note that about two-thirds of our study respondents do not intend to seek care at a tertiary health facility when needed as this may worsen their health outcomes.[5, 6] As previous research on intention of the general populace to seek healthcare at a tertiary facility when needed was scarce, we compared our findings with studies which looked at actual referral compliance rates. The statistics on intention to comply with referral found in our study was higher than that reported on referral compliance rates among patients who were actually referred from lower-level health facility to a higher-level health facility from previous studies conducted in Nigeria and other African countries. [19-21] The implication of this is that not all our study respondents who intend to seek care at a tertiary health facility when needed will comply with referral instructions when they actually need it. More community-based public health education programs co-designed with local leaders are needed to enlighten the general populace and patients on the role of specialised health services on the continuum of well-coordinated care and the need to comply with referral instructions when needed. Also, as majority of our study respondents had ever been to the study site, they probably might have had some experiences which are influencing their intention to seek care at same hospital in the future. These are reflected in the reported reasons stated by our study respondents for not wanting to seek care at the study site. These issues will need to be addressed if an improvement in the referral compliance intention and actual behaviour is desired.

Similar to our study findings, proximity of hospitals to where people live have been reported in previous studies as a factor which determines whether people will or will not utilize formal health services or referral health facilities.[22-26] Tertiary hospitals provide highly specialized services and so are expensive to set-up when compared to primary healthcare facilities. In Nigeria, tertiary health facilities make up only 0.25% of all health facilities [27]. The implication of this is that some of the catchment population for the tertiary health facilities will be disadvantaged in terms of distance to the tertiary health facilities simply because of where they reside. A multifaceted approach is needed to address this distance barrier in our study context. Among others, we suggest a need for the government to formulate and implement feasible and acceptable policies on appropriate and highly subsidized public transportation facilities to ease movement from patients' homes to formal healthcare facilities in other to ensure equitable access to healthcare. Secondly, when planning for allocation of health resources, affordable and appropriate means of transportation for patients who are referred from the lower-level facilities to the higher-level facilities should be taken into consideration. This will help reduce referral transit time for the referred patients.[28] Thirdly, there is the need to strengthen the referral system to ensure care of patients is well coordinated between healthcare facilities. Further implementation research into other homegrown innovative strategies to solve the distance barriers to accessing tertiary health facilities is also recommended.

The negative perception about safety of orthodox healthcare services compared to alternative healthcare services was another predictor of non-intention to utilize tertiary health services in our study. According to the World Health Organization, good health services are meant to be safe in addition to being of good quality and effective.[29] Any health service contrary to this falls short of contributing to the goal of the health system to improve health. Despite this expected ideal, mild to severe harms continue to happen in Nigerian hospitals in the course of patient management due to various reasons which include medical negligence, unsafe medication practices, bad communication, lack of

appropriate or faulty equipment, unavailability of supplies to work, high workloads, and poor funding of hospitals.[30-35] To prevent patient safety issues in the process of provision of healthcare services in Nigerian tertiary hospitals and to regain the confidence of the general public in seeking healthcare at the tertiary health facilities when needed, there is the need for the Nigerian government to set and implement uniform quality of care standards for tertiary hospitals in Nigeria as is been done in other climes.[36]

In line with our study findings, health illiteracy is a barrier to utilizing hospitals that has been reported in other studies.[12, 37] Our study participants who perceived that they do not have adequate knowledge about sickness and diseases were more likely not intending to seek care at the referral hospital when needed. A possible explanation for this might be that individuals who do not have adequate knowledge about sicknesses and disease are not likely to have information on the levels of healthcare for disease management and the role of referral systems in ensuring an individual enjoys the highest level of healthcare if and when they cannot be managed at the lower levels of care. Addressing this requires creating awareness on common ailments, responsibilities of the different levels of care in management of diseases, and role of the referral system in linking the levels of care.

Cost of healthcare services has been recognised as a determinant of utilization of specialist healthcare services from previous published literature.[12, 38, 39] It was therefore not surprising to find a similar result in our study. As majority of our study respondents earned less than one hundred thousand naira per month and were also not health insured, it is recommended that the hospital where this study was conducted, as much as practicable, do a downward review of the cost of the services being provided in the hospital. In addition, health insurance agencies and organisations should raise more public awareness about the benefits of health insurance and the insurance packages available, particularly for the informal sector which form the larger proportion of the population. Implementation research should also be conducted to develop and test feasible, acceptable, and sustainable strategies to solve the implementation problems of community-based health insurance schemes as a solution to increasing the informal sector coverage. These measures will help solve the perceived affordability problems. This will in turn prevent pushing families into financial hardship when they utilize healthcare services and ultimately lead to experience of good health outcomes.

Our results corroborate previous findings by Esienumoh and Okonofua et al who reported that unfriendly attitudes of health workers is a barrier to utilization of hospitals.[12, 14] In our study, respondents who disagreed that staff at our study site were polite and always ready to attend to clients do not intend to seek health care at the tertiary health facility where we conducted our study. The concern of our study respondents is quite understandable. People-centredness is one of the attributes of quality of care. And as such every client who visits a health facility expects an experience of care where they will be emotionally supported in addition to being treated with respect and dignity.[40] We recommend that hospital staff be trained continuously on the standards for improving quality of care in hospitals. This should include the standards for improving experience of care by the patients and their families.[40]

In our study, participants who had ever been to UNIMEDTH and also disagreed with the perception that better health outcome is gained in the hospital, compared to other health facilities, do not intend to seek health services at our study site when needed. Although it is acceptable for our study respondents who had been to UNIMEDTH and who do not experience better health outcome to feel this way, the issue of health outcome needs to be looked at wholistically. Several factors, both from the supply and demand side, contribute to the health outcome of a patient who presents at a tertiary health facility. From the demand side, these include the time of presentation and condition of patient at presentation at the hospital. Patients who present early and in stable conditions with no signs of complication are more likely to have better health outcomes. This emphasizes the point for public health education on their roles and responsibilities in ensuring better health outcomes from hospital visits. And on the supply side, the need to address the broader social determinants of health and the need for an all-round capacity building for quality care cannot be overemphasized.

The findings of this study should be considered in the context of the study limitations. Considering that the study was carried out in a single LGA and State, the generalizability of this research findings to the entire country is limited. Despite this limitation, this study provides insights into the issues which need to be

addressed towards improving intention to utilize tertiary health services when needed.

Conclusion

This study concludes that the determinants of intent to utilize tertiary health services at UNIMEDTH are multifaceted. Addressing affordability, accessibility, and service quality is essential to enhance healthcare utilization and achieve better health outcome.

To improve healthcare utilization at tertiary hospitals when needed, policy makers should prioritize the following interventions: expand health insurance coverage to reduce out-of-pocket payment and address affordability of tertiary healthcare services, design more public health education interventions such as community outreach programs to address the misconceptions about orthodox healthcare, explore strategies to reduce the inequalities in geographical access to orthodox healthcare facilities, capacity strengthening for healthcare providers on patient communication and empathy to address the negative attitude of health workers, and formulate uniform standards for improving quality of care in Nigeria tertiary hospitals to address poor health outcomes of patients.

Conflict of interest declaration: The authors declare that they have no conflict of interest

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Ethical conformity statement: Ethical approval was obtained from UNIMED Health Research Ethics Committee. Permission to conduct the study was also obtained from community leaders. A written informed consent was obtained from each participant before administering the questionnaire. All ethical principles of respect, beneficence/non-maleficence and justice were strictly adhered to in this study.

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