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RESEARCH ARTICLE

Determinants of Health Seeking Culture among Women of Childbearing Age

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Abstract: This study examines the determinants of health-seeking culture among women of reproductive age in the Calabar Metropolis, Nigeria. The determinants identified in this study were belief systems, level of education, cost of healthcare services, and Proximity. The researcher used the descriptive survey design to sample the opinion of representatives and get a detailed description of the health-seeking culture of women of childbearing age using quantitative and qualitative data. Six hundred (600) women of childbearing age were sampled from residents in the Calabar Metropolis. Both quantitative and qualitative data were retrieved using the research questionnaire and in-depth interview schedule. The retrieved quantitative data (586) were subjected to frequency and percentage counts, and simple linear regression at a significance level of 0.05. In contrast, the qualitative data were transcribed to supplement the quantitative responses. In addition, the transcribed qualitative data were analysed by the researcher into themes based on the research objectives. The findings indicate that: there is a significant relationship between belief system and health-seeking culture among women of childbearing age; there is a substantial relationship between the level of education and health-seeking culture of women of childbearing age; the cost of healthcare has a meaningful relationship with the health-seeking culture of women of childbearing age, and there is a significant relationship between Proximity to healthcare facilities and health-seeking culture of women of childbearing age. The study concludes that women's health-seeking behaviour is significantly retrained by beliefs, education levels, cost, and Proximity. Based on this finding, it is recommended that people's opinions be strongly considered and instilled in healthcare practice. Also, reproductive health awareness should be created using various social media platforms to address issues arising from self-medication.

Keywords: Women, belief system, level of education, cost of healthcare services, proximity.

1. Introduction

One of the global issues of our time is maintaining maternal health, where millions of women of childbearing age are easily affected (Kifle, Azale, Gelaw&Melsew, 2017;



Akpabio, Angioha, Egwuonwu, Awusa, & Ndiyo, 2020). Good health is essential to human welfare and is a fundamental social and economic development objective. However, accessing and utilising healthcare services remains a global challenge, where most people reside in hard to reach areas with difficulties in mobility and less diversity in health care resources (Adames Aigbokhaode, 2018; Akeju, Oladapo, Akimade & von Dadelszen, 2016). Women bear by far the most significant burden of reproductive health problems. They are at risk of complications from pregnancy and childbirth; they also face risks in preventing unwanted pregnancy, suffer the complications of unsafe abortion, bear most of the burden of contraception, and are more exposed to contracting and suffering the complications of reproductive tract infections, mainly sexually transmitted diseases (STDs) (Arika & Osuga, 2017; Angell & Kassirer, 1998.). Among women of reproductive age, 36% of all healthy years of life lost are due to reproductive health problems such as unregulated fertility, maternal mortality and morbidity and sexually transmitted diseases including HIV/AIDS. By contrast, the equivalent figure for men is 12% (WHO, 2000; 2012; UNEPA, 2013).

Health-seeking behaviour and healthcare services are proximate factors that influence maternal morbidity and mortality (Chukwuocha, Udeh, Ede, Amadi & Chukwuocha, 2015). Health seeking behaviour worldwide is affected by the totality of people's lives, including their economic circumstances, education, employment, living conditions and family environment, social and gender relationships, and the traditional and legal structures within which they live. Several reports indicate that many women have health complications during their reproductive age (WHO, 2004). These complications range from minor physiological imbalances to more complicated cases (Wambui, Kimani & Odhiambo, 2018). The survival of these women from these complications is primarily dependent on their health-seeking behaviour (Olenja, 2003; Chandwani & Pandor, 2015).

The delay in seeking healthcare, especially among women, has been attributed to several factors, for example, the inability to classify which illness is life-threatening and the lack of knowledge of their current situation (Wambui, Kimani & Odhiambo, 2018). Most of these factors exist against undiagnosed diseases such as infection, hepatitis, malaria, and others (WHO, 2015). The resultant effects are mortality and severe complications. Consequently, most women die during pregnancy despite intervention programmes and strategies addressing maternal health issues. A lot of this is primarily attributed to health-seeking behaviour. These are particularly predominant in developing and underdeveloped nations, where healthcare services are poor in general and most likely deficient for maternal health, leading to adverse outcomes for both women and new-borns (Arika & Osuga, 2017; Ushie, Agba, Olumodeji, & Attah (2011).

In Nigeria, the health-seeking behaviour of women of childbearing age varies. The most significant factors are usually the socio-economic status of these women. Although the economic development of a nation adversely affects the overall wellbeing of the country (Latunji & Akinyemi, 2018), women, in general, are the worst hit. According to the literature, health-seeking behaviour will be influenced by personal knowledge, disease perception, socio-demographic factors and the availability and accessibility of health services. Depending on these determinants and their interactions, health care seeking behaviour is a complex outcome of many factors operating at the individual, family, and community level (Dillip, Alba, Mshana, Hetzel, Lengeler, et al. 2012). In Nigeria, however, there is inadequate evidence concerning the determinants of health-seeking behaviour among women of childbearing age at the grassroots level and urban areas. This study, therefore, seeks to bridge this knowledge gap to examine the determinants of health-seeking behaviour among women of childbearing age in Calabar Metropolis, Nigeria.

1.1 Mechanic's general theory of help seeking behavior

The help seeking behaviour theory was developed by David Mechanic in 1978. The theory emphasizes individual differences in help-seeking behaviours. In other words, the theory explains why some people resort to self-medication when they are sick, while others do not.

Mechanic (1978) notes that socialization, belief system, awareness level, and proximity plays a major role in help-seeking behaviours, as it culturally defines what illness is, and how it should be dealt with (e.g., negatively or positively). Mechanic (1978) highlighted some socio-cultural factors that influence people not to resort to self-medication when they are ill. They include: (i) Visibility, recognisability, or perceptual salience of symptoms or deviant signs. (ii) The extent to which the symptoms are perceived as serious. (iii) The extent to which symptoms disrupt family, work, and other social activities. (iv) The frequency of the appearance of symptoms, their persistence, or their frequency of recurrence. (v) The tolerance threshold of those who are exposed to and evaluate the symptoms. (vi) Available information, knowledge, and cultural assumptions and understandings of the bodily changes, (vii) Basic needs which lead to autistic psychological processes – perceptual processes that distort reality. (viii) Needs competing with illness responses – competing needs and priorities (ix) Competing (cognitive) interpretations that can be assigned to the symptoms once they are recognized (x) Availability of treatment resources, physical proximity, and psychological and monetary costs of taking action.

The theory is relevant to this study because it can be applied to different strands of illness behavior. Such as what people do when they are sick, where they go for help, how they seek medical or non-medical help, how they manage acute as well as chronic conditions, why they use health services, and how they develop health beliefs and form illness perceptions. The theory explicitly explains that peoples' health behavior shows their routine activities related to their health lifestyles that ultimately determine potential health threats and maintain their current status of health. Relative to the phenomena of self-medication, the criticism labeled against this theory is that, in seeking help, an individual may take the wrong action by going to a chemist for over-the-counter drugs, instead of going to qualified medical practitioners for test, diagnosis and prescription (Hughes, McElnay & Fleming, 2001; MacKian, 2003).

2. Literature Review

Understanding the determinants of health-seeking behaviors are significant factors that helps address health challenges as well as manage available resources. Yearly, a good number of persons die of preventable and treatable health conditions - largely in low- and middle-income countries - because they do not access biomedical treatment in a timely manner (WHO, 2007). The lack of timely and adequate medical care has remained a significant contributor to mortality and morbidity in these resource-poor settings, inadequate financial resources and an under-resourced health care system contribute to delay in accessing medical facilities(Miller, boyer, butow, Gatterllari, Dunn & Childs, 1998). These two cardinal factors only partially explain the observed trends in low uptake of optimal treatment patterns (Dillip, Alba, Mshana, Hetzel, Lengeler, et al., 2012). Earlier studies indicate that a range of other factors - such as the relatively low status of women (Mwangome, Prentice, Plugge, & Nweneka, 2010), cultural beliefs and practices (Chibwana, Mathanga, Chinkhumba, & Campbell, 2009), and perception of the cause of the illness (Feyisetan, Asa, & Ebigbola, 1997) - may contribute to this delay for women to access medical care.

Belief system is one of the most influential social institutions in the Nigerian social structure. It highly influences the individual's life-style, world views, words, and action. Belief system is so influential that, it has a significant impact on members in determining health seeking behaviour. A study done in Ethiopia demonstrated that cultural practices, such as concealing the pregnancy in the early stages in case of a miscarriage prevented some women from attending ANC visits (Kea et al., 2018). Studies carried out in Ethiopia (Kea et al., 2018), Uganda (Anastasi et al., 2015), Pakistan (Nisar, Aurangezeb, Dibley & Alam, 2016) and Zambia (Sialubanje, Massar, Davidson & Ruiter, 2015) show that it is customary to delivery at home and hospital delivery is considered suitable for the weak, sick or those with complications. However, other studies have identified that due to increased knowledge

women deliver at the hospital with skilled birth attendance (Munguambe et al., 2016; Vidler et al., 2016)

Khan, Shaikh, and Baig, (2020) assessed the knowledge, awareness, perceptions, and health-seeking behaviour of general and specifically TB-affected population and to determine the presence and level of stigma and discrimination toward TB patients. A mixed-method study was conducted in district Haripur of the Khyber Pakhtunkhwa province, comprising a household survey, whereby 526 individuals were interviewed, and five focus group discussions with various subgroups including TB patients and health workers and authorities. Quantitative results show that women were more knowledgeable on symptomatology and spread of TB, and with rising education, awareness on TB improves. The majority of the respondents had the understanding that it is a curable disease, yet some would avoid TB patients. Most of the respondents (both men and women) knew that one must go to a government facility for treatment. Only one-third would speak to doctor first, if they suspect TB-like symptoms. Television was a popular source of information on TB. Qualitative results captured people's perceptions that TB was related with poverty and was still considered a stigma in the community; hence, patients afflicted feared disclosing the disease. Conclusion. With contextual understanding of communities' knowledge, attitudes, health-seeking behaviour, and care-seeking patterns, it was concluded that there is a need to increase the awareness about TB symptoms, mode of transmission, prevention, diagnosis and treatment, and de-stigmatization of the disease through health education.

Cost of health is a growing concern for substantial portion of the worlds' population. One in every ten adults are either delayed access to or do not receive healthcare due to healthcare cost (Amin, Claxton, Ramirez & Cox, 2021). Generally, the poor have higher rates of going without medical care due to cost than any other groups. Financial barrier are potent risk factors to adverse outcomes in illnesses. The sick individual is said to develop greater symptoms for untreated illness, and a greater risk of death because of the increasing cost of healthcare (DeNoon, 2007). Despite the availability of many health service providers in Nigeria, the poor, being financially constrained, normally have limited choice and often result to self-medication of which are more detrimental to safeguarding health. Indeed, there is a significant difference in access to various health care providers between the rich and poor.

Long distance and lack of transport to the healthcare facility have been cited as one of the most common barriers for not seeking healthcare for women living in rural areas in developing countries (Anastasi et al., 2015; Jacobs et al., 2018; Kea, Tulloch, Datiko, Theobald & Kok, 2018; Munguambe et al., 2016; Vidler et al., 2016). In some communities, health facilities serve a large geographical area, meaning that some women need to travel far on difficult terrain to reach the health facility. In the absence of transport and availability of ambulances, pregnant women have to walk for hours or days to reach the health facility, and the risk of giving birth on the road increases greatly (Kea et al., 2018; Munguambe et al., 2016).

Liu, Xue, Qian, et al. (2019) carried out a cross-sectional study on healthcare-seeking behaviour among pregnant women in the Guangdong, China. Pregnant women were randomly selected using a two-stage, stratified, random sampling method from hospitals in Guangdong, China. A multinomial logistic regression was used to identify statistically significant variables from aspect of environmental, demographic and pregnancy characteristics associated with pregnant women seeking healthcare at primary, secondary or tertiary hospitals. Results showed that 537 (38.5%) of the respondents attended a primary hospital, 437 (31.4%) a secondary hospital, and 419 (30.1%) a tertiary hospital. Women attending primary hospitals were more likely to live closer to the hospital, live rurally, and be educated to a lower level. Several factors were significantly associated with attendance at a secondary versus a primary hospital: the woman's perceived necessity to seek maternal healthcare (OR 1.73, 95% CI [1.1,2.74]), the woman's choice of delivery hospital (OR 1.45, 95% CI [1.01,2.07]), or urban living (OR 1.39, 95% CI [1.03,1.88]). Characteristics

associated with attendance at a tertiary versus a primary hospital were: a history of pregnancy complications (OR 2.35, 95% CI [1.43,3.86]), travel to the hospital by public transport/taxi (OR 2.09/2.67, 95% CI [1.35,3.22]/ [1.45,4.92]), urban living (OR 1.58, 95% CI [1.14,2.18]), or a planned current pregnancy (OR 1.53, 95% CI [1.07,2.19]). It was however concluded that medical needs and convenience both play a role in the choice of hospital for antenatal care, and impact on equity utilization of health services. Pregnant women without risk factors and with higher levels of education should be a target population for guiding to choose a more proper level of hospital.

3. Research Method and Materials

The study adopted the descriptive survey design. The descriptive survey design is a survey-based design that gathers data about varying phenomena/subjects. The collected data from a survey study is used to understand or explain how different conditions influence a specific topic (McCombes, 2019; Agba, Udom, & Eka, 2020; Ojong, Agba, Njirinze & Angioha, 2021; Ojong, 2008). The study adopted a descriptive survey design in this study because it aims to accurately and systematically describe a population, situation or phenomenon. It can answer what, where, when and how questions, but not why questions. This study opted to investigate the determinants of health-seeking behaviour among women of childbearing age in Calabar Metropolis, Nigeria. The researcher uses it to sample the opinion of representatives and get a detailed description of the health-seeking behaviour of women of childbearing age using quantitative and qualitative data. The population of the study comprises women of childbearing age in Calabar Metropolis. The Metropolis has a population of 371,022 as of the 2006 census (NPC, 2006) and a 2016 projected population of 501,400.

Consequently, the people of women of childbearing age (between 20 to 50 years) is unknown. Therefore, the study sample comprises six hundred (600) women of childbearing age of different ages, marital status, educational qualification, and employment status residing in Calabar Metropolis. Since the demographic population of women of childbearing age is unknown, the study used the Taro Yamane formula to determine the sample size. The procedure for Taro Yamane's sample size determinant is mathematically represented as:

$$n = \frac{Z^2(p)(1 - q)}{e^2}$$

Where:

- n = Sample size (Required)
- Z = Standard normal deviation set at 95% (or 1.96) confidence level
- P = Percentage picking a choice or response (50% = 0.5)
- e = Error margin (0.04 on the basis of 90% confidence level).

From the above Taro Yamane's sample size determinant technique, the sample size for the study is calculated thus: The sample size for the study were 600 women of childbearing ages.

The study adopts the multi-stage sampling technique to gather its representative sample. The multi-stage design was preferred because the study population is vast and has several socio-demographic characteristics. In the various stages, cluster, simple random, convenience/purposive sampling were used. Therefore, the 600 childbearing age women were selected using purposive/convenient selection. Next, one hundred (100) respondents were selected from each Ward from the study area. More so, in-depth interviews were conducted. Finally, the discussants were selected based on their experiences in childbirth. Therefore, eight (8) participants were conveniently selected among the 600 women of childbearing ages. The quantitative and qualitative methods were for the instruments of data

collection. The stated hypotheses were tested using the Linear Regression statistical procedure at a 0.05 level of significance. Although out of the six-hundred (600) questionnaires distributed in the selected areas, five-hundred and eighty-six (586) were validly filled and returned while fourteen (14) were not correctly filled and were discarded.

4. Results and Discussion

The analytical content of this study was based on respondents' views and responses from the administered questionnaire and in-depth interviews (IDI). Data obtained from the qualitative data complemented and explained the quantitative data. The analytical test was determined using linear regression analysis at a 0.05 level of significance. The study used regression model statistics to assess if there is a significant relationship between belief system and health-seeking culture among women of childbearing age in Calabar Metropolis, Nigeria as shown in Table 1.

Table 1. Regression model summary for belief system and health seeking culture (N=586)

Descriptive Statistics									
	Mean	Std. Deviation		N					
Belief system	9.9676	1.84825		586					
Health seeking culture	10.1160	1.49535		586					
Model Summary^b									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
1	.087 ^a	.008	.006	1.49092	R Square Change	F Change	df1	df2	Sig. F Change
1					.008	4.489	1	584 ^a	.035
ANOVA^a									
Model	Sum of Squares			Df	Mean Square	F	Sig.		
1	Regression	9.977		1	9.977	4.489s	.035 ^b		
	Residual	1298.132		584	2.223				
	Total	1308.109		585					
Coefficients^a									
Model	Unstandardized Coefficients			Standardized Coefficients	T	Sig.			
		B	Std. Error	Beta					
1	(Constant)	9.412	.338		27.838	.000			
	Belief system	.071	.033	.087	2.119	.035			

a. Dependent Variable: Health seeking culture

b. Predictors: (Constant), Belief system

The table on model regression summary reveals an R-value of .087, which shows that a significant relationship exists between belief system and health-seeking culture among women of childbearing ages. The R square (.008) showed that belief system indicators of predictors (believe in spiritual and divine powers, beneficial to rely on TBAs and spiritual healers, well taken care of, experienced, and relying on spiritual powers) explained a standard error of 1.49092 and (Adjusted R2 = .006) of the total variation of the independent variable. This value shows that 1.49 of the variances in the health-seeking is predicted from the belief system. The ANOVA model also showed a significant F-ratio of 4.489, calculated against the critical F-ratio of .035 at 0.05 level of significance and 584 degrees of freedom. Therefore, the result showed that the F-ratio of 4.489 was greater than .035 and therefore claims that belief system (independent variable) predicts health-seeking behaviour (dependent variable) among women of reproductive age in Calabar, Nigeria. The model coefficients on the relationship between belief system and health-seeking behaviour showed 27.838, Sig. = .000 (N=586). However, since the calculated values were higher than the table values, it implies a significant relationship between belief system and health-seeking behaviour among women of childbearing age in Calabar Metropolis, Nigeria.

Again, the study used regression statistics to assess whether the level of education has a significant relationship with the health-seeking culture of women of childbearing age in Calabar Metropolis, Nigeria, as shown in Table 2.

Table 2. Regression model summary for level of education and health seeking culture (N=586)

Descriptive Statistics									
		Mean	Std. Deviation				N		
Level of education		10.1485	2.26760				586		
Health seeking culture		10.1160	1.49535				586		
Model Summary ^b									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.038 ^a	.001	.000	1.49557	.001	.834	1	584 ^a	.362
ANOVA ^a									
Model		Sum of Squares	Df	Mean Square	F	Sig.			
1	Regression	1.865	1	1.865	.834	.362 ^b			
	Residual	1306.244	584	2.237					
	Total	1308.109	585						
Coefficients ^a									
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.			
		B	Std. Error	Beta					
1	(Constant)	9.863	.284		34.786	.000			
	Level of education	.025	.027	.038	.913	.362			

a. Dependent Variable: Health seeking culture

b. Predictors: (Constant), Level of education

The model regression table reveals an R-value of .038a, which shows a significant relationship between the level of education and health-seeking culture among women of childbearing ages. The R square (.001) showed that level of education indicators of predictors (acquiring formal education, uneducated women, unawareness, girl child education, and common knowledge) explained a standard error of 1.49557 and (Adjusted R2 = .000) of the total variation of the independent variable. This value indicates that 1.49 of the variances in health-seeking culture can be from the level of education. The ANOVA model also showed a significant F-ratio of .834, calculated against the critical F-ratio of .362 at 0.05 level of significance and 584 degrees of freedom. Therefore, the result showed that the F-ratio of .834 was greater than .362 and therefore claims that level of education (independent variable) predicts health-seeking behaviour (dependent variable) among women of reproductive age in Calabar, Nigeria. The model coefficients on the relationship between belief system and health-seeking culture showed 34.786, Sig. = .000 (N=586). However, since the calculated values were higher than the table values, it implies a significant relationship between education and health-seeking culture among women of childbearing age in Calabar Metropolis, Nigeria.

Furthermore, the study used regression statistics were to assess whether cost of healthcare has a significant relationship with the health-seeking culture of women of childbearing age in Calabar Metropolis, as shown in Table 3.

The model regression table reveals an R-value of .051a, which shows a significant relationship between the cost of healthcare and health-seeking culture among women of childbearing ages. The R square (.003) showed that cost of healthcare indicators of predictors (present economy, more economical to self-medicate, expensive going to healthcare centres, experienced in child birthing, and including divine powers in treatment) explained a standard error of 1.49470 and (Adjusted R2 = .001) of the total variation of the independent variable. This value indicates that 1.49 of the variances in health-seeking behaviour can be from the cost of healthcare services. The ANOVA model also showed a significant F-ratio of 1.510, calculated against the critical F-ratio of .220 at 0.05 level of

significance and 584 degrees of freedom. Therefore, the result showed that the F-ratio of 1.510 was greater than .220. Therefore, the cost of healthcare services (independent variable) predicts health-seeking culture (dependent variable) among women of reproductive age in Calabar, Nigeria. The model coefficients on the relationship between belief system and health-seeking culture showed 29.261, Sig. = .000 (N=586). However, since the calculated values were higher than the table values, it implies a significant relationship between the cost of healthcare services and health-seeking culture among women of childbearing age in Calabar Metropolis, Nigeria.

Table 3. Regression model summary for cost of healthcare and health seeking culture (N=586)

Descriptive Statistics						
	Mean	Std. Deviation	N			
Cost of healthcare	9.8549	1.71403	586			
Health seeking culture	10.1160	1.49535	586			
Model Summary ^b						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics F Change df1 df2 Sig. F Change
1	.051 ^a	.003	.001	1.49470	.003	1.510 1 584 ^a .220
ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3.373	1	3.373	1.510	.220 ^b
	Residual	1304.736	584	2.234		
	Total	1308.109	585			
Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.553	.361		29.261	.000
	Cost of healthcare	-.044	.036	-.051	-1.229	.220

a. Dependent Variable: Health seeking culture

b. Predictors: (Constant), Cost of healthcare

More so, the study used regression statistics to assess whether there is a significant relationship between proximity to healthcare facilities and health-seeking culture among women of childbearing age in Calabar Metropolis, Nigeria, as shown in Table 4.

The model regression table reveals an R-value of .404^a, which shows a significant relationship between proximity healthcare centres and health-seeking culture among women of childbearing ages. The R square (.163) showed that Proximity to healthcare centres indicators of predictors (inconveniences, more convenient, seek healthcare, very difficult, and utilising close-by vendors) explained a standard error of 1.36937 and (Adjusted R2 = .161) of the total variation of the independent variable. This value indicates that 16.1 of the variances in health-seeking behaviour can be from Proximity to healthcare centres. The ANOVA model also showed a significant F-ratio of 113.596, calculated against the critical F-ratio of .000 at 0.05 level of significance and 584 degrees of freedom. Therefore, the result showed that the F-ratio of 113.596 was greater than .000 and therefore claims that Proximity to healthcare centres (independent variable) predicts health-seeking culture (dependent variable) among women of reproductive age in Calabar, Nigeria. The model coefficients on the relationship between belief system and health-seeking culture showed an at-value of 22.775, Sig. = .000 (N=586). However, since the calculated values were higher than the table values, it implies a significant relationship between Proximity to healthcare centres and health-seeking culture among women of childbearing age in Calabar Metropolis, Nigeria.

4.1. Discussion of Finding



This study assessed the relationship between belief system and health-seeking culture among women of reproductive age. The statistical used was linear regression model analysis. The outcome of the analysis showed an R-value of .087, R² (.008), a standard error of 1.49092 and (Adjusted R² = .006) of the total variation of the independent variable. The ANOVA model also showed a significant F-ratio of 4.489, calculated against the critical F-ratio of .035 at 0.05 level of significance and 584 degrees of freedom. Therefore, the result showed that the F-ratio of 4.489 was more significant than .035. Thus, the belief system (independent variable) predicts health-seeking culture (dependent variable) among women of reproductive age in Calabar, Nigeria. This result, therefore, implied that a vital significance of belief system predicts the health-seeking culture of women of childbearing ages in Calabar, Nigeria. This outcome, thus, corresponds with Kea et al. (2018) in their study in Ethiopia, demonstrating that cultural practices, such as concealing the pregnancy in the early stages in case of a miscarriage, prevented some women from attending ANC visits, significantly affects health-seeking behaviour. Again, studies carried out in Ethiopia (Kea et al., 2018), Uganda (Anastasi et al., 2015), Pakistan (Nisar, Aurangezeb, Dibley & Alam, 2016) and Zambia (Sialubanje, Massar, Davidson & Ruiter, 2015) show that it is customary to delivery at home and hospital delivery is considered suitable for the weak, sick or those with complications.

Table 4. Regression model summary for level of education and health seeking culture (N=586)

Descriptive Statistics									
		Mean	Std. Deviation		N				
Proximity to healthcare centres		10.5375	1.99558		586				
Health seeking culture		10.1160	1.49535		586				
Model Summary ^b									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
1	.404 ^a	.163	.161	1.36937	R Square Change	F Change	df1	df2	Sig. F Change
1					.163	113.596	1	584 ^a	.000
ANOVA ^a									
Model	Sum of Squares		Df	Mean Square		F	Sig.		
1	Regression	213.011	1	213.011		113.596	.000 ^b		
	Residual	1095.098	584	1.875					
	Total	1308.109	585						
Coefficients ^a									
Model	Unstandardized Coefficients			Standardized Coefficients		T	Sig.		
		B	Std. Error	Beta					
1	(Constant)	6.930	.304			22.775	.000		
	Proximity to healthcare centre	.302	.028	.404		10.658	.000		

a. Dependent Variable: Health seeking culture

b. Predictors: (Constant), Proximity

An in-depth interview (IDI) session conducted on the relationship between belief system and health-seeking culture among women of reproductive age in Calabar, Nigeria, revealed that most of the IDI participants affirm that belief systems significantly influence the health-seeking behaviour of women of childbearing age. It confirmed that it is very typical to believe in spiritual and divine powers, especially in maintaining the health status of women.

When asked of those prevailing conditions affecting women at their childbearing ages, a discussant report that:

Any woman who feels safe, especially during pregnancy, is not serious. During pregnancy, women are like a magnet. They attract all sorts of evil. If they don't



have spiritual backings, they can be easily attacked or killed. So, women must be spiritually minded at their childbearing ages. Some women can be rendered barren. Some medically certified women are fit to be pregnant, yet they cannot conceive. These are all spiritually inflicted (IDI, Ekpò-Abasi).

The study also established the links between level of education and health-seeking culture among women of reproductive age. Linear regression model was used for the analysis. The analysis outcome showed an R-value of .038, R² (.001), a standard error of 1.49557 and (Adjusted R² = .000) of the total variation of the independent variable. The ANOVA model also showed a significant F-ratio of .834, calculated against the critical F-ratio of .362 at 0.05 level of significance and 584 degrees of freedom. Therefore, the result showed that the F-ratio of .834 was more significant than .035 and thus claims that level of education (independent variable) predicts health-seeking culture (dependent variable) among women of reproductive age in Calabar, Nigeria. This result, therefore, implied that a vital significance of the level of education predicts the health-seeking culture of women of childbearing ages in Calabar, Nigeria. This outcome, thus, corresponds with studies carried out in Ethiopia (Kea et al., 2018) and Pakistan (Qureshi et al., 2016), which claimed that many women are neither aware of the benefits of regular maternal services nor the signs of pregnancy and childbirth complications. The perception is that women do not use the health services if they feel well during the pregnancy and only in difficulties.

An in-depth interview (IDI) session conducted on the relationship between education and health-seeking culture among women of reproductive age in Calabar, Nigeria, revealed that most IDI participants affirm that educational level significantly influences women's health-seeking behaviour childbearing age. Furthermore, it proved that acquiring formal education can help you make good decisions when seeking healthcare. When asked about the role education play in health-seeking behaviour, a discussant reported that:

Being educated is very important for every woman. Not only to graduate and get a good job, being educated will help you make good decisions, especially on health-related issues. For instance, I once encountered a woman who said her friend advised her to use one concoction to treat her infection. But the condition persisted. When she was brought to the clinic, after a series of questioning, she revealed all she had encountered. She was educated enough to understand that certain illnesses or diseases are not to be treated on a trial and error experience. She would have avoided the later effect of the concoction taken.

Again, the study investigated the relationship between the cost of healthcare services and health-seeking culture among women of reproductive age. Linear regression model was used for the analysis. The outcome of the research showed an R-value of .051a, R² (.003), a standard error of 1.49470 and (Adjusted R² = .001) of the total variation of the independent variable. The ANOVA model also showed a significant F-ratio of 1.510, calculated against the critical F-ratio of .220 at 0.05 level of significance and 584 degrees of freedom. Therefore, the result showed that the F-ratio of 1.510 was more significant than .220. Thus, the cost of healthcare services (independent variable) predicts health-seeking behaviour (dependent variable) among women of reproductive age in Calabar, Nigeria. Therefore, this result implied that the cost of healthcare services indicates the health-seeking culture of women of childbearing ages in Calabar, Nigeria. This outcome, thus, corresponds with Amin, Claxton, Ramirez, and Cox (2021), who asserts that the cost of health is a growing concern for a substantial portion of the worlds' population. One in every ten adults are either delayed access to or do not receive healthcare due to healthcare costs. Generally, the poor have higher rates of going without medical care due to cost than any other group.

An in-depth interview (IDI) session conducted on the relationship between healthcare services and health-seeking culture among women of reproductive age in Calabar, Nigeria, revealed that the IDI participants affirm that healthcare costs significantly influence the

health-seeking culture of women of childbearing age. It was strongly proved it is more economical and cost-effective to self-medicate when sick than to visit health facilities or clinics.

When asked to describe the cost of healthcare services in their locality, a discussant avers that:

Going to the hospital these days is not encouraging at all. We all know that hospitals accord unique treatments to specific illnesses or diseases. Come to think of it. You still get the same outcome even when treated at home. If you have someone who can treat you at home with little cost, why not adopt it. Maintaining good health at hospitals is quite expensive these days. For instance, if you are to treat malaria or typhoid, going to the hospital will require you to carry out a test first before they commence treatment. What if you don't have enough money to carry out the test and then treatment. Medical cost is quite expensive for low-income earners (IDI, Anantigha).

More so, the study assessed the relationship between Proximity (distance) to healthcare centres and health-seeking culture among women of reproductive age. Linear regression model was adopted for the analysis. The outcome of the analysis showed an R-value of .404, R² (.163), a standard error of 1.36937 and (Adjusted R² = .161) of the total variation of the independent variable. The ANOVA model also showed a significant F-ratio of 131.596, calculated against the critical F-ratio of .000 at 0.05 level of significance and 584 degrees of freedom. Therefore, the result showed that the F-ratio of 131.596 was more significant than .000 and thus claims that Proximity (distance) to healthcare centres (independent variable) predicts health-seeking culture (dependent variable) among women of reproductive age in Calabar, Nigeria. This result, therefore, implied that distance (Proximity) to healthcare centres predicts the health-seeking culture of women of childbearing ages in Calabar, Nigeria. This outcome, thus, corresponds with Anastasi et al. (2015); Jacobs et al. (2018); Kea, Tulloch, Datiko, Theobald and Kok (2018); Munguambe et al. (2016); and Vidler et al. (2016), they assert that long-distance and lack of transport to the healthcare facility have been cited as one of the most common barriers for not seeking healthcare for women living in rural areas in developing countries. Moreover, in some communities, health facilities serve a large geographical area, meaning that some women need to travel far on rugged terrain to reach the health facility.

An in-depth interview (IDI) session conducted on the relationship between Proximity to healthcare centres and health-seeking culture among women of reproductive age in Calabar, Nigeria, revealed that the IDI participants do affirm that Proximity (distance) to healthcare centres pose a significant barrier to the health-seeking culture of women of childbearing age. Furthermore, it confirmed that inconveniences of visiting the hospital when sick such as long-distance and lack of transport to the healthcare facility are a common barrier for seeking healthcare

5. Conclusion and Recommendation

In Africa like in most part of the developing world, women bear by far the most significant burden of reproductive health. However, several constraints are emerging and remain a critical concern in healthcare practices. The issue of how women respond to their health needs have been reportedly affected by several social, economic, and cultural constraints. The present study examined determinants of health-seeking culture among women of reproductive age in Calabar Metropolis, Nigeria. Determinants of health-seeking culture examined were belief system, level of education, cost of health care and Proximity. Thus, people's belief system in terms of what they believe in, their level of education, cost of healthcare and Proximity to health care facilities are significant factors that influence the health-seeking culture of women in Calabar Metropolis. The study, however, concludes that the health-seeking culture of women is significantly retrained by beliefs, education

levels, cost, and Proximity. Consequently, government and other agencies alike should take strategic steps and develop policies that will reduce the reproductive burdens of women. Based on the finding of the study, the following recommendations are made: First, the people's beliefs should be strongly considered and taught in the healthcare practice. It shows that spirituality upholds womanhood; therefore, aspects of spirituality, like prayers, be offered to women during and after pregnancy at the healthcare centres. Reproductive health awareness is created using various social media platforms. Issues arising from self-medication could be addressed using media outlets. It will warn women of the impending dangers in seeking alternative healthcare. Government health policies should make safety-net provisions for low-income earners. However, the NHIS is part of government health policy to cut the cost of healthcare. This policy did not include non-government workers. Therefore, the government can subsidise healthcare services, especially women without government-paid jobs. Provisional healthcare facilities (home-based clinics) should be constructed within 10km in hard to reach communities. It would help women to access healthcare services during emergencies.

References

- Adam, Vincent Yakubu and Adesuwa Queen Aigbokhaode. 2018. Socio-demographic factors associated with the healthcare-seeking behaviour of heads of households in a rural community in Southern Nigeria. *Sabel Medical Journal*, 21(1), 31-36.
- Akeju, David, Olufemi Oladapo, Marianne Vidler, Adepoju Akinmade, Diane Sawchuck, Rahat Qureshi, and Peter von Dadelszen. 2016. Determinants of health care seeking behaviour during pregnancy in Ogun State, Nigeria. *Reproductive Health*, 13(1), 32.
- Amin, Krutika, Gary Claxton, Marco Ramirez and Cynthia Cox. 2021. How does cost affect access to care? Peterson-KFF: *Health System Tracker*, Accessed online at: <https://www.healthsystemtracker.org/chart-collection/cost-affect-access-care/#item-start>
- Anastasi, Erin, Matthias Borchert, Oona Campbell, Egbert Sondorp, Felix Kaducu, Olivia Hill, Denis Okeng, Vicki Norah Odong and Isabelle Lange. 2015. Losing women along the path to safe motherhood: why is there such a gap between women's use of antenatal care and skilled birth attendance? A mixed methods study in northern Uganda. *BMC Pregnancy and Childbirth*, 15(287), 1-15.
- Angell, Marcia and Jerome Kassirer. 1998. Alternative medicine-the risks of untested and unregulated remedies. *New England Journal of Medicine*, 339, 839-840.
- Arika, Gladys and Ben Osuga. 2017. Factors Associated with Reproductive Health Seeking Behaviour among Women of Reproductive Age (15-49 years): A Case Study of Kangitit Sub-Location, Turkana East Sub-County, Turkana County. *Global Journal of Research and Review*, 4(1), 1-6.
- Chukwuocha, Uchechukwu, Mary Udeh, Allison Ede, Chinasa Amadi and Adanna Chukwuocha. 2015. "Assessment of Maternal Health Seeking Behaviour and Service Utilization among Women of Reproductive Age in South- Eastern, Nigeria," *Scientific Review, Academic Research Publishing Group*, 1(3), 64-73.
- Dillip, Angel, Sandra Alba, Christopher Mshana, Manuel Hetzel, Christian Lengeler, Iddy Moyumana, Alexander Schulze, Hassan Mshindu, Mitchellweiss and Brigit. 2012. Acceptability – a neglected dimension of access to health care: findings from a study on childhood convulsions in rural Tanzania. *BMC Health Service Research*, 12(1), 113.
- Ebigbola, Joshua. 1997. *Population and quality of life*. Ile-Ife, Nigeria: Obafemi Awolowo University Press. Retrieved from <http://www.worldcat.org/oclc/39971662>
- Hughes, Carmel, James McElnay and Glenda Frances Fleming. 2001. Benefits and risks of self-medication. *Drug safety*, 24(14), 1027-1037.
- Jacobs, Choolwe, Charles Michelo and Mosa Moshabela. 2018. Why do rural women in the most remote and poorest areas of Zambia predominantly attend only one antenatal care visit with a skilled provider? A qualitative inquiry. *BMC Health Services Research*, 18(409).



Journal of Social Science & Medicine, 12, 207-214.

- Kea, Aschenaki, Olivia Tulloch, Daniel Datiko, Sally Theobald and Maryse Kok. 2018. Exploring barriers to the use of formal maternal health services and priority areas for action in Sidama zone, southern Ethiopia. *BMC Pregnancy and Childbirth*, 18(96). doi: 10.1186/s12884-018-1721-5.
- Khan, Adeela, Babar Tasneem Shaikh and Mirza Amir Baig. 2020. Knowledge, Awareness, and Health-Seeking Behaviour regarding Tuberculosis in a Rural District of Khyber Pakhtunkhwa, Pakistan. *Hindawi BioMed Research International*, 20, 1-6.
- Kifle, Dereje, Telake Azale, Yalemzewod Assefa Gelaw and Yayehirad Alemu Melsew. 2017. Maternal health care service seeking behaviours and associated factors among women in rural Haramaya District, Eastern Ethiopia: a triangulated community-based cross-sectional study. *Reprod Health*, 14, 6. <https://doi.org/10.1186/s12978-016-0270-5>.
- Latunji, Olajimi Oluwatosin and Oluwaseun Akinyemi. 2018. Factors influencing health-seeking behaviour among civil servants in Ibadan, Nigeria. *Annals of Ibadan Postgraduate Medicine*, 16(1), 52-60
- Liu, Guihao, Yunlian Xue, Zhenzhu Quian, Liuna Yang, Yunbin Yang, Qingshan Geng and Xin Wang. 2019. Healthcare-seeking behavior among pregnant women in the Chinese hierarchical medical system: a cross-sectional study. *International Journal of Equity Health*, 18, 1-8.
- MacKian Sars. 2003. A review of health seeking behaviour: problems and prospects. *Health Systems Development Programme*. Health policy and planning, 19(3), 137-146.
- McCombes, Shona. 2019. *Methodology: Descriptive research*. <https://www.scribbr.com/methodology/descriptive-research/>
- Mechanic, David. 1978. Sex, illness, illness behavior, and the use of health services. *Social Science & Medicine*. Part B: Medical Anthropology, 12, 207-214,
- Miller, Megan, Michael Boyer, Phyllis Butow, Melina Gattellari, Stewart Dunn and Annabel Childs. 1998. The use of unproven methods of treatment by cancer patients. *Supportive Care in Cancer*, 6(4), 337-347.
- Munguambe, Khatia, Helena Boene, Marianne Vidler, Cassimo Bique, Diane Sawchuck, Tabassum Firoz, Prestige Tantenda Makanga, Rahat Qureshi, Eusebio Macete, Clara Menéndez, Peter Von Dadelszen and Esperanca Sevene. 2016. Barriers and facilitators to health care seeking behaviours in pregnancy in rural communities of southern Mozambique. *Reproductive Health*, 13, 31.
- Mwangome, Martha, Andrew Prentice, Emma Plugge and Chidi Nweneka. 2010. Determinants of appropriate child health and nutrition practices among women in rural Gambia. *Journal of Health, Population and Nutrition*, 28, 167-172.
- National Population Commission (NPC) (2006) Nigeria National Census: Population Distribution by Sex, State, LGAs and Senatorial District. Retrieved from: <http://www.population.gov.ng/index.php/publication/140-popn-distri-by-sex-state-jgas-and-senatorial-distr-2006>
- National Population Commission, Nigeria and ICF Macro (2008). Nigeria Demographic and Health Survey (NDHS). Abuja: National Population Commission, Abuja and ICF Macro; 2009.
- Nisar, Yasir Bin, Brekhna Aurangzeb, Michael Dibley and Ashraful Alam. 2016. Qualitative exploration of facilitating factors and barriers to use of antenatal care services by pregnant women in urban and rural settings in Pakistan. *BMC Pregnancy and Childbirth*, 16, 42. Doi: 10.1186/s12884-016-0829-8.
- Ogaboh, Agba, Udom, Hannah and Ide Eka. 2020. Why Brain Drain in the Nigerian Health Sector?. *Asian Journal of Applied Sciences* (ISSN: 2321-0893), 8(02), 95-104.
- Ojong, Felix, Agba Ogaboh, Chineye Njirinze and Puis Angioha. 2021. Ethno-communal crisis and its implication on food security and business activities in Nigeria. *SAINSMAT: Journal of Applied Sciences, Mathematics, and Its Education*, 10(1), 11-20. <https://doi.org/10.35877/sainsmat1012102021>

- Olenja, Joyce Muhenge. 2003. "Editorial: Health seeking behaviour in context," *East African Medical Journal*, 80(2), 61-62.
- Qureshi, Rahat, Sana Sheikh, Asif Raza Khowaja, Zahra Hoodbhoy, Shujaat Zaidi, Diane Sawchuck, Marianne Vidler Peter Von Dadeslzen. 2016. Health care seeking behaviours in pregnancy in rural Sindh, Pakistan: a qualitative study. *Reproductive Health*, 13, 34. doi: 10.1186/s12978-016-0140-1.
- Sialubanje, Cephas, Karlijn Massar, Davidson Hamer and Robert Ruiters. 2015. Reasons for home delivery and use of traditional birth attendants in rural Zambia: A qualitative study. *BMC Pregnancy and Childbirth*, 15, 216. Doi: 10.1186/s12884-015-0652-7.
- Ushie, Monday, Agba Ogaboh, Ezekiel Olumodeji and Frank Attah. 2011. Socio-cultural and economic determinants of fertility differentials in rural and urban Cross Rivers State, Nigeria. *Journal of Geography and Regional Planning*, 4(7), 383-391.
- Vidler, Marianne, Umesh Ramadurg, Umesh Charantimath, Geetanjali Katageri, Chandrashekhar Karadiguddi, Diane Sawchuck, Rahat Qureshi, Shafiq Dharami, Anjali Joshi, Peter Von Dadelzen, Richard Derman, Mrutuyunjaya Bellad, Shivaprasad Goudar and Ashalata Mallapur. 2016. Utilization of maternal health care services and their determinants in Karnataka State, India. *Reproductive Health*, 13, 37. Doi: 10.1186/s12978-016-0138-8.
- WHO (2015). Integrated Management of Childhood Illnesses Module 5
http://www.who.int/maternal_child_adolescent/topics/child/imci/en/.
- World Health Organization (2012) Trends in Maternal Mortality: 1990–2010. UNICEF, UNFPA and the World Bank, Geneva.
- World Health Organization (WHO) (2000) Maternal Mortality in 2000: Estimates Developed by WHO, UNICEF and UNFPA. Geneva.