

# Impacts of Predisposing, Enabling and Need Factors in Utilization of Healthcare Services in a Catholic Hospital in Nigeria

Simon Peter N. Okanumee, Joan P. Bacarisas, and Ronald Y. Ferrer

College of Allied Health Sciences, University of the Visayas

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## ABSTRACT

Healthcare service utilization is an expression that fittingly describes the use of medical care for the purpose of maintaining one's health and well-being, preventing and/or treating health problems or obtaining information about one's health status and prognosis. The main purpose of the study was to determine impacts of predisposing, enabling and need factors in utilization of healthcare services in a Catholic Hospital in Nigeria within first quarter of 2024. In the cross-sectional descriptive study, a self-answered questionnaire was used for data collection, which contained features of demographics, socio-economic and health status of the respondents, like self-reported illness, consultation, hospitalization, expenditure and routine medication or rehabilitation. Most remarkably, the respondents mentioned that the medical facility nearest to them and that they used most was the community health center. They cited reasons for the medical facility they used most as availability of high-level medical technology/equipment as well as excellent services it offered. To address the findings of the study, a healthcare service utilization enhancement plan was proposed for practical and educational interventions to boost healthcare service utilization. That the study was cross-sectional descriptive and assessed the impacts not associations among these factors and utilization of a Catholic hospital in Nigeria were major limitations. These limitations lied in inability to establish reason why the respondents were found in a Catholic hospital, yet they indicated that community health center was closest to them as well as the health facility they used most. Future researchers on the topic might take care some of these lapses.

**Keywords**—Impacts, Predisposing, Enabling and Need Factors, Healthcare Services, Utilization, Catholic Hospital, Descriptive Cross-sectional design

## INTRODUCTION

Healthcare service utilization is an expression that is used to describe the consumption of a medical care, procedure, device, or pharmaceutical drug for the purpose of maintaining one's health and well-being, preventing and/or treating health problems, or obtaining information about one's health status and prognosis (Carrasquillo, 2013). Operationally, healthcare service utilization is most frequently characterized by the following activities: the number of outpatient visits to various healthcare providers and/or healthcare facilities in a given period, hospital admissions, length of in-patient hospital stays, hospital readmissions, emergency department visits, prescription drug utilization, and the costs associated with the use of these services (Corrao & Mancina, 2015).

Andersen and Newman's (2005) framework of health services utilization is a conceptual model whose objective is to show the factors that lead to the use of healthcare services or otherwise. According to Andersen and Newman's conceptual model, utilization of healthcare services (including inpatient care, outpatient physician visits, dental care, screening and diagnostic testing, etc.) is influenced by three dynamics which play collaborative roles in the utilization of healthcare facility (Bradley et al., 2002). Predisposing, enabling, and need factors directly influence and are influenced by personal daily health choices like diet, exercise, self-care and healthcare utilization, which, in turn, both directly influence and are influenced by some health outcomes (Ku *et al.* 2017).

Nigeria is a country with high risk of infectious and parasitic diseases, including corona virus disease (COVID-19), bacterial diarrhea, typhoid fever, hepatitis A, yellow fever, malaria, meningitis, to mention but a few. Malaria in rural Nigeria has a particular distribution and is found everywhere (WHO, 2015). A hereditary

disease called sickle cell anemia is also common among the rural population in Nigeria. Nigeria has the highest burden of Sickle Cell Disease and according to the World Health Organization (2020), over 165,250 children die from it every year. Similarly, HIV/AIDS is worrisome in Nigeria. Nigeria belongs to the top ten countries in the world with the most significant number of people with AIDS. There are other negative health indices about Nigeria.

Unfortunately, the Nigerian healthcare system, which should address the foregoing health challenges of the people, is itself facing a number of challenges associated with deteriorating medical infrastructure due to low government budget allocation, leading to outbound medical tourism. Health infrastructure in Nigeria is still underdeveloped and lacks the needed modern medical facilities. Many households and individuals living in Nigeria bear the burden of a dysfunctional and inequitable healthcare system, and having to pay out of pocket for healthcare services that are not affordable. Thus, over 90% of the Nigerian citizens are living without health insurance coverage. Accordingly, 71% of healthcare expenditure in Nigeria is out of pocket (WHO, 2019). This indicates that the majority of Nigerians still lack any form of health insurance and as such the poorest Nigerians have very little access to high quality medical treatment.

Togonu-Bickersteth *et al.* (2019) have implicated social support in healthcare utilization indices; arguing that people who receive adequate social support are more likely to exhibit appropriate healthcare service utilization. Thus, a study comparing the healthcare service utilization of rural and urban dwellers in Nigerians reveals that 71% of rural dwellers reported inappropriate healthcare service utilization while 53% of the urban dwellers reported inappropriate healthcare service utilization. Similarly, Nigerian women living in areas where the ratio of population to Primary Healthcare Centre was high were less likely to have a skilled birth attendant present during childbirth than areas where the ratio of population to Primary Healthcare Centre was lower (Latunji & Akinyemi, 2018). By implication, if people have access to functional, accessible and affordable healthcare service delivery system, they will likely opt for such. Thus, Catholic health facilities in Nigeria, like hospitals, aim to bridge these huge gaps of healthcare delivery deficits in Nigeria.

The health facilities in Nigeria are classified based on their management or the specific services they render to the people. Under management classification, there are private hospitals and government hospitals. According to Christian Connections for International Health (2021), Catholic health facilities are classified among private health facilities and particularly as Faith-based Organization (FBO) since they all operate under the same regulations and standardizations. Here it is estimated that Faith-based Organizations and the private sector contribute up to 70% of the total health services provision in the rural areas and the hard-to-reach places in Nigeria (CCIH, 2021). Faith-based health promotion has the potential of reducing health disparities and the Catholic Church, in particular, is one of the most respected and trustworthy institutions that have the potential to greatly enhance public health work (Heward-Mills *et al.*, 2018).

In particular ways, the faith-based health response in Nigeria is being implemented at two levels. The first level is at the health facilities involving the direct provision of health and medical services. The second level is a non-facility response where the health response focuses mainly on advocacy, community mobilization, prevention, care, and support services (CCIH, 2021). Faith-based health system is an integral part of healthcare delivery system in Nigeria. The management of Faith-based health institutions, who are faith-leaders, encourages people and the community at large to take up testing, prevention, and treatment services. Nevertheless, a study has shown that relatively more people seek care in private settings for most of their health demands due to reasons like travel time, education, age, sex, level of education of household head, household size and perceived quality of care provided in the facility (Ofoli *et al.*, 2020).

Considering the forgoing facts and factors, it was necessary to study utilization of healthcare services provided in a Catholic hospital in Nigeria to determine impacts of the predisposing, enabling and need factors on the clients in utilizing such healthcare services. Some studies had considered healthcare challenges in Nigeria but were focused on public or private sectors' disparities generally. However, socio-demographics and health service-based factors that determine the utilization of Catholic healthcare services in Nigeria were not well studied. Since private health sector is the most utilized in Nigeria, characterizing the uptake of healthcare services in Catholic hospital would provide an understanding of available infrastructure, utilization and barriers to efficient and effective healthcare service delivery in Catholic health facilities in Nigeria.

Finally, as one of the researchers is a medical doctor, the researcher was in the right position to conduct this study in the designated hospital in Nigeria. Most especially, being a Nigerian Catholic Missionary Priest, the researcher in future could work in or with Catholic health facilities in Nigeria. This made this study necessary to determine areas that needed enhancement. The research findings proffered enhancement strategies as its action plan to improve healthcare delivery in Catholic health facilities in Nigeria.

### **Statement of Purpose**

The main purpose of the study was to determine impacts of predisposing, enabling and need factors in utilization of healthcare services in a Catholic hospital in Nigeria within the period of the first quarter of 2024. Findings of the study provided bases for enhancement plan for healthcare service delivery in Catholic health facilities in Nigeria. To achieve this goal, the study purposefully answered these questions:

1. What were the predisposing factors of the respondents in terms of age; sex; civil Status; ethnicity; religion; and educational status?
2. What were the enabling factors of the respondents in terms of access to healthcare services; health insurance coverage; income class; and regular sources of healthcare services
3. What were the need factors of the respondents in terms of perceived need; and evaluated need?
4. What action plan could be proposed based on the findings of the study?

## **REVIEW OF RELATED LITERATURE AND STUDIES**

### **Healthcare Service Utilization**

Health promotion programs all over the world have always been focused and predicated on the idea of providing people with sufficient knowledge about the causes of illness and the ways to prevent them. It is believed that when people know their available options for more healthy lives that they would be in the position to make the right decisions about their health. However, there is growing recognition, in both developed and developing countries, that providing health education or knowledge at the individual level is not sufficient in itself to promote a change in behaviour (Mackian, 2003).

Consequently, a number of descriptive studies on health behaviour, highlighting similar and unique factors, have shown the complexity of influences relating to an individual's health choices. Many researchers have since shown interest in studying the health behaviours of people, to ascertain what motivates their utilization of healthcare services and what influences them to behave differently in relation to healthcare services. Peoples' behaviour towards their health can therefore be divided into two (Mackian, 2003). Firstly, there are studies which emphasize the 'end point' (that is, utilization of formal system of healthcare). This is otherwise known as healthcare seeking behaviour.

The second set of studies focuses on behaviours that emphasize the 'process' (that is, illness responses which include lifestyle changes aimed at health promotion and disease prevention). This is otherwise known as health seeking behaviour. The term healthcare seeking behavior as used in this study reflects a person's action towards perceived health-related challenges. Accordingly, it is described as an individual's response to the suspicion of a health problem (Olenja, 2004). Thus, healthcare seeking behaviour denotes a process that evolves through self-assessment of possible indicators, medical consultation, and compliance to professional demand (Gupta, 2010).

When it comes to the first category, healthcare seeking behaviour, studies focus specifically on the act of seeking 'healthcare' from the formal system or orthodox medical treatment. This behaviour is otherwise referred to as healthcare service utilization. In this regard, studies aim at gathering data on self-medication, visits to or use of more traditional healers or medicine and other unofficial medical channels for resolving health problems. The latter practices are often seen largely as inappropriate healthcare seeking behaviours which should be prevented and discouraged, with emphasis on encouraging people to opt for official channels (Latunji & Akinyemi, 2018).

Decision to use a particular medical channel is influenced by a variety of socio-economic variables like sex, age, the social status, type of illness, access to services and perceived quality of the service. The above factors which influence the decision to use formal medical system or not, have two broad trends: Firstly, there are studies which categorize the types of barriers or determinants between patients and healthcare services. In this approach, the emphasis is on considering factors that are health facility-based. These could be in the form of geographical, social, economic, cultural and organizational factors. There are also studies that categorize the type of pathways at work. Bedri (2001) developed pathways to care model in her exploration of abnormal vaginal discharge in Sudan. She identified five stages where decisions are made, and delay may occur towards adoption of 'modern care' or otherwise. This approach offers an opportunity to identify key junctions where there may be a delay in seeking competent healthcare.

Healthcare seeking behaviour has been defined as "any action or inaction undertaken by individuals who perceive themselves to have a health problem or to be ill for the purpose of finding an appropriate remedy" (Olenja, 2004). An important aspect of healthcare seeking behaviour is the choice of healthcare provider made in response to illness. Thus, healthcare seeking behaviour can be either appropriate or inappropriate (Latunji & Akinyemi, 2018). An appropriate healthcare seeking behaviour entails using formal health system; whereas inappropriate healthcare seeking behavior is the opposite. Inappropriate healthcare seeking behaviour is associated with worse health outcomes, increased morbidity, mortality and poorer health statistics (Mwase, 2015).

Summarily, studies that have attempted to describe factors that significantly affect health behaviours of people before and during illness conditions can be broadly classified into two groups. The first group of studies emphasizes the utilization of the formal healthcare service. These studies demonstrate that decision to engage with a particular medical channel is influenced by a variety of factors. Most of the studies under this category focus on specific groups of determinants presenting between patients and health services such as geographical, social, economic, cultural and organizational factors. Access to health facilities, socio-economic status and perceived quality of healthcare services are major influencers of healthcare service utilization (Mackian, 2003).

Healthcare services utilization is determined by predisposing factors like education and health beliefs. A study was conducted by Rabin et al. (2021), to assess healthcare service utilization among Lebanese population: a highlight on seeking care from Pharmacist. The study was aimed at assessing Lebanese population's knowledge, attitude and practice towards seeking healthcare from pharmacists, exploring particularly the practice of seeking diagnosis from pharmacists. A cross-sectional study was conducted with convenient sample of 493 participants across the eight governorates of Lebanon between July and October 2016. A self-administered questionnaire was used.

The study revealed that two-third of the study participants did not have a general practitioner whom they visit regularly. Nearly half of the participants reported seeking diagnosis from pharmacists. More than half of participants in the study have the belief that dealing with emergencies is among the pharmacists' duties. In addition, the majority perceived that pharmacists are 'often/always' capable of managing common complaints. This study showed that a significant proportion of the Lebanese population seeks a diagnosis from pharmacists and a significant proportion of them have a misconception about roles of pharmacists in Lebanese healthcare system.

Likewise, enabling factors like income class equally determine healthcare service utilization. For instance, in Pakistan, households whose average income was below the minimum wage were less likely to seek formal medical care compared with those whose incomes were above the minimum wage. Likewise in Kenya, almost 70% of pregnant women within households in the upper socio-economic stratum delivered babies in health facilities compared with 42% among pregnant women in the middle socio-economic stratum and 38% in the low socio-economic stratum (Phiri *et al.*, 2014).

Another study by Gulifeiya *et al.* (2019) examined the healthcare service utilization of people in using either public or private health facilities and to assess the factors that influence healthcare utilization in Northern Cyprus. The study used a cross-sectional, conducted in two polyclinics among 507 people using a structured interviewer-administered questionnaire. Healthcare service utilization of the population was measured using



four indicators which included: routine medical check-ups, preferences of healthcare facilities, admission while having health problems and refusal of health services while ill. Descriptive statistics and multivariable logistic regression analyses were deployed in exploring the factors influencing the use of health services.

About 77.3% of the respondents reported to have visited health centers when they had health challenges. More than half (51.7%) of them had a routine medical check-up during the previous year, and 12.2% of them had refused to seek healthcare when they felt ill during the last five years. In all, 39.1% of them reported preferring private health services. In conclusion, the study on the utilization of public and private health sectors revealed evident disparities in the socio-economic characteristics of the respondents. Their healthcare service utilizations were determined by combination of need factors, like chronic disease status, having poor health perception and by some enabling factors like income, insurance and capacity for out-of-pocket healthcare services.

For instance, in Pakistan, households whose average income was below the minimum wage were less likely to seek formal medical care compared with those whose incomes were above the minimum wage. Likewise in Kenya, almost 70% of pregnant women within households in the upper socio-economic stratum delivered babies in health facilities compared with 42% among pregnant women in the middle socio-economic stratum and 38% in the low socio-economic stratum (Phiri *et al.*, 2014).

Coming to Africa, a study was done by Yaya *et al.* (2021) to determine healthcare service utilization for children with acute childhood illness and its related factors in the entire sub-Saharan Africa, taking evidence from 24 countries for the study. The study investigated the rate and factors associated with healthcare service utilization of such children. The researcher used secondary data from Demographic and Health Surveys (DHSs) conducted between 2013 and 2018 across the 24 sub-Saharan African countries. Binary logistic regression models were applied to identify the factors associated with healthcare service utilization for children with acute childhood illnesses. The results were presented using adjusted odds ratios (aOR) with 95% confidence intervals (CIs).

The study revealed combination of predisposing, enabling and need factors. The result of the study showed that 45% of children under the age of five with acute childhood illnesses utilized healthcare facilities. The factors associated with healthcare service utilization for children with acute illnesses were sex of child, number of living children, education, work status, wealth index, exposure to media and distance to a health facility. One of the strengths of the study is that the data sets are from secondary source and from several sub-Saharan African countries and are nationally representative. This permits generalization of the results in sub-Saharan African countries, despite the time lag in data collection periods. However, comparison of results from different surveys should be done carefully and with caution due to differences in data collection time and space.

In yet another study carried out on Africans by Abor and Ghartey (2020) to assess healthcare service utilization in selected communities in the Sunyani metropolis, Ghana, the researchers adopted probability sampling, specifically the cluster system, where the selected study communities were put into clusters of households. The findings of this study suggested that most of the community members tended to seek treatment in modern medical systems when they are sick, with only a few that were seeking traditional spiritualists care and self-medication in the event of illness. These selected communities must be probably well to do people or dominantly rich to averagely rich people.

Coming down to Nigeria, a study was done by Egbunu and Yunusa (2022) to establish factors determining the healthcare service utilization of rural dwellers in Dekina Local Government Area of Kogi State, Nigeria. The study looked at factors influencing how rural residents sought out healthcare to identify the most prevalent diseases afflicting rural residents in the area, investigating the general healthcare service utilization of rural dwellers, studying the factors that influence these behaviours and examining the obstacles the patients in this area face. The study's framework was based on rational choice theory. The study used a survey research design, and a sample of people was chosen from the study participants using a cluster sampling strategy combined with systematic simple sampling. Multiple Regression was used to assess the study hypothesis.

The findings of the study show that typhoid fever and malaria were the most frequent illnesses experienced by the rural residents. The majority of the rural residents in Dekina L.G.A. sought healthcare from nearby facilities for symptoms diagnosis and treatment, but even while taking medications, they supplemented modern drugs with herbal remedies. Cost of drugs and medical services, location of healthcare facilities, level of education and income were found to be the main determinants of rural residents' healthcare seeking behaviours. The rural dwellers exercise and get checks from doctors to stay fit. It is recommended among other things that rural dwellers should use treated mosquito nets, avoid drinking dirty waters and foods and that cost of medical services should be subsidized through State and Community Health Insurance Scheme.

Similarly, Orubuloye (2013) examined healthcare service utilization among the rural dwellers in Ekiti State, Nigeria. Data for the study were collected from both primary and secondary sources. Two principal actors were involved in the collection of data: namely the medical consumers and the medical operators. A double random sampling was used which included a stratified sampling which entailed a hypothetical division of the community into zones. Results of the study show clearly that the major reasons why the rural dwellers in Ekiti State seek medical services as identified were for the following reasons: the type of ailment suffered by the patients, availability of money at the time of sickness, age of the patients, religion background or belief, educational background, severity of sickness, the patients, position in the household and other factors. How do these factors affect healthcare service utilization in a Catholic hospital in Nigeria?

### **Factors Affecting Health Services in Nigeria**

Nigeria is a West African country surrounded by Niger in the north, Chad in the northeast, Cameroon in the east, and the Republic of Benin in the west. With an estimated population of slightly above 225 million in 2023, by the United Nations ranking, Nigeria is the largest population in Africa; the seventh most populous country in the world and one of the fastest-growing populations in the world, according to UN (2015). Life expectancy in Nigeria was 53 years by the end of 2014 (World Bank, 2016). Unfortunately, this is quite lower than the average of 59 years for sub-Saharan African countries and 67 years for lower-middle-income countries, by World Bank (2016).

According to Centre for Disease Control (CDC, 2020), Nigeria is one of the worst countries concerning healthcare rates in Africa, although she is giant of Africa. Nigeria has high risk of infectious and parasitic diseases, which include corona virus disease (COVID-19), bacterial diarrhea, typhoid fever, hepatitis A, yellow fever, malaria, and meningitis. Malaria in rural Nigeria has a particular distribution and is found everywhere (WHO, 2015). Nigeria has the highest burden of Sickle Cell Disease, and according to the WHO (2020), over 165,250 children die from it every year. A special problem of Nigerian population is AIDS. In 2017, there were 4.9 million HIV-AIDS infected patients and 310 thousand people died (NACA, 2018). According to the Nigeria Centre for Disease Control (NCDC, 2017), 3.5 million HIV-infected people live in Nigeria. One hundred and fifty thousand people died from AIDS in Nigeria in 2017, and only about 33% of infected people are receiving any kind of treatment.

Despite the foregoing challenging health situations in Nigeria, her current healthcare system is not adequately equipped to tackle the situation. According to International Trade Administration (ITA, 2023), the Nigerian healthcare industry is facing challenges associated with outbound medical tourism, deteriorating medical infrastructure, low government budget allocation, poor compensation and subsequent emigration of skilled healthcare workers. The government allocates only about 5% of its annual budget to health. Health infrastructure in Nigeria is still underdeveloped and lacks modern medical facilities. This explains why Nigerians who can afford it embark on medical tourism to other countries. According to Nigerian Medical Association (NMA), Nigerians spend at least 2 billion dollars annually on medical tourism abroad.

Most families and individuals in Nigeria still do not have a functional and affordable health insurance scheme. Most payments for healthcare services are out-of-pocket and many people cannot afford to pay for their medical services. Hence, most poor households engage in self-medication, or resort to herbal medicine that could be relatively cheaper to orthodox medicine. Some patronize patent medical stores. A study was conducted by Vincent and Adesuwa (2018) on socio-demographic factors associated with the healthcare service utilization of heads of households in a rural community in Southern Nigeria. A descriptive cross-

sectional study was done. Data collection was by means of a structured interviewer-administered questionnaire. The preferred place to seek healthcare when ill by majority of the respondents was patent medicine stores.

According to International Labour Organization (ILO, 2014), since independence in 1960, Nigeria has had a very limited scope of legal coverage for social protection. The monies spent on medical tourism would have been used to fix the health sector. Nigeria has one of the fastest growing populations globally with 5.5 live births per woman and a population growth rate of 3.2% annually. It is estimated to reach 400 million people by 2050, becoming the world's third most populous country (ITA, 2023). However, medical professionals and healthcare workers are in short supply. Nigeria has about 35, 0000 doctors despite needing about 237,000 doctors according to World Health Organization estimation. This short supply is partially due to the massive migration of medical professionals to foreign countries in search of better conditions of service. This is adversely affecting the availability and accessibility of healthcare services to people.

### **Catholic Health Facilities (Hospital) in Nigeria**

Nigeria has three levels of government: Federal, State, and Local Governments. These three tiers share responsibilities for providing health services and programs in Nigeria. The Federal Government is largely responsible for providing policy guidance, planning and technical assistance as well as coordination of the state-level implementation of the National Health Policy and establishing health management information systems in the nation. The Federal government is equally responsible for disease surveillance, drug regulation, vaccine management and training of health professionals. The Federal Government is responsible for the management of the teaching, psychiatric and orthopedic hospitals (CCIH, 2021). Responsibility of managing public health facilities and programs is shared among the State Ministries of Health, State Hospital Management Boards and the Local Government Areas (LGAs).

Regarding classifications, health facilities in Nigeria are classified based on the services they render or on their management. If they are classified based on the services they render, Government Hospitals are classified the same way as those in the Faith-based organization like Catholic health facilities and privately owned health facilities since they all operate under the same regulations and standardizations. According to the 2014 National Health Act, health services are classified into three namely: primary healthcare, Secondary healthcare and tertiary healthcare. The 2019 Nigerian health facility register produced by the Federal Ministry of Health (MOH), puts the total number of health facilities in Nigeria at 40,821: primary healthcare facilities 34,675, secondary healthcare facilities 5,780 and tertiary healthcare facilities 166 (CCIH, 2021).

On the other hand, based on their management, health facilities in Nigeria are generally classified under two major segments, namely: government healthcare and private healthcare facility. Health facilities under the management of faith-based organizations are classified as private due to the nature of their ownership and management. Thus, in Nigeria, faith-based health facilities like Catholic health facilities and private health facilities are normally lumped together as “private” health facilities (CCIH, 2021). Faith-based and other private health facilities play important roles in the provision of healthcare services in Nigeria, especially the numerous Catholic health facilities in Nigeria. They help to ease pressure on government health facilities.

The Roman Catholic Church is the largest non-government provider of health care services in the world (John, 2010). Accordingly, in 2010, the Church's Pontifical Council for the Pastoral Care of Health Care Workers said that the Church manages 26% of the world's healthcare facilities. Robert (2013) avows that Catholic Church “has around 18,000 clinics, 16,000 homes for the elderly and those with special needs, and 5,500 hospitals, with 65 percent of them located in developing countries.” For instance, member institutions of the Catholic Health Association of the United States have 654 hospitals and more than 1,600 continuing care facilities.

In Nigeria, according to the Diocesan Health Departments' Report (2020) of the Catholic Secretariat of Nigeria (Health Unit), there are over 440 healthcare facilities (clinics, primary health centers and hospitals) as well as health educational institutions under the Catholic health services spread across the country including remote rural, urban slum settlements and riverine communities. The Church's healthcare services boast of unique penetrative presence even in hard-to-reach areas. Interestingly too, the first hospital that even predated Nigeria as a nation, the Sacred Heart Hospital (SHH), was established in 1895 by the Society of African Missions of

the Catholic Church. Nigeria was amalgamated into an entity in 1914 and gained her independence in 1960.

Sacred Heart Hospital (SHH) is located in Lantoro, Abeokuta South Local Government Area, Ogun State, in the South-West region of Nigeria. It contributes hugely to Ogun State healthcare delivery and boasts of about 500 in its workforce. It is classified as operating at the secondary level of healthcare, though giving some tertiary care attention. This oldest hospital in Nigeria provides an array of qualitative health services that enhance the dignity of the human person. Her services include Surgery, Medicine, Obstetrics and Gynecology, Pediatrics, Accident and Emergency, a range of Laboratory Services, Endoscopy, Scan, ENT, Ophthalmic and Dental Services etc. It is an accredited center for training of medical personnel in various fields of Medicine and Nursing as well as an accredited center for National Health Insurance Scheme (NHIS) services.

The foregoing services that Sacred Heart Hospital (SHH) renders are typical contributions of Catholic health facilities in Nigeria. According to Christian Connections for International Health (2021), Faith-Based Organizations, especially Catholic health facilities and others under private sector contribute up to 70% of the total health services provision in the rural areas and the hard-to-reach places in Nigeria (CCIH, 2021). Faith-based health promotion has the potential of reducing health disparities and the Church is one of the most respected and trustworthy institutions that has the potential to greatly enhance public health work (Heward-Mills *et al.*, 2018). For instance, during Covid-19 pandemic, the Catholic Bishops' Conference of Nigeria donated about 420 Catholic health facilities to the government of Nigeria to be used as Isolation Centers.

## RESEARCH METHODOLOGY

### A. Design

The research methodology for the study involved a quantitative approach, specifically using a cross-sectional descriptive design. In application to the study, the descriptive design was used to determine the impacts of the predisposing, enabling and need factors on the respondents towards their utilization of healthcare services as provided in a chosen Catholic hospital in Nigeria. The study was accomplished within the first quarter of the year 2024. The goal of a descriptive design as used in the study was to give full accounts of the variables and to demonstrate clearly how they impacted the lives and choices of the respondents in the utilization of healthcare services in a particular Catholic hospital in Nigeria.

### B. Environment

The chosen Catholic health facility is Mercy Specialist Hospital, formerly known as Mary Health of the Sick Comprehensive Health Center.

### C. Respondents

The respondents of the study were outpatients of Mercy Specialist Hospital, Ahiaeke, who qualified to participate based on the inclusion and exclusion criteria of the study. Outpatients are people who seek consult, treatment or follow up in the outpatient department of the hospital. The respondents were English speaking population because the area where the hospital was sited largely speaks English. Currently, the hospital receives an average of 25 to 35 outpatients on daily basis in her outpatient department.

### D. Sampling Design

The estimated sample size was calculated using 5% margin error, 95% confidence interval, 50% response distribution and 900 estimated population of outpatients in one month, going by 30 outpatients every day in 30 days. With the use of these figures, the sample size came to 260. To get sample size of 260, the study participants were selected using simple random sampling. All the outpatients waiting to be consulted by the doctors in the outpatient department of Mercy Specialist Hospital, Ahiaeke were approached. The outpatients were approached randomly and those who were interested in the study gave their consent after reading the informed consent sheet as well as meeting the inclusion and exclusion criteria and as such were qualified to participate in the study.



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## E. Inclusion and Exclusion Criteria

The specific inclusion criteria of the study: (a) participants were of legal age of 18, regardless of gender, civil status, employment status, economic status, educational qualification, and/or religion; (b) participants were able to speak, read, write and understand English language correctly; and (c) participants clearly expressed willingness to participate in the study and provided voluntarily expressed and signed informed consent.

Excluded from the study were: (a) staff members and those holding administrative and managerial positions in Mercy Specialist Hospital; (b) the patients who were on admission in the hospital as at the time of carrying out the study; and (c) those who were visiting the hospital for the first time during the period of the study. The foregoing specific inclusion and exclusion criteria of the study helped to ensure that highest quality respondents were selected to participate in the study.

## F. Instrument

The study made use of a three-segmented instrument (an adapted questionnaire) from a study by Yan-Ning *et al.* (2016), “The impact of predisposing, enabling, and need factors in utilization of health services among rural residents in Guangxi, China”. It was used to determine the influencing factors towards utilization of healthcare services provided in a Catholic hospital in Nigeria. The tool of the study was divided into three different segments, capturing the predisposing, enabling and need factors. The predisposing factors in the study involved the socio-demographics of respondents like age, sex, civil status, ethnicity, religion and educational status. Enabling factors in the study were the logistical aspects of obtaining healthcare, which included the means and access to healthcare services, income level, health insurance as well as regular sources of healthcare services (health personnel, facilities and the waiting time). Need factors in the study comprised the health issues that generated need for seeking healthcare services which included perceived and evaluated health needs of the respondents.

## G. Data Gathering Procedure

The following procedures were followed: Initially, the study started with the submission of three research titles for approval. Once one of the titles was approved, a research adviser was assigned. The manuscript was drafted along with sending of the transmittal letters from the Dean, College of Allied Health Sciences and the Chief Academic Officer. Likewise, permission was requested from the Chief Medical Director of Mercy Specialist Hospital, Ahiaeke, to conduct the study within the hospital environment. Upon obtaining abovementioned approvals, the study was presented for a design hearing under a panel of experts. Following the compliance of their recommendations and suggestions, the study was submitted to the Research Ethics Committee for ethical approval by the University of the Visayas - Institutional Review Board (UV-IRB), to ensure its ethical soundness. Once it was found to adhere to ethical principles, the issuance of the Notice to Proceed signaled recruitment of the study respondents.

Participants in the study were selected based on the aforementioned inclusion and exclusion criteria. After obtaining voluntary informed consent of the participants, they received copies of the questionnaire pertaining to their healthcare service utilization during their visit to Mercy Specialist Hospital, Ahiaeke. In order to mitigate potential conflicts of interest, the researcher involved an enumerator to collect the data. The enumerator received a briefing on the study which enabled her to respond to minor inquiries which could have arisen about the study. Where the enumerator could not address any query, she was directed to refer such query to the researcher. The enumerator made the questionnaire available to eligible respondents only and ensured the compliance. Out of 300 copies of the questionnaire provided, 260 copies were filled out correctly. The remaining 40 copies were either not completed or wrongly completed. The enumerator finally collected and submitted all the questionnaires. After all questionnaires were collected and the sample size achieved, the data were collated and subjected to appropriate statistical treatment. Data were presented in tables along with the interpretations, implications, and supporting literature and studies. At the end, all the answered questionnaires were shredded

## H. Statistical Treatment of Data

The following statistical treatments were used in the study: (a) Frequency and Simple Percentage: Frequency measured number of times events occurred based on the predisposing, enabling and need factors that impacted on respondents. Simple percentage was used in calculating information in the study.

## I. Ethical Considerations

The study was submitted to the institutional Review Board for ethical approval prior to data gathering.

## RESULTS AND DISCUSSION

Table 1 Predisposing factors in healthcare service utilization in a Catholic hospital in Nigeria

Profile	<i>f</i>	%
Age		
18 to 35 years old	98	37.70
36 to 55 years old	97	37.30
56 years old and above	65	25.00
Sex		
Male	82	31.50
Female	178	68.50
Civil Status		
Single	59	22.70
Married	180	69.20
Separated/Divorced	4	1.50
Widowed	17	6.50
Ethnicity		
Igbo	208	80.00
Hausa	26	10.00
Yoruba	26	10.00
Religion		
Catholic	169	65.00
Protestant	81	31.20
Muslim	4	1.50
ATR	3	1.20
Others	3	1.20
Educational Status		
No education	24	9.20
Primary	31	11.90
Secondary/High School	144	55.40
College	61	23.50

Note:  $n=260$ .

The above table showed that with respect to age, over one third of the respondents belonged to the 18 to 35 years old and almost the same number of respondents belonged to the 36 to 55 years old. Lastly, the remaining

quarter of the respondents was coming from the 56 years old and above. From this finding, the researcher observed that younger people and middle-aged individuals were found more likely to utilize healthcare services in this Catholic hospital than people from the 56 years old and above.

This was consistent with previous study where age was correlated with health seeking and illness behaviour. It was part of the determinants of exposure and preventive behaviour. Although most lifestyle-related medical conditions were relatively lower among children and some diseases are related to old age, the study observed that young people could have more inappropriate health seeking behaviours, hence the need for healthcare. For younger people it is possibly due to parental attention to children's health and taking decision for their healthcare service utilization (Yan-Ning *et al.*, 2016).

Particularly, in Nigeria most of the people who belong to the 56 years old and above, especially senior citizens, retire in rural areas. However, Mercy Specialist Hospital is located in urban area of Umuahia, Abia State. Probably the reason people from the 56 years old and above were the least in number among the respondents was because most of them reside in rural areas and some resort to traditional medicine, which was consistent with previous study (Vincent, 2015). To this end, people of this age bracket should be a key target group for health interventions, promotion and education. For this population, it is important to improve their healthcare service utilization by empowering them through health education and awareness campaigns.

In terms of sex, majority of the respondents was females, while over one third was males. In the study, sex ratios for healthcare service utilization in this Catholic hospital in Nigeria indicated that females had more need for healthcare service utilization than males. This was consistent with previous study which reported that "females have more health needs and awareness than males" (Birgit *et al.*, 2014). On the issue of need, females utilize healthcare services for a number of reasons. Demographics of the study showed that most of the respondents belonged to reproductive age bracket. This is so since adult females in Nigeria mostly use outpatient services for gynecological and obstetrical consults. On the issue of health equality, there are free hospital consults, medical outreaches, and health promotion and education for females than males.

A study was equally conducted recently by Ogunyemi *et al.* (2021) in Nigeria to ascertain healthcare service utilization and self-rated health of adult men in an urban local government area in Lagos State, Nigeria. A descriptive, cross-sectional study was conducted among adult males, aged 18 years and above. An interviewer-administered questionnaire was used to obtain data for the study. Findings of the study showed that healthcare service utilization of the men in the study area was influenced by some factors like severity of illness, availability of funds and subscription to health insurance. The majority of the respondents self-rated their health as good, very good or excellent. Provision of expert care was considered the most important characteristic of healthcare service utilization. The respondents preferred using hospitals, compared to other sources during their last illness episode. These simply confirmed appropriate healthcare service utilization in the absence of economic hindrance and other impeding factors.

Coming to their civil status, the majority of respondents were married while almost a quarter were single and very few were widowed and separated or divorced. Hence, in terms of civil status, married population was higher among others. This was consistent with previous a study which suggested that married people were more likely to endorse willingness to use healthcare services. This resonated with a previous study by Yan-Ning *et al.* (2016) which suggested that probably married people, as against single or widowed people, got help and advice from their spouses promoting their doctor's visit.

The study also showed that even though predisposing factors of age and sex contributed significantly to the variance in the healthcare service utilization in this Catholic hospital under study, civil status had a stronger effect than age and sex. Hence, a study by Kiran *et al.* (2019) suggested the following four reasons which are equally attributable to healthcare service utilization of married people in Nigeria. They are: First, healthcare costs among married Medicare beneficiaries are approximately half of those not married; this difference in costs is observed among the nonelderly (age < 65) as well, but for the elderly, the difference is significantly greater. Second, socio-demographic factors have been demonstrated to be important determinants of healthcare utilization. Third, unmarried individuals have reduced access to resources that may affect utilization (e.g. health insurance and disposable income) than those who are married and may engage in riskier health-related

behaviors, possibly impacting utilization. Fourth, previous research suggests that being married is predictive of better health status, perhaps attributable to more effective patterns of utilization.

With respect to ethnicity, majority of the respondents came from the Igbo ethnic group while the remaining respondents were equally distributed between Hausa and Yoruba ethnic groups at 10 percent each. Hence, ethnicity was positively associated with the healthcare services utilization in the Catholic hospital under study. The reason is not farfetched. Umuahia in Abia State, Nigeria, where Mercy Specialist Hospital is located, is part of the Igboland and the people who live and work in the hospital as well as within its environs are predominantly the Igbo, one of the major ethnic groups in Nigeria.

The culture of Nigeria is shaped by Nigeria's multi-ethnic nature, with over 521 languages, 1150 dialects and ethnic groups. The three largest ethnic groups in Nigeria are the Hausa/Fulani who are predominant in the north; the Igbo who are predominant in the southeast; and the Yoruba who are predominant in the southwest. The Edo people are predominant in the region between Yorubaland and Igboland. This group is followed by the Ibibio/Annang/Efik people of the coastal south-southern Nigeria and the Ijaw of the Niger Delta. The rest of Nigeria's ethnic groups (referred to as the 'minorities') are found all over the country, but especially in the middle belt and northern part.

Historically, Igboland of Nigeria is mostly on the eastern side of River Niger. Its eastern side is terminated by the Cross River. It extends westward across the Niger and its northernmost point enters the Savannah. During the late 19th century, Igboland was made part of the Southern Nigeria Protectorate of the British Empire, was amalgamated into modern-day Nigeria in 1914, and Nigeria gained independence in 1960. In Nigeria today, Igboland is roughly made up of Abia, Anambra, Ebonyi, Enugu and Imo states, as well as Northern Delta and Rivers states. Mercy Specialist Hospital, located in Ahiaeke Ndume, Umuahia North Local Government Area of Abia State, is in Igboland.

In relation to religion, majority of the respondents were Catholics and over one third were Protestants, while very few were Muslims, African Traditional Religionists and members of other religions. It is no surprise that religion was positively associated with healthcare service utilization in this Catholic hospital under study. In Nigeria, the abovementioned three major ethnic groups have predominance of two different religions. The Hausa/Fulani are predominantly Muslims while the Igbo are predominantly Christians, mainly Catholics. The Yoruba have a balance of members that are adherent to both Islam and Christianity, mainly Protestants. The Efik/Ibibio/Annang people are mainly Christians. African Traditional Religion is present in all the ethnic groups. Some people combine the latter with Christianity or Islam. Umuahia where Mercy Specialist Hospital is sited is in Southeast with predominance of Christians, mainly Catholics, and then Protestants. This explained why majority of the respondents were Catholics.

Commitment to religious sentiments is a common phenomenon in Nigerian society and it determines a more significant part of the people's healthcare service utilization. Accordingly, in a study by Hardin (2018), religious commitment creates a possible script that alters health practices and stress management. For instance, some religious sects in Nigeria do not allow their women to be treated by male. Faith-based organizations play intervening roles in positively shaping the healthcare seeking behaviours of Nigerians. While some hope in getting healed through miraculous intervention of prayer and rituals, others see faith-based healthcare institutions as providing succor to their health challenges. Thus, healthcare service users in Nigeria face grapple with many religious beliefs influencing their healthcare service utilization.

Religious health beliefs influence healthcare service utilization of many Nigerians. In a study by Uche (2017), in rural Nigeria, there is usually a spiritual undertone to every serious illness and when this happens, seeking healthcare service from professional healthcare providers will amount to a waste of time and resources. Thus, those who belong to this category of Nigerians look the way of traditional healers and herbalists who they believe will hear accurately from the 'gods or their ancestors' and solve their health needs. There is growing concern about the influence of religious beliefs and practices on the healthcare service utilization of people (Somefun, 2019).

In terms of educational status, most of the respondents were able to accomplish secondary education (high



school) while almost a quarter reached college degree. Few stopped at primary education and very few had no education at all. The reason for the foregoing is because secondary schooling is the basic education in Nigeria, in line with the Universal Basic Education (UBE) programme in the country. Nigeria runs 9-3-4 system of education: pre-primary together with primary education and lower secondary education, together constitute what is called ‘basic education’, which lasts for nine (9) years. The upper secondary education takes three (3) years and tertiary education takes four (4) years. These make up the 9-3-4 system of education in Nigeria.

The above UBE programme in Nigeria was launched in 1999, with the goal of providing free, universal and compulsory basic education for every Nigerian child aged six-fifteen years. According to the latest reports by the World Bank (2022), Nigeria’s literacy rate was 62% in 2018. Approximately 68% of the youth in Nigeria in 2020 had received secondary education. This was the highest level of education they had reached. Around 15% of them had completed primary education. 17% of Nigerian youth pursued higher studies after secondary education. This explains why majority of the respondents in the study were able to accomplish secondary schooling, basic education in Nigeria; followed by those who accomplished tertiary education like colleges and universities.

The foregoing is consistent with previous studies which reported that higher education led to knowledge of the importance of healthcare and awareness of available healthcare services. It suggested that educated people are more likely to have both perceived and evaluated needs for healthcare service utilization (Yan-Ning *et al.*, 2016). In the study of Cutler and Lleras-Muney (2007), education lowers rate of morbidity and mortality at a considerable percentage. The more people know about health promotion, the more likely they will act on it. It was observed that the magnitude of the relationship between education and health varies across conditions, but it is generally large. Education promotes appropriate healthcare seeking behaviour, improves knowledge of preventive measures, sources of healthcare and general access to health information. This also explains why respondents with ‘no education’ were the least (Ahmed *et al.*, 2010).

Summarily, the presentation of the data on the predisposing factors in healthcare service utilization like age, sex, civil status, ethnicity, religion, and educational status, showed the following findings: that with respect to age over one belonged to the 18 to 35 years old and almost the same number of respondents belonged to the 36 to 55 years old. Lastly, the remaining quarter of respondents were coming from the 56 years old and above. Majority of the respondents were females. In terms of civil status, the majority were married. With respect to ethnicity, majority of the respondents were coming from Igbo ethnicity. In relation to religion, majority were Catholics. In terms of educational status, most respondents were able to accomplish secondary (high school) education.

Table 2 Enabling factors in healthcare service utilization in a Catholic hospital in Nigeria

Enabling factors	<i>f</i>	%
Which medical facility is closest to your home?		
1. Private clinic	5	1.90
2. Catholic health facility	104	40.00
3. Community health center	140	53.80
4. City hospital	2	.80
5. District general hospital	8	3.10
6. Provincial hospital	1	.40
How much time does it take to get to the nearest health facility?		
1. Less than 30 minutes	59	22.70
2. More than 30minutes	136	52.30
3. More than an hour	37	14.20

4.	More than two hours	28	10.80
Which medical facility did you use most?			
1.	Private clinic	11	4.20
2.	Catholic health facility	100	38.50
3.	Community health center	119	45.80
4.	City hospital	21	8.10
5.	District general hospital	4	1.50
6.	Provincial hospital	5	1.90
What is the reason for the answer to No.3 above?			
1.	Close proximity	17	6.50
2.	Affordability	29	11.20
3.	High level medical technology and equipment	113	43.50
4.	Availability of drugs	12	4.60
5.	Excellent service	67	25.80
6.	Insurance coverage	6	2.30
7.	Familiar staff	3	1.20
8.	Reliable healthcare workers	11	4.20
9.	Religious Affiliation or belief	2	.80
Do you have any health insurance?			
1.	Yes	104	40.00
2.	No	113	43.50
3.	Once but quit	43	16.50
What is your income class?			
1.	No income	52	20.00
2.	Lower class	201	77.30
3.	Middle class	5	1.90
4.	Upper class	2	.80

Note:  $n=260$ .

The above table showed that as for the enabling factors, more than half of the respondents mentioned that the medical facility closest to them was the community health center. Almost half also mentioned that the closest was the Catholic health facility; very few of them named district general hospital, private clinic, city hospital and provincial hospital. The collected data from the study suggested that availability, consistent with previous study, was negatively associated with utilization of healthcare service from community health centers closest to the respondents (Oliveira et. al., 2012). In other words, the closer a healthcare facility is to the people or community, the more likely would the people or community utilize it. Little wonder that the closest health facility to the majority of the respondents was also the health facility that the majority of the respondents used most; even though the reason they furnished was not availability.

In Nigeria, community health centers are located in high-needs communities to provide health services to the people; they are mostly the closest to the people, especially in rural areas. These medically underserved areas normally have a high percentage of people living in poverty. They are areas with few primary care physicians,

higher than average infant mortality rates and high percentages of the elderly. Again, people prefer these community health centers probably because they mostly cannot afford the cost of utilizing healthcare services from private health facilities. Thus, community health centers provide relief to rural dwellers and are committed to providing healthcare services for everyone, through government interventions and support. In most cases too, the community health centers provide more comprehensive healthcare services, a broad range of healthcare services to the people, than private health facilities. In other words, community health centers make healthcare services more available and affordable.

On accessibility, over half of the respondents said it took more than 30 minutes to get to the nearest health facility from their home; while almost a quarter said that it took less than 30 minutes to get to the nearest health facility from their home. Few of them reported that it took more than an hour and more than two hours to get to the nearest health facility from their home. This was consistent with a study by Robert (1983), which examined the impact of distance (traveling time) on the utilization of health facilities in a rural community in Nigeria. The study reported that per capita utilization was found to decline exponentially with distance. In the study, Robert (1983) suggested that: The distance patients must travel in order to obtain treatment has long been recognized as a primary determinant of the utilization of healthcare facilities. The distance factor is especially significant in rural Third World settings where the density of Western-type health facilities is often low, where the majority of patients are likely to make the journey for treatment as pedestrians and where there are viable and usually more accessible alternate sources of medicine.

The majority of the respondents mentioned that the medical facility that they used the most was the community health center. Over one third of them indicated that they mostly use the Catholic health facility. The remaining few were distributed among the city hospital, private clinic, district general hospital, and provincial hospital. This was consistent with research conducted by Omotoso *et al.* (2022) to determine the factors influencing healthcare service utilization of South-African adolescents. The research examined the impact of medical aid coverage and other socio-economic factors in determining the adolescents' utilization of either private or public healthcare service.

Units of analysis for the study included adolescents within the ages of 10 and 19 years. Result of the study indicated that younger adolescents are more likely to use public healthcare facilities in the event of illness than older adolescents. However, adolescents who are medically covered are less likely to utilize public healthcare facilities. Further findings suggest that the likelihood of using public healthcare facilities is higher among black African adolescent who lived in relatively poor households, large households and rural areas. This is typical of the case of Nigeria and Nigerians.

The reason cited for medical facility that majority of the respondents used most was availability of high-level medical technology and equipment. A quarter mentioned that their reason was the excellent service delivery in such health facility. Other reasons include affordability, proximity, availability of drugs, reliable healthcare workers, insurance coverage, familiar staff, and religious affiliation or belief. This finding showed a positive association between utilization of community health centers and presence of high-level medical technology and equipment in the centers; then followed by excellence in service delivery. This was consistent with previous study by Azuh *et al.* (2019).

According to International Trade Administration (ITA, 2023), the Nigerian healthcare industry is facing challenges associated with outbound medical tourism, deteriorating medical infrastructure, low government budget allocation, poor compensation and subsequent emigration of skilled healthcare workers. The government allocates only about 5% of its annual budget to health. Health infrastructure in Nigeria is still underdeveloped and lacks modern medical technology. This explains why Nigerians who can afford to go on medical tourism abroad travel broad for ordinary medical test because most diagnostic centers in Nigeria lack the required equipment and capacity.

Pertaining to health insurance coverage, most of the respondents did not have and almost an equal number of them had, while the remaining few once had but quit. Interestingly too, the findings of the study showed that majority of the respondents belonged to the category of lower income class and almost a quarter had no income at all. Hence, there is a positive association between income class and utilization of healthcare services in this

Catholic hospital in Nigeria; Nigeria where hospitalization means out-of-pocket expenditure. This explains why there are significant personal expenditures associated with utilization of healthcare services by majority of people in Nigeria.

A study was conducted by Vincent and Adesuwa (2018) on socio-demographic factors associated with the healthcare service utilization of heads of households in a rural community in Southern Nigeria. A descriptive cross-sectional study was done. Data collection was by means of a structured interviewer-administered questionnaire. The preferred place to seek healthcare when ill by majority of the respondents was patent medicine stores. This is so because most people in Nigeria do not have a functional and affordable health insurance plan. Most payments for healthcare services are out-of-pocket and many people cannot afford to pay for their medical services. Hence, most poor households engage in self-medication or resort to herbal medicine that could be relatively cheaper compared to orthodox medicine. Others patronize patent medical stores.

In terms of income class, the majority of the respondents belonged to lower class and almost a quarter had no income. Very few belonged to middle and upper classes. No doubt, enabling factors like income class equally determined healthcare service utilization. Lower income class or not having income at all was crucial factor that affected healthcare service utilization. Nigeria is country of over 133 million multidimensional poor people who hardly have money to feed, not to talk of paying for healthcare services. Most poor families resort to self-treatment or herbal medicine in the event of illness instead of seeking appropriate care in well-equipped health facilities.

Cost of healthcare, medications and transportation due to distant locations of medical facilities and an unstable economy are major factors militating against appropriate healthcare service utilization, especially as it concerns attitude towards using formal system of healthcare services in Nigeria. This affects the decisions of most people in choosing between self-medication and health facilities. Lower income class equally affects some medical professionals and healthcare workers in Nigeria. It adversely affects their availability and accessibility in healthcare delivery system in Nigeria. According to World Health Organization estimation, Nigeria has about 35, 0000 doctors despite needing about 237,000 doctors. This short supply is attributed to the massive migration of medical professionals to foreign countries in search of better conditions of service.

Summarily, the presentation of the data on the enabling factors in healthcare service utilization like regular source of healthcare services, access to healthcare services and health insurance coverage, as well as income class, showed the following: that over half of the respondents said that the medical facility closest to them was the community health center. Over half of the respondents said that it took more than 30 minutes to get to the nearest health facility from their home. The respondents mentioned that the medical facility that they used most often was the community health center. The cited reason for the medical facility that they used most often was because of the high-level medical technology and equipment. Most did not have health insurance. In terms of income class, the majority of them were considered lower class and almost a quarter had no income.

Table 3 Need factors in healthcare service utilization in a Catholic hospital in Nigeria

Need factors	<i>f</i>	%
Have you been to a clinic in the past two weeks?		
1. Yes	154	59.20
2. No	106	40.80
Have you ever been diagnosed with chronic disease?		
1. Yes	24	9.23
2. No	236	90.77
(If yes, fill the below) (1) 1stdisease: Diagnosis time		
1. Six months ago	16	66.67



2. Within six months	8	33.33
Has the disease been treated in six months?		
1. Yes	11	45.83
2. No	13	54.17
If not, the main reason:		
1. Feel mild	11	84.62
2. Inconvenient traffic	1	7.69
3. Economic difficulties	1	7.69
(If other chronic diseases) (2)2nddisease:Diagnosis time:		
1. Six months ago	9	69.23
2. Within six months	4	30.77
Has the disease been treated in six months?		
1. Yes	11	84.62
2. No	2	15.38
If not, the main reason:		
1. Feel mild	1	50.00
2. Economic difficulties	1	50.00
Have you been hospitalized in the past six months?		
1. Yes	50	19.20
2. No	210	80.80
If YES, how many times have you in the past year?		
1. Once	46	92.00
2. Twice	4	8.00
If NO, what is the reason for not going?		
1. Unnecessary	23	10.95
2. Treatment does not work	5	2.38
3. Economic difficulties	19	9.05
4. Bad service	163	77.62
Are you on any routine medication or rehabilitation?		
1. Yes	62	23.80
2. No	198	76.20

Note:  $n=260$ .

From the above table, majority of the respondents had been to a clinic in the last two weeks while over one third of them had not. Majority of the respondents had not been diagnosed with a chronic disease while very few were diagnosed with chronic disease. From the foregoing data collected from the study on need factors, lack of chronic diseases represents the lack of need for healthcare service utilization. This is consistent with a previous study on the need factors which suggested that chronic diseases play a critical role in increasing healthcare service utilization of people, by promoting a more positive perception of healthcare service

utilization (Yan-Ning *et al.*, 2016).

For those diagnosed with a chronic disease, the majority of the diagnosis took place six months ago, while few took place within last six months. Similarly, only a few had multiple chronic diseases, and the majority of the time of diagnosis of the second disease was six months ago and few were within last six months. Also, half of those diagnosed with a chronic disease had been treated in six months while the other half were not. For those who have not been treated, the majority of the reason was because they felt mild symptoms while very few said that the reasons were because of inconvenient traffic and economic difficulties. For those with multiple chronic diseases, the majority said that the disease had been treated in six month and only very few said no. For those who said no, their reasons were that they felt mild symptoms and due to economic difficulties.

Thus, the majority of the respondents with diagnosed chronic diseases gave feeling of mild symptoms as the reason for lack of treatment or healthcare service utilization. This is consistent with a study which suggested that “in general, symptoms that are severe, persistent and new are more likely than symptoms that are mild, transient or chronic to compel healthcare-seeking” (Dennis *et al.*, 2020). One major factor affecting health service utilization in Nigeria is the perception some people have about their health status. In Nigeria, people do not desire to walk into healthcare facilities, especially hospitals, when their condition is not yet critical. They prefer to be carried to the hospital in ambulance. People think they need healthcare when their conditions are critical. In such cases, they end up with complications or more difficult cases to manage.

Self-diagnosis and self-medication are practiced often in Nigeria by the poorer households while the least poor use patent medicine dealers more and community health workers less, for the diagnosis of malaria in Africa (Uzochukwu & Onwujekwe, 2004). Self-diagnosis and self-medication are usually utilized to cut cost but most often they are ineffective. At best such practices deal with symptoms, and at worst they complicate health conditions. In chronic illnesses, most people delay visit to physicians, assuming that their symptoms will be contained. Unfortunately, they got complicated as early detection could have helped in better management. Most people hardly go for consult or check-up. When they do, they hardly follow prescriptions or health counsels.

Some respondents with diagnosed chronic diseases indicated that lack of finance is the reason for not been treated or lack of healthcare service utilization. This finding is also consistent with other studies showing that poor patients with chronic illness are less likely to use outpatient and inpatient services, whereas rich patients and those with insurance are more likely to utilize healthcare services (Abiodun *et al.*, 2020). According to Omoaregha *et al.* (2018), “the health value of the human life in rural communities has been compromised because of poverty further asserting that, health capital to rural development should be accepted because countries which take good care of her citizen’s health have much lower level of poverty irrespective of their per capital income.”

Other respondents with diagnosed chronic diseases indicated that inconvenient traffic is the reason for not been treated or lack of healthcare service utilization. This is also consistent with a study in Nigeria by Azuh *et al.* (2019). The latter researchers reported that “the poor state of roads is even more worrisome as more than half of the respondents stated that the roads are bad... This finding is in consonance with the World Bank Group (2008) study which noticed that infrastructure of PHC {Primary Health Center} facilities is in very poor condition leading to many constraints in the delivery of PHC services in all the four states studied in Nigeria.” For this reason, availability of comfortable and affordable transportation, the distance and time taken to reach health facility, influences healthcare service utilization in Nigeria (Omoaregha *et al.*, 2018).

In other words, place or space is also a major determinant of healthcare service utilization. This may simply be explained as the location of an individual in relation to the location of the scarcely available formal health facilities. For instance, most people in rural areas of Nigeria resort to informal medicine more than urban dwellers. This is so since traditional medicine seems more accessible to rural dwellers. Most rural areas are underserved with modern healthcare facilities, because the government hardly builds or equips the existing health centers in such rural communities. This invariably affects the healthcare service utilization of the local population. Consequently, there is a higher rate of morbidities and mortalities in rural areas because they mostly lack availability of or accessibility to healthcare services. Where there is any health facility at all, the

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waiting time becomes a cause for concern. People often die before it gets to their turn.

Majority of the respondents have not been hospitalized in the last six months while only very few were hospitalized. Of those hospitalized majority were hospitalized once and very few were hospitalized twice. For those not hospitalized at all, the reason of majority was because of bad service. Few of them also mentioned that their reason was because it was unnecessary, economic difficulties and because the treatment does not work. Furthermore, the study showed that the reason for lack of hospitalization by most of the respondents was bad service, including poor customer service. This resonated with previous studies on healthcare service utilization (Elvis *et. al.*, 2021). Hence, “community perceptions of poor quality and inadequacy of available services, however, determined largely the level of use of the primary health care facility” (Vincent, 2015).

Bad service could also explain the reason why those who have been hospitalized in the past had only gone for once in the past one year. Probably their experiences on the first visit did not encourage a second visit. This goes to say that besides the perception of healthcare services rendered in health facilities, bad service, including administrative and managerial inadequacies in some health facilities, could be a turn off for people because excellent service is holistic. Accordingly, a study by Abiodun *et al.* (2020) suggested: Health providers’ empathy, interpersonal relationship, communication of skills, knowledge and professional abilities may have demonstrable benefits on the experience of health service users with positive implications on future intention to use health services. Administrative or organizational access... may serve as disincentive to intentions to use health services...; poor management of the contact experience has long-term consequences for potential and actual future entry to the healthcare service delivery.

Finally, majority of the respondents did not have routine medication or rehabilitation while almost a quarter had. This is consistent with previous study showing that patients with diagnosed chronic illness were more likely to use outpatient and inpatient services: like having routine medication, periodic check or rehabilitation session; whereas those without diagnosed chronic disease were less likely (Yan-Ning *et. al.*, 2016). The reason for lack of routine medical check-up or rehabilitation could not be inferred based on the fact that there were some who were diagnosed with chronic diseases and some multiple chronic diseases. It could probably be apathy towards clinic visits and hospitalization or for lack of funds and health insurance to do that. It could equally be a combination of both. The fact remains that some people take healthcare less seriously; sometime allowing perceived needs to override evaluated needs for healthcare.

Summarily, the presentation of the data on the need factors in healthcare service utilization like perceived need and evaluated need, showed the following findings: that majority of the respondents had been to a clinic in the last two weeks. Majority of the respondents had not been diagnosed with a chronic disease. For those who had been diagnosed with a chronic disease, majority of the diagnosis time was six months ago. Half of those diagnosed with a chronic disease had been treated within the past six months while the other half were not. For those who had not been treated, majority of the reason given was because they felt mild symptoms. Only few had multiple chronic diseases, and majority of the time of diagnosis of the second disease was six months ago and few were within the past six months. Majority also said that the disease had been treated within the past six months and only very few said no. For those who said no, their reason was because they felt mild symptoms and due to economic difficulties.

The strength of the study lied in the conceptual framework anchored on Andersen and Newman’s Model of healthcare service utilization (2005) since studies have shown that the Andersen and Newman model of healthcare service utilization is appropriate conceptual basis for understanding human behavior, specifically when it has to do with healthcare service utilization. Notwithstanding, the major limitation of the study was that it used a cross-sectional descriptive method which only assessed the impacts of the predisposing, enabling and need factors on the utilization of healthcare services in a Catholic hospital in Nigeria; without looking at the associations among these factors and utilization of Catholic hospital in Nigeria. Although the study established impacts of these factors on healthcare service utilization, it is possible that unobserved clinical association might be uncovered in the findings. However, the researcher believed that the depth of data allowing for the performance of a multivariate analysis among the factors and Catholic hospital could not be represented by the sample for an inferential study.

Another limitation important to acknowledge is the inability to establish the reason why the respondents were found in a Catholic hospital whereas they indicated that community health centers were closest to them and were the health facility that they used most often. The study was not also able to incorporate all those who utilized the Catholic hospital in Nigeria under study by not translating the questionnaire into local languages spoken by the three major ethnic groups in Nigeria. Although the research had control measures for this lapse by excluding such people, the research was not able to rigorously ensure that all respondents understood the questions. Since the study could not figure out the respondents' reasons for using the Catholic hospital despite their proximity to and preference for community health center, future research might examine these lapses.

## CONCLUSIONS

The main purpose of the study was to determine impacts of predisposing, enabling and need factors in utilization of healthcare services in a Catholic hospital in Nigeria. In the cross-sectional descriptive study, a self-answered questionnaire was used for data collection, which contained features of demographics, socio-economic and health status of respondents, like self-reported illness, consultation, hospitalization, expenditure and routine medication and/or rehabilitation. By and large, the findings of the study on impacts of predisposing, enabling and need factors in utilization healthcare services in a Catholic Hospital in Nigeria provided relevant information for educational and practical interventions to promote healthcare service utilization in Catholic health facilities.

Predisposing factors were demographics such as age, sex (male, female), civil status (married, single, separated/divorced or widowed), ethnicity (Igbo, Hausa, Yoruba and others), religion (Catholic, Protestant, Muslim and African Traditional Religion) and educational status (no education means "has never gone to school;" primary education, secondary/high school and tertiary education). Enabling factors were the socio-economic factors which included: regular source of healthcare services (types of the available health facilities), access to healthcare services (travel time to health facilities), health insurance coverage and income class (low, middle and upper) of the respondents.

Need factors were the overall health condition of the respondents measured as perceived or evaluated health condition. Perceived health condition was measured by the respondents' visit to hospital whereas evaluated health condition was measured by respondents' diagnosis of chronic illness, hospitalization and routine medication and/or rehabilitation. Chronic disease was reported by answering yes-or-no to existing illnesses or symptoms of continuous or intermittent presentation, within or after a period of six (6) months. Thus, need factors were measured under two perspectives: utilization as an outpatient (visiting a clinic or consultation) and as an inpatient (hospitalization).

Despite the few flaws of the Andersen and Newman conceptual framework such as disregard for socio-cultural dimensions and interactions, omission of social construction of needs, as well as inadequacy in forestalling service utilization; as predisposing factors might be exogenous and enabling resources are necessary, it was relevant to the study as its tenets were in line with the study. Most importantly, the findings of the study showed that predisposing, enabling and need factors were present in the lives and circumstances of the respondents in the study in a Catholic hospital.

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## RECOMMENDATIONS

The following recommendations are hereby suggested: Practice: Catholic health facilities in Nigeria should provide high level modern medical technology and equipment as well as excellent services to their clients; build more health facilities, equip existing ones and train more priests and religious to address current healthcare facility and work-force deficits in Nigeria's health sector. Policy: Government should make and implement policies that support Catholic health facilities in Nigeria to improve their capacity for efficiency and effectiveness. Likewise, the Church should make and implement policies that promote health ministry, build capacity and teamwork with health professionals for medical missions. Education: To utilize the findings of the study, the healthcare service utilization enhancement plan provided in the study is suggested for implementation in all Catholic health facilities. Seminar should be organized to educate Catholic health managers and administrators on the findings of the study, to meet the expectations of people. Research: The study will be submitted for either oral or info-graphic presentation in any local or international research congress and for a possible publication in a peer-reviewed journal. The study can serve as reference for future studies where those who do not understand English should be included. Thus, the following topics are recommended: (a) Health seeking behaviour of clients utilizing Catholic health facilities; (b) The prospects of Church and State partnership in health service delivery; (c) Comparison of Catholic health and public health institutions in Nigeria; (d) Descriptive studies of Catholic health and other private health facilities; and (e) Application of modern technology in healthcare service and management

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## APPENDIX

### Healthcare Service Utilization Enhancement Plan

#### Rationale

The Catholic Church's involvement with healthcare service delivery dates back to her inception. The early Church showed concern for the health of the people via different means like laying of hands for recovery of the sick, anointing and exorcism. The influential rule of Saint Benedict holds that "the care of the sick is to be placed above and before every other duty, as if indeed Christ were being directly served by waiting on them". During the Byzantine era in the history of the Church, there were a number of priest-physicians as well as those who combined the sacred duties of the Altar with the healing ministrations of the physician.

The missionary role of Catholic Church in promoting life has continued till the present age in Nigeria, alongside the mandate to preach the gospel. Regardless of space and time, Catholic Church has always been involved in rendering healthcare services to Nigerians. Regardless of the circumstance, whether there is outbreak of new diseases that keep challenging experts in health sector to invent new treatments, the Catholic Church has always shown leading example in healthcare service delivery in Nigeria.

Despite the foregoing contributions and collaboration of the Church in Nigeria towards better health for the citizens, the healthcare system in Nigeria is still not adequate. Covid-19 exposed the poor state of healthcare services in Nigeria. Little wonder therefore the Nigerian healthcare industry is facing so many challenges associated with outbound medical tourism, deteriorating medical infrastructure, low government budget allocation, poor compensation and subsequent migration of skilled healthcare workers, leading to shortage in supply of healthcare professionals in most health facilities in Nigeria, to mention but a few examples.

The foregoing affects directly or indirectly the utilization of healthcare services in Catholic facilities in Nigeria. They have constituted predisposing, enabling and need factors with their corresponding impacts. Andersen and Newman healthcare utilization model shows the various factors that lead to the use of healthcare services or otherwise. Accordingly, utilization of healthcare services (including inpatient care, outpatient visits, dental care, screening and diagnostic testing, etc.) based on the study in a Catholic hospital in Nigeria, is influenced by these three factors, which are equally influential to and/or are influenced by personal health practices like diet, exercise, and self-care. These in turn influence healthcare service utilization and are influenced by health system in Nigeria.

For the foregoing reasons, some people now resort to traditional medicine for lack of efficient healthcare services, sufficient healthcare workers, modern healthcare facilities and functional health insurance. Regrettably, herbal medicine is more accessible and affordable to rural dwellers. Hence, as an alternative, many engage in self-diagnosis and self-treatment. The latter substitutes that people use, to cut costs, are ineffective and harmful. As a result, Nigeria continues to record a high rate of morbidity and mortality. There is an urgent need to salvage this ugly situation. The government should work with the Church to improve healthcare service delivery in Catholic health facilities in particular and Nigeria's health system in general; hence, the following recommendations:

#### General Objectives

This enhancement plan aims to address impacts of predisposing, enabling and need factors in utilization healthcare services in Catholic hospitals in Nigeria, towards improved healthcare service delivery in all Catholic health facilities in Nigeria.

#### Specific Objectives

Specifically, this enhancement plan is aimed at achieving the following specific objectives, namely:

1. To address the predisposing factor of patients' education towards utilization of Catholic hospitals in Nigeria;
2. To address the factor of religious perception or health belief towards healthcare service utilization of patients;
3. To address the factor of lack of health insurance coverage for people, towards utilization of healthcare services;
4. To address the enabling factor of accessibility of healthcare services to patients towards utilization of healthcare;
5. To address the factor of excellence in healthcare service delivery by health providers in Catholic health facilities;
6. To address the factor of excellent service delivery by Catholic health facilities' administrators and managements;
7. To address issues of poverty in Nigeria and task government to make and implement policies to improve income;
8. To address the need factors of patients' perception of health and need to utilize available healthcare services; and
9. To address the militating factors making routine health check, follow-up and/or rehabilitation difficult for patients.

Concerns	Specific Objectives	Activities	Persons Responsible	Budget	Time Frame	Success Indicators
1. Need to address modifiable predisposing factors of healthcare service utilization	Address predisposing factor of patients' education	- Conduct seminar on "The Purpose of Health Education"	State Government, Health workers, Local Government Health unit, All participants	Php 20,000	Jun-24	Certificates, list of participants, support group members, focus discussion minutes
		- Invite speakers from Department of Health				
		- Distribute pamphlets and post information on drug abuse/self-medication				
2. Need to address religious influence on healthcare service utilization	Address religious perception/health beliefs	- Disseminate information on healthcare myths	State Government, Health workers, Local Government Health unit, All participants	Php 20,000	Jun-24	Certificates, list of participants, support group members, focus discussion minutes
		- Conduct seminar on "Correcting Myths and Superstitions"				
3. Need to address enabling factor of health insurance coverage	Address lack of health insurance coverage	- Seminar on "Operational Guidelines of National Health Insurance Scheme"	State Government, Health workers, Local Government Health unit, All participants	Php 20,000	Jun-24	Certificates, list of participants, support group members, focus discussion minutes
		- Invite insurance experts to speak				



		on health insurance benefits				
4. Need to address healthcare service delivery capacity towards improving efficiency	Address healthcare accessibility to patients	- Lecture on "Code of Professional Conduct"	State Government, Health workers, Local Government Health unit, All participants	Php 20,000	Jun-24	Certificates, list of participants, support group members, focus discussion minutes
		- Organize diocesan discussion groups				
		- Awareness on National Health Act standards and penalties				
5. Need to address service delivery capacity of health providers	Promote excellence in healthcare service delivery	- Lecture on "Efficient Health Service Delivery"	State Government, Health workers, Local Government Health unit, All participants	Php 30,000	Jun-24	Certificates, list of participants, support group members, focus discussion minutes
		- Video resources on healthcare				
		- Awareness on medical records, privacy, and penalties				
6. Need to address healthcare administration and management capacity	Improve service delivery by Catholic facilities' administrators	- Lecture on "Nigeria Master Health Facility List Implementation Guidelines"	State Government, Health workers, Local Government Health unit, All participants	Php 30,000	Jun-24	Certificates, list of participants, support group members, focus discussion minutes
		- Seminar on "Code of Medical Ethics"				
		- Awareness on penalties for negligence, favoritism, and confidentiality				
7. Need to address poverty in Nigeria to empower healthcare service utilization	Tackle poverty issues and encourage policy implementation for improved income	- Lecture on "Public-Private Partnership in Health"	State Government, Health workers, Local Government Health unit, All participants	Php 20,000	Jun-24	Certificates, list of participants, support group members, focus discussion minutes
		- Video resources on public-private partnerships				
		- Awareness on policies addressing income, health				

		promotion, and partnership coordination				
8. Need to address factors affecting patients' perception of health	Address patients' perception and need for healthcare utilization	- Conduct seminar on "Purpose of Health Education"	State Government, Health workers, Local Government Health unit, All participants	Php 20,000	Jun-24	Certificates, list of participants, support group members, focus discussion minutes
		- Invite Department of Health speakers				
9. Need to address factors against routine health checks and rehabilitation	Improve patients' routine health checks and follow-ups	- Disseminate pamphlets on healthcare myths	State Government, Health workers, Local Government Health unit, All participants	Php 30,000	Jun-24	Certificates, list of participants, support group members, focus discussion minutes
		- Posters on drug abuse				
		- Raise awareness of ordinances on healthcare regulations				