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FACTORS INFLUENCING THE UTILISATION OF PRIMARY HEALTH CARE SERVICES AMONG RESIDENTS OF HADEJIA LOCAL GOVERNMENT AREA, JIGAWA STATE

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Abstract

In order to improve community health and lessen the strain on secondary and tertiary healthcare facilities, it is imperative that basic healthcare services be accessible and used. Citizens in many countries have limited access to primary healthcare. Many factors contribute to this condition, such as a lack of resources, the distance to primary care, and the reluctance of government healthcare authorities to consider community input on healthcare needs. The study assessed respondents' knowledge, identified the available services in PHCs using an observational checklist, and then found out the proportion of residents who utilized PHC services and determined factors influencing the utilization of PHC services (PHCCs). A cross-sectional design was adopted, and 384 participants were selected in six wards from the local government area. A multi-stage sampling procedure was used. After receiving approval from the relevant authority

Introduction

Background to the Study

Primary healthcare (PHC) should be broadly accessible to people and their families in the community at all stages of development, with active involvement and at a cost that the community and the country can afford, in the spirit of self-reliance and self-determination. The International Conference on Primary Health Care (WHO, 1978) defines PHC as follows. PHC aims to offer health care for everyone by the year 2000 and beyond. To attain this aim, the Federal Ministry of Health established a comprehensive

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and the participant's assent, a questionnaire was utilized to gather information from the respondents. The questionnaire proved to be a valid and dependable tool for the research. SPSS version 25.0 was used to analyse the data, and chi-square testing at the 0.05 level of significance was used to evaluate the null hypothesis. Findings were that women outnumbered men by a factor of two, and over half of the participants were in their highly fertile age range of 20 to 39 years. 89.5 percent of the participants acknowledged the presence of PHCCs. Over 80% of those surveyed said they comprehended the services provided by PHCCs. From the observational checklist, inadequate infrastructure, such as water supply, waste management facilities, and medical equipment like thermometers and blood pressure machines, was identified. The majority of respondents (67.9%) do not use the primary health care centres (PHCCs) that are available, despite having a high level of knowledge and awareness. The study identified potential barriers to use, such as a lack of experienced staff, distance, and inadequate infrastructure, as reasons for non-utilization or inadequate utilization. Conclusively, the study revealed that there was a strong correlation between utilization and demographic traits, distance and utilization, as well as respondent knowledge and level of utilization of PHCCs.

Keywords: Influencing, Utilisation, Primary Health Care Services, Residents, Hadejia Local Government Area, Jigawa State.

Healthcare system centered on primary care as part of the National Health Policy in 1987. The primary goal is to promote, protect, prevent, repair, and rehabilitate all residents while remaining within the constraints of available resources. As a result, both individuals and communities are guaranteed productivity, social well-being, and pleasure of life.

The utilization of primary health care (PHC) facilities in Nigeria is influenced by a myriad of factors, ranging from socio-economic to infrastructural and policy-related issues. Understanding these factors is crucial for improving health outcomes and ensuring equitable access to health services. This literature review explores the various determinants that affect the utilization of PHC facilities in Nigeria, drawing on recent studies and reports.

One of the primary factors affecting the utilization of PHC facilities in Nigeria is the socio-economic status of individuals. According to a study by Onwujekwe, (2019), income levels significantly influence health-seeking behavior, with wealthier individuals more likely to access and utilize health services compared to those from

lower-income backgrounds. This disparity is often exacerbated by the cost of healthcare services, which can be prohibitive for many Nigerians, particularly in rural areas where poverty rates are higher (Aregbeshola & Khan, 2018).

Geographical accessibility is another critical factor. Many PHC facilities in Nigeria are located in urban centers, leaving rural populations underserved. A study by Adamu, (2020) highlights that distance to health facilities is a significant barrier, with individuals in remote areas less likely to seek care due to the time and cost associated with travel. This issue is compounded by poor transportation infrastructure, which further limits access to health services in rural regions.

The quality of care provided at PHC facilities also plays a significant role in their utilization. Research by Oladipo, (2019) indicates that perceived quality, including the availability of essential drugs, the competence of healthcare providers, and the overall condition of the facilities, influences patients' decisions to seek care. Facilities that are understaffed or lack basic medical supplies often deter individuals from utilizing their services, leading to a preference for alternative healthcare options, such as traditional medicine.

Cultural beliefs and practices are additional factors that impact the utilization of PHC facilities. In many Nigerian communities, traditional medicine and healers are deeply rooted in cultural practices and are often the first point of contact for health issues (Ezeonwu, 2020). This preference can be attributed to trust in traditional practices, as well as the perception that modern healthcare providers do not respect or understand local customs and beliefs.

Despite the fact that research has not consistently revealed correlations between administration use and individual or family characteristics, (Babalola & Fatusi, 2019) highlight that few have looked at the person and family factors that impact the use of maternal administrations. The age distribution of a population may have an impact on the frequency of use of delivery services because younger people may not be as likely to use them when necessary, especially as most of them don't frequently make complex decisions like deciding whether to use medical care services, while older people do. Awasthi, (2018) found that 51.4% of adults 25 years of age and older routinely visit prenatal clinics for medical attention. A sizable portion of the elderly population takes full advantage of the healthcare services offered by prenatal visits, which will provide them with sufficient information or attention to concentrate on illness prevention. Boachie, (2017) observed that the utilization of health care services, in particular, was associated with similar outcomes. Boachie (2017) reported that patient age and the utilization of medical services have a statistically

significant positive connection (p 0.001). Research showed that whereas 9.7% of people under 20 feel embarrassed to visit a medical institution, the majority of people in the prime of their reproductive years (20 to 34 years) (93.3%) make four or more prenatal visits (Ayele, 2019). Because an individual is more mature and equipped to make moral decisions as she matures, age consequently has a significant influence on how she lives. Using medical services will support positive mental attitudes, healthy lifestyle choices, and overall good quality of life. The distance from the healthcare facility may have an impact on how delivery services are used. WHO recommendation is that a person's place of residence should not be more than 4 kilometres distant from a medical institution. It is evident that access to medical care services from one's place of residence would affect one's ability to use a health facility. According to studies by Ohiyemi et al. (2019), the utilization of wellness facilities is influenced by factors such as professional knowledge, service quality, and distance from home (5.1%). Transportation expenses to the medical facility will be substantial if its location is excessively far from the centre of the community. Furthermore, Mwani & Oleche, (2017) discovered that the size of the home and the cost per visit have a significant impact on the use of medical care services. Poor attitudes and negative behaviours, particularly arrogance, verbal abuse, and argumentative behaviour, are more common among healthcare workers. Kurpas et al. (2018) discovered that patients' motivation to use services to improve and promote health status was impacted by the negative attitudes of healthcare personnel. Compared to those of reproductive age who completed all levels of formal education, those who just completed basic education or had no formal education may be less likely to use medical care services correctly. This is because education has a role in mitigating the risk of improper use of medical care services. 2017 research by Mwami and Oleche found that women who have completed more education are considerably more likely to seek medical services than mothers who have not completed as much schooling. A greater level of education or auxiliary services is likely to be used more frequently by people of reproductive age than by house children with lower levels of education. This is consistent with the idea that education reduces ignorance. All things considered, a woman with greater education is more likely to recognize the need of maintaining her health and the benefits of obtaining medical services. This conclusion is similar with the findings of other studies (Adam & Awunor, 2017) which found that a higher educational level positively influences the use of medical care services from licensed or trained healthcare professionals. Numerous authors and researchers have examined

primary health care (PHC) from various angles, such as funding, variables influencing PHC systems, accessibility to care, PHC organization, etc. However, there is a dearth of research on the public's awareness of and knowledge of primary healthcare among those who will be using the facilities. Understanding PHC and its values is crucial for ensuring its accessibility. It is well known that PHC in Nigeria consists of four essential elements: (1) health in all policies; (2) people-centred care; (3) inclusive leadership; and (4) universal coverage. The success of PHC in Nigeria is largely dependent on these elements. According to Omoabike (2010), the main things working against the PHC system are inadequate funding, inadequate and/or lack of community support for the management of the health care facilities, and a shortage of staff to staff PHC centers. Illiteracy may have the potential to hinder efforts during a somewhat publicized event, unless communications are adapted to the sociocultural context of the involved groups. According to Iyayi, (2019), sociocultural variables may have an impact on PHC services provided in Nigeria. The PHC services in Nigeria were shown to be significantly impacted by cultural taboos and beliefs, unemployment, illiteracy, gender inequality, poverty, and financial inequality, as well as by the availability and distribution of health human resources (Iyayi, 2019). A critical evaluation of the aforementioned variables would point to a direct or indirect influence on Nigeria's basic healthcare facilities' accessibility. It was overly optimistic to think that primary health care would be the catalyst for significant improvements in the delivery of healthcare and the state of people's health. Primary health care is not widely available to citizens in many countries (Rutherford, 2009; World Health Organization (WHO, 2019).

The Study's Aim and Objectives

The purpose of the study is to ascertain how residents of Jigawa State's Hadejia Local Government Area use primary healthcare services. More specifically, the study's goals are to:

1. To determine the knowledge of PHC services among residents of Hadejia Local Government Area, Jigawa State .
2. To identify the available services in PHCs using an observational check list among residents of Hadejia Local Government area, Jigawa State
3. To determine the proportion of residents that utilizes PHC services among residents of Hadejia Local Government Area, Jigawa State
4. To determine factors influencing the utilisation of PHC services among residents of Hadejia Local Government Area Jigawa, State.

Research Questions

The research answered the following research questions

1. What is the level of knowledge of PHC services among residents of Hadejia Local Government Area, Jigawa State?
2. What are the available services in PHCs using an observational check list among residents of Hadejia Local Government area, Jigawa State
3. What are the proportion of residents that utilizes PHC services among residents of Hadejia Local Government Area, Jigawa State
4. What are the factors influencing the utilisation of PHC services among residents of Hadejia Local Government Area Jigawa, State.

Significance of the study

The study on factors affecting primary health care utilization in Hadejia is significant because it improper health outcome by identifying barriers to care, informs health policy and resource allocation, it further enhances health care delivery, patient cantered care and contribute to global health initiatives such as universal health coverage and sustainable development goals.

Scope of the Research

The study was delimited to confine the Factors influencing the utilisation of Primary health care (PHC) services among residents of Hadejia Local Government Area, Jigawa State.

Conceptual Review

Under the sponsorship of the World Health Organization (WHO) and the United Nations Children Fund (UNICEF), 134 countries gathered in Russia on September 12, 1978, to establish and endorse the idea of primary health care. It is the healthcare system that is closest to the communities and designed to help the most vulnerable members of society, whose health needs are vital and urgent (Adeniyi, 2013). Therefore, everything that is done at this stage is meant to be first-line, with the goal of providing health care as close to people's places of employment and residence as feasible while also contributing to the initial steps of an ongoing health care process. Primary Health Care (PHC) emerged from the obvious recognition of the many inconsistencies within the healthcare system, specifically the enormous mismatch between the vast array of health demands that people have and the little resources available to meet these needs. Additionally, there is an imbalance between inter-

sectoral health expenditures and health requirements. A further mismatch exists between the distribution of health services and the population (the so-called inverse pyramid of health care). These problems and disruptions have caused the people to become alienated and the system's beneficiaries to become submissive and obedient, even though 80% or more of our problems are preventable. Thus, a people-centered system is required to handle each of the aforementioned difficulties; primary health care is thought to be able to do so.

Definition of Primary Health Care (PHC):

The World Health Organization (WHO, 1978) defines PHC as essential health care based on socially acceptable, scientifically sound, and practically applicable techniques and technology. It is supplied to people and families in the community via full involvement at a cost that the country can afford to sustain at every level of growth in the spirit of self-dependence and self-determination.

Aims and Objectives of PHC:

The World Health Organization (WHO) has listed the following as the aims and objectives of the Primary Health Care system:

1) To ensure that health services are available to everyone, regardless of where they live or work;
2) To address the health issue causing the highest rate of death and morbidity at a cost that the community can afford;
3) To guarantee that any technology used in the implementation of health programs is within the community's capacity and is used effectively and maintained;
4) To ensure that the community has an active role in developing, implementing, and assessing the services with an eye towards self-sufficiency.

Promotion of health, prevention and treatment of disease, and rehabilitation to enable full normal life after sickness or disability should be the ultimate goals of any excellent primary health care service.

Governmental services to primary health care

Both the 1999 Constitution of the Federal Republic of Nigeria and the National Health Bill (2008) addressed primary health care in the country. The former laid out requirements for all federation-wide health service providers and the latter

provided a framework for the creation, administration, and oversight of the country's healthcare system. All three branches of government are implicitly tasked with enhancing health care at various levels, since the federal government's Constitution includes health on the concurrent legislative list. According to these papers, the federal, state, and local governments are expected to provide coordinated assistance.

The WHO Technical report series outlines a three-tier stepwise system of health care:

- Local government will coordinate primary health care;
- state governments will handle secondary health care; and the
- federal government will handle tertiary health care.

Consequently, all health care initiatives will revolve on primary health care at the local level. Another provision of the National Health Bill was the establishment of the National Primary Health Care Development Fund. At least two per cent of the consolidated revenue account's total will go into this fund. The National Health Insurance Scheme will use half of the fund's revenue to provide a minimum package of health care services to all citizens, primary health care will use 25% to provide materials and transportation facilities, and human resource development will get 10%. Health treatments and/or services that address health and health-related concerns and deliver substantial health benefits at minimal cost make up the ward minimum health care package, according to Adeyemo, (2015). Disease trends, financial considerations (such as service prices), and the proportion of the population affected or benefited by health care were among the many criteria considered while constructing this package. This package aims to attain universal health coverage and the Millennium Development Goals (MDGs) by providing a minimum set of interventions needed to meet people's fundamental health needs. It targets the grassroots level. This package contains, technically speaking, inexpensive therapies that have reduced mortality and morbidity rates from major and common diseases, improved health and development, and so on. Considering these factors and more, a package is recommended. The ward minimum health care package is being developed with the goals of improving community-level access to high-quality healthcare, particularly for rural populations, and addressing inequalities in the delivery of health services across and within wards. Child survival, nutrition, health education, community mobilisation, control of communicable illnesses (malaria, STIs/HIV/AIDS), nutrition, and prevention of non-communicable diseases make up

the six main components. In order to ensure the smooth implementation of this package, the National Primary Health Care Development Agency will collaborate closely with the health care departments of different states and municipalities. The National Basic Health Care Development Agency (NPHCDA) was established by Decree 29 of 1992 with the primary objective of ensuring the sustainability of Nigeria's basic health care system in the long run. This is the Nigerian Senate. Supporting health policy as an auxiliary of the federal ministry of health, we will provide technical help for primary health case implementation and encourage the formulation and execution of primary health care plans. For the sake of administrative efficiency, it operates in accordance with the geographic framework of our political system. Among its aims is the mobilisation of national and international assistance for programme execution, as well as the administration or commissioning of research on primary health care concerns. Appropriate use of the National Primary Health Care Development Agency's (NPHCDA) resources has the ability to make it a capacity development organisation. The National Health Policy was established in 1998 to provide a legislative framework for the management of the nation's healthcare system and to show that the federal government was serious about improving it. A comprehensive health care system centred on primary health care (PHC) that is primary, restorative, and rehabilitative is the purpose of the 1987 and 1988 approved policies. This policy was amended in 1997 and put into effect in 2004, along with several supplemental policies on health programmes such as HIV/AIDS, TB, malaria, reproductive health, health management information systems, etc. Nonetheless, primary health continues to be the central emphasis of this revised programme. The federal government has taken several concrete steps to improve the primary health care system under Olusegun Obasanjo's administration. The New Partnership for African Development (NEPAD) encompasses all of these modifications, as well as the Economic Empowerment and Development Strategies (NEEDS I and II) and the newly announced vision 20-2020. Despite the continued importance of the reforms' core goals—the creation and expansion of public-private partnerships in healthcare—the decision to do so is an encouraging development. Abolition of poverty, creation of employment, realignment of values, and the creation of jobs are the primary objectives of the NEEDS papers.

The four fundamental pillars of primary health care are;

1) Universal accessibility,
2) Community participation,

3) Intersectional collaboration, and
4) Appropriate technology (National Health Care Development Agency).

The Primary Health Care system is based on these three pillars:

i) Principles;
ii) ii) Monitoring and evaluation; and iii) Indicators.
iii) Universal accessibility,

As it relates to national economic empowerment, is the availability, affordability, and usability of health care for all people who require it. On the other hand, intersectoral collaboration focuses on the necessity of tight coordination and cooperation amongst all other sectors, agencies, and parastatals in order to achieve a shared objective. The goal of community participation is to encourage the greatest possible level of community involvement and engagement in the planning, implementation, and oversight of health care. Among the many tools used to assess primary health care are regular reporting systems that gather data on morbidity and death. Sentinel reporting system employs unique reporting sites that are hand-picked to offer data that is believed to be more accurate than what is often offered by standard disease reporting systems. The purpose of an outbreak inquiry is to establish conclusively whether or not there has been an unexpectedly high rate of illness and death. However, coverage surveys are designed to check data from normal reporting systems and provide an accurate evaluation of the program's effectiveness. Obtaining the necessary resources to execute a programme and comparing the actual expenses with the expected benefits are the other two steps in a programme review or cost analysis. According to WHO (2010), the indicators used to track primary health care systems vary according on the programme under evaluation, the tasks at hand, and the resources at our disposal. First and foremost, the indicator matrices are component-specific. As part of the effort to educate the public on common health issues, we will track metrics like the number of adult literacy programmes and the percentage of the population with access to various forms of media. Two measures of immunization coverage are the proportion of children at risk and the proportion of pregnant women who get all the required vaccines within a certain time period. One indicator for mother and child health is the percentage of births attended by trained personnel, which is determined by dividing the number of births attended by trained individuals by the predicted number of births. Zolne, (2017) states that the expected birth rate may be calculated by multiplying the crude birth rate by the

midyear population estimate. The contraceptive prevalence rate in a community is the sum of the rates of family planning use among eligible women and the rates of prenatal and postnatal care received by pregnant women. An indication of food and nutrition security for expecting moms is the proportion of children (under 5 or 3 years old) whose weight is less than the reference standard for their age, and another is the percentage of infants whose weight is less than 2500 grammes. Indicators of water supply and sanitation include the proportion of the population that has access to clean drinking water either at home or via 200 metres of portable water. Sewage indicators include things like the proportion of the population that has adequate means of waste disposal or that resides within 50 metres of a pit latrine or toilet. A health centre or village health worker is able to treat common and endemic illnesses in a region if the proportion of the population resides within 5 km, or 30 minutes to 1 hour, of that facility. Number of infants less than five years old who were treated with oral rehydration salts or reported cases of diarrhoea divided by that the number.

Primary health care (PHC) was first recognized globally in 1978 as a veritable tool for achieving health for all peoples of the world and for addressing the main health problems in the community by providing primitive, preventive, curative and rehabilitative services to the populace (WHO, 1978). It represents the first contact individuals, families and the community make with the national health system in the health care spectrum (WHO, 1978). In 2008, the World Health Organization (WHO) not only re-emphasized the importance of PHC as the benchmark for providing comprehensive health services globally and nationally in a safe, effective and socially productive manner but also echoed the need to adopt a people oriented approach (WHO, *2008)*.

Following the renewed commitment to health and well-being for all by the United Nations (UN) in 2015, PHC further gained traction as an effective, efficient and equitable approach towards enhancing health, thus making it an important tool towards achieving Universal Health Coverage (UHC) (WHO 2018). The Sustainable Development Goal (SDG) 3 addresses all major health priorities, aiming to ensure healthy lives and promote well-being for all by the year 2030 (*United Nations 2017*). Primary health care continues to be recognized globally as an important approach towards achieving the health-related SDGs and UHC (*Pettigrew, 2018*]. As the discourse on achieving UHC continues to gain momentum, the significant contribution of PHC to health and health systems in Low and Middle Income Countries (LMIC) has been highlighted (FMOH, 2018). In Nigeria, successive national

health policies recognize PHC as a core underlying principle, serving as the basic philosophy and strategy for national health development (FMOH, 2018). In order for countries to ensure the delivery and utilisation of high quality and safe PHC services, the in-country choice of specific interventions should not only be informed by global but also local evidence driven by context-specific PHC-oriented research (Gulton, 2017). Understanding the factors influencing utilisation of PHC services especially in developing regions would help guide policy formulation towards improving uptake of health services at the primary health care level, thus contributing towards achieving UHC and ensuring health and well-being, particularly among vulnerable populations and rural communities in poor-resource settings (Topp, 2018). This study therefore aimed to determine PHC services utilisation and to assess community as well as PHC facility-related factors associated with utilisation of PHC services among adult residents of a rural community in Nsukka local government area of Enugu State, Nigeria.

METHODOLOGY

Introduction

This chapter covers the research design, study area, study population, sample and sampling methods, data nature and sources, data collection and instrumentation procedures, instrument validity and reliability, data analysis methodologies, and ethical approval.

Research Design:

A descriptive survey design was used for this investigation. Because it defines, explains, and analyses certain demographic aspects relevant to the factors that determine the consumption of health care services in their natural setting, this approach was deemed appropriate.

Study Area:

The Hadejia Local Government Area in Jigawa State, Nigeria, served as the study's location. The Hausa town of Haɗejiya, also known as Haɕeja and formerly Biram, is located in eastern Jigawa State, northern Nigeria. In 2006, there were roughly 105,628 people living there.("Hadejia"). National Population Census, Encyclopaedia Britannica. Latitude 12.4506N and longitude 10.0404E are the coordinates of Hadejia. The GPS coordinates for Hadejia are available at https://latitude.to/map/ng/nigeria/cities/hadejia. It was bordered by the Mallam

Maɗori Local Government to the north, the Kiri Kasama Local Government to the east, and the Auyo Local Government to the west.

Eleven (11) political wards make up the Hadejia Local Government: Atafi, Dubantu, Gagulmari, Kasuwar ƙofa, Kasuwar Kuda, Matsaro, Majema, Rumfa, Sabon Garu,ˇankoli, and Yayari. With a few additional tribes like the Tiv, Yoruba, Igbo, Igala, etc., the Hausa, Fulani, and Kanuri make up the majority of the population. Crop farming and animal husbandry accounted for the majority of the population's jobs, with a sizeable portion also working in trade, fishing, and other services including civil service. (Isah, 2018). While some adhere to indigenous religious traditions, the majority of the population in Hadejia are Muslims.

The town is upstream from the Hadejia-Nguru marshes and located to the north of the Hadejia River. Hadejia is a sensitive and significant ecological area on a global scale. (M.J. Chiroma; 2009.)Formerly known as Biram, Hadejia is one of the "seven true Hausa states" (Hausa Bakwai), according to Daura (2006). Because the people who ruled over it were the heirs to the legendary Hausa figure Bayajidda and his second wife, Daurama. (Lange, 2006).

The community is blessed with sufficient medical facilities that span the primary, secondary, and tertiary health care systems. Nine primary healthcare facilities, including the following nine in Hadejia Town, are home to one general hospital and one specialist hospital: Fantai PHC A public hospital called;

- Fantai Primary Health Clinic is situated in Yankoli Quarters,
- Dala Health Post is a public hospital.Situated Yayari quarters
- Dubantu quarters, is the public in Dubantu
- Agumo Primary Health Centre.A public hospital called Kofar Arewa Urban Maternity Center situated in the Gagulmari
- Gawuna Primary Health Centre in Gawuna quarters.
- The Police Clinic is a public hospital situated in police station hea quarter
- Baderin Gabas Primary Health Centre is situated in Rumufa Quarters,
- Aguyaka Gudichin Basic Health Clinic is situated in Yankoli, Jigawa State's Hadejia Local Government.

Population of the study: The people who live in the Hadejia local government region made up the study's population (i.e 105,628). from eleven political wards, including the Kasuwar kuda ward, Majema, Atafi ward, Dubantu, Gagulmari, Sabon garu, Rumfa, Matsaro, Yankoli, Yayari, and Majema ward (National Bureau of Statistics, 2018).

Inclusion Criteria:

Any resident of the Hadejia local government area who consents to participate in the study was included in the the study. Thus, among those who live in and around the eleven wards where PHC is situated in Hadejia local government area

Exclusion Criteria:

Sampled but not available during the time of data collection for any reasons, and those who lack interest in the research was eliminated to be among the sampled population.

Sample size Determination:

A sample size of 384 was chosen from the population of 105,628; this can be accomplished most effectively by utilizing Taro Yamani's sample size calculation formula. As mentioned below, Confidence level (equivalent to a two-tailed test margin of error of 5%)E can be computed as: Replacement Let's continue with the calculation now. 105628 is the total population (N).Significant level (a) = 0.05 (corresponding to a 95% confidence level)Using Tan Yamane's technique, the sample size calculation formula is Where is the sample size that is needed? N is the size of the entire population. Compute e:Enter 0.05 and Title N = 105728 into the formula. Remember that e will be determined. Using n = 383 as a starting estimate Enter N = 105728 into the sample size calculation. For this investigation,

$$e = \frac{1}{\sqrt{n}}$$

Substitution $\propto = \ 0.05 \ into \ the \ formula$

$$e = \frac{1}{\sqrt{2.n}}$$

Now let's proceed with the calculation

1. Total population (N) = 105628
2. Level of significance (a) = 0.05
   (This corresponds to confidence level of 95%)

The formula to calculate sample size using Tan Yamane's method is

$$n = \frac{N}{1 + Ne^2}$$

Where:
n is the required Sample size.
N is the total population size

1. Calculate e:

$$e = \frac{1}{\sqrt{2.n}}$$

i. Subtitle N = 105728 and $\propto 0.05$ into the formula

$$n = \frac{N}{1 + Ne^2}$$

Keep in mind that e will be calculated

$$e = \frac{1}{\sqrt{2.n}}$$

Using the initial estimate of n = 383

$$e = \frac{1}{\sqrt{2.385}} \cong 0.081$$

i. Substitute N = 105728 and $e \cong 0.081$ into the sample size formula

$$n = \frac{N}{1 + Ne^2}$$

$$n = \frac{105628}{1 + 105{,}628(0.081)^2}$$

$$n = \frac{105{,}628}{1 + 105{,}628(0.081)^2}$$

the answer $= 383.43$, *but since the sample size must be whole number well round it up to nearest whole number* $= 384$

A multi-stage sampling approach was employed. There will be four stages, as indicated below: **Step one**: From the current eleven wards in the Local Government Area, six wards will be chosen using a simple random selection approach. This will be accomplished via voting in the Hadejia Local Government Area of Jigawa State, which includes the wards of Matsaro, Yankoli, Rumfa, Sabon Garu, Yayari, and Majema.

Step two: Out of the eleven wards currently in use, two quarters was chosen at random for the study using a basic random sample technique. In Yankoli ward, Unguwar Muazu and Chadi quarters will be used in Rumfa ward; for Matsaro,

Gawuna and Gandun sarki quarters will be used. In Sabon Garu ward, Bayi quarters and Kasuwar Kofa. The quarters in Magama Hudu and Oliya, Dala and Agumau for Yayari ward, and Tagurza and Charbin Barau for Majema ward was utilized, in that order.

Step three to create the 384 sample for the study, 32 residents from each of the six wards' chosen quarters—a total of 64 participants—will be chosen using a stratified non-proportionate sampling procedure.

The size of the sample

The Taro Yamani formula was applied on a total population of 105, 6283, and 384 was the sampled participant.

Methods of Data Collection

Questionnaire and Checklist was used on respondents for data collections. The Questionnaire was made up of two parts. Part A and B, Part A for demographic characteristics of respondent while part B for research objectives.

Entry to the research site: In order to help mobilize the members of that community to the point of data collection, the researcher contact the respective heads of each quarter upon entry into the study sites to arrange a meeting and briefing. During this meeting, the researcher introduces and discusses the purpose and objectives of the research as well as its significance.

Recruiting support for research: The researcher had two research assistants that actually help with data collection from respondents.

Data collection: On the designated collection day, participants received a brief explanation about the study, their verbal consent was requested, and data was gathered all the necessary sample size is obtained.

Respondent's confidentiality was guaranteed, anonymity, and their voluntary involvement.

Validation of the Instrument

Validation Copies of the questionnaire was provided to the two researcher supervisors for face, construct, and content validity after the instrument has been developed. The aforementioned experts received copies of the questionnaire along with the goals, research questions, and null hypotheses for review, correction, and moderation. The final version of the instruments was developed with input from the experts. A test-retest procedure was used with the residents of the Hadejia local government area.

Reliability of instrument

An instrument's or tool's consistency in measuring the intended object was determined by its reliability. It involves an instrument's capacity to yield the same outcome when used on the same subjects under the same circumstances.

The instruments' dependability was assessed using the test-retest reliability method. A type of reliability test called test-retest reliability assesses how consistently results hold up when the same test is administered to the same sample at a different time.to guarantee the instrument's consistency. 39 copies of the instrument (10%) were given out by the researcher to a variety of participants who were not included in the study population. For Ten (10) working days later, the identical instruments were given out again to the same groups of people.

The two distinct answers was gathered and subjected to reliability index analysis and Pearson's Product Moment correlation. What was the score?

Data Analysis:

Analysis of Data: Version 25.0 of the Statistical Products for Service Solution (SPSS) was used to code and analysed the collected data. To test the null hypotheses, chi square was employed at the 0.05 level of significance.

Ethical Approval

Approval by Ethics An introduction letter was provided to the researcher following submission of an ethical request to the University of Port Harcourt's research ethics committee for review and eventual acceptance. After receiving approval from the research and ethical committee at the Jigawa State Ministry of Health, the introduction letter was delivered to the research sites along with a formal request for authorization to carry out research and gather data in the research area. The respondents received sufficient information in an easy-to-understand format, including information on their right to withdraw from the study at any moment without facing any repercussions. After that, their specific consent was soughed so they can freely and voluntarily take part in the study. Before agreeing to participate, respondents received a promise from the researcher on their confidentiality and anonymity.

RESULTS AND DISCUSSION

The data presentation that was examined in light of the study questions was the topic of this chapter. The study participants were given 384 copies of the questionnaire in

total. A total of 384 copies were obtained after the first 383 copies were received and the final copy was later obtained. 384 were found to be legitimate and appropriate for data analysis and interpretation after being verified, sorted, and compiled.

Table 1: Socio-demographic characteristics of the respondent in Hadejia LGA Jigawa State

Item	Frequency (n=384)	Percentage (%)
Age group of respondent		
16-25 years	319	10.4
26-35 years	331	66.1
36-45 years	296	22.1
46-above years	176	13.0
Total	384	100
Sex of the respondent		
Male	125	32.6
Female	259	67.4
Marital status of respondent		
Single	88	22.9
Married	280	72.9
Widow	11	2.9
Divorce	5	1.3
Total	834	100
Religion of respondent		
Christians	11	2.9
Muslim	373	97.1
Total	384	100
Educational level of respondent		
No formal	79	20.6
Primary	111	28.9
Secondary	108	28.1
Tertiary	86	22.4
Total	384	100

Table 1 presented the demographic characteristics of the respondents. It showed that 66.1% of the respondents were between the ages of 26 and 35, 22.1% were between the ages of 36 and 45, 10.4% were between the ages of 16 and 25 and 1.3% were above the age of 46. Additionally, it was found that 1.3% of the respondents were widows, 72.9% of the respondents were married, and 22.9% of the

respondents were single. According to data on religion, only 2.9% of respondents identified as Christians, compared to 97.1% of Muslims. Additionally, it revealed that 28.9% of the respondents held a primary leaving certificate, 28.1% a secondary school leaving certificate, 22.4% a tertiary certificate, and only 20.6% had never attended any kind of formal schooling.

Research Question 1: What level of knowledge do the residences have on services provided by primary health care?

Table 2. Assessing level of knowledge of response on primary health care service (PHCC)

S/N	Variable	Frequency	Percentage
1	Where do you think patient with minor illness should go for treatment?		
	a Primary health care centre	30	7.8%
	b General hospital	30	7.8%
	c specialist hospital	24	6.3%
	d Depend on the condition	300	78.1%
	Total	**384**	**100%**
2	What are some of the function of primary health care do you know?		
	a Given immunization/minor ill care	201	
	b Drugs/diseases prevention	89	52.3%
	c health education	0	23.2%
	d ANC	9	0.0%
	e. all of the above	84	2.3%
	f. I don't know	1	21.9%
	Total	**120**	**100%**
3	Do you know all the available PHC in the town ?		
	a Yes	275	71.6%
	b No	16	4.2%
	c Not all the PHC	94	24.5%
	Total	**384**	**100%**

4	Do you know the services provided at primary health care centre?		
	a Yes	304	79.1%
	b No	80	20.8%
	Total	**384**	**100%**
5	Do you know about the role of PHC?		
	a Yes	207	53.9%
	b No	177	46.1%
	Total	**384**	**100%**

Table 2: When the respondents' level of knowledge was evaluated, it was found that 78.1% of them thought that primary care was the first place they should seek care, while 7.8% thought a general hospital should be the first place they should go for illness and injury. 6.3% selected a specialized hospital as their primary point of care, while 7.8% stated that it depended on the ailment or disease. When asked how primary health care functions, 52.3% of respondents said that PHCCs are for providing immunizations against communicable diseases, 2.3% said that they are for providing essential medications and disease prevention, 23.2% said that primary health care primarily serves as antenatal care (ANC), and 21.9% said that primary health care provides all of the services mentioned in the option above. When asked if they knew of every PHC in the town, 71.6% of participants responded in the affirmative, whereas 4.2% and 24.5%, respectively, indicated they did not know about any PHC. When asked if the participant was aware of the specific services offered by the primary health care centre, 79.1% of respondents said they were, whilst 20.8% said they were unaware of them. When asked about the role of PHCCs in the community, the majority of respondents—53.9%—knew about it, whilst 46.1% were unaware of it.

Research Question 3: what is the proportion of residents that utilize PHC services among residents of Hadejia Local Government Area, Jigawa State

Table 3. **Determining the proportion of residents who utilize PHC services among residents of Hadejia Local Government Area, Jigawa State**

S/N	Variable	Frequency	Percentage
1	Do you/family members use of the PHC?		
	a Yes	84	21.8%
	b No	40	10.4%
	c Not all the time	261	67.9%
	Total	**384**	**100%**

2	If yes does the facility open 24hours?		
	a Yes	58	15.1%
	b No	16	4.1%
	c Not sure	310	80.7%
	Total	**120**	**100%**
3	When do you use the primary health care facility?		
	a Every time if I am sick	31	8.1%
	b Not all the time	85	22.1%
	c depend on the severity of the sick	66	17.1%
	d. I don't visit unless if taken by some	202	52.6%
	Total	**384**	**100%**
4	On estimate how many times in a year do you visit PHC when you are sick		
	a. 1-2 times yearly	216	56.2%
	b 3-9 times yearly	106	27.6%
	c monthly	6	15.6%
	d weekly	50	13.0%
	e I don't	10	2.6%
	Total	**384**	**100%**
5	What type of personnel do you see in the facility?		
	a Nurses	101	26.3%
	b community health workers	211	54.9%
	c doctors	19	4.9%
	d I can't specify	53	13.8%
	Total	**384**	**100%**

Table 3: showed that 67.9% of respondents said they did not often visit primary health care centres (PHCCs) when they're sick. 10.4% of people did not utilize the centre at all, but 21.8% used it when they were ill. Additionally, it was discovered that 17.1% of respondents stated that visiting PHCCs depended on the severity of the sickness, and 52.6% of respondents indicated they only go to the centre if someone else took them. When asked if the facility is open 24 hours a day, 80.7% of participants responded that it was always open for 24 hours of services, 15.1% of respondents said they were unsure if the facility was opened for the specified hours (i.e., 24 hours) or not, and 4.1% said it was not open for 24 hours. When asked how often they visited, the majority of participants—56.2%—said they did it one to three times a year. 15.6% said they visited the facility at least once a month, while 27.6% said they visited at least three to nine times a year. While 2.6% were unable to provide the precise time of visit, 13.0% made weekly visits. Regarding the kind of

staff employed by the centres, 26.3% of participants stated that nurses made up the majority of those working there, 54.9% identified themselves as community health extension workers (CHEWs), 4.9% were doctors, and 13.8% were unable to identify the staff's occupation.

Research Question 4: What are the factors influencing the utilization of PHC services among residents of Hadejia Local Government Area Jigawa, State

Table 4 **Determining factors influencing the utilisation of PHC services among residents of Hadejia Local Government Area Jigawa, State.**

S/N	Variable	Frequency	Percentage
1	What are some of the reasons do you have for not utilizing primary health care facility?		
	a lack of experienced staff	229	59.6%
	b Lack of drugs	67	17.4%
	c behaviors of staff	40	10.4%
	d lack of infrastructure	42	11.0%
	Total	**384**	**100%**
2	Do you pay for services in primary health care?		
	a Yes	239	52.3%
	b No	34	23.2%
	Total	**384**	**100%**
3	If yes how much does it cost for common services?		
	a #500.00 - #1000.00	304	79.2%
	b #1000.00 - # 5000.00	64	16.7%
	c more than #5000.00	16	4.2%
	Total	**384**	**100%**
4	How satisfy are you with primary health care centre?		
	a strongly satisfied	218	56.8%
	b moderately satisfied	97	25.3%
	c Not satisfied	69	18.0%
	Total	**384**	**100%**
5	How long does it take you to travel to nearby PHC?		
	a 30mint to 1hour journey	321	83.6%
	b more than one hour journey	53	13.8%
	c not sure of the distance	**10**	2.6%
	Total	**384**	**100%**

One of the main reasons respondents did not use the primary health care facility in their neighbourhood, according to Table 4 of potential barriers that hampered utilization of primary health care, was the absence of skilled staff. Of those surveyed, 59.6% claimed it was because of unfavourable staff behaviours in the majority of the centres, 17.4% said it was because of this, and 11.0% said it was because most centres lacked the infrastructure present in secondary and tertiary hospitals. When asked if they payed for majority of primary healthcare services at the centres, participants in the majority of the centres answered "yes" with 52.3%, while 23.2% said "no," indicated that the majority of services were provided at no cost. According to the data, the majority of respondents—79.2%—indicated they spend between #500.00 and #1000.00 for services at primary health care centres, followed by 16.7% who said they pay between #1000.00 and #5000.00 and 4.2% who said they pay more than #5000.00.The table showed that, out of all participants, 56.8% expressed high satisfaction with the services provided in the centre, 25.3% expressed moderate satisfaction, and 18.0% expressed dissatisfaction with the services provided in the centres. The majority were identified by the final question, which requests distance. 83.6% reported that the trip from their house to the centre took between 30 and 1 hour. 2.6% indicated they were unsure of the precise amount of time travelled, while 13.8% said the trip took longer.

Discussion of Findings

Demographic characteristic

Analysis of the Results 1: Characteristic of the population Full data were gathered for 384 sampled participants. According to this study, the majority of respondent were female, aged under married had only completed their primary education and were Muslims. According to our survey, there were twice as many women as men because over half of the respondents were, (Most fertile age). This could be related with the study of Khalid Alghamdi et al, which conducted a study from January to March 2018, the respondents were surveyed on public awareness and utilization of primary health care services in Al-Madinah, Saudi Arabia." The age range of the responders was there were responses, of the total, who were female, and were male. Twenty-four of the respondents were married, and the remaining twenty-three were single. In terms of education, had formal education and of the respondents had no formal education, while respondents had only completed their primary education.

Assessing level of knowledge of primary health care services among the residence of Hadejia local Government Area

Evaluating Hadejia Local Government Area residents' knowledge of primary healthcare services that are offered Ninety-five per cent of the responders knew that their ward had a PHCC. Over of the participants indicated that they are aware of the majority of the services offered by PHCCs, such as nutrition education, immunization against infectious diseases, and minor illness management, which includes additional primary health care services like dental, mental, and eye care. The study participant is also aware of the value that PHCCs provide to their community and the contribution they play in enhancing health outcomes. According to the study, "Two hundred and seven respondents claimed that they visit PHCCs 1-2 times yearly, claimed times yearly, claimed monthly, and claimed that they did not use PHC services." This research was consistent with that done by Khalid A. et al. on Public Awareness and Utilization of the Primary Health Care Services in Al-Madinah, Saudi Arabia.

Identifying the available services in PHCs using an observational check list among residents of Hadejia Local Government area, Jigawa State

Based on the observational checklist, some key findings were identify which includes,

Inadequate infrastructure and equipment, such as water supply, waste management facilities, and medical equipment like thermometers and blood pressure machines. Limited availability of healthcare personnel, particularly doctors, nurses, and midwives. Several studies had reported similar findings on the challenges facing primary healthcare centers in Nigeria this was done in the study published in the Journal of Healthcare Engineering (2020) assessed the infrastructure and equipment availability in primary healthcare centers in Nigeria. The study found that centres lacked functional laboratory equipment, had inadequate water supply and lacked functional waste management facilities.

A report by the World Health Organization (WHO, 2019) on the state of primary healthcare in Nigeria highlighted: A shortage of healthcare workers, particularly doctors, nurses, and midwives, inadequate infrastructure, including lack of functional equipment and basic amenities. A study published in the Journal of Community Medicine and Primary Health Care (2018) assessed the availability of clinical services in primary healthcare centers in Nigeria. The study found that centers did not offer outpatient services. Did not offer inpatient services. Did not offer emergency services.

Determining the proportion of residents that utilizes PHC services among residents of Hadejia Local Government Area, Jigawa State

Determining the extent to which Hadejia Local Government Area residents use primary health care services the study's findings critically observed that the majority of respondents use the secondary and tertiary hospitals in the town for the management and treatment of health-related conditions. This is why the study found that approximately respondents visited the facility only times monthly. This study was consistent with a study conducted by Khalid A. et al. on public awareness and utilization of the primary health care services in Al-Madinah, Saudi Arabia, which found that respondents, claimed to visit primary health care clinics 1-2 times annually, claimed to visit them 3–9 times annually, and claimed to visit them monthly. Married respondents in the current study were 14 times more likely than single respondents to use PHC services on a monthly basis. Frequent use of PHC services was found to be substantially correlated with age, sex, marital status, employment, and overall health. Researchers discovered that respondents who were male, married, retired, and with chronic conditions had a noticeably greater percentage of frequent PHC users.

Determining factors influencing the utilization of PHC services among residents of Hadejia Local Government Area Jigawa, State.

Determining the possible obstacles that prevent Hadejia Local Government Area residents from using primary healthcare services the study's main finding regarding potential barriers to the use of primary health care centres (PHCCs) was that respondents cited a lack of experience among the staff as their reason for not using the majority of PHCCs in the area. This was because the majority of the staff at PHCCs were made up of community health care extension workers (CHEWs), who lacked the background experience necessary to handle most of the patients' health issues in the community. Additionally, some PHCCs were primarily centres for immunizations and antenatal care for expectant mothers. Respondents stated that they did not use the majority of the centres because of unfavourable staff behaviours and lack of facilities that could be utilized to properly diagnose and treat patients. This study supported that of Khalid A. et al.(year) on Public Awareness and Utilization of the Primary Health Care Services in Al-Madinah, Saudi Arabia, which found that respondents felt that PHC facilities did not meet their health needs, while respondents attributed non-utilization of PHC facilities to poor services. Additional factors included inappropriate work schedules physicians who were deemed less competent than hospital physicians the conviction that a particular medical condition did not necessitate PHC and ignorance of the district's PHCC Another difficulty for the majority of the study was distance. Respondents reported that it

took them hour to walk from their house to the centre, or kilometres. In contrast, some of them were unsure of the exact amount of time needed, possibly because of the considerable distance they had to travel before arriving at the centre, which could be estimated to be more than 4 kilometres. The study's outcome was anticipated since, should the health facility adhere to the World Health Organization's suggestion that it should not be located more than 4 kilometres from the resident; it might be located far from their reach. This study's findings were consistent with those of Singh et al. (2012), who found that residents who live distant from a medical centre was more than twice as likely to use the services. According to Yaldlapalli et al. (2013), residents who live far from a health facility—, more than 5 km from homestead—were less likely to use the services than their counterparts when it comes to their socioeconomic standing. Studies by Ibebuike (2017) and Murthy et al. (2016) showed that a sizable fraction of the population——lived in villages more than 10 kilometers from a medical centre, which had an impact on how much healthcare was used. In line with a recent local study conducted in Riyadh also revealed the considerable impact of distance on patients' utilization, Odetola (2015) stated that the choice of health care services was affected by the distance to the health facility. According to a previous Ghanaian study, most people in impoverished countries decided not to seek medical attention if it was more than five kilometres away. According to a related study conducted in Papua New Guinea, patients decided not to visit PHCCs if the travel time was more than 3.5 kilometres.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Summary

Encouraging community health and lessening the strain on secondary and tertiary healthcare institutions were two major goals of primary healthcare service access and utilization. Citizens in many countries have limited access to primary healthcare. Many factors contributed to this condition, such as a lack of resources, the distance to primary care, and the reluctance of government healthcare authorities to consider community input on healthcare needs (World Bank Working Paper, 2019). "Determining the utilization of primary health care services among residents of Hadejia local government area, Jigawa State," was the study's stated goal. The study aimed to evaluate respondents' knowledge and awareness of primary health care services (PHCCs) and identify potential impediments that might affect the utilization of these services. The objectives were based on stated objectives. Utilizing a cross-sectional analytical design, the approach utilized to pick 384 participants in six

wards from the Local Government area of 105,628 Population with eleven political wards used a multi-stage sampling procedure. After approval from the relevant authorities and the participants' assents, questionnaire was utilized to gather information from the respondents. The questionnaire proved to be a valid and dependable tool for the research. SPSS version 25.0 was used to analyse the data, and chi square testing at the 0.05 level of significance was used to evaluate the null hypothesis. According to the report, there were more than half of the respondents who were between the ages of 20 and 39, meaning that women outnumber men by a factor of two. Roughly 89.5 percent of the participants acknowledged the presence of PHCCs. Over 80% of those surveyed said they comprehended the majority of the services provided by PHCCs. It was found to be crucially important because the majority of respondents (67.9%) did not utilize the primary health care centres (PHCCs) that were available, despite having a high degree of knowledge and awareness. The study identified various limitations such as insufficient infrastructure, lack of experienced staff, and distance as reasons for either insufficient or non-utilization.

Conclusion

This study revealed differences in the awareness and understanding of various PHC services, with some services—such as vaccinations and prenatal care—having the highest levels of awareness and knowledge and other health-related services having the lowest. There was a substantial correlation found between the use of PHCCs and factors such as age, sex, marital status, occupation, and overall health. The primary cause of non-utilization was the shortage of qualified healthcare professionals. Thus, it was advised to conduct frequent patient satisfaction surveys in order to raise the standard of PHC services rendered. PHCCs ought to play a function that transcends geographical boundaries. They should host social and health events, like PHCC World Health Days, to reach out to the people around them. When the perspectives of staff and households were sought out, it was discovered that the low utilization of these PHC services (22.8%) was caused by the following factors:

1. A lack of necessary medications and an ineffective drug revolving fund in the facilities. Utilization was an index of the percentage of people who need services and were able to get those services at the right time.
2. Negative and uncomplimentary attitudes of staff.
3. Rising prices for medical treatments.

4. Absence of fundamental infrastructure. The presence of socio-cultural and religious barriers might result in misperceptions and an excessive dependence on alternative healthcare sources, such as traditional remedies.

Recommendations

A number of recommendations were made in light of the study's results and conclusion included the following: It was advised that stakeholders support enduring values and practices that encouraged residents or dwellers to get prenatal care. The population in this study would use healthcare services more frequently if these factors that have been identified were improved, which would require cooperation from the government, healthcare providers, and patients.

- Welfare packages should be arranged by the government for people living in rural areas so they could afford to get health care.
- Free medical treatment was one example of a welfare service, as was lending money to small businesses to help them grow their revenue and pay for healthcare when needed.
- For the institution to provide health care services in an effective and efficient manner, the government should make sure that all necessary medical supplies and material resources were available.
- The government should make concerted efforts to increase the availability of healthcare facilities in rural areas.
- The ability of health services should be improved in terms of both medical supplies and qualified health attendants. For more people, especially women, children, and the vulnerable, to have access to basic healthcare services,
- The government should make sure that additional primary healthcare facilities were available at the suggested 5 kilometre distance. To encourage individuals to use PHC and enhance public health, it was also necessary to improve the availability of vital medicine supplies and other PHC services at a lower cost.
- Additionally, funding must be raised at the municipal, state, federal, and individual levels in order to support health programs and construct new infrastructures or rehabilitate that which already exists. This would lessen the current deterioration of the infrastructure that was seen at the primary care level.

Limitation:

- The database search was restricted.
- The focus of the search approach was narrowed down to rural populations only in terms of awareness and use of primary health centres.
- There were just seven articles total.
- Was restricted to people living in rural areas.

Suggestion for further study

Recommendations for additional research further extensive and cross-sectional research is required to investigate the current state of PHCC utilization among Hadejia residents. It is strongly advised to do a comparable, long-term study in the same areas to ascertain the degree of PHHC consumption, identify any potential obstacles, and provide helpful suggestions for overcoming them.

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A comprehensive observational checklist to identify available services in Primary Health Centers (PHCs) among residents of Hadejia Local Government Area, Jigawa State

Infrastructure and Equipment availability	AVAILABLE	NOT AVAILABLE	I DON'T KNOW
- Electricity			
- Water supply			
- Toilets			
- Waste management facilities			
2. Medical equipment:			
- Stethoscopes			
- Thermometers			
- Blood pressure machines			
- Microscopes			
- Autoclave			
4. Furniture and amenities:			
- Beds			
- Chairs			
- Tables			
- Waiting area			
- Parking space			
5. Types of healthcare personnel:			
- Doctors			
- Nurses			
- Midwives			
- Community Health Workers (CHWs)			
6. Clinical Services*			
i. Outpatient services:			
- General consultations			
- Pediatric care			
- Maternal health services			
- Family planning			
ii. Inpatient services:			
- Admission facilities			
- Bed capacity			
iii. Emergency services:			
- Availability of emergency drugs			
- First aid kit			
- Referral system			
iv. Diagnostic services:			
- Laboratory tests (e.g., malaria, HIV)			
- Imaging services (e.g., X-ray, ultrasound)			
v. Preventive services:			
- Vaccinations			
- Health education			
- Community outreach programs			

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VI. Maternal and Child Health Services*
-Antenatal care
-Delivery services
-Postnatal care
-Child immunization
-Growth monitoring
VII. Family Planning and Reproductive Health*
-Contraceptive availability
-Family planning counseling
-STI/HIV testing and treatment
-Pregnancy testing and counseling

QUESTIONNAIRE TEMPLETE

Dear Respondent

I am **Ibrahim Isah Musa** conducting a research on the **"Factors effecting utilization of Primary health care services among residence of Hadejia Local Government Area, Jigawa State".**

I kindly wish to solicit for your cooperation in filling this questionnaire which will serve as a tool for data collection on the stated research topic. Information obtained through this questionnaire will be used strictly for academic purposes and strict confidentiality will be maintained.

Thank you

Yours Sincerely,

Ibrahim Isah Musa

Instruction: please tick (✓) in the box provided as you consider appropriate.

Section A: Demographic Data

1. Age: (a)16-25yrs[ ] (b)26-35yrs [ ] (c)36-45yrs [ ] (d) 46yrs and above [ ]
2. Sex: (a) Male [ ] (b) Female [ ]
3. Religion: (a) Christianity [ ] (b) Islam [ ] (c) Traditionalist [ ] (d) Others, specify…….
4. Marital status: (a)single [ ] (b) Married [ ] (c) Divorcee [ ] (d) Separated [ ]
5. Educational level: (a) No Formal Education [ ] (b) Primary Education [ ] (c) Secondary Education [ ] (d) Tertiary Education,
6. Occupation : (a) civil servant [ ] (b) skilled worker (c) Non skilled worker (d) House wife

Section B: Research Objectives

Assessing the level of knowledge of respondent

Q7. Where do you think that a patient with a minor illness should go for treatment?

a. Basic Health Centre/Private clinic
b. General hospital
c. Specialist Hospital

Q8. What are some of the functions of primary health care system you know?

a. Given immunization and treat minor illness and injuries
b. Provision of essential rugs and diseases prevention
c. Give health education on water and environmental sanitation with food and nutrition
d. Manage/treat of maternal and child health problem
e. I don't know

Q9. Are services provided free?

a) Yes
b) No

Q10. Aware of services provided at PHC centers

a) Yes
b) No

Q11. Do you know the type of staff working in PHC?

a) Yes
b) No

Identifying the level of PHC utilizations

Q12. Do you and your family members make use of the PHC facility?

a) Yes
b) No
c) Not all the time

Q13. If yes, does the facility open 24hrs a day?

a) Yes
b) No

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c) Not sure
Q14. How often do you visit the facility when you are sick?
a) Every time if I am sick
b) Not all the time
c) Depend on the severity of my sickness
d) Ones in a year
Q15. What kind of services are offered at the facility
(a) General outpatient services
b) Antenatal care:
c) Immunization services
d) All of the above and others not mention
e) Don't know
Q16. What type of personnel do you see in the facility?
a) Nurses
b) Community health workers
c) Doctors
d) I can't specify

Factors influencing utilization of primary health care services

Q17. Do you have reason for not utilizing your PHC? Please select from the reasons why you don't utilize it
a) Lack of staff
b) Lack of drugs
c) Negative attitudes of staff
d) Lack of basic infrastructures
e) Others specified ……..
Q18. Do you pay for services in primary health care?
a) Yes
b) No
Q19. If yes how much does it cost for common services
a) #500.00 - #1000.00
b) #1000.00 - #5000.00
c) More than #5000
Q20. How satisfied are you with the level of services offered in the facility?
a) Strongly satisfied
b) Satisfied
c) Not satisfied
d) Dissatisfied strongly
e) Moderately satisfied
Q21. How long does it take you to travel to the nearest PHC?
a) 30 minutes to 1hour journey
b) More than 1 hour journey
d) Not sure