

Health care services utilization in a comprehensive health centre, in a rural community of South-South, Nigeria

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Abstract

Background: There are varying levels of utilization of Primary HealthCare (PHC) services, with several and varied determining factors. At most Comprehensive Health Care (CHC), PHC and is the first level of care for households within the national health systems. Adequate utilization of health care facilities is pivotal to the well-being of the people. Studies on health services utilization focused mainly on the facility with less attention to the community. This study assesses the household utilization of the only CHC within Obeidu community in Esan North-east Local Government of Edo state, Nigeria. The objectives are to assess households' utilization of the CHC, to identify the barriers to the utilization of the CHC and to determine the motivators to the utilization of the CHC by households in the community.

Methods: A simple random sampling technique was used to select 60 households each from the three wards in the community, making a total of 180 households. In each ward, the household head, or a representative of the first 60 households were interviewed using a semi-structured interviewer-administered questionnaire. Data were analyzed using Statistical Package for Social Sciences (SPSS) version 21.0

Results: This study found that only 27.8% of the household utilized the PHC centre in the community, while 41.4% and 14.3% of the household utilize the patent medicine vendors/pharmacies and traditional medicines, respectively. The major barriers to utilization were lack of health personnel and essential drugs.

Conclusion: The HC facility is grossly underutilized as only 27.8% of the households utilized the health facility and a whopping majority using pharmacy and patent medicine vendors.

Keywords: Utilization, Healthcare services, Comprehensive Health Centre.

Introduction

The body's system is structured to maintain good health, it however ought to be supported by healthy lifestyles and practices inclusive of prompt utilization of health care services amongst others. The utilization of Health Care services differs considerably owing to the quality and types of services rendered [1]. Adequate utilization of health care facilities is a contributory factor to the well-being of the individuals and communities [2,3]. The importance of utilization which is the outcome of the interaction between health professionals and patients [2] cannot be over emphasized.

Primary health care (PHC) is the first level of care for individuals and households within the national health systems of any country. The Alma Ata Declaration of 1978 identifies the need for basic and essential health care for all individuals and families [4]. The declaration demands that a PHC provide Immunization against the major communicable diseases, Prevention and control of locally endemic diseases and epidemics, Maternal and child health including family planning, Environmental sanitation including adequate water supply and hygiene, Health education on the prevailing health problems and the methods of controlling them, Adequate nutrition through promotion of food supply and proper nutrition, Provision of essential drugs, Appropriate treatment of

common diseases and injuries, Mental and dental care and Primary eye care.

The primary health care centres (PHCC) or at the most comprehensive healthcare centres (CHC) responsible for providing this care are under-utilized despite being fairly evenly distributed in the local government areas (LGAs) in Nigeria [5]. The PHCC furnishes less than 20% of the people who needs it especially in the developing countries including Nigeria [6]. Some of the challenges faced in the rural communities are high levels of under-5 mortality[7] causing about 128 deaths per 1000 live births[8], non-attainment of international goals for health and survivals and inequalities in access to health facilities[7,9]. Other barriers identified include lack of essential drugs, high cost of services, community perceptions of poor quality and inadequacy of available services as well as inadequate infrastructure in primary healthcare facilities [10,11]. A recent study done in a northern state in Nigeria showed that only about 7.6% of the people utilized the PHC services; meaning there is 92.4% under-utilization of the services in the facility [10].

The Nigeria National Demographic Health Survey (NDHS) of 2014 and the United Nations Development Program (UNDP) World Development Report off 2009 still reflects the poor utilization of primary health care system in the country [12]. The poor utilization of these services results in undesirable outcomes with increase morbidity and mortality and subsequent poor health indices across the nation. Most of these morbidities and mortalities are usually caused by common illnesses that could have been handled by cost-effective and basic essential intervention measures which ought to be available in the health facility. Some of which are malaria, diarrhea, febrile illnesses, anaemia, hemorrhage, and sepsis. In most cases, people prefer to seek care first from the non-orthodox and untrained persons and only to present with complications which usually cannot be tackled by the PHCC or CHC level of health services. This delay puts burden on the health facilities especially the secondary and tertiary health facilities that likely are the next point of call.

PHC being the first level of care and grassroot care for households within the community is pivotal to the improvement of the national health systems and the health indices. Most studies on health services utilization have been limited to the facility with no or less focus on the community and the end-users. This study assesses the household utilization of the only health care centre within the community, motivators, and barriers to the utilization of the CHC by households. It is aimed at making recommendations and policy decisions based on findings, to improve utilization of the Comprehensive Healthcare Centre.

Methods

The study was carried out in Obeidu, one of the villages in Obiruan, Uromi. Uromi is in Esan North-east local government area of Edo state, Nigeria. Almost the whole of the community is covered with land. Obeidu is a rural community and most of the inhabitants are farmers with yam and cassava being their major farm products. Obeidu is divided into three settlements; Obeidu I, Obeidu II and Obeidu III, each headed by Elders called Odionwele. The community has one primary and secondary school, markets, churches as well as roads and electricity. Their source of water supply is mainly borehole and rainwater collected in an underground reservoir. The community has one public health facility, which is the Comprehensive Health Centre under review, and some patent medicine stores/pharmacy. There is also the existence of some traditional homes where some of the people seek healthcare.

The study population was household heads, their spouse, or an adult representative who have been resident in Obeidu community for at least one year. It included both males and females age between 18 and 60 years who were willing to participate in the study. Those living in the community for less than one year, the severely ill, age less than 18 years or greater than 60 years, those who object to participating in the study, and visitors were excluded.

The sample size of 150 households was determined using the Cochran formular[13] for cross sectional survey written as sample size (n) given as: the product of standard normal deviate (Z^2) taken as 1.96, proportion of utilization of health services [P] from previous study (89%) [14], and $Q = 1-P$ given as 0.11 divided by the margin of error (d^2) set at 95% confidence interval (0.05) including attrition rate. However, a total of 180 households participated in this study.

The study was a descriptive cross-sectional study. A semi-structured interviewer-administered close-ended questionnaire adapted from a study on assessment of barriers to the utilization of primary health care services [15] was used to obtain information from participants. The three settlements that made up the Obeidu community were used. A simple random sampling technique by balloting was used to select 60 households from each of the settlements. Questionnaire was administered to either the household heads or the spouse, or an adult representative of each household. Data was analyzed using SPSS version 17. The level of statistical significance was set at 5%. The level of utilization was determined using the proportion of participants who accessed the CHC in the past six months. barriers and motivators of utilization were also

stated by participants were also determined. The analyzed data is presented in tables, figures, and chart..

Results

The participants (30.6%) were ages 35-44, most (57.2%) were females, over one-third of the respondents had a primary or secondary level of education (34.4% and 35% respectively) and trading, made up one third (31.7%) of participants' occupation (Table 1).

Table 1: Sociodemographic characteristics of respondents

	Frequency (n=180)	Percent (%)
Age (yr)		
<24	21	11.7
25-34	47	26.1
35-44	55	30.6
45-54	34	18.8
>54	23	12.8
Sex		
Male	77	42.8
Female	103	57.2
Educational status		
No formal education	25	13.9
Primary education	62	34.4
Secondary education	63	35
Tertiary education	30	16.7
Occupation		
Student	22	12.2
Farmer	47	26.1
Trader	57	31.7
Civil servant	31	17.2
Others*	23	12.8

Others*= carpenters, hair stylists, fashion designers, welders

Majority (86.1%) of the respondents were sick in the past six months prior to this study. Nearly all (133, 86%) out of the (155, 86.1%) of the participants who had experienced one form of ill-health or another in the last six months sought for care, but only 27.8 % utilized the CHC while the majority used other sources of care (Table 2).

As indicated in Table 3, general outpatient services as well as antenatal, delivery, and postnatal services were the most utilized services in the CHC. Table 4 showed fever accounted for close to half (49%) of the symptoms of illnesses, 74.2% of the respondents who were sick in the past six months were ill for less than a week. Of note is the 6.4% were sick for more than a month. Lack of staff (85%), lack of drugs (76.1%) and basic infrastructures (65%) were the major reasons for non-utilization of the CHC in the community (Table 5).

Most (75%) of respondents travels less than 30 minutes, of importance is the 16.1% who need to travel for as long as 30 minutes to 1 hour (Table 6).

Table 2: Place where treatment was sought

Variable	Frequency (n=133)	Percent (%)
Traditional medicine	19	14.3
Pharmacy/patient medicine store	55	41.4
Comprehensive healthcare centre	37	27.8
Private hospital	10	7.5
Secondary health facility	12	9

Table 3: Services utilized in the CHC by participants

Variable*	Frequency (n=180)	Percent (%)
General Out-Patient Services	30	81
Antenatal services	26	70.2
Immunization Services	28	75.7
Other Postnatal Services	25	67.6
Delivery	24	64.9
Health education	20	54.1
Others	8	21.6

*multiple answers

Table 4: Common symptoms of households in the last six months and duration of illness

Variable*	Frequency (n=155)	Percent (%)
Symptoms*		
Fever	76	49
Cough	20	12.9
Diarrhea	14	9
Abdominal pain	25	16.1
Malaria	13	8.4
Headache	13	8.4
Back pain	9	5.8
Typhoid and eye pain	7	4.5
Duration of ailment		
Less than a week	115	74.2
One week to one month	30	19.4
Above one month	10	6.4

*multiple answers

Table 7 indicated that, recruitment of more staff (85.6%), provision of essential drugs (79.4%) and improvement of the quality of services rendered (61.1%) were the most motivators to the utilization of the CHC.

Discussion

This study showed that the CHC was grossly underutilized as only 37 (27.8%) of those who were sick and

Table 5: Barriers to utilization of CHC by households

Variable*	Frequency	Percent (%)
Lack of staff	153	85
Lack of drugs	137	76.1
Distance	13	7.2
Poor community involvement	14	7.8
Negative attitude of staff	18	10
Cost of services	23	12.8
Lack of basic infrastructures	117	65
Long waiting time	17	9.4
Dirty environment	8	4.4

*multiple answers

Table 6: Time of travel to the CHC

Variable	Frequency	Percent (%)
Less than 30mins	135	75
30mins to 1hour	29	16.1
Not sure	16	8.9

Table 7: Motivators of utilization of CHC by households

Variable*	Frequency	Percent (%)
More health personnel	154	85.6
Reduction in the cost of services	38	21.1
Community involvement	25	13.9
Provision of essential drugs and basic infrastructure	143	79.4
Friendly attitude of staff	29	16.1
Privacy	23	12.8
Improved quality of services rendered	110	61.1

*multiple answers

sought for care used the CHC. The study also highlighted inadequate staffing, essential drugs and basic infrastructure as the major reasons for the poor utilization of the CHC while availability of staff, essential drugs, reduction in cost, improvement in quality of services and basic infrastructures amongst others were the notable motivators of the CHC usage. The common symptoms of illness found were fever, cough, diarrhea, and headache. General outpatient services, antenatal, delivery, immunization as well as other postnatal services were the most utilized services in the CHC.

That only 27.8% of respondents who were ill in the past six months utilized the CHC while others (72.2%) utilized other sources of care: patent medicine stores/pharmacy being the most utilized is in contrast with studies done in western and northern Nigeria with a higher utilization rate

[14,16]. It is however similar to studies in Nigeria where majority sought care from other sources [10,17]. The low patronage of the CHC in the community translates to the fact that the presence of a health facility in a community is not synonymous with its utilization. Furthermore, the preference for patent medicine stores reflects the attitudinal health-seeking behavior of people in the community and the country at large as most seek for treatment only when sick and do not give attention to preventive care. The practice of self-medication and use of over the counter drugs by the rural populace may also account for this finding.

The reasons found in this study for the poor utilization of the health facility is consistent with findings from studies in Nigeria and Kenya [9,17,18]. This finding echoes the poor quality of health care services provided in many of the grassroot facilities within the area and the dilapidated and structural decay of the PHCC and CHC. Also, that lack of personnel is a deterrent to the non-utilization of the CHC is not unexpected as only one medical Doctor oversees all the PHCC and CHC in an LGA and coupled with the general shortage of medical personnel. It is also a fact that most health personnel have preference for urban areas, cities and as far as travelling abroad where they can get more and better remuneration for their services. Additionally, the lack of essential drugs also portrays the non-functionality of the drug revolving fund at the CHC that ought to ensure the availability of the commonly used drugs for the frequent ailments in the community. The implication of this is that even the common illnesses that ought to be taken care of by this level of health facility may not be possible. Moreover, this can lead to delay in care and late presentation resulting in increasing morbidity and mortality and overburdening of the next level of the health care system (secondary and tertiary) already stretched beyond capacity. Furthermore, studies have shown that traveling long distance to health facility deters its utilization [7,17]. Though this study showed that most (75%) of the respondents travels less than 30 minutes to access the CHC which is commendable, of note however, is the 16.1% who need to travel for as long as 30 minutes to 1 hour to get to the health facility. This implies that 16 out of every 100 persons in the community travel as far as an hour before he or she can get treatment in the CHC. This finding is in congruence with a study in south-western Nigeria where about 26.7% of respondents said the hospital was far from their homes [19].

Furthermore, the motivators of utilization of the CHC highlighted in this study suggest that the presence of qualified personnel gives clients and patients a sense of security and assurance of having good and quality care in a health facility. The implication of this is increase in utilization of this level healthcare facilities thereby lessening the drain and pressure on the secondary and tertiary healthcare facilities. The importance of

availability of essential drugs in a CHC cannot be over emphasized as it reduces some financial burden from families especially where the drug revolving fund is well established and functioning. Reduction in cost of services is also an integral part of service utilization in this study. It is imperative to know that most health care spending in the nation as well as in the rural community are out-of-pocket expenditure [3]. It is no longer news that most households in the rural area have low financial capacity and that the burden of health care is usually much on them thereby reducing their ability to seek care. Reduction in cost of services therefore is of paramount importance in improving the health of the people in the rural community. Again, achievement of the universal health coverage which is a strategy that has been adopted to improve the health of the people and reduce financial burden will be a mirage [20].

The common symptoms of fever, cough and diarrhea that are seen in this study relates to the endemicity of the diseases (malaria, upper respiratory tract diseases and diarrhea diseases) associated with these symptoms in this part of the world and especially in the rural areas. This is in agreement with a study done on understanding the barriers to utilization of PHC in a low-income setting [10] and another study [15] where fever, cough and diarrhea were the predominant symptoms. The most utilized services at the CHC were general outpatient services as well as antenatal, delivery, and postnatal services. The CHC and PHCC are saddled with the responsibility of providing basic and essential health care to individuals and families where they live and reside. Therefore, the predominant services utilized in this study is in keeping with the services rendered by this level of health care at the community.

Conclusion

The study revealed poor utilization of the only public health facility (CHC) within the community. The predominant reasons for the underutilization of the services in the CHC were lack of staff, lack of essential drug supplies and unavailability of basic infrastructure. Availability of personnel, drugs and basic infrastructures were found to be the motivators of use. While the study also highlighted the common symptoms of illnesses like fever, cough, and diarrhea; general outpatient services, antenatal, delivery, and postnatal services were the most utilized in the facility by the households in the community. With these findings, there is a need for LGA health dept where the CHC is located with support from the State Primary Health Care Development Agency (SPHCDA) to deploy more, trained and committed health personnel to the facility. They should also ensure the constant supply of essential drugs and revitalization of the drug revolving fund. Furthermore, the government should equip the

health facility in other to ensure the delivery of quality services at the centre.

List of abbreviations

PHC : Primary HealthCare; NDHS : Nigeria National Demographic Health Survey; PHCC: Primary health care centres; CHC: Comprehensive healthcare centres; LGA: Local government area.

Declarations

Ethics approval and consent to participate

Ethical approval to conduct this research was obtained Approval was obtained from the Department of Community Health, Ambrose Alli University, Ekpoma, Edo State and the LGA PHC Department. Verbal consent was obtained from participants after explaining and giving adequate information regarding the study to them.

Consent for publication

Not applicable.

Availability of data and materials

The datasets analyzed during the current study are not publicly available due to the fact the data were obtained from patients' medical records and as such are confidential but are available from the corresponding author on reasonable request.

Competing interest

No conflict of interest is associated with this work.

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Contribution of authors

We declare that this work was done by authors named in this article and all liabilities pertaining to claims relating to the content of this article will be borne by the authors.

NM and ECI were both involved in the conception, design, data analysis and write up of the manuscript. Both authors read and approved the manuscript for publication.

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