SCHOLEDGE International Journal Of Multidisciplinary & Allied Studies
ISSN 2394-336X, Vol.07, Issue 01 (2020)
Pg 14-29.
Paper URL: link.thescholedge.org/1208

SCHOLEDGE Publishing Worldwide
www.theSCHOLEDGE.org
Email: editorial@thescholedge.org

Health Information Literacy in Meeting Primary Health Care Objectives in Nigeria: A Performance Assessment in a Senatorial District

Odigie, Sunday Aisuhumuihien (PhD)
Department of Sociology, Ambrose Alli University, Ekpoma, Edo State, Nigeria.

Obinyan, Gabriel Aine (PhD)
Department of Library and Information Science, Ambrose Alli University, Ekpoma, Edo State, Nigeria.

ABSTRACT
The study investigated the performance of the Primary Health Care Programme in Nigeria using a senatorial district as a case study with the instrumentality of health information literacy. The choice of Central Senatorial District, Edo Staten was purposive as all the PHC in the country operates under similar socioeconomic and political conditions. The rationale behind the investigation was to ascertain the extent to which the objectives of PHC programmes have been meant as a fundamental component of the nation's healthcare delivery systems. In addition, to focus group discussion, copies of the questionnaire being the major instrument for data collection were distributed among286 members of staff that were accidentally sampled from 28 PHC centres. The sampled population comprised 21.3% Community Health Extension Workers, 13.6% Cleaners, 13.6%Security, 5.3% Orderlies, and 5.3% Messengers. The study revealed a shortage of professionals as only 3(1%) were Doctors, 3(1%) Anaesthetic Nurses and 2(0.8%)were Pharmacists. There was a dearth of professional Medical Records Clerks in the PHC underscored the abysmally low health literacy rate among the engaged personnel and those accessing the services as beneficiaries. The study concluded on the submission that enriched health literacy, adequate funding, and employment of skilled personnel, PHC will record appreciable performance in the future.

Keywords: Primary health care, Health literacy, Health care services, and PHC Challenges in service delivery

Introduction

The position of a healthy, teachable, learning and receptive populace can never be compromised by any nation in quest of sustainable development and technological advancement. For some time now, the government in Nigeria appeared to have come to terms with this realization by formulating policies to drive effective investment in health care, health awareness education, and agriculture being critical factors in societal development. One of the objective functions in promoting health care programmes in Nigeria is to create and maintain the wealth of the nation through a productive labour force. In Nigeria for instance, the provision of modern health care services lies with the federal, state, local governments and non-governmental organizations; and it is"modeled in such a manner that Federal Government takes care of the tertiary specialist care offered by Teaching Hospitals and Colleges of Medicine, while States Government caters for secondary care provided by general hospitals and medical centres, and the Local Government handles Primary Health Care (PHC) accessible at the health centres" (Ailemen, 2010). Foremost among the cardinal principles that necessitated the adoption of Primary Health Care in Nigeria is equity which is generally taken to mean fair share of opportunities in the "distribution and access to health resources and services", access to and use of health information; and human rights as touching the rights of people to life.

Whenever the health of a people is guaranteed, issues of social justice and community involvement in development can easily be controlled just to emphasize the importance of the health status of human beings driving and sustaining other aspects of the economy. Arising from this assertion is the belief that the fortune of any nation is fundamentally related to the quality of available health care programmes and activities that could be accessed by all. A nation with ineffective health systems will unarguably be saddled with an unbridled loss of valuable man-hours due to morbidity and illnesses. With a high rate of morbidity coupled with a sick and ineffectual populace, the quality of national productivity and the overall level of development of the country will be negatively affected. In a situation whereby good measure of the health of the citizens or inhabitants of a nation is guaranteed, it will repeatedly translate into enhanced productivity and in turn propels rapid economic and national development (WHO, 2008; Oshotimehin, 2009). Health is a cardinal element in the determination of the human development index and the human poverty index. The indicators which are life expectancy at birth, the proportion of individuals not expected to survive beyond age forty, access to potable water, and the percentage or relative frequency of children under five years old that are underweight, are health issues that deal with inequities meant to be ameliorated by PHC at the grass-root level.

The period covering the 1980s and 1990s in Nigeria witnessed the collapse of PHC centres. For a long time in Nigeria according to Ailemen (2010), a typical primary health care Centre "is a dilapidated building of two rooms with very limited staff and services". Since 1996, PHCs in Nigeria could be said to have witnessed a rebirth through the health policy document released by the Federal Government mandating theMinistry of Health to support and strengthen local government cardinal responsibilities in health-related issues and delivery of adequate health services to

those at the grassroots. To assist this process are the staff of PHCs who are expected through counseling, improved health information literacy, and health literacy to empower inhabitants of host communities to become active participants in the determination of their health status. The World Health Organization (2004), has repeatedly advised that it is extremely necessary to recognize and acknowledge the fact that many health problems still persist in many countries of the world despite efforts to curtail them. The question now is to what extent has the rebranded PHCs in Nigeria keyed into the available transformational agenda? In other words, could it be said with certainty and/or without infraction on human sensibility that the PHCs in Nigeria with their present facelift are capable of delivering on their statutory or institutional health care programmes or mandates? Our echoes of these issues will be guided intrinsically by the four WHO criteria of efficiency, quality, relevance, and equity that are accepted as the benchmark used for "a variety of health care management issues" (Simonet&Alkafaji,2017).

Nigerian being a signatory to the 1978Alma Ata declaration has since formulated and instituted a plethora of health policies to secure improved health conditions for the generality of the people. According to the Nigerian Health Policy and the Revised National Health Policy (2004):

> *"Primary health care is essential health care based on practical, scientifically sound and socially acceptable methods and technology universally accessible to individuals and families in the community and through their full participation and at cost that the community and country can afford to maintain at every stage of their development in the spirit of self- reliance and self-determination. It forms an integral point both of the country's health system of which it is the central function and main focus, and of the overall social and economic development of the community. It is the first level of contact of individuals, the family and community with the national health system bringing health care as close as possible to where people live and work, and contributes the first element of a continuing health care process".*

With the formulation of the aforementioned framework, the Nigerian Health Care Policy thus heralded and embraced a rebirth Primary Health Care (PHC) system/programme. As a Programme, PHC is community-based, organized from the grassroots upwards with the active participation of the people identifying their health needs and participating in the planning, implementation, and evaluation of health services. PHC essentially exists at the local government level which is the most basic among the three levels of healthcare delivery systems in the country.

One critical aspect of the health programme that has been neglected over the years is health literacy which according to the Joint Committee on National Health Education Standards (1995) cited by the Institute of Medicine (2004) is "the capacity of individuals to obtain, interpret and understand basic health information and services in ways which enhance health. Health literacy provides a clear understanding to guide the health system of public health practitioners, care providers, insurers and community

agencies toward adopting definitions and policies that resolve incompatibilities between the needs of individuals and the demands of health systems".As at today, PHC Programme has acquired the status of a household name especially among rural people, not just for the fact that most rural dwellers are aware of the programme, but more importantly, because it has become an instrument of electioneering by various political parties scrambling to win votes during national elections. Local governments across the nation, including those in Edo state, have established thousands of Primary Health Care (PHC) Centres in various localities without active databases that could sustain efficient evidence-based diagnoses and treatments. Many of these PHC have existence for about twenty years or more rendering various forms of services towards improving the health status or conditions of Nigerian citizens. To this end, huge resources in terms of financial and human resources have been committed to the project, hence the need to conduct an assessment study of the impact of the programme to ascertain the extent the corporate objectives for which the programme was established have been realized. This paper, therefore, focused on performance assessment of PHCs in the Central Senatorial District of Edo State between 2009 and 2015against the aforementioned concerns.

The Relevance of PHC in Health Delivery

Primary health care came to the fore at the Alma Ata Conference in 1978 as aided by events on the global scene that led to the landmark declaration. Of cardinal importance is the Observation of the WHO Executive Board (1973) that:

> *There appears to be widespread dissatisfaction of the population about their health services for varying reasons. Such dissatisfaction occurs in the developed as well as the Third World. The causes can be summarized as a failure to meet the expectations of the populations; an inability of the health services to deliver a level of national coverage adequate to meet the stated demands and the changing needs of different societies; ...*

These inequalities coupled with the need to increase the health status of people all over the world underpinned the hues of the Alma Ata 1978 Declaration. Considered relevant to this study are some selected schedules of the Declaration which are presented in as brief a manner as possible below.

Schedule II of the 1978Alma Ata Declaration recognized and considered the existence "of gross inequality in the health status of the people particularly between developed and developing countries as well as within countries to be politically, socially and economically unacceptable" hence it has become a common concern to all countries of the world. With increased international migration caused by high-speed and comfortable means of transportation, any disease condition in any part of the world could endanger every human life on the planet. In the schedule III of the Declaration, "economic and social development based on a New International Economic order adjudged to be of basic importance to the fullest attainment of health for all; and to the reduction of the gap between the health status of the developing and the developed

countries was emphasized alongside the promotion and protection of the health of the people recognized as essential to sustain economic and social development, and contribution to a better quality of life and world peace".

As overriding emphasis was on the attainment of a level of health by all people of the world that would permit them to lead socially and economically productive life by the year 2000, Alma Ata Declaration (1978) in its schedule Vfocuson governments to assume the"responsibility for the health of their people, which can be fulfilled only by the provision of adequate health and social measures" since "primary health care is the key to attaining set target as part of development in the spirit of social justice".With the similar thrust of consideration in ensuring health for all, the emphasis of schedule VII inter alia was on the need to address the main health problems in the community in providing promotive, preventive, curative and rehabilitative services" accordingly. The magic year 2015 has come and gone leaving Nigeriagrappling with preventable diseases. Sustainable Development Goals have taken over; setting the year 2030 as the year to achieve health for all. To this end Goal 3 and Goal 4 are very instructive with Goal 3 aiming"at enhancing well-being and healthy lives through the target on reducing maternal mortality, the preventable dearth of children, and major epidemic ... universal access to sexual and reproductive health care services and health coverage by 2030". Goal4, however, focuses on inclusive and equitable education through universal completion of primary and secondary education, access to pre-primary education, and opportunities to enhance vocational and lifelong learning (which is Information literacy) by the target year 2030.

PHC has at its core the principle of equity: giving a fair chance to all to achieve their full health potential. The major problem hindering human development in low-income countries like Nigeria is the deprivation experienced by a large proportion of the population which has its roots in the social structure of the society. Most of the disease burden in low-income countries results from a few conditions – infectious diseases, undernourishment, and unsafe childbirth. Added to this, is health ill-literacy/outright illiteracy, ignorance about evidence-based medical information that could be accessed and used for disease control and eradication. "The principle upon which the PHC is funded is that health is a fundamental human right to be enjoyed by the people, in all walks of life, and in all communities".So far, this conviction has acquired a global consideration; and the international community recognizes the importance of adequate and secured health care systems and how such conditions can affect the future projections of nations in terms of socioeconomic and political development. Giving credence to the centrality of health in both human and societal development, Obinyan and Momodu(2013) aver that PHCs were established to give expression to the noble objective of securing a holistic approach to facilitating people's well-being and tackling the burden of disease conditions which is so prevalent in greater stead in developing countries in a cost-effective manner through access to, and use of health information.

This brings issues of employment of various calibers of qualified health personnel and their periodic retraining to the central place within the matrix of PHC arrangement in order to guarantee effective operations in delivering health services to all. Table 1

depicts the relative frequencies of the calibers of PHC staff employed in the Senatorial District under study.

Table 1: Inventory of Staff in PHC Centres in the Senatorial District Studied

Staff Mix/Category	Frequency	Percentage (%) (N=286)
Doctor	3	1.0
Nurses/Midwives (RN/RM) (Double Qualification)	40	14.0
Midwives (RM)	26	9.1
Nurses (RN)	35	12.2
Nurse Anesthetist	3	1.0
Pharmacist	2	0.8
Outreach/Community Health Extension Workers (CHEW)	61	21.3
Information Science Professionals	0	0.0
Drivers	3	1.0
Mortuary Attendant	0	0.0
Cleaners	39	13.6
Security men	39	13.6
Medical Records Clerks	2	0.7
Pharmacist Assistant	2	0.7
Orderly	15	5.3
Messenger	15	5.3
Attendant/Ward Orderly	1	0.3

Looking at the staff mix revealed that there were only 3 Doctors representing just 1.0% of the total number of staff. Other categories of staff include Nurse/Midwife (14.0%), Midwives (9.1%), Nurses (12.2%), Nurse Anesthetist (1.0%) and Pharmacist (0.8%). Community Health Extension Workers (CHEW) was fairly well represented with21.3% relative frequency. Drivers were 1.0%, Cleaners 13.6%, Security men 13.6%, Medical Records Clerks 0.7%, Pharmacy Assistants 0.7%, Orderly 5.3%, Messengers 5.3% and Attendants/Ward Orderly 0.3%. There were no information science professionals and mortuary attendants in any of the PHC centres. Given the constant increase in population through birth rate and immigration, the staffing situation with its carrying capacity in delivering effective health services is low, to say the least. Quality performance based on satisfactory health delivery to the individual rather than to a group is beside the point.

Table 2: Distribution and Inventory of Staff of PHC Centres in Edo Central Senatorial District

STAFF	Esan West LGA								Esan Central LGA					Esan North-East LGA				Esan South- East LGA							Igueben LGA				TOTAL
	Urohi	Iruekpen	Ogwa	Ujoelen	Ukhun	Upper-Izoggen	Egoronaoika	Ujogba	Eguare-Irrua	Eguare-Ugbegun	Eidenu	Opoji	Eguare-Ewu	AmedokhianOb iyon	Arue	Obeide/Ivue	Egbele	Illushi	Eguare – Ubiaja	Okaegben-Ewohimi	Eguare-Ewato	Oria	Eguare-Ohordua	Uzogbon-Ugboha	Amahor	Ugun	Eguare-Igueben	Eguare-Ebele	
Doctor	-	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	1	--	**03**
Midwives/Nurses (RM/RN)	1	1	1	2	2	1	2	2	3	4	1	2	2	2	2	1	1	--	1	1	--	--	1	--	2	1	2	2	**40**
Midwives (RM)	1	1	1	1	--	1	1	1	2	1	2	1	1	1	--	1	--	1	1	2	1	1	1	1	--	--	1	1	**26**
Nurses RN	1	1	1	1	1	1	1	1	--	--	1	--	--	--	--	--	--	1	2	1	1	2	1	2	2	2	9	3	**35**
Nurse-anaesthetist	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	1	--	--	--	--	--	--	1	--	**03**
Pharmacist	-	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	2	--	--	--	--	--	--	1	--	**02**
Outreach Worker/ Community Extension Worker (CHEW)	2	3	2	3	2	3	4	3	4	1	1	1	1	3	3	4	3	--	--	2	--	--	--	--	2	1	11	2	**61**
Information Science Professionals	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**--**
Driver(s)	-	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	--	**03**
Mortuary Attendant(s)	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**--**
Cleaner(s)	1	1	2	1	1	1	1	1	2	1	1	3	--	3	4	5	4	--	1	--	--	--	--	1	1	1	2	1	**39**
Security Men	1	1	2	1	1	1	1	1	2	1	2	2	1	2	1	1	2	2	1	2	--	2	1	2	1	1	3	1	**39**
Clerk(s)	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	--	**2**
Pharmacist Assistant(s)	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	**02**
Orderly	-	2	--	--	--	--	--	--	3	2	--	1	3	--	--	--	--	1	1	--	1	1	--	--	--	--	--	--	**15**
Messenger(s)	1	--	1	1	1	1	1	1	--	--	1	--	--	1	--	--	--	--	--	--	--	1	1	--	1	1	1	1	**15**
Attendant	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	**01**
Total	**8**	**10**	**10**	**10**	**8**	**9**	**11**	**10**	**20**	**10**	**9**	**10**	**8**	**12**	**10**	**12**	**11**	**5**	**7**	**9**	**4**	**7**	**5**	**7**	**9**	**7**	**37**	**11**	**286**

Nature of infrastructure/Equipment Available

Table 3 presents data in respect to the nature of infrastructure and equipment available in PHCs in the study area.

Table 3: Current State of Infrastructure/Equipment in the Sampled PHCs in the Study Area

Infrastructure	Level of Availability			
	Available		Not Available	
	No. of PHCs	%	No. of PHCs	%
Electricity (From PHCN)	27	96.4	1	3.6
Standard Generator	12	42.9	16	57.1
Borehole/Tap water	8	21.4	22	78.6
Refrigerator/Freezer	21	75.0	7	25.0
EPI Cold Box	28	100	0	0.0
Blood Bank	0	0.0	28	100
Scanning Machine	0	0.0	28	100
X-Ray Facilities	0	0.0	28	100
Ambulance	0	0.0	28	100
Official Vehicle	0	0.0	28	100
Computers/Computer accessories	2	7.1	26	92.9
Internet connectivity	0	0.0	28	100
Designated Records Resource Centre	0	0.0	28	100
Fans	28	100	0.0	0.0
Labour/Delivery Beds	28	100	0.0	0.0
Patient Beds	28	100	0.0	0.0
Operating tables	0	0.0	28	100
Wheel chairs	11	39.3	17	60.7
Facilities to render Mortuary Services	0	0.0	28	100
Functional toilets/bathrooms	26	92.9	2	7.1

Table 3 depicts the availability and non-availability of critical infrastructure/equipment required to sustain PHCs' effective service delivery in line with their corporate mandate. By the sheer presence or lack of some equipment, the capacity of the PHC programme in the study area to provide the desired quality services in line with the health requirements and needs of the people appeared predetermined from the infrastructure and equipment available. This is further confirmed by the range of services the various designated centres could actually render (see Table 4).

Health Care ServicesAvailable for Accessibility

Data in respect of the range of available health services in PHCs in the study area are presented in Table 4.

Table 4: Range of Health Services Available in Surveyed PHCs in the Study Area

Range of Health Services	Availability	
	Present %	Absent %
Antenatal care	100	0.0
General visit OPD	100	0.0
Tetanus Toxoid Immunization	92.3	7.7
Nutritional Counseling	92.3	7.7
Iron Folic Acid Supplement	75.0	25.0
Deliveries (Normal)	100	0.0
Basic Emergencies Obstetrics care	39.0	61.0
Caesarian section	40.0	60.0
Blood Transfusion/screening	20.0	80.0
Postnatal care	100	0.0
Breastfeeding Counseling Support	100	0.0
Immunization	100	0.0
Mosquito net provision/supply	64.3	35.7
Safety/injury prevention counseling	75.0	25.0
STD Diagnosis and treatment	53.6	46.4
HIV/AIDS Counseling/Testing	14.3	85.7
Mental Health Counseling	71.4	28.6
Family Planning (FP) Services/Counseling	100	0.0
Suturing/stitching	100	0.0
Simple Diagnostic Tests for Infertility/Pregnancy	82.1	17.9
General Treatment	100	0.0

Table 4 shows that out of a total of twenty-one (21) standard medical services that one expects a PHC facility to provide, a total of nineteen (19) of such services were being provided in varying proportions. Areas, where full services were rendered, include Antenatal care (100%), General visits/Out-patient (100%), Deliveries (100%), Postnatal Care (100%), Breastfeeding Counseling (100%), Immunization (100%), Family Planning (100%), Suturing/stitching (100%) and General Treatment (100%).

Areas, where average services were being rendered, include Tetanus Toxoid immunization (93.2%), Nutritional Counseling (92.3%), Simple Diagnostic tests for Fertility/Pregnancy (82.1%), supply of Iron Folic Supplements (75%), the supply of Mosquito nets (64.3%), Mental Health Counseling (71.4%). There were certain services that were rendered in very small proportions. These were Caesarian Section (40%) and Blood Transfusion and screening (20%), Basic Obstetrics Care (39%), HIV/AIDS Counseling and Testing (14.3%).

Level of Utilization of PHC Services in Central Senatorial District

In-depth analysis of the major services PHCrenderedto the host communities in the Senatorial District studied was assisted by Table 5 originated to depict the number of people immunized, out-patients/admission cases; deliveries catered for, family planning

services rendered and number of malaria cases treated for the period between 2009 and 2015. Cases of Lassa fever and hepatitis were way off the range of diseases PHC centres were primed to handle.

Table 5:Level of Utilization of PHC Services in the Study Area

Basic Primary Healthcare Services	Level of Utilization						
	2009	2010	2011	2012	2013	2014	2015
Immunization	2940	3772	3963	4214	4596	4978	5169
Out-patient/Admissions	2403	2870	3081	3162	3418	3674	3802
Deliveries	1906	1360	1840	1710	1736	1762	1775
Family Planning/Counseling Services	1430	1486	1505	1572	1614	1656	1677
No. Treated for malaria	2800	2874	3006	3502	3841	4180	4350

There was an appreciably high level of consistent utilization of some basic services by PHC beneficiaries in the host communities from 2009 through 2015 as contained in Table 5. The only area where the downward trend was experienced during the period under review as deliveries for 2010 and 2012 before the figure picked slightly from the year 2013 through 2015. The observable improvement in the patronage of PHC centres was predicated on education, recently inaugurated health literacy and dissemination of information about PHC activities using indigenous language during the visitation of churches, schools, public gatherings and meetings in the neighborhood.

Education, Health Literacy and Promotion of PHC Activities

There are particular weaknesses regarding the education and promotional activities of PHC centres in very many locations in Nigeria. One of the components of PHC, as listed in the Alma Ata declaration, is the education concerning prevailing health problems and the methods of preventing and controlling them. According to the PHC guidelines (NPHCDA, 2004), these activities are also included in the standard package of services that PHC facilities should provide. The level of creditable achievement expected following the guidelines encompassed in PHC strategies is predicated on health literacy. Health literacy as defined by Ratzan and Parker (2000) cited by Institute of Medicine (2004)is the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make the appropriate decision, is seen by Parker and Jacobson (2012) as fundamental to health care that requires individuals to have a more active role in decision and management as much as it is essential for successful access to care and use of services, self-care of chronic conditions, and maintenance of health and wellness. If health literacy has been taken much more seriously and pursued vigorously, the number of beneficiaries from the PHC programme as Table 5 has revealed, would have been more each with the capacity to be effectively involved in the process that determines their health status by keeping the environment clean at least. The level of cleanliness achieved in the study area that is traceable to PHC activities under health literacy is impressive. This fit regrettably has left on its trail a new set of challenges x-rayed under the causal map for public health issues –Figure 1.

Accomplishment and Performance Assessment of PHC Objectives

In the area of equity, no respondent claimed to be discriminated against or deliberately denied the opportunity of accessing the service(s) of PHCs across the study area. Although the study does not discriminate against those that are allowed to access to PHC services, priority is not accorded to the vulnerable and the underprivileged in the society, as some respondents attested to the fact that they paid varying sums for services/treatments they received from the centers. This to some extent negates the aims and objectives of the PHC programme in Nigeria where free services are recommended. On whether the Primary Health Care (PHC) will be able to meet health requirements of the citizenry in the near future is conjectural, given that Primary Health Care (PHC) Centers by our observations are grossly under staffed. In order words, there is an acute shortage of key health professionals in the PHC centres in Central Senatorial District. For example, there were only 3 Doctors, 3 Anaesthetic Nurses and 2 Pharmacists in the 28 facilities surveyed, with relative frequencies of 1%, 1%, and 0.8% of the total staff respectively. Besides, only 2 qualified Medical Records Clerks (0.7%) were in the employment of the 28 facilities across the five LGAs surveyed. The probable outcome of all these combined will be the difficulty, if not an impossibility for the majority of the rural poor and those living in sub-urban locations of Central Senatorial District of Edo State to access quality health care.

A total of nineteen (19) types of Medical Services are being rendered presently in the various PHCs in the Senatorial District. Out of this number, thirteen services can be accessed by the inhabitants in nearly all the PHC facilities; the notable ones being Antenatal care, General Visit/Out-patient, Tetanus toxoid immunization, Nutritional Counseling, Deliveries, Postnatal, Breastfeeding Counseling and immunization, family planning and Suturing/Stitching. None of the PHC facilities is equipped to render satisfactory services in such areas as Basic Emergency, Obstetric Care, HIV Counseling/Testing, Sexually Transmitted Diseases Diagnosis/Testing, Caesarian section and Mental Health Counseling. In the area of infrastructure/equipment, facilities such as refrigerators, EPI cold boxes, air conditioners/fans, delivery beds, and toilets and bathrooms were available. On the other hand, standard generators, boreholes, computer accessories, steady electricity, and wheelchairs were not readily available in the various PHCs.

None of the PHC centres in the area had blood banks, scanning machines, X-ray facilities, ambulance services, internet services, and mortuary services. This finding agrees with Engrurracht (2006) in his work entitled “Human Health” carried out in the Western Province and its neighbouring areas in South Africa where it was reported that the efficiency of health facilities can be hampered by the absence of key services and infrastructure. There are massive demand and utilization of PHC services in the study area with particular reference to immunization, outpatient services/admission, deliveries, family planning services/counseling for women and treatment of malaria fever. Some of the cardinal objectives and ideals of the PHC initiative have been met in the study area.

The areas where appreciable efforts were recorded include immunization, first aid treatment, counseling, family planning and treatment of malaria fever. Charging/paying fees for services rendered seem to discourage would-be beneficiaries from seeking PHC services.

Several challenges faced the PHCs in the study area from performing maximally. According to all the respondents, the challenges include inadequate training of health staff, poor conditions of service, insufficient funds for operational logistics, diversion of funds and shortage of key equipment and services. Other problems include difficulty in sourcing drinkable water, occasional vandalism of PHC installations, lack of ambulance services, mortuary services, wheelchair and poor documentation of medical records. On the side of the government, according to the respondents, the attention given to Primary Health Care (PHC) programme needs to be stepped up. The study also revealed that many essential equipment and infrastructure were not available to enable effective implementation of the programme. In addition, there was a dearth of doctors and pharmacists in the programme. It was also discovered that certain categories of professionals like Nurse/Midwives (with double qualification) and Medical Records Officers were in short supply. This is one problem the government should decisively address in order to achieve impressive implementation of the Primary Health Care programme in the area. The quality of health of the populace has a direct relationship with available health care facilities within reach, qualified staff and high level of health literacy of both the staff and the target audience being the beneficiaries of the programme.

Challenges Facing the Successful Implementation of PHC Programme

The challenges facing successful implementation of the PHC programme in the study area for effective performance as articulated by the respondents are depicted inTable 6.

Table 6: Major Challenges Facing Successful Implementation of PHC

Challenges Identified	Yes (%)	No (%)
Inadequate training of health personnel and low health literacy skills with the associated debilitating gap in health knowledge	95.5	4.5
Required number of staff to man PHC posts in the local government, not enough.	76.8	23.2
Conditions of service of health workers not sufficient or adequate to increase their morale	69.0	31.0
Inadequate allocation of funds to LGAsto enable them PHC deliver quality services to citizens	95.5	4.5
Diversion of funds meant for PHC services to other areas is a major problem	82.6	17.4
Various PHC centers in the LGAs are not equipped with requisite tools to do their work satisfactorily	80.6	19.4
Irregular payment of health workers salaries/allowances	91.0	9.0

Going by the relative frequencies associated with the articulated problems or challenges, it could be said that the encumbrances facing PHC programme implementation in the study area are all significantly critical. Inadequate training of health personnel and low health literacy skills with the associated debilitating gap in health knowledge and inadequate allocation of funds were at par in topping the list with 95.5%. The least of the retarding challenges is poor staffing with 76.8% relative frequency.

Added to this are several other challenges facing the performance of PHC centres in the study area, they are:

- Frequent absenteeism of staff from duty posts.
- Difficulty in sourcing clean water for cleaning and other purposes. This is because of the absence of borehole in more than 78% of the facilities. Health workers have no option but to rely on rainwater from dug-up well and the services of water vendors.
- Poor supply of electricity due mainly to the epileptic nature of PHCN services and/or absence of generators to complement energy supply.
- Occasional vandalism of installed facilities by unknown persons resulting in poor service delivery.
- Absence of ambulance, vehicles, motorbikes to enhance staff movement.
- High charges of fees by PHC operators each time people come for treatment.
- Poor and improper documentation of health data. This habit of poor medical record-keeping made data classification, retrieval, and utilization for evidence base diagnostic and effective and timely response to disease condition(s) a difficult task.
- Difficulty in sustaining a high level of health literacy among the majority of the inhabitants

The level of passable performance so far achieved in respect of better sanitation in the study area did not only lead to an improvement in health but also lead to more garbage, more bacteria, and more disease. The present manner PHC programme in the area is being managed shows a lacked capability to be proactive in providing supportive infrastructures like modern incinerators and sewer systems, etc in the light of the continuous provision of standard and quality of health care services.

The presence of universities at Ekpoma and Ogwua; Specialist Teaching hospital at Irrua; and Federal Institute of Construction at Uromi; kings Polytechnic at Ubiaja and College of Education at Igueben in the Central Senatorial District studied, has triggered and sustained a high tempo of the influx of people into the area in search of greener pasture. Cognitive mapping techniques which Figure 1 depicts consist of a set of procedures to capture perceived relationships of attributes to ill-structured decision problems that decision-makers have to face (Esfahanipour&Montazemi, 2015). Assessment of this phenomenal surge in migration into the study area using the instrumentality of cognitive mapping in knowledge management revealed some unintended consequences (see Figure 1).

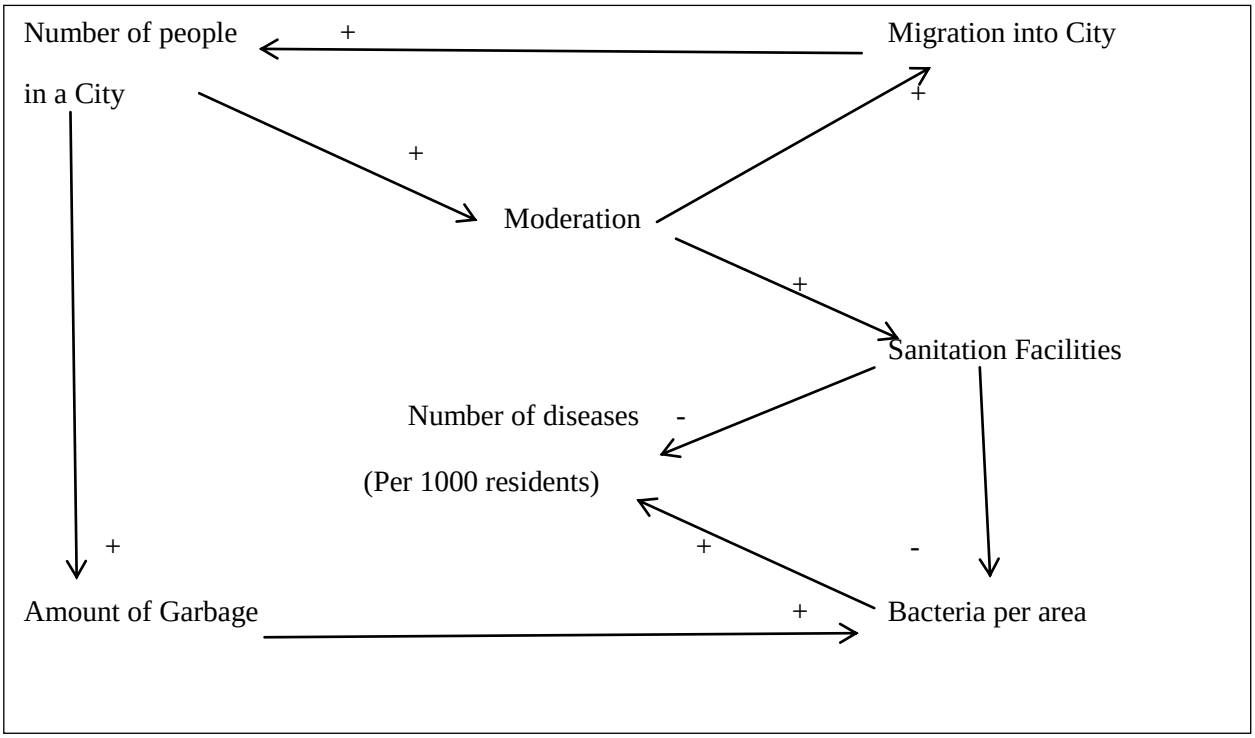

Figure 1: Causal Map for Public Health Issues Adopted from Esfahanipour & Montazemi(2015)

Interdependent tradeoffs emphasized by Lawless & Kung (2015) touched the fact that to control a system requires channels that enhance the ability of management to diminish the destructive interference from inside or outside of an organization. PHC as an organization has not been alive to the overwhelming refuse generation and the attendant increased the number of bacteria arising for the inflow of people into the Senatorial District to plan for proper handling of intended sustainable healthcare in the area. Through proper records keeping and maintenance of relevant databases that could be interrogated for evidence base information for decision making, intended high-level performance could be guaranteed. The presence of higher institutions in the study area could easily bring about improved training and health literacy skills of health personnel and the target audience of PHC to consolidate on positive tradeoffs in order to effectively tackle disease conditions in the study area.

Conclusion

This study set out to assess the activities of Primary Health Care Services in the Central Senatorial District of Edo State, Nigeria. To be able to achieve this goal, several objectives were drawn up and adopted as bases for data collection. By means of questionnaires, in-depth interview and documentary analysis, a number of findings were obtained in the study. Since the objective function of the implementation of PHC health care programme in the study area is sustainable health generally seen as a satisfactory

level of health condition for inhabitants of a delineated geographic area while controlling for such parameters as access, affordability (cost), human relationship, effectiveness, and efficiency, recorded PHC performance in Central Senatorial District is average in terms of coverage and quality of health care services provided. With enhanced health literacy, adequate funding and employment of skilled health personnel, it was generally agreed that the situation will be improved appreciably in years to come.

References

[1]. Aileme, M. I. (2010). An empirical study of health care demand in Nigeria. An Unpublished PhD Thesis Submitted to the Department of Economics, Faculty of Social Sciences Ambrose Alli University, Ekpoma, Nigeria.

[2]. Alakija, W. (2000). Essentials of community health care and health management. Benin City: Medisuccess Publication

[3]. Alderman, H. &Lavy, V. (2006) Household Responses to Public Services: Cost and Quality Trade-offs. World Bank Research Observer 11(1):3-22.

[4]. Braveman, P., and Tanimo (1994) "Screening in Primary Health Care: Setting Priorities with limited Resources" Publications of the World Health Organisation

[5]. Braveman, P and Gruskin, S. (2003). Defining equity in health. Journal of Epidemiology and Community Health (57): 254-258. Retrieved 3 March 2006 from: http:jech.bmjjournals.com/cgi/reprint/57/4/254

[6]. Engrurracht,B. (2006). Human Health. Vol. 1. San Diego Academic Press

[7]. Esfahanipour, A. &Montazemi, A. R. (2015). Application of cognitive map in knowledge management. Ecyclopedia of Information Science and Technology. 3rd Edition. Doi:10.4018/978-1-4666-5888-2.ch106

[8]. Institute of Medicine (2004). Health literacy: a prescription to end confusion. Washington D. C.: The National Academies Press. Doi: 17226/10883.

[9]. Lawless, W. F. & Kung, L. (2015). Interdependence, uncertainty, and completeness in terms and organizations. Ecyclopedia of Information Science and Technology. 3rd Edition. Doi:10.4018/978-1-4666-5888-2.ch106

[10]. NPHCDA (2004). Ward health service operational guide. Abuja: Nigeria

[11]. Obinyan, O. O. &Momodu, M, O. (2013). Accessibility and useof health information resources by primary health care workers in central senatorial district of Edo State. The Research Librarian: a Journal of the Nigerian Library Association, Abia State Chapter, 7: 84-100.

[12]. Odigie, Sunday Aisuhmuihien (2015). An Assessment of primary health care programme in central senatorial district, Edo State. Unpublished Thesis in the Department of Sociology Submitted to the School of Postgraduate Studies, Ambrose Alli University, Ekpoma, Nigeria.

[13]. Ogunlela, Y. I. (2011).An appraisal of Nigeria's health sector and its healthcare delivery system Journal of Food, Agriculture & Environment Vol.9 (3&4): 81-84.

[14]. Osohotimehin, B. (2009). The Imperative of Primary Health Care for National Development in The Constitution.9(1):78-92.

[15]. Parker, R. M. & Jacobson, K. L. (2012). Health literacy. Retrieved 22nd March 2018 from www.nationa.academics.org/hmd/~/media/Files/ActivityFiles/PublicHealth/HealthLiteracy/HealthLiteracyFactSheets_Feb6_2012_Parker_JacobsonFinal1.pdf

[16]. Simonet, D. &Alkafaji, Y. (2017). Critical evaluation of the French health care accounting indicators: the use of DRGS. PAQ, 41(3): 569-609. Retrieved on 28 May 2018 from https://paq.spaef.org
[17]. Walsh, J. W. (1980). Selective primary health care: an interim strategy for disease control in developing countries. Social Science and Medical14: 145-163.
[18]. World Health Organisation (2008). Health systems, improving performance, The World Report 2000, Geneva