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CONTENTS

PRIMARY HEALTH CARE DELIVERY IN ADO-ODO/OTA OGUN STATE, NIGERIA: CHALLENGES AND POLICY IMPLICATIONS

Dominic Ezinwa Azuh and Shalom Nwodo Chinedu

Corresponding author: Dominic Ezinwa Azuh

Department of Economics and Development Studies,
Covenant University, PMB 1023 Ota, Ogun State, Nigeria

ABSTRACT

Twenty-five years after the establishment of the primary health care (PHC) delivery system in Nigeria, facilities lack the capacity to achieve its objectives. The situation poses a threat in the nation's effort at achieving Millennium Development Goals (MDGs) which is less than 1000 days away. Studies on this focus are few and not really community based. To bridge this gap, current paper seeks to examine the factors retarding the operations of primary health care in Ado-Odo/Ota local government area in Ogun State Nigeria in order to accelerate health care services especially at the grassroots among other PHC centres in the country. The methodology is based on survey work among all the 16 primary health care facilities within the 16 wards in Ado-Odo/Ota local government area (AOO), from which data were collected from the respondents. The respondents were health personnel available during the period of survey. Using a semi structured questionnaire. On the whole the total number of 16 PHCs was covered in the study. Descriptive and inferential analyses were carried out using statistical package for social sciences (SPSS). The variables referred to are as given on tables 1 to 4. Six variables namely poor state of building, low community involvement, poor cold chain storage facility, irregularity of worker's payment, poor state of roads to PHC facility and state of vital equipment were regressed against the state of PHC using perceived service satisfaction of facility as the proxy dependent variable. It finds poor state of building/structure, low community involvement, poor storage facility, irregular payment of worker's salary, poor state of roads to facility, vital equipment inadequacy (p= .000, .000,.000, .000, .046 and .000 respectively) among other factors inhibiting service delivery at the grassroots. In order to improve the services at this first- tier level, funding should be increased, procurement of drugs, consumables and cold chain/storage facility ensured, salary and welfare of the staff enhanced and made regular, facilities and equipment be provided.

Keywords: Challenges; community; delivery; grassroots; primary health care

INTRODUCTION

Nigeria is one of the few countries in the developing world to have systematically decentralized the delivery of basic health services to three tiers of government- Federal, States and local governments. The Primary Health Care (PHC) delivery system is the bedrock of the national health system and a sure way towards achieving the Millennium Development Goals (MDGs). The year 2015 which is the target year for global achievement of MDGS is just less than 1000 days away. The extent to which these goals can be realized especially the health related goals is through unhindered access to PHC which is the grassroots health care delivery service.

The PHC was established in 1978 at Alma-Ata in former USSR with a global mandate to protect and promote the health of all the people of the world through the resolution called Alma-Ata Declaration. In Nigeria PHC was established in 1988, ten years after with a similar mandate of providing health care services to the masses especially rural segment. PHC has eight elements namely food and nutrition, safe water and sanitation, immunization, prevention and control of endemic diseases, health education, maternal and child health care, basic treatment of health problems and provision of essential drugs.

In order to combat ugly situation in health care sector, many international and national initiatives such as the Safe Motherhood Initiative Kenya 1987, World Summit for Children 1990, International Conference on Population and Development (ICPD) 1994, UN MDGs, National Safe Motherhood Conference Abuja 1990, and Integrated Maternal, Newborn and Child Health (IMNCH) Strategy 2007 have been put forward and anchored on PHC over the years. Currently the services being rendered by the PHCs are not optimal in spite of all these efforts, the contribution of PHC facility is far from desirable.

In Nigeria about 36% of women receive no antenatal care (ANC) services, 62% of deliveries occur at home and 61% of mothers who gave birth were not attended to by skilled health worker (NPopC & ICF Macro, 2009). Similarly in a study conducted by Federal Ministry of Health (2003) on the quality of care, only 18% of the 4500 facilities surveyed had the capacity to provide emergency obstetric care. Also Gupta *et al.* (2003) stated that PHC is currently catering for less than 20 percent of its potential capacity. Hence this study becomes imperative to uncover some of the hiccups on PHC delivery services using empirical survey data to effect sound policy intervention measures.

No doubt, a country cannot develop without better health care system which plays an indispensable role in propelling economic growth. Therefore, the hypothesis that availability of healthcare infrastructure is not related to utilisation was proposed for the study. This was therefore designed to examine the challenges/factors retarding the operations of PHC in Ado-Odo/Ota Local Government Area of Ogun State, in order to assess the level of achievement of one of the health-related MDGs in the study area.

LITERATURE REVIEW

Studies have shown that health facilities are not equitably distributed in Nigeria. Recently, Adebiyi (2002) remarked that as much as 35% of Nigeria population is presently not covered by any form of modern facility due to inadequate distribution. In a study on the satisfaction of clients with services at a model PHC centre at Pakoto, Ogun State. Personnel inadequacy is one of the major problems confronting health care delivery in Nigeria (Omofonmwan, 2004). The present doctor/population ratio of 1:12,300 and nurse/population ratio of 1:3360, which is against the WHO (1961) recommendation of 1: 10,000, and 1:1500 respectively, is enough evidence of this problem (Akhayere, 2002).

This ugly situation is worse in the rural setting where about 65% of the population lives with few facilities and less dedicated health personnel. It is established that doctor/population ratio in the rural areas is between 1:40,000 to 1:200, 000 (Sule *et al.* 2008). In a utilization study, Sule *et al.* also concluded that community perception of poor quality and inadequacy of available services was responsible for low use of PHC services. Even though National Health Policy (NHP) was formulated in 1988 and revised in 2004 to bring about a comprehensive health care system based on primary health care that is protective, preventive, restorative and rehabilitative to every citizen of the country, health system in Nigeria still contends with chronic problems, such as inappropriate budgetary allocation, poor infrastructure in the public health facilities, lack of drugs, uneven distribution of health facilities and lack of qualified medical personnel (United Nations International Children's Fund [UNICEF], 2001).

In another study, Erinosho (2006) concluded that physical structure entails the buildings and other fixed structures such as pipe borne water, good access roads, electricity and so on within the healthcare environments, whilst the technology is about the equipments meant specifically for hospital use including surgeries. Several other studies have highlighted other areas of discomfort in the use of PHC services such as attitude of staff, cost of services, time spent at the hospital, availability of doctors, drugs, equipment and laboratory facilities (Al-Doghither, Abdurhman & Saeed, 2000; Ofovwea and Ofili 2005; Zaky, Khahab & Galal 2007).

A low utilization of PHC services found in a study from south western Nigeria was attributed to factors causing dissatisfaction with services rendered at these centres (Sule *et al.* 2008). Similarly, Lambo, one time Health Minister observed that capacity utilization at the primary level is grossly low. Consequently, there is overcrowding of the secondary facilities due to patients "lack of faith" in the lower facilities. A lack of faith that is premised on users' perception of the system's output quality as doubtful and therefore offering little or no help in needful hours. The delivery of quality PHC can have a large impact on the health of Nigerians. Many of the most cost-effective health interventions to prevent and treat the major causes of mortality and morbidity in the country and progress towards the health Millennium Development Goals (MDGs) can be offered at this level of care.

DATA AND METHODS

Study Location and Sampling

Ado-Odo/Ota local government area was purposively chosen from the 20 local government areas in Ogun State, Nigeria in the first phase based on its status as an emerging industrial nerve centre, proximity and anticipated cooperation from the respondents. The study covers all the 16 wards of Ado-Odo/Ota Local Government Area (LGA) in the State. In the second phase, all the 16 wards in the local government were listed and selected. Among these wards (Ota I, Ota II, Ota III, Ilogbo, Atan, Alapoti, Ado-Odo I, Ado-Odo II, Ere, Igbesa, Ketu Adie-Owe, Agbara I, Agbara II, Iju, Sango-ota and Ijoko), eleven are rural and five are urban. On the whole, *16 p*rimary health care facilities in these wards were selected. However, in Wards with two or more health facilities, one facility was chosen at random. Thereafter, seven (7) health personnel (respondents), consists of the ancillary workers, nurses and matrons in each PHC were randomly interviewed using the questionnaire instrument.

Research Instrument

The survey instrument was designed to collect data pertaining to basic socio-demographic characteristics of the respondents and health facility, availability of essential equipment, essential drugs/consumables and referral activity. Also information on personnel, level of motivation, adequacy of staff, service delivery, and environmental sanitation were gathered from our respondents at their place of work. Overall, 112 respondents were interviewed from the sixteen wards in the Local government area.

Data Analysis

The survey data were analyzed using statistical package for social sciences (SPSS). A combination of univariate and multiple regression analyses were used for the descriptive statistics such as frequency distributions and multiple regression to ascertain the relationship between the dependent variable (a proxy, perceived service satisfaction of facility was used) and few selected independent variables as shown on table 4. Pearson product moment correlation coefficient(r) coupled with coefficient of determination r^2 were incorporated to examine relationships, direction and the strength of the association between the variables of interest.

Ethical Clearance

The approval to carry out this study was sought and obtained from Ado-Odo/Ota Local Government; vide approval number AOLG.49T/2. The cooperation and support of the Medical Director in-charge of Primary Health Care, Ado-Odo/Ota and his cohort was accorded during the course of the study and informed consent from all respondents was secured.

RESULTS AND DISCUSSION

A total of 112 questionnaires were administered, 109 respondents (97.3%) responded with sufficient information on various aspects of the study. The descriptive results of socio-demographic characteristics of health personnel (Table 1) show an overwhelming proportion of female respondents (79.8%) than males (20.2%). Over two-fifths of the respondents (43.1%) were in the 18-30 year age group.

Respondents in the age- group of 31-40 and 41-50 years accounted for 23% and 23.8% respectively. However, respondents above 51 years registered the least proportion (10.1%). There were slightly more Christian respondents (68.8%) than Moslems (30.3%) and Traditional worshippers (0.9%). Educational attainment of the respondents show that those with tertiary/professional qualifications account for 62%, followed by respondents with secondary education (31.2%).

The location of respondents shows that there are more rural (65.1%) than urban (34.9%) respondents. However, respondents with low years of work experience accounted for the highest (40.4%), followed by those with 21 years and above (29.3%). Those with 6-10 years and 11-15 years and 16-20 years fall in between with 15.6% and 5.5% and 9.2% respectively. While the highest number of respondents with lowest years of experience could be due to migration for greener pasture and replacement, those with highest years of experience following them may be due to some form of home attachment or other additional form of business.

Most respondents (80.7%) confirmed irregular and poor payment of health workers' salary. This is consistent with findings by Adeniyi *et al.* (2003). No doubt more than half (58.7%) of those interviewed acknowledge satisfactory staff welfare and motivation, a substantial proportion (41.3%) also registered their displeasure on this issue.

On examination of health and service characteristics (Table 2) core medical personnel (doctors and nurses) accounted for 22.9 % whereas other health workers constitute a vast proportion (77.1%) of the PHC workforce. This low proportion of trained and skilled manpower is likely to negatively impact on the quality of services rendered. The study also reveals the extent of infrastructural decay that has besieged most PHCs as over half (56.9%) of the centres are in poor state followed by those in fair category (24.8%) and just a quarter of the buildings are satisfactory (18.3%). Not only that room and furniture inadequacy exist (67.9%), poor state of roads is even more worrisome as more than half of the respondents stated that the roads are poor (56%).

Table 1: Socio-demographic and characteristics of PHC Health workers

Characteristics	Frequency	Percent (%)
Sex		
Male	22	20.2
Female	87	79.8
Total	109	100.0
Age		
18-30 years	47	43.1
31-40 years	25	23.0
41-50 years	26	23.8
51 years and above	11	10.1
Total	109	100.0
Religion		
Christianity	75	68.8
Islam	33	30.3
Traditional	1	.9
Total	109	100.0
Educational Attainment		
Primary	7	6.4
Secondary	34	31.2
Tertiary/Professional	68	62.4
Total	109	100.0
Status of Ward/Community		
Urban	38	34.9
Rural	71	65.1
Total	109	100.0
Years of Experience		
1-5 years	44	40.4
6-10 years	17	15.6
11-15 years	6	5.5
16-20 years	10	9.2
21 years and above	32	29.3
Total	109	100.0
Regularity of health workers' salary		
Regular	21	19.3
Irregular	88	80.7
Total	109	100.0
Welfare and staff motivation		
Satisfactory	45	41.3
Not satisfactory	64	58.7
Total	109	100.0

Source: Field Survey, 2011

Poor state of amenities such as basic water supply, electricity and clean latrines is a concern to the normal functioning of most facilities in the study area. Even personnel with mobile hand set do not engage them during emergency for the facility benefit due to non provision of pre-paid cards. While an overwhelming proportion of respondents acknowledge the non-availability of functional amenities (67.9%), slightly below one-third affirmed their availability (32.1%). Quality of care and services are affected due to lack of amenities leading to unsatisfactory provision of service to the end users.

The lack of access to ambulance facility is also a constraint towards the delivery of healthcare services in the study area with large proportion of facilities not having access to ambulance (72.5%), Even though result show that substantial proportion of the respondents (76.1%) have access to referral facility, the poor state of the roads lead to ineffectiveness of the facility. Community involvement with respect to development initiatives, sanitation improvement, provision of water supply, repair or construction of buildings and roads, community mobilization of women for antenatal clinic and campaign against home delivery is very poor in the study area.

It was observed that as high as 75.2 percent of respondents indicated lack of community participation in the above mentioned areas. The scenario is not only against the guidelines evolved in establishment of global PHC in 1978 and 1988 in Nigeria; but also the health policy of Nigeria which is guided by the Bamako initiative to encourage and sustain community participation in primary health care system. In fact, community participation helps communities in identifying their health needs and shaping service development. The study revealed substantial drug availability with slightly above half of the respondents accenting to drug supply in their health facility (50.4%). Nevertheless, high proportion of the facility lack drugs for their operation.

It is appalling to note that the state of equipment inadequacy in the PHCs is high as 81.7% of respondents stated inadequacy of basic equipment. According to Ojeifo (2005), the inadequacy of or lack of basic medical equipment has equally been identified as one of the effects of low patronage especially of rural health centres (Ojeifo 2005; 2008). Storage facility especially for vaccines as well as the baking of ice-packs is poor in the study area as about two-thirds (66.1%) of the PHCs lack functional storage facility. The outcome of this study has enabled Covenant University to establish a functional Cold Chain at Covenant University Health Centre for the local government. Regular visitation of medical director is just slightly above average (55%) and expressed opinion of respondents on the need for better facilities at the various health centres is overwhelming (94.5%).

It is observed that one of the functions of PHC, that is community health promotion exercise is reported to be 56.9 percent, this is not too good in building sufficient health awareness in an area where national literacy rate is low. Regular cleaning of the surrounding of health facility is poor with only 46.8 percent under this category. Rating of client's service level of dissatisfaction by the respondents showed that a substantial proportion (43.1%) of them stated their dissatisfaction on quality of service delivery at the PHC facilities. This is a vital issue because it

serves as an internal evaluation of services rendered to the public. Hence, there is need for urgent improvement in the services being rendered at this level to enhance the eroded public confidence in the PHC services.

Table 2: Health characteristics and services at the PHC

Characteristics	Frequency	Percent (%)
Health personnel at the PHC		
Doctors	1	0.9
Nurses/midwives	24	22
Other health workers	84	77.1
Total	109	100.0
State of the PHC Infrastructure(Building)		
Good	20	18.3
Fair	27	24.8
Poor	62	56.9
Total	109	100.0
Adequacy of the PHC Room/Furniture		
Adequate	35	32.1
Inadequate	74	67.9
Total	109	100.0
State of Roads to the PHC		
Good	3	2.8
Fair	45	41.2
Poor	61	56
Total	109	100.0
Common Ailments Treated in the PHC		
Malaria	36	33
Fever	11	10
Diarrhoea	9	8.3
Measies	7	6.4
Cough	5	4.6
Haemorrhage	15	13.8
Severe headache &waist pain		
Others	10	9.2
Total	16	14.7
	109	100.0
Availability of Operational Amenities (- water		
supply, electricity and clean latrines)	35	32.1
Available	74	67.9
Not available	109	100.0
Total		
Availability of Access to Ambulance facility		
Yes	30	27.5
No	79	72.5
Total	109	100.0
Access to Referral Facility		
Yes	83	76.1
No	26	23.9
Total	109	100.0

(Table 2 continued)

Characteristics	Frequency	Percent (%)
Rating of Community Involvement		
High	3	2.8
Medium	24	22.0
Low	82	75.2
Total	109	100.0
State of drug availability		
Satisfactory	55	50.4
Unsatisfactory	54	49.6
Total	109	100.0
Status of equipment adequacy		
Adequate	20	18.3
Not adequate	89	81.7
Total	109	100.0
Availability of functional storage facility		
Yes	37	33.9
No	72	66.1
Total	109	100.0
Regular visitation of medical doctor		
Yes	60	55
No	49	45
Total	109	100.0
Opinion on PHC needs for better facilities		
Yes	103	94.5
No	6	5.5
Total	109	100.0
Does the PHC carry out community health promotion exercise		
Yes	62	56.9
No	47	43.1
Total	109	100.0
Regular cleaning of surroundings		
Regular	51	46.8
Irregular	58	53.2
Total	109	100.0
Service Satisfaction		
Very satisfactory	32	29.4
Satisfactory	30	27.5
Unsatisfactory	47	43.1

Source: Field Survey, 2011

The respondents' opinion on areas of need or challenge which limit delivery services of PHC in the study area (See Table 3) showed that drugs and consumables account for the greatest challenge (32.1%), followed by inadequacy of essential equipment(23.9%). Nevertheless poor/irregular payment of salary and poor staff welfare (18.3%), poor storage facility (15.6%) and poor infrastructure and amenities (11%) are equally sources of concern to the respondents. This calls for attention in order for the PHC facilities to deliver better services.

Table 3: Respondents opinion on Areas of challenge limiting service delivery of PHC

Characteristics	Frequency	Percent (%)
Poor infrastructure and amenities	12	11
Poor cold chain storage facility	17	15.6
Drugs and consumables	34	32.1
Inadequacy of vital equipment	26	23.9
Poor/irregular salary and poor staff welfare	20	18.3
Total	109	100.0

Source: Field Survey, 2011

To buttress the above findings, regression analysis was carried out (Table 4). Results showed that health care challenges such as poor state of building/structure, low community involvement, poor storage facility/lack of functional cold chain facility, poor/irregularity of worker's salary, poor state of roads to facility, vital equipment inadequacy are all significantly related to perceived service satisfaction, which is the proxy dependent variable. The proxy, perceived service satisfaction, is used because it is the force which may ginger attendance or utilization of PHC services by clients/end users.

The facility will attract the attention of the public only when its services are perceived to be satisfactory. The study revealed that except poor state of roads to facility, all the other selected variables are at perfect significance (1%) level. However, poor state of building, low community involvement, irregularity of workers salary and poor state of roads to facility were negatively related to perceived service satisfaction. This means that the above factors contribute to non effective utilization of PHC by numerous people in the study area as satisfaction induces use and vice versa.

Table 4: Results of Regression Analysis

Model		Unstandardized coefficients		Standardized coefficients		t	Sig.
		B	Std. Error	Beta			
1.	(Constant)	4.121	.243			16.964	.000
	Poor state of building/structure	-.069	.019	-.115		-3.745	.000
	Low community involvement	-1.237	.088	-.733		-14.024	.000
	Poor cold chain storage facility	.475	.064	.269		7.472	.000
	Irregularity of worker's salary	-.343	.037	-.250		-9.231	.000
	Poor state of roads to facility	-.082	.041	-.078		-2.020	.046
	Vital equipment inadequacy	.377	.048	.249		7.849	.000

R Square = 0.949 Adjusted R Square = 0.946 F= 317.9
b. Dependent Variable: perceived service satisfaction of facility (PHC)

However, it is fascinating to note that all the variables are significantly related to the perceived challenges facing health care delivery services among the study communities when related to the dependent variable (using a proxy-perceived service satisfaction of facility). Furthermore, since the F- statistic calculated is greater than the F- tabulated, the hypothesis that level of available health care infrastructures are significantly related to utilization is upheld.

CONCLUSION

There are several challenges retarding the smooth service delivery of primary health care. The funding of PHC should not be left to the Local Government; the Federal Government should increase the health budget in order to facilitate the activities of health facilities. Federal and State Governments should also contribute to provision of basic infrastructure at PHC facilities. Similarly, personnel of PHC should be encouraged by adequate and regular remuneration in order to put in their best and to avoid migration or relocating to industrialized countries where they may be adequately remunerated.

Provision of adequate amenities and procurement of equipment including drugs and other consumables should be a matter of top priority. In addition, communities in the study area should be mobilized and given adequate orientation to participate in the activities of PHCs in their various places in order to maximize the benefits and sustainability of PHC service delivery within the local government. In fact, community development associations may be encouraged to ginger participation at the first-tier level of health car system.

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