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FACTORS AFFECTING PATIENT ACCESS TO PRIMARY CARE FACILITIES IN ADO-EKITI, NIGERIA

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ABSTRACT

Background: Most people access care globally through the Primary health care (PHC) which is the first point of contact with health care professionals. Given that the uptake of PHC in Nigeria is low, this research investigated factors affecting patient access to PHC facilities by analysing patient experience as they access PHC facilities in Ado - Ekiti, Nigeria. **Methods:** A cross-sectional study design that employed the use of quantitative survey method. The participants were 321 Patients who access PHC facilities in Ado – Ekiti for routine medical care. A questionnaire was administered to each of the participants as they accessed the facilities within the PHC settings in Ado - Ekiti. The questionnaire measured outcome of patient-doctor relationship, barriers and difficulties to access, and accessibility to care. **Results:** More females (79%) and the age group of 18 to 28 years (51.9%) accessed primary health care facilities more than their counterparts do. 'Empathy' was the only significant and predictive variable associated with 'improvement in physical and mental state after the visit to the doctor'. Also, 'attitude of staff' was the only predictive factor that showed significant association with 'arranging for appointment to the doctor'. **Conclusion:** 'Empathy' and 'attitude of staff' were found to be independent predictors of access to care. Therefore, strategies that target improvement in patients' experience of PHC, and subsequently, access to PHC facilities should be directed to sensitive issues relating to 'empathy' and 'attitude of staff' in Ado-Ekiti, Nigeria.

KEYWORDS: Access to care, barriers and difficulties, patients' experience, primary health care, satisfaction.

INTRODUCTION AND BACKGROUND

Access to health care is dependent on a number of factors including, for example, availability of care provided by a health professional and public/private health care institution (Segen, 2002). Importantly, its function hinges on the availability of health care personnel and supply of services, including the ability of the patient to pay for the available services (Segen, 2002). It has been observed that most people access care globally through the primary health care which is the first point of contact with health care professionals (Rabiu, 2010). The Primary health care (PHC) has been defined as "essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a 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" (WHO, 2011:p.1). This core definition of primary health care expresses the true meaning and essence of primary health care. With this in mind, the World Health Organisation (WHO) sees this essential type of health care as a first port of call in health care access, and it is designed to be accessible and affordable to the increasing world population, especially the developing world (WHO, 2011).

The primary health care system in Nigeria is a vital part of the country's health care policy. It is the aspect of health care that is accessible to the people (LCCS, 2005). Although, it has been judged as highly ineffective owing to inadequate investment in facilities, inadequate man power and inadequate provision of essential drugs (NAS, 2010), it remains the first point of contact for patients seeking preventive, health promoting, curative and rehabilitative services in Nigeria (NAS, 2010). Rabiu (2010) observes that increased accessibility of patients to

PHC has the rare advantage of improving public health. However, the state of PHC facilities, such as electricity supply, drinking water, healthy environment, waste disposal system, access roads and health personnel, being witnessed in different geopolitical zones in Nigeria appears to have caused absence of confidence and trust on the part of the general populace who access health care in primary health care centres (Uzondu, 2011). It is noted that less than 20% of the potential patients in Nigeria is currently being catered for by PHC as compared with Republic of South Africa where over 60% gain access to PHC (Abdulraheem, Olapipo and Amodu, 2012; Harris et al, 2011).

In countries where patients have improved access to PHC facilities, they tend to have better health indices as well as a decrease in all cause mortality (DHS, 2003). It has been reported that low-income countries where the public heavily depend on out-of-pocket health care payment plan tend to perform worse than the high and medium income countries (DHS, 2003). Nigeria is a low-income country and the majority of the people pay for treatment through out-of-pocket health care payment plan. Department of health service (2003) critically assessed Nigeria health indicators such as life expectancy at birth, under-five mortality ratio and infant mortality rate. Leo (2010) described Nigeria's health indices as one of the 'worst in the world' considering the high maternal mortality and morbidity being witnessed in the country and with its related high infant and under-five mortality rate.

The aforementioned notwithstanding, there is now general acceptance amongst the stakeholders in health in Nigeria that the Primary health care constitutes the fundamental framework for meeting the health needs of the Nigerian population (Iyayi, 2010).

The National Health Insurance Scheme (NHIS) which was launched in 2005 is a major social input of the Nigerian government in her drive to improve health care access in the country. It is a pre-paid health care plan that promises easy access to health care for all Nigerians through the payment of capitation fees from a common pool funded by stakeholders like the Federal government workers and the military. Nevertheless, NHIS is yet to achieve 50 percent coverage since its inception (Rabiu, 2010). While the formal sector of the Nigerian workforce which comprises of the public sector and the organised private sector is already accessing health care through the scheme, the informal sector (the self-employed and low-income earners) and the rural dwellers that constitute over 75 per cent of the Nigerian population are yet to be enrolled into the scheme (Fagbemi, 2011). Noteworthy is the fact that the central government budgetary provision in Nigeria (1998-2008) which was allocated to health was 1 per cent of the total budget in a country with an average annual growth rate of urban population (2000-2009) of 4 per cent; population annual growth rate (2000-2009) being 2.7 per cent (UNICEF, 2011). The doctor to patients ratio is put at 1:4,000 which greatly deviates from the World Health Organisation's recommendation of one doctor to 200 patients (The Punch, 2009).

Ado-Ekiti, the Ekiti State capital in Nigeria, has an estimated population of 313,690 (FGN, 2011). There are 74 Primary Health care facilities of which 32 are publicly owned, while 42 are private health care facilities (MOH, 2010). Both facilities have varying degrees of infrastructures and they provide varying degrees of health care. The health care services in the public primary health care facilities are under the supervision of the primary health care co-ordinator who is a medical doctor, while the rest of the health care staff are mainly nurses, and the community health extension workers. They keep the facilities running on daily basis. The privately owned facilities are manned by the owners who are medical doctors, though there are few health facilities that are owned by nurses and paramedics.

Given that the uptake of PHC in Nigeria is very low, this research will investigate factors affecting patient access to PHC facilities and make useful recommendations.

METHODS

Study Design

A cross-sectional study design was used for the present research. The design enabled the researcher to collect the desired data from a fairly large sample at one point in time during the research process (Bruce, Pope and Stanistreet, 2008).

Setting

The setting for this research was the PHC facilities in Ado - Ekiti, Nigeria, where the patients access their emergency and routine care. The PHC facilities in Ado-Ekiti are the Basic Health Centres (BHC; provide PHC to the local community but can afford consultation by a visiting medical doctor on fixed days of the week), Comprehensive Health Centres (CHC; as the name denotes, provide a comprehensive PHC with daily consultation by medical doctors), and Public/Private Hospitals. Ado-Ekiti is a semi-urban area in Ekiti State of Nigeria. There were 72 PHC facilities in Ado-Ekiti as at the time of this research. An estimated 44,440 patients access health care in these facilities every month. The mode of payment for health care is majorly by out-of-pocket payment plan except for few patients on the National Health Insurance Scheme. There are various types of health care workers in each PHC facility. They include a Medical doctor, a Pharmacist, Nurses, Midwives, Community Health Extension workers and Medical record officers. There are 25 healthcare workers, on average, who are employed in each PHC facility.

Sampling Approach/Frame

A cluster sampling method was employed for the present study. This was necessary for the reason that there was no sampling frame (easily available list of all the

patients) in Ado - Ekiti at the time of this research; therefore a simple random sample was not feasible (Bruce, Pope and Stanistreet, 2008). There was, however, a list of all the 74 PHC facilities available in the Ministry of Health. Thus, it was possible to make a selection in two stages:
Stage I – this involves a random selection of 3 health care facilities from the PHC facilities (clusters) in the town.
Stage II – involves obtaining from each selected PHC facility (from stage I) a list of patients from which to sample, considering the inclusion/exclusion criteria. Further details are stated below.

Required Sample Size
Sample size was calculated using EpiInfo StatCalc, using the following criteria:- CI=95%, Power=80%, Ratio=1:1, Expected frequency=14%, and Risk Ratio=2, where the expected frequency is based upon a total population of people in Ado-Ekiti which is 313,690. The total number of patients accessing PHC facilities in Ado - Ekiti around the time of this research was estimated to be 44,440. Therefore, the expected frequency is calculated thus; 44,440/313,690 X 100 = 14%; and RR = 2 was based upon existing published study literature (MOH, 2011; Sanmartin and Ross, 2005; UOL, 2011). A final sample size was 292. However, a 10% possible attrition was added i.e. 29.

Using three PHC facilities (A, B and C); PHC A has about 1200 patients per month on average accessing health care in the facility, PHC B has about 1050 patients on average, while PHC C has about 450 patients. The total number of patients = 2,700 patients.

The first stage in the calculation was to work out the percentage of patients for each PHC facility:
A = 1200 / 2700 x 100 = 44%. B = 1050 / 2700 x 100 = 39%. C = 450 / 2700 x 100 = 17%. The 10% of the sample size that was added owing to possible attrition was calculated thus: 10 / 100 x 292 = 29.2.
To work out the number of participants per PHC: the new sample size became 29+292 = 321. This was distributed among the three PHC facilities thus:
PHC A = 44/ 100 x 321 = 141.
PHC B = 39 / 100 x 321 = 125.
PHC C = 17 / 100 x 321 = 55.
Total = 321.

Sample and Inclusion/Exclusion Criteria
All patients accessing primary health care facilities in Ado - Ekiti, Nigeria, were the eligible subjects, notwithstanding their individual socio-economic and health status. Nevertheless, those patients who were less than 18 years at the time of this study were not included.

Recruitment
Once permission to carry out the study was provided by the medical directors/officers in charge of the selected facilities, samples were recruited from the PHC facilities. When patients arrived at the PHC for treatment the project was explained verbally in English and local languages to the patients by the researcher. Those who agreed to take part were recruited for the study. They were given more information about the study and the participant's information sheet. Verbal consent to take part in the study was then obtained. This was used instead of informed consent form because of illiteracy. The project was voluntary; therefore no patient was compelled to participate against his/her will.

Sample
All the participants sampled for the research agreed to participate after clearly explaining to them about the anonymity and confidentiality involved in the research. Participants' information sheet was given and explained to them. 321 questionnaires were distributed, however, 291 were returned. Further details are contained in the result section.

Data Collection Method
This was essentially by survey that made use of quantitative approach. Data were collected using questionnaires. The questionnaires contained closed questions that were designed to make it easier for the participants to choose. The content of the questionnaire was translated to the illiterate participants in local languages. It took an average of 15minutes for a participant to complete the questionnaire at the out-patient department of the PHC facilities.

Instrument
The questionnaire used for the study was a slightly modified version of an existing questionnaire by Marcinowicz et al (2010) that measured the quality of visits that patients made to family physician practices in Poland. Since this current study was conducted in a setting that relies heavily on out-of-pocket payment plans (different to Poland where health care is financed by a State through National Health Fund), Marcinowicz's (2010) questionnaire was modified in order to address this issue.

Pilot-Testing
The slightly modified questionnaire was piloted on 10 patients who use one of the PHC facilities in Ado - Ekiti. The instrument was generally acceptable and comprehensible. Hence, no changes were made to the questionnaire prior to its use for the study.

DATA ANALYSIS

Statistical analysis
SPSS (Version 16.0) was used for analysis of data. The independent variables were categorical data and were examined in line with the dependent variable. Logistic regression was used for multivariate analyses. Multivariate analysis was used to control for relationships that exist between predictors. The Fisher's exact test values were determined with the statistical significant value placed at $p<0.05$.

Ethics

Approval was obtained from Ekiti State Ministry of Health where the research was carried out. The questionnaire did not contain any identifiers, although a unique ID number was assigned to each participant, in order to ensure strict anonymity and confidentiality of data. Verbal consent was obtained from the participants and they were asked to confirm agreement to participate by 'ticking' a box on their respective questionnaires.

RESULTS

Three PHC facilities in Ado – Ekiti, Nigeria, were selected for the study. Only 291 out of the 321 questionnaires distributed were returned resulting in a response rate of 90.7%. The reasons for this can be attributed to unwillingness on the part of some of the patients to return the completed questionnaires owing to past research studies that did not make much positive impact on the wellbeing of the patients or poor handling of past study questionnaires by both the patients and the staff of the institutions involved (Odebiyi and Olabisi, n.d.; Anisulowo, 2010). However, an encouraging return rate was still recorded.

Nine questionnaires were not fully completed. These were computed into the row of 'missing data' during analysis using the SPSS (Statistical Package for Social Sciences).

Respondents' demography

Respondents' age

Patients' ages were categorised into four groups to aid analysis of data. There were more respondents within the 18 to 28 age group i.e. 151 (51.9%), while 50 and older were very few (40 respondents, representing 13.7%). By this token, the younger age groups appear to be accessing primary health care facilities more than the older age group.

Respondents' gender

There were more females in the sample than males. There were 61 (21%) males out of a total number of 291 respondents, while females were 230 (79%). This indicates a higher number of females accessing primary health care facilities in the sample during the study period.

Table 1: Distribution of Respondents By Age, Sex And Mode of Payment For Health Care.

Age range (yrs)	No. of respondents	%
18 – 28	151	51.1
29 – 39	56	19.2
40 – 50	44	15.1
>50	40	13.7
Total	291	100.0
Sex		
Male	61	21.0
Female	230	79.0
Total	291	100.0
Mode of payment for health		
Out-of-Pocket payment	207	71.1
Pre-paid plan	26	8.9
Free access	20	6.9
Others	38	13.1
Total	84	28.9

Relationship Between Variables

Chi-Squared test was conducted to examine for the relationship between 'improvement in physical and mental state after the visit to the doctor' and 'the doctor empathized with my situation'.

Table 2: Doctor's empathy and improvement in Physical and Mental State crosstabulation.

		Improvement in Physical and Mental State.					
		Definitely do not agree	Rather do not agree	Do agree or do not agree	Rather agree	Definitely agree	Total
Doctor's empathy	Definitely do not agree	4	0	1	0	1	6
	Rather do not agree	1	3	0	2	1	7
	Do agree or do not agree	0	1	7	2	10	20
	Rather agree	2	1	1	14	24	42
	Definitely agree	4	0	2	16	194	216
	Total	11	5	11	34	230	291

The Fisher exact test was 88.3, p<0.001 indicating that there is a relationship. Doctor's empathy significantly improved physical and mental state of the patients.

Chi-Squared test was conducted to examine for the relationship between 'improvement in physical and mental state after the visit to the doctor' and 'the doctor listened to me willingly and until the end'.

Table 3: Doctor's Listening and Improvement in Physical and Mental State Crosstabulation.

		Improvement in Physical and Mental State.					
		Definitely do not agree	**Rather do not agree**	**Do agree or do not agree**	**Rather agree**	**Definitely agree**	**Total**
Doctor's listening	Definitely do not agree	4	2	0	3	2	11
	Rather do not agree	0	0	6	0	2	8
	Do agree or do not agree	0	1	1	2	7	11
	Rather agree	3	1	1	13	13	31
	Definitely agree	4	1	3	16	206	230
	Total	11	5	11	34	230	291

The Fisher exact test was 44.9, p<0.001 indicating that there is a relationship. Doctor's close attention to patients significantly improved physical and mental state of patients.

Chi-Squared test was conducted to examine for the relationship between 'improvement in physical and mental state after the visit to the doctor' and 'difficulty asking the doctor question'.

Table 4: Difficulty asking question and improvement in Physical and Mental State crosstabulation.

		Improvement in Physical and Mental State.					
		Definitely do not agree	**Rather do not agree**	**Do agree or do not agree**	**Rather agree**	**Definitely agree**	**Total**
Difficulty asking question.	Definitely do not agree	8	2	0	12	140	162
	Rather do not agree	1	0	0	4	13	18
	Do agree or do not agree	1	1	1	3	14	20
	Definitely agree	0	1	3	5	44	53
	Total	10	4	4	24	211	253

The Fisher exact test was 0.51, p<0.05 which indicates a relationship. There is correlation with not finding it difficult asking the doctor question and improvement in patients' physical and mental state (the question considered here is a negatively worded question).

Chi-Squared test was conducted to examine for the relationship between 'making an appointment to the doctor' and 'nurses nice and polite' (attitude of staff).

Table 5: Nurses Nice and Polite and Appointment To The Doctor Crosstabulation.

		Appointment to the doctor.					
		Definitely do not agree	**Rather do not agree**	**Do agree or do not agree**	**Rather agree**	**Definitely agree**	**Total**
Nurses nice and polite.	Definitely do not agree	6	0	3	0	2	11
	Rather do not agree	1	1	0	0	0	2
	Do agree or do not agree	3	0	1	9	5	18
	Rather agree	4	0	7	14	9	34
	Definitely agree	80	4	10	24	108	226
	Total	94	5	21	47	124	291

The Fisher exact test was 7.8, p<0.01 which indicates a relationship. Patients are more likely to make an appointment with the doctor when there is a positive attitude from staff.

Chi-Squared test was conducted to examine for the relationship between 'making an appointment to the doctor' and 'financial restraint to access'.

Table 6: Financial Restraints to Access and Appointment to The Doctor.

		Appointment to the doctor.					
		Definitely do not agree	**Rather do not agree**	**Do agree or do not agree**	**Rather agree**	**Definitely agree**	**Total**
Financial restraint to access.	Definitely do not agree	65	0	7	21	60	153
	Rather do not agree	4	3	1	2	5	15
	Do agree or do not agree	5	2	4	7	7	25
	Rather agree	11	0	6	15	14	46
	Definitely agree	9	0	3	7	38	52
	Total	94	5	21	47	124	291

The Fisher exact test was 12.4, p<0.001 indicating that there is a relationship. Financial restraints did not discourage making an appointment with the doctor.

Chi-Squared test was conducted to examine for the relationship between 'making an appointment to the doctor' and 'waiting too long for a visit'.

Table 7: Waiting too Long and Appointment to The Doctor Crosstabulation.

		Appointment to the doctor.					
		Definitely do not agree	**Rather do not agree**	**Do agree or do not agree**	**Rather agree**	**Definitely agree**	**Total**
Waiting too long	Definitely do not agree	55	1	6	9	42	113
	Rather do not agree	3	3	1	2	9	18
	Do agree or do not agree	13	0	4	8	21	46
	Rather agree	9	0	3	21	16	49
	Definitely agree	14	1	7	7	36	65
	Total	94	5	21	47	124	291

The Fisher exact test was 17.4, p<0.001 indicating that there is a relationship. Waiting too long did not discourage making an appointment with the doctor.

Further analysis was done for the factors determining "Improvement in Physical and Mental State" and "making appointment with doctors" using multiple logistic regression.

Multiple Logistic Regression analyses

Multiple Logistic Regression was carried out by dichotomising the data which were on a 5 point Likert scale. This was done by coding 'definitely do not agree' and 'rather do not agree' into one group, and 'definitely agree' and 'rather agree' into another group. Those who were 'not too sure' were not included in the analysis.

Factors determining physical and mental state:
Dependent variable :– 'My physical and mental state improved after the visit to the doctor'.
Independent variables:– 'The doctor empathized with my situation'
'The doctor listened to me willingly and until the end'
'I had difficulty asking the doctor question'.

Results:- Chi square = 35.248; p = 0.001.Nagelkerke R Square = 0.398, indicating that nearly 40% of the variance of improvement following visit to the doctors could be accounted for by the doctors showing empathy, willingness to listen and no difficulty asking questions.

'Empathy' (the doctor empathized with my situation), however, was the only significant and predictive variable with the following additional information: Wald = 11.758; p = 0.001. Exp(B) = 153.772. 95% Confidence Interval for Exp(B) = 8.647 to 2734.559.

Factors determining making appointments with doctors:
Dependent variable:- 'Was is easy to make an appointment to the doctor at a convenient time?'.
Independent variables;- 'Were the Nurses nice and polite during registration?'
'Was there any financial restraint to access?'
'Did you have to wait too long in the waiting room for your visit?'.

Result:- Chi square = 21.331; p = 0.001. Nagelkerke R square = 0.140, indicating that 14% of the variance of appointment with the doctor are accounted for by the predictor variables.

'Nurses nice and polite' was the only significant variable with the following additional information: Wald = 4.112; p = 0.043; Exp(B) = 5.468; 95% Confidence Interval for Exp(B) = 1.059 to 28.244.

From the result above, it can be deducted that people find it easy to access care when there is a positive patients' experience. 'Empathy' (the doctor empathized with my situation) was the only significant and predictive variable that showed statistically significant association with 'improvement in physical and mental state after the visit to the doctor' even after accounting for confounding factors. Also, 'Nurses nice and polite' was the only significant variable that showed statistically significant association with 'appointment to the doctor' after accounting for confounding factors. Hence, empathy shown by doctors and positive attitudes from the nurses as demonstrated by being "nice and polite" enhance the patients'' experience of healthcare.

DISCUSSION

Introduction

The present study which examined factors that affect patients' experience of access to primary health care facilities in Ado - Ekiti utilised quantitative research method (survey) to assess the factors of interest. The huge attempt in the data collection and analysis was geared toward determining those factors that are associated with and can predict access to PHC facilities. The results and their analysis were presented in a simplified manner in order to convey unambiguous meanings to both the academia and the general public. Essentially, the factors researched were considered under three main groups: the patient-doctor relationship and consultation outcome, barriers and difficulties, and accessibility to care. Detailed analysis of data was carried out considering the aforementioned as they relate to patients' satisfaction (the patient-doctor relationship and consultation outcome as an indication of patients' satisfaction), barriers and difficulties to access, staff services, and financial services.

Demography – Patients' age and gender

Age and gender of patients were investigated to determine the demography of those accessing primary health care facilities in Ado-Ekiti. It was noted from the basic descriptive analysis in the result that more patients of age group, 18 to 28, were accessing the health care facilities more than other age groups that were included in the study. The result also showed that females were identified as accessing the facilities much more than males. Essentially, these findings are in line with the objectives of the primary health care that seek to address, among other public health related issues, maternal and child health as contained in the 1978 declaration of the international conference on primary health care in Alma Ata (WHO, 2011).

The age group (18 to 28) falls within the high reproductive age group (WHO, 2007), and it was identified to have the highest frequency in terms of those who access primary health care facilities. Similarly, females of the same age range were reported to be accessing primary health care facilities more than males of the same age group. These findings were also supported by Phaswana-Mafuya, Peltzer, and Davids, (2002) who reported 75 percent females who access PHC facilities in three selected Districts of the Eastern Cape, South Africa. Additionally, they noted that 69.4 percent were in the reproductive age group.

Patients' satisfaction with primary health care facilities

This research considered patient-doctor relationship and consultation outcome (with a focus on the improvement in physical and mental state after a visit to the doctor) as a proxy to patient satisfaction. Importantly, patient satisfaction has been researched as a dependent variable in some studies and independent variable in others (Fiedler, 1981). The present study that sought for a determination of the factors that affect patient access to primary health care facilities in Ado-Ekiti, Nigeria, utilised the idea of patient satisfaction as a dependent variable. It is worth noting that various taxonomies as regards major satisfaction dimensions have been suggested in literature. Ware et al (1975) pointed out various dimensions in patient satisfaction which include accessibility and/or convenience, art of care i.e. the amount of caring or humaneness shown to patients, financial issues, efficacy and/or outcomes of care. Patient satisfaction in this study stems from efficacy and/or outcomes of care. In this regard, 'improvement in physical and mental state after the visit to the doctor' was deemed fit as a dependent variable that was useful in assessing patient satisfaction. The independent or predictor variables used in this analysis were 'the doctor empathized with my situation' (Table 2), 'the doctor listened to me willingly and until the end' (Table 3) and 'I had difficulty asking the doctor questions' (Table 4).

'The doctor empathized with my situation' was found to have Fisher's Exact test of 88.3, $p<0.001$. This finding suggests statistically significant relationship between 'the doctor empathized with my situation' and 'improvement in physical and mental state after the visit to the doctor'. Also, 'the doctor listened to me willingly and until the end' has a Fisher's Exact test of 44.9, $p<0.001$, while 'I had difficulty asking the doctor question' has a Fisher's Exact test of 0.51, $p<0.05$. Both results are statistically significant findings. In comparison with the present study, Abiodun (2010) found a strong positive relationship between satisfaction and empathy. This was also supported by Bein (2011) who found that empathy, as part of patient-centred care, has a very high tendency in influencing the outcome of doctor-patient relationship.

Marcinowicz et al (2010) reported a positive association between satisfaction and access to care, and observed that patient-doctor relationship was a key element in describing consultation outcome and subsequently access to primary health care. A similar finding was made by Steine, Finset and Laerum (2001) while researching on a related study in far away Norway.

Staff services

This study assessed the above issue as 'were the nurses nice and polite during registration?' (attitude of staff) in the given sample. Also, 'did you have to wait too long in the waiting room for your visit?' (waiting too long) was employed to determine patient experience of PHC. Both issues are functions of health care access (Segen, 2002).

The statistical analysis of attitude of staff revealed a Fisher's Exact test of 7.8, $p<0.01$(Table 5) which is statistically significant. There is also a positive association between extended wait and 'appointment to a doctor' (Fisher's Exact test was 17.4, $p<0.001$). This is supported by the study carried out by Sanmartin and Ross (2006). The present result on the 'attitude of staff' is in line with a previous research that reported 'attitude of staff' as having a great impact on access to health care facilities (Calnan et al, 1994; Lochman, 1983; Ntabaye, Scheutz, and Poulsen, 1998 and Robbins et al, 1993). Masatu, Klepp and Kvale (2001) reported a positive association between attitude of staff and access to health care, although this was indirectly reported for interpersonal skills and patient satisfaction.

The attitude of staff which was one of the major focuses in this study used the nurses' attitude as a yardstick to determine its impact on access to health care. It is known that an important aspect of positive nursing entails "directly inoculating the work atmosphere with a productive and cheerful character" (Gaddis, 2011:p.1), ultimately serving as a proxy to availability of health care personnel which is a function of health care access (Segen, 2002). A qualitative research method that will probe the 'attitude of staff' further is likely to improve the understanding of the association between attitude of staff and access to health care facilities. On the aspect of extended wait by patient, this study recorded a statistically significant finding ($p<0.001$). This is supported by Sanmartin and Ross (2006) who observed that long wait times are the major difficulties patients are facing accessing urgent care.

Financial services, barriers, difficulties and accessibility to primary health care

Financial services were investigated in line with the barriers and difficulties they may cause. 'Financial restraints' was employed to determine its impact on patients' experience of PHC, and subsequently, health care access. There is statistically significant relationship between financial restraints to access and 'appointment to a doctor' (Fisher's Exact test was 12.4, $p<0.001$). The present study revealed that paying for treatment did not deter people from making appointment to see the doctors, and hence, did not affect access to care. This finding was supported by Litvack and Bodart (1993) who researched on user fees but in conjunction with quality of care in improving health care access in Cameroon. Although the study lent some support to the impact of user fees to access, but a remarkable finding was that contrary to previous studies that reported severe negative impact of increasing user fees on poor population, they found that the probability of the poorest part seeking care tend to increase (when drugs are made available locally) at a rate which is greater than the rest of the population (Litvack and Bodart, 1993).

Additionally, in countries where there are improved and better organised health care funding and insurance services (e.g. in the UK) the burden of financial services becomes greatly reduced thereby improving access (Kontopantelis, Roland and Reeves, 2010). Nevertheless, other factors such as employment status and location of practice are major predictors of access in developed world (Kontopantelis, Roland and Reeves, 2010). For instance, patients who are more likely to take time off work to visit their doctor show more positive experience and satisfaction with access to care than those who have to commute for more than an hour from work to health care facilities (Kontopantelis, Roland and Reeves, 2010).

CONCLUSION

'Empathy' (the doctor empathized with my situation) was the only significant and predictive variable that showed statistically significant association with 'my physical and mental state improved after the visit to the doctor' even after accounting for confounding factors. Also, 'Nurses nice and polite' was the only significant variable that showed statistically significant association with 'appointment to the doctor' after accounting for confounding factors. Therefore, strategies that target improvement in patients' experience of PHC, and subsequently, access to PHC facilities should be directed to sensitive issues relating to 'empathy' and 'attitude of staff' in Ado-Ekiti, Nigeria.

Recommendations

The input into the present study has undoubtedly left us with the fact that reduced access to PHC facilities may not be blamed on patients' financial predicament alone, but other more serious factors may exist that were not investigated in the present study. To this end, it is recommended that;

Future studies should target qualitative research method to determine the degree of the impact of 'empathy' and 'attitude of staff' on patients' experience of PHC in a typical Nigerian setting like Ado-Ekiti.

More effort should be made to improve patient-centred care which will, ultimately, improve patients' experience of PHC.

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REFERENCES

1. Abdulraheem, I., Olapipo, A., and Amodu, M. (2012) 'Primary health care services in Nigeria: Critical issues and strategies for enhancing the use by the rural communities', [Online]. Available from: www.academicjournals.org/jphe (Accessed: 24 July 2012).
2. Abiodun, A. 'Patients' Satisfaction with Quality Attributes of Primary Health Care Services in Nigeria', Journal of Health Management, 2010; 12(1): 39-54 [Online]. Available from: http://jhm.sagepub.com/content/12/1/39.full.pdf+html (Accessed: 16 June 2011).
3. Anisulowo, T. (2010) 'Ekiti: Land of abandoned projects?', The Nation,[Online]. Available from: http://thenationonlineng.net/web2/articles/34550/1/Ekiti-Land-of-abandoned-projects/Page1.html (Accessed: 16 May 2011).
4. AQR (2011) 'Pilot Study – definition', [Online]. Available from: http://www.aqr.org.uk/glossary/?term=pilotstudy (Accessed: 19 August 2011).
5. Atting, I and Egwu, I. 'Indicators of Accessibility to Primary Health Care Coverage in Rural Odukpani Nigeria' Asia Pac J Public Health, July, 1991; 5(3): 211-216. [Online]. Available from: http://aph.sagepub.com/content/5/3/211. (Accessed: 12 June 2011).
6. Baird, K. (2010) 'Want a better experience? Start with a clear definition', [Online]. Available from: http://baird-group.com/blog/want-a-better-patient-experience-start-with-a-clear-definition(Accessed: 9 September 2012).
7. Bein, B. (2011) 'Empathy is 'powerful tool' in improving patient outcomes, say family physicians', AAFPNewsNow, [Online]. Available from: http://www.aafp.org/online/en/home/publications/news/news-now/professional-issues/20110323physempathy.html (Accessed: 13 September 2012).
8. Beyond Philosophy (2011) 'Patient Experience Excellence; What is patient experience?', [Online]. Available from: http://www.beyondphilosophy.com/patient-experience-excellence (Accessed: 8 September 2012).
9. Brown, S. (2011) 'Decision points for Correlation Coefficient' [Online]. Available from: http://www.tc3.edu/instruct/sbrown/stat/decpts.htm (Accessed: 12 August 2011).
10. Bruce, N., Pope, D., & Stanistreet, D., (2008) Quantitative Methods for Health Research: A Practical Interactive Guide to Epidemiology and Statistics. England: John Wiley & Sons Ltd.
11. Calnan, M., Katsouyiannopoulos, V., Ovcharov, V., et al. 'Major determinants of consumer satisfaction with primary care in different health systems'. Family Practice, 1994; 11: 468 –78.
12. Charles, C. and DeMaio, S. (1993) 'Lay Participation in Health care decision making: A conceptual framework', Journal of health politics, policy and Law, [Online]. Available from: http://reference.kfupm.edu.sa/content/l/a/lay_participation_in_health_care_decisio_65393.pdf (Accessed: 13 September 2012).
13. Coulter, A., Fitzpatrick, R. and Cornwell, J. (2009) 'The Point of Care. Measures of patients' experience in hospital; purpose, methods and uses', [Online]. Available from: www.kingsfund.org.uk (Accessed: 15 July 2012).
14. DHS (2003) 'Nigerian Demographic and Health Survey; Nigeria HIV synthesis report.doc', [Online]. Available from:http://docs.google.com/viewer?a=v&q=cache:oYOipJHsSdMJ:www.naca.gov.ng/index2.php%3Foption%3Dcom_docman%26task%3Ddoc_view%26gid%3D16%26Itemid%3D99999999+DHS+2003&hl=en&gl=ng&pid=bl&srcid=ADGEESgy53Zdq6uBgzIfP_56LGTmJ5SH3JaghYWSJv6UkrlxnCuqLBKC2HAUgT8kpqQVtxOZc7SexXunvWNIc5OZp-4rkmu9i_6KQOBxz_2UTa5nzSRJL3R8piJfWMpkkQHyKu_aw2as&sig=AHIEtbThIP84FwBfjxRU1SllyGvYlksmeQ (Accessed: 11 January 2011).
15. Fagbemi, S. (2011) 'Health Insurance Scheme to capture informal sector – NHIS Director', [Online]. Available from: http://tribune.com.ng/index.php/labour-today/30584-health-insurance-scheme-to-capture-informal-sector--nhis-director ((Accessed: 30 June 2012).
16. Federal Government Nigeria (2011) 'Population by Local Government Area and Sex', [Online]. Available from: http://www.population.gov.ng/state/ekitifinal.pdf (Accessed: 16 May 2011).
17. Fiedler, J. 'A review of the literature on access and utilisation of medical care with special emphasis on rural primary care', Soc. Sc. and Med., 1981; 15c: 129 to 142.
18. Gaddis, S. (2011) 'The Power of Positive Nursing', [Online]. Available from: http://docs.google.com/viewer?a=v&q=cache:nlu9-8pkkOIJ:www.communicationsdoctor.com/articles/positivenurse.pdf+Nursing+positive+effect&hl=en&gl=ng&pid=bl&srcid=ADGEEShZTOdJbhpBS7OGIvtCkaqOzTY0SHqJ33yH_hA-6Gtd_Zza2i1fU-IEd8wXKQqvZLv0pqZfTPeR9zoWR5SvimCpZc56WM7Dbyvc6N4Xf6I6FBvE3mt2mrcxmB-LCDSNHsVtK27S&sig=AHIEtbQvj4x3AJ0-nDwPbyk0gTo_NEWkag (Accessed: 18 August 2011).
19. Green, J. & Thorogood, N. (2009) Qualitative Methods for Health Research, 2nd ed, London: SAGE publications Ltd.

20. Harris, B., Goudge, J., Ataguba, J., McIntyre, D., Nxumalo, N., Jikwana, S., and Chersich, M. (2011) 'Inequality in access to health care in South Africa', [Online]. Available from: http://www.palgravejournals.com/jphp/journal/v32/n1s/pdf/jphp201135a.pdf (Accessed: 25 July 2012).
21. Inem, V. (2011) 'Financing Of Primary Health Care System In Nigeria'. [Online]. Available from: http://www.serac.org/Publications/Financing%20Of%20Primary%20Health%20Care%20System%20In%20Nigeria.pdf (Accessed: 16 June 2011).
22. Kelly, M. and Charlton, B. (1995) The Modern and Postmodern in Health Promotion, In: Bunton, R., Nettleton, S. and Burrow, R. (Ed). The Sociology of Health Promotion. London: Routledge.
23. Kontopantelis, E., Roland, M. and Reeves, D. (2010) 'Patient experience of access to primary care: identification of predictors in a national patient survey', [Online]. Available from: http://www.biomedcentral.com/1471-2296/11/61 (Accessed: 11 January 2011).
24. Leo, R. (2010) 'Nigeria: Empowering Youths to improve the Health indices', African Conflict and Peacebuilding Review, [Online]. Available from: http://allafrican.com/stories/201006150561.html (Accessed: 16 May 2011).
25. Lewis, S. (2009) 'Patient-centred care: An introduction to what it is and how to achieve it'. A discussion paper for the Saskatchewan Ministry of Health, [Online]. Available from; http://www.changefoundation.ca/docs/patient-centred-care-intro.pdf (Accessed: 13 September 2012).
26. Litvack, J. and Bodart, C. 'User fees plus quality equals improved access to health care: Results of a field experiment in Cameroon', Soc. Sc. Med., 1993; 37(3): 369-383.
27. Lochman J. 'Factors related to patients' satisfaction with their medical care', Journal Community Health, 1983; 9: 91-109.
28. Marcinowicz, L., Rybaczuk, M., Grebowski, R., and Chlabicz, S. (2010) 'A short questionnaire for measuring the quality of patient visits to family practices', [Online]. Available from: http://intqhc.oxfordjournals.org/content/early/2010/06/12/intqhc.mzq034.full.pdf+html (Accessed: 11 January 2010).
29. Masatu, M., Klepp, K., and Kvale, G. 'Use of Health Services and Reported Satisfaction Among Primary School Adolescents in Arusha, Tanzania', Journal of Adolescent Health, 2001; 28: 278-287.
30. Masiye, F., Chitah, B., Chanda, P., and Simeo, F. (2008) 'Removal of user fees at Primary Health Care facilities in Zambia: A study of the effects on utilisation and quality of care', [Online]. Available from: http://www.equinetafrica.org/bibl/docs/Dis57FINchitah.pdf (Accessed: 11 January 2011).
31. Ministry of Health (2011) Primary Health Care Facilities in Ado-Ekiti. Ado-Ekiti: MOH.
32. Naidoo, J. and Wills, J. Foundations for Health promotion, Public health and health promotion practice, 3rd ed, 2009; 305. China: Bailliere Tindall Elsevier.
33. NairaLand.Com (2009) 'Nigeria – 'The Most Populous Black Nation In The World', [Online]. Available from: http://www.nairaland.com/nigeria/topic-246997.0.html (Accessed: 7 June 2011).
34. National Health Insurance Scheme (2012) 'NHIS Programme; Formal sector',[Online]. Available from: http://www.nhis.gov.ng/index.php?option=com_content&view=article&catid=36%3Anhis-programs&id=54%3Aformal-sector&Itemid=57(Accessed:30 June 2011).
35. National Health Service (2009) 'NHS Choices Information', [Online]. Available from: http://www.nhs.uk/NHSEngland/thenhs/about/Pages/overview.aspx (Accessed: 7 June 2011).
36. National Population Commission Nigeria (2012) 'Data for National Development', [Online]. Available from: http://www.population.gov.ng/ (Accessed: 13 September 2012).
37. Neuman, L. (2000) Social Research Methods: Qualitative and Quantitative Approaches, Sydney: Allyn and Bacon.
38. Nigerian Academy of Science (2010) 'Primary Health Care System', [Online]. Available from: http://www.nas.org.ng/index.php?option=com_rokdownloads&view=file&task=download&id=13%3Aeffective-primary-health1&Itemid=14. (Accessed: 18 May 2011).
39. Ntabaye, M., Scheutz, F., and Poulsen, S. 'Patient satisfaction with oral health care in rural Tanzania', Community Dent OralEpidemiol, 1998; 26: 289-295.
40. Odebiyi, A. and Olabisi, I. (n.d.) 'Alternative modes for financing higher education in Nigeria and implications for university governance', [Online]. Available from: http://docs.google.com/viewer?a=v&q=cache:hlcCYMfPpjQJ:www2.aau.org/studyprogram/notpub/odebaina.pdf+abandoned+project+research+Ekiti&hl=en&gl=ng&pid=bl&srcid=ADGEESg3QgpeoX3I3KR17jqdL1WKGmBQAZm1l3x7sPLiEBzFMOP51T5yI1dxP-agS1vmiwtnNttbaf_zjGcXxvIjct_kUllHtfQYdMngtCvHds-Ir0hJuoIge3ciufaKYybSQYbHnHS&sig=AHIEtbTRN5N_-KGBuYhweJnFfrT6BvfoGQ. (Accessed: 16 May 2011).
41. Pallant, J. Statistical Package for Social Sciences, survival manual, 3rd ed, 2007; 132. Berkshire: Open University Press.
42. Phaswana-Mafuya, N, Peltzer, K, and Davids, AS (2002) 'Patients" perception of primary health care services in the Eastern Cape, South Africa', African Journal for Physical, Health Education, Recreation and Dance, [Online]. Available from:

http://www.ajol.info/index.php/ajpherd/article/view/71102 (Accessed: 6 February 2013).

43. Rabiu, R. (2010) 'Why primary healthcare must be enhanced', Daily Trust [Online]. Available from: http://www.news.dailytrust.com/index.php?option=com_content&view=article&id=13180:why-primary-healthcare-must-be-enhanced&catid=22:health-report&Itemid=124 (Accessed: 11 January 2011).
44. Robbins, J., Bertakis, K., Helms, L., et al. 'The influence of physician practice behaviors on patient satisfaction'. Family Medicine, 1993; 25: 17–20.
45. Sanmartin, C., Gendron, F., Berthelot, J. and Murphy, K. Access to Health Care Services in Canada, 2003. Ottawa: Statistics Canada Cat. 2004; 82-575-XIE.
46. Sanmartin, C. and Ross, N. (2005) 'Experiencing Difficulties Accessing First-Contact Health Services in Canada', [Online]. Available from: http://www.longwoods.com/content/17882 (Accessed: 25 January 2011).
47. Segen, J. (2002) 'Health care access', McGraw-Hill Concise Dictionary of Modern Medicine, [Online]. Available from: http://medical-dictionary.thefreedictionary.com/health+care+access (Accessed: 20 May 2011).
48. The Library of Congress Country Studies (2005) 'Nigeria Primary Health Care Policies', [Online]. Available from: http://www.photius.com/countries/nigeria/society/nigeria_society_primary_health_care_~10006.html (Accessed: 10 January 2011).
49. The Punch (2009) 'Nigeria now has one doctor to 4,000 patients —LUTH CMD', [Online]. Available from: http://www.punchng.com/Articl.aspx?theartic=Art20091015338968 (Accessed: 20 May 2011).
50. UNICEF (2011) 'At a glance: Nigeria', Statistics', [Online]. Available from: http://www.unicef.org/infobycountry/Nigeria_statistics.html (Accessed: 16 May 2011).
51. University of Liverpool/Laureate Online Education (2010) Advanced Epidemiology and Statistics, SPSS for Windows V16 Practical Course in Quantitative Data Analysis, [Online]. Available from: University of Liverpool/Laureate Online Education VLE (Accessed: 16 May 2011).
52. University of Liverpool/Laureate Online Education (2010) Lecture Notes on Quantitative Method, 'RESSPT, [Online]. Available from: University of Liverpool/Laureate Online Education VLE (Accessed: 24 January 2011).
53. Uzondu, J. (2011) 'Stalling Healthcare Delivery', Nigerian Newsworld, [Online]. Available from: http://www.nigeriannewsworld.com/content/stalling-healthcare-delivery (Accessed: 24 July 2012).
54. Ware, J., Davies-Avery, A. and Stewart, A. (1978) 'The Measurement and Meaning of patient satisfaction', Health Med. Care Service Rev. [Online]. Available from: http://www.ncbi.nlm.nih.gov/pubmed/10297474 (Accessed: 17 August 2011).
55. Webster, L. (2010) 'Exploring Research Methodologies: Positivism and Interpretivism', p.1, [Online]. Available from:http://www.essaysforstudent.com/essay/Exploring-Research-Methodologies-Positivism-Interpretivism/64242.html (Accessed: 8 January 2011).
56. World Health Organisation (1992) International Statistical Classification of Diseases and Related Health Problems, ICD-10, an updated version for 2007, 10th revision. Geneva: WHO publication.
57. World Health Organization (2007) Maternal mortality in 2005. Estimates Developed by WHO, UNICEF, UNFPA and the World Bank. Geneva: WHO publication.
58. World Health Organisation (2011) 'Declaration of Alma-Ata; International Conference on Primary Health Care, Alma- Ata, USSR, September 1978; 6-12: 1, [Online]. Available from: http://www.who.int/topics/primary_health_care/en/ (Accessed: 20 May 2011).
59. World Health Organisation (2011) 'Gender, Women and Health; Why gender and health?' [Online]. Available from: http://www.who.int/gender/genderandhealth/en/index.html (Accessed: 21 August 2011).
60. World Health Organisation (2012) 'The World Health Report 2008; Primary Health Care (Now more than ever)', [Online]. Available from: http://www.who.int/whr/2008/en/ (Accessed: 8 September 2012).