# CLIENT SATISFACTION AND QUALITY OF FAMILY PLANNING SERVICES: A COMPARATIVE STUDY OF PUBLIC AND PRIVATE FACILITIES IN LAGOS, NIGERIA

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# ABSTRACT

Client satisfaction and quality of care of family planning services affect contraceptive uptake and continued usage of method. The study aimed to determine and compare client satisfaction with quality of family planning services between public and private health facilities in an urban area of Lagos, Nigeria.

A cross sectional study was carried out among consecutively recruited 240 women accessing family planning services in July 2013 at public and private health facilities (120 per facility). Data collection was done with exit interview, client-provider interaction and facility audit questionnaires from measure evaluation. Data was analyzed with epi-info and level of significance was set at 5% (p<0.05).

*Major findings include:* (public vs private) mean age was  $35.5\pm5.5$  years vs  $37.9\pm7.5$  years; mean waiting time (minutes),  $24.8\pm11.7$  vs  $48.7\pm17.8$  (p<0.001). Statistically significant differences were observed in perceived long waiting time, (12.5%, 15/120) vs (30%, 36/120) (p<0.001); active participation, (95.8%, 115/120) vs (100%, 120/120) (p=0.020); client received method of choice, (66.3%, 56/80) vs (72.3, 60/83) (p=0.010). Overall, private provider clients were better satisfied with services (93%, 112/120) than clients in the public facility (88%, 105/120) (p<0.001).

The private provider clients were better satisfied with services. Training of public providers on interpersonal relationship, counseling and communication skills is recommended. Private providers should implement strategies to reduce waiting time.

KEY WORDS: Client satisfaction, Quality of care, Family Planning, Nigeria

# **INTRODUCTION**

Client satisfaction is the differences between the expected service and the experience of the service from the point of view of the client. Across the globe, understanding and measuring client satisfaction has become a vital part of hospital/clinic management strategies. Moreover, in most countries quality assurance and accreditation process requires a regular measurement of client satisfaction (Matthew et al, 2001).

A study done to assess the interpersonal and organization dimension of client satisfaction revealed that satisfaction influences whether a person seeks medical advice, complies

with treatment and maintains a continuing relationship with practitioners (Westaway et al, 2003). A leading theorist in the area of quality assurance has emphasized that client satisfaction is of fundamental importance as a measure of the quality of care because it gives information on the provider's success at meeting those client values and expectations, which are matters on which the client is the ultimate authority (Donabedian, 1988).

Quality of care is a key component of health care delivery and therefore has an important bearing on client satisfaction. Client satisfaction is a major factor that will determine whether a client will seek medical care and also adhere to a prescribed treatment. Dissatisfaction with health services may result in patients/clients not adhering to treatment regimens and follow up appointments. They may even spread negative information based on their perception to discourage people from using a health service (Andaleeb et al, 2007).

Several factors such as low level of knowledge, low quality of services including nonavailability of contraceptive commodities, poor attitude of service providers, and low status of women are reported responsible for low utilization of family planning services in Nigeria (NPC, 2000). Hence, the need for continuous monitoring of quality of care should be based on clients' satisfaction and perception of quality of care (FMOH, 2004). The total fertility rate in Nigeria is 5.7 and the contraceptive prevalence is still low with a high unmet need for FP (NPC, 2009). The quality of care and level of satisfaction may thus help women who want to prevent pregnancy but are uncertain about the use of contraceptives (Jain, 1989).

Studies have shown that one principal determinant of uptake and continued utilization of family planning services is overall client satisfaction with those services (Jain, 1989, Mensch et al, 1996, Mariko, 2003, Williams et al, 2000). Studies of contraceptive discontinuation rates have indicated that - with the exception of the desire to become pregnant, the principal reason for discontinuation is dissatisfaction with the quality of services (Blanc et al, 2002). Clients of private facilities are usually better satisfied than clients in public facilities (Jitta et al, 2008, Hutchinson et al, 2011, Agha et al, 2009) even when the technical quality of care provided are the same (Hutchinson et al, 2011, Agha et al, 2009).

Higher levels of quality are likely to result in higher levels of client satisfaction but it is important to determine any possible difference in quality of care between private and public health facilities and which of these aspects of quality are more vital for achieving higher client satisfaction. Thus the aim of this study, which was to determine and compare client satisfaction and quality of family planning services between a public and private health facility with large clientele base in Lagos, Nigeria.

# MATERIALS AND METHODS

#### STUDY SITES AND SETTING

The study was conducted in Oshodi-Isolo LGA, Lagos State, Nigeria. At the 2006 Census it had a population of 621,509 people, and an area of 45 square kilometres (Osodi-Isolo LGA, 2013). Existing public health facilities in the LGA include a general hospital, i.e. the Isolo General Hospital and 12 Primary Health care Centers (HEFAMAA, 2013). In addition, some Non-Governmental Organizations, agencies, and charity groups also established health facilities providing varying degrees of health services. The two health facilities studied were Isolo General Hospital which is a public facility and Planned Parenthood Federation of Nigeria (PPFN) which is a private facility. PPFN is a not-forprofit organization established over 25 years ago. It is one of the country's most experienced Sexual and Reproductive health (SRH) organization. Nationally, it delivers around 10% of all family planning services. At Isolo-Oshodi LGA, where their main office is situated, it offers family planning services to about 450 clients monthly. Isolo General Hospital provides family planning services to about 350 clients monthly. Both were purposively chosen because they serve majority of the family planning clients in Oshodi-Isolo LGA, thereby serving as a large pool of desired respondents. A comparative, cross-sectional study was carried out among women accessing family planning services in July 2013 at these two centres. Only women who came solely for family planning services were included, those who came for other maternity services like ante natal care were excluded.

Using the formula for comparing two independent groups, an initial minimum sample size of 94 respondents was calculated using the following parameters; statistical power (80%); 95% confidence interval; satisfaction rates of 46.9%(public) and 63.6%(private) (Hutchinson et al, 2011). However, 120 women were subsequently interviewed in each facility to allow for 10 % non-response rate, hence giving a total sample size of 240.The respondents were interviewed consecutively until the sample size was achieved.

## DATA COLLECTION TOOLS AND PROCEDURE

A structured interviewer-administered exit client questionnaire, facility Audit and clientprovider interaction observation tools adapted from MEASURE Evaluation QIQ were used for data collection (MEASURE Evaluation, 2001). The Facility Audit was used to determine the readiness of a facility to deliver services; the observation of the Client-Provider Interaction (CPI) provided information about the exchange between the client and the provider from the perspective of a clinician; and the Client Exit Interview provided information about the quality of services received from the clients' perspective ie the clients' experiences. Four research assistants collected data using the facility survey and client exit interview. One hundred and twenty client exit interviews were conducted for each facility, making a total of two hundred and forty respondents. The interviews were conducted privately and not within ear shot of service providers so as to ensure un-

biased responses. The principal researcher conducted the Facility Audit and an external nurse with training on providing family planning services conducted the non-participant client – provider interaction observation on 20 clients at each center.

The research instruments were pretested at similar public and private facilities both in an urban area of Lagos. Ten client exit interviews and one client-provider observations were conducted at each facility. Slight adjustments were made before actual study.

## DATA MANAGEMENT

Data analysis was done with Epi-Info 3.5.1 version software package. Frequencies, percentages and means were calculated. Inferential statistics using chi square and t-tests were done and a significance level of 5 % was set (p < 0.05).

## ETHICAL CONSIDERATIONS

Ethical approval was obtained from the Health Research and Ethics Committee of the Lagos University Teaching Hospital. Permission was also obtained from medical directors of the two selected centers. Respondents gave informed written consent before interview and client confidentiality was ensured as the questionnaires were anonymous.

## RESULTS

## SOCIO-DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

A total of 240 respondents were interviewed for the study, one hundred and twenty from each health facility. Respondents in private facility were older than respondent in public facility with mean age of 35.5(5.5) years (public) and 37.9(7.5) years (private). The difference was statistically significant (p<0.001). Respondents in public center were better educated than respondents at private center with 96.7% (116/120) of them with post primary educated compared with 89.2% (107/120) in private center. Almost all the respondents 99% (119/120) in public center were married compared to 93% (112/120) in private center. Respondents at both centers have same median number of living children as 3. The difference observed was statistically significant (p=0.010). Although about one third of respondents, 29.2% (35/120) desired to have another child in the future at both centers, however, more respondents 41% (23/56) at public center will like to wait for more than 2 years before having another child compared to 18.4 % (7/38) of the respondents at private center. (Table 1)

## **CONTRACEPTIVE METHODS RECEIVED BY RESPONDENTS**

At the public center, 65.8%, 79/120 received their method of choice and at the private center, 70%, 84/120 received their method of choice. The rest were either told their method of choice was in-appropriate for them or they just came for counseling and education on the various methods. At the public center, the most common methods amongst new clients were implant (41.2%, 14/79) and intra uterine device (IUD) (29.4%, 10/34) while at the private center, they were IUD (34.6%, 9/26) and injectables (26.9%,

7/26). For the re-visit clients, common methods were injectables and pills at both centers. (Table 2)

# WAITING TIME IN FACILITIES

The mean waiting time ie time taken from client presentation at the registration point until consultation (minutes) in private center 48.7(17.8) was significantly longer than the waiting time in public center 24.8(11.7). Waiting time for 56.7% (68/120) of the respondents in the public center was less than 30 minutes as against only 7.5% (9) in the private center. (Table 3)

# CLIENT SATISFACTION AND QUALITY OF FAMILY PLANNING RENDERED

More respondents 87.5% (105/120) at public center reported satisfaction with the waiting time than respondents 70% (84/120) in private center. The private facility was rated better in maintenance of privacy and treatment by other staff than the public facility. (Table 4)

Perceived clients' rating of the indicators of quality of family planning services showed that private center was rated better than public center in various aspects like provider discussing STI/AIDS (p=0.020), good treatment of client by other staff (p=0.020) and active participation of clients in discussion p=0.020 and clients receiving their method of choice (p=0.010). Public centre was rated significantly better in asking clients about reproductive intentions (p<0.001) and having an acceptable waiting time (p<0.001) (Table 5)

The indicators observed during client-provider interaction showed that providers in both centers did not differ significantly in communication skills, information discussed and following clinical procedures for injectables, pelvic examination and IUD insertion. (Table 6)

With regards to facility readiness to offer quality FP services, the public facility did not have mechanisms to make programmatic changes based on client feedback, had not received a supervisory visit in the past six months prior to study and did not have clinical guidelines. The private facility did not have acceptable waiting time ie less than 30 minutes. (Table 7)

Table 1: Soc	ial demographic a	and reproductive	<b>characteristics</b>	of respondents
Variable	Public	Private	Statistic	p-value
	n=120	n=120		
	Freq (%)	Freq (%)		

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Age(years)				
20-29	13(10.8)	20(16.6)		
30-39	81(67.5)	47(39.2)		
40-49	26(21.7)	45(37.5)		
50-59	0(0)	8(6.7)		
Mean no± SD	35.5(5.5)	37.9(7.5)	t-stat=0.86	p<0.001*
Marital status				
Married	119(99.2)	112(93.3)	$x^2 = 5.66$	p=0.020*
Single	1(0.8)	8(6.7)	λ 0100	P 0.020
8				
<b>Educational Status</b> Primary				
Secondary	4(3.3)	13(10.8)	$x^2 = 5.62$	p=0.060
Higher	64(53.4)	54(45.0)	K	•
0	52(43.3)	53(44.2)		
No of children				
0-4	109(90.8)	95(79.2)	t-stat=1.64	p=0.010*
>5	11(9.2)	25(20.8)		I ····
Median	3	3		
Desire For More				
Children				
Yes	35(29.2)	35(29.2)	$x^2 = 15.72$	p<0.001*
No	64(53.3)	82(68.3)	k -13.72	P \0.001
Don't know	21(17.5)	3(2.5)		
S		- 29		
Spacing for next	n=36	n=38		
	22(41,1)	12(21.6)	2-11 77	n-0.002*
≥∠years	23(41.1)	12(31.0)	χ=11.//	p=0.003*
>2 years	23(41.1) 10(17.8)	/(18.4)		
DOI: UKIIOW	10(17.8)	19(30.0)		

\*Statistically significant

Methods received	Public	Private	
	n=79	n=84	
	Freq (%)	<b>Freq (%)</b>	
New Clients	n=34	n=26	
Pills	3(8.8)	5(19.2)	
IUD	10(29.4)	9(34.6)	
Injectable	6(17.6)	7(27.0)	
Norplant	14(41.2)	5(19.2)	
Condom	1(3)	0(0)	
<b>Re-Visit Clients</b>	n=45	n=58	
Pills	7(15.6)	14(24.1)	
IUD	4(8.9)	2(3.5)	
Injectable	28(62.2)	39(67.2)	
Norplant	4(8.9)	3(5.2)	
Condom	2(4.4)	0(0)	

# **Table 3: Waiting time in facilities**

Variable	Public n=120 Freq (%)	Private n=120 Freq (%)	Statistic	p-value
Waiting time(minutes)	1104(70)	1104(70)		
<30	68(56.7)	9(7.5)		
30-60	50(41.7)	69(57.5)		
61-90	2(1.6)	33(27.5)		
>90	0(0)	9(7.5)	t-stat=3.29	p<0.001*
Mean waiting time	24.8(11.7)	48.6(17.8)		

# Table 4: Respondent's rating of the clinics

Variables	Public n=120 Freq (%)	Private n=120 Freq (%)	Statistics	p-value
Perception of waiting	time			
Short	10(8.3)	1(0.8)	$\chi^2 = 16.82$	p<0.001*
Moderate	95(79.2)	83(69.2)		-
Long	15(12.5)	36(30.0)		
Privacy maintained				
Yes	115(95.8)	117(97.5)	$\chi^2 = 0.52$	p=0.470
No	5(4.2)	3(2.5)		
Treatment by other St	aff			
Very well	4(3.3)	9(7.5)	$\chi^2 = 52.77$	p<0.001*
Well	73(60.8)	111(92.5)		_
Not well	43(35.8)	0(0)		

\*statistically significant

Table 5: St	immary of indicators of	quality of family	planning se	rvices as	perceived
by	respondents				
				2	

Variables	Public n=120 Freq (%)	Private n=120 Freq (%)	χ <sup>2</sup>	p-value
Provider				
Asked client about reproductive intensions	110(91.7)	84(70.0)	18.57	p<0.001*
Mentioned STI/AIDS (initiates or responds)	29(24.2)	51(42.5)	12.46	p=0.020*
Discussed Dual method use	20(16.7)	15(12.5)	2.56	p=0.460
Gave instruction on how the method accepted works	75(94.9)	81(97.6)	3.46	p=0.180
Gave instruction on when to return	118(98.3)	118(98.3)		
Asked clients if she has any problems (re-visit clients)	( <b>n=76</b> ) 72(94.7)	( <b>n=93</b> ) 81(87.1)	2.85	p=0.091
Other staff				
Treated client with dignity and respect	77(64.1)	120(100)	52.77	p<0.010*
<b>Client</b> Participated actively in discussion & selection of method (is empowered)	115(95.8)	120(100)	5.106	p=0.020*
Believed the provider will keep her	116(96.7)	119(99.2)	1.838	p=0.180
Received her method of choice	( <b>n=80</b> ) 56(66.3)	( <b>n=83</b> ) 60(72.3)	9.91	p=0.010*
Facility	115(05.9)	117(07.5)	0.517	- 0.470
Otters Privacy for clients	115(95.8)	11/(97.5)	0.517	p=0.470
Has acceptable waiting time	105(87.5)	84(70)	16.82	p<0.001*

\*Statistically significant

# Table 6: Summary of indicators of quality of family planning services as observed during client- provider interaction

Aspect of client provider interaction	Public	Private	χ <sup>2</sup>	Fisher's
	freq(%)	freq(%)		p value
Counseling and communication skills	18 (90)	19 (95)	0.36	1.000
Information discussed	18 (90)	19 (95)	0.36	1.000
Performed clinical procedures according to guidelines for	19 (95)	20 (100)	1.03	1.000
Injectable				
Performed clinical procedures according to guidelines for	18 (90)	19 (95)	0.36	1.000
pelvic examination				
Performed clinical procedures according to guidelines for	n=10	n=10	1.05	1.000
IUD insertion	9 (90)	10 (100)		

#### Table 7: Facility readiness to offer quality FP services

Variables	PUBLIC	PRIVATE
Had all approved methods; no stock outs*	YES	YES
Had basic items needed for delivery of methods available	YES	YES
Offered privacy for pelvic exam/IUD insertion	YES	YES
Had mechanisms to make programmatic changes based on client feedback	NO	YES
Had received a supervisory visit in the past six months	NO	YES
Had adequate storage of contraceptives and medicines (away from water, heat, direct sunlight) is on premise	YES	YES
Had clinical guidelines	NO	YES
Had acceptable waiting time (less than 30 minutes)	YES	NO
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\*Methods the facilities can perform especially non surgical methods

# DISCUSSION

From this study, clients' rating at private center was better than those at public center in most of the perceived measurable indicators such as client participation in selection of method, treatment by other clinic staff, and provider mentioning STI/AIDS during counseling. However, the public center was better with waiting time than private center.

Private respondents were older than public respondents with mean age of 37.9(7.5) years (private) and 35.5(5.5) years (public). Most women would have been married at this age and thus uptake of FP is expected to be higher. The current marital status of respondents in both facilities was in keeping with the reports of 2008 NDHS in which about 70% of women were either formally married or are living together (NPC, 2004).

Choice and continuous usage of contraceptives may be influenced by clients' family size and fertility intentions. The median number of children reported was 3 for both centers,

however one third of the respondent in both centers 29.2% (35/120) desired to have more children in future. This is in keeping with a study conducted in urban health facility where 29% of the FP clients desired to have more children in future (Kuyinu, 2005). This could infer that they came primarily for spacing.

In line with previous studies, about a quarter of FP clients were new (Williams, 2000). However, the contraceptive methods that clients received differed between new and revisit clients in both centers. The most frequently used methods were Implants and IUD (for new clients in the public centre) while it was injectables and IUD for new clients in the private centre. The most common for re-visit clients in both centres were injectables and pills. Use of pills and injectables require more frequent clinic visits for refill and shots of injections unlike the more long lasting methods like IUD and implant. It is a general belief that the long usage of injectables can cause delay in conception (Lacey, 1997), hence its popularity with re-visit clients who may have completed their family size. This finding however, differs from an earlier study carried out in Bangladesh which reported pills as the most commonly used method, followed by IUD and injectables (Hanifi et al, 2001). The pill was not popular among our respondents.

One of the important factors related to client perceptions is the waiting time for services. In most developing countries, a minimum package of health services has been developed for all levels of health care for both the private and the public sector. The average waiting time is recommended to be one hour but a larger study covering 3 African countries found that there is a significantly longer waiting time in public health facilities than private ones (Hutchinson et al, 2011).Contrary to this, our respondents in the public facility had significantly shorter waiting time than those in the private facility. This delay in the private facility resulted in dissatisfaction among their clients. It has been shown that reduction of waiting time to 30 minutes was more important to clients than prolongation of consultation times (Creel et al, 2002, Aldana et al, 2001). Higher stockout rates have also been reported in public facilities (Hutchinson et al, 2011) but in this study, a significantly higher proportion of respondents in the private facility did not receive their methods of choice. It may be that the desired methods were considered not suitable for them.

An important indicator for continuity of care is whether provider has methods to determine client opinion/feedback and gives instruction for follow–up (MEASURE Evaluation, 2001). Only the private centre had a method to determine client opinion and feedback through the use of Clients' suggestion box but providers at both centers equally discussed return visits. This will most likely increase subsequent utilization of service.

An important indicator for technical competence is provider counseling and communication skills, where the information exchanged between clients and providers is important. Private providers were perceived to have better client-provider interaction and

personal relations. This is in keeping with findings in a comparative study measuring client satisfaction and quality of FP services in public and private health facilities in Tanzania, Kenya and Ghana (Hutchinson et al, 2011). All respondents in the private facility testified that the staff treated them with respect and dignity and they felt very involved in discussions and decisions concerning their visit. Providers and other staff in the public facility should perhaps go an extra mile to be courteous to their clients at the possible expense of shorter waiting time. On technical and procedural terms, these two centres from observations, seemed to provide quality services equally for the procedures observed. Just like in Kenya, technical quality of care provided in both public and private facilities were similar and private providers were also better at managing interpersonal aspects of care. The authors noted that higher level of client satisfaction at private facilities could not be explained by differences between public and private facilities in structural and process aspects of care (Agha et al, 2009). It is then obvious that the clients' perception of what is quality and their satisfaction certainly has a personal undertone.

Indicators of "facility readiness" are used to determine the basic capacity of the facility to provide reproductive health services (MEASURE Evaluation, 2001). Private center having guidelines and supervisory monitoring demonstrate that accepted standards are in place more than the public centre but in another study, the public facilities had better management systems in place (Agha et, 2009). Acceptable procedures and practices are more likely to occur if clinic personnel are able to easily refer to the guidelines while supervisory visits remind staff of the need to maintain certain standards.

## **CONCLUSION**

Overall, client satisfaction in the private facility was significantly higher but the technical qualities in both centres were similar and good. The level of satisfaction with FP services offered in both health centres and perceived quality of care based on availability of commodity, observed physical condition of the facilities and providers' behaviors were high. Providers in private centre were rated better than their public counterparts in maintenance of privacy, treatment by other staff, confidentiality and active participation. These are important aspects of quality of care that increase uptake of family planning methods and continued usage of methods.

These facilities need to appropriate standards so as to include all basic elements of family planning service provision. Improved quality will increase uptake of FP methods which will benefit the health and well-being of women, families and the nation.

Effort to improve staff attitude in the public facility is recommended. Establishment of more family planning clinics by private organizations can help reduce work load, thereby reducing waiting time.

## STRENGTHS AND WEAKNESSES

This study adds to the body of knowledge on the subject matter especially in developing countries where there is dearth of data. Validated tools were used for data collection and centers which cater to the family planning needs of a large proportion of women in the study area were used. The results cannot be generalized to the State.

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## REFERENCES

- Agha S, Do M.(2009). The quality of family planning services and client satisfaction in the public and private sectors in Kenya. *Int J Qual Health Care*, **21**:87-96
- Aldana JM, Piechulek H, Ahmed A (2001). Client satisfaction and quality of health care in rural Bangladesh. *Bull of the World Health Organ*, **79**:512-517.
- Andaleeb S, Siddiqui N, Khandakar S (2007). Patient satisfaction with health services in Bangladesh. *Health Policy Plan*, **22**:263-273.
- Blanc AK, Curtis SL, Croft TN (2002). Monitoring contraceptive continuation: links to fertility outcomes and quality of care. *Stud FamPlann* ; **33**:127-140.
- Creel LC, Sass JV, Yinger NV (2002). Client-Centered Quality: Clients' Perspectives and Barriers to Receiving Care. *New Perspectives on Quality of Care*. New York. Population Council, 2
- Donabedian A (1988). The quality of care. How can it be assessed? J Am Med Assoc, **260**:1743-48.
- Federal Ministry of Health [FMOH] (2004).National Family Planning/Reproductive Health, Policy Guidelines and standard of Practice, Abuja, FMOH 2004.
- Hanifi SM, Bhuiya A (2001). Family planning services in a low performing areas of Bangladesh. Insights from field observations. J. Health PopulNutr, 19:209-214.
- Healthcare Facilities Monitoring and Accreditation Agency (HEFAMAA) 2013, Lagos State Ministry of Health, Alausa, Ikeja.
- Hutchinson P, Do M, Agha S (2011).Client Satisfaction and the Quality of Family Planning Services: A Comparative Analysis of Public and Private Health Facilities in Ghana, Kenya, and Tanzania. BMC Health Serv Res, 11:203 doi:10.1186/1472-6963-11-203
- Jain AK. (1989). Fertility reduction and the quality of family planning services. *Stud FamPlann*, **20**(1):1-16.
- Jitta J, Arube-Wani J, Muyiinda H (2008) Study of client satisfaction with health services in Uganda.*Int J Equity Health*, **9**:109-115.
- Kuyinu YA (2005).Clients' perception of quality of family planning services in urban and rural health facilities in Lagos State. Journal of Community Medicine and Primary Health Care, **221**:1-2.

- Lacey L, Adeyemi V, Adewuyi A (1997). A tool for monitoring the performance of family planning programs in the public and private sectors: An application in Nigeria. *IntPerspect Sex Reprod Health*, **32**:162-167.
- Mathew S, Beth E (2001).Guide to Assessing Client Satisfaction. Health system Trust January 2001; 4:12-19.
- Mariko M (2003). Quality of care and the demand for health services in Bamako, Mali: the specific roles of structural, process, and outcome components. *SocSci Med*, **56**(6):1183-1196.
- MEASURE Evaluation Project, Monitoring and Evaluation Subcommittee of the Maximizing Access and Quality Initiative 2001. Quick Investigation of Quality (QIQ). A user's Guide for Monitoring Quality of Care in Family Planning. Measure Evaluation Manual Series, No. 2. MEASURE Evaluation, Carolina Population Center, University of North Carolina Chapel Hill, 2001.
- Mensch B, Arends K M, Jain A (1996). The impact of the quality of family planning services on contraceptive use in Peru. *Stud Fam Plan*, **27**(2):59-75.
- National Population Commission (NPC) [Nigeria] and ICF Macro 2009. Nigeria Demographic and Health Survey 2008. Abuja, Nigeria National Population commission and ICF Macro.
- National Population Commission (NPC) [Nigeria] and ORC Macro 2000. Nigeria Demographic and Health survey 1999. Calverton, Maryland: National Population commission and ORC/Macro.
- National Population Commission (NPC) [Nigeria] and ORC Macro 2004. Nigeria Demographic and Health Survey 2003. Calverton, Maryland: National Population Commission and ORC/Macro.
- Oshodi-Isolo Local Government directory. Available at http://en.wikipedia.org/wiki/oshodi-Isolo.
- Westaway M S, Rheeder P, Vanzyl D G, Seager J. R. (2003). Interpersonal and organisational dimensions of patient satisfaction. Int J Qual Health Care, **15**:337-44.
- Williams T, Schutt AJ, Cuca Y (2000). Measuring family planning service quality through client satisfaction exit interviews. IntFam Plan Perspec, **26**:57-73