CLIENT SATISFACTION WITH MATERNAL HEALTH SERVICES COMPARISM BETWEEN PUBLIC AND PRIVATE HOSPITALS IN JOS NIGERIA

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ABSTRACT

Background: *One principal determinant of uptake and continued utilization of maternal health services is overall client satisfaction. The public and private sectors supply substantial portions of these services in developing countries, but face different challenges. This study aimed at determining the differences in the quality of maternal health services they offer in Jos metropolis of Plateau State, Nigeria, to assess how these quality differentials impact upon clients' satisfaction and suggesting how to improve on the gaps.*

Methods: *This was facility-based, cross-sectional study where 400 women accessing maternal health services and whose children came for first dose of DPT and subsequent vaccinations in selected public and private health facilities in Jos, Plateau State were recruited following informed consent. Data was collected using semi-structured, interviewer-administered questionnaires and analysed using Epi info software.*

Results: *Ninety seven clients were sampled in the private and 204 in the public hospitals. Six (6.2%) of them in the private and 4(2%) in the public hospitals lived more than an hour from the facility. There were statistically significant associations; $p<0.0001$ between the groups with regards to waiting time, comfort and cleanliness of the waiting lounge.Utilization of maternal health services and level of satisfaction was most statistically significant; $p<0.0001$ in terms of health education, though in terms of antenatal and nursing care, these relationships were not statistically significant; $p=0.112$ and $p=0.733$.*

Conclusion: *In both private and public facilities in Jos, clients were generally satisfied with maternal health services.*

Key Words: *Client Satisfaction, Maternal Health Services*

Introduction

Numerous studies have examined the effects of maternal health service quality on the uptake and continuation of maternal health services. One principal determinant of uptake and continued utilization of maternal health services is overall client satisfaction with those services.[1] Few clinicians would debate that clients are the central focus of both service delivery and quality measurement. Yet, the client's perspective on quality care largely has been considered external to the service delivery process.[2] In recent years, client satisfaction with clinical services has gained recognition as an outcome of quality care.

Client satisfaction, a term frequently used in marketing, is a measure of how products and services supplied by a company meet or surpass customer expectation. It is defined as "the number of clients, or percentage of total clients, whose reported experience with a firm, its products, or its services (ratings) exceeds specified satisfaction goals.[2] It is a multidimensional concept, relating to both technical and interpersonal aspects of care and the amenities of care (such as an attractive physical environment and convenient location and parking).[2] Healthcare administrators of University Hospital University of British Columbia , defined client satisfaction as the extent to which a program fulfils clients' treatment expectations.[3]

Maternal health refers to the health of women during pregnancy, childbirth and the postpartum period. It encompasses the health care dimensions of family planning, preconception, prenatal,

antenatal and postnatal care in order to reduce maternal morbidity and mortality.[4]

Preconception care can include education, health promotion, screening and other interventions among women of reproductive age to reduce risk factors that might affect future pregnancies. The goal of prenatal care is to detect any potential complications of pregnancy early, to prevent them if possible and to direct the woman to appropriate specialist medical services. Postnatal care issues include recovery from childbirth, concerns about newborn care, nutrition, breastfeeding and family planning.[5]

Antenatal care is a major component of integrated maternal health with reproductive health as a part of primary health care. Maternal mortality rate which is one of the major indicators of the state of health service to many communities is still unacceptably high in Nigeria in the 21st century. With maternal mortality rate of 1000 1500 for every 100 000 live births, Nigerian women face a lifetime risk of maternal death of 1 in 13 compared with 1 in 3300 for the United States of America (USA) and 1 in 7300 for Canada.[5] The concept of safe motherhood initiative is anchored on many programmes, among which include provision of acceptable, complete, safe and affordable antenatal services, family planning, girl child education and provision of infrastructure.[6]

Nigeria has one of the highest maternal and infant mortality rates in the world and this necessitated the greater attention given to Maternal and Child Health (MCH) services in the country's Bamako Initiative (BI) programme. MCH consumers who are often poor are mostly women, their children and families and are also at extraordinary risk of receiving poor or no health care. Nigeria's infant mortality rate is approximately 96 per thousand live births in rural areas against 75 per a thousand life births in urban areas and only 89% and 59% of pregnant women in urban and rural areas respectively sought pre-natal care.[6]The quality of services provided in the health centres operating the BI scheme and how people perceive that quality would determine the level of utilisation of the maternal health services.[6]

Both the public and private sectors supply substantial portions of maternal health services in developing countries, but face different incentives to provide services of high quality and to ensure client satisfaction. Public sector health services, for example, are less likely to be motivated by economic incentives (since governments and their health facilities seldom go out of business) and have frequently been characterized by low staff morale, attendance and performance; often related to poor or infrequent pay, at least relative to the private sector, poor quality of care and treatment, shortages of workers, medicine, supplies and functioning equipment and waste and inefficiency.

Motivated to maximize the demand for their services, while minimizing their costs, private for-profit facilities generally face greater incentives to be efficient and client-friendly providers of health care. Even so, they have been shown to be of varying quality, often due to the inability of government regulatory bodies to adequately monitor and enforce standards. Private providers may also take advantage of informational asymmetries to sell unnecessary - or poor quality services - to unsuspecting consumers. Non-governmental facilities, often not-for-profit and affiliated with religious, faith-based organizations, have been touted as being more likely to provide higher quality services because of their social mission, but evidence to support this has been mixed.[1]

In recent years developing countries, influenced heavily by findings in developed countries, have become increasingly interested in assessing the quality of their health care. Quality of care can be measured at three levels: the policy level; the service delivery level; and the client/outcome level. Outcomes have received special emphasis as a measure of quality. Assessing outcomes has merited both as an indicator of the effectiveness of different interventions and as part of a monitoring system directed to improving quality of care as well as detecting its deterioration.

Quality assessment studies usually measure one of three types of outcomes: medical outcomes, costs and client satisfaction. For the last mentioned, clients are asked to assess not their own health status after receiving care, but their satisfaction with the services delivered. The Bruce - Jain framework, the central paradigm for quality of family planning, emphasizes the importance of client's perspective. It defines quality in terms of six fundamental elements: Choice of method (service), technical competence, information given to clients, inter-personal relations, mechanisms to ensure follow up and continuity and an appropriate constellation of services. The importance of peoples' perception of quality was demonstrated by Akin and Hutchinson, who found that the ill and poor people by-passed free or subsidised services in facilities they perceived to be offering low

quality services. It was thus hoped that the BI would increase the quality and peoples' perception of the quality of services in public facilities, together with the utilisation of maternal health services, in order to improve the health of mothers and children. Thus, perceived quality is one of the most important determinants of patient's choice of provider and willingness to pay.

It should be noted that historically the establishment of quality standards has been delegated to the medical profession and has been defined by clinicians in terms of technical delivery of care. However, recently, patients' assessment of quality care has begun to play an important role, especially in the advanced industrialized countries. As a result, the satisfaction or dissatisfaction of clients with services has become an important area of inquiry as client satisfaction comes to be a major device in order to take critical decisions in the health care services. Studies identified that there was a need to assess the quality of the care that the hospitals were providing as there was often concern about the performance. Quality can be assessed from the point of view of the users or by using technical standards. Different studies identified that to operationalize the term quality and to offer a framework for its definition, three major attributes should be considered; structure, process and outcome. However, most of the studies assessing quality of care have looked at curative services and at structural aspects and process attributes and at the relation between curative and preventive services.

Therefore, service providers as a matter of fact, take the satisfaction of customers into account as a main goal of the strategies of their firms. Some studies also focused on clients' satisfaction or their judgment of the quality. This is because customers or clients of hospitals and clinics have the most direct experiences with the services provided by these institutions. It should be noted that some feel that the customer cannot really be considered a good judge of quality and dismiss their views as too subjective. Petersen suggests that, it really does not matter if the patient is right or wrong, rather what counts is how the patients felt even though the caregiver's perception of reality may be quite different.[7]

While motherhood is often a positive and fulfilling experience, for too many women it is associated with suffering, ill-health and even death.[3] Public and private maternal health service providers face different incentive structures, which may affect overall quality and ultimately the acceptability of maternal health services for their intended clients. This analysis seeks to quantify differences in the quality of maternal health services at public and private provider's health care centres in Jos metropolis of Plateau State and to assess how these quality differentials impact upon maternal health clients' satisfaction and to suggest how quality improvements can improve maternal mortality rates.

Methodology

This was a descriptive, cross sectional, facility-based study conducted among women accessing maternal health services and whose children came for first dose of DPT and subsequent vaccinations in selected public and private health facilities in Jos, Plateau State, Nigeria.

From a list of 66 health facilities (56 private and 10 public) providing maternal and health services within Jos metropolis, 20% each of private and public health facilities were picked respectively for the study translating into 11 private health facilities and 2 public health facilities. The clients were selected using simple random sampling technique by balloting.

Using the formula for cross sectional studies,

$$n = \frac{(Z\alpha)^2 Pq}{d2}$$ [8]

Where $Z\alpha$ is standard normal deviate = 1.9

P is the proportion of women assessing maternal health services which is put at 50%

d precision for the study = 5%

q = 1-P (50%)

n =384 which is rounded up to 400 to account for a non-response rate of 5 %.

A semi-structured, interviewer-administered questionnaire consisting of 4 sections; socio-demographics, waiting time, quality of health services and interaction with health care provider was used to collect data from the respondents, following informed consent.

Data processing and analysis was done using Epi-info statistical software version 3.5.1

Results

The highest proportion of respondents;69(71.1%) and 121(59.3%) were in the age range of 26-35 years, with majority of them being married and having secondary level of education as their highest level of education. (Table1)

Table 1: Socio-demographic Characteristics

	Private n = 97		Public n = 204				
Characteristics	**Freq**	**%**	**Freq**	**%**	**X^2**	**df**	**P- value**
Age group							
16 – 25	12	12.4	74	36.3			
26 – 35	69	71.1	121	59.3			
36 – 45	11	11.3	9	4.4			<0.0001 **
46 – 55	5	5.2	0	0.0			
Mean age	31.1 ± 6.4		27.2 ± 5.5		T – test =5.407	df = 299	P = 0.000
Marital status							
Married	94	96.9	196	96.1			
Separated	2	2.1	1	0.5			0.215**
Single	1	1.0	7	3.4			
Religion							
Christianity	84	86.6	181	88.7	0.28	1	0.595
Islam	13	13.4	23	11.3			
Level of Education							
None	0	0.0	7	3.4			
Quaranic	0	0.0	2	1.0			
Primary	10	10.3	37	18.1			<0.0001**
Secondary	29	29.9	105	51.5			
Tertiary	57	58.8	53	26.0			
Occupation							
Artisan	3	3.1	42	20.6			
Civil servants *	31	32.0	38	18.6	18.890	3	< 0.0001
Trading	29	29.9	60	29.4			
Unemployed	34	35.1	64	31.4			
Level of income							
<50,000	24	24.7	106	50.0			
50,001 – 100,000	23	23.7	46	22.5	24.876	3	<0.0001
100,001 – 150,000	25	25.8	29	14.2			
>150,000	25	25.8	23	11.3			
Place of last Delivery							
Home	4	4.1	22	10.8	3.696	1	0.055
Hospital	93	95.9	182	89.2			

*= Government employees, military and paramilitary officers

**= Fisher's exact

Most of the clients in both groups were satisfied with the waiting time; 31(32%) and 73(35.8 %) in the private and public hospitals with 4.1% and 0.5% in the respective groups being indifferent. (Table 2)

Table 2: Clients' level of satisfaction with waiting time

Satisfaction with Waiting time	Private		Public	
	Freq	**%**	**Freq**	**%**
Strongly satisfied	16	16.5	34	16.7
Satisfied	25	25.8	73	35.8
Somewhat satisfied	31	32.0	32	15.7
Indifferent	4	4.1	1	0.5
Dissatisfied	21	21.6	64	31.4
Total	**97**	**100.0**	**204**	**100.0**

X^2 = 17.768; df = 4; P= <0.0001

More than half; 62.9% of the respondents in the private hospitals and the greater proportion; 40.1% in the public were satisfied with the serenity of the waiting lounge, though 10.3% and 24% in the respective groups were dissatisfied with it. (Table 3)

Table 3: Clients' level of satisfaction with the serenity of the waiting lounge

Satisfaction with Serenity of the lounge	Private		Public	
	Freq	**%**	**Freq**	**%**
Strongly satisfied	8	8.2	21	10.3
Satisfied	61	62.9	94	40.1
Somewhat satisfied	18	18. 6	34	16.7
Indifferent	0	0.0	6	2.9
Dissatisfied	10	10.3	49	24.0
Total	**97**	**100.0**	**204**	**100.0**

X^2 = 13.186; df = 4; P = <0.0001

Very few of the clients', 1% and 2% in the private and public facilities were indifferent about the cleanliness of the waiting lounge, with 59.8% and 42.2%; the greater proportions in both groups that were satisfied with this. (Table 4)

Table 4: Clients' level of satisfaction with the cleanliness of the waiting lounge

	Private		Public	
Satisfaction with Cleanliness of the lounge	**Freq**	**%**	**Freq**	**%**
Strongly satisfied	12	12.4	27	13.2
Satisfied	58	59.8	86	42.2
Somewhat satisfied	19	19.6	44	21.6
Indifferent	1	1.0	4	2.0
Dissatisfied	7	7.2	43	21.1
Total	**97**	**100.0**	**204**	**100.0**

X^2 = 12.33; df = 4 ; P = 0.015

In both facilities, a large proportion of the clients, 99% and 82.8% in the private and public centers attended the health education sessions. Though there was no statistically significant relationship between the two groups in their satisfaction with the information gotten, the clients were generally satisfied with it. (Table 5)

Table 5: Clients' satisfaction with information obtained during health education

	Private n = 97		Public n = 204				
Components	**Freq**	**%**	**Freq**	**%**	**X^2**	**df**	**P-value**
Health education attendance							
Yes	96	99.0	169	82.8	16.74	1	<0.0001
No	1	1.0	35	17.2			
Nutrition							
Strongly satisfied	15	15.6	33	19.5			
Satisfied	76	79.2	118	69.8			
Somewhat satisfied	5	5.2	11	6.5			0.329**
Indifferent	0	0.0	4	2.4			
Dissatisfied	0	0.0	3	1.8			
Immunization							
Strongly satisfied	19	19.8	42	24.9			
Satisfied	72	75.0	116	68.6			
Somewhat satisfied	5	5.2	7	4.1			0.590**
Indifferent	0	0.0	3	1.8			
Dissatisfied	0	0.0	1	0.3			

Family planning							
Strongly satisfied	16	16.7	30	17.8			
Satisfied	69	71.9	111	65.7			
Somewhat satisfied	8	8.3	14	8.3			0.419**
Indifferent	1	1.0	10	5.9			
Dissatisfied	2	2.1	4	2.4			
Birth preparedness							
Strongly satisfied	14	14.6	25	14.8			
Satisfied	72	75.0	111	65.7	8.839	3	0.065
Somewhat satisfied	9	9.4	15	8.9			
Indifferent	0	0.0	8	4.7			
Dissatisfied	1	1.0	10	5.9			
Labour and delivery							
Strongly satisfied	19	19.8	29	17.2			
Satisfied	73	76.0	113	66.9			
Somewhat satisfied	3	3.1	10	5.9			0.045**
Indifferent	0	0.0	8	4.7			
Dissatisfied	1	1.0	9	5.3			
Post-natal care							
Strongly satisfied	13	13.5	16	9.5			
Satisfied	72	75.0	105	62.1			
Somewhat satisfied	6	6.3	15	8.9	11.758	4	0.019
Indifferent	3	3.1	18	10.7			
Dissatisfied	2	2.1	15	8.9			

****= Fisher's exact**

Regarding foetal monitoring, birth preparedness, delivery and post-natal services, majority of respondents in both groups were generally satisfied; 81.3% and 84.5% in the private and public facilities, 78.1% and 70.6%, 67.7% and 75.8%, 73.4% and 56.3%, respectively.(Table 6)

Table 6: Clients' satisfaction with Ante-natal, delivery and post-natal services

Services	Private n = 97 Freq	%	Public n = 204 Freq	%	X^2	df	P-value
ANC attendance							
Yes	96	99.0	194	95.1			0.112**
No	1	1.0	10	4.9			
Number of ANC attendance							
Once	2	2.0	2	1.0			
2 – 3 times	18	18.8	38	19.6			0.080**
4 times	24	25.0	27	13.9			
>4 times	52	54.2	127	65.5			
Foetal monitoring							
Strongly satisfied	16	16.7	24	12.4			
Satisfied	78	81.3	164	84.5			
Somewhat satisfied	0	0.0	3	1.5			0.599**
Indifferent	1	1.0	2	1.0			
Dissatisfied	1	1.0	1	0.5			
Birth preparedness							
Strongly satisfied	13	13.5	18	9.2			
Satisfied	75	78. 1	137	70.6			
Somewhat satisfied	4	4.2	12	6.2	8.820	4	0.066
Indifferent	3	3.1	10	5.2			
Dissatisfied	1	1.0	17	8.8			
Delivery services							
Strongly satisfied	15	16.1	12	6.6			
Satisfied	63	67.7	138	75.8			
Somewhat satisfied	12	12.9	27	14.8			0.0218**
Indifferent	3	3.2	1	0.6			
Dissatisfied	0	0.0	4	2.2			
Utilization of post-natal Services							
Yes	79	81.4	135	66.2	7.456	1	<0.0001
No	18	18.6	69	33.8			
Post-natal services							
Strongly satisfied	58	73.4	8	5.9			
Satisfied	11	13.9	76	56.3			
Somewhat satisfied	7	8.9	41	30.4			<0.0001**
Indifferent	2	2.5	3	2.2			
Dissatisfied	1	1.3	7	5.2			

****= Fisher's exact**

Discussion

Most of the respondents in this study were aged 26-35 years and married. This is similar to a study conducted among clients in a tertiary Antenatal Clinic (ANC) in Jos, where in that study the same findings apply.[9] This can be expalianed by the fact that most women seeking matermal health services are within the reproductive age group that this age range is a part of the married who are most likely to be married. However, though in the index study and in another on institutional delivery conducted in Jos[10], most clients had their highest level of education as secodary, that of the study conducted in the tertiary ANC in Jos recorded tertiary education as the highest level.[9] This contrary finding maybe attributed to the expalation that most people of a higher educational background may most likely seek healthcare from teretiary as opposed to primary and secondary facilities that the index study mostly collected data from.

Generally, in both public and private facilities studied, clients were satisfied with maternal health services.This finding was similar to some studies; in an African American community in Mississippi,Unites States of America (86% satisfaction)[11], one in Bangladesh[7] and that in Jos, Nigeria.[9] This may be due to the fsct that significant portions of the population in developing countries are deprived of a fundamental right of access to basic health care. However, in recent years, many developing countries have been actively seeking to improve the quality and outcomes of the health care delivery system by engaging in a process of reform. Consequently private hospitals were introduced in addition to public hospitals to a greater extent where services can clearly fill gaps where public services are inadequate. Mostly this is because of the negative perception and belief regarding public hospitals and the service quality of private hospitals was considered better in regard to physical infrastructure and availability of services. However, the difference between the two sectors is unnoticed in terms of technical quality of care provided.

Specific aspects related to general patient satisfaction included waiting time, serenity and cleanliness of the environment. In this index study, though clients were satisfied with waiting time, it was contrary to a South African one, where the highest level of dissatisfaction was with waiting time.[11] This may be as a result of the overdependence of the black South African population on understaffed public hospitals, which may contribute significantly to the long waiting time. The relationship in the index study was statistically significant between the two groups with regards to waiting time and the serenity of the environment; $p<0.0001$, but not with cleanliness; $p= 0.015$.This difference may be as a result of the usually crowded public health facilities that have unequal doctor, client ratios as opposed to the relatively less crowded private facilities. That of cleanliness may be due to chance or can be explained by the fact that cleanliness is a subjective term, therefore interpreted differently. Usually the cleaners in both public and private hospitals may not be adequate, but competent enough to meet the demands of their expected responsibilities.

In this study, more than half of the clients attended the health education sessions comprising of various topics ranging from nutrition, immunization, birth preparedness, family planning and post-natal care, where in both facilities, clients were satisfied. This finding is similar to that of findings in a study conducted in Jos, where only 11% of the clients were not satisfied with these findings.[12] Health education is usually the first activity conducted during maternal health services, which is mostly done in the mornings. The timing adds to increased vitality and zeal on both clients and care providers and increased attentiveness of the clients.

Antenatal attendance was high in both groups as observed in a study conducted in Kenya, where 86% of the respondents attended[13] and 97.3% in that conducted in Jos.[10]Aspects of this care such as foetal monitoring, birth preparedness, delivery and post-natal services were satisfactory in both groups, which is not different from the findings of a study conducted in Victoria, Australia where 62.4% of the clients rated their ANC as very good.[14] These findings may be as a result of the presence of skilled and trained attendants at birth.

From this study client satisfaction in private and public facilities was found to generally be satisfactory, thus the need to maintain this observed finding and to improve more upon it.

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