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PATIENT PERCEPTION OF SERVICES IN A TERTIARY HEALTHCARE SETTING

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ABSTRACT

Background: Patient assessments of care is increasingly being considered an important dimension of quality of care service and patients' perception of quality of care is critical to understand the relationship between quality of care and utilization of health services. **Objectives**: The objectives of this study were to determine patients' perception of services and barriers that influence utilization of the health care facilities. **Methods**: A prospective, cross sectional, non-randomized study was carried out in the University of Benin teaching hospital using self-completed, structured questionnaires, administered to patients while waiting for their drugs at the different outpatient pharmacy sections in the hospital. Data obtained were entered into Microsoft Excel and checked before sorting. These were then analyzed using SPSS version 21.0. **Results**: A perceived barrier to healthcare facilities was identified to be excessive waiting time with weighted average of 3.47. The longest wait was seen at the nursing department. The level of Patient satisfaction was highest at the physician's clinic (3.71); medical laboratory Unit (2.79) and the pharmacy Unit (2.56). The level of satisfaction was lowest at the medical records Unit (2.51). **Conclusion**: This study clearly showed that excessive waiting time was a major barrier to health seeking behavior by users of the healthcare facility and the average level of perceived patient satisfaction was 3.03 of health care services at the university of Benin teaching hospital.

KEYWORDS: Patient Perception, satisfaction, barriers and healthcare utility.

BACKGROUND

Health services include all services dealing with the diagnosis and treatment of disease, or the promotion, maintenance and restoration of health. They include personal and non-personal health services. Health services are the most visible functions of any health system, both to users and the general public. And Service provision refers to the way inputs such as money, staff, equipment and drugs are combined to allow the delivery of health interventions. Improving access, coverage and quality of services depends on these key resources being available; on the ways services are organized and managed, and on incentives influencing providers and users. [2]

Various researches have highlighted the trends in healthcare services utilization for both public and private health care systems as well as informal avenues health facilities [3-4] these predispositions are greatly depend on and affected by factors such as age, gender, level of female autonomy, urban or rural habitat, economic status, seriousness of illness, availability and accessibility to health care facilities, quality of healthcare provided and so on. [5] Individual choice as which health service avenue is dependent on their perception about its affectivity and benefits, in areas from faith healer rather

than properly investigating the illness by a medical doctor. On the other hand those with high socioeconomic status tend to seek medical help for the inconsequential health problem. ^[6]

The provision of health facilities and their location have a correlation with accessibility and utilization of the services and also there is also a positive relationship between cost of accessibility and utilization of health care. [7]

Patient satisfaction is measured based on two factors, their expectation of the service and their perceptions of the actual service they received. Tarantino (2004) More so, Patients are in the best position to evaluate their experience of care, but one study raise a doubt whether this experience could be a good measure of effectiveness of care. [8]

In addition, some researches have indicated that patients' perception of quality is influenced by a variety of factors, such as features of the national health system, practice type and the providers' personal and clinical skills. [9-12]

Studies have also, shown that patients value immediate comfort while physicians addressing quality of care are

concerned more about resources.^[8,13-14] However, practitioners and patients have complementary roles to a shared position on quality of care.^[14]

Some studies have been carried out, addressing different aspects of quality of care from the perspective of patients and healthcare providers. However, these studies mostly cover a single country. [14-16]

Patients' perceptions of the dimensions of service quality (perceived service quality) has been limited, [27] yet study seeking to assess the components of the quality of care in health services predominately continue to measure patient satisfaction. [28] There is no consensus on how to best conceptualize the relationship between patient satisfaction and their perceptions of the quality of their healthcare. [29] In addition, there is insufficient information about perception of quality of care by patients in this region.

Hence, this study was sought to determine patient perception of services, perceived barriers associated with utilization of health care facilities and patient satisfaction with health care services.

METHODS

Study design / setting

A prospective, cross sectional, non-randomized study was carried out. Patients attending General and Consultants Clinics of University of Benin Teaching Hospital, Benin City Edo State were administered questionnaire. University of Benin Teaching Hospital is a tertiary healthcare facility established in the 1972 with six hundred and twenty bed space. The facility provides healthcare services for Edo, Delta, Kogi, Ondo and other neighboring states. The medical Outpatient Department records an average turnout of about 450 patients per day.

Data Collection / instrument

A self-completed, structured questionnaire was administered to patients at the General Outpatient and Consultant pharmacy Units of the university of Benin teaching hospital when waiting for their drugs. The research instrument was pretested using 20 patients from different service delivery points and subsequently reviewed taking cognizance of the peculiar settings before data collection.

The questionnaire elicited information on the patients' demographic data, and their perception of healthcare services rendered by pharmacists, doctors, nurses, laboratory scientists and medical records department which constitutes all the service delivery points.

The questionnaire has multiple choice items designed to yield scaled responses to the study domains. Patient perception was measured by listing the questionnaire items and asking respondents to indicate level of agreement to perceived quality of care received from the health personnel, and adequacy of infrastructure, using 5-

point Likert scales (Strongly agree, Agree, Not sure, Disagree and Strongly disagree (with scores of 5, 4, 3, 2, and 1 respectively). Perceived barriers to the use of the health centre were measured using such indicators as waiting time, adequacy of health information, staff attitude, and access to healthcare personnel and availability of prescribed medicines. Respondents were asked to indicate the extent to which some perceived barriers limited their utilization of the institution's health centre (strongly agree, agree, not sure disagree and strongly disagree with values of 5, 4, 3, 2 and 1 respectively).

Inclusion criteria

All patients present at the university of Benin teaching hospital for treatment were eligible to participate in the study, but only those who gave their consents constituted the sample.

Ethical consideration

Ethical approval was obtained from the Ethics and Research Committee of University of Benin teaching hospital, Ugbowo, Benin City.

Data analysis

Data obtained were entered into Microsoft Excel and checked before sorting. These were then analyzed using SPSS version 21.0. Descriptive statistics were used to examine relative influence of the determinants of healthseeking behavior and utilization of healthcare facilities in the community. Selected factors affecting health-seeking behavior were ranked in order of importance and the weighted averages (WA) of the responses were computed to determine the level of agreement with the questionnaire items. Using the scoring of 1 to 5 on a 5point Likert scale response mode, the deciding rule for the level of agreement was that any weighted average up to 2.50 or more was considered to be an agreement (A) with the questionnaire item while a value less than 2.50 was considered as a disagreement (D). Availability of health services was assessed by the degree of satisfaction with doctor's consultation and medicine supply in the pharmacy while the accessibility of service was determined by their perception of the attitude of health workers, operating hours and waiting time at the health facility.

RESULTS

Of the 400 questionnaire distributed to the respondents 349 were completed and returned accounted for 87.3% respond rate, out of which 172(49.9%) were female, 251(72.8%) had tertiary education, 164(47.5%) were single, 151(43.9%) were aged between 31-40 years, 118(34.2%) were civil servants and 68(29.2%) earned between NGN50,000.00 to NGN 100,000.00 (Table1)

Table 1: Socio-demographic characteristics of the respondents.

Frequency n (%)
172 (49.9)
165 (47.8)
13 (3.8)
81(23.5)
251(72.8)
164 (47.5)
125 (36.2)
32 (9.3)
12 (35.0)
2 (6.0)
30 (8.7)
114 (33.1)
151 (43.9)
48 (14.0)
1 (3.0)
52 (15.1)
56 (16.2)
118 (34.2)
91 (26.4)
26 (7.5)
46 (19.7)
67 (28.8)
68 (29.2)
44 (18.9)
8 (3.4)

Perceived Average mean \pm standard deviation is 3.70 \pm 0.99, factor loading ranged from 0.561 to 0.820 and Cronbach's alpha is 0.544. (Table 2)

Table 2: Descriptive statistics on perception of physician services.

Item questions	Mean ±SD	Factor loading	α Alpha
You think the doctors appropriately diagnose your illness	3.91±0.949	0.561	0.544
Your consulting time with the doctor was adequate	3.88±0.844	0.689	
You can almost predict what the doctor will prescribe	3.52±1.034	0.751	
The doctor demonstrates professional competence	3.60±1.056	0.723	
It is difficult to see doctors at off peak periods	3.63±1.090	0.695	
You spend too much time waiting to see the doctor	3.99±1.028	0.573	
The waiting area in the hospital is convenient	3.71±1.203	0.792	
doctors are polite	3.69±1.011	0.696	
Doctors are friendly	3.84±0.796	0.820	
You can trust the doctor	3.81±0.859	0.809	
You are satisfied with the doctors services	3.73±1.022	0.773	
Sub total	3.70±0.99		

Perceived average mean \pm standard deviation is 3.66 \pm 0.90 factor loading ranges from 0.700 to 0.884 and Cronbach's alpha is 0.716 (Table 3)

Tables 3: Descriptive statistics on Patients perception of Pharmacy Services.

Item questions	Mean ± SD	Factor loading	α Alpha
The pharmacist gives me adequate information about my drugs	3.89±0.994	0.750	0.716
The drugs are affordable	3.78±0.953	0.717	
Consulting time with the Pharmacist is adequate	3.47±1.018	0.748	
I can almost predict what the Pharmacist will say to me	3.27±1.115	0.792	
The Pharmacist demonstrates professional competence	3.75±1.076	0.848	
Good quality medicines are dispensed	3.80±1.040	0.700	
You spend too time waiting to see the Pharmacist	3.43±1.139	0.736	
Waiting area in the Pharmacy is convenient	3.48±1.086	0.741	
24-hour service is available	3.55±1.105	0.747	
Pharmacy staff are polite	3.67±0.916	0.740	
The Pharmacist is friendly	3.76±0.831	0.884	
I can trust the pharmacist	3.82±0.773	0.838	
I am satisfied with the pharmacists services	3.91±0.703	0.786	
Sub total	3.66±0.90		

Perceived average mean \pm standard deviation is 3.53 \pm 0.96 factor loading ranges from 0.670 to 0.796 and Cronbach's alpha is 0.794 (Table 4)

Table 4: Descriptive statistics of Patients perception of Nursing Services.

Item questions	Mean ± SD	Factor loading	α Alpha
Nursing services are promptly delivered	3.81±0.867	0.796	0.794
The Nurses demonstrate professional competence	3.77±0.900	0.670	
There are delays in receiving nursing services	3.62±0.923	0.734	
Waiting area at the Nursing department is convenient	3.56±0.942	0.688	
24-hour service is available	3.57±0.966	0.679	
The Nurses are polite	3.37±1.002	0.750	
The Nurses are friendly	3.34±1.085	0.747	
You can trust the Nurses	3.38±0.988	0.769	
You are satisfied with the Nurses' services	3.41±0.979	0.750	
Sub total	3.53±0.96		

Perceived average mean \pm standard deviation is 3.51 \pm 0.93 factor loading ranges from 0.740 to 0.817 and Cronbach's alpha is 0.654 (Table 5)

Table 5: Descriptive statistics of Patients perception of Medical Laboratory Services.

Item questions	Mean±SD	Loading factor	α alpha
Services are promptly delivered	3.56±1.046	0.753	0.654
Laboratory scientist demonstrate professional competence	3.84±0.971	0.817	
There are delays in receiving Medical Laboratory services	3.29±1.092	0.740	
You spend too time waiting to see the Laboratory Scientist	3.10±1.029	0.627	
Waiting area at the Medical Laboratory department is convenient	3.24±1.016	0.780	
24-hour service is available	3.33±0.954	0.752	
The Laboratory Scientists are polite	3.67±0.788	0.744	
The Laboratory Scientists are friendly	3.74±0.665	0.784	
You can trust the laboratory Scientists	3.70±0.779	0.794	
You are satisfied with the laboratory Scientists' services	3.60±0.919	0.764	
Sub total	3.51±0.93		

Perceived average mean \pm standard deviation is 3.41 \pm 1.12 factor loading ranges from 0.654 to 0.870 and Cronbach's alpha is 0.540 (Table 6)

Table 6: Descriptive statistics of respondents' perception of Medical Record Services.

Item questions	Mean±SD	Loading factor	α Alpha
Services are promptly delivered	3.29±1.249	0.792	0.540
You need to know someone for prompt action	3.58±1.246	0.839	
The Medical record keepers demonstrate professional competence	3.47±1.124	0.777	
There are delays in receiving my Record file	3.36±1.261	0.773	
I spend too much time waiting to see the Medical record keepers	3.27±1.241	0.697	
Waiting area at the Medical record department is convenient	3.40±1.078	0.725	
24-hour service is available	3.38±0.944	0.654	
The Medical record keepers are polite	3.38±0.981	0.779	
The Medical record keepers are friendly	3.54±0.993	0.849	
You are satisfied with the Medical Records Department's services	3.41±1.109	0.870	
Sub total	3.41±1.12		

The weighted average ranking obtained for excessive waiting time is 3.47, health workers attitude is 3.63 and inadequacy of Infrastructure is 3.4 (Table 7).

Table 7: Perceived barriers to healthcare seeking behavior.

Perceived barriers	Strongly agree	Agree	Not sure	Disagree	Strongly disagree	Weighted
(score) x	5	4	3	2	1	average
Excessive Waiting time f	309	644	294	344	58	3.47
Fx	1545	2576	882	688	58	
adequate Infrastructure f	230	784	275	285	81	3.48
Fx	1150	3136	825	570	81	
Attitude f	181	970	215	168	73	3.63
Fx	905	3880	645	336	73	
Professional competence f	173	681	532	171	91	3.40
Fx	865	2724	1596	342	91	

Key: f = frequency of response; x = score of frequency

The weighted average ranking values obtained for delay experiences at the hospital are highest at nursing

department (3.61) and lowest at the physician's clinic (2.56)

Table 8: Delay experiences at the different delivery points in the hospital.

Service delivery points Score (x)	Strongly agree 5	Agree 4	Not sure 3	Disagree 2	Strongly disagree 1	Weighted average
Physician's clinic	125	132	35	42	3	2.56
Fx	625	528	105	84	3	
Pharmacy department	68	109	72	79	42	3.22
Fx	340	436	216	158	42	
Nursing department	36	188	48	49	5	3.61
Fx	180	752	144	98	5	
Medical laboratory department	15	91	81	114	19	2.90
Fx	75	364	243	228	19	
Medical records department	61	101	58	83	25	3.27
Fx	305	404	174	166	25	

Key f=frequency of response; x= score of frequency

The weighted average ranking showed that patient satisfaction is highest at the physician clinic (3.70) and lowest at the medical records department (2.51) Table 9

Not sure Disagree Strongly disagree Service delivery points Strongly agree Agree Weighted average Score(x) 5 4 2 3 1 Physician clinic 82 134 88 26 12 3.70 410 536 264 52 Fx 12 Pharmacy 16 49 223 42 19 2.79 19 Fx 80 196 669 84 Nursing department 20 168 81 36 20 2.56 72 20 100 672 243 Medical laboratory f 39 159 86 24 11 3.59 195 636 258 48 11 Fx Medical records 32 171 54 43 29 2.51

162

86

Table 9: Patient satisfaction with health care services.

Key: f = frequency of response; x = score of frequency

160

684

DISCUSSION

Sub Total average

Patient perception and satisfaction are of prime importance as a measure of the quality of medical services, because it gives information on the provider's success at meeting those patients' values and expectations, which are matters on which the patient is the ultimate authority. The internal consistency assessment given by Cronbach's alpha value and the factor loading indicate that the questionnaire is reliable and valid instrument with good flexibility. Usually, Cronbach's alpha values above 0.6 and factor above 0.4 are considered good. [17] Weighted averages (WA) of the responses were used to determine the level of agreement with the questionnaire items.

In this study, more than half of the population obtained higher level of education; this there implied that respondents are probably better informed about their therapy and should be able to judge the technical quality of the care they received. This finding is in line with a previous study which illustrated the importance of the level of patient education on perception of healthcare services which showed that patients with higher education could assess the competence of physicians and other health personnel more critically. [18]

The level of perception of services at the different service delivery points were considered adequate.

More so, physicians' appropriate diagnosis of illness and professional competence were the strongest determinant of patient's perceived quality of services. However, this finding is not in line with existing literature, as some studies have found that the behavior of health personnel is associated with patient perceived quality, [19,20] but this behavior is more commonly linked to interpersonal or relational aspects rather than technical aspects of care defined in clinical terms. [19,21]

Furthermore, the study findings showed that Perceived barrier to the utilization of healthcare facilities was identified by the respondents to be excessive waiting time, with weighted average of 3.47 and the weighted average value is considered to be in agreement with the questionnaire item on excessive waiting time.

3.03

29

In addition, patients' also experienced considerable delays at the service de-livery points of the health care facility, with longest waits in nursing stations and at the medical records unit. The file retrieval system at the medical records unit was considered inadequate and there is a need to know someone in the unit to prompt services. This is in support of the finding that some factors preventing effective use of some healthcare facilities include excessive waiting time at service delivery points and poor attitude of healthcare personnel. [22] The personnel may need to show more empathy and under-standing of patient sick role. [23]

The finding also indicated that, patients were attended to in various units of the health facility with excessive waiting Time. However, this did not resulted in dissatisfaction with the services in the hospital. A study has concluded that timeliness of services at healthcare facility did not impact upon the perception of quality of services rendered to clients. [23] Another study shown that client perceptions of quality are sensitive to the amount of time clients are kept waiting before being seen by the physician, but not sensitive to the amount of time the provider spends with them. [24]

A few minutes spent with the physician appears not to have a negative effect on perceived quality, while time spent waiting for the often brief consultation to begin is associated with lower perceived quality. Patients feel increased time demands, and if the wait is too long, they may not come back. However, if waiting times are reasonable and handled well, patients are more likely to have a positive perception of services and return to the practice. Timely health care service is very important in the provision of quality care which in turn, will most likely improve the utilization of health services.

In fact, prolonged waiting time has been given as a reason for not seeking care in some conventional health facilities. [22]

Previous study have also demonstrated that a patient's experience of waiting in a health system can radically influence his/her perceptions of service quality. ^[22] On the other hand, Availability and adequate provision of drugs required by patients is one of the hallmarks in quality of health care.

In addition, participants recognized the 24-hour daily services at the pharmacy unit while the quality and affordability of medicine dispensed was appreciated. These factors possibly help to enhance patient perception of quality of services from the pharmacy unit.

Patient satisfaction at the different service delivery points was positive, the highest weighed average value was obtained at the physician clinic and lowest at the medical records department .A studies also supported this finding where patients filling of their prescription where satisfied with process component of the waiting time and the quality of pharmaceutical services rendered and the process component of the waiting time however had no influence on their perception of the quality of pharmaceutical care services rendered. [26-29]

CONCLUSION

This study clearly showed patients satisfaction was above average. However, excessive waiting times at the service delivery points were perceived barriers to utilization of health care in this facility. Hence there is need to improve on health care services in this facility.

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