An Investigation into Client Satisfaction in Health Care Delivery at Komfo Anokye Polyclinic, Kumasi

Eric Abayie Prempeh, Francis Anyan

Abstract— The study investigatedclient satisfaction with health care delivery at Komfo Anokye Polyclinic,Kumasi. Data were collected using open and closed ended questionnaireadministered to 300respondents randomly selected using the simple random sampling technique. Data collected was analyzed using both inferential and descriptive statistical tools. The study revealed that majority of the respondents were female. Also it was indicated from the study that the level of outpatient's satisfaction is dependent on attitude of health workers. Furthermore, the study revealed that the level of outpatients' satisfaction is dependent on the waiting time of outpatients before treatment. The study recommended that the hospital authorities should put in measures that would improve on the time patients spend at the hospital before accessing health services.

Index Terms— outpatient, satisfaction, waiting time, improve, quality, healthcare, delivery.

I. INTRODUCTION

There is no doubt that the greatest asset of every country is its citizens. This is because their general well-being determines the overall progress and development of a national economy as enhanced quality of life means higher productivity. Any country that has unhealthy population is bound to suffer in the implementation of development programs to improve the quality of life of the people.

The major challenge facing many countries lies in ensuring and improving the performance of their health care systems.

According to Shaw (2002),despite differences in the levels and methods of healthcare delivery, the challenges and solutions in quality are remarkably similar between countries. The common national concern over quality that cut across all nations are; unsafe health systems, unequal access to health services, dissatisfaction on the part of users and the wider public, unacceptable levels of variations in performance, practices and outcome; overuse, misuse or under-use of healthcare techniques, unaffordable waste from poor quality and unaffordable costs to society.

In a study by Graham(2001) he is of the view that everybody is a consumer of health services and it is important to know their expectations on healthcare services. Users of health services want safe, appropriate interventions, treatment and care that consider their dignity and respect. They want information that is accurate, timely and relevant. Patients believe that if this is to happen, then consumers of health services must be involved and consulted, not only in relation to their own healthcare, but also about service planning and delivery, health evaluation and research.

Patient satisfaction measures therefore provide healthcare managers with useful information about the structures, process and outcomes of care. They alert administrators satisfaction assessments help maximize an organizations quality and the value of the care it provides (Bell et al, 1997, Kelsey, 2001).

Many Authors tend to have different perceptions of definitions of patient satisfaction. Jenkinson et al. (2002) and Ahmed et al. (2011) pointed out that patient satisfaction mostly appears to represent attitudes towards care or aspects of care.While Mohan et al. (2011) referred to patient satisfaction as patients' emotions, feelings and their perception of delivered healthcare services.

According to Fitzpatrick (1990), satisfied patients are more likely to follow planned care and make better use of health services. Therefore, patient was seen as a substitute indicator justifying and validating healthcare initiatives.Aday and Anderson (1974) have suggested that perceptions of satisfaction are the results of individual patient characteristics and of the medical care systems they enter. Often service recipient characteristics have been studied such as age, race, and education.

Despite all efforts been made by the Ghana Health Services, the Central government, donor funding agencies and all stakeholders to improve quality healthcare delivery in Ghana, there is still perceived unsatisfactory services rendered by the staff of the hospitals in the area of healthcare and treatment, attitude of the health workers towards patients and the waiting time of the patients prior to receiving treatment. It is in the light of this that the study has as its broad objectiveto investigates the level of patient satisfaction in healthcare delivery at the polyclinic. More specifically it was to find out the experiences of respondents regarding the delivery of health care service at the facility, also examine the effect of attitude of health workers on the level of outpatients' satisfaction and to determine the effect of waiting time before treatment on the level of outpatient satisfaction.

Eric Abayie Prempeh, Department of Mathematics and Statistics, Kumasi Technical University P.O.Box 854 Kumasi
Francis Anyan, Department of Mathematics and Statistics, Kumasi Technical University P.O.Box 854 Kumasi

II. METHODOLOGY

The study involved a combination of both probability and non-probability sampling techniques in selecting the study area and respondents. Purposive sampling technique was used to select Komfo Anokye Polyclinic, Kumasi as the study area.Korle Bu Polyclinic is a 42 bed facility that offers primary health care to the Korle Bu community, its environs and the city as a whole. It was established primarily to serve as a service delivery facility in the catchment area, but has grown over the years into a Sub-BMC under the Korle Bu teaching hospital.

A structured questionnaire containing both closedand open ended questions was administered to collect primary data from 300 randomly selected respondentsatthe Out Patient Department (OPD) of the health facilities. The questionnaire was translated from English to the respondents in their local language. Data was collected over a period of one month. Both descriptive and inferential statistical analysis were used to analyzed data collected.

RESULTS AND DISCUSSION

Analysis of Socio-Demographic Characteristics Respondents Table 1 shows thesocio-demographic characteristics of the respondents. For the purposes of this study socio-demographic characteristicsincludes gender, age, marital status, educational background, occupations and religious affiliations. From the table it can be observed that majority (76%) of the respondents were females, whiles males were in minority (24%) were males. This imply that female visit the health facility more than males. On age majority (47%) were between 41 - 60 years, 33% were between 21-40 years, 13% were above 60 years and 7% were below 20years.Age is one of most considered socio-demographic factors of patients' satisfaction of health care delivery. This is confirmed by the study by Blanchard CG. & JC.,(2009) who is of the view that younger generations tends to be less satisfied than the older generation, which explainswhy the old easily comply to treatment and demand less from their physicians ascompared to the young.Marital status was also indicated as socio-demographic characteristic. From the table it was revealed that majority (45%) of therespondents were married, 22% were single and 19% were divorced and 4%were separated.

Another demographic characteristic considered by the study is the educational levelwhich is related to satisfaction as mention by Hall(1990). It was revealed by the study that 36% of the respondents have a primary education, 22% are illiterate, 24% have completed Junior high school, while 11% and 7% of the respondents were tertiarygraduate and senior high school graduate respectively. Also captured in the demographic characteristics was respondents' religious affiliation. Majority, (64%) of respondents were Christians, 34% were Muslims, and whiles 2% were traditionalist.

Table 1: Socio-demographic Characteristics

Characteristic	Frequency	Percentage (%)
Gender		
Female	227	76
Male	73	24
Age		
Below 20	20	7
21-40	100	33
41-60	140	47
Above 60	40	13
Marital Status		
Single	66	22
Married	134	45
Divorced	56	19
Widowed	40	13
Separated	4	1
Education level		
Illiterate	67	22
Primary	107	36
Junior High	72	24
Senior High	20	7
Tertiary	34	11
Occupational status		
Self-employed	184	61
Unemployed	59	20
Government Staff	34	11
Private Company staff	23	8
Religious affiliation		
Christian	192	64
Muslim	101	34
Traditionalist	7	2

Source: field survey 2017

Respondents Experiences with Health Care Service

The study sought to find out from respondents their experience with Health Care Service at the facility. They were given a set of items which was measured using a Likert scale of 1- agree and 2- disagree. The results are indicated in the table below.

Table 2: Experiences with health care service

Experience with health care service	Responses				
		Agree		Disagree	
	#	%	#	%	
Physical Facilities					
OPD's location is easy to find.		299	99.7	1	0.3
There is a clean restroom in the waiting area.		293	98	7	2
The consulting room are spacious and tidy.		275	92	25	8
Physicians' Services					
Physicians introduced themselves to patients.	49		16	251	84
Physicians check your health history in details.		232	77	68	23
Physicians understood your health complaint.		221	74	79	26
Physicians were punctual and reachable.		291	97	9	3
Nurses' Services					
Nurses welcomed you with respect.		205	68	95	31
Nurses answers to your questions gently.		214	71	86	29
Nurses prepared you for the consultation process.		148	49	152	51
Pharmacy Service					
Pharmacy staff explained how to use drugs	300		100	0	0
There are adequate amount of medicines		158	53	142	47

In table 2, a descriptive statistics computation was done to obtain responses of patients' regarding their experiences at the health facility. On physical facilities an overwhelming majority (99%) of respondents agree that the location of the outpatient department was easy to locate while 0.33% disagree. Also 98% of the respondents also agreed that there is a clean restroom in the waiting area, whiles 2% disagree with that. In addition, 92% of the respondents also agreed that, the consulting rooms are spacious and tidy.

Regarding physicians' services, 16% of the respondents agreed that physicians had introduced themselves to the patients before giving consultation, while 84% disagree, to that statement. Also, 77% of the respondents mentioned that physicians check their health history in details whiles 23% of the respondents disagree with that. And in addition, 97% of the respondents agreed that physicians at the Polyclinic were punctual and reachable while 3% disagree.

Regarding nurses' services, 68% of the respondents agreed that nurses welcomed them with respect whiles 32% disagree with that. However, 71% of the respondents mentioned that nurses had listened and answered to patients' complaints whiles 29% disagrees. Moreover, the majority of the respondents, accounting for 97% disagree that nurses prepared them for consultation process whiles 3% agrees to this statement. All the respondents, accounting for 100%, agreed that pharmacy staff explains drug usage. Respondents consisting of 53% agreed that there was adequate amount of medicine at the pharmacy, whiles 47% disagree with that.

Attitude of health workers on the level of outpatients' satisfaction

The study sought to find out the relationship between the attitude of health workers and the level of outpatients' satisfaction at the facility. The result is indicated in the table below.

Table 3: Attitude of health workers against Level of outpatients satisfaction

	Value	df	P-value
Likelihood Ratio	136.793	9	.000
N of Valid Cases	300		

From table it can be observed that p-value (0.00) < 0.05. Since the p-value is less than 0.05 we say that there is a relationship between attitude of health workers and level of outpatients' satisfaction. In effect, attitude of health workers plays a significant role in determining the level of outpatients' satisfaction. The level of outpatient's satisfaction is dependent on attitude of health workers.

Waiting time and level of outpatients' satisfaction

The study sought todetermine the effect of waiting time before treatment on the level of respondents' satisfaction. The result is indicated in the table below.

Table 4: Waiting time of outpatients before treatment against level of outpatients' satisfaction

	Value	df	P-value
Likelihood Ratio	309.503	15	.000
N of Valid Cases	300		

From the tableit can be seen that the p-value (0.00) < 0.05. Based on the result from the table we can say that there is a relationship between waiting time of outpatients before treatment and level of outpatients' satisfaction. In effect, waiting time of outpatients before treatment plays a significant role in determining the level of outpatients' satisfaction. The level of outpatient's satisfaction is dependent waiting time of outpatients before treatment.

Binary Logistic Regression

Binary logistic regression was used to determine the predictive strength, thus, satisfied or dissatisfied of the factors affecting the level of outpatients' satisfaction.An omnibus test of model coefficients revealed a chi-square value of 147.277 and a significant value of 0.000which implies that the data fit the model. From the Nagelkerke R-square, 64% of the independent variables were able to explain the variation accounted for in the dependent variable, that is, level of outpatient satisfaction.

Table 5:Factors affecting the level of outpatients' satisfaction

	B	S.E	Wald	DF	SIG	EXP(B)	95% C.I Lower	Upper
Age	0.372	0.367	1.029	1	0.310	1.451	0.707	2.977
Sex	0.530	0.616	0.736	1	0.390	1.690	0.508	5.688
MS	-0.44	0.311	1.990	1	0.158	0.645	0.351	1.186
Education	0.640	0.249	6.583	1	0.010	1.896	1.163	3.092
Region	-0.46	0.510	0.816	1	0.366	0.631	0.232	1.713
Occupation	-0.04	0.187	0.037	1	0.848	0.961	0.668	1.392
W.T	1.113	0.195	32.612	1	0.000	3.044	2.078	4.461
Attitude	1.933	0.444	18.967	1	0.000	6.913	2.896	16.504
Drugs	0.150	0.535	0.079	1	0.779	1.162	0.407	3.315
Constant	-14.2	3.034	21.880	1	0.000	0.000		

Our equation is;

$$Log\left(\frac{p}{1-p}\right)=-14.20+0.372Age+0.530Sex-0.438MS+0.640Education-0.460Religion-0.036Occupation+1.113W.T+1.933Attitude+0.150Drugs\ldots\ldots\ldots (1)$$

Where P is the probability of membership of Dissatisfaction MS is Marital Status.

W.T is Waiting Time.

Waiting time and attitude was having a p-value of 0.000 less than 0.05 followed by education with a p-value of 0.010, which implies that there is a significant relationship between these variables and the dependent variable (that is, the level of outpatient satisfaction). The rest of the variables were having their p-value greater than 0.05 indicating that, there was no relationship between them and the dependent variable. An educated patient is about 1.9 more likely to be dissatisfied with health care delivery been delivered at the KomfoAnokye Polyclinic. Moreover, we are 95% confident that, a patient is about 3.044 more likely to be dissatisfied with the waiting time before receiving treatment at the Polyclinic. This implies that, the longer patients are left unattended to, they become less satisfied with the services been rendered. Also, we are 95% confident that about 7% of health workers' attitude are more likely to be dissatisfactory towards patients, denoting that, a personal relationship from health workers towards patients makes them more satisfied with healthcare service been delivered.

Conclusion

The research examined client satisfaction in health care delivery at Komfo Anokye Polyclinic, Kumasi. The objectives of the study were to find out the experiences of respondents regarding the delivery of health care service at the facility, also examine theeffect of attitude of health workers on the level of outpatients' satisfaction and to determine the effect of waiting time before treatment on the level of outpatient satisfaction.

Our findings suggest that respondents have easy access to most of the physical facilities (consulting rooms, OPD) at the hospital.We also found out that the level of outpatient's satisfaction is dependent on attitude of health workers. Again the level of outpatient's satisfaction is dependent waiting time of outpatients before treatment.

It is recommended that the hospital authorities should put in measures that would improve on the time patients spend at the hospital before accessing health services.

REFERENCES

[1] Aday, L. A., & Andersen, R. (1978). Theoretical and methodology issue in sociology: Study of satisfaction withmedical care. *SocSci Med*, *1*(2), 28.

[2] Cockerham, W.C. (1982) Medical Sociology. 2nd ed. Englewood Cliffs, N.J.: Prentice Hall; p.16-27

[3] Hall J.A., Dornan M.C 1990. Patient socio-demographic characteristics as predictor of satisfaction with medical care: meta-analysis. Social science and medicine.; 30: 811-8

[4] Jenkinson C, Coulter A, Bruster S, Richards N, Chandola T. Patients' experience and satisfaction with Health Care: Results of a questionnaire study of specific aspects of care. Quality Safety Health Care, VOL 2003;11:335-339 .10.1136/qhc.11.4.335

[5] Schaffer MA, Lia-Hoagberg B. Effects of social support on prenatal care and health behaviors of low-income women. J ObstetGynecol Neonatal Nurs. 1997; 26:433–440

[6] Setter JF, Thomas V. Perenger. 1997Validating a satisfaction questionnaire using multiple approaches. SocSci Med; 45(6): 879-85.

[7] Sriratanabul U, PimpakovitV . Service of outpatient department at hulalongkorn Med J 1973; 18(1): 55-62.