

Patients' Satisfaction and its determinants in Outpatient Department of Deberbirhan Referral Hospital, North Shoa, Ethiopia

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Abstract

Introduction: Patient satisfaction is a primary means of measuring the effectiveness of healthcare delivery. Patients have explicit desires for quality services when they visit health institutions. However, inadequate discovery of their needs may result in patient dissatisfaction. Hence, this study aimed to determine the level and determinants of patient satisfaction with outpatient department of Deberbirhan referral hospital, North Shoa, Ethiopia

Methods: Institution based cross sectional study was conducted from April 1-30,2013. Systematic random sampling technique was used to get a total of 414 outpatient clients/service users/. Data was collected using pretested, structured and interviewer administered questionnaire, and it was analyzed using SPSS version 20. Both Bivariate and multivariate logistic regression were computed to identify the associated factors.

Results: The overall patient's satisfaction in health care services rendered at Deberbirhan Referral Hospital was 57.7%. Majority of the patients were satisfied with the quality of medical instruments 368(88.9%). On the contrary, Majority of the patients were not satisfied with the availability of drinking water 320(77.3%). Provision of prescribed drugs [AOR: 4.304(1.139-14.606)], older age [AOR: 3.353(1.628-6.905)], higher educational status [AOR: 0.392(0.188-0.818)] and those who were not charged for service[AOR: 2.510(1.518-4.150)] were significantly associated with patient satisfaction.

Conclusion and recommendation: The overall patient's satisfaction in Deberbirhan referral hospital was relatively high. However, lack of drugs and supplies, and long waiting time were found to be the major causes of dissatisfaction. Therefore, the Hospital management should understand these service areas and plan for a better service delivery.

Keywords: Outpatient; Satisfaction; Hospital; Deberbirhan

Introduction

Patient satisfaction is one of the main components of quality of care which includes respect for the patient and understanding the need of patient and providing services accordingly [1]. Hospitals are an important part of any health system. To achieve service excellence, hospitals require continuous efforts to improve quality of the service delivery system [2-6]. Patient satisfaction and perceived quality service will influence utilization of services, as well as compliance with practitioner recommendations [7]. If the system cannot be trusted to guarantee a threshold level of quality, it will remain underutilized, be bypassed, used only for minor ailments, or used as a measure of last resort [8].

Measuring patient satisfaction has become an integral part of hospital management strategies across the globe. Moreover, the quality assurance accreditation process in most countries requires regular measurement of patient satisfaction [9]. As many researchers revealed, patient satisfaction represent a key indicator for the quality of health care delivery and this internationally accepted factor needs to be studied repeatedly for the good function of the health care system [10,11].

The Ethiopian federal ministry of health has been running a sector wide reform effort aimed at significantly improving the quality and the accessibility of the service at all levels of the country through implementing hospital reform guideline. One of the component of this guideline is improving service quality, this can be achieved by caring out of survey on patient satisfaction on the regular base [12].

Besides, improving quality service is one of strategies to reduce the

burden of communicable disease and play a significant role in attaining the millennium Development goal (MDGs) [13]. Studies in the developing world have shown a clear link between patient satisfaction and variety explanatory factor, among which service quality has been prominent [14]. This link is also important in the health sector Ethiopia [14]. This study intends to assess patient satisfaction and associated factors in outpatient department of Deberbirhan Referral Hospital.

Methods

The study was carried out in Deberbirhan Referral Hospital from April 1-30, 2013. Deberbirhan Referral Hospital is one of the governmental referral hospitals in North Shoa zone which is located 130 km far from Addis Ababa, the capital city of Ethiopia. It provides services for around 5000 emergency cases and 103,403 outpatient attendants each year. The study utilized institution-based cross-sectional study design with quantitative data collection method. Clients with greater than 15 year's age coming to the outpatient departments

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during the study period were selected by using systematic random sampling technique. Seriously ill patients were excluded.

The sample size was calculated using single population proportion formula with the following assumptions; proportion 43.6% (which was obtained from patient satisfaction at Tigray Zonal Hospital), 5% margin of error at 95% confidence level. The sample size was 416 after considering 10% non response rate. The total sample size was allocated proportionally to all out patient department services. The dependant variable was patient satisfaction; likewise the independent variables included were; socio demographic factors (age, sex, marital status, educational level, occupation, residence, frequency of visit, patient department), frequency of visit, reason for visit, payment status, waiting time, availability of drugs and supplies and other hospital service.

Waiting time: the time gap between the patient's arrival at the service delivery point and the time the patient received health service. Satisfied: In this study refers to clients who have the overall satisfaction of equal and above the mean score calculated from the satisfaction measuring items.

The questionnaires were prepared by reviewing relevant literatures. Pre- test was done on 10% of the subjects at Enat hospital. Data were collected by pre-tested, pre-coded and interviewer-administered questionnaires. The collected data were cleaned, coded, entered into EPI-INFO version 3.5.1 software and transferred and analysed using SPSS computer software package version 20. Summary statistics of socio demographic variables were presented using frequency tables and graphs. Bivariate analysis was done and variables with p-value less than 0.2 were included in the multiple logistic regression analysis. Odds ratio and 95% confidence intervals were also computed along with the corresponding p-value.

The study was reviewed and approved by Institution Research Review Boards, Institute of Public Health at the University of Gondar. The purpose and the importance of the study were explained and written consent was obtained from each participant. Moreover, confidentiality of the information was assured by using anonymous questionnaires and by keeping the data in a secured place.

Results

Socio demographic characteristics of the respondents

A total of 414 patients were enrolled in the study with a response rate of 98%. Out of the total study subjects, 226 (54.6%) were females. One hundred thirty one (31.6%) and 98 (23.7%) of the clients were in the age group of 25-34 and 35-44 years respectively. Similarly, 332 (80.2%) and 323 (78.0%) of the study subjects were orthodox in religion and Amhara in Ethnicity (Table 1).

Level of patient satisfaction

From the total of 414 respondents, 239 (57.7%) patients were satisfied by the overall service rendered in the hospital. Majority of the patients 350(84.5%), 253(61.1%) 368(88.9%), 288(69.6%) were satisfied with the availability of nurses for consultation, privacy during examination, quality of medical equipments, and clean and tidy environment respectively.

Factors associated patient satisfaction at outpatient department

The result showed that age, educational status, payment status, waiting time, availability of drug and supply were found to be significantly associated with patient satisfaction in the multiple logistic

regression analysis model ($p < 0.05$). Patients who belong to the age group of above 45 years and did not charge for the treatment were found be 3.35 and 2.5 times more likely to be satisfied than those who were in the age group of 15-24 [AOR:3.353(1.628-6.905)] and paying for the treatment [AOR: 2.510(1.518-4.150)] respectively.

Furthermore, respondents who had higher education and spent more than two hours in the hospital before getting service were 61% and 84% less likely satisfied than those who were illiterate [AOR: 0.392(0.188-0.818)] and spent less than one hours in the hospitals before getting service [AOR: 0.149(0.077-0.287)] respectively.

Concerning availability of drug and supply, patients who have got all the prescribed drug in the hospital pharmacy were 4.30 times more likely to satisfied than those who did not get all the prescribe drugs in the hospital pharmacy [AOR: 4.304(1.139-14.606)] (Table 2).

Discussion

Patient satisfaction is popular way of evaluating quality of health

Characteristics	Number (n=414)	Percent (%)
Sex		
Male	188	45.4
Female	226	54.6
Age group		
15-24	86	20.8
25-34	131	31.6
35-44	98	23.7
45+	99	23.9
Marital status		
Single	104	25.1
Married	257	62.1
Divorced	47	11.4
Widowed	6	1.4
Educational status		
Not able to read and write	138	33.3
Primary	82	19.8
Secondary	71	17.1
Diploma and above	123	29.7
Occupation		
Civil servant	117	28.3
Self employers	15	3.6
Merchant	53	12.8
Framers	71	17.1
No job	106	25.6
Students	49	11.8
Others	3	0.7
Religion		
Orthodox	332	80.2
Muslim	59	14.3
Protestant	19	4.6
Others	4	1.0
Ethnicity		
Amhara	323	78.0
Oromo	88	21.3
Others	3	0.7
Address		
Urban	227	54.8
Rural	187	45.2
Visited Service		
OPD	285	68.8
MCH	60	14.5
ART clinic	69	16.7
Payment status		
Paying	274	66.2
Free	140	33.8
Frequency of visit		
New	180	43.3
Repeat	234	56.5

Table 1: Socio demographic characteristics of patients at Deberebirhan referral hospital North Shoa, Ethiopia, April 2013

Variable	Satisfied	Dissatisfied	COR (95%CI)	AOR (95%CI)
Sex				
Male	97	91	1	
Female	142	84	1.586(1.070-2.350)	
Marital status	t			
Single	46	58	1	1
Married	155	102	1.916(1.209-3.037)	
Divorced	34	13	3.298(1.562-6.961)	
Widowed	4	2	2.522(0.442-14.381)	
Age				
15-24	48	38	1	1
25-34	62	69	0.711(0.412-1.229)	0.823(0.440-1.541)
35-44	55	43	1.013(0.565-1.815)	1.249(0.641-2.454)
45+	74	25	2.343(1.258-4.364)	3.353(1.628-6.905)*
Educational level				
Not able to read and write	95	43	1	1
Primary school	49	33	0.672(0.380-1.188)	0.637(0.303-1.337)
Secondary school	33	38	0.393(0.218-0.709)	0.419(0.185-0.948)*
Diploma and above	62	61	0.460(0.278-0.762)	0.392(0.188-0.818)*
Occupation				
Civil servant	61(51.2%)	56(47.9%)	1	1
Self employer	9(60%)	6(40%)	1.377(0.461-4.116)	
Merchant	29(54.7%)	24(45.3%)	1.109(0.578-2.127)	
Framers	44(62%)	27(38%)	1.496(0.820-2.729)	
No job	68(64.2%)	38(35.8%)	1.643(0.960-2.813)	
Student	26(53.1%)	23(46.9%)	1.038(0.532-2.024)	
Others	2(66.7%)	1(33.3%)	1.836(0.162-20.808)	
Address				
Urban	132(58.1%)	95(41.9%)	1	1
Rural	107(57.2%)	80(42.8%)	0.963(0.651-1.424)	
Payment status				
Paying	145(52.9%)	129(47.1%)	1	1
Free	94(67.1%)	46(32.2%)	1.818(1.189-2.781)	2.510(1.518-4.150)*
Frequency of visit				
New	104(57.8%)	76(42.2%)	1	1
Repeat	135(57.7%)	99(42.3%)	0.997(0.672-1.477)	
Availability of drug and supply				
None	5(27.8%)	13(72.2%)	1	1
Not ordered	32(64.0%)	18(36.0%)	4.622(1.417-15.073)	4.940(1.247-19.569)*
Some but not all	47(40.9%)	68(59.1%)	1.797(0.600-5.397)	1.476(0.422-5.158)
All of them	155(67.1%)	76(32.9%)	5.303(1.824-15.417)	4.304(1.268-14.606)*
Waiting time				
Less than one hour			1	1
One to two hours			0.262(0.165-0.417)	0.230(0.139-0.380)*
Greater than two hours			0.150(0.83-0.272)	0.149(0.077-0.287)*

Table 2: Multivariate Analysis showing factors associated with patient satisfaction

services in most developed countries. It has been also practiced in developing countries like Ethiopia.

This study revealed that the overall patient satisfaction at Deberebirhan Referral Hospital was 57.1%. This finding is lower than study conducted in Trinidad, Tobago, Nigeria, Kuwait and Bangladesh in which the patient satisfaction was 74% and 84% 94, 2%, 99.6% and 68% respectively [14-16]. The observed difference might be due to adequate number of health professionals, good infrastructure and better diagnostic facilities studies in most developed countries. However, the patient satisfaction in Deberebirhan Referral Hospital was higher than study conducted in selected hospitals of Amhara region, Tigray zonal hospital, hospitals in central Ethiopia and Harar

hospital in which the patient satisfaction was 22% to 50%, 43.6%, 54.1% and 54.1% respectively [17-20]. This might due the fact many efforts have been made to make changes in the service delivery process. In addition, health workers might be highly motivated to attain higher patients' needs and make the hospital as a good model of the regional referral hospitals.

This study showed that lower educational status and older age were significantly associated with patient satisfaction [21]. This is in agreement with the study Jimma specialized and teaching hospital, Tukmur and Bangladesh More than 68% of the patients were getting prescribed drugs within the hospital pharmacy. The finding is not in line with studies done elsewhere (20212829) in Ethiopia. Majority 54.1%

of the respondents were not satisfied with the physical environment, which is in line with study done in Bangladesh. Similarly, more than 40% of the study subjects were not satisfied with the waiting time. This is similar with study done in Tigray zonal hospital

Limitation of the study

Since the study was institutional based, underestimating patient satisfaction could be there. It is possible that a dissatisfied patient may not come to the hospital. Response bias might be also introduced, though we tried to reduce it.

Conclusion

The overall patient satisfaction in Deberbirhan referral hospital was 57.7% which was high as compared to different studies in Ethiopia. Majority of the patients 54.1% were not satisfied with physical environment (availability drinking water and cleanness of the toilet). From the social demographic characteristics, educational status, payment status of the patient and age were significantly associated of patient satisfaction. Majority of the patients were not satisfied with waiting time and lack of drug and supply.

Recommendations

Deberbirhan Referral hospital management bodies should give attention to the physical cleanness of the hospital, patient waiting time, service payment to improve their patients' satisfaction. Amhara Regional Health Bureau should look for different mechanisms to enable the hospitals keep adequate stock of essential drugs and supplies. Researchers need to conduct further research by adding different explanatory variable like attitude and expectation of the patient about the problem

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Authors' contributions

RM conceived the original idea, involved in proposal writing, designed the study and participated in all implementation stages of the project. MG analyzed the data and finalized the write up of the manuscript. MG was responsible for critically revising the proposal and the manuscript, and participated in its design and interpretation. MG and RM were responsible for data collection, initial analysis and drafting of manuscript. Both authors reviewed and approved the final manuscript.

Disclosure

The authors declare that they have no competing interests.

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