

Patients Satisfaction on Clinical Laboratory Services at Nekemte Referral Hospital, Oromia, Ethiopia

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Abstract

Background: Satisfaction is the extent to which the clients feel their needs are fulfilled and their expectations are being met by the service provider. Furthermore, understanding the level of client satisfaction and identifying the factors hindering client satisfaction are the most important base lines to improve the quality of service being delivered.

Objective: to assess the extent to which patients were satisfied on clinical laboratory services provided at Nekemte Referral Hospital (NRH).

Method: A Hospital based cross sectional study was conducted on randomly selected 422 Patients requested for clinical laboratory service at NRH from March to April 2014. Data were collected using structured, pretested, interviewer-administered questionnaire. Data analysis was performed using SPSS for windows version 20.

Result: Among the 422 patients, 255 (60.4%) were satisfied, 75 (17.8%) were neutral and 92(21.8%) were dissatisfied with the laboratory services given in Nekemte Referral Hospital. There was no significant association between socio-demographic characteristics and level of satisfaction of patients (P- value > 0.05). In Likert Scale, the overall mean rate of satisfaction of patients with laboratory services in Nekemte referral hospital was 3.65 out of the 5 points. The lowest mean rating of satisfaction were given for Cleanness of latrine and location of the laboratory in the hospital with mean rating of 2.15 and 2.17 respectively.

Conclusion: The overall degree of patient customers' satisfaction with the laboratory services at Nekemte Referral Hospital was 60.4% .patients were dissatisfied in cleanness and location of latrines in the hospital. Therefore; hospital administration and the laboratory department of Nekemte referral Hospital should strive more to enhance patients' satisfaction, particularly in sanitation and location of the latrine in the hospital.

Key Words: patients' Satisfaction, Clinical Laboratory Services, Nekemte Referral Hospital

Background

Client satisfaction reflects provider's ability to successfully deliver care that meets clients' expectations and needs (1, 2). A number of factors have been shown to influence clients' satisfaction with health care services including clients' socio-demographic characters, physical health status, clients' personal understanding and expectations from various health care services (3, 4). The general physical appearance of the hospital as well as the general environment of the premises also influences the overall Satisfaction of the client (5).

In every service providing organization what matters is whether the customer is satisfied or not. Now a day, the most important issue in health care service and other service providing organization is the level of satisfaction of the customers with available service(6).

Patients' satisfaction on service given in hospitals was assed in Nigeria and Tanzania (5, 7). In Ethiopia, some studies have done on clients' satisfaction in different hospitals (8, 9, 10, 11)

Customer service is an integral part of a quality management system. Most clinical laboratories in the United States are required to assess their customers' Satisfaction in order to maintain their accreditations (12).

Some studies conducted on patients and clinical services providers at selected government hospitals in eastern Ethiopia were revealed that most of patients (87.6%) and clinical services providers (80%) were satisfied with the laboratory services (13). The overall satisfaction

rate for ART monitoring laboratory services in Addis Ababa, Ethiopia was (85.5%)(14).

Patient satisfaction with laboratory services in selected government Hospitals, Eastern Ethiopia, revealed that the mean rating values ranged from 2.93 (± 1.67) to 4.78 (± 0.6) out of a possible 5 Likert scale(15). The Likert scale results of patient satisfaction of the laboratory

Services in selected governmental hospitals, Sidamma zone, southern Ethiopia indicated that the mean rating values ranged from 3.07 (± 0.96) to 4.25 (± 0.56) (16).

The problems related to clinical laboratory are aggravated particularly at peripheral level due to lack of properly designed laboratory rooms, shortage of short term and long term training for laboratory staff, lack of water and electricity, shortage of equipment and supplies, absence of effective maintenance and spare parts and lack of follow-up and supervision of laboratory staff are said to be among major clinical laboratory problems (17, 18).

Patients' were satisfied with waiting time to get blood drawing service, availability of ordered laboratory tests and waiting time to get laboratory result (14). The lowest rate of patient satisfaction were reported on cleanness of latrine to collect specimens (13). A study done in Tanzania showed that the main complaint reported on the laboratory service were: long waiting time for result notification, privacy and timely instructions. In addition to this level of privacy in the consultation room was described as unsatisfactory by 24.1% of clients (19).

Stepwise Laboratory (Quality) Improvement process is required in developing countries to strengthen for accreditation in laboratory service (20). Thus, this study assessed level of patient satisfaction on clinical laboratory service to give quality service for clients and enable clinical laboratories of Nekemte referral hospital to fill the gap to maximize service given to patient customers and the strive toward accreditation.

OBJECTIVE OF THE STUDY

General Objective

- To assess patients satisfaction on clinical laboratory service provided by Nekemte Referral Hospital.

Specific Objectives

- To assess patient customers satisfaction level on clinical laboratory service provided by Nekemte Referral Hospital.
- To assess association between patients satisfaction with clinical laboratory service at Nekemte Referral Hospital and sociodemographic characteristics of patients.

MATERIALS AND METHODES

Study area and period

The study was conducted in Nekemte Referral Hospital from April-May 2014. Nekemte Referral Hospital is the major health service providing governmental institute in the Nekemte town which is found at a distance of 331 kilometers from Addis Ababa. Nekemte Referral Hospital is the only referral hospital in East wollega zone and gives different health service for more than 1,756,952 populations.

Sample size determination and sampling

Institution based cross sectional study was conducted on patients whose age was >18 years and requested for diagnosis of parasites at clinical laboratory of Nekemte Referral Hospital. Sample size was calculated using a formula for estimating single population proportion for cross-sectional studies that is corrected for finite population. Taking the assumptions, proportion of customers' satisfaction 51.5% (11) at 95% confidence level and with margin of error of 5 %, and 10% non-respondent rate, sample size of 422 patients were included in the study. The study participants were distributed to the units of the laboratories based on the average patient flow per month. The study participants selected from source population using systemic random sampling.

Data collection methods

Data were collected by using structured, pre-tested and interviewer-administered questionnaire initially prepared in English and then translated to local language Amharic and Affan Oromo. The Amharic and Affan Oromo versions of the questionnaire were used for data collection. Data were collected by 3 medical laboratory technologists. Besides their socio-demographic characteristics study participants were asked to rate each aspect of their laboratory service on a five-point scales (very dissatisfied, dissatisfied, Neutral, Satisfied, and very Satisfied).

4.10. Data Analysis

Data were checked daily for completeness, entered in to computer and analyzed using SPSS for window version 20. A 5 point Likert scale rating of very dissatisfied (1-point), dissatisfied (2-points), neutral (3-points), satisfied (4-points) and very satisfied (5point) were used. To calculate level of patients satisfaction on different laboratory services; Very dissatisfied and dissatisfied were considered as dissatisfied, satisfied and very satisfied were considered as satisfied. Patients with neutral rating responses were excluded. The percentage satisfaction or dissatisfaction was calculated by dividing the number of satisfied or dissatisfied responses by the total number of respondents excluding neutral response ratings, respectively.

The overall rate of satisfaction by Likert scale was calculated as $(\text{No. of very satisfied rating} \times 5) + (\text{No. of satisfied rating} \times 4) + (\text{No. of Neutral rating} \times 3) + (\text{No. of Dissatisfied rating} \times 2) + (\text{No. of very dissatisfied rating} \times 1)$ divided by the total number of ratings (1–5) for the specific laboratory service. Association between sociodemographic characteristics of patients and level of satisfaction on laboratory services was determined by using Chi-square test. P-value < 0.05 was considered as statistically significant.

Ethical considerations

The study was endorsed by wollega University student research program. Permissions were obtained from Nekemte Referral Hospital to conduct the study. Verbal consent was also obtained from the study participants before administering the questionnaire.

RESULTS

Socio demographic characters

A total of 422 patients were enrolled in this study. 225(53.3%)of respondents were male, 57.8% were literate and 320(76.3%) of respondents were Urban dwellers. 92.4% of patients were not referred to Nekemte Referral Hospital and only 32(7.6%) patients were referred to the Hospital from nearby Health organization. There was no significant association between socio-demographic characteristics and satisfaction of respondents on laboratory service at Nekemte referral hospital (Table 1).

Table-1:- Comparisons of overall level of patients satisfaction with clinical laboratory services provided at Nekemte Referral Hospital and Socio Demographic, 2014. (n=422).

Variables		Satisfaction		Chi-square Value		
		Satisfied	Dissatisfied	DF	X ²	P- value
Sex	Male	130	51	1	0.406	0.546
	Female	125	42			
Age	18-29	261	63	3	3.99	0.263
	30-41	50	18			
	42-53	41	8			
	>54	15	4			
Residence	Urban	139	59	1	2.22	0.137
	Rural	116	34			
Education	Literate	190	75	1	1.41	0.235
	Illiterate	65	18			
Service	In payment	239	87	1	0.004	0.952
	Freely	16	6			
Number of Visit	Once	126	32	2	8.6	0.14
	Twice	79	44			
	More than Two	50	17			
Requisition	Referred	20	7	1	0.1	1
	Non referred	235	86			

Satisfaction level of patient on clinical Laboratory Services

Of 422 respondents, 255(60.4%) were satisfied, 75(17.8%) were neutral and 92(21.8%) were dissatisfied with general Laboratory service provided at Nekemte Referral Hospital (Figure 1).

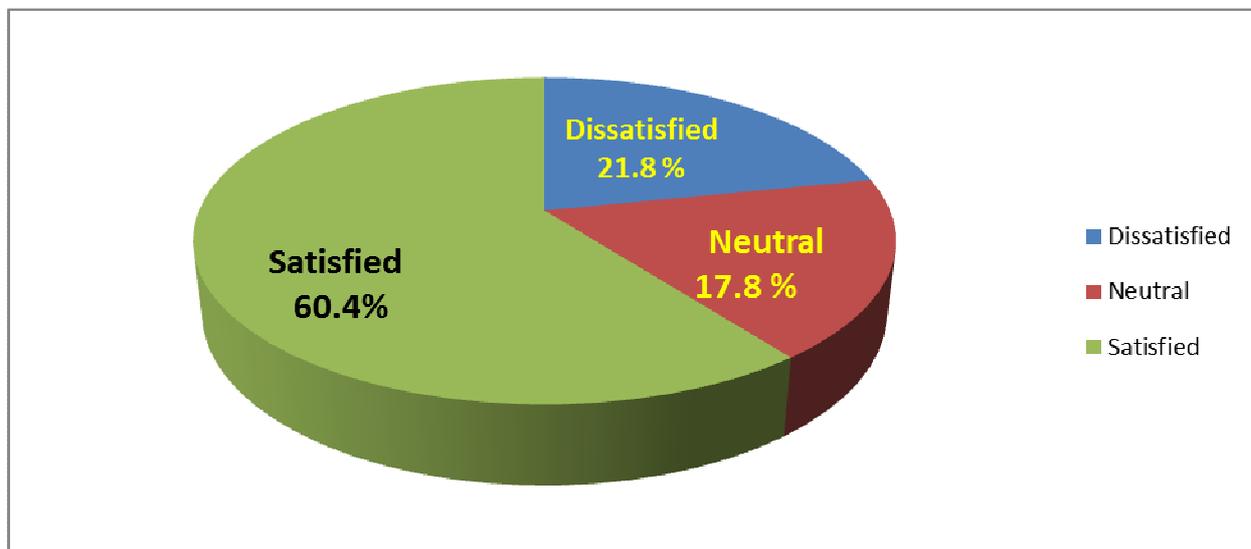


Figure 1: Level of patients satisfaction on laboratory services at Nekemte Referral Hospital, 2014(n=422).

In Likert Scale, the overall mean rate of satisfaction of patients by laboratory services in Nekemte referral hospital was 3.65. The mean rate of satisfaction for different aspects of laboratory services ranged from 2.15 to 3.82. The lowest mean rating of satisfaction were given for cleanness of latrine and location of the laboratory in the hospital with mean rating of 2.15 and 2.17 respectively. Higher mean rating of satisfaction was obtained for the language the clinical laboratory workers use (3.82) and the presence of waiting place nearby laboratory building in the Hospital (3.72) as indicated in Table 2.

Table -2:-Patients’ ratings of satisfaction with different aspects of clinical laboratory services given at Nekemte Referral Hospital, April –MAY 2014, (n=422).

Variables	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied	me Rati	Satisfied Percentage
General satisfaction by the hospital laboratory	39(9.2)	53(12.6)	75(17.8)	104(24.6)	151(35.8)	3	73.5
Waiting Place	30(7.1)	55(13)	78(18.5)	98(23.5)	161(38.2)	3	75.3
Cleanness of room	38(9.0)	51(12.1)	97(23)	115(27.3)	121(28.7)	3	72.6
Privacy of room	40(9.5)	53(12.6)	96(22.7)	120(28.4)	113(26.8)	3	71.5
Communication	37(8.8)	41(9.7)	101(23.9)	109(25.8)	134(31.8)		75.7
Patience	39(9.2)	57(13.5)	83(19.7)	100(23.7)	143(33.9)	3.6	71.7
Respect	74(17.5)	52(12.3)	62(14.7)	93(22)	141(33.4)		66.9
Language	32(7.6)	38(9)	75(17.8)	101(23.9)	175(41.5)		79.5
Location of Latrine	207(49.1)	56(13.3)	73(17.3)	53(12.6)	33(7.8)		24.6
Cleanness of Latrine	206(48.8)	54(12.8)	83(19.7)	49(11.6)	30(7.1)		23.3

	54(12.8)					
Total waiting time to Get results	60(14.2)	47(11.1)	86(20.4)	103(24.4)	126(29.9)	68.2
Accessibility of sample Collector	41(9.7)	48(11.4)	67(15.9)	118(28)	148(35.1)	75
The whole availability of Requested tests	53(12.5)	(11.6)	77(18.2)	90(21.3)	153(36.2)	70.4
Information given before specimen collection outside the laboratory room	48(11.4)	54(12.8)	82(19.4)	110 (26.1)	128 (30.3)	70
Measures taken during loss of laboratory results	59 (14)	44(13.1)	85(20.1)	87(20.6)	147 (34.8)	69.4
Improvement of laboratory service from time to time	44 (10.4)	54(12.8)	86(20.4)	103 (24.4)	135 (32)	70.8
The Cost of the laboratory service	45 (10.7)	38(9)	89(21.)	113(26.8)	137 (32.5)	75.1

Discussion

Satisfaction of clients is one of the outcome measures for health care services and it serves as a useful quality improvement tool, required by most clinical laboratories. Satisfaction rate of patients with clinical laboratory service in Nekemte referral hospital was 60.4%. This satisfaction rate was lower than a study conducted in some government hospitals in eastern part of Ethiopia (13). A lower in patients' satisfaction might be due to excess patients to the laboratory as Nekemte referral hospital is the only referral hospital used in east wollega zone, west wollega zone and Kelem wollega. Level of patient satisfaction was not statistically different by sex, Age, educational status and residence of respondents.

The mean rating of satisfactions for different aspects of clinical laboratory services in Nekemte referral hospital range from 2.15 to 3.82. This range was lower as compared with some studies done in Ethiopia (15, 16). From different laboratory service given in Nekemte referral hospital, patients' higher rate of satisfaction was showed on language used in laboratory workers and presence of adequate waiting place nearby the clinical laboratory. The Likert scale results of the patient ratings for the level of satisfaction on laboratory services showed the lowest rate 2.15 for cleanliness of the latrines for specimen collection and the second lowest rate 2.17 was recorded for the location of latrine in the hospital to brought specimen. Dissatisfaction of patients with the sanitation of the latrines in this study was in line with study done in some hospitals in eastern and southern part of Ethiopia (15, 16).

Conclusions

The overall degree of Patients satisfaction with the laboratory services was high. Patient satisfaction was lowest with the sanitation and location of latrines in the laboratory .Therefore; hospital administration and the laboratory department of Nekemte referral Hospital should strive more to enhance patients' satisfaction, particularly in sanitation and location of the latrine in the hospital.

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