

## Patient satisfaction and associated factors with services provided at outpatient departments

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### ABSTRACT

Asking patients what they think how they feel about the health service they have received is an important step towards improving the quality of care and, ensuring that local health services are meeting clients needs and expectations. Facility- based cross-sectional study was conducted from April 1-7, 2019 in randomly selected primary hospitals found in Guraghe zone. There were 266 randomly selected patients who attended the primary hospitals were participated in the study. Data was collected using a interviewer-administered structured questionnaire and analyzed using SPSS version 21. Multiple logistic regression analysis used to identify predictors of patient satisfaction. The overall of patient satisfaction level with the health service provided at the outpatient departments of the primary hospitals was 66.5% (95% C.I. 60.8%-72.2%). waiting time (AOR 3.65), informing patients about cause of illness (AOR, 2.46) and waiting area cleanliness (AOR 2.33) were among the significant predictors of patients satisfaction. Acknowledging the limitation of the cross-sectional study design findings of this study indicate that waiting time, telling the cause of illness, cleanliness of the waiting area are important predictors of patient satisfaction.

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## 1. INTRODUCTION

Patient satisfaction is an important and desired outcome of healthcare delivery, and it can significantly affect patient outcomes because it determines long-term retention of the patients and their adherence to treatment regimens [1]. Asking patients what they think and how they feel about health service they received from their given providers and about the way it was delivered it is an important aspect for improving the quality of care, and to ensure that health services provided locally are meeting patients needs [2]. Different research findings showed that that patients satisfied with the health service provided are more likely to keep utilizing health services provided by a given health facility, comply with treatment and recommendation of the service provider, and continue with the health care providers [3]. Understanding patient's level of satisfaction with the care provided by a given health organization is first and foremost, essential for improving the quality of health service delivery since it indicates the provider's success at fulfilling the most important expectations of a given patient [4-5]. Measuring healthcare quality and improving patient satisfaction have become increasingly important among healthcare providers and users of healthcare. This is mainly due to the fact that consumers are becoming increasingly more knowledgeable about healthcare services provided to them and the ever-changing health care market and competitions in it demands the service provider to understand and fulfill the sophisticated needs of their patients [6].

Quality of health services used to be commonly measured based on professional performance standards, however over the last decade, patients' perception about healthcare has been predominantly accepted as an important indicator for measuring quality of health care and a critical component of

performance improvement and service effectiveness [7]. Recent trends show that quality assurance and management as well as certification procedures throughout health care systems of different countries both for ambulatory and hospital services require outcomes of patient satisfaction surveys as a major criteria. Data from such surveys are used for benchmarking the quality of the service provided by a given health organization and commonly the results made available for the public [8-9]. Satisfaction is a multi-dimensional concept that is part of complex model [6] and there is absence of a solid conceptual basis and consistent measurement tool for consumer satisfaction has led, over the past ten years, to a proliferation of surveys that focus exclusively on patient experience [10]. There is no universally accepted way on how to define the concept of patient satisfaction and how to measure it different literatures describe satisfaction in healthcare in differently. According to Donabedian's quality measurement model, patient satisfaction is conceived as patient-reported outcome [11]. Jackson and Ahmed considered patient satisfaction as appears to representation of patients attitudes towards care or aspects of care [12-13]. On the other hand, other authors defined patient satisfaction as a degree of congruency between patient expectations of ideal care and their perceptions of real care received [14].

Primary hospitals specially those found in developing countries like Ethiopia are primarily established for purpose of inpatient service and no much attention was given for patients who visited outpatients departments since those services can be delivered by health centers and health posts, but this facts didn't stop patients from attending primary hospital because of the belief that quality services are provided at hospital level [15]. In developing countries patients perception about health services provide to them seems to be given inadequate attention by health care managers [16] in addition health professionals found to have both awareness and adequate training to address patients' expectations [17] and these and patients satisfaction surveys have received little attention. The main objective of this study was the level of patients' satisfaction its associated factors focusing on out patients departments of primary hospitals. The findings of this study hence will contribute to improve the quality of health services provided in the clinics.

## 2. RESEARCH METHOD

Facility-based cross-sectional study was conducted in primary hospitals of Guraghe zone, Southern Ethiopia. The study was conducted at outpatient departments of three primary hospitals found in Gurage zone southern, Ethiopia from April 1-7, 2019. Gurage zone is located 157 kilometers away from Addis Ababa capital of the country. There are currently three primary and one tertiary level hospitals in Guraghe zone namely, Atat Primary hospital, Butajira primary hospital, Bouyie primary hospital and Wolkite University specialized tertiary hospital, which provide both inpatients and outpatient services for population of the zone. This study primarily focused on the satisfaction status of the patients who attended outpatient departments of the above mentioned primary hospitals.

There are 270 randomly selected patients who attended outpatient department of the primary hospitals in Guraghe zone, Southern Ethiopia were included in the study after proportional allocation of the final sample size to the respective hospitals. Stable patients who received care in the primary hospitals during study period and willing to participate in the study. Exit interview was made using interviewer-administered patient satisfaction survey questionnaire. The questionnaire consisted of four parts. The first part of the questionnaire was about Socio-demographic characteristics of the respondents. The second part of the instrument assessed reason and pattern of patients visit. The third part the instruments assessed patients Interaction with the Health care provider. The fourth part of the instruments is consists Likert-scale type item which measured perceived level of patients satisfaction different components of service provision.

Data were checked for completeness and accuracy and entered and analyzed using SPSS version 21 software. Descriptive statistics were computed for different study variables. An overall satisfaction means score of 2.5 is considered as cut-off value to categorize patients. Based on that calculated mean score cut-point scores patients were classified as satisfied (those who scored overall means score above or equal to 2.5) and dissatisfied (those who scored calculated means score below 2.5). Bivariate logistic analysis was conducted to determine predictors of patient satisfaction.

## 3. RESULT AND ANALYSIS

### 3.1. Socio-demographic characteristics of patients

Among the total sample size (n=270) 266 patients completed the questionnaire which makes the total response rate 98.5%. More than half of the respondents 150 (56.4%) were between the ages of 20 and 35 and (98.1%) of the respondents were single as shown in Table 1.

**Table 1. Socio-demographic characteristics of respondents**

Socio demographic variables	Frequency(n=266)	Percent (%)
Age category(years)		
20-35	150	56.4
36-40	100	37.6
>65	16	6.0
Total	266	100
Sex		
Male	157	59.0
Female	109	41.0
Total	266	100
Marital Status		
Single	161	60.5
Married	105	39.5
Religion		
Protestant	88	33.1
Orthodox	97	36.5
Muslim	52	19.5
Catholic	23	8.6
Others*	6	2.3
Total	266	100
Ethnicity		
Oromo	84	31.6
Amhara	62	23.3
Tigre	27	10.2
Gurage	48	18.0
Others **	45	16.9
Total	266	100

\*(Adventists and Wakefata), \*\*others (Hadiya, Wolkite, Sidama, silte, Gamo)

### 3.2. Institutional aspects and pattern of visit

Among the total respondents, 175 (65.8%) respondents were follow-up visitors while 91 (34.2%) were new visitors. 62.0% of the study participants reported that they found only some of the prescribed drugs from the hospital pharmacy. Concerning the perceived duration of consultation, 26.3% of the patients reported that they had long consultation time than they expected, while 27.4% of them consider it as short. As shown in Table 2.

**Table 2. Institutional aspects and patterns of visit among patients**

Variable	Frequency(n=266)	Percent (%)
Reason for visit		
Illness	236	88.7
Others	30	11.3
Total	266	100
Number of visit within the last 24 months		
One time	91	34.2
Two times	94	35.3
Three times	48	18.0
Four time or more	33	12.4
Total	266	100
Perceived waiting time to see physician		
Long	45	30.2
Fair	69	46.3
Short	35	23.5
Total	266	100
Perceived consultation duration		
Long	70	26.3
Fair	123	46.2
Short	73	27.4
Laboratory test ordered		
Laboratories tests are ordered	149	56.0
Laboratories tests are not ordered	117	44.0
Total	266	100
Availability of prescribed drugs		
All available	84	31.6
Some available	165	62.0
None available	17	6.4
Total	266	100

### 3.3. Interaction with the health care provider

Among the total number of the respondents, more than half (53.0%) of the respondents reported that the provider discussed with them cause of their illness while 63.5% of the respondents reported that they were advised how to prevent the re-occurrence of their illness. Regarding perceived empathy 142 (53.4%) perceived that the providers have medium level of empathy while 94 (35.3%) of them feel that the providers have low level of empathy, while the remaining 30 (11.3%) believe that service providers have a high level of empathy as shown in Table 3.

Table 3. Patient service-provider interaction among in outpatient departments of primary hospitals

Variables	Frequency (n=266)	Percentage (%)
Patients identity is confirmed by service provider	211	79.3
Patients Asked about their medication history	178	66.9
Provider discussed with them about the cause of your illness	141	53.0
Provider told them to return if symptoms gets worse	170	63.9
Provider told enough about their treatment	153	57.5
Provider told them ways of preventing future reoccurrence	169	63.5
Perceived level of empathy		
Low	94	35.3
Medium	142	53.4
High	30	11.3

### 3.4. Level of patient's satisfaction with different components of service provision

Table 4 shows that from the total respondents 27.4% were satisfied with the clarity of the instructions given by the care provider on investigations/prescriptions; while 12 (4.5%) of them were strongly dissatisfied. Majorities (51.9%) were satisfied with the cleanness of the consultation room; while 18 (6.8%) were strongly dissatisfied. Overall satisfaction score with health service provided in the outpatient department of the primary hospitals was 66.5% at 95% CI (60.8%-72.2%)

Table 4. Level of patient satisfaction with different components of health service provided at outpatient departments of primary hospitals

Characteristics	Strongly dissatisfied N (%)	Dissatisfied N (%)	Neutral N (%)	Satisfied N (%)	Strongly satisfied N (%)
Clarity of instructions given by the service provider on investigations/prescriptions	12(4.5)	85(32.0)	91(34.2)	73(27.4)	5(1.9)
The amount of time spent with service provider	17(6.4)	51(19.2)	80(30.1)	117(44)	1(0.4)
Condition (comfort, privacy etc.) of the consultation room	17(6.4)	49(18.4)	90(33.8)	101(38.0)	9(3.4)
Cleanness of waiting area	45(16.9)	66(24.8)	59(22.2)	88(33.1)	8(3)
Cleanness of consultation room	18(6.8)	37(13.9)	55(20.7)	138(51.9)	18(6.8)
Courtesy and respect of the provider	45(16.9)	66(24.8)	59(22.2)	88(33.1)	8(3)
Procedure of physical examination	15(5.6)	44(16.5)	95(35.7)	102(38.3)	10(3.8)
Overall waiting time	17(6.4)	62(23.3)	99(37.2)	83(31.2)	5(1.9)

### 3.6. Factors associated with patient satisfaction

Bi-variate logistic regression was conducted between socio-demography, pattern of visit, interaction with health service provider variables and overall satisfaction score. Those variables with  $P < 0.05$  at bivariate analysis were included in multiple logistic regressions. According to the outcomes of multivariate analysis patients waiting time was among significant predictors of patient's satisfaction. Accordingly, patients who waited less than or equal to 30 minutes to visit service provider were 3.65 times more satisfied than patients waited more than 60 minutes (AOR 3.65, 95%CI: 1.58-8.46). Patients who perceived the waiting area is clean are 2.33 times satisfied compared to those who perceived the waiting area is unclean (AOR 2.33, 95% CI: 1.34-4.77). Patients who were told about the cause of their illness were 2.46 more satisfied than those patients who hadn't been told about cause of their illness (AOR 2.46, 95% CI: 1.15-5.29). As shown in Table 5.

Table 5. Predictors of patient satisfaction in outpatient departments of primary hospitals.

*Patient satisfaction and associated factors with services provided at outpatient departments (Dereje Mesfin)*

Explanatory variables	Patient satisfaction		COR(95%CI)	AOR(95%CI)
	Satisfied N (%)	Dissatisfied N (%)		
Registration process was done timely				
Agree	116(65.5)	38(42.7)	2.55(1.51-4.30)***	1.42(0.73-2.75)
Disagree	61(34.5)	51(57.3)	1	1
Waiting time to visit service provider(in minutes)				
≤30	101(57.1)	28(31.5)	3.61(1.85-7.05)***	3.65(1.58-8.46)**
31-60	48(27.1)	33(37.1)	1.46(0.74-2.89)	1.56(0.66-3.68)
60+	28(15.8)	28(31.5)	1	1
Laboratory test ordered				
Yes	48(53.9)	69(39)	1.83 (1.09-3.04)*	1.33(0.70-2.52)
No	41(46.1)	108(61)	1	1
Availability of prescribed drugs				
All	66(37.3)	18(20.2)	3.26(1.10-9.65)*	2.28(0.58-8.94)
Some	102(57.6)	63(70.8)	1.44(0.53-3.92)	1.04(0.29-3.78)
None	9(5.1)	8(9.0)	1	1
Does privacy of consultation room appropriate?				
Yes	138(78)	58(65.2)	1.89(1.078-3.32)*	1.03(0.51-2.09)
No	39(22)	31(34.8)	1	1
Cleanliness of waiting area				
Yes	146(82.5)	60(67.4)	2.28(1.26-4.10)**	2.33(1.34-4.77)*
No	31(17.5)	29(32.6)	1	1
Perceived empathy				
Low	53(29.9)	41(46.1)	1	1
Medium	103(58.2)	39(43.8)	2.04(1.18-3.54)*	1.73(0.77-3.91)
High	21(11.9)	9(10.1)	1.81(0.75-4.36)	1.66(0.44-6.20)
Interviewed by the language you understand				
Yes	152(85.9)	67(75.3)	1.99(1.05-3.79)*	1.38(0.64-2.95)
No	25(14.1)	22(24.7)	1	1
Asked medication history took				
Yes	128(72.3)	50(56.2)	2.04(1.20-3.47)**	1.49(0.76-2.96)
No	49(27.7)	39(43.8)	1	1
Provider told cause of illness				
Yes	148(83.6)	56(62.9)	3.01(1.67-5.40)***	2.46(1.15-5.29)*
No	29(16.4)	33(37.1)	1	1
Provider a to return if symptoms gets worse				
Yes	49(55.1)	121(68.4)	1.76(1.04-2.98)*	1.07(0.53-2.18)
No	40(44.9)	56(31.6)	1	1
Provider told you how to prevent reoccurrence of your illness				
Yes	123(69.5)	46(51.7)	2.13(1.26-3.60)**	1.14(0.56-2.31)
No	54(30.5)	43(48.3)	1	1

(\*) P-value<0.05, (\*\*) P-value<0.01, AOR: Adjusted odd ratio, COR: Crude odd ratio

#### 4. DISCUSSION

The current study conducted in the OPD of primary hospitals of Guraghe zone showed that the overall satisfaction score of the patients with services provided was 66.5% at 95% CI (60.8%-72.2%). This overall satisfaction level report is low compared to the report of the studies conducted in Hospital of Wollega Oromia region and Assendabo and Jimma Town and Teaching Hospital of Isfahan which showed 91%, 85.7% and 86% respectively overall satisfaction [18-20] but the findings is comparable with studies conducted in Health centers in central Ethiopia which reported overall patient satisfaction level of 62.6% [15]. This difference might be previously listed hospitals were established prior to hospitals of covered by the study and are well equipped both in human resource and other facilities. According to the result of the above study perceived waiting time to visit service providers, informing the cause of illness and cleanliness of waiting areas are found to be an important predictor of patient satisfaction. Long waiting time to receive service in the hospitals negatively affected patient satisfaction in this study. This finding is consistent with the studies conducted in Different outpatient clinics in Ethiopia [19, 21-22]. Concerning the cleanliness of the waiting area, 33.0% of the respondents were satisfied with the cleanliness of the waiting area. This level of satisfaction with regard to cleanliness of the facilities is less compared findings from study wolaita Sodo University Teaching Hospital and OPD of Tertiary Care Hospital in India reported that, 50.0%, and 55.6% of the patients were satisfied respectively [23-24]. This difference might be due to the intrinsic difference between the primary hospitals and the tertiary level teaching hospitals. According to findings of this study more than half (53.0%) of the patients were informed about the cause of their illness which is less compared to the findings of a study conducted in USA where 72% of the respondents reported that their health care providers gave them adequate information about their condition [25]. But it is better compared to the findings study conducted in primary health care centers in

central Ethiopia whereby 62.6% of patients were not informed about the cause of their illness which translates to be a missed opportunity for health education [15].

## 5. CONCLUSION

In general, the overall satisfaction level of patients with the health care services provided at outpatient departments of Guraghe zone was suboptimal. Short waiting time, cleanliness of waiting areas and discussing with patients about the cause of their illness were positive and significant predictors of patient satisfaction. Hence optimizing patient waiting time to visit health professionals would be crucial to improve patient satisfaction. Therefore hospital managements and service providers should work towards devising a strategy to reduce waiting time. Furthermore the hospital management should work to create clean and comfortable waiting areas. Besides that, health care professionals should discuss with their patients about the cause and treatments of their illness as such they can improve the satisfaction level of their patients. Furthermore health office of the zone should establish a mechanism for a regular patient satisfaction surveys as a fundamental initiative for the improvement of the health service quality.

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