

# Satisfaction of Outpatient Service Consumers and Associated Factors Towards the Health Service Given at Jimma Medical Center, South West Ethiopia

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*Patient Related Outcome Measures*

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**Background:** Client satisfaction reflects the gap between the expected service and the experience of the services from the client's point of view. As patient satisfaction is considered to be a healthcare outcome and predictor of treatment utilization and adherence to the care and support, assessment of the level of patient satisfaction is vital.

**Objective:** To assess satisfaction of outpatient service and its associated factors toward the health service given among outpatients at Jimma medical center, southern western Ethiopia, 2019.

**Methods:** An institutional-based cross-sectional study design was employed at Jimma Medical center from May 1 to May 30, 2019 GC. The respondents were selected by systematic random sampling method. The data were cleaned, coded, interred into EPI data version 3.1 and transferred and analyzed using SPSS version 23. Descriptive statistics was used to summarize the data. Binary logistic regressions were used to analyze the association between dependent and independent variables. A  $P$ -value  $<0.05$  was considered significant.

**Results:** A total of 284 respondents were included in the study with a response rate of 96.6%, from which 174 (61.3%) were male and 183 (64.4%) were Oromo by ethnicity. The overall satisfaction was 79 (27.8%) (CI = 20.0–30.4). Satisfaction was high if the patients had kept their privacy (AOR = 13.332; 95% CI = 2.282–77.905) and understandability of the patient problem (AOR = 21.830; 95% CI = 0.054–77.500).

**Conclusion:** The overall satisfaction level of the patients is low, so this demands the hospital to take further action on the identified problems to improve the services delivered to the patients.

**Keywords:** client satisfaction, health care service, outpatient, Jimma

## Background

Patient satisfaction is a crucial phenomenon that recognizes the patients' needs so as to improve healthcare systems. Patient responses to healthcare services are one way to obtain information about patient views regarding the perceived quality of healthcare, and to establish robust patient engagement.<sup>1</sup> Patients who report higher satisfaction are more likely to benefit from their treatment.<sup>2</sup>

Several studies used factors such as pharmacy services, physical services (tangible, environment), doctor–patient communication, and laboratory services to access the sustainability of healthcare services with a concern for patient satisfaction.<sup>3,4</sup> Patient satisfaction has been defined as the degree of congruency between a patient's expectations of ideal care and his/her perception of the real care he/she receives.<sup>5</sup> Better appreciation of the factors pertaining to patient satisfaction

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would result in implementation of custom-made programs according to the requirements of the patients, as perceived by patients and service providers.<sup>6</sup>

Patient satisfaction is an important issue both for evaluation and improvement of healthcare services.<sup>7</sup> It reflects the gap between the expected service and the experience of the service from the patient's point of view. Measuring patient satisfaction has become an integral part of hospital/clinic management strategy across the globe.<sup>8</sup> It is also used as a measure of the quality of care because it gives information on the provider's success at meeting those patient values and expectations, which are matters on which the patient is the ultimate authority.<sup>9,10</sup>

In the prior years when hospitals were symbols of humanitarian efforts for community welfare, accountability for performance was of little concern. Today, however, people are increasingly concerned about hospital performance because hospitals use an increasing proportion of scarce community resources and there are increasing questions about quality and effectiveness.<sup>11</sup>

Patient satisfaction is a healthcare recipient's reaction to salient aspects of the contexts, process, and result of their service experience.<sup>12</sup> Patient satisfaction with the treatment process may both influence and be influenced by treatment outcomes. Patient satisfaction should be as indispensable to the assessment of quality as to the design and measurement of the healthcare system.<sup>13</sup>

Patient satisfaction refers to the degree of conformity between patients' expectations and the reality regarding their experience of medical services, the quality of received healthcare, feelings related to diagnosis and treatment, and consensus about the treatment program. In other words, it is a reflection of patients' perceptions of medical care processes, and it is considered an important index of medical quality.<sup>14-17</sup>

Patient satisfaction is the consumer's evaluation about the effectiveness, safety, and benefit of the healthcare service, which is a combination of the patient's experience and perception.<sup>18,19</sup> Patient satisfaction is an important and commonly used indicator for measuring the quality of healthcare, and higher patient satisfaction would lead to better clinical outcomes and less care resource utilization. Therefore, a patient satisfaction survey is essential for patients, healthcare providers, and healthcare payers.<sup>13,19-25</sup>

As patient satisfaction is considered to be a healthcare outcome and predictor of treatment utilization and adherence to the care and support, assessment of the level of patient satisfaction is vital. In addition, knowing the needs

of the patient is of paramount for the achievement of sustainable development goal on health service delivery.<sup>22</sup>

As the expectations of patients increase over time, the quality of the service has to keep improving to maintain or increase the level of satisfaction. In developing countries, even if services are available at all, they are often of low quality due to many people bypassing the closest public facility to go to costlier private facilities.<sup>23</sup>

Patients who are not satisfied with service may have worse outcomes than others, because they miss more appointments, leave against advice or fail to follow treatment plans.<sup>24,25</sup>

At the hospital level, providing a quality service is usually challenged by burdensome patient flow and the urgent nature of care in the emergency department (ED) further suppresses the effort.<sup>13</sup>

According to a study done in different countries there was patient satisfaction with the outpatient healthcare services. For example, in Mozambique,<sup>10</sup> Tanzania<sup>26</sup> and Bangladesh<sup>27</sup> patient satisfaction was 55%, 83% and 68%, respectively. The study done in Hawasa Ethiopia stated that 80.1% of the respondents were found to be satisfied with the outpatient services they received.<sup>28</sup>

A study conducted in Addis Ababa, Ethiopia, found that 75% of cases were not adequately diagnosed, treated or monitored. A study noted that despite having high expenditure and adequate facilities, patients were often not satisfied with the healthcare they received.<sup>29</sup> Therefore, the objective of this study was to assess satisfaction of outpatient service consumers and associated factors towards the Health Service given at Jimma Medical Center, south-west Ethiopia.

## Methods

### Study Area and Period

The study was done in Jimma medical center (JMC), which is found in Jimma zone, south-west Ethiopia. It is the new name given to the former Jimma specialized hospital, one of the oldest public hospitals in the country. It was established in 1930 by Italian invaders for the services of the soldiers which give services for more than 15 million people. It is the only teaching and referral hospital in the south-western part of country. The study was conducted May 1-30, 2019.

### Study Designs

- An institutional-based cross-sectional study design was used.

## Population

### Source of Population

- The source population was all patients visiting the outpatients department (OPD), Jimma Medical Center. There are two types of OPD (EOPD & cold OPD).

### Study Population

- The study population was all sampled patients visiting OPD Jimma medical center during data collection period.

### Inclusion and Exclusion Criteria

- Patients whose are interested to participate in the study were included. Known mentally unstable patients and critically ill patients.

## Sample Size Determination and Sampling Technique

### Sample Size Determination

Sample size was calculated using single population proportion formula at standard normal distribution ( $Z_{\alpha/2} = 1.96$ ) with confidence interval of 95% and  $\alpha = 0.05$ ,  $P = 64\%$ ,<sup>30</sup>  $d =$  a tolerable margin of error ( $d = 0.05$ ) which was 354. Because the source population during the data collection period was  $<10,000$ , a reduction formula was used to get the final sample size, which was 267. Adding a 10% non-response rate, the final sample size was 294.

### Sampling Technique

A convenient sampling method was used to select the study participants until the final sample size was reached. Every third patient exiting the OPD was interviewed to complete this study.

## Study Variables

### Dependent Variables

- Level of patient satisfaction

### Independent Variables

Socio-demographic factors: age, sex, educational status, marital status, ethnicity, monthly income, religion, occupational status, resident.

Health-related factors: provider behavior, service quality.

## Data Collection Instrument

Data were collected using a pre-tested and structured interviewer-administered questionnaire. The instrument was adapted from different relevant literatures. The instrument contains three parts with 27 items. The first part contains

socio-demographic information (six items). The second part related with satisfaction of outpatient service consumer (18 items). The third part focuses on the availability of the prescribed medication and treatment (three items). A five-point Likert scale was used, that ranges from very dissatisfactory (1) to very satisfactory (5) to measure patient satisfaction toward the healthcare service.

## Data Collection Procedure

The data were collected using a pre-tested structured interviewer-administered questionnaire by face-toface interview.

## Quality Control

The questionnaire was prepared in English and translated to local languages Afaan Oromo and Amharic, then back to English by language expertise to check for its consistency. Cross-checking of completeness of questionnaires was made during and after data collection. To ensure the validity and reliability of data collection, a pre-test was done on 5% of the sample size at Shenene Gibe Hospital, one of the regional hospitals found in the Jimma zone. The validity of this study was maintained through continuous input and feedback from the supervisor, and the expertise of a statistician. The instrument was checked for reliability (internal consistency) using the Cronbach's alpha coefficient, which was 0.79, and the time taken for each questionnaire was 20 min.

## Data Processing, Analysis and Presentation

Data were first checked manually for completeness and then coded and entered into Epi-Data version 3.1 and cleaned then entered into SPSS (version 23) for analysis. Binary logistic regression was used to determine the dependent variable on the basis of continuous and/or categorical independent variables, and factors with a  $P$  value  $\leq 0.25$  in bivariate analysis were candidates for multivariate analysis and factors with  $P < 0.05$  in the final model were used to determine statistical significance. Descriptive statistics were used to describe and summarize the data.

## Ethical Consideration

Ethical approval was obtained from the Institutional Review Board (IRB) Institute of Health of Jimma University. Following the approval by the IRB, an official letter of cooperation and support was written to Jimma medical center. After receiving permission from the

hospital, ethical issues within the study were taken into consideration during the study.

Data collectors were informed about the study, and then written informed consent was obtained from the study participants. Parental written informed consent was obtained for patients under 18 years of age. Confidentiality was assured for all the information provided and no personal identifiers (anonymity) were used on the questionnaires. The collected data were kept in a secure place until publication of the result.

## Results

### Socio-Demographic Characteristics of the Participates

Among the total samples ( $n = 294$ ), 284 patients 'were interviewed, with a response rate of 96.6%. Of the total respondents, 174 (61.3%) were female. The mean age of the respondents was  $39.58 \pm 21.842$  years, and 163 (57.4%) were married. The majority (341, 81.2%) were Muslim and 157 (55.3%) were Oromo (one of the largest ethnic groups in Ethiopia). From all respondents, 104 (57.7%) could only read and write (Table 1).

### Satisfaction of Outpatient Service Consumers

The majority of the respondents (229, 80.6%) had visited the emergency department for the first time. The majority were satisfied with the time taken to obtain service (185, 65.1%). More than half of the respondents (190, 66.9%) thought the health professional understood their problem. From the total respondents, 119 (41.90%) were very satisfied with the completeness of the information given to the patient by the health provider (Table 2).

### Availability of the Prescribed Medication and Treatment

Of the respondents, 185 (65.1%) were prescribed medication. From those who were not prescribed medication, 53 (18.7%) were due to low availability of the medication. Seventy-eight (27.5%) of the participants were satisfied with the availability for drug and supplies (Table 3).

### Level of Satisfaction of Outpatient Service Consumer

The overall satisfaction level in this study was 79 (27.8%) with a confidence interval (Figure 1).

**Table 1** Socio-Demographic Characteristics of the Respondent's Attending in Jimma Medical Center, South West Ethiopia, May 2019 (N= 284)

Variable	Category	Frequency	Percentage
Sex	Male	174	61.3
	Female	110	38.7
Age	15–20	49	17.5
	21–25	39	13.7
	26–30	48	16.9
	31–35	51	17.9
	36–40	37	20
	>40	60	21.1
Level of education	Cannot read and write	8	
	Only read and write	164	57.7
	Primary school	27	9.5
	High school	51	18.0
	College/university	34	12.0
Marital status	Single	61	21.5
	Married	163	57.4
	Divorced	34	12.0
	Widowed	26	9.2
Religion	Orthodox	68	23.9
	Muslim	157	53.3
	Protestant	46	16.2
	Catholic	11	
	Apostolic	1	
Ethnicity	Oromo	183	64.4
	Amhara	35	12.3
	Tigre	8	
	Walita	58	20.4

### Factors Associated with Outpatient Service Satisfaction

The healthcare providers respected the privacy of patients and understandability of the patient problem by health professional was associated with satisfaction of outpatient service. Accordingly, where the healthcare providers respected privacy, the patients were 13 times more likely (AOR = 13.332; 95% CI: 2.282–77.905) to be satisfied than their counterparts (Table 4).

## Discussion

The findings of this study have implications for practice, education, policy, and research. It will be supremely significant to the policy-makers and more specifically to

**Table 2** Satisfaction of Outpatient Service Consumers in Jimma Medical Center, South West Ethiopia, May 2019 (N= 284)

Variable	Category	Frequency	Percentage
Frequency of visit	New	229	80.6%
	Repeat	55	19.4
Satisfaction during repeat visit	Yes	76	26.8
	No	208	73.2
Visit to other place	Yes	182	64
	No	102	36
Place of visit	Traditional healers	1	
	Private clinic	44	15.5
	Government health institution	32	11.3
Health service payment status Refer	Free	192	6.7
	Payment	265	93.3
	Self/family	156	56.0
	Private clinic	19	6.7
	Government health institution	103	36.3
	Other/specify	3	
Privacy	Yes	194	68.3
	No	90	31.3
Is providing care is enough	Yes	179	63.0
	No	105	37.0
Service from the hospital	Yes	182	64.1
	No	102	35.9
Future visit of hospital	Yes	186	65.5
	No	98	34.5
Money they paid	Very cheap	55	19.4
	Cheap	65	21.8
	Fair	87	30.6
	Expensive	50	17.6
	Very expensive	30	10.6
Total time spent	1 day	169	59.5
	2–3 days	48	16.9
	4–5 days	53	18.7
	>5 days	14	5
Satisfaction with time spent	Yes	185	65.1
	No	98	34.1
Place spent for most of total time	Waiting for examination	91	32.0
	Waiting for consolation time	87	30.6
	Waiting for laboratory	38	13.4
	Waiting for x-ray	34	12.0
	Waiting for pharmacy service	33	11.6

(Continued)

**Table 2** (Continued).

Variable	Category	Frequency	Percentage
Reason for the long wait	Many people waiting for the service	155	54.6
	Person in charge not available	127	44.7
Examination experience	Very satisfactory	100	35.2
	Satisfactory	89	31.3
	Unsatisfactory	71	25.8
	Very satisfactory	24	8.5
Understandability of problem	Yes	190	66.9
	No	64	33.1
Satisfaction with the completeness of the information	Very satisfactory	119	41.9
	Satisfactory	58	20.4
	Neutral	12	4.21
	Dissatisfactory	71	25.0
	Very dissatisfactory	24	8.5

**Table 3** Availability of the Prescribed Medication and Treatment in Jimma Medical Center, South-West Ethiopia, May 2019 (N= 284)

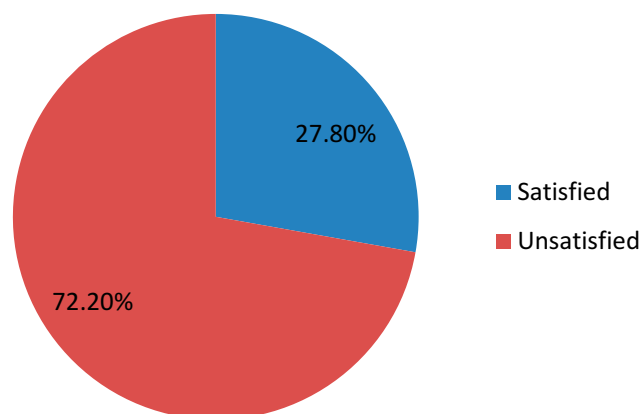
Variable	Category	Frequency	Percentage
Getting prescribed medication	Yes	185	65.1
	No	99	34.9
Reason for not getting medication	Too expensive	44	15.5
	Not available	53	18.7
Satisfaction with the availability of drug and supplies	Very satisfied	43	15
	Satisfied	78	27.5
	Neutral	75	26.4
	Dissatisfied	54	19.0
	Very satisfied	34	12.0

healthcare professionals to provide quality of care in meeting the needs of patients and families as a whole; specifically, it improves patient outcomes and decreases healthcare costs, which is a priority of governmental and funding agencies. Future research areas should be considered at all levels of health institutions to get in-depth patient perception. This study finding has international relevance and can be used as a baseline for global health scientists.

Patient satisfaction is a relative phenomenon which is evaluated on the basis of patient experiences, expectations and perceived needs. Both medical and non-medical factors influence patient satisfaction scores. Patient satisfaction is considered one of the most important quality indicator(s) at healthcare institutes. Satisfaction is achieved when the



## Level of satisfaction



**Figure 1** Level of satisfaction of patient towards outpatient service consumer in Jimma medical center, south-west Ethiopia, May 2019 ( $n=284$ ).

patients' perception of the quality of care and services that they receive in healthcare setting has been positive, satisfying, and met their expectations.

This study achieved a response rate of 96.6%. This is significantly higher than the majority of similar studies.<sup>31–33</sup>

A study done<sup>34</sup> in rural Bengal had a 93.5% response rate. Studies conducted in Ethiopia and Lahore, however, showed comparable response rates to the current study. This difference might be due to patients being interviewed face-to-face in this study.

This study revealed that the overall satisfaction level of the outpatient service was 27.8%. This is lower than the result of studies conducted in Nigeria (83%),<sup>26</sup> Mozambique, Bangladesh<sup>27,35</sup> and Ethiopia (80.1%).<sup>28</sup> This discrepancy may be due to inadequate short course training given for staff on patients' satisfactions, number of OPDs, number of staff, type of service and patients' self-report. The other reason may be the ways of keeping patients' privacy by health professionals.

In this study, understandability of patient problem by health professional showed significant effect on patient satisfaction (AOR = 21.830; 95% CI 0.0–554–77.500). In this study, where the healthcare providers respected the privacy of patients, patients were 13 times more likely (AOR = 13.332; 95% CI: 2.282–77.905) to be satisfied than were their counterparts. This finding is similar to the study finding in Hawassa university teaching hospital.<sup>36</sup> This might be due

**Table 4** Factors Associated with Satisfaction of Outpatient Service at Jimma Medical Center, South-West Ethiopia, May 2019 ( $N = 284$ )

Variable	Category	Satisfaction		COR	AOR
		Satisfied	Not Satisfied		
Level of education	Cannot read and write	2 (25%)	6 (75%)	5.250 (1.566, 17.601)	1.923 (0.023, 8.013)
	Only read and write	60 (36.6%)	104 (63.4%)	0.929 (0.311, 2.773)	0.745 (0.154, 3.257)
	Primary school	18 (66.6%)	9 (33.4%)	1.187 (0.417, 3.380)	0.247 (0.099, 6.227)
	High school	43 (70.5%)	8 (29.5%)	0.721 (0.246, 2.110)	2.016 (0.085, 11.663)
	College/university	25 (73.5%)	9 (26.5%)	1	1
Time spent	1 day	130 (76.9%)	39 (23.1%)	42.979 (9.708, 190.282)	0.903 (0.080, 10.200)
	2–3 days	23 (47.9%)	25 (52.1%)	363.708 (47.899, 2761.726)	2.665 (0.897, 9.776)
	4–5 days	47 (86.6%)	6 (13.4%)	53.623 (6.895, 417.018)	2.044 (0.054, 77.500)
	>5 days	14 (100%)	0	1	1
Understandability of problem	Yes	178 (93.65%)	12 (6.3%)	70.4 (30.306, 193.669)	21.830 (5.278, 90.284)*
	No	11 (17.18%)	53 (82.8%)	1	1
Privacy respected	Yes	169 (87.1%)	25 (12.9%)	60.84 (13.020, 155.528)	13.332 (2.282, 77.905)*
	No	9 (10%)	81 (90%)	1	1
Service from the hospital	Yes	112 (61.5%)	70 (38.5%)	3.06 (0.07, 5.68)	0.903 (0.080, 10.200)
	No	35 (34.3%)	67 (65.7%)	1	1
Getting prescribed medication	Yes	118 (63.7%)	67 (36.3%)	2.29 (5.018, 18.223)	12.267 (0.795, 6.468)
	No	43 (43.4%)	56 (56.6%)	1	1

**Note:** \*significant association.

to those patients who kept their privacy feeling free to talk and explain their problem to healthcare providers.

Education enables patients to make well-informed health decisions. A knowledgeable patient has a better understanding and greater exposure to what constitutes “ideal” care, and is not willing to settle for substandard service delivery. In this study, educational level has no association with patient satisfaction. About 55.7% of the respondents only can read write, which is incomparable with the study done in Romania.<sup>37</sup> This discrepancy may be due to the majority of the respondents in this study coming from rural areas where education is not well expanded.

In this study, time spent is not significantly associated with the level of outpatient satisfaction. However, in another study it was found to be significantly associated with the level of satisfaction of the services provided at hospitals. That is, a longer waiting time leads to a decrease in satisfaction level.<sup>38</sup> This discrepancy might be due to respondents' self-report about the time it took to get the service they were provided by health professionals.

Getting prescribed medication from the hospital has no association with patients' satisfaction on the service they receive. This is similar to the study done in Ethiopia, Tigray. This might be due to lack of drugs and supplies in the hospital pharmacies.

## Strength and Limitation of the Study

The limitation of the study is that patient self-reports were used, which usually overestimate satisfaction levels. Satisfaction level among younger patients (i.e., below 18 years of age) was not evaluated, which could be considered the main limitations of the study. Also, some study participants were not willing to respond, which made our study result difficult to generalize for all outpatient service consumers.

A cross-sectional study design was used in this study which cannot tell us about causal relationship (only an association). Social desirability bias may affect the result of this study.

## Implications of the Study

The findings of this study have implications for practice, education, policy, and research. It will be of supreme significance to the policy-makers and more specifically to healthcare professionals to provide quality of care in meeting the needs of patients and families as a whole; specifically, it improves patient outcomes and decreases healthcare costs, which is a priority of governmental and funding agencies.

## Conclusion

Generally, this study revealed that the overall satisfaction level of the outpatient service consumers at Jimma Medical Center was 27.8%. In multivariate analysis, the healthcare providers respected the privacy of patients and understandability of patient problem by health professional was associated with satisfaction of outpatient service. Therefore, it is better that the management should engage with formulating an effective strategy and activity to increase the level of patients' satisfaction.

Patient satisfaction is an increasingly important issue both in evaluation and shaping of health care, so it should be carried out routinely in all aspects of healthcare to improve the quality of health services. Healthcare providers are encouraged to measure the consumer satisfaction of their services.

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## Author Contributions

All authors contributed to data analysis, drafting or revising the article, gave final approval of the version to be published, and agree to be accountable for all aspects of the work.

## Disclosure

The authors report no conflicts of interest in this work.

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