

Patient Satisfaction and Associated Factors in an out Patient Department at Butajira General Hospital, Southwest, Ethiopia

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INTRODUCTION

Nowadays healthcare situation is fast changing in advanced technology globally [1]. Quality of care is a dominant concept in quality assurance and quality improvement programs in the healthcare sectors [2]. Hospitals which provide better services for patients encourage greater adherence to medical standards of care and follow up [3].

Outpatient Department is considered to be the shop windows of the hospital [4]. Patient satisfaction is the level of service satisfaction that patients experience from having used a health service from a health facility [1,5]. Patient satisfaction is considered as the necessary outcomes of health systems and a tool to measure of health service quality [5]. Patient satisfaction is a crucial phenomenon that recognizes the patients' needs so as to improve healthcare systems, patient outcomes, and retention and health status of the population and also reduce medical malpractice [467]. Service satisfied patients may be more likely to come in for visits, follow clinicians recommendations and better patient understanding scores could indicate that a hospital has stronger teamwork, organizational leadership, and commitment for improvement [3]. In recent decades, assessing of patient satisfaction has been found to be the most important tool for getting patients' views on how to provide care[8]. Patient satisfaction is the degree of congruency between a patient's expectations of ideal care and his/her perception of the real care he/she receives [6]. The prevalence of patient satisfactions were 89.1% in rural Haryana hospital and 73% in tertiary hospital, India [9]. A case study conducted at teaching Hospital Karapitiya, Sri Lanka, 10.36% of the patients were highly satisfied with health services [10].

In Ethiopia patient satisfaction towards outpatient services was ranged from 27.8% to 79.7%. from these, 27.8% in Jimma Medical Center [6], 57.8% at Bahirdar Felege Hiwot referral hospital [11]. 50.3% in Addis Ababa, St Paulo's Hospital Hospital OPD [12]. 66.5% in Gurage Zone Public Hospitals

[13]. 79.7% was at Mekele town public hospitals 70.4% Addis Ababa, at black lion hospital [14]. 48.3% Debre Markos referral hospital [15]. and 64.0% Debre Markos referral hospital [16].

Patient satisfaction with hospital care is significantly influenced by socio-demographic characteristics (e.g., age, marital status, income and education levels), patient-provider interactions during the episodes of care (doctors, nurses), the surrounding physical environment (hospital hygiene), interpersonal skills in terms of courtesy, respect by health care providers, communication skills, explanation and clear information, and technical skills (clinical competency) and hospital equipment, long waiting time, service attitudes of medical staff [17]. Hence, this study is assumed to have significant importance in providing information in view of patients' satisfaction of health care service provided at Butajira Hospital, Gurage Zone, Southwest, and Ethiopia [18].

Objective

General Objective

- To assess patient satisfaction and associated factors among adult patients who attend Outpatient Department at Butajira General Hospital, Southwest, Ethiopia, 2020.

Specific Objective

- To assess prevalence of patient satisfaction toward OPD at Butajira General Hospital.
- To identify factors associated with patient's satisfaction toward OPD at Butajira General Hospital.

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Received date: July 15, 2021; Accepted date: October 05, 2021; Published date: October 15, 2021

Citation: Assefa Z M, Megenas A k, Berrie F W, Haile T G, Tawiye N Y (2021) Word of Mouth marketing in tourism industry: Evidences from Chinese business immigrants in Ethiopia. J Tourism Hospit 10: p103

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Methodology

Study area and period

The study was conducted at Butajira General Hospital. Butajira is a town in the south Ethiopia located in the Gurage zone of the Southern region. It is one hundred and thirty-one kilometer (131km) far from Addis Ababa, the capital city of Ethiopia. The 2007 national census reported a total population for Butajira of 33406 of whom 16923 were men and 16483 were women. The majority of the inhabitants were Muslims account for 51.27% of the population, while 39.58% of the population practiced Ethiopian Orthodox Christianity and 8.72% were protestant. Butajira General Hospital is one of the hospitals that are found in Gurage Zone, Southern region. At Out Patient Department about 150 clients are served per day. The hospital has 6 ward and 145 beds. The hospital provides inpatient service, OPD, MCH, Dental, Psychiatry, labor & delivery, OR, TB/HIV service etc.

The hospital has 8 specialists, 22 GP, 110 nurses, 26 midwife, 7 druggists, 8 clinical pharmacy & 5 pharmacists, 19 laboratory professionals & 25 other health professionals. The total catchment population is 1.6 million. The hospital has served patients comes from Eza, Bue'e, Siliti, koshe and Ziway. The study was conducted at Butajira General Hospital from Oct 28-Nov 28, 2020.

Study Design

An institutional based cross sectional study was conducted.

Study population and source of population

Source population

- All adult patients who visiting outpatient health services.

Study population

Randomly selected patients those coming to the outpatient departments during the study period was the study population.

Inclusion and Exclusion Criteria

Inclusion criteria

- Adult Patients who seek medical service at the outpatient department (OPD) unit.

Exclusion criteria

- Patients cannot speak or listening, critically ill, and had mental problems were excluded.

Sample size determination

Sample size of the study was determined by using single population proportion formula

$$n = \frac{(Z^{\alpha/2})^2 \times p(1-p)}{(D)^2}$$

Where, n= estimated sample size, P= It is the proportion of patient satisfaction with the health care provided, P= 0.665 were assumed from a study conducted at Gurage Zone primary Hospitals, which reported 66.5% patients satisfaction with services delivered, Z= 1.96 at 95% confidence interval

$$\text{Therefore, } n = \frac{(1.96)^2 \times 0.665 \times (1-0.665)}{(0.05)^2} = 342$$

By including 10% of non-response, the final sample size was 376.

Sampling Technique

Stratified sampling was applied to select the patients based on last year patient flow data. Population was stratified in to six units of the services, such that general adult OPD, Emergency OPD, Surgical referral clinics, Medical referral Clinics, dental clinic and Gyn/Obs referral clinic. By proportional allocation of $n_i = n / N \times N_j$ of this equation, and from general adult OPD (186), Emergency OPD (51), Surgical referral clinic (30), Medical referral clinic (18), Dental clinics (16), and Gyn/obs (75) were selected and simple random sampling was employed and exit interview was performed for selected patient just after receiving the health care service.

Study Variable

Dependent variable

- Patient satisfaction

Independent variables

- Socio-demographic characteristics: age, sex, educational status, occupation, family income. Residence and payment status
- Health professional characteristics: attitude (courtesy, respect), information provision, privacy and waiting time.
- Institutional Services/facilities: health professional services, diagnostic facilities, physical facilities (waiting room/exam), medical equipment's, cost of services, availability of drugs and supplies and registration service.

Data collection procedure (instruments, personnel and data quality)

Data collection procedure and materials

Data were collected using structured questionnaire based exit interview which are composed of many questions with three parts of questionnaire, those were Socio-demographic, Patient attitude towards health services, and patient satisfaction towards Health Service. The structured questionnaire prepared in the English language was translated into Amharic and then translated back to English to check for consistency by language

experts. The questionnaire was a pretest on 5% (21) of the study population Blue primary Hospital to test the content, wording, and expression, the topical sequence of questions and duration of the interview, and the reliability of some items. Then the questionnaires were assessed for its clarity, length, and completeness. Some skip patterns were corrected; questions difficult to ask were rephrased /removed. The actual data were collected by trained 6 diploma nurses with three supervisors.

Operational definition and definition of terms

Assessment: is the process by which the characteristics and needs of patients, groups or situations are evaluated or determined so that they can be addressed. The assessment forms the basis of plan for service or actions.

Patient waiting time: the interval between departure from the proceeding outpatient and receiving service at the next outpatient stations.

Quality: users based quality is defined as “fitness for use”, which means the consumers perception of quality. It is also defined as meeting the desires and expectations of customers.

Satisfied: there are questions to assess the satisfaction of patient. After the sum of response in each question in all respondents, then we make mean score, those score mean and above mean [two point five and above (≥ 2.5)] are considered as satisfied.

Dissatisfied: there are questions to assess the satisfaction of patient. After the sum of response, those score below mean are considered as dissatisfied (the opposite of satisfied).

Data Quality Management

To keep data quality, the two days training would be given for supervisor and data collectors. The prepared questionnaire would be pre-tested in Blue primary hospital before actual date of data collection and correction would be made based on the finding.

Proper categorization and coding of the data completeness and consistency of the collected data would be checked on daily basis during data collection by supervisor and the principal investigators. Double entry and data cleaning was also considered.

Data Processing and Analysis

After data collection, each questionnaire would be checked for completeness and consistency by the principal investigators and supervisors. Data were cleaned, edited, coded and entered into Epi data version 3.1 and exported to SPSS version 23 for further analysis.

Bivariate analysis would be done to identify associations between dependent and independent variables. Bivariate analysis at, 95% CI and P-value < 0.25 and variables which were statistically significant in previous studies would be eligible for multi variable regression analysis, to identify independent predictors of Adult patient satisfaction at outpatient department. Statistical significance would be declared at P-value

less than 0.05. Finally, the findings of the study were presented in graphs, tables and charts as appropriate.

Results

Socio-demographic and economic characteristics

In this study a total of 370 Adult patients were participated with the cumulative response rate of 98.4%. The majorities of respondents were greater than or equal to 45 years. More than half of the study participants were farmers. Regarding to educational status half of the respondents had primary level education. 252 (74%) of the study participants were repeat in their hospital visits. Regarding to economic status the majority 228 (61.6%) of patient's monthly household income was more than 2000 ETB as shown in table 1 below.

Table1: Socio-demographic status of the study population, at Gurage Zone Public Hospitals, southwest, Ethiopia, 2020(n=370).

Variables	Frequency(n)	Percent (%)
Sex		
Male	184	49.7
Female	186	50.3
Age in years		
18-24	104	28.1
25-34	104	28.1
35-44	14	3.8
≥ 45	148	40
Occupation		
Student	29	7.8
Government employed	31	8.4
private sector employed	32	8.6
Merchant	65	17.6
Farmer	193	52.2
Others	20	5.4
Educational status		
Cannot read and write	15	4.1
Can read and write	11	3

primary school	187	50.5
Secondary school	79	21.4
College education and above	78	21
Monthly income		
<1000	71	19.2
1000- 2000	71	19.2
>2000	228	61.6
Frequency of visits		
New	98	26.5
Repeat	252	73.5
Payment type		
Payee to get services	192	51.9
Free service	178	48.1
Residence		
Urban	158	42.7
Rural	212	57.3

Patient attitude towards Health services at OPD

The patient attitude towards Health services at OPD 176(47.6%) were satisfied for the hospital has a good reputation and 252(68%) were satisfied for the overall health care service get from this OPD is very good as shown in figure 1 below.

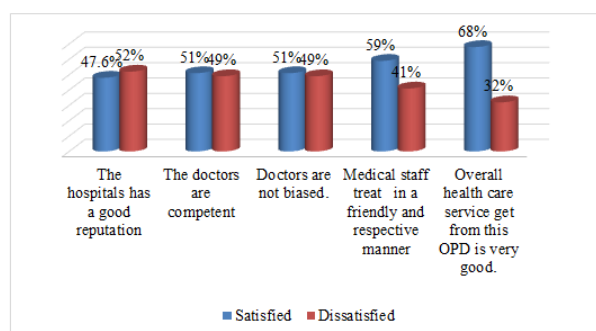


Figure1: Patient attitude towards Health services at Gurage Zone Public Hospitals, southwest, Ethiopia, 2020.

Patient satisfaction towards health service at outpatient department

In this study the overall patient satisfaction was 85% in the adult outpatient department as shown in figure 2 below.

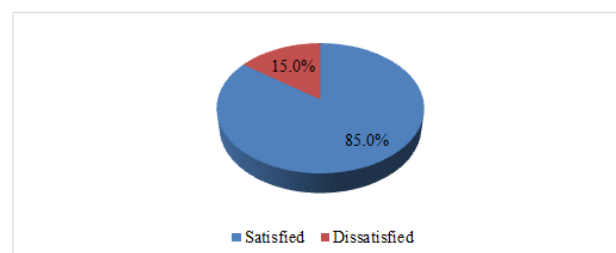


Figure2: Patient satisfaction towards Health service at OPD in Butajira General Hospital, 2020.

CONVENIENCE

Regarding to convenience of the hospital availability of instruments like BP apparatus, thermometer, weighing scale and other instrument 266(71.9%) of the study participants were satisfied. The majority of the respondents 300(81.1%) were satisfied for doctors were available of for consultation as shown in table 2 below.

Table2: Patient satisfaction towards health service at OPD regarding to convenience, at Gurage Zone Public Hospitals, southwest, Ethiopia, 2020. (n=370)

Variable	Mean	Satisfied	Dissatisfied
Availability of instruments like BP apparatus, thermometer, weighing scale and other instrument.	3.39	266(71.9%)	104(28.1%)
The arrangement for coding in waiting time for patient.	3.43	280(75.7%)	90(24.3%)
Availability of nurse/clinical Assistance for consultation	3.49	280(75.7%)	90(24.3%)
Availability of doctor for consultation	3.86	300(81.1%)	70(18.9%)

COURTESY

The majority of the respondents were satisfied 314(84.9%) for their attentiveness of doctor/nurse while answering questions for the clients and 319(86.2%) were satisfied for maintaining privacy appropriately before doing any procedure as shown in the table 3 below.

Table3: Patient satisfaction towards health service at OPD regarding to courtesy, at Gurage Zone Public Hospitals, southwest, Ethiopia, 2020. (n=370)

Variables	Mean	Satisfied	Dissatisfied
The attentiveness of doctor/nurse while answering your questions	3.82	314(84.9%)	56(15.1%)
Provide appropriate time for medical examination	3.86	284(76.8%)	86(23.2%)
Maintaining privacy appropriately before doing any procedure	3.9	319(86.2%)	61(13.8%)

Quality of care

The satisfaction of patient regarding quality of care 323(87.3%) of the respondent were satisfied for doctor examine patients carefully and 310(83.8%) were satisfied for competency of doctor for treating the patients as shown in table 4.

Table4: Patient satisfaction towards health service at OPD regarding to Quality of care, at Gurage Zone Public Hospitals, southwest, Ethiopia, 2020. (n=370)

Variables	Mean	Satisfied	Dissatisfied
Doctor examine patient carefully	3.63	323(87.3%)	47(12.7%)
Competency of doctor for treating the patients	3.59	310(83.8%)	60(16.2%)
Pharmacists are friendly and act in a respective manner.	3.56	288(77.8%)	82(22.2%)
Costs of medical services are affordable	3.82	299(80.8%)	71(19.2%)
The atmosphere of this OPD is clean and tidy	3.71	286(77.3%)	84(22.7%)

Physical environment

Regarding to physical environment the majority of the respondents 286(77.3%) was satisfied for availability of drinking water and clean toilets and 278(75.1%) were satisfied for the inside of the hospital has good environment as shown in table 5.

Table5: Patient satisfaction towards health service at OPD regarding to physical environment, at Gurage Zone Public Hospitals, southwest, Ethiopia, 2020. (n=370)

Variables	Mean	Satisfied	Dissatisfied
Sitting chairs are available at the waiting time	3.52	258(69.7%)	112(20.3%)
Availability of drinking water and clean toilets	3.67	286(77.3%)	84(22.7%)
Clear signs and directions to indicate where to go to the service area and e	3.78	200(54%)	170(46%)
The inside of the Hospital has good environment.	3.72	278(75.1%)	92(24.9%)

Factors associated to patient satisfaction in adult outpatient department

Binary and Multivariable logistic regression analysis were employed to identify factors associated with adult patients satisfaction in outpatient services. After the adjustment of these independent variables; sex of the respondents and resident of respondent were significantly associated to patient satisfaction at p- value of 0.05. Male patients were 2.68 [AOR=2.68; 95% CI (1.3, 5.53)] times more likely to be satisfied than female patients and patients who lived in rural were 4.23 [AOR=4.23; 95% CI (1.45, 12.34)] times more likely satisfied than urban resident patients as shown in table 6 below.

Table6: Bi-variable and multivariable analysis of factors associated to patient satisfaction among adult OPD at Gurage Zone Public Hospitals, southwest, Ethiopia, 2020.

Variables	Patient satisfaction n		COR(95 %CI)	AOR(95 %CI)	P-value
	Satisfied	Dissatisfied			
Sex					
Male	171(54.5 %)	13(23.2%)	3.95(2.05, 7.64)	2.68(1.3, 5.53)	0.001*
Female	143(45.5 %)	43(78.8%)	1	1	
Residency					

Urban	117(37.3%)	41(73.2%)	1	1	
Rural	197(62.7%)	15(26.8%)	4.6(2.44,8.68)	4.23(1.45, 12.34)	0.008*
Frequency of visit					
New	70(22.3%)	28(50%)	1	1	
Repeat	244(77.7%)	28(28%)	3.49(1.94, 6.27)	1.07(0.49, 2.36)	0.86
Payment status					
Payee	152(48.4%)	40(71.4%)	1	1	
Free	162(51.6%)	16(28.6%)	2.66(1.43, 4.96)	0.7(0.27, 1.84)	0.48

DISCUSSION

In this study adult patients were highly satisfaction in outpatient department with convenience 282(76.2%), courtesy 305(82.4%), quality of care 302(81.6%) and physical environment 256(69.2%) which was higher than a case study done in outpatient department of at Teaching Hospital Karapitiya Sri Lanka, these were with convenience 24.7%, with courtesy 45.8%, with quality of care 44.2%, and with physical environment 41.8%.

The overall adult patient satisfaction in outpatient departments at Butajira General Hospital was above four-fifth (85%), which was somewhat similar with study done in Tertiary Care Hospital in Rural Haryana, India 89.1%, Hawassa University Teaching Hospital 80.1% and comparative cross sectional study done at Addis Ababa public hospitals 89.3%, but; this study was higher than a mixed study done in department of Suva sub-divisional health center, Fiji, Australia 69.3%. Tertiary Care Hospital, Jabalpur, Madhya Pradesh, India 73%, Jimma University Specialized Hospital 77%, Debre Berhan referral hospital 57.7%, Yikatit 12 hospital 47%, study done in Obstetrics and Gynecology wards of Mekelle public hospitals, Tigray 79.7%, Gurage zone primary hospitals 65.5%, Wolayita Sodo Teaching Hospital 54.2%, North Gondar primary Hospitals 56.1%, Dangila primary hospital, Awi zone 24.4%, psychiatry outpatients of St Paulo's Hospital 50.3%, Adult Admitted Patients satisfied by nursing care in Debre Markos and Dessie Referral Hospitals 64%, adult patients satisfaction with clinical laboratory method attending outpatient departments at Debre Markos referral hospital 48.3%, OPD of Jimma medical center 27.8%.

This variation may be due to study setting, cultural difference, difference in methodology, study period difference, and also may be because of a real difference in quality of services provided by hospitals.

In this study, being male sex and rural residence had significantly associated and independent predictors of Adult patient satisfaction at outpatient department [19].

This study revealed that, being male sex was three times more likely to be satisfied than female patients who were similar with study conducted in Pakistan, being female was less satisfied with health care service provider than male, but; study done in Pakistan and Addis Ababa, Ethiopia, reported that female sex was more satisfied than males in Regular OPD [20].

This difference might be related to cultural variations, high expectation of female patients, specific disease (DM) and study method (comparative study between private wing and regular OPD) [21].

This study also showed that patients who had rural residence were four times more likely satisfied than urban resident patients and this factor was not supported in multiple studies conducted in the world. The possible justification might be due to urban patients are more literate, exposed for medias, updated technologies and information, and also had more access to private health facilities. Due to this, urban patients had high expectation for advanced health services from public hospitals, but in Ethiopia, most public health facilities are below the standard [22].

CONCLUSION AND RECOMMENDATION

Conclusion

Nowadays, due to emerging of new technologies and advanced treatment, patient's satisfaction plays a significant role in increasing utilization of health services. Patient satisfaction in outpatient departments was above four-fifth in this study. Male patient and rural resident patients were the independent predictors of adult patient satisfaction at outpatients department [23].

Recommendation

Patient satisfaction assessment should be regularly conducted in every quarter. It will be helpful in keeping knowing the gap of the service we provide for improving the quality of the services and patient outcome.

Health care providers should modify their provision of services in order to make their patients more satisfied and focused on the predictors.

Finally, further studies should be considered to explore the needs of patients and to identify types of interventions that will have a positive impact on the satisfaction of patients

STRENGTH AND LIMITATION OF THE STUDY

Strength of the study

The study is representative and had high response rate. A standard questionnaire developed by multiple published literatures was used with only slight adaptation to the local context. The study provides new and updated information of patient satisfaction.

Limitation of the study

Social desirability bias might be occurred. For this reason, the purpose of the study was clearly defined for the respondents by the data collectors.

DECLARATION

Ethical Consideration

Ethical clearance letter was obtained from Wolkite University ethical review board and dispatched to selected hospitals. Before data collection, the data collectors were informed about COVID-19 infection prevention and control protocol. The participants were informed and their oral consent would be obtained. They have the right to refuse or withdraw from participating at any time and the information provided by each participant must keep confidentially, each questionnaire would be coded and information would not share to the third party.

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