

SPHMMC, AaBET HOSPITAL



PATIENT SATISFACTION AND ASSOCIATED FACTORS TOWARDS HEALTH SERVICE AT EMERGENCY MEDICINE AND CRITICAL CARE DEPARTMENT, AaBET HOSPITAL ADDIS ABABA, ETHIOPIA.

A thesis research Submitted In Partial Fulfillment of the Requirement for Specialty in Emergency Medicine and Critical Care, St' Paulos Millennium Medical College.

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STATEMENT OF THE AUTHOR

By my signature below, I declare and affirm that this thesis is my own work. I have followed all ethical principles of scholarship in the preparation, data collection, data analysis and completion of this thesis. All scholarly matter that is included in the thesis has been given recognition through citation. I affirm that I have cited and referenced all sources used in this document. Every serious effort has been made to avoid any plagiarism in the preparation of this thesis.

This thesis is submitted in partial fulfillment of the requirement for Specialty in Emergency Medicine and Critical Care, St' Paulos Millennium Medical College.

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As thesis research advisor, I hereby certify that I have read and evaluated this thesis prepared under my guidance by Dr. Merhawit Abrha entitled patient satisfaction and associated factors towards health service at emergency medicine and critical care department, AaBET hospital Addis Ababa, Ethiopia, I recommend that it be submitted as fulfilling the thesis requirement

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Summary

Background: Patient Satisfaction is an important issue in health care nowadays. It is considered one of the important Quality indicator(s) at the ED(3). Patient satisfaction influences their compliance with treatment, seeking of medical advice and maintains a continuing relationship with practitioners. Measurement of patient satisfaction has become an integral part of hospital management strategies worldwide.

Objectives: To assess patient satisfaction and associated factors towards health service in AaBET Hospital, ADDISABABA.

Methodology: A cross sectional Hospital based survey was conducted at adult Emergency department of AaBET Hospital. Representative sample of 423 patients was selected among patients who come during study period. Using systematic random sampling techniques, the study participants were enrolled according to the patients' list which is obtained from the triage registry and the first patient was selected by lottery method from number 1 to 3 patients' list during data collection day and then every 3rd patient was selected for Interview. Patients were interviewed after 24 hrs of stay in the emergency. Data was collected by data collector using structured questionnaires. The collected data was entered, cleaned, edited with EPI- INFO 7 and analyzed by using SPSS 20.0 version statistical software.

Result and Conclusion The overall satisfaction of participants was low. Patient satisfaction was affected by ED staff (doctors and nurses), physical environment of ED and administrative facilities.

LIST OF ABBREVIATIONS

AaBET- Addis Ababa burn emergency and trauma hospital.

SPHMMC- St Paulo's millennium medical college

ED- Emergency Department.

GURH- Gonder university referral hospital.

OPD- Outpatient Department.

SPSS- Statistical Package for Social Science.

ICU- Intensive care unit

NHIS –National health information system

EPI INFO- Epidemiological information

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1 CHAPTER-1: INTRODUCTION

1.1 BACKGROUND

Satisfaction is a psychological notion, difficult to define, especially in the healthcare environment. Some authors define satisfaction as the coincidence between expectations and results. A working definition is the degree to which the patients desired expectations, goal and or preferences are met by the health care provider and or service (6). Satisfaction is a multi-dimensional concept with a number of components: user perception of the service, of the health workforce and of the results of treatment received (6).

Patient Satisfaction is an important issue in health care nowadays. It is considered one of the important Quality indicator(s) at the ED (3). The emergency department (ED) is considered to act as a gatekeeper of treatment for patients. Thereby, EDs must achieve customer satisfaction by providing quality services. A common tool to improve the quality of care in the ED is to conduct a client satisfaction survey to clearly explore the variables affecting the satisfaction level and causes of dissatisfaction. Clients' satisfaction is a key component in choosing an ED for receiving services or even for recommending it to others. (3)

Measuring healthcare quality and improving patients' satisfactions have become increasingly prevalent, especially among healthcare providers and purchasers of healthcare, because consumers become more knowledgeable about healthcare. Health care in developing countries has not traditionally focused on emergency medical care. However, emergency care can make an important contribution to reduce avoidable deaths and disability in low-and middle-income countries, and in this realm, greater attention is needed.(2)

Patient satisfaction with their ED experience has been associated with a number of different predictor variables related to patient demographics and visit characteristics. However, certain aspects of care such as amenities, accessibility and the quality of interpersonal relationship between patients and caregivers can only be reliably assessed by measuring patient's satisfaction. Interest in such measurements has grown recently because patient satisfaction has important implications for the financial status of the Hospital and for its professional reputation in the community. Previous studies have suggested that patients' satisfaction is a major determinant of whether patients will patronize the health facility again. (23)

Patient satisfaction is measured over a wide range of health service dimensions, including availability, accessibility and convenience of services, technical competence of the providers, interpersonal skills and the physical environment where services are delivered. However, it remains controversial whether patients' ratings reflect anything about technical quality or simply the interpersonal skills of the providers. Patient perceptions of quality are often influenced by their interaction with the health provider. Some studies suggest that certain patient demographic and clinical characteristics, including age, health status and the severity of illness, are associated with satisfaction scores more than the technical quality of care they provide.(3)

Because it is such a complex topic, one of the most accepted ways of studying satisfaction is by using questionnaires in which the questions are organized into different dimensions or domains.(23)

1.2 STATEMENT OF THE PROBLEM

Patient Satisfaction is an important issue in health care nowadays. It is considered one of the important Quality indicator(s) at the ED (3). Patient satisfaction influences their compliance with treatment, seeking of medical advice and maintains a continuing relationship with practitioners. Measurement of patient satisfaction has become an integral part of hospital management strategies worldwide. Provision of health care is expected to respond directly to patients' preferences and demands and the efficacy of medical treatment is enhanced by greater patient satisfaction. (13)

Cross-Sectional Survey was conducted at Hawassa University Referral Hospital emergency outpatient department from Dec 2013 G.C. to June 2014 G.C. shows Overall satisfaction level of Hawassa University Referral Hospital is 55.9% participants are dissatisfied with the Hospital emergency medical service delivered & 44.1% are satisfied. The study findings indicated the need for evidence-based interventions in emergency care services in areas such as speed of reception area, medical care, well control of pain, nursing care, courtesy of staff, physical comfort and waiting time.(3)

A facility based cross-sectional study was conducted among patients visiting GURH for emergency care in 2013 G.C. The overall satisfaction using the mean score indicates that 498 (51.7%) were satisfied with the service, the providers and the facility suitability whereas 465(48.3%) were not satisfied. Seven hundred and six (73.3%) patients reported that they have been discriminated or treated badly during the service provision in the hospital. There was a low level of patient satisfaction related to lack of confidence in the hospital for treatment, discrimination towards patient care, and under and delayed treatment of patients who were not in serious medical conditions.(22)

Various factors influence patients' satisfaction in hospital settings including medical and nursing care, communication, administrative facilities, physical environment of ED and patient socio-demographic variables. In line with this, there is a gap of study on investigation of diverse set of variables to identify important factors influencing patient satisfaction in AaBET hospital ED.

1.3 LITERATURE REVIEW

Ethiopia has good health coverage with about 89% physical access or reach ability, but unacceptably low utilization at 29%. Cognizant of this fact, the Ethiopian Federal Ministry of Health has stated that universal access to emergency service will be provided to all citizens. The low rates of utilization of care entail the absence of basic service capacity standards, affordability, weak referral systems and quality of services. (13)

A Cross-Sectional Survey was conducted at Hawassa University Referral Hospital emergency outpatient department from Dec 2013 G.C. to June 2014 G.C. The study population was all adult patients who visit emergency room of Hawassa University Referral Hospital and also all pediatric emergency room of the hospital. The data was collected from both adult and pediatric Emergency out Patient Department of Hawassa University Referral Hospital one hundred seventy eight (42.1%) & two hundred forty five (57.9%) respectively. In the study total of four hundred twenty three patients and attendants are involved during the data collection period. Overall satisfaction level of Hawassa University Referral Hospital is 55.9% participants are dissatisfied with the Hospital emergency medical service delivered & 44.1% are satisfied. The study findings indicated the need for evidence-based interventions in emergency care services in areas such as speed of reception area, medical care, well control of pain, nursing care, courtesy of staff, physical comfort and waiting time. (3)

Study done in Iran to evaluate patient satisfaction with the Emergency Department of Imam Reza Hospital in Tabriz, Iran, Five hundred patients ED were included in this study. The highest satisfaction rates were observed in the terms of physicians' communication with patients (82.5%), security guards' courtesy (78.3%) and nurses' communication with patients (78%). The average waiting time for the first visit to a physician was 24 min 15 s. The overall satisfaction rate was dependent on the mean waiting time. The study findings indicated the need for evidence-based interventions in emergency care services in areas such as medical care, nursing care, courtesy of staff, physical comfort and waiting time. (2)

A facility based cross-sectional study was conducted among patients visiting GURH for emergency care. Patients were selected by systematic random sampling, using patient flow list in the day and night emergency services. Data were collected using a standard Press Ganey questionnaire by BSc health science graduates. The overall satisfaction using the mean score indicates that 498 (51.7%) were satisfied with the service, the providers and the facility suitability whereas 465 (48.3%) were not satisfied. Seven hundred and six (73.3%) patients reported that they have been discriminated or treated

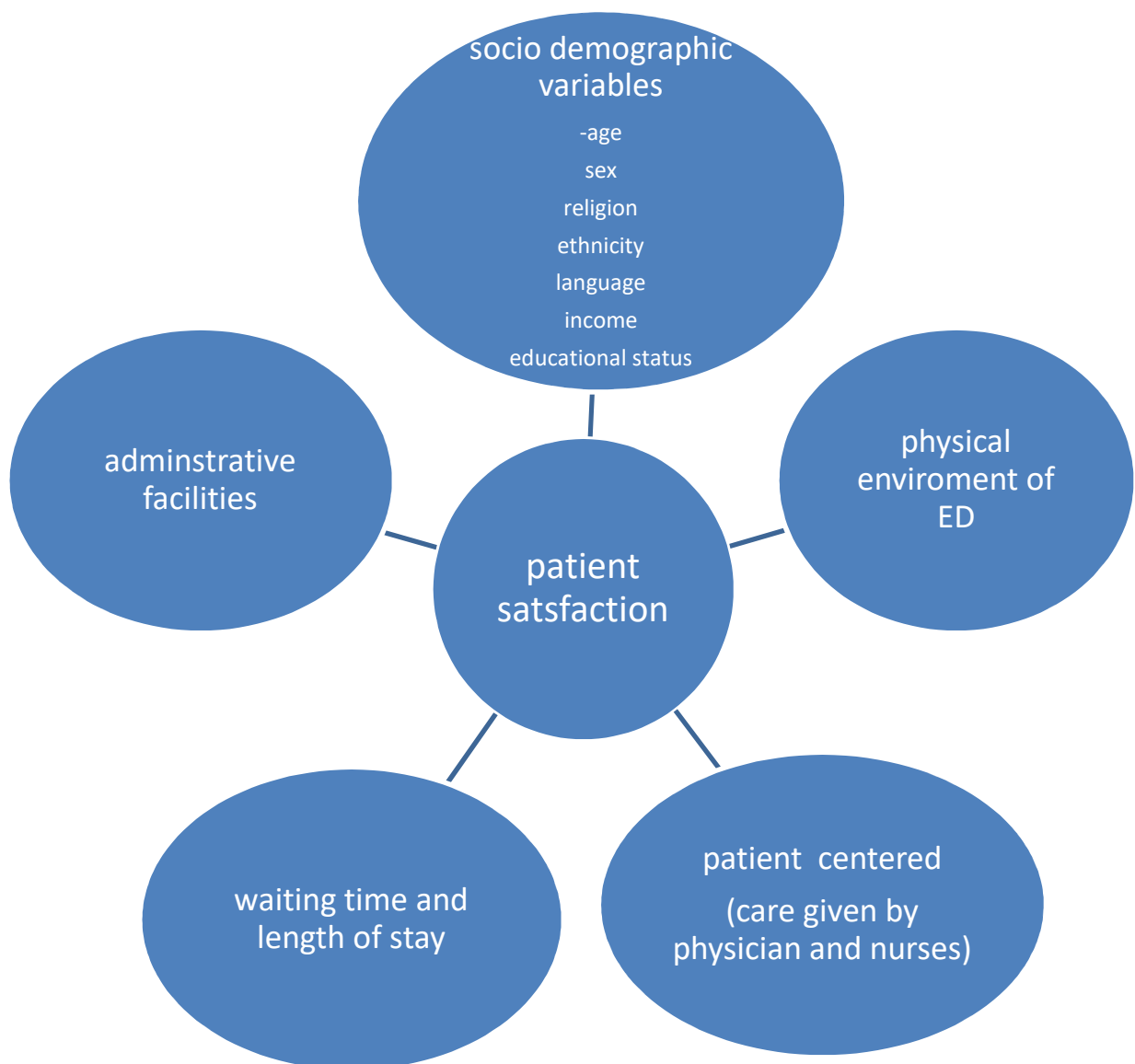
badly during the service provision in the hospital. There was a low level of patient satisfaction related to lack of confidence in the hospital for treatment, discrimination towards patient care, and under and delayed treatment of patients who were not in serious medical conditions.(22)

Study done in north central Nigeria To assess satisfaction with care received by patients at public secondary hospitals in Abuja, north central Nigeria Of 305 completed questionnaires, 23 (7.5%) were invalid. Among the valid respondents, there were 92 (32.6%) males and 190 (67.4%) females, with the age range of 9 to 70 years;147 (52.1%) were outpatients while 135 (47.9%) were inpatients who were just discharged from admission. All individual items that assessed their relationships and communication with doctors and nurses scored mean satisfaction levels >3 , except “promptness of responses by nurses when patients called for help” which scored low mean satisfaction level of 2.8. A total of 60.5% of respondents felt being valued and appreciated as a patient during their hospital visits. Hospital experience by inpatient respondents showed positive average satisfaction score of 3.4 for cleanliness of the ward and bathroom; 3.1 for quietness at night; but low satisfaction score of 2.9 for feeling being valued and appreciated as patients. Over 64% of respondents said they spent 60 minutes or less as the waiting time, while average waiting time for all study centers was less than 1 hour. On a number scale of 1 to 10 (1 being worst hospital and 10 being best hospital), the median satisfaction score was 8, meaning intermediate satisfaction perspective by the patients while 73% of respondents scored the hospitals 7 and higher. (24)

Descriptive study carried out on 400 NHIS patients from April 2011 to October 2011 at the general outpatient department of Federal Medical Centre in Southeastern Nigeria Each satisfaction item was scored in a five point Likert scale ordinal response, which was converted to percentage scale response. Satisfaction was measured from the following domains: accessibility, patient waiting time, patient-provider communication, patient-provider relationship, hospital bureaucracy, and hospital environment. Operationally, patients who scored 50% and above in the assessed domain were considered satisfied while those who scored less than 50% were dissatisfied. The age of the respondents ranged from 18 to 60 years with mean age of 34.8 ± 11.3 years. Majority of the respondents were middle-aged adults (40–60 years) (67.7%). There were 181 (45.3%) males and 219 (54.7%) females with a male- to- female ratio of 1:1.2. Majority of the respondents were married (66.0%) and had

secondary education (74.4%). Generally, the overall average satisfaction score of the respondents was 66.8%. Specifically, the respondents expressed satisfaction with patient–provider relationship, which had highest average score of 81.5% for the domain, with medical doctors rated highest (88.8%) and medical records staff the lowest (68.0%). This is followed by patient–provider communication, which has average score of 79.9%, with medical doctors rated highest (88.8%) and medical records staff rated the least (68.0%). The accessibility had average score of 86.2% while hospital environment had average score of (68.2%). Hospital bureaucracy had score of 48.8 while patient waiting time had 48.3%).(25)

Conceptual framework on factors associated with patient satisfaction



1.4 SIGNIFICANCE OF THE STUDY

Measuring healthcare quality and improving patients' satisfactions have become increasingly prevalent, especially among healthcare providers and purchasers of healthcare, because consumers become more knowledgeable about healthcare (2).

Assessing the level of patient satisfaction and identifying the factors that influence patient satisfaction in Emergency medicine and critical care, and their suggestion will help us to improve quality of care of our hospital and to solve the problems. Moreover, this study will also initiate further research.

2 CHAPTER -2: OBJECTIVES

2.1 GENERAL OBJECTIVES

To assess patient satisfaction and associated factors towards health service in AaBET hospital, Addis Ababa.

2.2 SPECIFIC OBJECTIVES

- To identify factors that influence patient's satisfaction of the health care.
- To assess patient satisfaction towards emergency department staff.
- To assess patient satisfaction towards physical environment of emergency department
- To assess patient satisfaction towards administrative facilities

3 CHAPTER 3 - METHODS AND MATERIALS

3.1 STUDY AREA AND PERIOD

The study was conducted at adult emergency medicine and critical care department AaBET hospital, Addis Ababa, from august 01- march 30, 2019 GC.

3.2 STUDY SETTING

AaBET Hospital is an affiliate of SPHMMC. It is established on 15, July 2015 GC and located in Arada sub city. AaBET hospital is also referral teaching hospital which is managed by the federal ministry of health. This hospital receives Trauma, non-trauma and Burn injured Patients and most of the patients are adults because st Paulo's has its own pediatric emergency unit .

In emergency medicine and critical care department it has 59 functional beds (5 in red side, 8 in orange side, 30 in yellow green, 11 in ICU and 3 in semi -ICU). There are 182staffs (34residents, 10 consultants of emergency medicine, nurses90,16 runners and 32 others). The study was conducted at Adult Emergency department of AaBET hospital, where patients with medical, surgical and traumatic emergencies are managed.

3.3 STUDY DESIGN

Hospital based cross sectional study was conducted in the study area.

3.4 SOURCE POPULATION

All patients presenting to the AaBET Hospital adult emergency department during the study period.

3.5 STUDY POPULATION

The study was conducted on adult patient's age of 18 and greater than 18 who come to Emergency department during study period.

3.6 INCLUSION CRITERIA

Patients who are 18 and greater than 18years of age will be included in the study and attendants of Confused patients and patients who are unable to communicate and Psychiatric patient .

3.7 EXCLUSION CRITERIA

- Patients who are not willing to participate in the study
- Confused patients and patients who are unable to communicate and Psychiatric patients with no attendant

3.8 STUDY VARIABLES

DEPENDENT VARIABLES

- Patient satisfaction

INDEPENDENT VARIABLE

Socio-demographic variables: age, sex, religion, ethnicity, language, monthly income, occupation, educational level.

Physical environment of emergency department; including equipment, infrastructures and cleanliness.

Administrative facility ;diagnostic services, treatment efficacy, access and cost of the services

Patient centeredness: communication and care visits by nurses and physician

Waiting time and length of stay

Operational Definitions

Triage- a process of prioritizing patients based on the severity of their condition.

Red : Potential threat to life, limb or function, requiring rapid intervention.

Orange :Potential progress to serious problem and need intervention within 30 minutes.

Yellow green: minor or chronic problems, unlikely to deteriorate and patients can wait 1 hours and more.

Consultation time: The time spent discussing health matter with one's physician.

Satisfaction: average score of 50% and above in all the domains

satisfaction item was Scored in a five point Likert scale ordinal response, which Was converted to percentage scale response as follows:

Very satisfactory= 5 points (100%),

Satisfactory = 4 points (80%),

Neutral = 3 points (60%),

Dissatisfactory= 2 points (40%),

Very dissatisfactory = 1 point (20%) with the following operational

Percentage range definitions:

Very satisfactory (90%–100%),

Satisfactory (70%–89%),

Neutral (50%–69%),

Dissatisfactory (30%–49%),

Very dissatisfactory (0%–29%). (25)

Physical environment: refers to the features of the setting in which the health services are provided.

Length of stay: The number of hours or days of stay in the ED before ward admission.

Patient Centeredness: partnership and relationship established among workers and the patient.

3.9 Limitation of the study

The research did not include patients who are age < 18 years, psychiatric patients, confused patients and patients who are unable to communicate with no attendants.

3.10 Sample size and Sampling techniques

Sample size

From study which was done at Gondar referral Hospital patients satisfaction was 51.7% so, $p=51.7\%$ is taken. (22)

$n = \frac{z^2 p (1-P)}{D^2}$, where

D^2

n- Minimum sample size required

p- Patients satisfaction with Emergency care from previous study Population

d- Margin of sampling error tolerated

z- Value of z a confidence interval of 95%=1.96

Hence $n = \frac{(1.96)^2 (0.517)(0.483)}{(0.05)^2}$

$n = 384$

The non respondent rate assuming to be 10% and when we add the non respondent rate to finite population correction 423 was enrolled for the study.

Sampling techniques

Systematic randomly sampling technique was used to select the required sample. The patients obtained from the triage registry and the first patient was selected by lottery method from number 1 to 3 patients' list during data collection day and then every 3rd patient was selected for Interview.

3.11 Data collection

A structured questionnaire prepared in English language was translated in to Amharic and used to collect the data. Training was given to data collector for one day. Data was collected with data

collector who was not involved with patient care .in patient who is unconscious or in distress; attendants were asked for consent and were interviewed. Patient satisfaction level was recorded using five-level Likert scale; very satisfied, satisfied, neutral, dissatisfied and very dissatisfied. Respondents were either patients or their attendants.

3.12 Data analysis

- ✓ The collected data was entered, cleaned, edited by EPI-INFO 7 and analyzed using SPSS 20.0 version statistical software. Patient satisfaction level was recorded using five-level Likert's scale; very satisfied, satisfied, neutral, dissatisfied and very dissatisfied. In the analysis of client satisfaction the very satisfied and satisfied was categorized as satisfied group and patients who respond as, neutral, dissatisfied and very dissatisfied was categorized as dissatisfied group. The overall patient satisfaction, average satisfaction towards ED staff, average patient satisfaction towards physical environment of ED and average patient satisfaction towards administrative facilities was found by computing variables on SPSS
- ✓ Finally the finding was presented using tables and then a chi square test to see association between different variables.

3.13 Data Quality control

The questionnaire was pre-tested in 30 patients who are visiting our ED to assess the clarity, sensitivity, reaction, and logical flow of questions. During data collection and training there was strict supervision by the investigator. The completeness of the questionnaire was checked by principal investigator.

3.14 Ethical consideration

The final proposal of the research was presented to emergency medicine and critical care department ethical clearance committee to approve the research. Respondents were informed clearly about the purpose of the study and only volunteers were interviewed.

4 CHAPTER -4 RESULT

4.1 Socio Demography Characteristics of Respondents

of the 423 participants enrolled in the study 400 were respondents with response rate of 94% and 23 (6%) patients were non respondent .The data collected for a total of 400 respondents (72 %) were males. the mean age of respondents were 40 years .

Most of the respondents were from yellow green 294(73.5%), and the rest 78(19.5%) from orange and 28(7%) from Red .questioner was completed by patients in 177 (44.3%), and 223(55.8 %) by attendants.

Most of the respondents were orthodox 273(68.3%), protestant 89 (22.3%), Muslim 38 (9.5%).Of the respondents 257(64.3%) were married

Most of the participants 112 (28%) have educational status can't read and write , 35 (8.8 %) grade 1-4 , 92(23%) grade 5-8, 81(20.3%) grade 9-12, 52 (13%) diploma and 28 (7%) of participants have educational status of first degree and above .

Ethnicity of most participants 237 (59.3%) was Oromo, followed by 124 (31%) amhara .,Occupation of most of participants 89(22.3 %) were farmers ,71 (17.8 %)house wife ,66(16.5%) government employee ,59(14.8%) private employee,53(13.3%)students ,34(8.5%)merchant and 28 (7%) were daily laborers. Monthly income of majority of participants 220 (55.1%) was < 1500. Most of participants come from Oromia 193(48.3%) ,followed by Addis Ababa 145(36.3%).

4.2 Patient characteristic

Most of participants 244 (61 %) was transported to our hospital by ambulance both from health facilities and from the scene and the rest 103 (25.8%),51(12.8 %),transported by public and private transport respectively. 63.3% of participants arrive to our hospital with in 3 hrs . 65.5 % of participants arrive to in the week days ,and 66% arrive in day time. 83(20.8 %) of participants had language barrier during their ED stay and of them 83 % were from oromia . Majority the participants 75.6% stay in the ED for more than 48 hrs at the time of data collection.

Table 1; socio demographic characteristic of respondents, AaBET hospital April 2019

Variables	Category	Frequency	Percentage (%)
Age	<25	79	19.8
	25-34	116	29
	35-44	60	15
	>45	145	36.3
sex	Male	288	72
	Female	112	28
Marital status	Single	130	32.5
	Married	257	64.3
	Divorced	7	1.8
	Widowed	6	1.5
Religion	Orthodox	273	68.3
	Muslim	38	9.5
	Protestant	89	22.3
Occupation	Government employee	66	16.5
	Private employee	59	14.8
	House wife	71	17.8
	Merchant	34	8.5
	Farmer	89	22.3
	Daily laborer	28	7
	Student	53	13.3
Education	Illiterate	112	28
	1-4	35	8.8
	5-8	92	23
	9-12	81	20.3
	Diploma	52	13

	First Degree and above	28	7
Income	<500	103	25.8
	500-1500	117	29.3
	1500-3000	86	21.5
	3000-4500	51	12.8
	>4500	43	10.8
Ethnicity	Oromia	237	59.3
	Tigraway	11	2.8
	Amhara	124	31
	SNNP	7	1.8
	Others	21	5.3

Table 2; patient characteristic, AaBET hospital April 2019

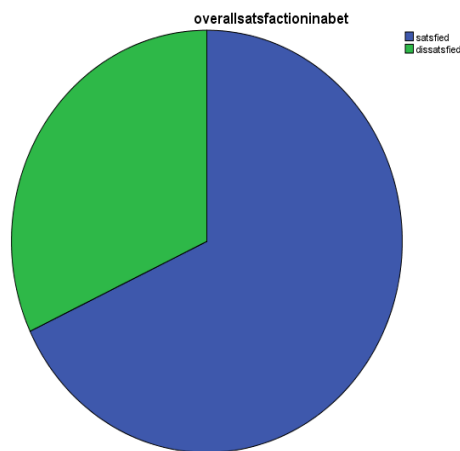
Patient characteristic		Frequency	Percentage (%)
No of hospital visit	New	372	93
	repeated	28	7
Time taken to arrive hospital	< 1 hr	117	29.3
	1-3 hr	136	34
	3-6 hrs	71	17.8
	>6 hrs	76	19
Mode of transport	Ambulance	244	61
	Public transport	103	25.8
	Private transport	51	12.8
	Others	2	.5
Time of arrival to ED	Day time	264	66
	Night time	136	34
Day of arrival to ED	Weekday	262	65.5

	Weekend	138	34.5
Triage category	red	28	7
	Orange	78	19.5
	Yellow green	294	73.5
do you have language barrier	yes	83	20.8
	no	317	79.3
Length of stay in ED	24-48 hrs	95	23.8
	48-72hrs	191	47.8
	>72 hrs	111	27.8
Who is completing questioner	patient	177	44.3
	Attendant	223	55.8

4.3 Patient satisfaction

Overall proportion of satisfaction of participants using the mean score was 68 % and 32% were not satisfied. Satisfaction was significantly associated with ED staff And dissatisfaction was significantly associated with physical environment of ED and towards administrative.

Overall satisfaction



The average satisfaction of participants towards the ED staff was 82.5 %. Majority of respondents were satisfied with speed of reception 94.8%, amount of time spent with physician 92.6% , courtesy and respect of doctors 92.8%, maintaining of privacy during physical examination 94.8%, explaining nature of the disease and method of treatment 89%, courtesy and respectfulness of nurses 84 % , nursing care 88.8% , and fairness of nurse and doctors regarding treatment of patient equally 92.5%.The median waiting time before physicians visit was 6 min being minimum1 minute and maximum 120 minute .

The average satisfaction of participants towards physical environment of the ED was 13.5 % and 86.5% were dissatisfied . specifically ,of all participants 294(73.4%) were dissatisfied with availability of drinking water . and 77.9 % were dissatisfied with cleanness of the toilet . of all the participants 88.8 % were satisfied with cleanness of the emergency.

The average satisfaction towards administration of hospital was 44% and 56% were dissatisfied. Most of participants were satisfied with availability of medication(79.3 %), availability of investigation (82.6%), waiting time to collect investigation (93.5 %),affordability of medication (78.8 %) and affordability of investigation(81 %), and 65 % were dissatisfied with availability of bed.

Table 3 patient satisfaction towards ED staff, AaBET hospital April2019 GC

variables	Very dissatisfied (%)	Dissatisfied (%)	Neutral (%)	Satisfied (%)	Very satisfied (%)
Speed of reception	2(%)	4(%)	15 (3.8 %)	258(64.5%)	128(30.3%)
Amount of time spent with physician	3(0.8)	1(0.3)	26(6.5)	281(70.3)	89(22.3)
Courtesy and respectfulness of doctors	2(.5)	1(.3)	26(6.5)	241(60.3)	130(32.5)
Maintaining privacy during physical exam	1(.3)	0	20(5)	251(62.8)	128(32)
Explaining nature of disease and treatment	1(.3)	2(.5)	41(10.3)	280(70)	76(19)
Courtesy and respectfulness of nurses	2(.5)	6(1.5)	56(14)	260(65)	76(19)
Nursing care	2(.5)	2(.5)	41(10.3)	266(66.5)	89(22.3)
Fairness of nurses and doctors	1(.3)	3(.8)	25(6.3)	281(70.3)	90(22.5)

Table 4 Patient satisfaction towards physical environment of ED, AaBET hospital April 2019

Variables	Very	Dissatisfied	Neutral (%)	Satisfied (%)	Very satisfied
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	dissatisfied (%)	(%)			(%)
Availability of drinking water	99(24.8)	71(17.8)	124(31)	101(25.3)	5(1.3)
Cleanness of emergency	2(.5)	5(1.3)	38(9.5)	218(54.5)	137(34.3)
Cleanness of toilet	83(20.8)	97(24.3)	131(32.8)	75(18.8)	14(3.5)

**Table 5 Patient satisfaction towards administrative facilities of hospital,
AaBET hospital April 2019**

variables	Very dissatisfied (%)	Dissatisfied (%)	Neutral (%)	Satisfied (%)	Very satisfied (%)
Availability of medication in hospital	3(.8)	0(0)	80(20)	262(65.5)	55(13.8)
Availability of investigation in hospital	3(.8)	2(.5)	65(16.3)	265(66.3)	65(16.3)
Waiting time to collect investigation	0(0)	2(.5)	24(6)	330(82.5)	44(11)
Availability of bed	46(11.5)	92(23)	122(30.5)	119(29.8)	21(5.3)
Place continently labeled	3(.8)	3(.8)	75(18.8)	245(61.3)	74(18.5)
Affordability of medication	4(1)	3(.8)	78(19.5)	235(58.8)	80(20)

Affordability of investigation	3(.8)	4(1)	69(17.3)	233(58.3)	91(22.8)
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4.4 Factors associated with level of satisfaction

Overall satisfaction was significantly higher with patient satisfaction towards ED staff with (p value of 0.049). Overall satisfaction was significantly lower with patient satisfaction towards physical environment of ED with (p value of 0.028) and satisfaction towards administrative with (p value of 0.037).

Table 6; Bivariate Logistic Regression analysis of specify areas

Satisfaction assessment variables, AaBET hospital April 2019

variables	Category	Overall satisfaction		COR(95% CI)	P value
		S	D		
ED Staff	S	245	76	1.168(1.127-1.208)	0.049
	D	18	52		
physical environment of ED	S	52	2	1.548 (1.49-1.59)	0.028
	D	220	126		
Administrative	S	165	11	1.254(1.209-1.299)	.037
	D	107	117		

5 CHAPTER-5 DISCUSSION

Overall proportion of satisfaction of participants using the mean score was 68 % and 32% were not satisfied. Satisfaction was significantly associated with ED staff and dissatisfaction was significantly associated with environment of ED and towards administrative. Overall satisfaction was significantly higher with patient satisfaction towards ED staff with (p value of 0.049) and was significantly lower with patient satisfaction towards physical environment of ED with(p value of 0 .028) and satisfaction towards administrative with(p value of 0.037) . There was significant number of participants who face language barrier (20.8%) .

Specifically dissatisfaction was higher in availability of drinking water (73.4%), bed availability (65 %) and cleanness of toilet (77.9 %) and satisfaction was higher with speed of reception 94.8%, amount of time spent with physician 92.6% , courtesy and respect of doctors 92.8%, maintaining of privacy during physical examination 94.8%, and waiting time to collect investigation (93.5 %).

A Cross-Sectional Survey was conducted at Hawassa University Referral Hospital emergency department from Dec 2013G.C. to June.2014 G.C. The study population was all adult patients who visit emergency room of Hawassa University Referral Hospital and also all pediatric emergency room of the hospital.: The data was collected from both adult and pediatric Emergency out Patient Department of Hawassa University Referral Hospital 178 (42.1%) & 245 (57.9%) respectively In the study total of 423 patients and attendants are involved during the data collection period. Overall satisfaction level of Hawassa University Referral Hospital is 55.9% . (3) and compared to the study done in hawassa university hospital the over the overall satisfaction was higher in this study 68 % and unlike in hawassa referral hospital in which patient dissatisfaction was associated with as speed of reception area, medical care, well control of pain, nursing care, courtesy of staff, physical comfort and waiting time in which they recommend evidence based intervention to improve these factors , in this study dissatisfaction was associated to availability of drinking water , availability of clean toilet and availability of bed .

Descriptive and analytic cross-sectional study was done in Iran to evaluate patient satisfaction with the Emergency Department of Imam Reza Hospital in Tabriz, Iran, 500 patients ED were included in this study. The highest satisfaction rates were observed in the terms of physicians' communication with patients (82.5%), security guards' courtesy (78.3%) and nurses' communication with patients (78%) (2) and in this study higher

satisfaction was associated with speed of reception 94.8%, amount of time spent with physician 92.6% , courtesy and respect of doctors 92.8%, maintaining of privacy during physical examination 94.8%, and waiting time to collect investigation (93.5 %) which shows comparable level of satisfaction towards patient physician and patient nurse communication . in the study done in iran the average waiting time before seen by physician it was 24 min and 15 second but in this study the average waiting time was 8.5 min which show shorter waiting time in this study .

A facility based cross-sectional study was conducted in 2014 GC among patients visiting GURH for emergency care. Patients were selected by systematic random sampling, using patient flow list in the day and night emergency services and total of 963 patients were included in the study. Data were collected using a standard Press Ganey questionnaire by BSc health science graduates. The overall satisfaction using the mean score indicates that 498 (51.7%) were satisfied with the service, the providers and the facility suitability whereas 465(48.3%) were not satisfied. Seven hundred and six (73.3%) patients reported that they have been discriminated or treated badly during the service provision in the hospital. There was a low level of patient satisfaction related to lack of confidence in the hospital for treatment, discrimination towards patient care, and under and delayed treatment of patients who were not in serious medical conditions.(22) and when we compare with the study done in gonder hospital this study shows higher level of satisfaction and unlike to the study done in gonder referral hospital this study shows low level of satisfaction with availability of drinking water , availability of clean toilet and availability of bed.

Study done in north central Nigeria in November 2013- June 2014 G.C. To assess satisfaction with care received by patients at public secondary hospitals in Abuja, north central Nigeria Of 305 completed questionnaires, 23 (7.5%) were invalid. Among the valid respondents, there were 92 (32.6%) males and 190 (67.4%) females, with the age range of 9 to 70 years;147 (52.1%) were outpatients while 135 (47.9%) were inpatients who were just discharged from admission. All individual items that assessed their relationships and communication with doctors and nurses scored mean satisfaction levels >3, except “promptness of responses by nurses when patients called for help” which scored low mean satisfaction level of 2.8. A total of 60.5% of respondents felt being valued and appreciated as a patient during their hospital visits. Hospital experience by inpatient respondents showed positive average satisfaction score of 3.4 for cleanliness of the ward and bathroom; 3.1 for quietness at night; but low

satisfaction score of 2.9 for feeling being valued and appreciated as patients. Over 64% of respondents said they spent 60 minutes or less as the waiting time, while average waiting time for all study centers was less than 1 hour. On a number scale of 1 to 10 (1 being worst hospital and 10 being best hospital), the median satisfaction score was 8, meaning intermediate satisfaction perspective by the patients while 73% of respondents scored the hospitals and higher. In the study done in central Nigeria the low level of satisfaction was associated with of respondents felt being valued and appreciated as a patient (24) unlike to this study in which low level of satisfaction was associated with availability of drinking water, availability of clean toilet and availability of bed. And average waiting time was short in this study.

Descriptive study carried out on 400 NHIS patients from April 2011 to October 2011 at the general outpatient department of Federal Medical Centre in Southeastern Nigeria. Each satisfaction item was scored in a five point Likert scale ordinal response, which was converted to percentage scale response. Satisfaction was measured from the following domains: accessibility, patient waiting time, patient-provider communication, patient-provider relationship, hospital bureaucracy, and hospital environment. Operationally, patients who scored 50% and above in the assessed domain were considered satisfied while those who scored less than 50% were dissatisfied. The age of the respondents ranged from 18 to 60 years with mean age of 34.8 ± 11.3 years. Majority of the respondents were middle-aged adults (40–60 years) (67.7%). There were 181 (45.3%) males and 219 (54.7%) females with a male- to- female ratio of 1:1.2. Majority of the respondents were married (66.0%) and had secondary education (74.4%). Generally, the overall average satisfaction score of the respondents was 66.8%. Specifically, the respondents expressed satisfaction with patient-provider relationship, which had highest average score of 81.5% for the domain, with medical doctors rated highest (88.8%) and medical records staff the lowest (68.0%). This is followed by patient-provider communication, which has average score of 79.9%, with medical doctors rated highest (88.8%) and medical records staff rated the least (68.0%). The accessibility had average score of 86.2% while hospital environment had average score of (68.2%). Hospital bureaucracy had score of 48.8 while patient waiting time had 48.3% in Nigeria the overall average satisfaction score of the respondents was 66.8% which is comparable to result of this study overall satisfaction 68 %. Similar to the study done in NHIS in this study higher patient satisfaction was associated with patient provider communication and patient provider relationship (25)

6 CHAPTER 6-Limitation and strength

6.1 Limitation of this study

More than half (55.8%) of questioners are completed by attendants.

6.2 Strength of study

- ✓ Data was collected by data collector who is not involved in patient care which minimizes bias .
- ✓ The result of this study will help us to improve quality of care of our hospital and to solve the problems and to initiate further research.
- ✓ High response rate .

7 CHAPTER 7 - CONCLUSION AND RECCOMNDATION

The overall satisfaction of participants was low .patient satisfaction was affected by ED staff (doctors and nurses) , physical environment of ED and administrative facilities.

Based on the research findings, the following recommendation can be made;

- ✓ The hospital has to improve on physical environment of ED mainly availability of drinking water and on establishment of clean toilet .
- ✓ The hospital has to improve bed availability by increasing rate of disposition and additional beds
- ✓ It is better to the hospital to have translators mainly from Oromiffa to Amharic because most of patients who face language barrier was from oromia .
- ✓ Hospital to improve on availability and affordability of drugs and investigations
- ✓ Staffs should listen to the patients carefully & explain the disease course and method of treatment

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ANNEXES
ANNEXE 1-QUESTIONNAIRE

Annex III: consent form

Patients information document code no:_____

Dear participants, my name is Dr MerhawitAbrha I am an emergency medicine and critical care resident in SPHMMC, AaBET Hospital. This letter serves to ask consent from you to take part in this research. The purpose of this research is to assess patient satisfaction and to determine factors that contribute for being not satisfied with emergency medical service in AaBET Hospital. This will be critical input for policy makers and organizations involved on care and support of emergency patients. Your participation in this research is voluntary. If you decide not to participate there will be no negative consequences for you. If you do decide to participate there will be no benefits for you, however, your participation on this study is very important for achievement of the study and for emergency patients thereby increasing the quality of care for the patients. There is no any risk will occur to you because of your participation in this study. All the responses given by you and results obtained will be kept confidential using coding system whereby no one will have access to your response. You are not expected to give your name or phone number. Without permission from you legal body any part of this study will not be disclosed to third person. you have full right to refuse and withdrawal to participate in this study if you don't wish. The interview period will take about 15 minutes. if you are willing to participate in this study, you need to understand and sign the agreement form, and then you will asked to give your responses by data collectors.

Name of investigator: Merhawitabrha.

Tell: +251-914-122-665.

E-mail address: merhawitabrha27@gmail.com.

1. Are you volunteer to participate in the interview?

Yes ☐ No ☐

9. Estimated Monthly income In Birr

A) less than 500 birr B) 500-1500 C) 1500-3000 D) 3000-4500 E) 4500 and above

10. Number of Visited to this Hospital A) New B) repeat visit

11. Where do you come?

A) Addis Ababa B) Tigray C) Oromia D) SNNP E) Amhara region F) others specify_____

12. What is the taken to arrive the Hospital (in hr)

A) less than 1 hr B) 1-3hr C) 3-6 hr D) more than 6 hr

13. Mode of transport Used to arrive this Hospital

A) Ambulance B) Public Transport C) Private Car D) others specify_____

14. Time of arrival at ED A) day time B) night time

15. Day of arrival at ED A) weekday B) weekend

16. Do you speak Amharic? A) Yes B) No

17. Was there meet language barrier? A) Yes B) No

18.Length of stay at ED A) <24 hr B) 24-48hr C) 48-72 hr D) >72 hr

II .Assessments of patient's satisfaction towards ED staff

1. Are you comfortable with the speed of reception?

A) Very dissatisfied B) Dissatisfied C) Neutral D) Satisfied E) very satisfied

2. How many minutes or hrs did you wait before you were seen by a doctor? _____

3. The amount of time spent with your physician (Consultation time)

A) Very dissatisfied B) Dissatisfied C) Neutral D) Satisfied E) very satisfied

4. Courtesy and respectfulness of Doctors

A) Very dissatisfied B) Dissatisfied C) Neutral D) Satisfied E) very satisfied

5. Maintaining your privacy during examination

A) Very dissatisfied B) Dissatisfied C) Neutral D) Satisfied E) very satisfied

6. Explaining the nature of disease and methods of treatment

A) Very dissatisfied B) Dissatisfied C) Neutral D) Satisfied E) very satisfied

7. Courtesy and respectfulness of Nurses

A) Very dissatisfied B) Dissatisfied C) Neutral D) Satisfied E) very satisfied

8. Nursing care A) very dissatisfied B) Dissatisfied C) Neutral D) Satisfied E) very satisfied

9. Fairness of Nurses and doctors regarding treating patients equally

A) Very dissatisfied B) Dissatisfied C) Neutral D) Satisfied E) very satisfied

III. Patients satisfaction towards Physical Environment of ED

1. Availability of drinking water A) very dissatisfied B) Dissatisfied C) Neutral D) Satisfied E) very satisfied

2. Cleanness of Emergency A) very dissatisfied B) Dissatisfied C) Neutral D) Satisfied E) very satisfied

3. Cleanness of toilet A) very dissatisfied B) Dissatisfied C) Neutral D) Satisfied E) very satisfied

IV. Patients level of satisfaction towards Administrative facilities in the ED

1. Availability of drugs in the ED and In the Hospital

A) Very dissatisfied B) Dissatisfied C) Neutral D) Satisfied E) very satisfied

2. Availability of investigations in the Hospital

A) Very dissatisfied B) Dissatisfied C) Neutral D) Satisfied E) very satisfied

3. Waiting time to collect investigation

A) Very dissatisfied B) Dissatisfied C) Neutral D) Satisfied E) very satisfied

4) Availability of bed

A) Very dissatisfied B) Dissatisfied C) Neutral D) Satisfied E) very satisfied

5) Places conveniently located and labeled ... availability of arrows to show where to go; like pharmacy, laboratory and toilet...etc A) very dissatisfied B) Dissatisfied C) Neutral D) Satisfied E) very satisfied

6) Affordability of Medications

A) Very dissatisfied B) Dissatisfied C) Neutral D) Satisfied E) very satisfied

7) Affordability of investigation

A) Very dissatisfied B) Dissatisfied C) Neutral D) Satisfied E) very satisfied

