

Assessment of Client Satisfaction on Emergency Service at Jimma University Medical Center, Jimma, Ethiopia

Warkaw Merachew

School of Veterinary Medicine, College of Agriculture and Veterinary Medicine,
Jimma University, Jimma, Ethiopia

Abstract: *Background:* Satisfaction refers to a state of pleasure or contentment with an action, event or service, especially one that was previously desired. Regarding client, satisfaction is the level of happiness that clients experience having used a service. It, therefore, reflects the gap between the expected service and the experience of the service, from the client's point of view. Information was unavailable regarding the level of satisfaction of patients towards emergency health care services at Jimma University Medical Center that serves a huge catchment area; and this study will address this gap. *Objective:* to assess client satisfaction on emergency health service delivery at Jimma University Medical Center. *Method:* A Hospital-based cross-sectional study was conducted on randomly selected 270 Patients request for emergency service at Jimma University medical center from September 20 to November 15/2018. Data was collected by using structured, pretested, self-administered questionnaire. Data analysis was performed by using SPSS for windows version 20. *Result:* A total 270 clients were enrolled under this study of which 60% of the participants were males and 40% of the participants were females. Overall, 59.7% of the patients were satisfied with the services received from emergency department of JUMC, while the remaining 40.3% were dissatisfied. Specifically, the satisfaction rate in the professional care rendered by doctors, nurses, laboratory and pharmacy personnel were 54.8%, 61.1%, 60.2% and 58.1%, respectively. *Conclusions:* Generally, the study showed a moderate level of satisfaction of patients with services obtained from the emergency department of JUMC care center.

Key words: Client Satisfaction • Emergency • Health Service • JUMC

INTRODUCTION

Patient satisfaction has been defined as the degree of congruency between a patient's expectations of ideal care and his or her perception of the real care (s) he receives [1]. It is a multidimensional aspect, represents a vital key marker for the quality of health care delivery and this is an internationally accepted factors that needs to be studied repeatedly for the smooth functioning of the health care systems. It has been an important issue for health care managers. The client here does not technically assess their own health status after receiving care but the degree of satisfaction with the services delivered [2].

Satisfaction refers to a state of pleasure or contentment with an action, event or service, especially one that was previously desired [3]. Regarding to client,

satisfaction is the level of happiness that clients experience having used a service. It therefore reflects the gap between the expected service and the experience of the service, from the client's point of view [4]. Furthermore, patient satisfaction is the patient's perception of care received compared with the care expected [5].

Satisfaction is one of the WHO's building blocks of health systems is the delivery of health services that are effective, safe and of good quality for those who need them [6]. At a hospital level, providing a quality service is usually challenged by burdensome patients' flow and the urgent nature of care in the emergency department(ED) further suppresses the effort. And hence, assessing the patients' satisfaction as a quality of care indicator is required to monitor the non-technical aspects of quality of care in such settings [7].

Corresponding Author: Warkaw Merachew (DVM), School of Veterinary Medicine,
College of Agriculture and Veterinary Medicine, Jimma University, Jimma, Ethiopia.
Tel: +251 9 73 83 94 92.

Good health for the people in countries is essential to the human development and improvement of their economies [8]. Health care delivery has been explained as one of the service deliveries that demand high consumer involvement in the consumption process [9]. The whole process of the service delivery involves the client. A bad service delivery harms the client and to some extent could even lead to the loss of life. For this reason, checking and assessing client satisfaction with health care is an essential effort to improving the quality of the health system [10].

Information was unavailable regarding the level of satisfaction of patients towards emergency health care services at JUMC that serve a huge catchment area; and this study addressed this gap. This study will have an important input in assessing the level of clients' satisfaction on Emergency department health care services, identify the factors affecting the clients' satisfaction and provide a recommendations on an improved health service delivery that will be helpful to fill research knowledge gaps which ultimately contributes to enhance quality of patient services in the hospital and improve the level of clients' satisfaction.

This research is done in order to answer the major problem in Jimma University medical center emergency department healthcare sector which is what is the perceived service quality by patients in the hospital. It is without any doubt to say that there is very poor research done in order to find the service sector quality levels with regard to healthcare industry in Ethiopia. This fact is the main reason for undertaking this research in order to render a social service for human beings in Ethiopia.

Keeping this in view, the present study was conducted to assess patient satisfaction with services provided in a tertiary care hospital situated in Jimma University, Southwestern Ethiopia. Therefore, the general objective of the study was to assess the client's satisfaction on emergency department health care service at Jimma University Medical Center. Specifically, the study sought to address the following objectives: To describe the socio-demographic characteristics of clients experience on emergency medical service at Jimma University medical center. To evaluate client satisfaction level on emergency health service provided by Jimma University Medical Center.

Significance of the Study: The study provides an insight to client's satisfaction level of health delivery services at emergency department and to identify service gap and improve upon it. By identifying the gap, the JUMC

emergency department health Service can revise its strategy and concentrate on cost effective way of managing its limited resources to improve service delivery. The research would provide a perspective for the understanding and measurements of patients' expectations, service quality dimensions critical to an efficient healthcare delivery system. This can be ascertained from the revelation of client expectation thereby enabling management of health services to prioritize the gap to focus on to guarantee patient's satisfaction. A measure of patient's/clients satisfaction level will enable the Jimma University Hospital management to develop client centered service approach to deal with patients to enhance satisfaction. By identifying what customers expect and perceived to be quality, The Jimma University Health Service in connection with the government can revise, redesign, or repackage its service operations and tailor them to meet the patient's expectations. The JUMC emergency department Health Services by virtue of this research will invest in resources and logistics particularly in areas which will enhance quality health delivery.

Finally, this research will serve as an example for future studies at public service, health care or its related field.

Scope of the Study: Jimma University Medical Center is choice because it exhibits the features of a dense population and fast growing needs with clients (patients) related problems. There also to enable the researcher to compare why patients (clients) will choose to attend emergency cases in the JUMC. Therefore, the findings of this research can perhaps, be projected to the zonal level in the southwestern region of Jimma zone.

MATERIALS AND METHODS

Study Setting: The study was conducted in Jimma University Medical Center. Jimma University Medical Center is the major health service providing governmental institute in the Jimma town which is found at a distance of 346 kilometers from Addis Ababa. Jimma University Medical Center is the only Medical Center in southwestern Ethiopia and gives different health service for more than five million populations.

Study Design and Study Period: A hospital based cross-sectional study was conducted. This cross-sectional study was a descriptive study aims and the participants were including Jimma University Medical Center emergency department clients.

Sample Size Determination and Sampling Method:

The Sample size was determined by using a single population proportion formula. A 95% confidence level, 5% margin of error and 77% anticipated satisfaction level of the patients was considered as inputs. Therefore the sample size was determined by using the assumption that the proportion of patient satisfaction of 77% [4]. Formula for single population Proportion:

$$n \geq \frac{(Z\alpha / 2)^2 * P(1 - p)}{d^2}$$

where,

p = Expected population proportion of the event

Q = 1-p

d = degree of absolute precision / error tolerated (0.05)

Zα/2 = Standard normal variable at 95% Confidence level (1.96).

Systematic sampling method was employed. Busy work hours, shifts, personnel, different providers, day of the week and type of client complaints were considered to have an effect on satisfaction level. The total sample size was 270 respondents of the emergency department clients.

Measurement and Data Collection: Pre-structured questionnaires were developed in English and then translate to working language of the country Amharic and Affaan Oromo language. Data was collected via face-to-face interviews. The questionnaire contain satisfaction indicators and socio-demographic characteristics of the emergency clients and different dimensions of emergency services such as consultation time with physician, courtesy of staff, health care service and waiting time. Due to the fact that emergency service is given to 24 hours only, the clients were interview immediately after getting emergency service within this time frame. I.e. at the time of admission to inpatient ward from emergency department or before the clients go to their home after getting emergency service.

Data Quality Control: To maintain the quality of the data, data was collected with great care and the questionnaires were pretested. During interviewing the clients wearing of gown, uniforms or badges were not allowed in order to prevent bias. The interviewers were oriented about unifying their communication and the process of interviewing the clients.

Ethical Considerations: In this study, care was taken to meet basic ethical principles in social science research. Accordingly, the communities' cultures and their way of life were treated respectfully. The researcher and the enumerators were explained to all respondents the purposes of this study before commencing interviews. Proper care was also taken to keep the confidentiality of the participants; their names have not been use anywhere. Besides, the responses have not been used for other purposes than what was communicated to the participants.

Participation in interviews was voluntary and the respondents have the right to abstain from answering any question that they do not want to answer. They have also the right to withdraw from the interviews at any time for any reason.

Data Analysis Interpretation and Presentation: Data was checked daily for completeness and enter in to computer and analyze by using SPSS for window version 20. To calculate level of patient's satisfaction on different health services; Very dissatisfied and dissatisfied was considered as dissatisfied, satisfied and very satisfied was considered as satisfied. Patients with neutral rating responses were excluded. The percentage of satisfaction or dissatisfaction was calculated by dividing the number of satisfied or dissatisfied responses by the total number of respondents excluding neutral response ratings, respectively.

Furthermore, the researcher was believed that tables and percentages was the findings of the research, hence it used to facilitate the summarization and communication of the meaning of the data because tables and percentages are used to summarize and include the issues which is raised in the questionnaire and put together in a short and precise manner.

RESULTS

A total 270 clients were enrolled under this study of which 60% of the participants were males and 40% of the participants were females. The age of the study participants ranged between was 18 and 75 years. The majority of study subjects were in age group 28-37 years which accounts 29.3% of the study participants (Table 1). This is findings indicated the most working age affected by emergency cases due work related accidents.

Regarding the level of education, the majority of the study participants can able to read and write. Considerable number of clients 49(18.1%) were not able to

Table 1: Socio-demographic characteristics (gender and age) of study participants at emergency department of JUMC, from September 20 to November 15/2018 (N=270)

Demographic Characteristics	Frequency	Percent (%)
Gender		
Male	162	60.0
Female	108	40.0
Total	270	100.0
Age		
18-27	41	15.2
28-37	79	29.3
38-47	70	25.9
48-57	54	20.0
58-67	20	7.4
> 67	6	2.2
Total	270	100.0

Table 2: Level of education and address of study participants at emergency department of JUMC from September 20 to November 15/2018 (N=270)

Demographic Characteristics	Frequency	Percent (%)
Level of Education		
Illiterate	49	18.1
Read and write	69	25.6
Elementary	58	21.5
High school	51	18.9
Diploma	24	8.9
Degree and above	19	7.0
Total	270	100.0
Address of client		
Urban	143	53.0
Rural	127	47.0
Total	270	100.0

Table 3: Time and frequency of visit of study participants at emergency department of JUMC from September 20 to November 15/2018 (N=270)

Demographic Characteristics	Frequency	Percent (%)
Time of visit		
Morning	92	34.1
Evening	106	39.3
Night	72	26.7
Total	270	100.0
Frequency of visit		
New	121	44.8
Repeat	149	55.2
Total	270	100.0

Table 4: The overall satisfaction rate of study participants regarding courtesy of staff at emergency department of JUMC from September 20 to November 15/2018 (N=270)

Questions	Satisfied (%)	Dissatisfied (%)
Waiting time to get service	189(70.0)	81(30.0)
Consultation time with Physician	148(54.8)	122(45.2)
Courtesy of Staff		
Doctor	165(61.1)	105(38.9)
Nurse	156(57.8)	114(42.2)
Medical Laboratory Professionals	171(63.3)	99(36.7)
Pharmacy Professionals	174(64.4)	96(35.6)
Registration Staff	156(57.8)	114(42.2)
Security Guard	147(54.4)	123(45.6)
Porter	165(61.1)	105(38.9)
Casher	159(58.9)	111(41.1)
The Overall Satisfaction of Courtesy of Staff	162(59.8)	108(40.1)

Table 5: The overall satisfaction rate of study participants regarding health care services at emergency department of JUMC from September 20 to November 15/2018 (N=270)

Questions	Satisfied (%)	Dissatisfied (%)
Health Care Service		
Physical examination by Doctor	148(54.8)	122(45.2)
Nursing services	165(61.1)	105(38.9)
Medical Laboratory Services		
Availability of the test	171(63.3)	99(36.7)
Waiting time to get the lab professionals	174(64.4)	96(35.6)
Waiting time to get lab result	156(57.8)	114(42.2)
Payment for lab tests.	147(54.4)	123(45.6)
Cleanness of Waiting area	165(61.1)	105(38.9)
The overall satisfaction of Lab services	163 (60.2)	107(39.8)
Pharmacy Service		
Availability of drug	147(54.4)	123(45.6)
Payment for drug	165(61.1)	105(38.9)
Completeness of information on how and when to take the prescribed drugs	159(58.9)	111(41.1)
The Overall Satisfaction of Pharmacy Services	157(58.1)	113(41.8)
The Overall Satisfaction of ED Services	162 (59.7)	108(40.3)

read and write, while, 69(25.6%) were able to read and write. Concerning to the address of study participant, slightly more than half of the participants were from urban areas, 143 (53.0%) (Table 2). This is may be due to the study concern only emergency case because most of the emergency case comes from near to the hospitals.

The study participants were getting services in three shifts: morning, evening and night. The busiest time of visit was evening 106 (39.3%). Nearly half of the study participants 121 (44.8%) of the respondents visited the emergency department for the first time (Table 3). Here this finding indicates more than half of the study participants know the hospital.

Out of the total study participants 189 (70.0%) of the respondents reported satisfaction with the overall waiting time to get the hospital services. Among the clients, the consultation time with physicians the clients was dissatisfied 125 (45.2) with the time spent to consult by a doctor.

Regarding to staff courtesy, 162(59.8%) of study participants were satisfied by the manner shown by staffs and among these 174 (64.4%) were satisfied by pharmacy professionals and the lowest satisfaction rate 147(54.4%) was recorded for courtesy of the hospital guards (Table 4). In this finding we observe the courtesy of the security guard of is lower when comparing to the others so it should be improved in order to increase the satisfaction rate of clients.

The majority, 162(59.7%), of the study participants were satisfied by services rendered in emergency department. The satisfaction rate in the professional care rendered by doctors, nurses, laboratory and pharmacy

personnel were 54.8%, 61.1%, 60.2% and 58.1%, respectively (Table 5). This finding shows moderate satisfaction rate it should be improved through continuous evaluation of health delivery services in order to improve the satisfaction rate of the clients.

DISCUSSIONS

Patient satisfaction is considered one of the important quality indicator(s) at the emergency department [11]. Clients visiting the emergency department have the same socio-economic profile with that of the general population of the country since this hospital is the first of its kind in the region in terms of providing tertiary/specialized level care. Meanwhile, quality service provision is expected, service rendered in emergency department needs greater emphasis. Therefore, factors affecting this service should be identified and necessary measures should be taken to improve the quality of the service [12].

In our study showed that the overall patient satisfaction level of service given in Emergency Department was (59.7%). which is comparable with that of a study conducted in Hawassa University Referral Hospital (57.1%) and Mozambique hospital (55%). However the finding of our study is higher than study conducted in Eastern part of Ethiopia (54.1%) and lower than study conducted in South Western part of Ethiopia (77.0%) and Tertiary Hospital in South Nigeria (66.8%) [4, 7, 13]. This variation may be attributed to the fact that this study was conducted in a high-level facility with relatively low number of health professional. In addition, differences in the time of the study and the type the study participants may be the reason for the variation.

The current study indicated that 54.8% of study participants were satisfied with physical examination by the physicians. This finding is lower than the study conducted at Jimma University specialized hospital and Hawassa University Referral Hospital [4, 14]. This difference is due to low number of health professional or physicians.

Regarding the service provided by the nursing staff, 61.1% of the participants were satisfied with the care. This study finding is lower than with study conducted in Black Lion Hospital (90.1%), Addis Ababa, Ethiopia and Hawassa University Referral Hospital (89.9%) Hawassa, Southern, Ethiopia [14, 15]. Similar study from Iran [12] reported that 82.8% of the study participants were satisfied and, which is higher than this figure in the current study. The probable reason may be the nature of the clients (the level of satisfaction by the patients

themselves and their relatives could be varied), differences in the level of facilities and also the time of study. On the other hand, the report (67.1%) from Gondar, Northwest Ethiopia [16] was comparable to our findings.

Based on current study, 59.8% of study participants were satisfied by the courtesy of the staffs working in Jimma University Medical Center Emergency Department which is lower than a study conducted at Hawassa University Referral Hospital (91.7%) [14]. The satisfaction rate of study participants about their encounter with security guards was relatively lower than compared to the study conducted in Iran and Hawassa University Referral Hospital (79.4%) [12]. The differences might be due to misunderstanding of manners, duties and responsibilities of clients' handling.

One of the domains of emergency outpatient department is laboratory service. Based on the findings of the current study, the overall satisfaction rate of laboratory service was 60.2%. This result is lower than with the report (85.5%) of similar study conducted in Addis Ababa, Ethiopia [17] and (84.7%) of Hawassa, Ethiopia. However this finding is comparable to that of the report (60.4%) of other Ethiopian study from Nekemte Referral Hospital [18].

Concerning pharmacy services, 58.1% of study participants were satisfied and 41.8% of the respondents were dissatisfied. This should be greater than this finding the problem was mainly because of the unavailability of drugs partially in the unit. The stock-out might be related to the government drug supply system that was lengthy for the sake of averting corrupted practices. The complaints of the clients we observed were due to the unavailability of the item while they were prepared to purchase out of pocket. As a result the clients were forced to buy prescribed drugs with exaggerated price from private pharmacies. Because of this fact, relatively half of the study participants were dissatisfied by pharmacy services. This finding is lower than with a similar study conducted in Hawassa University Referral Hospital 67.6% satisfaction level [14].

Limitations of the Study: This research work is not without Limitations. The process of selecting respondents randomly from a sample frame was challenging. Also, some patients are reluctant to respond to the questionnaires. Again clients sometimes need to be convinced before answering the questionnaires. The responses of patients depend upon their socio-economic profile, personality and their perceptions; some may be satisfied with average services, while other may be dissatisfied even with the best.

Evidence based intervention related to client satisfaction can be implemented based on such assessment data. However we believe that there may be potential confounding factors that we did not take into account neither in data collection tools preparation nor in the analysis. We didn't measure waiting time from patient arrival until leaving the emergency outpatient department. Patients with different clinical presentations might have different satisfaction rates and also the severity of cases may influence satisfaction rates. On the other hand using a relative or friend accompanying the patient to assess satisfaction of the service (the majority in our case) might have its own limitations since their view could be different from the patient him/herself. In addition, the absence of other alternative tertiary level care facility may suppress disclosing dissatisfactions and also compel the respondents to submit to the standards of care without questioning. In addition, there are no standard procedures or tools to assess patient satisfaction in Ethiopian hospitals as in the case in developed nations. In addition, the hospital does not have its own mechanism of assessment in a structured way but there is an office to hear complaints (if any) and try to solve on the spot. We did this assessment taking into account the experience of other researchers.

CONCLUSIONS

The overall satisfaction rate (59.7%) of clients admitted to the emergency department of Jimma University Medical Center is moderate. Generally, the study showed a moderate level of satisfaction of patients with services obtained from the emergency department of JUMC care center. Our findings showed that in order to provide optimal ED services and win patients' satisfaction, research-based interventions are needed in areas such as clinical care processes, nursing services, staff behavior and treatment of patients, the physical environment and waiting time. To make these improvements, institutionalizing quality management in health services is a must and using its feedback in a systematic way can enhance efficiency and patient satisfaction with the ED. Based on the findings of the study the following recommendations are forwarded: According to this study overall picture of services to be improved in all aspects of services, it does not mean deficiency in the department; rather it means that things should improve to meet customer satisfaction. The fact that some patients expressed dissatisfaction with the services indicates that health care providers need to do more in the drive towards improving service windows in

order to improve efficiency, minimize patient waiting times and provide for patient comfort. The hospital administration may need to take the necessary action on the gaps identified. Researchers also shall do further research in general hospital services to uncover the major causes of clients dissatisfaction.

ACKNOWLEDGEMENTS

First of all I would like to express my deepest thanks to God for his permission to do my daily activities as well. Next, I would like to express my sincere and deepest gratitude to my advisors Mr. Wendosson Siyum for scholarly guidance, intellectual advice, constructive comments, rectifying manuscript and with continuous follow up throughout the study period in writing this paper. In third place, I have no enough words to express my great full pretty thanks, sincere appreciation and great respect for JUMC workers and clients for their valuable support during data collection. Finally and most importantly, I would like to express my deepest appreciation to my family, for their endless help, love and moral support in every situation facing me. Special thanks go to all of my friends, for their valuable comments and encouraging ideas.

REFERENCES

1. Aragon, S.J. and S.B. Gesell, 2003. A patient satisfaction theory and its robustness across gender in emergency departments: a multi-group structural equation modeling investigation. *American Journal of Medical Quality*, 18(6): 229-241.
2. Ahmad, I. and S. Ud Din, 2010. Patients' satisfaction from the health care services. *Gomal Journal of Medical Sciences*, 8(1).
3. Hornsby, A.S. and J. Crouther, 2000. *Oxford advanced learners' dictionary*. Oxford University Press, pp: 1042.
4. Assefa, F. and A. Mosse, 2011. Assessment of clients' satisfaction with health service deliveries at Jimma University specialized hospital. *Ethiopian Journal of Health Sciences*, 21(2): 101-110.
5. Aiello, A., A. Garman and S.B. Morris, 2003. Patient satisfaction with nursing care: a multilevel analysis. *Quality Management in Healthcare*, 12(3): 187-190.
6. World Health Organization, 2006. *Working together for health: the World health report 2006: policy briefs*.
7. Abdosh, B., 2016. The quality of hospital services in eastern Ethiopia: Patient's perspective. *The Ethiopian Journal of Health Development (EJHD)*, 20(3).

8. Brundtland, G.H., 2001. Improving health systems' performance. OECD, pp: 4.
9. Peprah, A.A., 2014. Determinants of patients' satisfaction at Sunyani regional hospital, Ghana. *International Journal of Business and Social Research*, 4(1): 96-108.
10. Owusu-Frimpong, N., S. Nwankwo and B. Dason, 2010. Measuring service quality and patient satisfaction with access to public and private healthcare delivery. *International Journal of Public Sector Management*, 23(3): 203-220.
11. Trout, A., A.R. Magnusson and J.R. Hedges, 2000. Patient satisfaction investigations and the emergency department. What does the literature say? *Academic Emergency Medicine*, 7: 695-709.
12. Soleimanpour, H., C. Gholipouri, S. Salarilak, P. Raoufi and R.G. Vahidi, 2011. Emergency department patient satisfaction survey in Imam Reza Hospital, Tabriz Iran. *International Journal Emergency Medicine*, 4: 2.
13. Young, G.J., M. Meterko and K.R. Desai, 2000. Patient satisfaction with hospital care: effects of demographic and institutional characteristics. *Medical Care*, pp: 325-334.
14. Worku, M. and E. Loha, 2017. Assessment of client satisfaction on emergency department services in Hawassa University Referral Hospital, Hawassa, Southern Ethiopia. *BMC Emergency Medicine*, 17: 21.
15. Molla, M., A. Berhe, A. Shumiye and Y. Adama, 2014. Assessment of adult patients' satisfaction and associated Risk factor with nursing care in Black Lion Hospital, Ethiopia: Institutional based cross sectional study. *International Journal of Nursing and Midwifery*, 6(4): 49-57.
16. Azanu Kibret, N., N. Wubante Demilew and D. Amsalu Feleke, 2014. Patients' Satisfaction and Associated Factors with Nursing Care Services in Selected Hospitals, Northwest Ethiopia. *American Journal of Nursing Science*, 3(3): 34-42.
17. Mindaye, T. and B. Taye, 2012. Patients' satisfaction with laboratory services at antiretroviral therapy clinics in public hospitals. Addis Ababa, Ethiopia: *BMC Research Notes*, pp: 5-184.
18. Tadele, G., E. Ejeta, M. Desalegn, S. Abere and K. Elias, 2014. Patients Satisfaction on Clinical Laboratory Services at Nekemte Referral Hospital, Oromia, Ethiopia. *Food Science and Quality Management*, 30: 25-30.