



Patient Satisfaction with Service Quality in Emergency Department of Public Hospitals in KSA

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ABSTRACT

The aim of this study was to assess patient satisfaction with services using questionnaire survey. In Emergency Department patient satisfaction is an important quality indicator. Patient satisfaction must be one of the key objectives of modern healthcare systems and must be evaluated constantly. Health as a fundamental right is gaining popularity in the past few decades and it has become a social goal. The health care scenario is fast changing all over the world. Patient satisfaction is one of the established parameters to measure success of the health care services that are provided in the hospitals. The findings of this study show that the patients are not satisfied with most of the emergency department services provided to them like front desk and timing, facilities, nursing care, doctor care, cleanliness and billing procedure. Therefore, we conclude there is apparently a gap between the perception and expectation of the emergency department services provided to the patients. These emergency department services need improvement to fill the gap of service quality.

Keywords: Patient, Satisfaction, Emergency hospital, Service quality and department

INTRODUCTION

Patient satisfaction is considered as an important indicator of quality care provided in emergency departments. This satisfaction may not be the actual representation of the technical quality of patient care as it is associated with the overall quality of care perceived by the patient. These perceptions can later become the future choice of emergency department for other patients. By improving patient care we can also improve the job satisfaction of physicians and staff of emergency departments that will motivate them and this will, in turn, create a positive work environment in already overwhelmed and stressed work settings. Patient satisfaction refers to the feeling of patients whether their expectations and needs are taken care of or not. It is a measure of equality of care perceived and the expected care by patients. There are many factors affecting patient satisfaction like behavior of healthcare providers, hospital factors, wait time, level of experience of physician, perception of care and cost of treatment. On a current and general level, health systems provide care based on diagnosis and treatment and this characteristic is inherited over time from a philosophy that appeared in the early last century. It is necessary to be highlighted, the other factors that can enhance the quality and efficiency of the medical care and that's why literature and medical research studies complement those mentioned so far, trying to emphasize that it is important the relationship between a physician and a patient, the dialogue has taken place with the patient, knowing his private life situation, before determining a treatment plan. If we refer to patient satisfaction this concept may include a number of elements as: low cost strategy to improve safety and quality in hospital [1], patients perceptions against professional skill and communication attitude of personnel, service quality and patient trust [2] or waiting time for appointments, office waits, emergency care, availability of hospitals and other resources [3]. To ensure a good level of satisfaction, we need to monitor the quality of decision making and use health information technology that collects information from patients [4], but also a good level of satisfaction can mean high expectation on receiving timely and high quality of medical service [5]. The performance of medical system is an important indicator of the level of economic development and a way to improve health outcomes is closing the gap between patient desires as a consumer and their medical needs [6]. The quality of medical services

can refer to some factors as external environment, perceptions of payment, commitments and promises and these factors can propose suggestions to improve hospital patient satisfaction [7]. It is important to measure all-time patient satisfaction because nowadays is increasing in importance and is associated with increased market share, decreased malpractice claims, financial gains [8], but also the efforts should be made to give more attention and more time to the patient [9]. It is important to investigate how the health conditions of the patients influence the way they combine the healthcare experiences [10] and how in some cases patients correlate satisfaction with some factors as staff attitudes or provision of explanation [11]. To ensure excellence of care services, hospitals and healthcare systems should invest in programs to determine how patients evaluate their experiences [12] and mention a positive relationship between the interpersonal continuity of care and patient satisfaction [13]. Patient satisfaction should be accepted as an integral part of quality health [14] because quality outcomes and patient satisfaction with services are now a priority and the primary competitive edge in healthcare [12]. Necessary to be highlighted, the other factors that can enhance the quality and efficiency of the medical care and that’s why literature and medical research studies complement those mentioned so far, trying to emphasize that it is important the relationship between a physician and a patient, the dialogue has taken place with the patient, knowing his private life situation, before determining a treatment plan.

MATERIALS AND METHODS

Research Methodology

The main aim of the research is to measure the “Patient satisfaction with service quality in the emergency department”. To serve this purpose, a customized questionnaire was used to collect data in order to work on patient satisfaction with service quality in emergency department in hospitals.

Questionnaire development: The survey method, employing the self-administered questionnaire was chosen as the most appropriate data collection method for this particular research. The research instrument was developed covering 50 service quality parameters picked up from the literature review.

Item in the questionnaire can be found in Table 1. Respondents were asked to indicate the quality of service on a 5-point Likert scale from 1(Strongly Disagree), 2 (Disagree), 3 (Neither Agree nor Disagree), 4 (Agree) and 5 (Strongly Agree). Respondents were also asked to mention their Nationality for the correlation of the study. This English and Arabic questionnaire is designed to assess patient satisfaction with service quality in emergency department.

Table 1 Description of questions for questionnaire

Serial No.	Questions
1	Ease of registration/process of forms was good
2	Front desk friendliness was good
3	Front desk responsiveness to patient telephone calls was efficient
4	Patient’s requests are promptly attended
5	Comfortless and pleasantness at the waiting area was good
6	Courtesy of admission staff was good
7	Courtesy of security staff was good
8	Speed of admission to the ward was good
9	Promptly take action during an emergency
10	Duration of waiting time for a doctor after admission was good
11	Hospital is conveniently located to get medical aid whenever the patient needs
12	Easy to get emergency aid
13	Hospital has everything to provide complete medical care
14	The facility of telephone/television/air condition was good
15	Availability of sitting chairs was sufficient
16	Ventilation of Air was good
17	Proper lightning everywhere
18	Privacy during the patient stay was good
19	Friendliness/cheerfulness/kindness was good
20	Frequency of visits of the nurse to the patients was sufficient
21	Knowledge and professionalism at work was efficient
22	The patients nursing staff is constantly present

23	Promptness of nurse answering patient's questions was efficient
24	Nurse conveniently lift and place patient in bed
25	The nurse gently prepare the patient for medical investigations and medications
26	The nurse follows through patient's diet
27	Nurses gave instructions about caring and medications for me at home
28	The nursing staff explains to the patients the complications expected after discharge
29	The patient is provided with all the necessary information at discharge
30	Doctors are caring and concerned
31	Doctors are good about explaining the reason for medical test
32	Doctors spend plenty of time to diagnose a patient
33	Doctors listen to the patient carefully about patient problem
34	Doctors never expose the patient to unnecessary risk
35	Doctors review patient medical history
36	Doctor's round for review during the patient stay was sufficient
37	Doctors explained the patient disease symptoms clearly
38	Doctors clearly stated patient the purpose of the treatment and medications
39	Doctor's takes care of patient allergies
40	Cleanliness of room/bathroom/public areas was good
41	Cleanliness of clothes was good
42	Doctor's appearance was good
43	Nurse's appearance was good
44	Uses of gloves and disposable material were efficient
45	Environmental dimension was taken care
46	Courtesy of billing staff was good
47	Accuracy of billing was accurate
48	Timeliness of billing was good
49	Patients go without medical care because it is too expensive
50	The patient feels that the cost calculation is unfair

The Sample

Data for this study was gathered using a questionnaire that was distributed to 470 patients in hospitals in KSA, out of which 202 useable questionnaires were returned giving a response rate of 42%, which was considered satisfactory for subsequent analysis.

Hypothesis

The research objective is to determine if there is an empirical significance between the perceived patient satisfaction with service quality in the emergency department compared to their expectations. Based on this research objective, the following hypotheses were developed:

Null hypothesis: $H_0: \mu_1 = \mu_2$

There is no significant difference between the service quality in the emergency department as perceived (μ_1) by its patients compared to their expectations (μ_2). (This means that the services offered by emergency department as perceived do meet patient's expectations).

Research (alternative) hypothesis: $H_1: \mu_1 \neq \mu_2$

There is a significant difference between the service quality in the emergency department as perceived (μ_1) by its patients compared to their expectations (μ_2). (This means that the services offered by emergency department as perceived do not meet patient's expectations).

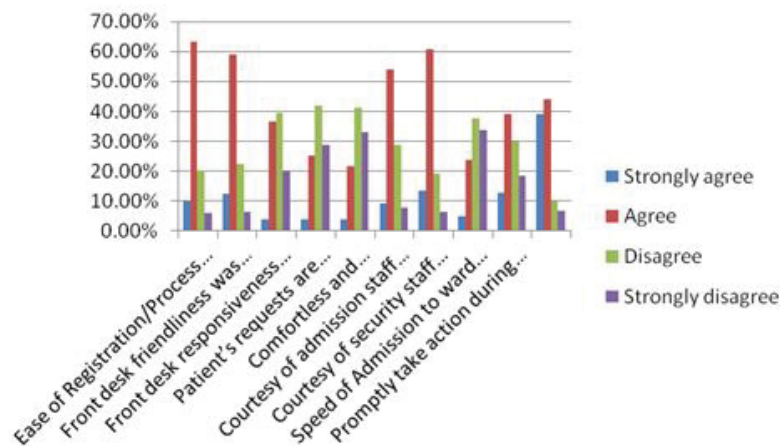
DATA ANALYSIS AND DISCUSSION

Data was entered into SPSS. The thereafter overall mean of various scores was taken. In order to know, this difference was statistically significant popular, t-tests ANOVA were applied. If the value is greater than 0.05 this is our Null Hypothesis (H_0). We have tested this at significance level of 5% in all the cases and findings would have been more appropriately discussed and analyzed at various levels of significance.

Findings Related to Patient Satisfaction with Service Quality in Emergency Department (Tables 2-7 and Graphs 1-6)

Table 2 Showing patient satisfaction results for front desk and timing

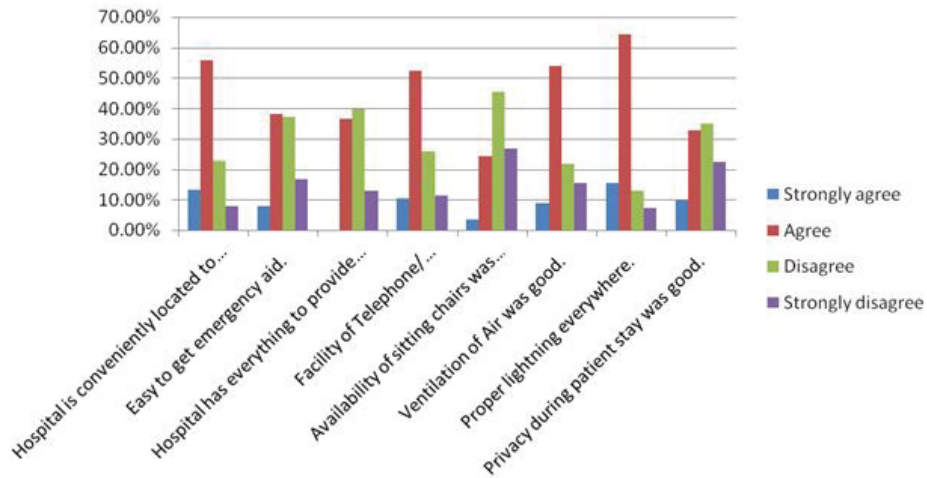
Serial No.	Results for Front Desk and Timing	Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)
1	Ease of registration/process of forms was good	10.10%	63.40%	20.30%	5.90%
2	Front desk friendliness was good	12.40%	58.90%	22.30%	6.40%
3	Front desk responsiveness to patient telephone calls was efficient	4.00%	36.60%	39.60%	19.80%
4	Patient's requests are promptly attended	4.00%	25.20%	42.10%	28.70%
5	Comfortless and pleasantness in waiting area was good	3.90%	21.80%	41.10%	33.20%
6	Courtesy of admission staff was good	9.40%	54.00%	28.70%	7.90%
7	Courtesy of security staff was good	13.40%	60.90%	19.30%	6.40%
8	Speed of Admission to the ward was good	4.90%	23.80%	37.60%	33.70%
9	Promptly take action during emergency	12.90%	39.10%	29.70%	18.30%
10	Duration of waiting time for a doctor after admission was good	39.10%	44.10%	10.10%	6.70%



Graph 1 Showing patient satisfaction results for front desk and timing

Table 3 Showing patient satisfaction results for facilities

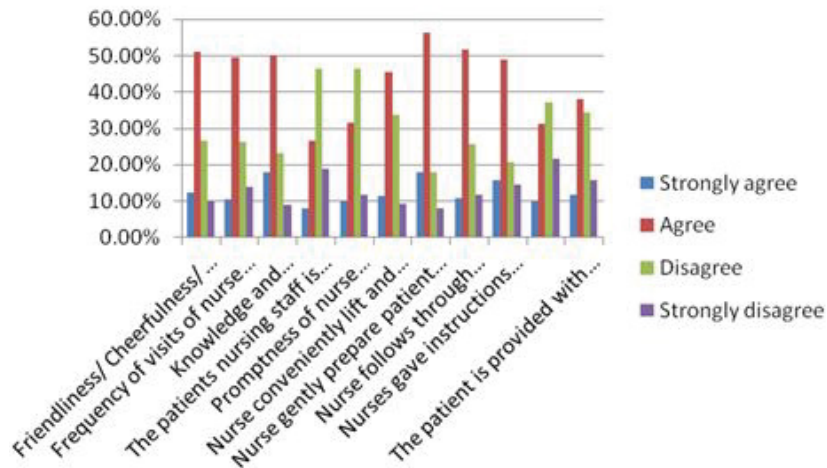
Serial No.	Results for Facilities	Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)
11	Hospital is conveniently located to get medical aid whenever a patient needs	13.40%	55.90%	22.80%	7.90%
12	Easy to get emergency aid	7.90%	38.10%	37.10%	16.80%
13	Hospital has everything to provide complete medical care	10.9%	36.60%	39.60%	12.90%
14	Facility of telephone/television/air condition was good	10.40%	52.50%	25.70%	11.40%
15	Availability of sitting chairs was sufficient	3.50%	24.30%	45.50%	26.70%
16	Ventilation of Air was good	8.90%	54.00%	21.80%	15.30%
17	Proper lightning everywhere	15.30%	64.40%	12.90%	7.40%
18	Privacy during patient stay was good	9.90%	32.70%	35.10%	22.30%



Graph 2 Showing patient satisfaction results for facilities

Table 4 Showing patient satisfaction results for nursing care

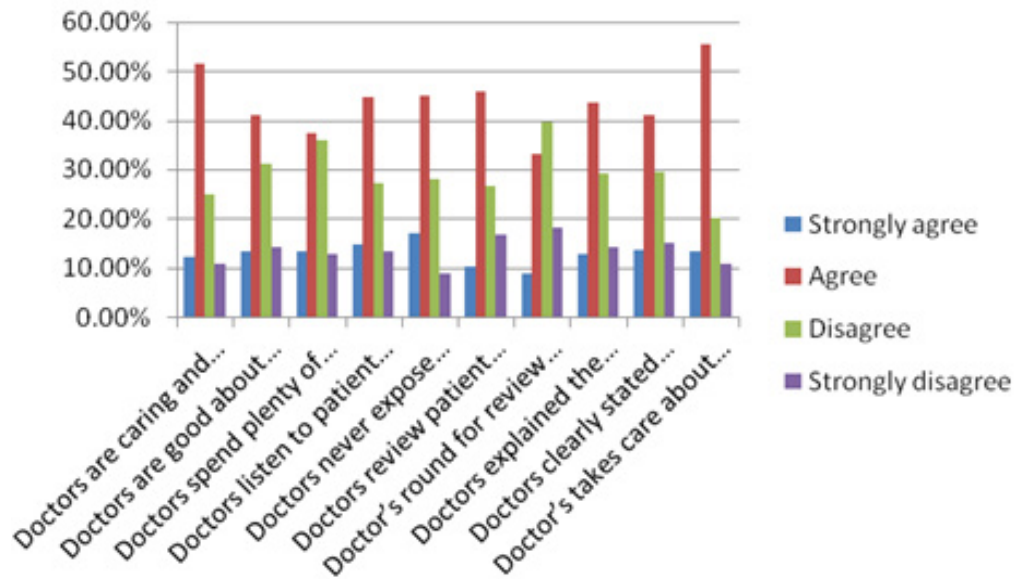
Serial No.	Results for Nursing Care	Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)
19	Friendliness/cheerfulness/kindness were good	12.40%	51%	26.70%	9.90%
20	Frequency of visits of the nurse to the patients was sufficient	10.40%	49.50%	26.20%	13.90%
21	Knowledge and Professionalism at work was efficient	17.80%	50%	23.30%	8.90%
22	The patients nursing staff is constantly present	7.90%	26.70%	46.50%	18.80%
23	Promptness of nurse answering patient's questions was efficient	9.90%	31.70%	46.50%	11.90%
24	Nurse conveniently lift and place patient in bed	11.40%	45.50%	33.70%	9.40%
25	Nurse gently prepare patient for medical investigations and medications	17.80%	56.40%	17.80%	7.90%
26	Nurse follows through patient's diet	10.90%	51.50%	25.70%	11.90%
27	Nurses gave instructions about caring and medications for me at home	15.80%	49%	20.80%	14.40%
28	The nursing staff explains to the patients the complications expected after discharge	9.90%	31.20%	37.10%	21.80%
29	The patient is provided with all the necessary information at discharge	11.90%	38.10%	34.20%	15.80%



Graph 3 Showing patient satisfaction results for nursing care

Table 5 Showing patient satisfaction results for doctor care

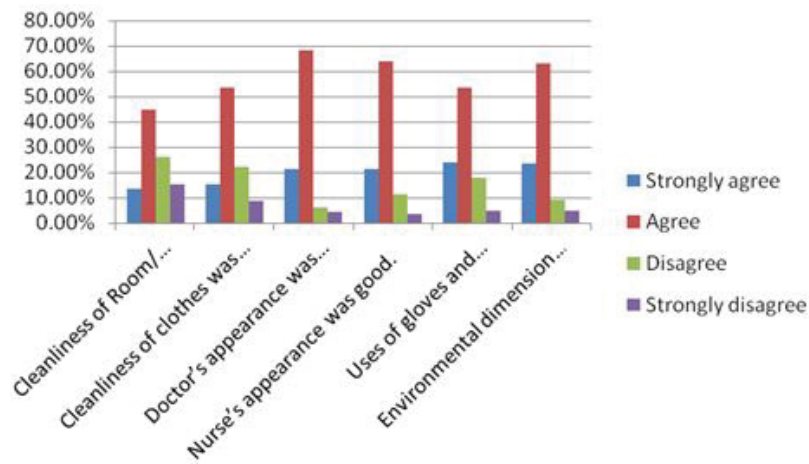
Serial No.	Results for Doctor Care	Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)
30	Doctors are caring and concerned	12.40%	51.50%	25.20%	10.90%
31	Doctors are good about explaining the reason for medical test	13.40%	41.10%	31.20%	14.40%
32	Doctors spend plenty of time to diagnose patient	13.40%	37.60%	36.10%	12.90%
33	Doctors listen to patient carefully about patient problem	14.90%	44.90%	27.20%	13.40%
34	Doctors never expose patient to unnecessary risk	17.30%	45.00%	28.20%	8.90%
35	Doctors review patient medical history	10.40%	46.00%	26.70%	16.80%
36	Doctor's round for review during the patient stay was sufficient	8.90%	33.20%	39.60%	18.30%
37	Doctors explained the patient disease symptoms clearly	12.90%	43.60%	29.20%	14.40%
38	Doctors clearly stated patient the purpose of the treatment and medications	13.90%	41.10%	29.70%	15.30%
39	Doctor's takes care about patient allergies	13.40%	55.40%	20.30%	10.90%



Graph 4 Showing patient satisfaction results for doctor care

Table 6 Showing patient satisfaction results for cleanliness

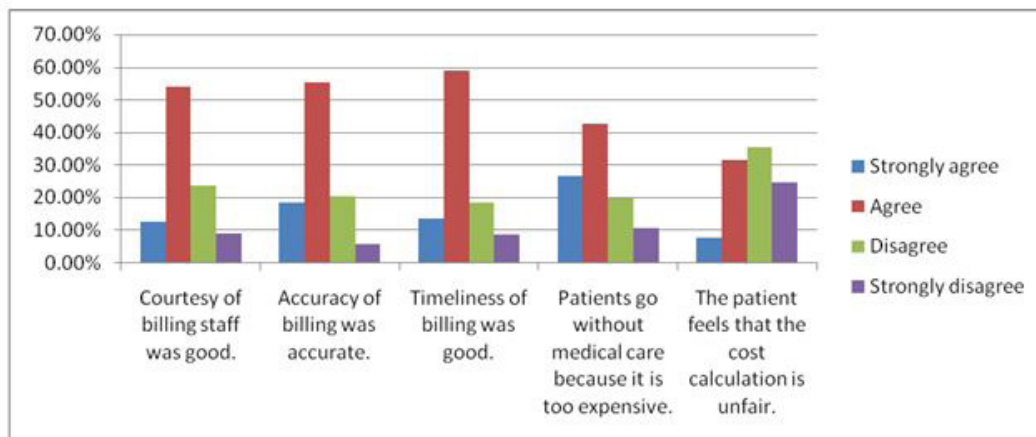
Serial No	Results for Cleanliness	Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)
40	Cleanliness of room/bathroom/public areas was good	13.40%	45.00%	26.20%	15.30%
41	Cleanliness of clothes was good	15.30%	53.50%	22.30%	8.90%
42	Doctor's appearance was good	21.30%	68.30%	6.00%	4.40%
43	Nurse's appearance was good	21.30%	63.90%	11.40%	3.40%
44	Uses of gloves and disposable material were efficient	23.80%	53.50%	17.80%	4.90%
45	Environmental dimension was taken care	23.30%	62.90%	9.00%	4.80%



Graph 5 Showing patient satisfaction results for cleanliness

Table 7 Showing patient satisfaction results for billing procedure

Serial No.	Results for Billing Procedure	Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)
46	Courtesy of billing staff was good	12.80%	54.10%	23.90%	9.20%
47	Accuracy of billing was accurate	18.40%	55.30%	20.40%	5.90%
48	Timeliness of billing was good	13.70%	58.80%	18.60%	8.80%
49	Patients go without medical care because it is too expensive	26.70%	42.60%	19.80%	10.90%
50	The patient feels that the cost calculation is unfair	7.90%	31.70%	35.60%	24.80%



Graph 6 Showing patient satisfaction results for billing procedure

Research Findings

On the basis of the analysis following are the research findings:

- The hospital provides sufficient services regarding front desk and timing which includes registration process, front desk friendliness, courtesy of admission staff, and prompt action during emergency services
- Services related to facilities which are hospital location, easy to get emergency aid, the facility of telephone/television/air condition, ventilation of air and proper lightning are sufficient
- Nursing care services are efficient like friendliness/cheerfulness/kindness, frequency of visits of nurse to the patients, knowledge, and professionalism at work, nursing staff constantly present, nurse conveniently lift and place patient in bed, nurse gently prepare patient for medical, investigations and medications, nurse follows through patient's diet, nurse gave instructions about caring and medications for me at home and patient is

provided with all necessary information at discharge

- Services which are well related to Doctor's care are doctors are caring and concerned, doctors are good about explaining the reason for medical test, doctors spend plenty of time to diagnose patient, doctors listen to patient carefully about patient problem, doctors never expose patients to unnecessary risk, doctors review patient medical history, doctors explained the patient disease symptoms clearly, doctors clearly stated patient the purpose of the treatment and medications and doctors takes care about patient allergies
- Hospital services related to cleanliness are sufficient like cleanliness of room/bathroom/public areas, cleanliness of clothes, doctor's and nurse's appearance, uses of gloves and disposable material and environmental dimensions
- Billing procedure services like courtesy of billing staff, accuracy of billing, timeliness of billing are all good

Recommendations

On the basis of analysis and interpretations following are the recommendations:

- Services are not sufficient regarding front desks and timing like courtesy of security staff, speed of admission to ward, responsiveness to telephone calls, patient's requests and pleasantness in waiting area so these services should be improved to fill the gap of service quality
- Services related to facilities like hospital should have everything to provide medical care, availability of sitting chairs and privacy during patient stay are not good which needs improvement
- Nursing care services are not efficient related to the promptness of nurse answering patient's questions and nurse explains complications expected after discharge so improvement is required to fill the gap of service quality
- Services which are not good related to Doctor's care is doctor's round for review during patient stay which needs more doctor's round to improve the service quality gap

CONCLUSION

Overall Perception of 202 Respondents with Service Quality in Emergency Department

The patients are not satisfied with most of the emergency department services provided to them like Front Desk and Timing, Facilities, Nursing Care, Doctor Care, Cleanliness and Billing Procedure. Therefore we conclude there is apparently a gap between the perception and expectation of the emergency department services provided to the patients. These emergency department services need improvement to fill the gap of service quality.

Hypothesis Accepted and Rejected by the Patients

Patients are not satisfied with most of the services provided by the emergency department but the Hypothesis is accepted in all cases.

DECLARATIONS

Conflicts of Interest

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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