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Original Article

A Comparative Study of Patients' Satisfaction with Emergency Departments in Governmental General Hospitals, Kuwait

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Abstract

Background: Patient satisfaction is commonly used as an indicator for evaluation of the quality of health care services provided in the Emergency Departments (EDs).

Objective: The objective of this study was to evaluate and compare the level of patient satisfaction with the Emergency Departments in different governmental public hospitals in Kuwait.

Methods: A comparative descriptive cross-sectional survey was conducted in five governmental general hospitals located in different governorates in Kuwait state from January to March 2016. A random sample of 657 patients, who attended the emergency departments of these hospitals was asked to participate in the study. A 20-item satisfaction questionnaire was used in this study. The three domains of satisfaction were computed namely; ED courtesy, environment and care-providers. The Pearson's chi square test ($\chi 2$) was used to compare between the satisfaction categories. The Kruskal-Wallis test was used to compare between the median values of satisfaction scores of the five hospitals. For intergroup comparisons, Mann-Whitney test was used. The 5% was considered as the level of significance.

Results: A total of 657 patients were enrolled in this study. More than half were males (53.9%), most of them were married (57.2%) and carriers of bachelor degree represented 40.9%. The minimum age of subjects was 18 years and the maximum 86 years, with an average value of 38.9±14.7 years. The majority was belonging to the same health region of the hospital (79.5%) and nearly two-thirds of them had been admitted (68.2%). The highest median for the overall patient satisfaction scores with emergency departments was in Amiri (4.2), and Jahra hospitals (4) followed by Mubarak and Adan hospitals (3.6 each) and the lowest median score was in Farwaniya hospital (3.15). The differences were statistically significant. Similarly, the highest median satisfaction scores for all domains (ED staff courtesy, ED environment and ED care providers) were reported in Amiri and Jahra hospitals, followed by Mubarak and Adan hospitals and the lowest median score was observed in Farwanyia hospital. Less than 20% of the participants attending Farwanyia hospital were satisfied with most items and only 12.9% of the participants attending Adan hospital were satisfied with the waiting area.

Conclusion: The study findings indicate that the need for intervention and development in emergency care service departments are required based on the study findings of relatively low level of satisfaction in the emergency department domains namely environment domain, staff courtesy domain and care providers' domain in Farwaniya hospital.

Keywords: Patient satisfaction, emergency department, Kuwait

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INTRODUCTION

The State of Kuwait is divided into five health administrative regions, with each region having a general public hospital, which provides full out-patient services and 24-hour emergency services. The capacity and structure of these secondary governmental general hospitals are the same and provide the same type of services to their patients. The hospital emergency department (ED) acts recently as a front-door of treatment for patients daily. Several types of patients with critical conditions are transferred to the emergency department of hospitals. therefore, providing good quality of care and services in emergency hospital departments is important to achieve patient satisfaction.[1] Patient Satisfaction can be described as a patient's reaction to different health dimensions' of their service experience.[2] Patient's evaluation in terms of patient satisfaction for the health services as well as providers from their own point of view is a useful measure. It may influence health-care utilization, can be a predictor of

subsequent health-related behavior[2,3] and whether patients are willing or not to recommend their health-care provider to others.[1,4] Patient satisfaction is somewhat difficult to determine.[5] patient satisfaction may be influenced by past experiences with the health-care system.[6] Patient characteristics also have an impact on satisfaction, as less educated and elderly patients appear to be more satisfied.[7] Furthermore, psychosocial determinants play a role in the sense that patients report greater satisfaction than they feel because they fear negative consequences in case they give negative feedback.[8] Even though patients may not be able to judge specific technical aspects, they provide the best source of accurate information regarding some dimensions of important health care such as clarity of explanations, helpfulness of information patients are receiving, and barriers to obtaining care or the physician's interpersonal behavior.[9,10] Thus, patient satisfaction is considered an important emergency department goal and is associated with the concept of overall quality of care perceived by the patient. Studies show that the number of emergency department patients are increasing which is an indicator of the importance of planning quality health care services according to patients' need. Hence, understanding the patient's demand is an important step to achieve and provide good quality of care in such departments. [1]

Studies also show that using the results obtained from satisfaction surveys can have a great effect on the quality of services. [11-12] This study was conducted to compare patient satisfaction domains in different hospitals. It is important and useful for the Quality Assurance Department in the Ministry of Health as quality assessment study for the hospital emergency services in the state of Kuwait. Furthermore, there is a shortage in literature regarding satisfaction of patients with the emergency departments in Kuwaiti public hospitals.

The objective of this study was to compare the level of patient satisfaction with the Emergency Departments in five governmental general hospitals in Kuwait State.

METHODS

Study setting: This study was conducted in five governmental general hospitals located in different governorates, namely Amiri (Capital governorate), Mubarak Al-Kabeer (Hawalli governorate), Adan (Ahmadi governorate), Farwaniya (Farwaniya governorate) and Jahra (Jahra governorate). These hospitals represent all health regions in the state of Kuwait.

Study design and tool: A comparative descriptive cross-sectional survey was conducted in five general public hospitals located in different governorates in the state of Kuwait from January to March 2016. A random sample of patients attending the emergency department of these general hospitals was taken during study period, considering working shifts and different providers. The satisfaction questionnaire of the Press Ganey Institute, was used in this study with some modification of some items because Kuwait's admission, visit and discharge processes are somewhat different from those in the US. (11) The questionnaire consisted of two sections. The first section collected information on participants' demographic data (name of hospital, age, gender, nationality, education, occupation, education, and marital status, time of encounter, patient/or accompanied, patient health region, and patient status at the end of encounter). The second section was divided into three domains related to the 20-item of the press Ganey satisfaction questionnaire. The first domain was staff courtesy in ED (6 statements), the second domain was ED environment - physical & emotional (7 statements), and the third domain was care providers in ED (7 statements). There were five options for answering each question based on Likert scale, which scores five to one, given to answers very good, good, fair, poor, and very poor respectively. The revised Press Ganey questionnaire was validated by distributing it first to ED specialists and academic members to confirm its content validity. A pilot study was conducted prior to the field work on a small purposive sample of participants aiming to test the clarity of the questions, and its suitability for use in Kuwaiti culture. The study revealed that the questions were valid and suitable after some minor modifications of certain expressions to cope with local culture.

Patients were selected at random immediately after getting emergency service either at the time of admission to inpatient ward from ED or before the clients go to their home after getting emergency services and interviewed by well-trained research assistants. Inclusion criteria were age 18 years and above and hospitalization in the emergency department for more than five hours. Exclusion criteria were: significant impairment of cognition (attention, understanding questions, recent memory loss etc..) or inability of the patient or his accompanying person to speak either Arabic or English. Literate patients were asked to complete the questionnaire if not; it was read for them. A relative or friend accompanying the patient was asked to answer the questionnaire if the patient's condition prevented him from talking to the interviewer.

Statistical analysis

Sample size was determined for opinion survey at 5% level of significance, 80% power and one design factor, 0.05 margin of error and 50% response rate, it

was found to be 768. The sample size was calculated according to the equation [13]:

$$n=\frac{z^2*(P\ Q)*d*Number\ of\ estimate}{(MOE)^2}/\text{nonresponse rate}$$

where; z = the critical value (at alpha =0.05) =1.96,

p= 0.5 the maximum proportion for opinion research,

q= (1-p) =0.5,

d=design effect=1 in this study,

Number of estimate=1,

MOE=Margin of error =0.05, and Nonresponse rate was supposed to be 50%.

Statistical analysis was done using SPSS version 22. Description of qualitative variables was performed by frequency tables and quantitative variables by calculation of median and interquartile limits (Q1 – Q3).

Satisfaction was scored according to a five Likert's scale, as follows: very poor= 1, poor= 2, fair = 3, good= 4 and very good = 5.

The weighted average of the three domains and overall satisfaction were computed by dividing the sum of related responses by the number of statements, as follows:

1- ED Staff courtesy=(Q1+Q4+Q5+Q6+Q7+Q9)/6.

2-E environment (Physical & emotional = (Q2+Q3+Q8+Q17+Q18+Q19+Q20)/7.

3- ED care providers = (Q10+Q11+Q12+Q13+Q14+Q15 +Q16)/7.

4- Overall satisfaction = sum of all questions/ 20.

The Kruskal-Wallis was used to compare between the median values of satisfaction scores of the five hospitals. For intergroup comparisons, Mann-Whitney's test was used. The Pearson's chi square test was used to compare between the satisfaction categories in the five hospitals. The 5% was considered the level of significance.

Ethical considerations

The study conformed to the international ethical guidelines and that of declaration of Helsinki. All the required approvals for conducting the study were obtained as that of Ethical Committee, the Kuwait Ministry of Health. The permissions of the Undersecretary of Ministry of Health as well as manager of each selected hospital were obtained. A written informed consent was prepared and signed by respondents after clarification of the aim and process of the study. Confidentiality of collected information was ensured. Filled questionnaires were kept in the central office of the researcher.

RESULTS

Analysis of the data indicated that 713 patients out of the total number of 768 patients referred to the ED agreed to participate in the study with a response rate of 92.8%. Due to high missing data, 56 cases were excluded resulting in 657 cases to be studied. Table 1 shows the distribution of participants according to their demographic and background characteristics. Because some questionnaires were not fully answered, a small proportion of the data was considered as missing. One third of participants attended Adan hospital (30.7%), followed by Mubarak Alkabeer (23.4%), Farwaniya (20.9%), Jahra (13.5%) and lastly Amiri (11.4%).

Table 1: Background characteristics of emergency patients in Kuwait

Characteristics	ED patients (n=657)	
	n	%
Hospitals		
Amiri	75	11.4
Mubarak Alkabeer	154	23.4
Farwaniya	137	20.9
Jahra	89	13.5
Adan	202	30.7
Gender		
Male	354	53.9
Female	303	46.1
Age group		
<30	191	29.1
30-	320	48.7
50-	101	15.4
65+	45	6.8
Marital status		
Single	203	30.9
Married	376	57.2
Divorced	50	7.6
Widowed	28	4.3
Educational status		
Below intermediate	161	24.5
Secondary	227	34.6
Above secondary	269	40.9
Time of visit		
Morning	354	53.9
Evening	200	30.4
Night	103	15.7
Who completed the questionnaire		
Patient	340	51.8
Accompanied	317	48.2
Do you belong to the health region		
Yes	522	79.5
No	112	17.0
Missing	23	3.5
Patient's status at the end of encounter		
Admission	448	68.2
Discharge	209	31.8

It was found that, the highest proportion of participants were residing Farwanyia governorate (29.4%), just less than a half were in the age group of 30–49 years (48.7%). The minimum age of subjects was 18 years and the maximum 86 years, with an average value of 38.9±14.7 years. Just more than half

were males (53.9%), most of them were married (57.2%). Carriers of bachelor level represented 40.9% of the sample. Time of encounter was more in the morning (53.9%). Only half of the participants answered the questionnaire by themselves (51.8%). The majority were belonging to the same health region of the hospital (79.5%) and nearly two-thirds of them had been admitted (68.2%).

Table 2 shows the percentage distribution of patient satisfaction with ED staff courtesy in the five study hospitals. It was found that the percentage of "very good level of satisfaction" with courtesy of registration staff, nurses, security staff, staff transferring the patients and care providers was higher in Amiri and Jahra hospitals than in Mubarak and Adan hospitals and was lowest in Farwaniya hospital. All these differences were statistically significant as shown by the different P values of $\chi 2$. The percentages of "very good" level of satisfaction with courtesy of staff in the registration area, courtesy of security staff, and courtesy of staff who transfer the patients were less than 20% among patients attending Farwaniya hospital (15.3%, 19.7% & 16.1% respectively).

The percentage distribution of patient satisfaction with ED's environment (physical & emotional) in the five study hospitals was detailed in Table 3. It was found that the percentage of "very good level of satisfaction" with the waiting time, examination room, frequency of being visited by the physician, overall cleanliness and likelihood of recommending the practice for others was higher in Amiri and Jahra hospitals than in Mubarak and Adan hospitals and was lowest in Farwaniya hospital. However, satisfaction with the waiting area was lowest in Adan hospital. All these differences were statistically significant as shown by the different P values of $\chi 2$. The table also showed that the percentages of "very good" level of satisfaction with all items was less than 20% among patients attending Farwaniya hospital and only 12.9% with the waiting area in Adan hospital.

Table (2): Distribution of patient satisfaction with emergency department staff courtesy in Kuwaiti hospitals

Item	Hospital	% of Patients' Satisfaction					$\chi^2_{(4)}$ P
		Very poor	Poor	Fair	Good	Very good	
Q1- Courtesy of staff in the registration area	Amiri	1.3	5.3	17.3	32.0	44.0	11.163 0.000
	Mubarak	3.2	16.2	25.3	27.3	27.9	
	Farwanyia	15.3	32.8	19.7	16.8	15.3	
	Jahra	1.1	10.1	16.9	24.7	47.2	
	Adan	5.0	5.9	27.7	34.7	26.7	
Q4- Friendliness/ courtesy of the nurse	Amiri	1.3	8.0	13.3	22.7	54.7	14.744 0.000
	Mubarak	3.2	11.0	18.2	33.8	33.8	
	Farwanyia	8.8	16.1	24.1	23.4	27.7	
	Jahra	1.1	2.2	21.3	25.8	49.4	
	Adan	4.5	7.4	23.8	28.2	36.1	
Q5- Concern the nurse showed for doing medical orders	Amiri	2.7	6.7	12.0	28.0	50.7	16.665 0.025
	Mubarak	2.6	14.3	20.1	29.2	33.8	
	Farwanyia	8.0	13.1	27.0	22.6	29.2	
	Jahra		3.4	21.3	33.7	41.6	
	Adan	5.4	8.9	18.3	29.2	38.1	
Q6- Courtesy of security staff	Amiri	1.3	9.3	24.0	25.3	40.0	16.815 0.000
	Mubarak	4.5	9.7	24.0	32.5	29.2	
	Farwanyia	6.6	21.2	31.4	21.2	19.7	
	Jahra	3.4	4.5	15.7	27.0	49.4	
	Adan	7.4	8.4	25.2	31.7	27.2	
Q7- Courtesy of staff who transfer the patients	Amiri		8.0	14.7	37.3	40.0	17.580 0.000
	Mubarak	4.5	14.3	23.4	31.8	26.0	
	Farwanyia	6.6	19.7	32.1	25.5	16.1	
	Jahra	1.1	1.1	18.0	37.1	42.7	
	Adan	6.4	8.9	25.2	29.2	30.2	
Q9- Friendliness/ courtesy of the care provider	Amiri		6.7	12.0	28.0	53.3	21.416 0.000
	Mubarak	4.5	15.6	21.4	27.3	31.2	
	Farwanyia	6.6	19.0	23.4	29.9	21.2	
	Jahra	2.2	2.2	23.6	29.2	42.7	
	Adan	5.0	6.4	16.8	35.1	36.6	

Table 3: Distribution of patient satisfaction with emergency department's environment in Kuwaiti hospitals

Item	Hospital	% of Patient Satisfaction					$\chi^2_{(4)}$ p
		Very poor	Poor	Fair	Good	Very good	
	Amiri	2.7	10.7	22.7	34.7	29.3	
	Mubarak	9.7	18.2	26.6	24.7	20.8	13.095
Q2- Comfort and pleasantness of the waiting area	Farwanyia	10.2	29.9	21.9	24.1	13.9	0.000
	Jahra	1.1	12.4	25.8	18.0	42.7	
	Adan	17.8	16.3	27.2	25.7	12.9	
	Amiri	4.0	10.7	17.3	25.3	42.7	
	Mubarak	6.5	11.0	27.3	29.2	26.0	13.819
Q3- Comfort and pleasantness during examination	Farwanyia	12.4	19.7	25.5	24.8	17.5	0.000
	Jahra	1.1	5.6	21.3	31.5	40.4	
	Adan	9.9	9.4	25.2	27.7	27.7	
	Amiri	2.7	9.3	25.3	29.3	33.3	
	Mubarak	12.3	16.9	27.9	24.7	18.2	19.389
Q8- Length of wait before going to an exam room	Farwanyia	8.8	21.9	31.4	22.6	15.3	0.000
	Jahra	4.5	6.7	21.3	34.8	32.6	
	Adan	19.3	19.3	26.7	19.8	14.9	
	Amiri	5.3	9.3	20.0	34.7	30.7	
	Mubarak	9.7	20.8	20.8	22.7	26.0	31.339
Q17- Frequency of being visited by physician	Farwanyia	5.8	16.8	35.8	25.5	16.1	0.002
	Jahra	11.2	11.2	24.7	14.6	38.2	
	Adan	14.9	14.4	26.2	22.8	21.8	
	Amiri	4.0	9.3	8.0	44.0	34.7	
	Mubarak	7.8	20.1	22.7	24.7	24.7	32.545
Q18- Overall cheerfulness of our practice	Farwanyia	5.8	21.9	27.7	26.3	18.2	0.005
	Jahra	2.2	7.9	21.3	32.6	36.0	
	Adan	13.9	10.4	25.7	29.2	20.8	
	Amiri	6.7	8.0	18.7	28.0	38.7	
	Mubarak	9.1	15.6	20.8	25.3	29.2	35.214
Q19- Overall cleanliness of our practice	Farwanyia	2.2	23.4	29.2	27.0	18.2	0.000
	Jahra	6.7	3.4	20.2	28.1	41.6	
	Adan	17.3	14.4	19.3	28.7	20.3	
	Amiri	4.0	6.7	13.3	36.0	40.0	
	Mubarak	9.1	22.1	22.7	20.8	25.3	40.846
Q20- Likelihood of your recommending our practice to others	Farwanyia	6.6	18.2	32.1	23.4	19.7	0.008
	Jahra	5.6	3.4	28.1	33.7	29.2	
	Adan	17.3	10.4	22.8	28.7	20.8	

Table 4 shows the percentage distribution of patient satisfaction with ED care-providers in the five study hospitals. It was found that the percentage of "very good" level of satisfaction with explanations the care provider gave about the condition, care providers' efforts to include patient in decisions about treatment, information the care provider gave about medications, instructions the care provider gave about follow-up care and degree to which care provider talked using words patient could understand was the

highest among participants attending Amiri and Jahra hospitals and lowest among participants attending Farwaniya hospital. All these differences were statistically significant as shown by the different P values of $\chi 2$ test. Table 5 shows the median values of the different domains and overall patient satisfaction score in the five study hospitals. The highest median overall satisfaction score was observed among participants attending Amiri hospital (median = 4.2), followed by Jahra hospital (median = 4) Mubarak and Adan hospitals (median = 3.6 each) and then Farwaniya hospital (median = 3.15). Similarly, the highest median satisfaction scores for all domains (ED staff courtesy, ED environment and ED care providers) were reported in Amiri and Jahra hospitals, followed by Mubarak and Adan hospitals and the lowest median score was observed in Farwanyia hospital. All the above-mentioned differences were statistically significant, as shown by the different p-values of the Kruskal-Wallis test.

Table 4: Distribution of patient satisfaction with emergency department care-providers in Kuwaiti hospitals

Item	Hospital	% of Patient Satisfaction					$\chi^2_{(4)}$ P
		Very poor	Poor	Fair	Good	Very good	
Q10- Explanations the care provider gave you about the condition	Amiri	--	13.3	8.0	29.3	49.3	22.215 0.001
	Mubarak	9.1	12.3	23.4	22.1	33.1	
	Farwanyia	6.6	21.2	29.2	21.9	21.2	
	Jahra	5.6	6.7	19.1	29.2	39.3	
	Adan	5.0	10.9	20.3	31.7	32.2	
Q11- Concern the care provider showed for your question or worries	Amiri	4.0	6.7	9.3	25.3	54.7	22.447 0.000
	Mubarak	5.8	11.7	27.9	24.7	29.9	
	Farwanyia	6.6	19.0	32.1	24.8	17.5	
	Jahra	1.1	9.0	23.6	29.2	37.1	
	Adan	6.4	10.9	21.3	30.2	31.2	
Q12- Care providers efforts to include you in decisions about treatment	Amiri	--	6.7	13.3	32.0	48.0	24.449 0.000
	Mubarak	5.8	13.6	23.4	27.9	29.2	
	Farwanyia	8.0	22.6	27.0	23.4	19.0	
	Jahra	4.5	3.4	27.0	21.3	43.8	
	Adan	5.0	11.4	23.3	32.2	28.2	
Q13- Information the care provider gave you about medications	Amiri	2.7	9.3	13.3	29.3	`45.3	25.117 0.001
	Mubarak	3.9	17.5	23.4	24.7	30.5	
	Farwanyia	6.6	16.1	32.1	24.8	20.4	
	Jahra	3.4	3.4	24.7	31.5	37.1	
	Adan	5.9	9.9	24.8	32.7	26.7	
Q14- Instructions the care provider gave you about follow-up care	Amiri	1.3	6.7	18.7	29.3	44.0	26.194 0.002
	Mubarak	5.2	15.6	18.8	33.8	26.6	
	Farwanyia	8.0	15.3	28.5	27.0	21.2	
	Jahra	2.2	4.5	22.5	31.5	39.3	
	Adan	5.9	10.4	24.3	30.7	28.7	
Q15- Degree to which care provider talked with you using words you could understand	Amiri	1.3	5.3	17.3	28.0	48.0	26.869 0.000
	Mubarak	4.5	12.3	27.9	27.9	27.3	
	Farwanyia	5.8	16.8	32.1	30.7	14.6	
	Jahra	2.2	6.7	25.8	28.1	37.1	
	Adan	5.0	11.4	18.8	30.2	34.7	
Q16- Amount of time the care provider spent with you	Amiri	4.0	10.7	12.0	37.3	36.0	27.234 0.011
	Mubarak	7.1	18.8	24.7	24.7	24.7	
	Farwanyia	4.4	24.8	31.4	22.6	16.8	
	Jahra	5.6	10.1	24.7	27.0	32.6	
	Adan	11.4	12.4	29.7	23.8	22.8	

Table 5: Median values of the domains and overall patient satisfaction with emergency department services in Kuwaiti hospitals

Domain	Hospital	Median (Q1-Q3)	K-W P
	Amiri	4.3 (3.7-4.8)	
	Mubarak	3.8 (3-4.5)	51.341
ED staff courtesy	Farwanyia	3.2 (2.5-4.2)	0.000
	Jahra	4.3 (3.4-4.8)	
	Adan	3.8 (3.3-4.5)	
	Amiri	4(3.4-4.6)	
	Mubarak	3.3(2.6-4.3)	42.008
ED environment	Farwanyia	3.1(2.6-4)	0.000
	Jahra	4(3.1-4.6)	
	Adan	3.1(2.4-4)	
	Amiri	4.3 (3.7-5)	
	Mubarak	3.7 (2.7-4.6)	37.202
ED care-provider	Farwanyia	3.3 (2.6-4.1)	0.000
	Jahra	4(3-4.9)	
	Adan	3.9 (3-4.4)	
	Amiri	4.2(3.5-4.8)	
	Mubarak	3.6(2.8-4.3)	43.828
Overall satisfaction	Farwanyia	3.15(2.6-4)	0.000
	Jahra	4(3.2-4.75)	
	Adan	3.6(2.9-4.2)	

DISCUSSION

Study findings revealed a high level of satisfaction in all hospitals with staff courtesy domain which included courtesy of the staff in the registration area, friendliness/ courtesy of the care provider and the nurse with patients, concern the nurse showed for doing medical orders. However, satisfaction with items like security guards' courtesy and courtesy of staff who transfer the patients were lower in Farwaniya hospital compared to other studied hospitals. As for environment domain (physical and emotional), patients of Amiri and Jahra hospitals were significantly more satisfied than other hospitals in all items. Such findings of low satisfaction level in Mubarak, Adan and Farwaniya hospitals indicated that the evaluated services need to be improved since they were not perceived as satisfying to patients. The important factors that influenced patient satisfaction were the waiting time, staff service and courtesy. These results are consistent with other research studies which highlighted the importance of communication between patients and hospital staff.[8,14] The provider kindness has an impact and great meaning and is also important to patients.[15,16] Possibly, patients experience more contact with nurses than doctors, as nurses are the first responders to patients if they feel discomfort or have general questions.[16]

Research studies indicated that overall service satisfaction is a function of patient satisfaction with the doctor, with the waiting time and with nursing service. Hierarchically relating to the patients' perception that the doctor provides the greatest clinical value, followed by time spent waiting for the doctor and then satisfaction with the nursing care.[17] With this respect, the research studies provide evidence that satisfaction with waiting time, doctor and nurse care influences overall satisfaction with emergency department services and that these are most important factors in the measurement of overall satisfaction. Thus, EDs that cannot reduce waiting times can recover some patient satisfaction by improving the comfort of their patients. Hospitals can analyze their patients' comments to find ways to improve the comfort level in registration waiting area and examination room. This may have a noticeable effect on the patients' perceptions of the ED. The current study revealed that a high satisfaction rate can be achieved by courtesy of staff in the registration area, friendliness and courtesy of the nurse, courtesy of security staff, courtesy of staff who transfer the patients, friendliness and courtesy of the care provider and concern the nurse shows for doing medical orders. This was observed in Amiri and Jahra hospitals than other hospitals.

With regards to care provider domain, satisfaction among patients in Amiri hospital was significantly higher than in other hospitals, especially for concern the care providers showed for patients' questions or worries, care providers' efforts to include patients in decisions about treatment, information the care providers gave to patients about medications, degree to which care providers talked with patients using words patients could understand, explanations the care providers gave to patients about the condition and amount of time the care providers spent with patients.

Furthermore, patients from Amiri and Jahra hospitals were significantly more satisfied regarding instructions the care providers gave to patients about follow-up care. A study conducted in Hong Kong supports such findings in which workshops on communication skills can enhance physicians' abilities in this area with a corresponding increase in patient satisfaction and decrease in patient complaints concerning ED physicians.[18] Trout et al and Boudreaux studies concluded that determinant factors of emergency department patient satisfaction are provision of information, interpersonal interaction and perceived waiting time.[19,20] These factors that are related to communication comprise proportions of all complaints received in hospital emergency departments.[21] Improved staff communication skills can reduce patient complaints and enhance level of patient satisfaction in the emergency department.[22-24] Furthermore Tailor's study in Australia, revealed that staff orientation with an educational film and workshop on how to communicate effectively with patients and having a nurse to explain the diagnostic and treatment processes to patients, improved the patients' satisfaction levels.[25] Although the skills of health care providers and their friendliness and courtesy are important factors in patient satisfaction, effort should focus on shortening the waiting times, as well as improving patients' perceptions about waiting in the ED.

CONCLUSIONS & RECOMMENDATIONS

Patient satisfaction with emergency departments in Amiri and Jahra hospitals was higher than that in Mubarak and Adan hospitals and was lowest in Farwaniya hospital. The study findings indicated that the need for intervention and development in emergency care service departments are required based on the study findings of relatively low level of satisfaction in the emergency department domains namely environment domain, staff courtesy domain and care providers' domain especially in Farwaniya hospital.

Conflict of interest: None to declare.

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