Satisfaction of Patients about Hospital Services among Sample of People in Baghdad city

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Abstract

Background: Patient satisfaction is an expression of the gap between the expected and perceived characteristics of a service and is considered an important measure of health care quality by offering information on the provider's success at meeting clients' expectations.

Objectives: To measure the level of satisfaction among patients attending the Baghdad Teaching Hospital and Al-Shu'la General Hospital, compare it between the two hospitals and between different wards, and investigate any associations between socioeconomic factors and the level of patients 'satisfaction.

Patients and methods: A cross-sectional study done in two hospitals in Baghdad city; Baghdad Teaching Hospital and Al-Shu'la General Hospital, targeting patients attending these hospitals, both inpatients and different outpatient departments, during the period from the1st of February to the 31st of July, 2020. The data were collected from patients using an already prepared questionnaire formulated to investigate the level of satisfaction in five domains: nursing, doctors, health facility, drug related information, and billing information, filled via direct doctor to patient interview.

Results: A total sample of 173 patients were interviewed; 106 (61.3%) from Baghdad Teaching Hospital and 67 (38.7%) from Al-ShulaGeneralHospital, with a mean of 41.4± 16.7 years. Patients' satisfaction scores were higher in Baghdad Teaching Hospital(57.5%) compared to Al-Shula General Hospital (42.5%), and the highest satisfaction scores were with the drug related information (67.6%), followed by the billing process (59%), the health facility (56.6%) ,nursing (56.1) and doctors (48%) ,and satisfaction regarding health facility was significantly higher in Al-Shu'la General Hospital, while satisfaction regarding the billing process was significantly higher in Baghdad Teaching Hospital. Age and gender were not associated with satisfaction levels, while educational level was associated with satisfaction about nursing and doctor (highest in primary and lowest in secondary education) and employed patients had higher satisfaction about doctors.

Conclusion: Total satisfaction in both hospitals was better for inpatients than outpatients. Satisfaction was better in surgery and gynecology and obstetrics compared to medicine and minor surgical branches.

Keywords; Patient satisfaction, Baghdad Teaching Hospital, Al-Shu'la General Hospital.

Introduction:

Assessing the quality of care is an important concept for improving programs in the health care sector. Patient satisfaction is an important measure of health care quality by offering information on the provider's success at meeting clients' expectations. Patient satisfaction is correlated with important outcomes, like good compliance, decreased utilization of medical services, less malpractice litigation and better prognosis.[1]

Patient satisfaction is an expressionof the gap between the expected and perceived characteristics of a service. Satisfaction is a subjective phenomenon and could be elicited by asking simply how satisfied or not patients may be about the service. Traditional assessments of medical care were done purely in terms of technical reports of outcomes. Studies of patients' attitudes towards health services, personnel and resources are important aspects of evaluating health care services. [2]

Person-centered care is a pivotal part of quality for two aspects. Firstly, it is intrinsic with high importance due to the rights of each individual to be managed with dignity and consideration while utilizing healthcare services. Secondly, it is principally necessary because person-centered care is correlated with better health-care utilization and outcomes.[3] Focusing on these measures is not new; the Institute of Medicine's widespread report in 2001 on quality of care focused the light to what was then referred to as patient-centered caring.[4]

From that time, many measures were suggested in the research's literature regarding centering the care on the persons. Theoretically, these steps allowed quality enhancing efforts evaluation and health care systems to be responsible for the target population they are serving. However, practically, these steps are easily misused, as they are relying on the person's feedback on their visits. The utilization of the steps has limitations due to lacking of clarity and accuracy in the design of these steps. [5]

Iraq is emerging from several decades of wars

followed by long periods of violence and insecurity. In spite of extreme difficulties, the Iraqi national health system represented to a large extent by the Iraqi Ministry of Health (MoH) is functional and achieved a good progress in term of service provision. The MoH made a great effort in the provision of heath service. Improving health requires strengthening four major domains of the health care system; personal health management, health are delivery, public health, and health related research. [6]

Studying patients' satisfaction is one of the important aspects of providing feedback about the services provided.

Aims of the study:

1. To measure the level of satisfaction among patients attending BaghdadTeaching Hospital and Al- Shu'la General Hospital.
2. To compare patients' satisfaction between the two hospitals and between different wards.
3. To find if there are any associations between socioeconomic factors and the level of patients' satisfaction.

Patients and Methods:

Study design and setting: A cross-sectional study was carried out in two hospitals in Baghdad city; Baghdad Teaching Hospital and Al-Shu'la General Hospital, targeting patients attending these hospitals, both inpatients and different outpatient departments, during the period from the1st of February to the 31st of July, 2020.

The target population: Patients attending the two mentioned hospitals, either admitted to the hospital or attending to the outpatient's department of general medicine, general surgery, dermatology, and minor surgical branches (MSB) that included; orthopedic surgery, ophthalmology, ear, nose and throat. The pediatrics was excluded as Baghdad Teaching Hospital does not include this specialty.

SamplingTechnique: All patients attending the selected hospital or admitted to the different wards that were available at the time of study and agreed to participate were included in the study.

Datasources/measurement: The data were collected from patients using an already prepared questionnaire, adopted from a previously published work done by Owaidh etal., in Saudi Arabia (2018),[7] with minor modifications, making a total of 18 statements each answered with3-levelLikert scale (marked 0 negative, 1 for neutral and 2 for positive). Two questions were addressed to inpatients, namely question-10 (about noise at night) and question-11 (about food quality) were left blank for outpatients and considered neutral for all of them. Data were collected through direct interview performed by the researcher. **Scoring:** The level of satisfaction was calculated depending firstly on the summation of the scores for each domain, divided by the maximum possible score for each of them multiplied by 100, then values <50% were considered not satisfied, values 50-75% neutral, and values more than 75% considered satisfied, as shown in Table below:

Study domains scoring

Domains	No. of statements	Maximum possible score
Satisfaction about nursing	4	8
Satisfaction about doctors	4	8
Satisfaction about the health facility	5	10
Satisfaction about the drug related information	2	4
Satisfaction about the billing process	3	6
Total satisfaction score	18	36

Ethical Consideration:

1-The study proposal was approved by the College Council and the Scientific Committee at the Department of Family and Community Medicine, College of Medicine, University of Baghdad.

2-Official agreements were obtained from both The Medical City Health Directorate and Baghdad AL-Karkh Health Directorate.

3-The aims of the study were explained to each participant, ensuring confidentiality and the interview was performed after taking his/her approval.

Statistical analysis:

The data were handled and analyzed by IBM©SPSS© (Statistical Package for the Social Sciences) Statistics Version 22. Chi-square test was used for categorical data, and Fisher's Exact Test modification when applicable, while comparison between the participants' age and

domains based on satisfaction level was done by using Univariate Analysis of Variance (ANOVA). *P-values* less than 0.05 were considered statistically significant throughout this study.

Results:

During the study period 173 patients were interviewed; 106 (61.3%) from Baghdad Teaching Hospital and 67 (38.7%) from Al-Shula General Hospital, 49.7% were inpatients most of them from Baghdad Teaching Hospital and 50.3% were outpatients mainly from Al-Shula General Hospital. The age of the participants ranged from 18 to 94 years with a mean of 41.4±16.7, the highest percentage was between 20-39 years (54.9%), 74.7% were females with a female to male ratio of 3:1, 43.4% were with primary school education and 82.1% were not employed (Table1).

At Al-Shula Hospital, all the interviewed inpatients were satisfied regarding the total satisfaction score where no one was not satisfied or neutral, while outpatients showed 44.4% total satisfaction (*p <.001*). The highest scores of satisfactions among the inpatients were found with nurses, doctors and health facility with 92.3% of the inpatients, whereas for the outpatients, the highest satisfaction was with drug related information (66.7%) followed by health facility (61.1%) and nursing (46.3%) and the least was with doctors (25.9%) (Table2).

At Baghdad Teaching Hospital (BTH), 58.9% of the interviewed inpatients were satisfied , compared to 21.2% of outpatients regarding the total satisfaction score (*p <.001*). The highest scores of satisfactions among the inpatients were found with billing process (83.6%), followed by nurses (80.8%), doctors (74.0%) and the least was for health facility with 49.3% of the inpatients, whereas for the out patients the highest satisfaction was with drug related information (57.6%) followed by health facility (51.5%) and the least was with nursing (3.0%) and doctors (9.1%) (Table3).

Table (1): Distribution of patients according to basic characteristics

Variables	NumberNo=173	%
Age groups (in years)		
20-29	48	27.7
30-39	47	27.2
40-49	26	15.0
50-59	21	12.1
60-69	19	11.0
≥70	12	6.9
Gender		
Males	44	25.4
Females	129	74.6
Hospitals		
Al-Shu'la(Total)	67	38.7
Inpatients	13	19.4
Outpatients	54	80.6
BaghdadTeachingHospital (Total)	106	61.3
Inpatients	73	68.9
Outpatients	33	31.1
Educationallevel		
Illiterate	34	19.7
Read and write	8	4.6
Primary school	75	43.4
Secondary school	39	22.5
Higher	17	9.8
Occupation		
Not employed Governmental Employee	142	82.1
Non-governmental Employee	15	8.7
	16	9.2

Table (2): Satisfaction level of inpatients and outpatients at AL-Shu'la Hospital

Satisfaction level	Inpatients N=13		Outpatients N=54		Total N=67		P-value
	No.	%	No.	%	No.	%	
Nursing	0	0.0	17	31.5	17	25.4	.003
Not satisfied Neutral	1	7.7	12	22.2	13	19.4	
Satisfied	12	92.3	25	46.3	37	55.2	
Doctors	0	0.0	21	38.9	21	31.3	<.001
Not satisfied Neutral	1	7.7	19	35.2	20	29.9	
Satisfied	12	92.3	14	25.9	26	38.8	
Health facility	0	0.0	19	35.2	19	28.4	.017
Not satisfied Neutral	1	7.7	2	3.7	3	4.5	
Satisfied	12	92.3	33	61.1	45	67.2	
Drug related information	0	0.0	4	7.4	4	6.0	.205
Not satisfied Neutral	2	15.4	14	25.9	16	23.9	
Satisfied	11	84.6	36	66.7	47	70.1	
Billing process	1	7.7	19	35.2	20	29.9	.005
Not satisfied Neutral	1	7.7	15	27.8	16	23.9	
Satisfied	11	84.6	20	37.0	31	46.3	
Total satisfaction score	0	0.0	22	40.7	22	32.8	<.001
Not satisfied Neutral	0	0.0	8	14.8	8	11.9	
Satisfied	13	100.0	24	44.4	37	55.2	

*Theassociation was statistically significant using Fishers Exact Test

Table (3): Satisfaction level of inpatients and outpatients at BaghdadTeaching Hospital

Satisfaction level	Inpatients N=13		Outpatients N=54		Total N=67		P-value
	No.	%	No.	%	No.	%	
Nursing	5	6.9	17	51.5	22	20.8	<.001
Not satisfied Neutral	9	12.3	15	45.5	24	22.6	
Satisfied	59	80.8	1	3.0	60	56.6	
Doctors	9	12.3	17	5.5	26	24.5	<.001
Not satisfied Neutral	10	13.7	13	39.4	23	21.7	
Satisfied	54	74.0	3	9.1	57	53.8	
Healthfacility	27	37.0	11	33.3	38	35.8	.932
Not satisfied Neutral	10	13.7	5	15.2	15	14.2	
Satisfied	36	49.3	17	51.5	53	50.0	
Drug related information	10	13.7	8	24.2	18	17.0	.359
Not satisfied Neutral	12	16.4	6	18.2	18	17.0	
Satisfied	51	69.9	19	57.6	70	66.0	
Billing process	2	2.7	11	33.3	13	12.3	<.001
Not satisfied Neutral	10	13.7	12	36.4	22	20.8	
Satisfied	61	83.6	10	30.3	71	67.0	
Total satisfaction score	9	12.3	20	60.6	29	27.3	<.001
NotsatisfiedNeutral	21	28.8	6	18.2	27	25.5	
Satisfied	43	58.9	7	21.2	50	47.2	

*The association was statistically significant using Fishers Exact Test

On comparing the two hospitals; patients' satisfaction scores were higher in Baghdad Teaching Hospital compared to Al-Shula General Hospital. Table (4) showed that total satisfaction score was recorded by 87(50.3%) of the studied participants, 57.5% were from Baghdad Teaching Hospital. The highest satisfaction scores were with the drug related information (67.6%), followed by the billing process (59%), the health facility (56.6%), nursing (56.1%) and doctors (48%). Although among all levels, scores of satisfactions were higher in patients from Baghdad Teaching Hospital yet the associations were statistically not significant except for the satisfaction about the health facility (P=0.038), and satisfaction about the billing process (P=0.007).

Comparing inpatients; the number of satisfied inpatients was higher in Baghdad Teaching Hospital compared to Al-Shula General Hospital. Table (5) showed that total satisfaction score was recorded by 56 (65.1%) of the studied inpatients, of which 76.8% of them were from BaghdadTeachingHospital. The highest satisfaction scores were with the billing process (83.7%), followed by nursing (82.6%), doctors (76.7%), drug related information(72.1%), and the least for the health facility (55.8%). Although, among all levels, scores of satisfactions were higher in patients from BTH, yet the associations werestatistically notsignificant except for the satisfaction about the health facility (P= 0.006), and total satisfaction (P=0.014).

Comparing outpatient; the number of satisfied outpatients was higher in Al-Shula General Hospital compared to BTH. Table (6) showed that total satisfaction score was recorded by 31 (35.6%) of the studied outpatients, of which 77.4% of themwere from Al-Shula General Hospital. The highest satisfaction scores were with drug related information (63.2%), followed by the health facility (57.5%), the billing process (34.5%), nursing (29.9%) and the least was with doctors (19.5%). Although, among all levels, scores of satisfactions were higher in patients from Al-Shula General Hospital, yet the associations were statistically not significant except for the satisfaction about nursing (P= <0.001).

Table(4):Distribution of satisfaction by hospitals

Variables		Al-Shu'la N= 67	Baghdad Teaching Hospital N=106	Total N=173	P-value
		No.(%)	No.(%)	No.(%)	
Satisfaction about nursing	Not satisfied	17(43.6)	22(56.4)	39(22.5)	.739
	Neutral	13(35.1)	24(64.9)	37(21.4)	
	Satisfied	37(38.1)	60(61.9)	97(56.1)	
Satisfaction about doctors	Not satisfied	21(44.7)	26(55.3)	47(27.2)	.156
	Neutral	20(46.5)	23(53.5)	43(24.9)	
	Satisfied	26(31.3)	57(68.7)	83(48)	
Satisfaction about the health facility	Not satisfied	19(33.3)	38(66.7)	57(32.9)	**.038***
	Neutral	3(4.5)	15(14.2)	18(10.4)	
	Satisfied	45(45.9)	53(54.1)	98(56.6)	
Satisfaction about the drug related information	Not satisfied	4(18.2)	18(81.8)	22(12.7)	.082
	Neutral	16(47.1)	18(52.9)	34(19.7)	
	Satisfied	47(40.2)	70(59.8)	117(67.6)	
Satisfaction aboutthebillingprocess	Notsatisfied	20(60.6)	13(39.4)	33(19.1)	**.007***
	Neutral	16(42.1)	22(57.9)	38(22)	
	Satisfied	31(30.4)	71(69.6)	102(59)	
Total satisfaction score	Not satisfied	22(43.1)	29(56.9)	51(29.5)	.097
	Neutral	8(22.9)	27(77.1)	35(20.2)	
	Satisfied	37(42.5)	50(57.5)	87(50.3)	
*The association was statistically significant using Chi-Square test					

Table (5): Distribution of satisfaction by hospitals for inpatients only

Variables		Al-Shu'la N= 13	Baghdad Teaching Hospital N= 73	Total N=86	P-value
		No.(%)	No.(%)	No.(%)	
Satisfaction about nursing	Not satisfied	0(0)	5(100)	5(5.8)	1.0
	Neutral	1(10)	9(90)	10(11.6)	
	Satisfied	12(16.9)	59(83.1)	71(82.6)	
Satisfaction about doctors	Not satisfied	0(0)	9(100)	9(10.5)	.447
	Neutral	1(9.1)	10(90.9)	11(12.8)	
	Satisfied	12(18.2)	54(81.8)	66(76.7)	
Satisfaction about the health facility	Not satisfied	0(0)	27(100)	27(31.4)	**.006***
	Neutral	1(9.1)	10(90.9)	11(12.8)	
	Satisfied	12(25)	36(75)	48(55.8)	
Satisfaction about the drug related information	Not satisfied	0(0)	10(100)	10(11.6)	.484
	Neutral	2(14.3)	12(85.7)	14(16.3)	
	Satisfied	11(17.7)	51(82.3)	62(72.1)	
Satisfaction about the billing process	Not satisfied	1(33.3)	2(66.7)	3(3.5)	.615
	Neutral	1(9.1)	10(90.9)	11(12.8)	
	Satisfied	11(15.3)	61(84.7)	72(83.7)	
Total satisfaction score	Not satisfied	0(0)	9(100)	9(10.5)	**.014***
	Neutral	0(0)	21(100)	21(24.4)	
	Satisfied	13(23.2)	43(76.8)	56(65.1)	
*The association was statistically significant using Fishers Exact Test					

Table (6):Distribution of satisfaction by hospitals for outpatients only

Variables		Al-Shu'la N=54	Baghdad Teaching Hospital N=33	Total N=87	P-value
		No.(%)	No.(%)	No.(%)	
Satisfaction about nursing	Not satisfied	17(50)	17(50)	34(39.1)	**<.001***
	Neutral	12(44.4)	15(55.6)	27(31)	
	Satisfied	25(96.2)	1(3.8)	26(29.9)	
Satisfaction about doctors	Not satisfied	21(55.3)	17(44.7)	38(43.7)	.148
	Neutral	19(59.4)	13(40.6)	32(36.8)	
	Satisfied	14(82.4)	3(17.6)	17(19.5)	
Satisfaction about the health facility	Not satisfied	19(63.3)	11(36.7)	30(34.5)	.158
	Neutral	2(28.6)	5(71.4)	7(8)	
	Satisfied	33(66)	17(34)	50(57.5)	
Satisfaction about the drug related information	Not satisfied	4(33.3)	8(66.7)	12(13.8)	.082
	Neutral	14(70)	6(30)	20(23)	
	Satisfied	36(65.5)	19(34.5)	55(63.2)	
Satisfaction about the billing process	Not satisfied	19(63.3)	11(36.7)	30(34.5)	.678
	Neutral	15(55.6)	12(44.4)	27(31)	
	Satisfied	20(66.7)	10(33.3)	30(34.5)	
Total satisfactions core	Not satisfied	22(52.4)	20(47.6)	42(48.3)	.085
	Neutral	8(57.1)	6(42.9)	14(16.1)	
	Satisfied	24(77.4)	7(22.6)	31(35.6)	
*The association was statistically significant using Chi-Square test					

Table (7) showed that the total satisfaction about departments was 50.3%, the highest for department of Surgery (35.6%), followed by the department of Medicine (26.4%), Gynecology and Obstetrics (21.8%) and the least was with Minor Surgical Branches (MSB) (16.1%), yet the association was statistically not significant (P= <0.467). The total satisfaction among departments were higher with the drug related information (67.6%) (highest at department of Surgery 37.6%), followed by the billing process (59.0%) (highest at department of surgery 40.2%), health facility (56.6%), (highest at department of Surgery 33.7%), nursing (56.1%) (highest at department of Surgery 38.1%) and the least was with doctors (48.0%) (highest at department of Surgery 43.4%). The association between level of satisfaction and the departments were statistically significant regarding nursing (P= 0.001),

doctors (P= <0.001) and billing process (P= <0.001).

On studying the differences between mean age of the participants and level of satisfaction in different services; table (8) showed that the mean age for patients who were satisfied about the nursing was 42.54± 16.6 years, about doctors was 41.18± 17.3 years, about health facility 41.33±16.4 years, about drug related information 40.98±17.2 years, about billing process 42.17± 16.7 years, for total satisfaction score was 42.46± 17.5 years. The differences in mean age were statistically not significant among all levels of care.

Table (7): Comparison of satisfaction between departments of both hospitals

Variables	Medicine N= 54 No. (%)	Surgery N=55 No. (%)	Gynecology N= 37 No. (%)	MSB N= 27 No. (%)	Total N=173 No. (%)	P-value
Satisfaction about nursing						
Not satisfied	15(38.5)	10(25.6)	5(12.8)	9(23.1)	39(22.5)	**.001***
Neutral	20(54.1)	8(21.6)	3(8.1)	6(16.2)	37(21.4)	
Satisfied	19(19.6)	37(38.1)	29(29.9)	12(12.4)	97(56.1)	
Satisfaction about doctors						
Not satisfied	21(44.7)	11(23.4)	6(12.8)	9(19.1)	47(27.2)	**<.001***
Neutral	13(30.2)	8(18.6)	8(18.6)	14(32.6)	43(24.9)	
Satisfied	20(24.1)	36(43.4)	23(27.7)	4(4.8)	83(48)	
Satisfaction about hehealth facility						
Not satisfied	17(29.8)	20(35.1)	13(22.8)	7(12.3)	57(32.9)	.165
Neutral	9(50)	2(11.1)	6(33.3)	1(5.6)	18(10.4)	
Satisfied	28(28.6)	33(33.7)	18(18.4)	19(19.4)	98(56.6)	
Satisfaction about the drug related information						
Not satisfied	7(31.8)	6(27.3)	7(31.8)	2(9.1)	22(12.7)	.195
Neutral	14(41.2)	5(14.7)	8(23.5)	7(20.6)	34(19.7)	
Satisfied	33(28.2)	44(37.6)	22(18.8)	18(15.4)	117(67.6)	
Satisfaction about the billing process						
Not satisfied	14(42.4)	8(24.2)	4(12.1)	7(21.2)	33(19.1)	
	21(55.3)		4(10.5)	7(18.4)	38(22)	
Satisfied	19(18.6)	41(40.2)	29(28.4)	13(12.7)	102(59)	
Total satisfaction score						
Not satisfied	21(41.2)	13(25.5)	8(15.7)	9(17.6)	51(29.5)	.467
Neutral	10(28.6)	11(31.4)	10(28.6)	4(11.4)	35(20.2)	
Satisfied	23(26.4)	31(35.6)	19(21.8)	14(16.1)	87(50.3)	

*The association was statistically significant using Chi-Square test

MSB:minor surgical lbranches

Table(8):Difference in age according to satisfaction level

Variables	Not satisfied	Neutral	Satisfied	P-value
	Mean±SD	Mean±SD	Mean±SD	
Nursing	40.46±18.1	39.41±15.5	42.54±16.6	.579
Doctors	40.85±15.7	42.42±16.8	41.18±17.3	.894
Health Facility	40.49±17	44.67±17.6	41.33±16.4	.653
Drug related information	42.36±17.9	42.21±14.2	40.98±17.2	.894
Billing process	41.03±19.2	39.66±14.4	42.17±16.7	.726
Total	40.67±16.7	39.83±14.7	42.46±17.5	.686
Univariate ANOVA				

On comparing level of satisfaction by gender outpatient; table (9) showed that total satisfaction was nearly the same between males and females. Taking each domain separately showed that females were more satisfied than males regarding nursing, doctors and drug related information, whereas males were more satisfied than females regarding the other domains. In spite of these differences, the association between patients' satisfaction and gender were statistically not significant for total satisfaction and for each domain.

Table(10)showed that there were a statistically significant association between educational level and satisfaction about nurses (P= 0.009), doctors (P= 0.017) and total satisfaction (P=0.005), as those with primary education had the highest satisfaction(49.5%) about nurses, (50.6%) about doctors, and (43.7%) about total satisfaction while patients with secondary education were the most not satisfied 43.6% about nurses, 38.3% about doctor and 37.3% about total satisfied.

Table(9): Distribution of patients' satisfaction by gender and domains

Variables		Male N=44 No.(%)	Female N=129 No.(%)	Total N=173 No. (%)	P-value
Satisfaction about nursing	Not satisfied	11(28.2)	28(71.8)	39(22.5)	.902
	Neutral	9(24.3)	28(75.7)	37(21.4)	
	Satisfied	24(24.7)	73(75.3)	97(56.1)	
Satisfaction about doctors	Not satisfied	14(29.8)	33(70.2)	47(27.2)	.628
	Neutral	9(20.9)	34(79.1)	43(24.9)	
	Satisfied	21(25.3)	62(74.7)	83(48)	
Satisfaction about the health facility	Not satisfied	15(26.3)	42(73.7)	57(32.9)	.665
	Neutral	3(16.7)	15(83.3)	18(10.4)	
	Satisfied	26(26.5)	72(73.5)	98(56.6)	
Satisfaction about the drug related information	Notsatisfied	6(27.3)	16(72.7)	22(12.7)	.538
	Neutral	11(32.4)	23(67.6)	34(19.7)	
	Satisfied	27(23.1)	90(76.9)	117(67.6)	
Satisfaction about the billing process	Not satisfied	8(24.2)	25(75.8)	33(19.1)	.980
	Neutral	10(26.3)	28(73.7)	38(22)	
	Satisfied	26(25.5)	76(74.5)	102(59)	
Total satisfaction score	Not satisfied	15(29.4)	36(70.6)	51(29.5)	.615
	Neutral	7(20)	28(80)	35(20.2)	
	Satisfied	22(25.3)	65(74.7)	87(50.3)	
*The association was statistically not significant using Chi-Square test					

Table (10): Association between educational level and patients' satisfaction

Variables	lliterate N= 42	rimary N= 75	condary N= 39	Higher N= 17	Total N=173	P-value
	No.(%)	No.(%)	No.(%)	No.(%)	No.(%)	
Satisfaction about nursing						
Not satisfied	7(17.9)	13(33.3)	17(43.6)	2(5.1)	39(22.5)	**.009**
Neutral	8(21.6)	14(37.8)	9(24.3)	6(16.2)	37(21.4)	
Satisfied	27(27.8)	48(49.5)	13(13.4)	9(9.3)	97(56.1)	
Satisfaction about doctors						
Not satisfied	6(12.8)	18(38.3)	18(38.3)	5(10.6)	47(27.2)	**.017**
Neutral	15(34.9)	15(34.9)	10(23.3)	3(7)	43(24.9)	
Satisfied	21(25.3)	42(50.6)	11(13.3)	9(10.8)	83(48)	
Satisfaction about the health facility						
Not satisfied	10(17.5)	26(45.6)	15(26.3)	6(10.5)	57(32.9)	.813*
Neutral	6(33.3)	7(38.9)	3(16.7)	2(11.1)	18(10.4)	
Satisfied	26(26.5)	42(42.9)	21(21.4)	9(9.2)	98(56.6)	
Satisfaction about drug related information						
Not satisfied	3(13.6)	8(36.4)	8(36.4)	3(13.6)	22(12.7)	.186*
Neutral	10(29.4)	11(32.4)	11(32.4)	2(5.9)	34(19.7)	
Satisfied	29(24.8)	56(47.9)	20(17.1)	12(10.3)	117(67.6)	
Satisfaction about the billing process						
Not satisfied	6(18.2)	11(33.3)	13(39.4)	3(9.1)	33(19.1)	.108
Neutral	9(23.7)	20(52.6)	8(21.1)	1(2.6)	38(22)	
Satisfied	27(26.5)	44(43.1)	18(17.6)	13(12.7)	102(59)	
Total satisfaction						
Not satisfied	7(13.7)	17(33.3)	19(37.3)	8(15.7)	51(29.5)	**.005**
Neutral	9(25.7)	20(57.1)	6(17.1)	0(0)	35(20.2)	
Satisfied	26(29.9)	38(43.7)	14(16.1)	9(10.3)	87(50.3)	
Chi-squaretest,*:FisherExacttest						

Table (11) showed that occupation had statistically significant influence only on satisfaction about doctors (P=0.025), as the satisfaction of not employed patients regarding doctors was the lowest of all other domains (79.5%), while the satisfaction of employed patients regarding doctors was the highest compared to other domains (20.5%).

Table(11):Distribution of occupation according to patients' satisfaction

Variables		Not employed N=142	Employed N= 31	Total N=173	P-value
		No.(%)	No.(%)	No.(%)	
Satisfaction about nursing	Not satisfied	31(79.5)	8(20.5)	39(22.5)	.877
	Neutral	31(83.8)	6(16.2)	37(21.4)	
	Satisfied	80(82.5)	17(17.5)	97(56.1)	
Satisfaction about doctors	Not satisfied	35(74.5)	12(25.5)	47(27.2)	**.025***
	Neutral	41(95.3)	2(4.7)	43(24.9)	
	Satisfied	66(79.5)	17(20.5)	83(48)	
Satisfaction about the health facility	Not satisfied	47(82.5)	10(17.5)	57(32.9)	.318
	Neutral	17(94.4)	1(5.6)	18(10.4)	
	Satisfied	78(79.6)	20(20.4)	98(56.6)	
Satisfaction about the drug related information	Not satisfied	16(72.7)	6(27.3)	22(12.7)	.299
	Neutral	26(76.5)	8(23.5)	34(19.7)	
	Satisfied	100(85.5)	17(14.5)	117(67.6)	
Satisfaction about the billing process	Not satisfied	28(84.8)	5(15.2)	33(19.1)	.784
	Neutral	32(84.2)	6(15.8)	38(22)	
	Satisfied	82(80.4)	20(19.6)	102(59)	
Total satisfaction score	Not satisfied	39(76.5)	12(23.5)	51(29.5)	.346
	Neutral	31(88.6)	4(11.4)	35(20.2)	
	Satisfied	72(82.8)	15(17.2)	87(50.3)	
Th eassociation was tested using Chi-square test					

Discussion:

The current study targeted patient satisfaction, in hopes to draw attention and make a landmark to monitor the efforts of the two hospitals included to gain their customers satisfaction. Patient satisfaction is one of the major aims for healthcare services; however, satisfaction represents a more holistic view of the results or consequences of healthcare system, and is reaction to all the events that patients are going through in hospitals, primary healthcare centers, private clinics, or other health delivery systems [(8)].

Iraq has suffered significant drawbacks during the last two decades, and health services are still recovering from2003, following that war it was estimated that Iraq will need five years to regain and improve the health status

[9].Since then efforts were made to promote the healthcare services, but suffered from poor planning and negative effects of internal and external political conflicts, that hampered the achieve the planned progress in health organization [10]. Logically doctors alone cannot achieve enough satisfaction for patients, because all these efforts would be in vain without a healthy working environments, adequate resources, and collaboration between pillars of the health care systems i.e. medical staff [11, 12]. One very crucial and urgent matter concerns the violence directed towards doctors in Iraq, with insufficient protection by the authorities, in 2018 the WHO recorded 42 attacks on the healthcare facilities [13], this is for sure an under rated number, as most incidents goes by unreported, and the attackers rarely get to be judged or receive punishment for what they done, and in spite all of these incidents, some people feels, without slightest doubt, that Iraqi doctors deserve what they are getting, and no matter what the Iraqi doctors might offer, they might never reach patients acceptance and satisfaction.[14,15]

Conclusions:

- Total patient satisfaction was not acceptable as half of patients was not satisfied. Highest satisfaction was about drug related information and the lowest was about doctors.
- Inpatients showed higher satisfaction compared to outpatients. The highest satisfaction for inpatients was about billing process, and for outpatients was about drug related information, and in general inpatients were more satisfied in Al- Shu'la General Hospital in comparison to Baghdad Teaching Hospital.
- Highest satisfaction level was seen in surgical department.
- Age and gender did not influence the satisfaction levels, while primary educated patients and employed patients had better satisfaction compared to their counterparts.

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