

The Impact of Service Quality on Patient Satisfaction in the Health Care System a Comparative Study

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Abstract: Quality of Care and patient satisfaction are major challenges faced by the healthcare sector in Jordan. This paper aims to comparative study of the factors affecting service quality on the Patient Satisfaction from patient's perspectives in Jordan. Cross Sectional Survey. The study sample consisted of (200) respondents divided between King Hussein Medical Centre Hospital and Al-Bashir Hospital. The collected data were analyzed using the SPSS package. The study results revealed that quality of care has an impact on patient satisfaction. Moreover the results indicated that patients are satisfied with quality of care in the two hospitals. The study recommended that the two hospitals have to set up criteria for their quality provided for patients, and they are requested to provide sufficient number of qualifies medical staff to deal with the increased number of patients.

Keywords: Quality of Care, patient satisfaction, King Hussein Medical Centre Hospital, Al-Bashir Hospital.

INTRODUCTION

This Study aims to measure the quality of health services in governmental hospitals from patient and clinic attendance experience and perspectives in Jordan; the study was conducted on the major teaching hospitals in Amman City -Al Bashier Hospital and King Hussein Medical center.

Patients are not always satisfied with the care received in the hospitals; more attention needs to be paid to the specific needs and expectations of the patients, who make up the majority of attendance at many clinic departments. Nurses and physicians perceptions about good quality of care do not always agree with patients perceptions.

Health institution concept varied depending on the parties they deal with , and therefore each party defines it according to the relationship between them , but in order to avoid this variance it will be defined according to functional perspective so health institute is : a collection of specialists , medical professionals , non-medical and material inputs that organized in a certain pattern in order to serve the existing and potential patients and to satisfy their needs and the continuation of health organization Greer, S.L. *et al.* [1]. Health organization is also defined as social ,and human institution, designed to achieve specific objectives and consists of professionals and specialists individuals in various health and medical fields offer a variety of health care Bonfrer, I. *et al.* [2]. These definitions are focusing on traditional function of the health institutions as a place to treat patients and

modern concept as an integral part of the social system, the performance of various health functions.

LITERATURE REVIEW

Patient safety, satisfaction, and quality of hospital care

Cross sectional surveys of nurses and patients in 12 countries in Europe and the United States. Aiken, *et al.* [3] study aimed to determine whether hospitals with a good o organization of care can affect patient care and nurse workforce stability in European countries, Cross sectional surveys of patients and nurses were used, nurses were surveyed in general acute care hospitals (488 in 12European countries; 617 in the United States); patients were surveyed in 210 European hospitals and 430 US hospitals. The participants were 33659 nurses and 11318 patients in Europe and 27509 nurses and more than 120000 patients in the US; in conclusion they found that defects in; hospital care quality which were common in all countries, defects in Doctor-patient communication and quality of care.

Doctor-patient communication and the quality of care

Jozien Bensing [4] study aimed to compare between three independent sources of assessment of medical consultations. A panel of 12 experienced general practitioners rated 103 consultations with hypertensive patients on the quality of psychosocial care. Two contrasting groups were formed: consultations that were rated high and those rated low in quality of psychosocial care. Knowledge about doctor-patient communication proved to predict very

well as to which quality group the consultations belonged. A very high percentage (95%) was predicted accurately.

Quality of Care and Patient Satisfaction

A Review of Measuring Instruments van Campen, *et al.* [5] study aimed to survey the literature on the assessment of quality of care from the patient's perspective; the concept has often been operationalized as patient satisfaction. Quality of care from the patient's perspective, however has been investigated only very recently and only a few measuring instruments have explicitly been developed for the assessment of quality of care from the patient's perspective. The studies consider patient satisfaction as an indicator of quality of care from the patient's perspective. This review is concerned with the question of whether any reliable and valid instruments have been developed to measure quality of care from the patient's perspective.

Effect of Patient-Centred Care on Patient Satisfaction and Quality of Care

Wolf, Debra *et al.* [6] study aimed to examine whether patient-centered care (PCC) impacts patient satisfaction, perception of nursing care, and quality of care. A clinical randomized study (post-test design) was conducted; Differences were seen in 2 of 3 subscales within the Baker and Taylor Measurement Scale. The PCC group rated satisfaction ($P = .04$) and quality of services ($P = .03$) higher than controls.

Quality perceptions and patient satisfaction

a study of hospitals in a developing country Sayed Saad Andaleeb [7] study aimed to investigate 'Patients' perceptions about health services, therefore, patient-centred and identifies the service quality factors that are important to patients; it also examines their links to patient satisfaction in the context of Bangladesh. A field survey was conducted.

Patient Satisfaction and Change in Medical Care Provider

A Longitudinal Study (M. Susan Marquis, *et al.* [8] study aimed to test the hypothesis that provider continuity and can be modelled as one behavioural consequence of patient satisfaction. Bivariate and multivariate analyses (controlling for socio-demographic characteristics, prior use of services, health status, and health insurance plan) supported hypotheses. A multivariate linear probability function indicated that a 1-point decrease on a general satisfaction scale was associated with a 3.4 percentage-point increase in the probability of provider change.

Patient Satisfaction and Experience with Health Services and Quality of Care

Zastowny, Thomas R, *et al.* [9] study aimed to discuss the use of patient satisfaction and personal health care experiences as a measure of health care quality; it also presents a field-proven patient

experience and satisfaction assessment methodology known as the Patient Experience Survey (PES) that has been employed throughout the country for the last decade. Finally, it offers recommendations and comments on the use of patient satisfaction data in quality assessment and improvement.

The quality of health care and patient satisfaction

An exploratory investigation of the 5Qs model at some Egyptian and Jordanian medical clinics Mosad Zineldin [10] study aimed to examine the major factors affecting patients' perception of cumulative satisfaction and to address the question whether patients in Egypt and Jordan evaluate quality of health care similarly or differently. The study concerns three hospitals in Egypt and Jordan. A questionnaire form was designed to achieve the research objectives. Findings: Patients' satisfaction with different service quality dimensions is correlated with their willingness to recommend the hospital to others. Continuity of care in general practice: effect on patient satisfaction.

P. Hjortdahl, E. Laerum [11] study aimed to evaluate the influence of continuity of care on patient satisfaction with consultations. Representative samples of 3918 Norwegian primary care patients were asked to evaluate their consultations by filling in a questionnaire. The response rate was 78%. MAIN OUTCOME MEASURES-The patient's overall satisfaction with the consultation was rated on a six point scale. Results, Personal, continuous care is linked with patient satisfaction. If patient satisfaction is accepted as an integral part of quality health care, reinforcing personal care may be one way of increasing this quality.

Healthcare quality and moderators of patient satisfaction

Testing for causality Masood A. Badri [12] study aimed to present a comprehensive structural equation based service quality and patient satisfaction model taking into account the patient's condition before and after discharge. Data were collected using questionnaires .Results; the study highlights the importance of healthcare quality as patient satisfaction predictors by capturing other effects such as patient status.

Research Problem

After reviewing different literature, the most consistent finding suggests that; the more personal care will result in better communication and more patient involvement and hence better quality of care, the research problem was formulated in three questions:

1. How can Quality of care in the public hospitals impact on patient satisfaction?
2. Are the patients capable of assessing the quality of care?
3. How patient satisfaction can be measured?

Research Objective

The main objective of this study is to provide health service of distinguished quality that achieve patient satisfaction and increase communication channels between service users and providers in the public hospitals. Enable health organizations to perform their tasks efficiently and effectively to achieve better levels of productivity, since reaching the required level of health care provided is the main objective of quality implementation. Obtaining patient satisfaction, since there are core values of quality management to be offered in any health organization working to improve the quality and seeks to implement quality systems and consequently improve the performance of the work, and ultimately obtain patient satisfaction.

Research Importance

The research importance reflects the researcher concern about comparing the overall patient satisfaction with quality of provided services taking into consideration the small number of similar studies in the literature (according to the researcher knowledge) . The theoretical importance of this study lies in the study data which would help other researchers in their future studies , on the other hand the results of this study are important for hospital administrators when they are looking to bridge the gabs in order to improve the

quality of services and positively affecting the overall patients satisfaction.

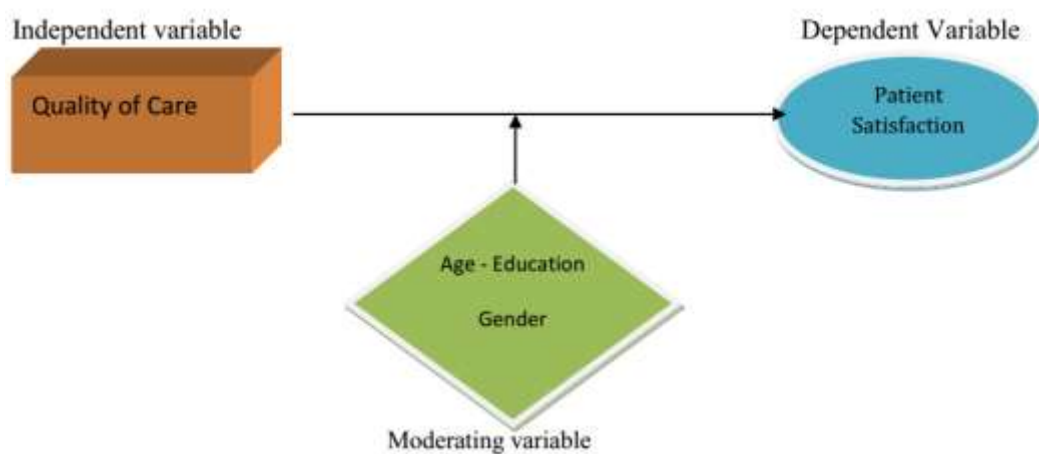
Research limitation

Although the research has reached its aims, there were some unavoidable limitations. First, because of the time limit, this research was conducted on the patients attending ENT clinics in Al-Bashir Hospital & King Hussein medical centre during the period 2016-2017 and it was limited to Amman city. Second limitation was educational level, some patients were illiterate and needs help to answer the questionnaire, and also accessing to patients in the both hospitals was limited and hard.

Theoretical Framework

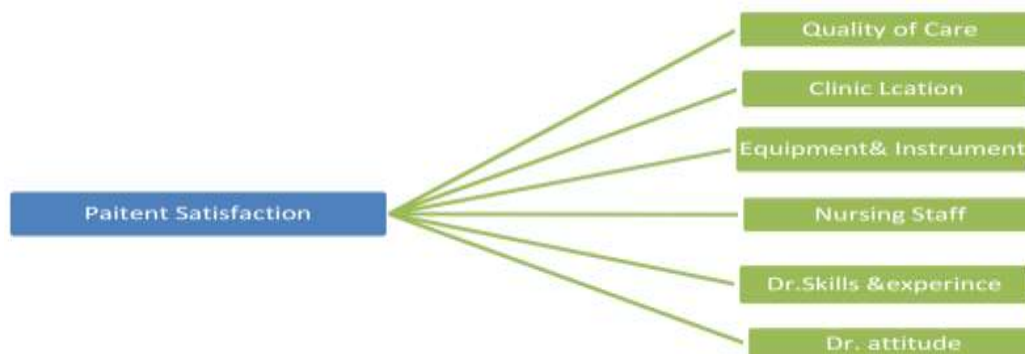
Definitions and aspects of the concept of patient satisfaction and its impact on the quality of care are reviewed and integrated into a framework that views quality of care in ENT clinic dimensions impact of the patient satisfaction. Indicators are suggested for the measurement of the various relevant aspects of access, with the system and population descriptors seen as process indicators and satisfaction as outcome indicators in a theoretical model of the access concept.

Theoretical Framework model (1)



Dimension & Element of the Quality of Care in ENT Clinic model (2)

Research



Hypotheses

The study is based on the following hypotheses;

First Main hypothesis

H0= There is no statically significant impact at ($\alpha=0.05$) level of Quality of Care on Patient Satisfaction.

Sub Hypotheses

H0.1= There is no statically significant impact at ($\alpha=0.050$) level of Clinic Assessment on Patient Satisfaction.

H0.2= There is no statically significant impact at ($\alpha=0.050$) level of Instrument & Equipment Assessment and Patient Satisfaction.

H0.3= There is no statically significant impact at ($\alpha=0.050$) level of Nursing Assessment on Patient Satisfaction.

H0.4= There is no statically significant impact at ($\alpha=0.050$) level of physician Assessment on Patient Satisfaction.

Second Main Hypothesis

There are no statically significant differences of impact at ($\alpha=0.050$) level quality care and Patient Satisfaction due to demographic variables (Gender, age and education level).

Operational Definition

Health Care Quality Definition; Service quality is defined as the “difference between predicted, or expected, service (customer expectations) and perceived serviced (customer perceptions). Aagja and Garg, [13]. Patient Satisfaction Definition; Patient satisfaction is defined as “the judgment made by patients on their expectations for care services that have been met or not in respect of both technical and interpersonal care” [14].

RESEARCH METHODOLOGY

Population and Sample

The study population consisted of all patients attending ENT clinic at both AL- Bashier hospital and King Hussein medical centre; one hundred patients were selected randomly from each hospital during the period from October 10th to November 20th 2016. 220 questionnaires were distributed, 208 questionnaires were collected and eight questionnaires were not disregarded because they were incomplete. So the study consisted of 200 patients and the response rate was (90.1%).

DATA COLLECTION METHODS

This research built over two basic source of information as following;

Primary source: The study used questionnaire to collect the needed data from study sample subjects.

Secondary Source: The study used books, articles, references, dissertations and the internet for building the theoretical part of the study.

The questionnaire was developed to collect the primary data. It was made up of 3 different sections. Section (1) includes respondent's demographic information s such as (age, gender, and educational level,). Section (2) had items related to care quality, precisely care quality dimensions (clinic, equipment, nursing and physician). The last section concentrated on patient satisfaction. All of that used a 5-point Likert Scale, with a value of: (1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree and 5-Strongly Agree).

The questionnaire translated to Arabic language for patients who didn't master English language. Participation in the study was voluntary and based on patient ability to answer the questionnaire, the study pointed out that patient tends to be honest when they feel they might be identified or their care may be jeopardized.

Data Analysis Method

All collected data coded and analyzed using SPSS package, Different statistical technique will used such as descriptive analysis, to describe sample characteristic MEAN, and STANDAR DIVIATION for subject's responses. T.TEST and other test will be used for testing the study hypotheses.

Unite Of Analysis & Time Horizon.

Unit analysis includes all patients of King Hussein Medical Centre and Al-Bashir Hospital. Population based cross sectional study. Two hundred patients were selected randomly from each hospital during the period from October 10th to November 20th (2016-2017).

STATISTICAL ANALYSIS

Validity

The questionnaire will be sent to university professors and some specialists to express their opinion regarding the statement suitability on belonging to the topic; there comments will be taking in consideration either for cancelling of or adding some statements for the purpose of formulating the final version of the questionnaire.

Reliability

Reliability of the questionnaire was tested using Cronbach's alpha, which checks whether items within the questionnaire measures the same concept.

Table-1: Instrument Reliability

Variables		Cronbach alpha	No. of items
Independent variables	Clinic Assessment	69.7	6
	Instruments and Equipment	74.6	3
	Nursing Assessment	89.1	3
	Physician Assessment	79.2	7
Dependent Variables	Patient Satisfaction	90.2	3
Total Instrument		89.4	22

- Table No.1 indicates that instrument reliability was 89.4%, while the instrument’s dimensions reliability ranges between 69.7% - 90.2%. All values are more than 60%. This means According to Sekaran, 2012[15] that the instrument is reliable and can be used for the purposes of this research.

Data Presentation and Description

The section aims to analyze the collected data through the questionnaire. Subjects were asked to answer the questionnaire based on their own experience. The obtained results were as follows:

Characteristic of the Respondents

The analysis for the collected data by self-administrated questionnaire revealed the results indicated in table (2) in terms of sample’s age, education, and gender.

Table-2: Sample distribution according to Demographic information

Variable	Options	King Hussein Medical Centre		Al-Bashir Hospital	
		Frequency	%	Frequency	%
Age	18-24	10.0	10.0	10	10.0
	25-34	24.0	24.0	16	16.0
	35-44	22.0	22.0	24	24.0
	45-54	28.0	28.0	20	20.0
	55+	16.0	16.0	30	30.0
Education	Less than Secondary	38.0	38.0	26	26.0
	Secondary Certificate	24.0	24.0	30	30.0
	Diploma	16.0	16.0	22	22.0
	BSC	20.0	20.0	20	20.0
	Master	2.0	2.0	2	2.0
	PhD Student				
Gender	Male	58.0	58.0	54.0	54.0
	Female	42.0	42.0	46.0	46.0

- Table No.2. Indicates that 10% of the first sample (King Hussein Medical Centre) their age ranged between (18-24), 24 % ranged between (25-34) years, 22% ranged between (35-44) years, 28% ranged between (45-54) years and finally 16% are 55 years and more.
- Table No.2 also indicates that 10% of the second sample (Al-Bashir Hospital) their age ranged between (18-24), 16 % ranged between (25-34) years, 24% ranged between (35-44) years, 20% ranged between (45-54) years and finally 30% are 55 years and more.
- As for education level 38% of the first sample has less than secondary, 24 % have secondary certificate, 16% have diploma, 20% have BSC and 2 % have master.
- With Respect to education level 26% of the second sample have less than secondary, 30 % have secondary certificate, 22% have diploma, 20% have BSC and 2 % have master.
- With regard to gender 58 % of first the sample were males and the rest 42 % are females. While 54% of the second sample was males and 46% are females.

Table-3: Means and Standards Deviations for Sample's Responses Regarding Clinic Assessment in General

No.	Statements	King Hussein Medical Centre			AL-Bashir Hospital		
		Mean	S .Deviation	Rank	Mean	S. Deviation	Rank
3	Clinic Location Accessible & Convenient	3.46	.947	1	3.32	.948	1
4	Clinic Is Clean & Tidy	3.32	.737	2	3.02	.873	2
5	Sufficient & Comfortable Clinic furniture	2.44	.729	6	2.36	.746	5
6	Clinic Information & Appointment Desk was helpful	2.64	.980	4	2.76	.933	4
7	Easy access to patient old medical reports	2.82	1.058	3	2.84	.992	3
8	Warm reception and tact in dealing with patient	2.48	1.105	5	2.34	1.112	6
	General Mean	2.86	0.581		2.79	0.591	

Descriptive Statistics

- Table No.3 indicates the means and the standard deviations of the two sample's subjects.
- It indicates that means of King Hussein Medical Centre patients responses ranges between(2.44 – 3.46) with medium level , while the responses of Al Bashir hospital subjects ranged between (2.34- 3.32) with medium level.
- Statement No. 3 “Clinic Location Accessible & Convenient” ranked the first. By the two samples,

while statement No.5 “Sufficient & Comfortable Clinic furniture” ranked the last with respect to King Hussein Medical Centre sample. As for Al Bashir patients statement No.8 “Warm reception and tact in dealing with patient) ranked the lass.

- By reviewing the means the two samples' responses, the researcher found that there is a medium agreement for all statements that measure clinic assessment.

Table-4: Means and Standards Deviations for Sample's Responses Regarding Medical Instruments and Equipment in the two hospitals.

No.	Statements	King Hussein Medical Centre			AL Bashir Hospital		
		Mean	Standard Deviation	Rank	Mean	Standard Deviation	Rank
9	Clinic has All Necessary Instrument	3.16	.861	2	2.88	.913	2
10	Clinic Is Well Equipped	2.98	.710	3	2.84	.813	3
11	Clean & hygienic instrument	3.44	.756	1	3.14	.752	1
	General Mean	3.19	0.625		2.95	0.677	

- Table No.4 indicates the means and the standard deviations of the two sample's subjects.
- It indicates that means of King Hussein Medical Centre patients responses ranges between(2.98 – 3.44) with medium level , while the responses of Al Bashir hospital subjects ranged between (2.88- 3.14) with medium level.

- Statement No. 3 “Clean & hygienic instrument t” ranked the first by the two samples, while statement No. 10 “Clinic Is Well Equipped ” ranked the last with respect to the two samples.
- By reviewing the means the two samples' responses, the researcher found that there is a medium agreement for all statements that measure Instruments and Equipment.

Table-5: Means and Standards Deviations for Sample's Responses Regarding Nursing Assessment

No.	Statements	King Hussein Medical Centre			AL Bashir Hospital		
		Mean	Standard Deviation	Rank	Mean	Standard Deviation	Rank
12	Nursing Staff was cooperative	3.10	1.049	3	3.06	1.179	2
13	Nursing Staff are competent	3.30	1.010	1	3.10	1.087	1
14	Nursing Staff are Skilled	3.28	.877	2	3.06	1.108	2
	General Mean	3.23	0.900		3.07	1.010	

- Table No.5 indicates the means and the standard deviations of the two sample’s subjects.
- It indicates that means of King Hussein Medical Centre patients responses ranges between (3.10 – 3.28) with medium level , while the responses of Al-Bashir hospital ranged between (3.06- 3.10) with medium level.
- StatementNo.13 “Nursing Staff are competent” ranked the first by the two samples, while statement No. 12 “Nursing Staff was cooperative” ranked the last with respect to the two samples.
- By reviewing the means the two samples’ responses, the researcher found that there is a medium agreement for all statements that measure nursing staff.

Table-6: Means and Standards Deviations for Sample's Responses Regarding Physician in the clinic Assessment

No.	Statements	King Hussein Medical Centre			AL Bashir Hospital		
		Mean	Standard .Deviation	Rank	Mean	Standard Deviation	Rank
15	Doctors Behave well with the patient	3.90	.835	4	4.02	.791	2
16	Doctor shows Respect for what patient want to say	3.98	.710	1	3.86	.725	5
17	Doctor was able to diagnose patient case	3.98	.651	1	4.06	.509	1
18	Patient get enough time with doctor	3.48	.904	6	3.68	.931	6
19	Patient Privacy Well Maintained	2.82	1.20	7	2.98	1.092	7
20	Doctor were able to give proper management to Patient Case	3.74	.747	5	3.93	.660	4
21	Doctors are well Qualified	3.94	.839	3	3.96	.567	3
	General Mean	3.69	0.564		3.78	0.525	

- Table No. 6. Indicates the means and the standard deviations of the two sample’s subjects.
- It indicates that means of King Hussein Medical Centre patients responses ranges between(2.82 – 3.98) with medium and high levels, while the responses of Al-Bashir hospital subjects ranged between (2.98- 4.02) with high level.
- Statements No.(16 and 17) “Doctor shows Respect for what patient want to say and Doctor was able to diagnose patient case” ranked the first by the King Hussein Medical Centre sample, while for Al-Bashir sample Statement No. 12 “Doctor was able to diagnose patient case” ranked the first, while Statement No. 19 “Patient Privacy Well Maintained ”ranked the last with respect to the two samples.
- By reviewing the means the two samples’ responses, the researcher found that there is a high agreement for all statements that measure physician in clinic.

Table-7: Means and Standards Deviations for Sample's Responses Regarding Patient Satisfaction

No.	Statements	King Hussein Medical Centre			AL Bashir Hospital		
		Mean	Standard Deviation	Rank	Mean	Standard Deviation	Rank
22	I was overall satisfied with the treatment	3.12	1.131	1	3.02	1.163	1
23	I would recommend this clinic to my Relative & Friends	2.76	1.215	3	2.90	1.049	3
24	Overall, the service you received from the staff at clinic considered good	3.00	1.189	2	3.00	1.101	2
	General Mean	2.96	1.098		2.97	0.991	

- Table No.7 indicates the means and the standard deviations of the two sample’s subjects.
- It indicates that means of King Hussein Medical Centre patients responses ranges between(2.76 – 3.12) with medium level , while the responses of Al-Bashir hospital subjects ranged between (2.90- 3.02) with medium level.
- Statements No.11 “I was overall satisfied with the treatment” ranked the first by the two samples, while statement No.12 “I would recommend this clinic to my Relative & Friends” ranked the last with respect to the two samples.
- By reviewing the means the two samples’ responses, the researcher found that there is a high agreement for all statements that measure patient satisfaction.

Hypotheses Testing

There is no statistically significant impact at significance level ($\alpha \leq 0.05$) for quality with its dimensions (Clinic Assessment, Instruments and

Equipment Assessment, Nursing Assessment and Physician Assessment) in King Hussein Medical Centre.

Table-8: Main Hypothesis Test results For King Hussein Medical Centre

Variables	B	(T)	Sig
Clinic Assessment	.583	3.867	.000
Instruments and Equipment Assessment	.145	1.152	.252
Nursing Assessment	.278	3.013	.003
Physician Assessment	.750	5.037	.000
(R)	0.766		
(R ²)	0.603		
F Calculated Value	36.042		
F Tabulated	2.50		
Sig	0.000		

Table No.8. Indicates the statistical test of this hypothesis.

- The table indicates that there is a statistically significant impact for quality on patient satisfaction, since the significance level is (0.00.) F calculated value =36.042 which is more than the tabulated value (2.50). (R²) value = (0.603) indicates that quality interpret (60.3%) of the change in patient satisfaction in the King Hussein Medical Centre. R value = 76.6% which represents a strong relationship between the variables, results

of partial analysis for this hypothesis indicates that all dimensions except "Instruments and Equipment Assessment" impacts patient satisfaction such impact is clear through (B) values (T) values at significant level (0.05) as described in the table.

- Based on the above, the Null hypothesis is rejected and the alternative is accepted, this means that there is a statistically significant impact at significance level ($\alpha \leq 0.05$) for quality in King Hussein Medical Centre on patient satisfaction.

Table-9: Main Hypothesis Test results for Al-Bashir Hospital

Variables	B	(T)	Sig
Clinic Assessment	.193	1.344	.182
Instruments and Equipment Assessment	.365	3.077	.003
Nursing Assessment	.183	2.053	.043
Physician Assessment	.706	4.693	.000
(R)	0.662		
(R ²)	0.489		
F Calculated Value	18.576		
F Tabulated	2.50		
Sig	0.000		

- Table No. 9. Indicates the statistical test of this hypothesis.
- The table indicates that there is a statistically significant impact for quality on patient satisfaction, since the significance level is (0.00.) F calculated value =18.576 which is more than the tabulated value (2.50), (R²) value = (0.489) indicates that quality interpret (48.9%) of the change in patient satisfaction in the Al-Bashir Hospital. R value = 66.2% which represents a strong relationship between the variables.
- Results of partial analysis for this hypothesis indicates that all dimensions except clinic Assessment impacts patient satisfaction such

impact is clear through (B) values (T) values at significant level (0.05) as described in the table.

- Based on the above, the Null hypothesis is rejected and the alternative is accepted. This means that there is a statistically significant impact at significance level ($\alpha \leq 0.05$) for quality in Al-Bashir hospital on patient satisfaction.

First Sub-Hypothesis testing Results

There is no statistically significant impact at significance level ($\alpha \leq 0.05$) of Clinic Assessment in King Hussein Medical Centre and Al-Bashir hospital in Jordan on patient satisfaction.

Table-10: First Sub Hypothesis Test results.

Sample	Variables	R	(R ²)	B	(T)	Sig
King Hussein Medical Center	Clinic Assessment	0.627	0,393	1.185	7.959	0.000
Al- Bashir Hospital	Clinic Assessment	0.429	0.184	0.656	4.701	0.000

- Table No.10. Indicated that there is a statically significant impact of clinic assessment on patient satisfaction in the two hospitals since the significance level is (0.00) and (T) calculated value =7.959 and 4.701 respectively which are more than the tabulated value (1.97) .
- Table also demonstrate that (R²) = (0.393and 0.184) which indicate that clinic Assessment interpret (39.3% and 18.4%) of the change in patient satisfaction in the two hospitals.
- Based on the Null hypothesis is rejected and the alternative is accepted , which means that there is

a statistically significant impact at significance ($\alpha \leq 0.05$) level of clinic Assessment in King Hussein Medical Centre and Al-Bashir Hospital on patient satisfaction.

Second Sub–Hypothesis testing Results

There is no statistically significant impact at significance level ($\alpha \leq 0.05$) of "Instrument and Equipment Assessment" in King Hussein Medical Centre and Al-Bashir Hospital in Jordan on patient satisfaction.

Table-11: Second Sub-Hypothesis Test results;

Sample	Variables	R	(R ²)	B	(T)	Sig
King Hussein Medical Center	Instruments and equipment Assessment	0.349	0.144	0.692	4.242	0.000
Al Bashir Hospital	Instruments and equipment Assessment	0.396	0.157	0.581	4.274	0.000

- Table No.11. Indicated that there is a statically significant impact of "Instruments and equipment assessment" on patient satisfaction in the two hospitals since the significance level is (0.00). And T calculated value =4.242 and 4.274 respectively which are more than the tabulated value ().
- Table also demonstrate that (R²) = (0.144and 0.157) which indicate that "Instruments and equipment Assessment" interpret (14.4% and 15.7%) of the change in patient satisfaction in the two hospitals.

- Based on the Null hypothesis is rejected and the alternative is accepted which means that there is a statistically significant impact at significance ($\alpha \leq 0.05$) level of "Instruments and equipment Assessment" in King Hussein Medical Centre and Al-Bashir Hospital on patient satisfaction.

Third Sub-Hypothesis testing Results

There is no statistically significant impact at significance ($\alpha \leq 0.05$) level of nursing Assessment in King Hussein Medical Centre and Al-Bashir hospital on Patient Satisfaction.

Table-12: Third Sub-Hypothesis Test results:

Sample	Variables	R	(R ²)	B	(T)	Sig
King Hussein Medical Center	Nursing Assessment	0.552	0.305	0.674	6.554	0.000
Al-Bashir Hospital	Nursing Assessment	0.421	0.177	0.413	4.597	0.000

- Table No.12. indicated that there is a statically significant impact of nursing assessment on patient satisfaction in the two hospitals since the significance level is(0.00) and T calculated value =86.554 and 4.597 respectively which are more than the tabulated value ().
- Table also demonstrate that (R²) = (0.305and 0.421) which indicate that nursing assessment interpret (30.5% and 17.7%) of the change in patient satisfaction in the two hospitals.

- Based on the Null hypothesis is rejected and the alternative is accepted which means that there is a statistically significant impact at significance ($\alpha \leq 0.05$) level of nursing assessment in King Hussein Medical Centre and Al-Bashir Hospital on patient satisfaction.

Fourth sub – hypothesis testing Results

- There is no statistically significant impact at significance ($\alpha \leq 0.05$) level of Physician Assessment in King Hussein Medical Centre and Al-Bashir Hospital on patient satisfaction

Table-13: Fourth Sub Hypothesis Test results

Sample	Variables	R	(R ²)	B	(T)	Sig
King Hussein Medical Centre	Physician Assessment	0.652	0.425	1.268	8.510	0.000
Al-Bashir Hospital	Physician Assessment	0.533	0.284	0.966	6.228	0.000

- Table No.13. Indicated that there is a statically significant impact of physician assessment on patient satisfaction in the two hospitals since the significance level is (0.00), T calculated value =8.521 and 6.228 respectively which are more than the tabulated value ().
- Table also demonstrate that (R²) = (0.425 and 0.284) which indicate that physician assessment interpret (42.5% and 28.4%) of the change in patient satisfaction in the two hospitals. Based on the null hypothesis is rejected and the alternative is

accepted , which means that there is a statistically significant impact at significance ($\alpha \leq 0.05$) level of Physician Assessment in King Hussein Medical Centre and Al-Bashir Hospital on patient satisfaction.

Second Main Hypothesis

There are no statistically differences of impact of service quality on patient satisfaction due to their demographic data (gender, age, and education level,)

Table-14: Indicates that F calculated values are more than F tabulated values for all demographic variables in the two samples, this means that there are statistically significant differences at ($\alpha \leq 0.05$) level in impact of quality on patient satisfaction in the two hospitals due to (gender, age, and educational level)

Sample	Variable	F Tabulated	F Calculated	Sig**
King Hussein Medical Centre	Gender	2.04	6.023	0.000
Al-Bashir Hospital		2.16	3.355	0.004
King Hussein Medical Centre	Age	1.80	6.079	0.000
Al-Bashir Hospital		1.83	9.217	0.000
King Hussein Medical Centre	Education Level	2.16	10.097	0.000
Al-Bashir Hospital		1.183	1.103	0.004

- Table No.14. Indicates that F calculated values are more than F tabulated values for all demographic variables in the two samples, this means that there are statistically significant differences at ($\alpha \leq 0.05$) level in impact of quality on patient satisfaction in the two hospitals due to (gender, age, and educational level)

- There are differences in the impact of quality on patient satisfaction due to demographic variables (gender, age, and education level).

Data analysis indicated the following results:

- Health Service quality has an impact of patient satisfaction.
- Clinic assessment as one of health quality dimension has an impact patient satisfactions.
- Instruments and equipment assessment as one of health quality dimension has an impact on patient satisfaction.
- Nursing assessment as one of health quality dimension has an impact on patient satisfaction.
- Physician assessment as one of health quality dimension has an impact on patient satisfaction.

CONCLUSION & RECOMMENDATIONS

The study results revealed that quality of care has an impact on patient satisfaction. Moreover the results indicated that patients are satisfied with quality of care in the two hospitals. The questionnaire is proven to be reliable and consistent and is useful as an option for policy makers to ensure that hospital services meet patient needs. The findings provide important insight on developing tools to measure patient experience for improving the quality of care and laying the foundation for further research into patient expectations and needs regarding The findings provided important insight on developing tools to measure patient experience in hospitals to improve the quality of care and to lay the foundation for further research on patient expectations and needs.

On the light of the results mentioned above, the researcher suggests the following recommendations

- The two hospitals have to set up criteria for their quality provided for patients.
- Hospital are requested to provide sufficient number of qualifies medical staff to deal with the increased number of patients.
- Hospitals should aware all of their staff either medical or managerial ones with the advantages of quality.
- Hospital should establish quality culture among medical and managerial staff through seminars and training programs.
- Hospitals should carry out periodical studies regarding patient ratification to know the weakness points in order to avoid or to adjust.

Future Research: There is a bad need for conducting such research with a different sample and different hospitals such making the comparison between private and public hospitals.

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Appendices: 1 Patient satisfaction Questionnaire in ENT Clinic

Num	Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	What is your age? 18 to 24 <input type="checkbox"/> 25 to 34 <input type="checkbox"/> 35 to 44 <input type="checkbox"/> 45 to 54 <input type="checkbox"/> 55 or older <input type="checkbox"/>					
2	What is degree you have received? Less than high school <input type="checkbox"/> High school <input type="checkbox"/> Bachelor degree <input type="checkbox"/> Graduate degree <input type="checkbox"/> Higher Degree					
	Please put (√) in front of chosen answer	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
Clinic Assessment						
3	Clinic Location Accessible & Convenient					
4	Clinic Is Clean & Tidy					
5	Sufficient & Comfortable Clinic furniture					
6	Clinic Information & Appointment Desk was helpful					
7	Easy access to patient old medical reports					
8	Warm reception and tact in dealing with patient					
Instrument & Equipments Assessment in the clinic						
9	Clinic has All Necessary Instrument					
10	Clinic Is Well Equipped					
11	Clean & hygienic instrument					
Nursing assessment						
12	Nursing Staff was cooperative					
13	Nursing Staff are competent					
14	Nursing Staff are Skilled					
Doctors assessment						
15	Doctors Behave well with the patient					
16	Doctor shows Respect for what patient want to say					
17	Doctor was able to diagnose patient case					
18	Patient get enough time with doctor					
19	Patient Privacy Well Maintained					
20	Doctor were able to give proper management to Patient Case					
21	Doctors are well Qualified					
patient satisfaction assessment						
22	I was overall satisfied with the treatment					
23	I would recommend this clinic to my Relative & Friends					
24	Overall, the service you received from the staff at clinic considered good					