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

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Abstract: Objective: Quality of Care and patient satisfaction are major challenges faced by the healthcare sector in Jordan. This paper aims to study the factors affecting service quality on the Patient Satisfaction from patient’s perspectives in Jordan. Method: Cross Sectional Survey. Population & sample: The study sample consisted of (200) respondents in King Hussein Medical Centre Hospital. Measures: The collected data were analyzed using the SPSS package. Result: 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 hospital. The study recommended that the hospital 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

1. 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 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 perspectiveso 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 2004) [1].Health organization is also defined as social and human institution, designed to achieve specific objectives and consistsof 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.

2. Literature Review

Aiken, et al (2012)[3]study aimed to determine whether hospitals with a good 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.

JozienBensing(2002) [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.

(van Campen, et al, 1995) [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.

(Wolf, Debra.et al 2008)[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.
predictors by capturing other effects such as patient status. Using questionnaires.

Results: the study highlighted the importance of healthcare quality as patient satisfaction predictors by capturing other effects such as patient status.

(SayedSaad Andaleeb2001) [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.

(M. Susan Marquis, et al 1983)[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 sociodemographic 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.

(Zastowny, Thomas R.et al1995)[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.

(Mosad Zineldin2006)[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’1992)[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.

(Masood A. Badri2009)[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.

3. 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 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 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, also accessing to patients in the both hospitals was limited and hard.

4. 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.

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Research Hypotheses
The study is based on the following hypotheses:

First Main Hypothesis:
H0= There is no statically significant impact at (α=0.05) level of Quality of Care on Patient Satisfaction.

Sub Hypotheses:
H0.1= There is no statically significant impact at (α=0.05) level of Clinic Assessment on Patient Satisfaction.
H0.2= There is no statically significant impact at (α=0.05) level of Instrument & Equipment Assessment and Patient Satisfaction.
H0.3= There is no statically significant impact at (α=0.05) level of Nursing Assessment on Patient Satisfaction.
H0.4= There is no statically significant impact at (α=0.05) level of physician Assessment on Patient Satisfaction.

Second Main Hypothesis:
There are no statically significant differences of impact at (α=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 services (customer perceptions).” (Aagja and Garg, 2010)[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” (Esch et al., 2008).[14]

Research Methodology
Population and Sample:
The study population consisted of all patients attending ENT clinic in King Hussein medical centre; one hundred patients were selected randomly from 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 a questionnaire to collect the needed data from the 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 respondents demographic information such as (age, gender, and educational level). Section (2) had items related to quality care, 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 whodidn’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 jeopardize.

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 STANDARD DIVIATION for subject 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. Population based cross sectional study. Two hundred patients were selected randomly from 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 taken 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-administered 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 |
|---------------|--------------------|-----------------------------|
|               | Frequency | %  |                  |
| Age           | 18-24     | 10.0 | 10.0 |
|               | 25-34     | 24.0 | 24.0 |
|               | 35-44     | 22.0 | 22.0 |
|               | 45-54     | 28.0 | 28.0 |
|               | 55+       | 16.0 | 16.0 |
| Education     | Less than Secondary | 38.0 | 38.0 |
|               | Secondary Certificate | 24.0 | 24.0 |

- TableNo.2. Indicates that 10% of the 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.
- As for education level 38% of the sample has less than secondary; 24 % have diploma, 20% have BSC and 2 % have master.
- With regard to gender 58% of the sample were males and the rest 42 % are females.

Descriptive Statistics
Table No.3 Means and Standard Deviations for Sample Responses Regarding Clinic Assessment in General
- Table No.3 indicates the means and the standard deviations of the sample subjects.
- It indicates that means of King Hussein Medical Centre patients responses ranges between (2.44 – 3.46) with medium
- Statement No. 3 “Clinic Location Accessible & Convenient” ranked the first, while statement No.5 “Sufficient & Comfortable Clinic furniture” ranked the last with respect to King Hussein Medical Centresample.
- By reviewing the means the sample’ responses, the researcher found that there is an 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 |
|-----|------------------------------------------------|-----------------------------|
|     |                                                | Mean | Standard Deviation | Rank |
| 9   | Clinic has All Necessary Instrument            | 3.16 | .861              | 2    |
| 10  | Clinic Is Well Equipped                        | 2.98 | .710              | 3    |
| 11  | Clean & Hygienic instrument                    | 3.44 | .756              | 1    |
|     | General Mean                                   | 3.19 | .625              | 1    |
Table No.4 indicates the means and the standard deviations of the sample subjects.

It indicates that means of King Hussein Medical Centre patients responses ranges between (2.98 – 3.44) with medium level.

Statement No. 3 “Clean & hygienic instrument “ ranked the first, while statement No. 10 “Clinic Is Well Equipped ” ranked the last.

By reviewing them means the sameresponses, 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 |
|-----|------------|-----------------------------|
|     |            | Mean | Standard Deviation | Rank |
| 12  | Nursing Staff was cooperative | 3.10 | 1.049 | 3 |
| 13  | Nursing Staff are competent | 3.30 | 1.010 | 1 |
| 14  | Nursing Staff are Skilled | 3.28 | .877 | 2 |
|     | General Mean | 3.23 | .900 | |

Table No.5 indicates the means and the standard deviations of the sample subjects.

It indicates that means of King Hussein Medical Centre patients responses ranges between (3.10 – 3.28) with medium level.

Statement No.13 “Nursing Staff are competent” ranked the first, while statement No. 12 “Nursing Staff was cooperative” ranked the last.

By reviewing them means the sameresponses, 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 |
|-----|------------|-----------------------------|
|     |            | Mean | Standard Deviation | Rank |
| 15  | Doctors Behave well with the patient | 3.90 | .835 | 4 |
| 16  | Doctor shows Respect for what patient want to say | 3.98 | .710 | 1 |
| 17  | Doctor was able to diagnose patient case | 3.98 | .651 | 1 |
| 18  | Patient get enough time with doctor | 3.48 | .904 | 6 |
| 19  | Patient Privacy Well Maintained | 2.82 | 1.20 | 7 |
| 20  | Doctor were able to give proper management to Patient Case | 3.74 | .747 | 5 |
| 21  | Doctors are well Qualified | 3.94 | .839 | 3 |
|     | General Mean | 3.69 | .564 | |

Table No.6. indicates the means and the standard deviations of the samplesubjects.

It indicates that means of King Hussein Medical Centre patients responses ranges between (2.82 – 3.98) with medium and high levels.

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 Statement No. 19 “Patient Privacy Well Maintained ” ranked the third.

By reviewing them means the sameresponses, 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 |
|-----|------------|-----------------------------|
|     |            | Mean | Standard Deviation |
| 22  | I was overall satisfied with the treatment | 3.12 | 1.131 |
| 23  | I would recommend this clinic to my Relative & Friends | 2.76 | 1.215 |
| 24  | Overall, the service you received from the staff at clinic considered good | 3.00 | 1.189 |
|     | General Mean | 2.96 | 1.098 |

Table No.7 indicates the means and the standard deviations of the sample subjects.

It indicates that means of King Hussein Medical Centre patients responses ranges between (2.76 – 3.12) with medium level.

Statements No.11 “I was overall satisfied with the treatment” ranked the first ,while statement No.12 “I would recommend this clinic to my Relative & Friends” ranked the last.

By reviewing them means the sameresponses, 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 (≤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 |
| (R²) | | 0.766 |
| (R²) | | 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 onpatient satisfaction, since the significance level is (0.00) . F calculated value =36.042which 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.
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 (α≤0.05) for quality in King Hussein Medical Centre on patient satisfaction.

**First Sub-Hypothesis testing Results:**
There is no statistically significant impact at significance level (α≤0.05) of Clinic Assessment in King Hussein Medical Centre hospital in Jordan on patient satisfaction.

**Table 10: First Sub Hypothesis Test results**

| Sample                  | Variables          | R   | (R²) | B   | (T)  | Sig |
|-------------------------|--------------------|-----|------|-----|------|-----|
| King Hussein Medical Center | Clinic Assessment | 0.627 | 0.393 | 1.185 | 7.959 | 0.000 |

- Table No.10. Indicated that there is a statically significant impact of clinic assessment on patient satisfaction in the hospital 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) = (0.393 and 0.184) which indicate that clinic assessment interpret (39.3% and 18.4%) of the change in patient satisfaction in the hospital.
- Based on the Null hypothesis is rejected and the alternative is accepted, which means that there is a statistically significant impact at significance level (α≤0.05) of clinic Assessment in King Hussein Medical Centre Hospital on patient satisfaction.

**Second Sub–Hypothesis testing Results:**
There is no statistically significant impact at significance level (α≤0.05) of "Instruments and Equipment Assessment" in King Hussein Medical Centre Hospital in Jordan on patient satisfaction.

**Table 11: Second Sub-Hypothesis Test results**

| Sample                  | Variables          | R   | (R²) | B   | (T)  | Sig |
|-------------------------|--------------------|-----|------|-----|------|-----|
| King Hussein Medical Center | Instruments and equipment Assessment | 0.349 | 0.144 | 0.692 | 4.242 | 0.000 |

- Table No.11. Indicated that there is a statistically significant impact of "Instruments and equipment assessment" on patient satisfaction in the hospital 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) = (0.144 and 0.157) which indicate that "Instruments and equipment Assessment" interpret (14.4% and 15.7%) of the change in patient satisfaction in the hospital.
- Based on the Null hypothesis is rejected and the alternative is accepted which means that there is a statistically significant impact at significance (α≤0.05) level of "Instruments and equipment Assessment" in King Hussein Medical Centre patient satisfaction.

**Third Sub-Hypothesis testing Results**
There is no statistically significant impact at significance (α≤0.05) level of nursing Assessment in King Hussein Medical Centre Hospital on Patient Satisfaction.

**Table 12: Third Sub-Hypothesis Test results**

| Sample                      | Variables          | R   | (R²) | B   | (T)  | Sig  |
|-----------------------------|--------------------|-----|------|-----|------|------|
| King Hussein Medical Center | Nursing Assessment | 0.552 | 0.305 | 0.674 | 6.554 | 0.000 |

- Table No.12 indicated that there is a statically significant impact of nursing assessment on patient satisfaction in the hospital 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) = (0.305 and 0.421) which indicate that nursing assessment interpret (30.5% and 17.7%) of the change in patient satisfaction in the hospital.
- Based on the Null hypothesis is rejected and the alternative is accepted which means that there is a statistically significant impact at significance level (α≤0.05) of nursing assessment in King Hussein Medical Centre Hospital on patient satisfaction.

**Fourth sub – hypothesis testing Results**
There is no statistically significant impact at significance (α≤0.05) level of Physician Assessment in King Hussein Medical Centre Hospital on patient satisfaction.

**Table 13: Fourth Sub Hypothesis Test results**

| Sample                     | Variables          | R   | (R²) | B   | (T)  | Sig  |
|---------------------------|--------------------|-----|------|-----|------|------|
| King Hussein Medical Center | Physician Assessment | 0.652 | 0.425 | 1.268 | 8.510 | 0.000 |

- Table No.13. Indicated that there is a statically significant impact of physician assessment on patient satisfaction in the hospital 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 hospital. Based on the null hypothesis is rejected and the alternative is accepted, which means that there is a statistically significant impact at significance level (α≤0.05) of Physician Assessment in King Hussein Medical Centre 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**

| Sample                     | Variable | F Tabulated | F Calculated | Sig ** |
|----------------------------|----------|-------------|--------------|--------|
| King Hussein Medical Centre | Gender   | 2.04        | 6.023        | 0      |
| King Hussein Medical Centre | Age | 1.8 | 6.079 | 0 |
| King Hussein Medical Centre | Education Level | 2.16 | 10.097 | 0 |

- Table No.14. Indicates that F calculated values are more than F tabulated values for all demographic variables in the sample, this means that there are statistically significant differences at (α ≤ 0.05) level in impact of quality on patient satisfaction in the hospital due to (gender, age, and educational 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.
- There are differences in the impact of quality on patient satisfaction due to demographic variables (gender, age, and education level).

**5. 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 hospital 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.

**6. Future Research**

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

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### Appendices: Patient satisfaction Questionnaire in ENT Clinic

| Num | Question                                                                 | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|-----|--------------------------------------------------------------------------|-------------------|----------|---------|-------|----------------|
| 1   | What is your age? 18 to 24 ☐ 25 to 34 ☐ 35 to 44 ☐ 45 to 54 ☐ 55 or older ☐ |                   |          |         |       |                |
| 2   | What degree you have received? Less than high school ☐ High school ☐ Bachelor degree ☐ Graduate degree ☐ Higher Degree ☐ |                   |          |         |       |                |
|     | Please put (✓) in front of chosen answer                                |                   |          |         |       |                |

#### 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 & Equipment 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

#### Doctor 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