



**Arab American University**

**Faculty of Graduate Studies**

**Healthcare Providers' Perception towards the Effect of  
Publishing Hospital Performance Report on Quality  
Improvement**

**By:**

**Mohammad Foud Al-Batran**

**Supervisor:**

**Dr. Salwa Barghouthi**

**This thesis was submitted in partial fulfillment of the  
requirements for the Master's degree in Quality  
management**

**August 2019**

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**By:**

Mohammad Foud Al-Batran

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## **Declaration**

I declare that the content of this thesis is my own research work, unless otherwise referenced. I certify that this thesis does not contain any material published before by another person or has been submitted elsewhere for any degree or qualification.

Name: **Mohammad Foud Al-Batran**

Signature: \_\_\_\_\_

Arab American University, Jenin- Palestine.

**Date: 06, August 2019**

## **Dedication**

This thesis is dedicated to:

I dedicate this humble work to my country, Palestine.

To the souls of Palestinian martyrs, and the prisoners in Israeli jails,

To my beloved father and mother, sisters, and brothers,

To my lovely friends for their endless support,

To my colleagues at Augusta Victoria Hospital,

To Dr. Salwa Barghouthi for her efforts and support to complete this thesis

Researcher: Mohmmad F. Al-Batran

## **Acknowledgment**

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Special thanks to all the hospitals that have accepted to be a part of this research and gave me the permission to distribute the questionnaires and for all the managers and quality officers that participated in this research.

Last but not least, I would like to thank my family, my parents, and my friends for their support in this research as well as in my life.

## **Abstract**

The Research aimed to answer the research questions related to the impact of publicizing hospital performance on quality improvement, and how publication affected the hospital quality image from the respondents' perspectives, first-line managers (head of departments), quality managers, and quality officers.

Furthermore, the research aimed to provide a detailed elucidation about the contributions of publicizing hospital performance on the quality improvement of healthcare providers from quality managers and Middle Management's point of view.

The Research relied on the descriptive approach and quantitative research methodology through obtaining data from books, publication journals, reports and past researches on the same topic while a questionnaire for collecting primary data was developed and adopted by the researcher depending on previous literature, and the analysis of survey respondents using SPSS program.

The research population consisted of all Quality Managers, Quality Officers and first line Managers of the health services departments, who belong to (51) hospitals ranging from government, private and nonprofit hospitals in the West Bank under the supervision of the Palestinian Ministry of Health. The sample was selected by using a proportion stratified technique, the sample consisted of 150 Quality Managers, Quality Officers and first line Managers in Hebron and Ramallah hospitals who were chosen randomly, 120 Questionnaires were returned making the response rate equals (80%). The analysis of the research variables was done through (Means and Frequencies, One-Way-ANOVA test, independent T-Test, Tukey-test, and The Kruskal-Wallis Test Analysis).

The research achieved a number of outcomes, including the Palestinian hospitals still do not measure their performance by collecting and presenting data related to performance indicators. In addition it shows that Palestinian hospitals still do not publish their own performance reports to be accessible to the public.

The research also found that the publication of healthcare performance reports affects the quality system through: better understanding of quality concepts within hospitals, as well as increasing the hospitals intent to provide the best possible service with the best quality provided to maintain their image to the public. The hospitals have to avoid medical errors and pay attention to prevent any mistakes in dealing and providing service to patients to maintain their reputation. Moreover, there is an increase in hospitals' competition in order to provide better services.

The research recommends healthcare providers to follow an international health quality systems' standards to prepare their Performance indicators and reports, while it recommends working on preparing their own reports to contain three types of information : patients' satisfaction from the services that are being delivered, the results of the services provided, and performance indicators assessment results. Healthcare providers need to consider the differences in the performance indicators according to the services provided in each hospital and its specialties as well.

Key words: Quality Managers, Quality Officers, Healthcare providers, Quality publicizing reports, performance reports, quality, quality improvement, hospitals, and quality indicators.



## Contents

<b>Declaration.....</b>	<b>II</b>
<b>Dedication .....</b>	<b>III</b>
<b>Acknowledgment.....</b>	<b>IV</b>
<b>Abstract .....</b>	<b>V</b>
<b>List of Tables.....</b>	<b>X</b>
<b>List of Figures .....</b>	<b>XIII</b>
<b>List of Abbreviations.....</b>	<b>XIV</b>
<b>List of Appendices .....</b>	<b>XV</b>
<b>Chapter 1: Introduction .....</b>	<b>1</b>
1.1 Overview .....	1
1.2 Problem Statement .....	2
1.3 Research Questions.....	4
1.4 Research Hypothesis.....	4
1.5 Research Objectives.....	5
1.6 Importance of Research.....	6
1.7 Significance of Research. ....	6
1.8. The limitation of the Research.....	7
1.9 Research Methodology .....	8
1.10 Literature Review .....	8
1.11 Summary .....	8
<b>Chapter Two Theoretical Framework and Literature Review .....</b>	<b>9</b>
2.1 Theoretical Framework.....	9
2.1.1 Introduction.....	9
2.1.2 Part one: Historical part. ....	10
2.1.2.1 History of Quality Improvement. ....	10
2.1.2.2 Quality Improvement in Health Sector. ....	11
2.1.2.3 History of Measuring and Reporting Performance. ....	13
2.1.3 Part two: Hospital Performance and Measurement.....	16
2.1.3.1 Definition of Hospital Performance and Measurement:.....	16
2.1.3.2 Measuring Performance and the Components of Performance Reporting:.....	17
2.1.4 Part three: Publicizing Hospital Performance Reports: .....	18
2.1.4.1 Publishing Hospital Performance and Quality Improvement: .....	18
2.1.4.2 Transparency, and Hospital Performance Reporting. ....	20
2.1.5 Key Performance Indicators.....	22
2.1.5.1 Key Performance Indicators (KPIs) in the Health Sectors.....	22
2.1.5.2 Classification of Key Performance Indicators (KPI).....	24
Summary.....	33
<b>Chapter 3 Conceptual Framework.....</b>	<b>34</b>
3.1 Introduction.....	34
3.2 Concepts Definitions.....	34
3.2.1 Service Quality.....	34

3.2.2 Performance and Performance Measurement (PM) .....	35
3.2.3 Publishing Hospital Performance Reports .....	36
3.2.4 Key Performance Indicator (KPI) .....	37
3.2.5 Quality Improvement .....	38
3.3 Operational Definition:- .....	38
3.3.1 Publishing Hospital Performance Report and Quality Improvement .....	38
3.3.2 Demographic Factors.....	39
3.3.3 Organizational Factors: .....	39
3.3.4 Questionnaire's Structure (Dependent, Moderate and Independent Variables) (4 Domains):- .....	40
3.3.4.1 Assessment for the Current Quality and Reporting System.....	41
3.3.4.2 Publishing Hospital Performance Reports .....	41
3.3.4.3 Quality Improvement.....	42
3.3.4.4 Transparency, Responsibility, and Accountability.....	43
3.4 Conceptual Framework .....	44
3.5 Summary .....	44
Chapter 4 Research Methodology .....	46
4.1 Introduction.....	46
4.2 Research Method.....	46
4.3 Data allocation Method .....	46
4.4 The Research Population.....	47
4.4.1 Sample of Research.....	50
4.4.1.1 Proportion Stratified Sample .....	52
4.5 The sample .....	55
4.6 Research Tool .....	55
4.6.1. First: Questionnaires .....	55
4.6.1.1 Method Correction: .....	56
4.6.1.2 Description of Questionnaires .....	56
4.6.1.3 Pilot Research .....	57
4.6.1.4 Validity of the Instrument.....	57
4.6.1.4.1 First: Context validity: .....	58
4.6.1.4.2 Second: Structural Validity: .....	58
4.6.1.5 Reliability of the instrument:- .....	59
4.6.1.6 Survey Administration.....	59
4.6.1.7 Survey Responses .....	60
4.7 Permission and Ethical Consideration.....	60
4.8 Data Coding Process.....	61
4.9 Data Analysis.....	61
4.10 Statistical Analysis:.....	61
4.10.1 Test of Normality .....	62
4.11 Summary .....	63
Chapter 5 Results and Discussion.....	64

<b>5.1 Introduction.....</b>	<b>64</b>
<b>5.2 Characteristics of Respondents: .....</b>	<b>64</b>
<b>5.3 Study Results:.....</b>	<b>67</b>
<b>5.3.1 Section one: Respondents' Perception towards the Quality of the Current Healthcare System: .....</b>	<b>67</b>
<b>5.3.2 - Section Two: Respondents' Perception Towards Publishing Hospitals' Performance Reports. ....</b>	<b>70</b>
<b>5.3.3- Section Three: Respondents' Perception towards Publishing the Hospitals' Performance Reports and Quality Improvement:.....</b>	<b>75</b>
<b>5.3.4 Section Four: Respondents' Perception towards Publishing Hospitals' Performance Reports and Improving Hospitals Transparency, Responsibility and Accountability:.....</b>	<b>78</b>
<b>5.4 Demographic Data:.....</b>	<b>83</b>
<b>5.4.1 The Respondents' Perception towards the Quality of the Current Health System:.....</b>	<b>83</b>
<b>5.4.2 - The Respondents' Perception towards Publishing Hospitals' Performance Reports: .....</b>	<b>87</b>
<b>5.4.3 – The Relation between Publishing Performance Report, Quality Improvement and Position, Education Qualifications, Experience and Type of Hospitals: .....</b>	<b>90</b>
<b>5.4.4 - The Respondents' Perception towards Publishing Hospitals' Performance Reports and Transparency, Responsibility and Accountability: .....</b>	<b>93</b>
<b>5.4.5 –Respondents' Perception of Publishing Performance Reports and Improving Transparency, Responsibility, and Accountability according to: Gender, Quality Training, Quality Certification and the City.....</b>	<b>95</b>
<b>5.5 Summary .....</b>	<b>96</b>
<b>Chapter 6 Conclusions and Recommendations .....</b>	<b>97</b>
<b>6.1 Research Results.....</b>	<b>97</b>
<b>6.2 Recommendations:- .....</b>	<b>99</b>
<b>6.3 Future Research .....</b>	<b>101</b>
<b>References .....</b>	<b>102</b>
<b>Appendixes.....</b>	<b>113</b>
<b>Appendix (1) Questioner in English Language.....</b>	<b>113</b>
<b>Appendix (2) Hospitals Permeations. ....</b>	<b>120</b>
<b>Appendix (3) List of Arbitrators .....</b>	<b>127</b>
<b>ملخص الدراسة.....</b>	<b>128</b>

## List of Tables

No.	Table name	Page No.
Table (2.1)	The Ten Categories of Suggested Key Performance Indicators.	27
Table (2.2)	Detailed Selected KPIs Sorted into the Ten Categories	28
Table (2.3)	Performance indicators frequently used in previous studies.	31
Table (2.4)	National summary data on 36 key performance indicators for 121 government hospitals, Ethiopia, 2013	32
Table (4.1)	The names of hospitals in Jerusalem governorate	47
Table (4.2)	The names of hospitals in Jenin governorate	48
Table (4.3)	The names of hospitals in Tubas governorate	48
Table (4.4)	The names of hospitals in Tulkarm Governorate	48
Table (4.5)	The names of hospitals in Nablus Governorate	49
Table (4.6)	The names of hospitals in Qalqilya Governorate	49
Table (4.7)	The names of hospitals in Salfit Governorate	49
Table (4.8)	The names of hospitals in Jericho Governorate	49
Table (4.9)	The names of hospitals in Bethlehem Governorate	50
Table (4.10)	The names of hospitals in Ramallah Governorate	50
Table (4.11)	The names of hospitals in Hebron Governorate	50
Table (4.12)	The names of hospitals in Ramallah Governorate	51
Table (4.13)	The names of hospitals in Hebron Governorate	51
Table (4.14)	The Distributions of Ramallah Hospitals.	52
Table (4.15)	The Distributions of Hebron Hospitals.	52
Table (4.16)	First liar of proportion stratified sample	53
Table (4.17)	Selected Sample from Ramallah Hospitals	54
Table (4.18)	Selected Sample from Hebron Hospitals.	54
Table (4.19)	The Sample of the Research using a Proportion Stratified Sample.	55
Table (4.20)	Likert scale	56
Table (4.21)	Correction Key	56
Table (4.22)	Pearson Correlations between questionnaire's sections and total degree of questionnaire	58
Table (4.23)	Reliability coefficients of questionnaire's sections.	59

Table (4.24)	Test of Normality	63
Table (5.1)	Characteristics of Samples' respondents	65
Table (5.2)	Respondents' perception towards the quality on the current healthcare system:	67
Table (5.3)	The results of one sample t-test of Respondents perception towards the quality on the current healthcare system.	69
Table (5.4)	Respondents' perception towards publicizing hospitals' performance reports.	71
Table (5.5)	The results of one sample t-test of respondents' perception towards publicizing hospitals' performance reports.	74
Table (5.6)	Respondents' perception towards publishing the hospitals' performance reports and quality improvement	75
Table (5.7)	The results of one sample t- test of Respondents' perception towards publishing the hospital performance reports and quality improvement.	78
Table (5.8)	Respondents' perception towards publishing the hospitals' performance reports and improving hospitals transparency, responsibility and accountability	79
Table (5.9)	The results of one sample t-test of respondents' perception towards publishing the hospitals' performance reports and improving hospitals transparency, responsibility and accountability	82
Table (5.10)	Results of ANOVA (One Way Analysis Of Variance) of the respondents' perception towards the quality of the current health system, according to the following aspects: position, Duration of experience, Educational qualifications and Type of hospital.	84
Table (5.11)	Results of Tukey Test of source of difference of the perception towards the quality of the current health system according to position	85
Table (5.12)	Results of Tukey Test of source of difference of the perception towards the quality of the current health system according to educational qualifications.	86
Table (5.13)	The Results of t-test for Equality of Means	87
Table (5.14)	Results of ANOVA (One Way Analysis Of Variance) difference of the perception towards publicizing hospitals' performance reports.	88

Table (5.15)	Results of Tukey Test of source of differences of the perspectives of publicizing hospitals' performance reports between groups according to type of hospital.	89
Table (5.16)	Differences of the respondents' perceptions of publicizing hospitals' performance reports by gender, quality training, quality certifications and city.	90
Table (5.17)	Results of Kruskal-Wallis test of differences between publishing performance report, quality improvement and position, education qualifications, experience and type of hospitals.	91
Table (5.18)	Pairwise comparisons of type of hospital, differences of perspectives of publishing performance reports and quality improvement.	92
Table (5.19)	Results of Mann-Whitney Test. of differences between publishing hospital performance reports, quality improvement and gender, quality training, quality certification, and the city.	93
Table (5.20)	Test of the differences of the respondents' perspectives of publishing performance reports and Transparency, Responsibility and Accountability.	94
Table (5.21)	Pairwise comparisons of types of hospital and the differences of the respondents' perspectives of publishing performance reports and Transparency, Responsibility and Accountability.	95
Table (5.22)	Respondents' perspectives of publishing performance reports and improving Transparency, Responsibility, and Accountability according to: Gender, Quality training, Quality certification and the city (Results of Mann- Whitney Test).	96

### List of Figures

No.	Figure	Page No.
Figure (2.1)	Pathway for improving performance by published report	19
Figure (2.2)	Healthcare Key Performance Indicators: What Can They Measure?	26
Figure 3.1	variables model	40
Figure (3.2)	Conceptual framework	45

### List of Abbreviations

Abbreviation	Means
JCIA	Joint commission international accreditation
WHO	World Health Organization
KPIs	Key performance indicators
TJC	The Joint commission
ISO	International Organization for Standardization
AHRQ	Agency for Healthcare Research and Quality
NCQA	National Committee for Quality Assurance
HEDIS	Healthcare Effectiveness Data and Information Set
CAHPS	Consumer Assessment of Healthcare Providers and Systems
HQA	Hospital Quality Alliance
IQR	Inpatient Quality Reporting
QI	Quality Improvement
CI	Continuous Improvement
LWBS	Left Without Being Seen
LOS	Length of Stay
ER	Emergency Room
OR	Operation Room
ICU	Intensive Care Unit
BMT	Bone Marrow Transplant
SPSS	Statistical Package for Social Science
Pt.	Patient



**List of Appendices**

No.	Subject	Page No.
1	Questionnaire in English	113
2	Hospitals permeations	120
3	List arbitrators.	127

# **Chapter 1**

## **Introduction**

### **1.1 Overview**

In order to understand how hospitals work in an effective and reliable manner, a hospital must use a hospital's performance assessment. Because hospitals provide vital services that are highly demanded by people, and the service provider should try to provide these services in a very effective manner through following loyalty, honesty and Quality criteria, which have been used since ancient times until today and will still be used in the future. Noting that the quality criteria and methodologies in health sectors were implemented for the first time in the 20<sup>th</sup> century (Colton, 2000).

After the 20<sup>th</sup> century identified the importance of following, using and focusing on using quality criteria and methodologies in service provides, there became a hospital's performance assessment criteria. Hospital's performance assessment and quality methodologies and criteria is a core of any internal system whether governmental or non-governmental hospitals.

A lot of patients decide which service provider to use, especially hospitals; they look for different criteria like: reputation, success stories, reporting data, quality methodologies ...etc). So hospitals publishing reports like (Strategic Evaluation report, Quality Assessment report, structure, processes, outcomes, patient safety, and patient satisfaction) will be useful for both the service provider and the service recipients. It also gives the hospitals' systems more transparency and credibility.

The context of Palestinian hospitals was rich for conducting this research because there are still no obvious criteria for monitoring performance, quality assessment, and the lack of performance reporting, as it will be illustrated in the following sections. This

Research will support different destinations in the assessment of the importance of publishing hospitals' performance reports and their effects on quality improvement on healthcare providers.

In light of this background, the researcher came up with the idea to conduct a research on a topic that covers the impact of publicizing hospital performance reports on quality improvement in Palestinian hospitals in the West Bank.

The research also applied on Palestinian hospitals in the West Bank because hospitals are considered one of pillars in Palestinian healthcare and the recipients' huge confidence in the service provided by these hospitals.

## **1.2 Problem Statement**

Through reviewing previous literature, it was noted that Western countries tend towards publishing hospital performance reports and this actually affects the quality of care in these hospitals. This emphasizes that accessing hospitals performance reports makes the system more transparent and accountable (Hafner et al., 2011).

Healthcare services are very sensitive services, so they should work towards greater accountability and transparency through addressing newly exposed gaps in the care they provide. One of these gaps is Quality and Quality assessment.

Through the conducted research, a huge number of studies focused on Quality and Quality Assessment as tools for performance evaluation in the healthcare sector.

Furthermore, to maintain a high level of quality, healthcare services providers seek to publicize their information to the public sector, in order to enhance their reputation in the eyes of their patients, and monitor the hospital's performance in a better way because this is what matters to the patients. (Barr, et al.2006).

Conforming to that, a number of countries started the implementation and developing strategies that help in monitoring hospitals' performances such as USA which started publishing their hospitals' reporting in 1997, and Australia followed in 2011 (Zahirah et al., 2015).

On the other hand, developing countries still face some problems in their health system. For example, the monitoring of hospitals' performance, the credibility of these hospitals and the quality of the care provided. There is now this idea of enforcing hospitals to improve their quality of care (Zahirah et al., 2015). Many countries fight to develop and implement some strategies to control and monitor their hospitals' performance, through fighting challenges like the scarcity of their resources in such countries.

One question was raised which is: Is Palestine facing the same challenges developing countries face or not?

The answer comes after conducting some research, and the result showed that the state of Palestine still does not use clear criteria towards monitoring hospitals' performance, the process of a quality improvement system, and the lack of a responsible system for publishing hospitals' performance reports. Plus the patients still do not have any access to information regarding how these hospitals work and perform.

However, few hospitals in Palestine, particularly in East Jerusalem, (for example Agusta Victoria Hospital) are working on possessing the quality accreditation.

As a result, the research considered the "Quality" tool as a field of Research due to the comprehensiveness in all evaluation perspectives. To fill the gap in the main research, the question is:

From the perception of healthcare providers, does publishing hospitals' performance report affect quality improvement?

For answering the statement of the problem, the following sub-questions were raised:

### **1.3 Research Questions**

1. What is the health care providers' perception regarding the current quality system in Palestinian hospital and the need for improvement?
2. Does publishing hospitals' performance reports affect the quality improvement process from the perception of healthcare providers?
3. Does the regular publication of performance reports affect the hospital's transparency, responsibility, and accountability from the perception of healthcare providers?
4. Do Healthcare providers respondents have a different perception towards publishing hospital performance reports and its effects on quality improvements based on demographic variables (gender, age, educational degree, job title, duration of experience, training related quality, type of hospital, quality certification and city)?

### **1.4 Research Hypothesis**

First hypothesis:

H0: There is no relation between publicizing hospital performance reports and quality improvement.

H1: There is a relation between publicizing hospital performance reports and quality improvement.

Second hypothesis:

H0: There is no relation between publicizing hospital performance reports and making the hospital more transparent, responsible, and accountable.

H1: There is a relation between publicizing hospital performance reports and making the hospital more transparent, responsible, and accountable.

Third hypothesis:

H0: There is no significant difference in the impact of publicizing hospital performance reports and quality improvement and demographic variables.

H1: There is a significant difference in the impact of publicizing hospital performance reports and quality improvement and demographic variables.

## **1.5 Research Objectives**

- 1- To assess the respondents' perception towards quality of care and the need for improvement, and to check if there are any systems and regulations applied by the ministry of health to measure hospital performance.
- 2- To examine healthcare providers' perception towards the role of publishing hospital performance reports that could make the hospital more transparent, responsible, and accountable.
- 3- Examining the healthcare providers' perception regarding the effect of publishing hospitals' performance reports on the quality improvement process.
- 4- Compare between the respondents' perception towards publishing hospital performance reports and the effect on quality improvements and demographic variables (gender, age, highest educational degree, the job title, duration of experience, training related quality, type of hospital, if the hospital has quality certification and city).

## **1.6 Importance of Research**

- 1- The importance of the research derived from highlighting on the publishing of hospital performance as the newest strategic approach, especially for evaluation, controlling and improving the quality provided by the hospitals.
- 2-This research will be beneficial for the Palestinian Ministry of Health since it gives feedback about the current quality of the health system and the need for improvement. The research also highlights a new area of concern to improve the health system.
- 3-For researchers, the researcher hope that this research adds serious scientific knowledge in the field.

## **1.7 Significance of Research.**

This research is a quantitative research that focuses on assessing healthcare providers' perception towards the effect of publishing hospitals' performance reports on quality improvement, and how this affects the hospital's quality image from different points of view: first-line managers(head of health departments), quality managers, and quality officers.

The major factors in the success or failure of health systems are: controlling the healthcare centers and enforcing them to be more accountable and transparent, and the encouragement and improvement of the service quality provided by the different units in the hospital structure. Hospitals are the most important component of healthcare sectors so improving the quality of the health service provided by them is very important to health improvement which has a high influence on the country's economy. Hospitals constitute the highest percentage of the health sector which is why

improvement in the quality of hospital care is fundamental and directly linked to the service delivery dimension of the World Health Organization (WHO) building blocks of a health system (Zahirah, et al, 2015). Therefore, to achieve health progress in Palestinian hospitals, providers should establish a new national strategy to control healthcare centers in order to improve their quality. Worldwide, they have started to publish performance reports as a tool to improve hospitals' quality, this strategy is still not applicable in Palestine so this research is useful to healthcare providers if they decide to use this strategy to improve the quality of Palestinian hospitals by investigating the main research question.

### **1.8. The Limitation of the Research**

Through the research process, the researcher faced a variety of obstacles and limitations preventing them from getting valuable information, which lead to bias, no response, and inaccuracy which affected the reliability of the research findings.

- 1- Some hospitals refused to participate in the research
- 2- The ministry of health refused to make any comparison between the government hospitals and other hospitals, but allowed giving general results.
- 3- The scarcity in the researches related to the publicizing of hospital performance reports in the Middle East.
- 4- The lack of quantitative research about the publicizing hospital performance report and quality improvement.
- 5- Some hospitals took a long time to give permission for distributing the questionnaires.



## **1.9 Research Methodology**

The researcher wanted to find an answer regarding the perception of healthcare providers towards the effect of publishing hospital performance reports on quality improvement.

The research is a quantitative descriptive research using an exploratory approach to assess the relation between publishing the hospital performance reports and its effect on quality improvement from the perspective of healthcare providers.

The subject of the research included the first line managers of the health services departments, quality officers, and quality managers in all hospitals under the supervision of the Palestinian Ministry of Health whether governmental, private and nonprofit hospitals in the West Bank. Two cities were selected randomly to answer the questionnaire regarding the research, Hebron and Ramallah.

## **1.10 Literature Review**

The researcher conducted a literature review, which is shown in a separate chapter titled; Chapter Two: Literature review.

## **1.11 Summary**

This chapter provides an overview about the research, the way it was conducted, the problem statement that described the situation which derived this research, then the research question, main three hypothesis, objectives, importance, significance, limitations and research methodology.

## **Chapter Two**

### **Theoretical Framework and Literature Review**

#### **2.1 Theoretical Framework**

##### **2.1.1 Introduction**

Many studies were conducted in the world to understand the effects of publicizing hospital performance reports on quality improvement. From this we can say that quality improvement in the health field is not a new area of concern, so the purpose of this literature review is to explore the existing knowledge about publicizing hospital performance reports and their influence on quality improvement, and to identify the knowledge gap in this area.

In relation to the topic; this chapter presents the reviewed study including history of quality improvement, quality improvement in the health sector and the history of measuring and reporting performance. The second part of this chapter discusses hospital performance and measurement which includes: definition of hospital performance and measurement and the components of performance reporting. The third part discusses the topic of publicizing hospital performance reports which involves: publishing hospital performance and quality improvement, transparency and hospital performance reporting, Key Performance Indicators (KPIs) in the health sector and classification of KPIs.

### **2.1.2 Part one: Historical Part.**

#### **2.1.2.1 History of Quality Improvement.**

Contrary to what people might think, the healthcare industry is not the field in which the idea of quality improvement first originated. In fact, many quality improvement techniques have evolved in the manufacturing industry and have been widely used in the healthcare systems. Through the 1920s and especially with the increased demand for manufactories, efforts were enhanced to critically improve the quality of final products (Handfield, 1989). By 1924, the first known control chart had been created by Shewhart, which later became known as the Shewhart Cycle. The Shewhart Cycle successfully engaged quality improvement and statistical processes to correctly control and continue the improvement techniques in businesses, which led to better control of how the very last products had been fabricated (Best,2006). The Shewhart Cycle contains four main points: Plan, Do, Check/Research, and Act. In addition, it is used continuously to improve processing to the final product. Each step is related and based on the previous step, and one can't move to the following step without completing the preceding one (Tague, 2004).

Later to that, Edward Deming came to expand Shewhart's work; through introducing the quality development efforts to the front line of the business world. At the time of the 1940s, through which the Japanese financial system had deteriorated, when they were recuperating from World War II, Deming was asked to help the Japanese in businesses and teach them about quality improvement (Handfield,1989). Deming's "14 Points of Management" have introduced that the environment in which one works must uphold the concept of continuous improvement not only for individual benefit but also for organizations as a whole (Gupta, 2006). Deming's principles have proven that

employees from different areas of an organization (e.g., those who are "knee deep in what is occurring") should be enwrapped in quality improvement efforts and not only the organization leadership (Lynn & Osborn, 1991). With Deming's vision, and as noticed during the 20<sup>th</sup> century, the Japanese companies succeeded in taking the steering wheel and became leaders in numerous industries that has been capable of producing better quality products at a much lower cost (Gupta, 2006). However, it was not until the early 1980's that the United States healthcare industry started to construct quality improvement steps, which has begun years before within the production industry (Lynn & Osborn, 1991).

#### **2.1.2.2 Quality Improvement in Health Sector.**

The improvement of quality in healthcare probably started along with medicine itself. Historically, physicians have always aimed to develop care and treatment techniques for better and safer outcomes. However, these efforts were only focused on by physicians but not by other medical and healthcare providers such as nursing staff or any organizational processes (Laffel & Blumenthal, 1989).

In the 1980s, the ideas of quality improvement were closely emphasized in the healthcare industry. Nevertheless, it worth mentioning that efforts to enhance and develop the quality of care for patients had, in fact, already been in existence. Even earlier than Shewhart, Deming and Juran, and others within the healthcare industry started to look at and analyze approaches of making sure that patients have been treated correctly; and so the healthcare of patients was improved. Through that time, several pioneers made up the history of healthcare improvements; in 1847, the Hungarian physician Ignaz Semmelweis connected the

importance of hygiene with childbirth. A few years later, Florence Nightingale improved hygiene techniques throughout the Crimean war. She was known to be the first nurse to introduce measurements and data to enhance healthcare (Hamrin & Halldrsdttir, 1997). In the early 20<sup>th</sup> century the doctor Ernest Amory Codman started to follow up results and outcomes so as to apply measurements for improvement, thus, he developed performance measurements (Mainz & Bartels, 2006). In 1910, Ernest Codman led the concept of improving hospital care by following up on patients to ensure effective treatments. In addition, Codman's ideas led to improving the care provided within hospitals by constructing the foundation for the American University of Surgeons to develop a "minimal standard" of care.

In addition, Avedis Donabedian, a physician and professor of public health at the University of Michigan, United States, was a pioneer in the development of healthcare quality improvement. In the 1960s, he developed a model for Quality Assurance (QA), consisting of seven parameters. This model characterizes quality in health care, which he described as the product of the combination between science and technology with their application in practice. The seven parameters are (Donabedian, 2003):

- 1) Efficacy, how to use best practice to improve
- 2) Effectiveness, to what extent improvements are reached
- 3) Efficiency, how to improve cost-effectiveness, or work smarter
- 4) Optimality, the balance between improvements and cost-effectiveness
- 5) Acceptability, how healthcare lives up to customer expectations
- 6) Legitimacy, relations to society and regulations
- 7) Equity, which is a principle about equal and fair healthcare

Following these efforts, and approximately 40 years later, the Joint Commission on accreditation of healthcare organizations, now known as the international Joint Commission accreditation (JCIA) came out. This group is responsible for implementing and advocating quality programs not only at the organizational level but also for the entire healthcare system (Luce, Bindman, & Lee, 1994).

After that, and due to the rising need for change, there were some different improvement initiatives going on, at least in Western countries that designed specific studies to investigate the implementation of quality improvement strategies in Europe. Moreover, they found that all participating countries used different strategies. The research investigated four sections of quality improvement strategies. The first part focused on general hospital level, including quality improvement policies at a hospital-wide level, procedures, structures and activities, and the organizational (governance) structure. The other three parts were about quality management for specific medical conditions. External quality standards, commonly ISO (International Organization for Standardization), were applied the most but patient-related activities were least often implemented (Lombarts et al., 2009).

### **2.1.2.3 History of Measuring and Reporting Performance.**

In 1966, Dr. Avedis Donabedian, doctor and founding father of the research of quality in health care and medical outcomes studies published “Evaluating the quality of medical care” (Donabedian, 1966), a replicable and highly beneficial model that is based upon the factors of structure, process, and outcomes to have a look at the quality of care delivered. While applied to orthopedics, the Donabedian model indicates that care structures and care processes can contribute to patient outcomes. This also includes

scientific endpoints, which include functional status, pain, complications, morbidity, and mortality, in addition to patient based experiences and utilization of sources. This model presents a foundation for the current methods used to evaluate healthcare quality (Auerbach, 2009).

Shortly after Dr. Donabedian's transformative contribution to the sector of healthcare quality, The National Academies of science established the Institute of Medicine (IOM) in 1970, which has since released numerous concerted efforts targeted on evaluating, informing, and improving the quality of healthcare delivered (Institute of Medicine of the National Academies, 2012). In 1989, the agency for health Care policy and research—Agency for Healthcare Research and Quality (AHRQ)—was created (AHRQ, 2012). AHRQ replaced the national center for health services research and was created by Congress in response to newly reported information that revealed wide geographic variations in practice patterns without supporting clinical evidence, and with reports of misuse and overuse of procedural treatments (Steinwach & Hughes, 2008). These findings helped drive Congressional prioritization of this research program, with a focus on investing in clinical effectiveness, treatment outcomes, and practice guidelines (Center for Medicare and Medicaid Services, 2010).

In 1990, the National Committee for Quality Assurance (NCQA) was established with an objective of improving health care quality. NCQA manages accreditation programs for individual physicians, health plans, and medical groups. It uses the administration and submission of the Healthcare Effectiveness Data and Information Set (HEDIS) and the Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey to measure accreditation performance (Bennett, 1998).

Throughout the past 2 decades, an increase in quality improvement activities have been slow but steady throughout the healthcare sector, possibly motivated by the market and regulatory pressures that inspire health delivery plans, employer and consumer involvement, and public reporting of performance data. A structured approach to quality improvement using set up guidelines of engagement have demonstrated utility in lots of conditions common to medical care, which includes standardization of care, enhancement of patient safety, control of chronic disease and preventive care (Varkey, Reller, & Resar, 2007).

Over the last 20 years, the United States has witnessed a shift from little conveniently available data about the overall performance of the healthcare system to the use of a wide variety of measures in different approaches by multiple entities (Cronin, Damberg and &, 2011). The explosion of overall performance measures and the public reporting of performance have served essential functions in elevating attention of deficits in quality and stimulating efforts to close measured gaps (O'Neil Schurrer, & Simon, 2010).

The association of American hospitals, the American Hospitals Federation, and the American medical colleges association initiated the Hospital Quality Alliance (HQA) in December 2002. HQA was a collaboration of national public and private sectors to encourage hospitals to gather and report information regarding the quality of care on voluntary basis. The 2003 hospital Inpatient Quality Reporting (IQR) program was supposed to provide clients with healthcare quality information that assists in making knowledgeable decisions regarding their healthcare. It was additionally intended to guide hospitals and providers in the direction of improving the quality of inpatient care



introduced to patients via the incentive of a higher annual update to their payment charges ( Marjoua & Bozic, 2012).

### **2.1.3 Part two: Hospital Performance and Measurement.**

#### **2.1.3.1 Definition of Hospital Performance and Measurement:**

Hospital overall performance can be defined according to the fulfillment of specified goals, either clinical or administrative (World Health Organization (WHO), 1994). According to the WHO report (2003), “performance” should be described concerning specific goals reflecting the values of various stakeholders (which include patients, professions, insurers, regulators). In fact, however, very few performance measurement systems focusing on health results were valued by customers. “Measurement” implies objective assessment about the area that need to be assessed without given interpretation or judgment of values or quality; interpretation of the data may be introduced via those who later present them. Overall performance measurement seeks to monitor, evaluate and communicate the extent to which diverse elements of the health system meet their key targets (Smith, Elias, & Irene, 2008).

Ultimately, the purpose of health care is better health; however, there are many intermediate measures of both system and outcome. Goals may also relate to traditional clinic functions, along with diagnosis, treatment, care and rehabilitation as well as to teaching and research. However, both the definition and the functions of hospitals are converting; as emphasis shifts from inpatient care to ambulatory care, community outreach programs and health care networks (McKee & Healy, 2002). Hospital overall performance may consequently be anticipated to include elements of community care and public health, in addition to social and employment functions. (Onyebuchi, Arah, &

Klazinga, 2003). In general, overall performance measurement seeks to monitor, examine, and communicate the extent to which various elements of the health system meet their key targets. Commonly, those objectives may be summarized under a limited number of headings – as an example, health conferred on people via the health system, its responsiveness to public preferences, the financial protection it offers and its productivity (Smith , Elias & Irene, 2008).

#### **2.1.3.2 Measuring Performance and the Components of Performance Reporting:**

How can we measure the performance of different health systems, and how are we able to use such data to assist ongoing health systems improvement?

Encouraging the healthcare sector towards improving their overall performance became one of the most interesting aspects for health policy makers, and the interest is growing in finding methods for enforcing the healthcare provider to improve his/her performance by measured performance against efficiency, effectiveness, or equity goals. Enhancing overall performance has the potential to reduce the tensions between rising needs and restricted sources. There is additionally a growing demand for accountability among those who fund and those who provide health services. According to the WHO (2003), standardized surveys of patients and relatives can reliably measure hospital overall performance against explicit standards at a national level. Hospital performance is turning a greater focus on health education, patient empowerment, comfort, complaint mechanisms, and continuity of care. A few governmental organizations and intergovernmental sectors are looking for increasing patients' awareness and protecting their rights by publishing patients' rights charters and legislation to protect patients'

rights. Therefore, consumer surveys assessing the experience of health care and outcomes as perceived by patients and their families carry added weight.

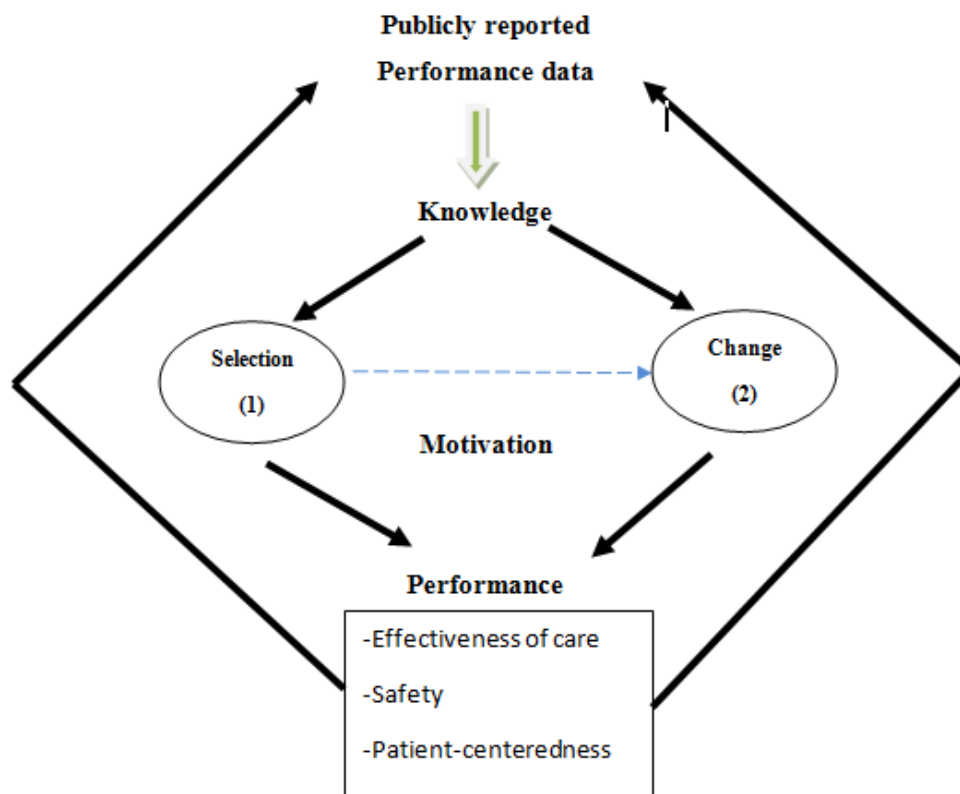
Healthcare organizations and providers often invest time and energy to enhance their performance on reported measures and we should make sure that they are acting on valid information (Marshall & Davies, 2001). That holds true for all styles of measures—measures of outcomes (each clinically oriented and patient defined), quality, safety, and costs. The accurate measurement and reporting of healthcare system performance are important for all stakeholders. Patients, clinicians, payers and purchasers need measures of absolute and relative performance to facilitate the knowledgeable desire of providers, innovative gain designs and provider networks and alternative payment methods that support great improvement and more affordability (Damberg, Shaw, Teleki, Hiatt, & Asch, 2011).

#### **2.1.4 Part three: Publicizing Hospital Performance Reports:**

##### **2.1.4.1 Publishing Hospital Performance and Quality Improvement:**

According to Berwick, James and Coye (2003), the placement of data in the public domain, in order to tell the public and other stakeholders about consumer and provider overall performance, is growing. This data often takes the shape of report cards or provider profiles that summarizes measures, consisting of waiting times, patient satisfaction scores and mortality rates, throughout providers. Two broad objectives lie at the back of the general public disclosure of information: first, to stimulate quality improvement and, second, to enhance the more standard accountability of health system organizations and practitioners to the public who fund and use them. Public reporting can improve quality through pathways, as illustrated in figure (2.1): (1) an expansion

pathway, whereby consumers become better informed and choose providers of higher quality; (2) a change pathway, whereby information facilitates providers to become aware of the areas of underperformance thus acting as a stimulus for improvement.



**Figure (2.1): Pathway for Improving Performance by Published Report**

Source: update from Berwick DM, James B, Coye MJ. (2003).pg(32)

Barr et al. (2006) conducted a study about using public reports of patient satisfaction for hospital quality Improvement in America. The aim of his study was to discover the impact of statewide public reporting of hospital patient satisfaction on hospital quality improvement (QI). Public reporting of comparative data on patient views can enhance and reinforce quality improvement efforts in hospitals. The participation of key stakeholders facilitated the successful implementation of statewide public reporting. A

recent assessment discovered that, among low scoring hospitals, those involved in public reporting were significantly much more likely to report development activities in areas included in the public report than those who were not involved in the reporting (Hibbard, Stockard, & Tusler 2003). An important use of performance measurement is to provide feedback to medical practitioners on their actions, and the way these compare to those of their peers. Overall performance measurement systems should be monitored frequently to ensure alignment with different health system mechanisms and to identify areas for improvement (Smith, Elias & Irene, 2008).

According to Hibbard, Stockard and Tusler (2003), there is a strong evidence that making overall performance data public stimulates quality improvement within the areas where overall performance is reported to be low. Since quality improvement efforts among the public-report hospitals look like significantly more than in hospitals given only private reports, there is a benefit to creating overall performance information public.

#### **2.1.4.2 Transparency, and Hospital Performance Reporting.**

According to Hafner et al. (2011), public reporting of overall performance measure data appears to encourage and energize organizations to improve, or keep, high levels of performance. Despite usually cited concerns over the constraints, validity and interpretability of publicly reported information, the heightened awareness of the data intensified the point of interest in overall performance development activities. Experts in healthcare sectors answered about how the healthcare sector moved to extra transparency and accountability. The answer was by re-prioritizing quality improvement efforts to address newly exposed gaps in care

Transparent reporting of the overall performance of the healthcare system is often promoted as a key tool for enhancing the cost of healthcare by improving quality and decreasing costs; although the evidence of its effectiveness in achieving better quality or lower cost is mixed (Austin & Pronovost, 2016). Transparency can improve value by using key pathways to improve their overall performance and inform consumer choice (Berwick, James & coye, 2003). Through engaging healthcare providers, transparency can improve the quality of efforts made by physicians and nurses through stimulating competition among them and other colleagues in their organizations (Lamb, Smith, Weeks, & Queram, 2013). With respect to informing consumer choice, public reporting can provide patients, payers and purchasers with information about overall performance, and enable preferential selection of higher-quality providers, lower-cost providers or providers that demonstrate both characteristics. Although the potential for informing client choice exists, there is restrained evidence to assist a concept that clients are using public reports of their current form to make better selections (Faber, Bosch, Wollersheim, Leatherman, & Grol, 2009).

With the transparency of performance outcomes, markets can work more effectively. This enables higher-quality providers to attract greater market share, assuming that the incremental revenue gained from extra market share is financially beneficial to them. Physicians and hospitals need measures to make treatment choices and to identify strengths and weaknesses in order to focus their quality-improvement and performance improvement activities and monitor progress (Berenson & Rice, 2015). Transparency of overall performance facilitates identification of exemplary performers who might, in turn, be emulated by others (Dixon, McNicol, & Martin, 2011).

### **2.1.5 Key Performance Indicators.**

#### **2.1.5.1 Key Performance Indicators (KPIs) in the Health Sectors.**

When hospitals want to track their operational effectiveness beyond any doubt, they turn to key performance indicators (KPIs). Key performance indicators for hospitals aim to evaluate their workflows in the hope of making improvements. KPIs are essential for operation management and continuous improvement (CI). They are described as a set of metrics to reflect operation performance, such as: efficiency, throughput and availability, from productiveness, quality, and maintenance perspectives. Through continuous monitoring and measurement of KPIs, meaningful quantification and identification of various factors of operation activities may be received (Kanga, Kang, Zhao, Li, & Horst, 2016). As Investopedia writes; KPIs are used by the organization in order to determine progress in achieving its strategic and operational goals, and to compare the finances and performance within its industry against other businesses. According to Anderson (2017), KPIs hold great energy and insight for hospitals that could figure out a workable method for analyzing overall performance data and setting benchmarks. Without order, KPIs never evolve from being rows of numbers in spreadsheets. KPIs are useful in assessing operations and setting goals, however, they must meet fixed standards to be clearly useful for organizations. According to Kuhfahl, et al. (2018) KPIs additionally provide a disciplined mechanism to periodically investigate the overall performance of organizations on a daily, weekly, monthly, quarterly and annual basis. Effective KPIs need to be described in a way that is understandable, meaningful, and measurable. This can be illustrated in what is known as SMART criteria which include these key components:

- Specific - KPIs have a specific purpose for the business.

- Measurable - KPIs must be measurable.
- Achievable - KPIs must include achievable goals.
- Relevant - KPIs should include relevant measures that align with the success of the employer.
- Time phase - KPI objectives should be measured based on predefined, relevant and specific time intervals which might be vital to meet organizational goals.

KPIs have been developed by many healthcare organizations for monitoring, measuring and managing the overall performance of healthcare systems in order to ensure effectiveness, efficiency, equity and quality of services. KPIs do not depend on easily, simply, or passively picked up and collected data and facts. They can only be understood and measured through an underlying conceptual framework, which defines relevant facts. Healthcare systems are expected to achieve and manage the outcomes in line with their established objectives and quality standards (Onyebuchi, Arah, & Klazinga, 2003). Although the managers in healthcare sectors are aware of the importance of using measures in monitoring and improving performance, they still do not use the measurements as an extremely important part of their strategies and tactics. Some healthcare managers continue to use the same old or short-term indicators they have used for years and use them with the experience and skills of introducing new strategies and innovating new operating processes to achieve breakthrough performance. But if they truly need to reflect the actual performance of healthcare organizations, it is very essential to develop strategic key performance indicators (Kaplan & Norton, 1995).

Hospitals monitor and evaluate performance against benchmark standards and explain how improvements are being made over time by using KPIs. Also, they tend to



compare the results with approved standards or against other similar comparable organizations. This assist hospitals to test if the performance is reaching the desired level and to spot the area that needs improvement (Hwang et al., 2011).

#### **2.1.5.2 Classification of Key Performance Indicators (KPI)**

According to Eckerson (2009), KPIs are classified according to the three levels of performance as: operational, tactical and strategic indicators. In addition, objectives, methods of measurement and expected outcomes differ depending on each category. High quality healthcare, according to the Institute of Medicine, is defined as the provision of proper healthcare services in a technical professional manner, good communication shared decision-making, and consistent with patient values and preferences. Though optimizing the structure, process and outcomes, it is crucial to achieve high quality healthcare services (Wolfe,2001). According to Donabedian, KPIs can be classified differently by being related to the three components of the healthcare system conceptual model. The Donabedian conceptual modal, that aims to evaluate healthcare services and quality of care, divides the KPIs into three sections. First, structures that describes the context in which the health service is delivered including staff, hospital buildings, equipment. and financing. Second, processes which include all transaction -the moment of truth- between the patient and the healthcare providers throughout the delivery of health services. Third, outcomes which illustrate the effects of healthcare services on the health status of the patients (Gilbert,2014).

According to the Institute of Medicine, KPIs are also classified according to the different main six elements; safety, effectiveness, efficiency, timeliness, patient centeredness and equity (Porter,2010). Safety indicators should measure the degree of

how much any healthcare procedure or intervention is safe and/or harmful to the patient and/or for the staff and involves the sentinel event and infection control (Shojania,2001). Effectiveness indicators should measure the capability of the service to achieve the intended goals and produce the desired results. Efficiency indicators should measure how much the resources of healthcare, such as time, effort or money, are utilized in order to achieve the intended tasks or purposes (Grimshaw et al., 2010). Patient-centeredness indicators measure the satisfaction of the patient and how much the systems succeed or fail in meeting patient needs. According to the institution of medicine, there are six dimensions of patient-centered care. The first one is respect to the patient needs, values and preferences, the second one is coordination and integration, the third one provides information, education, and communication, the fourth one provide emotional support, the fifth one provide physical comfort and the sixth one involve family and friends in the treatment plan (Wolfe,2001). Timeliness indicators should measure the degree of providing the health services for patients at the most necessary times; through decreasing waiting times and reducing the time waste in accordance with patient perception of promptness. Equity indicators should ensure providing high quality services for all individuals and reducing inequality among patient subgroups and guarantee that the healthcare services are delivered regardless of age, gender, race, ethnicity, education, disability, sexual orientation, income or place of residence (Brilli, Allen, & Davis, 2014).

Khalifa & Khalid (2015) From King Faisal Specialist Hospital & Research Center, Saudi Arabia, conducted a qualitative research in a Tertiary Care Hospital about developing strategic healthcare KPIs. The aim of the Research is to develop and utilize a group of strategic KPIs to monitor, measure and improve the performance of

the hospital including different departments and services. These KPIs help the managers at all levels to make decisions based on available evidence in order to highlight performance gaps and improve deficiencies. KPIs can be classified differently in accordance with healthcare performance and can be related to the three components of the healthcare system. The researchers suggested a model of KPIs classified into different levels, dimensions and system components as illustrated in figure 2.

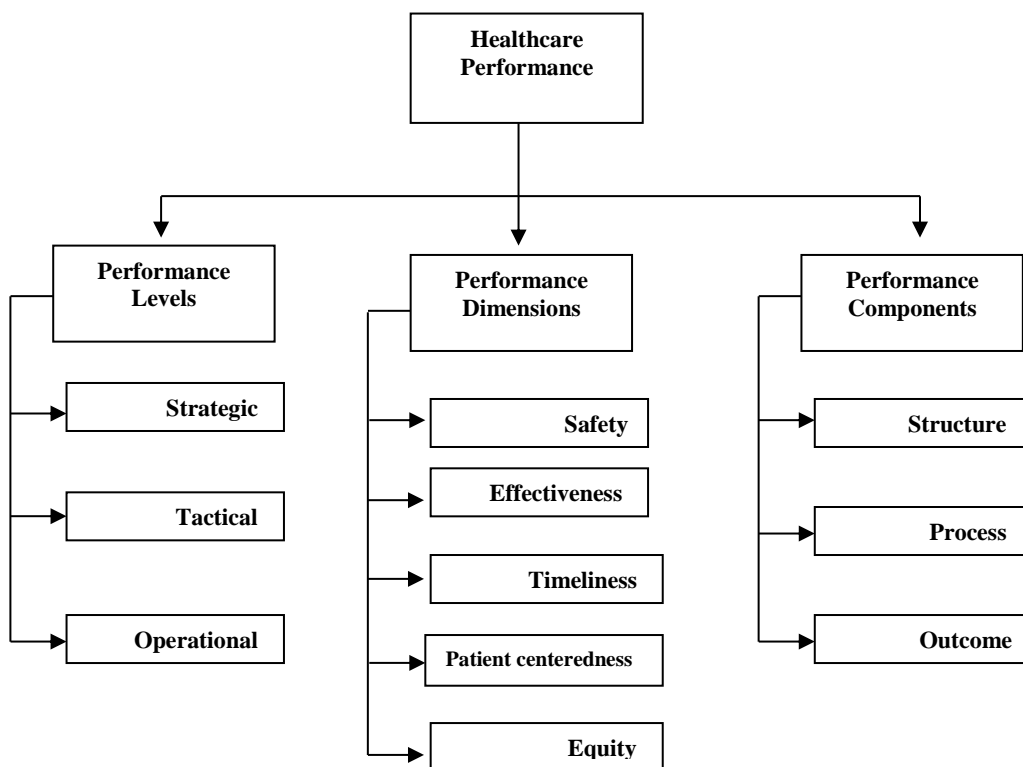


Figure (2.2) Healthcare Key Performance Indicators: What Can They Measure?

Sours: (Khalifa, M., & Khalid, P. 2015).

According to this Research, fifty-eight KPIs could be identified, standardized and validated against published research and through comparisons with internationally recognized hospitals. These indicators were arranged in ten categories (Table 2.1); each

category reflects its own performance objective that helps in improving the performance of hospitals and services. Detailed KPIs are shown in table 2.2

**Table 2.1 The Ten Categories of Suggested Key Performance Indicators.**

	<b>KPIs Categories</b>	<b>Value</b>
<b>A</b>	Patient Access Indicators	Reflect accessibility of healthcare services
<b>B</b>	Inpatient Utilization Indicators	Reflect inpatient performance
<b>C</b>	Outpatient Utilization Indicators	Reflect outpatient performance
<b>D</b>	OR Utilization Indicators	Reflect utilization and performance of operation room
<b>E</b>	ER Utilization Indicators	Reflect utilization and performance of emergency room
<b>F</b>	Generic Utilization Indicators	Reflect some major services performance
<b>G</b>	Patient Safety Indicators	Reflect of safety of diagnosis, treatment, and procedures
<b>H</b>	Infection Control Indicators	Reflect quality of care
<b>I</b>	Documentation Compliance Indicators	Reflect compliance with documentation policies
<b>J</b>	Patient Satisfaction Indicators	Reflect patient centeredness

**Table 2.2. Detailed Selected KPIs Sorted into the Ten Categories**

	<b>Indicator</b>	<b>Indicator (Reported on Monthly Basis)</b>
A	Patient Access Indicators	1- Number of Patients Referred
		2- Number of Patients Accepted
		3- Percentage of Patients Accepted
		4- Number of Patients on Waiting List for Admission
B	Inpatient Utilization Indicators	1- Number of Beds
		2- Number of Admissions
		3- Number of Discharges
		4- Average Daily Census
		5- Total Inpatient Days
		6- Average Length of Stay
		7- Average Bed Occupancy Rate
		8- Bed Turnover Rate
		9- Number of Patients with LOS > 30 Days
		10- Number of Patients with LOS > 60 Days
		11- Number of Patients with LOS > 90 Days
		12- Number of ICU Beds
		13- Average ICU Bed Occupancy Rate
		14- Average ICU Length of Stay
		15- Number of Patients Transferred to HHC (Home Health Care)
		16- Number of Deaths
		17- Mortality Rate
C	Outpatient Utilization Indicators	1- Total Number of Outpatient Clinic Visits
		2- Average First Available > 30 Days for New Patients
		3- Patient Seen - New Patients
		4- Patient Seen - Follow Up
		5- Patient Seen - New Follow Up
		6- Number of No Show Patients
		7- Percentage of No Show Patients
D	OR Utilization Indicators	1- Number of OR Cases Booked
		2- Number of OR Cases Performed
		3- Number of OR Cases Cancelled

		4- Percentage of OR Cancellation Rate
		5- Number of OR Cases Done in Day Procedure Unit
		6- OR Utilization Rate
		7- Percentage of OR Cases Done in Day Procedure Unit
		8- Number of Cardiac Surgeries
		9- Number of Renal Transplants
		10- Number of BMT Cases – Adults
		11- Number of BMT Cases – Pediatrics
E	ER Utilization Indicators	1- Total Number of ER Visits
		2- ER Waiting Time (Door to Doctor)
		3- ER Treatment Time (Doctor to Disposition)
		4- ER Admission Waiting Time (Boarding Time)
		5- Percentage of Patients LWBS
F	Generic Utilization Indicators	1- Total Radiological Procedures 2 3
		2- Total Prescriptions
		3- Total Lab Investigations
G	Patient Safety Indicators	1- Unplanned Readmission within 30 Days of Discharge
		2- Unplanned Transfer to Any Critical Unit/OR
		3- Cardiac or Respiratory Arrest.
		4- Bleeding Requiring Transfusion/Exploration
H	Infection Control Indicators	1- Blood Stream Infection
		2- Catheter Related Infection
		3- Wound Infection within 30 Days of Surgery
I	Documentation Compliance Indicators	1- Number of Deficient Records (less than 30 days)
		2- Number of Delinquent Records (more than 30 days)
J	Patient Satisfaction Indicators	1- Inpatient Satisfaction Rate
		2- Outpatient Satisfaction Rate

Abbreviations: LWBS= Left Without Being Seen/ LOS= length of stay. / ER= emergency room/ OR= operation room/ ICU= intensive care unit / BMT= bone marrow transplant

Many of these indicators are already in use by the healthcare organizations and hospitals individually. It is not important how, but why we measure these indicators in order to investigate deficiencies and suggest ways of improvement. These indicators

should be valid and reliable, and triggers should be set before they became fully comprehensive. Triggers indicate alarming values which the KPIs shouldn't exceed; whether these are upper limit triggers, such as blood stream infection rates which we do not want to increase, or lower limit triggers, such as patient satisfaction indicators which we do not want to decrease, or both, an upper and a lower limit, such as occupancy rates which we need to keep within a certain range (Khalifa & Khalid, 2015).

Si, You, Liu, & Huang (2017) conducted a research to identify KPIs for Holistic Hospital Management; they summarized the KPIs used in their research to assess hospital performances as in Table 2.3.

Zahirah et al. (2015) conducted a study that involved the national system for monitoring the performance of hospitals in Ethiopia. Six months of research and negotiation resulted in the establishment of 36 national indicators for the assessment of hospital performance. Indicators measured 11 aspects of hospital operations: management of the hospital, outpatient, emergency, inpatient, maternity, patient's referral, and services of pharmacy, productivity, human resources, finance aspects and patient experience (Table 2.3).

**Table 2.3. Performance indicators frequently used in previous studies.**

<b>Perspective</b>	<b>Measure</b>	<b>Indicator</b>
<b>Patient</b>	Patient stisfaction	Overall satisfaction (p1)
	Patient complaints	Overall complaints (p2)
	Patient Safety	Incidents / Errors (p3)
		Accidents / Adverse events (p4)
		Nosocomial infection (p5)
	Waiting / Delay	Waiting time (p6)
<b>Employee</b>	Employee satisfaction	Overall satisfaction (E1)
	Occupational health	Sickness leave (E2)
	Work conditions	Staff turnover (E3)
<b>Management</b>	Health statistics	Mortality/Death (M1)
		Number of operations/ procedures (M2)
	Readmission/return	Unscheduled readmission/return (M3)
	Organizational efficiency	Length of stay (M4)
		Bed occupancy (M5)
	Financial effectiveness	Financial measures (M6)

Source: Si, S., You, X., Liu, H., & Huang, J. (2017). International Journal of Environmental Research And Public Health



**Table 2.4. National summary data on 36 key performance indicators for 121 government hospitals, Ethiopia, 2013.**

Category	Indicators
<b>Hospital management</b>	KPI 1 Proportion of EHRIG operational standards met
<b>Outpatient services</b>	KPI 2 Outpatient attendees
	KPI 3 Outpatient attendees seen by private-wing service
	KPI 4 Outpatient waiting time to treatment
	KPI 5 Outpatients not seen on same day
<b>Emergency services</b>	KPI 6 ED attendees
	KPI 7 ED patients triaged within 5 minutes of arrival at ED
	KPI 8 ED attendances with stay longer than 24 hours
	KPI 9 ED mortality
<b>Inpatient services</b>	KPI 10 Inpatient admissions
	KPI 11 Inpatient admissions to private wing
	KPI 12 Inpatient mortality
	KPI 13 Delay for elective surgical admission
	KPI 14 Bed occupancy
	KPI 15 Mean length of stay
	KPI 16 Incidence of pressure ulcer
	KPI 17 Percentage of surgical sites infected
<b>Maternity services</b>	KPI 18 Completeness of inpatient medical records
	KPI 19 Deliveries – i.e. live births and stillbirths – attended
	KPI 20 Births by surgical, instrumental or assisted vaginal delivery
	KPI 21 Institutional maternal mortality
<b>Referral services</b>	KPI 22 Institutional neonatal deaths within 24 hours of birth
	KPI 23 Referrals made
	KPI 24 Rate of referrals
<b>Pharmacy services</b>	KPI 25 Emergency referrals, as a proportion of all referrals made
	KPI 26 Mean stock-out duration of hospital-specific tracer drug
<b>Productivity</b>	KPI 27 Patient-day equivalents per physician
	KPI 28 Patient-day equivalents per nurse or midwife
	KPI 29 Major surgeries per surgeon
	KPI 30 Major surgeries conducted in private wing
<b>Human resources</b>	KPI 31 Attrition rate among physicians
	KPI 32 Staff experience, as a staff satisfaction rating
<b>Finance</b>	KPI 33 Cost per patient-day equivalent
	KPI 34 Raised revenue, as a proportion of total operating revenue
	KPI 35 Revenue utilization – i.e. the proportion of budget used
<b>Patient experience</b>	KPI 36 Patient experience, as a patient satisfaction rating

ED: emergency department; EHRIG: Ethiopian hospital reform implementation guidelines; KPI: key performance indicator.

Source: (McCants, Z et al. 2015)

**Summary**

This chapter provided a detailed description of three major points; the first one was related to the historical aspects of quality and quality improvement, the second one was related to the hospital performance and management, while the third point was about publicizing hospital performance and how it affects the two previous points in some detail.

## **Chapter 3**

### **Conceptual Framework**

#### **3.1 Introduction**

A conceptual framework is considered as “a set of broad ideas and principles taken from relevant fields of inquiry and used to structure a subsequent presentation” (Smyth, 2004). A suitable and clearly articulated conceptual framework in research will help the researcher to have a comprehensive meaning to their findings, so it is considered as “a tool to scaffold research”. However, the framework is a tool intended in researching to help the researcher develop the awareness and obtain more understanding of the situation under inquiry, examining, and communication (Smyth, 2004).

#### **3.2 Concepts Definitions**

##### **3.2.1 Service Quality**

Service quality is defined as conformance to operating specification with performance measures such as waiting time, processing time, and the number of errors in transaction used to determine whether the process met these specifications, and to check if the process is in or out of control (Reichheld & Sasser, 1990). Service quality depends on the understanding of the customers' needs and tries to meet or exceed them, in order to satisfy the customers, which equates quality with customer satisfaction, depending on the customer perception and expectation of service transactions (Oliver, 1997).

Quality of care:-

According to Steffen (1988), quality of care is the capability and capacity of the healthcare providers, centers/individuals, and the elements of care, such as process or

structure to achieve medical and nonmedical goals. The goal of the patient care exceeds the medical goal, which means that not all patients' goals are technical or scientific in nature. Non-medical goals such as patient satisfaction and the provider's consistency with patient preferences fit in the definition of quality of care.

Quality of care is the degree to which health services are consistent with current professional knowledge, which increases the likelihood of desired health outcomes for individuals and populations (Institute of Medicine, 1990). According to WHO (2018), quality of care is defined as "the extent to which healthcare services provided to individuals and patient populations improve desired health outcomes." To achieve the desired outcomes, healthcare must be patients-centered, effective, efficient, timely, equitable, and safe.

### **3.2.2 Performance and Performance Measurement (PM)**

Hospital performance is the degree to which hospitals are improving or deteriorating over time, and how they achieve and sustain that improvement. Moreover, they use the quality indicators to measure their performance to compare quality across institutions, and in examining practices and cultures in high-performing hospitals (Alteras, Meyer, & Silow-Carroll, 2007). According to Shaw (2003) performance must be defined in relation to explicit goals reflecting the values of various stakeholders (such as patients, professionals, insurers, regulators).

Performance measurement is a very important concept of quality improvement initiatives; which gives information on the targets of quality improvement and achievement. It also facilitates identifying the area that needs improvement, and adds suggestions for improvement (Hashjin et al., 2014). Another indicator is the quantifiable

indicator used by an organization or business to assess how well it is achieving its desired objectives. This indicator is used in order to get a more objective sense of how this business is operating and requires the weather improvement (business dictionary). According to the Agency for Healthcare Research and Quality (2011), performance measurement is used to assess and compare the quality of healthcare organizations and classify it to the first structural measurement. This gives the customer a good sense of the healthcare providers' capacity, system, and process to deliver high quality of care. Second are process measures which indicate what a provider does to maintain or improve health. Third, outcome measures reflect the impact of the healthcare service or intervention on the health status of patients.

### **3.2.3 Publishing Hospital Performance Reports**

According to Cambridge dictionary (2019) publicizing means make information about something generally available. And according to the Joint Commission (2018) they define publicizing hospital performance as giving out information about hospitals' performance regarding the measures and measure sets, including how it performed compared to other accredited hospitals nationwide and statewide, and to be available to various stakeholders such as patients, professions, insurers and regulators.

According to (Hibbard and Sofaer, 2010), public reporting can be broadly defined as giving out information about an organization or an individual to a large audience, which means making the reports about healthcare structure, process or outcome at any provider level (individual clinician, group, organization) publicly available.

In this research, publishing hospital performance reports is defined as disseminating information and hospital performance reports and making them available and accessible

to all people. This means making the information publicly available and easy to reach by anyone (patient, doctors, government, and other hospital) if there is a need to see the performance of any hospital.

### **3.2.4 Key Performance Indicator (KPI)**

KPI is a quantifiable measure used to evaluate the success of an organization or an employee in meeting the objectives for performance (Business dictionary, 2019). A Key Performance Indicator (KPI) is a measurable tool that demonstrates if a company/organization is achieving their objectives affectively. It is used to evaluate their success at reaching target goals (Stedman, 2018). Key performance indicators are also used to present performance periodically, and an organization can use them to gauge its performance over time. These metrics are used to determine a company's progress in achieving its strategic and operational goals and also to compare the company's finances and performance" (Kenton, 2019). A healthcare KPI is a well-defined performance measurement that is used to increase patient satisfaction by monitoring, analyzing and optimizing all relevant healthcare processes then determine the most important KPIs which are average hospital stay, treatment costs, hospital readmission rates, patient Wait Time, Patient Satisfaction, Patient Safety, ER Wait Time, and costs by payer (Datapine.com. 2019).

In this research, KPIs are defined as a measurement tool used to evaluate and display the performance of individuals, departments and the institution in general. The institution can then assess its current performance to identify and strengthen the areas that need improvement in order to improve performance, achieve its objectives, and compare their results with other organizations in the same industry.

### **3.2.5 Quality Improvement**

"After reviewing many articles, the conception of improvement can be defined as achieving better patients' experience and outcomes through using a systemic change method and strategies which changes the provider and organization behavior" (Ovretveit, 2009). According to the Health Resources and Service Administration Institution (HRSA) (2011), Quality Improvement (QI) is defined as systematic and continuous actions that lead to measurable improvement in healthcare services. It is a direct correlation between the level of improved health services and the desired health outcomes to improve the health status of targeted patient groups. Quality Improvement is defined as making the changes that lead to better patients outcomes (health), better system performance (care), and better professional development (learning) by combining and unceasing of healthcare professionals, patients and their families, researchers, payers, planners, and educators (Paul & Davidoff, 2018).

In this research, quality improvement is defined as a continuous action of changes and modifications based on performance data that are present, and the best ways to improve the performance within the institution to be able to provide the best services for all clients at all levels during delivering these services and during any interaction with the customers, on the way to exceed their expectation.

## **3.3 Operational Definition:-**

### **3.3.1 Publishing Hospital Performance Report and Quality Improvement**

The assessment and exploration of Publicizing Hospital Performance Report is applied to make the hospital performance report available to all stakeholders such as patients, professions, insurers, regulators, and its impact on quality improvement. The researcher

created a questionnaire based on the literature review to assess healthcare providers' perception towards the effect of publishing hospital performance on quality improvement.

### **3.3.2 Demographic Factors**

The characteristics of the population that participated in the research included socioeconomic characteristics that are expressed statistically as sex, age, marital status, occupation, education level (business dictionary, 2018).

Independent variables included gender, age, level of education, years of experience, and job title. Statement forms (1) to A (6).

- **Gender:** - male or female
- **Age:-** categorized into three age groups (Less than 25 years ,  
25 – 30, 31-35, 36-40, 41-45, 46-50, more than 50 years )
- **Highest Educational Degree:** - Either diploma, Bachelors, Higher Diploma, Master's degree, and Ph.D.
- **Job Title:-** Either Quality Officer, Quality Manager, Head Nurse, Head of Laboratory, Head of Radiology Department, or other.
- **Duration of Experience:-** categorized into four groups (Below 5yrs, 5 - 10yrs, 11 – 20yrs, more than 20 yrs.)
- **Training related to quality:-** Either yes or no

### **3.3.3 Organizational Factors:**

These are independent variables that included work place, quality training, type of the hospital, and the hospital's quality certificate. Statement forms A (7) to A (10).



- **Type of the hospital:-** Either private, non-profit, or governmental hospital
- **If the hospital you work in has a certificate of quality: -** Yes or No
- **What is/ are the certificate/s?** Either JCIA, ISO, JCIA&ISO, or any other certificate.
- **City: -** Ramallah or Hebron

### 3.3.4 Questionnaire's Structure (Dependent, Moderate and Independent Variables) (4 Domains):-

#### Independent Variable



#### Dependent Variable



#### Moderate Variables

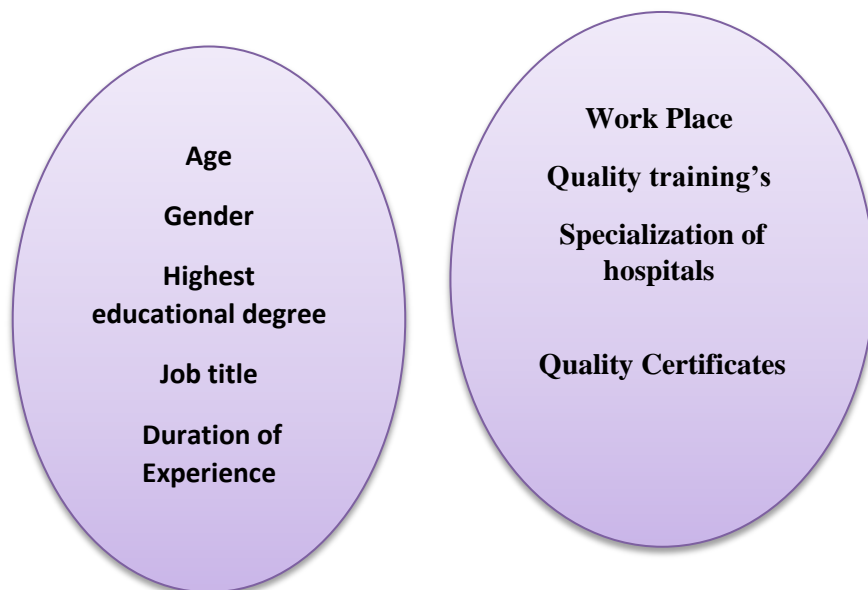


Figure 3.1 Variables Model

#### **3.3.4.1 Assessment for the Current Quality and Reporting System**

Moderate variables include eleven statements from A(1) to A(13) to assess the current quality system, the need for improvement, to assess the role of the Ministry of Health in monitoring the performance of hospitals and the quality of services provided. On the other hand, they are also used to assess if there is a reporting system applied by the hospitals themselves or by a unified system of reporting from the Ministry of Health for all hospitals, plus to assess the availability of these reports for the stakeholders such as patients, professions, insurers, regulators.

According to Davies (2001), a quantitative assessment for existing should be used to check for improvement before using any other quality improvement tool. In this research, the researcher assessed the current reporting system- reporting cards, provider profile, comparative health outcomes, and the availability of the reporting cards to the customer and the consumer reports-, and compared the performance of healthcare providers. According to Dudley, Rittenhouse, and Bae (2002), when creating the hospital report system and make it available to the public they should firstly assess the current quality system and the current reporting system. They conducted a qualitative research and asked the participants about the current quality and if there is need to improve where they asked "Do you currently provide quality information on hospitals or health plans to the consumers you serve?" to check the current reporting system.

#### **3.3.4.2 Publishing Hospital Performance Reports**

Independent variables are twelve statements from B(1) to B(12) conducted to assess from the point of view of the participants the needs for publishing hospitals performance reports, and the need for a unified system for reports to all hospitals by

using the same indicators. The indicators include mortality rates, incidents reports, falling down, infection control indicators, etc., and using special indicators for some hospitals, depending on the service they deliver for the patients, for example, cancer centers use special indicators for cancer treatment, and cardiac centers are the same as they use special indicators, etc., and to assess how we can ensure the validity and reliability of these reports.

According to (Rechel ,2016), in a research about public reporting and quality, three main types of information were found available in the performance report, healthcare outcomes, provider performance, and patients experience where hospitals often use websites for publishing their reports to be available for the people.

#### **3.3.4.3 Quality Improvement**

Quality improvement is a dependent variable which includes eleven statements from C (1) to C (11) to assess how the publishing hospital performance plays a role in quality improvement. Public performance reports improve the quality in two ways, improvement through change and improvement through selection. The first one is achieved through changing the provider's behavior by helping the provider to identify an area that needs improvement (underperformance), and the reporting act as a stimulus for improvement, while the latter provides the users with the knowledge to select their provider according to quality criteria (Berwick, James,& Coye, 2003). According to Lanier and Roland (2003), public performance reports motivated government, healthcare funders, and clinicians to improve professional performance. According to Fung,Lim and Mattke (2008), public reporting of performance data has been suggested to improve the quality of care through two interconnected pathways. First, published

performance reports help patients and general practitioners to select the better performing providers; this motivates and improves healthcare performance. Secondly, comparing performance data with peers which helps the providers to identify the areas that need improvement and implement internal improvement projects. The comparison between peers plays a much greater role in performance improvement because it includes motivating forces such as provider's professional pride, competitiveness, and sensitivity to their reputation among peers (Davies, 2001).

#### **3.3.4.4 Transparency, Responsibility, and Accountability**

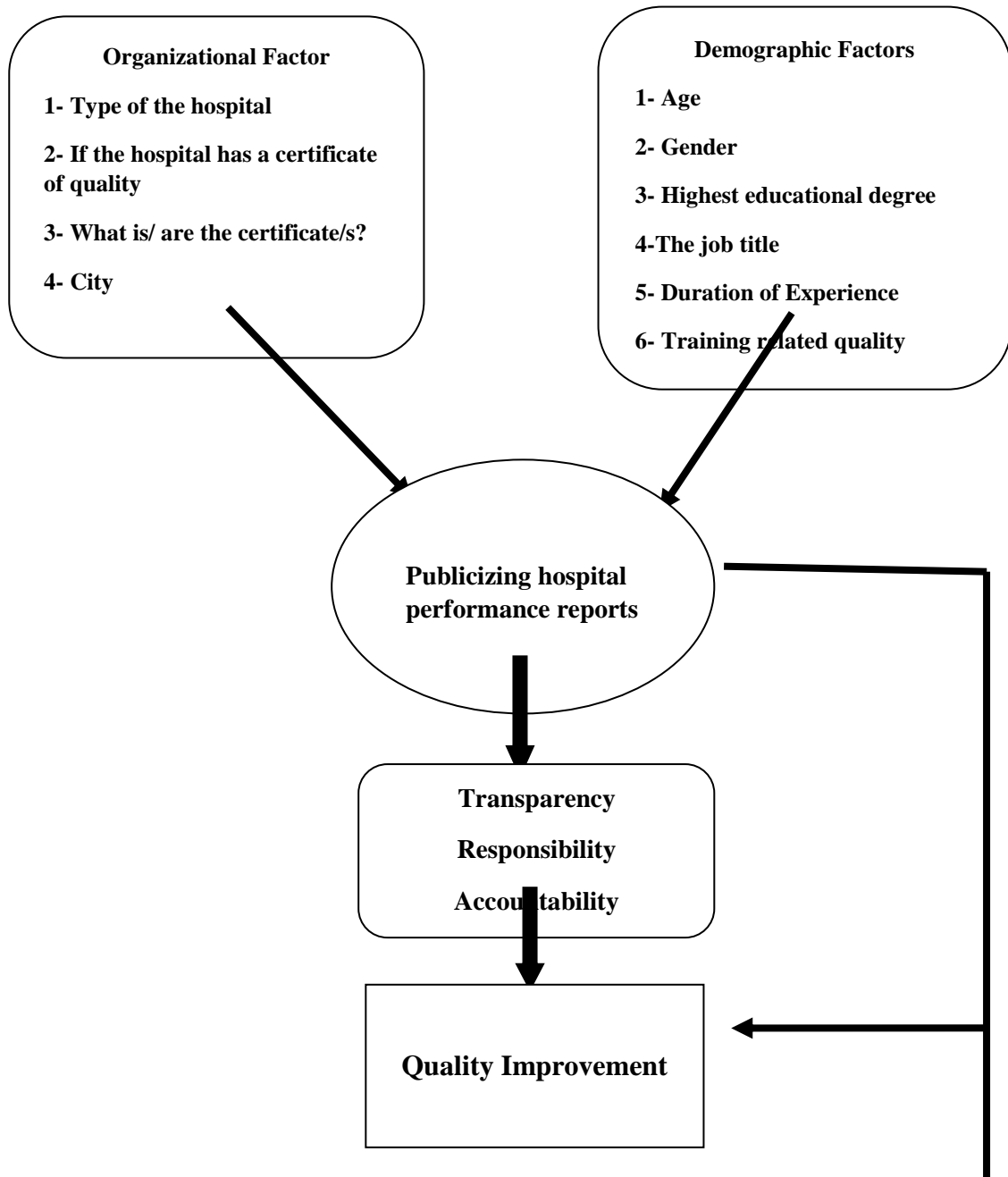
This is also a dependent variable, twelve statements from D (1) to D (12) conducted to assess if publishing hospital performance leads to making the hospital more transparent, responsible, and accountable. According to (Robinowitz and Dudley, 2006), they asserted that public reporting of performance leads to increasing accountability and responsibility. Public performance reports help to improve transparency and accountability, empower the patients to make informed choices, and provide policymakers and party payers with the knowledge needed in their decisions on payment, including rewarding high performers or penalizing low performers (Rechel, 2016). Greater transparency and accountability of the health system and for quality improvement the assessment and publicizing hospital performance reports became increasingly important in many European countries and worldwide (Groene, Skau, & Frolich, 2008).

### **3.4 Conceptual Framework**

The framework was developed based on the literature reviewed. It includes factors related to the demographic data, organizational factors and how these factors affect the perception towards Publicizing hospital performance reports. It also tackles how the performance report can affect the transparency, responsibility and accountability of the hospital, and the impact of these factors on quality improvement. (see figure 3.2)

### **3.5 Summary**

This chapter included the conceptual framework, the conceptual and operational definitions of the dependent and independent variables, and the methods used for measuring the study variables.



**Figure 3.2 Conceptual Framework**

## **Chapter 4**

### **Research Methodology**

#### **4.1 Introduction**

This chapter describes the Research methodology, which includes the Research design, target population, the data collection instrument, and data statistical entry and analysis. Moreover, ethical consideration and a summary of the pilot Research are highlighted.

#### **4.2 Research Method**

To answer the research questions and collect data to analyze them in this Research, a (Quantitative) methodology was employed. For achieving the Research objectives, the researcher following descriptive research by expelitory approaches through obtains data from different sources and makes comparisons between it to reach to the most truly and reliable sources.

#### **4.3 Data allocation Method**

- **First, Secondary Data**

The researcher started collecting data from, Books, research, articles, conference, publication journals, reports, and past researches on the same topic and website, to collecting data about research questions. The results are presented in Chapter 2 of this Research.

- **Second, Primary Data**

The researcher uses different techniques to collect primary data: through design a questionnaire for collecting data through answering some structured questions for research terms and provide the researcher with necessary information related to objectives. After taking the approval from the targeted hospital. The questioner distributed by the researcher on the targeted group after taking the verbal approval to fill out the questionnaire.

The participant was asked to put the filled questioner in a closed envelope and asked them to don't write the name of the participant on it.

#### **4.4 The Research Population**

The Research population consisted of all Quality Managers, Quality Officers and first line Managers of the health services departments, who belongs to (51) Hospitals divided in government, privet, and nonprofit hospitals- in West Bank. Under the supervision of the Palestinian Ministry of Health. As identified in the following Table from (4.1 to 4.11) below related to on each Governorate.

**Table (4.1) The Names of Hospitals in Jerusalem Governorate**

#	Jerusalem Governorate
1	Makassed Islamic Charitable Society Hospital
2	Augusta Victoria Hospital "Insider"
3	Saint Joseph (FR)
4	St. John 's Eyes
5	Dajani Maternity
6	Jerusalem Birth
7	Palestinian Red Crescent Maternity
8	Princess Basma Rehabilitation



**Table (4.2) The Names of Hospitals In Jenin Governorate**

#	Jenin Governorate
1	El Shaheed Hospital Khalil Suleiman Government
2	Razi
3	Healing for the eyes
4	The Evangelist
5	Hope for generation
6	Jordan Field Hospital
7	Avicenna

**Table (4.3) The Names of Hospitals In Tubas Governorate**

#	Tubas Governorate
1	Turkish Tubas Governmental Hospital

**Table (4.4) The Names of Hospitals In Tulkarm Governorate**

#	Tulkarm Governorate
1	El Shaheed Hospital Fixed government constant
2	Red Crescent Society
3	Zakat Hospital (Tulkarm)
4	Saint John Eye Hospital
5	Friends of the patient charity clinic
6	An-Najah National University Hospital (Attil)

**Table (4.5) The Names of Hospitals In Nablus Governorate**

#	Nablus
1	Rafidia Governmental Surgical Hospital
2	National Governmental Hospital
3	Arab Women Union Association Hospital
4	Arab Evangelical Hospital
5	Nablus Specialty Hospital
6	Arab Specialist Hospital
7	An - Najah National University Hospital
8	Hope Rehabilitation Hospital
9	Martyrs Military Medical Complex

**Table (4.6) The Names of Hospitals In Qalqilya Governorate**

#	Qalqilya Governorate
1	UNRWA Hospital
2	Dr. Darwish Nazzal Government

**Table (4.7) The Names of Hospitals In Salfit Governorate**

#	Salfit Governorate
1	Martyr Yasser Arafat Governmental Hospital

**Table (4.8) The Names of Hospitals In Jericho Governorate**

#	Jericho Governorate
1	Jericho Government

**Table (4.9) The Names of Hospitals In Bethlehem Governorate**

#	Bethlehem Governorate
1	Caritas Children's Hospital
2	Molasses for childbirth
3	the Holy Family
4	Al Hussein Governmental Hospital
5	Dr. Hossam Abdel Aziz Hospital Mohamed Kamal for Psychiatry
6	Arab Society

**Table (4.10) The Names of Hospitals In Ramallah Governorate**

#	Ramallah Governorate
1	Palestinian Medical complex
2	Istishari Hospitals
3	Arab care Hospitals
4	Red Crescent Society,
5	AL- Mostaqbal Hospitals
6	Muslam Hospitals

**Table (4.11) The Names of Hospitals In Hebron Governorate**

#	Hebron Governorate
1	Red Crescent Society Hospital
2	Al-Ahli Hospital
3	Alia Hospital
4	Al Mezan Hospitals

#### **4.4.1 Sample of Research**

The sample of Research is selected from a population of Research, to determine sample size of the Research population; the researcher categorizes hospitals in cities and

identifies a number of Quality Managers, Quality Officers and first line Managers, direction researcher to determine size in a reliable and accurate way.

To choose sample, the researcher cant conduct the research in all 84 hospitals in West-Bank, according to that two cities were selected randomly to conduct the Research on them, and these cities it (Ramallah and Hebron), and conducted the research on (10) Public, Private and Nonprofit Hospitals, as identified in (4.12)& (4.13) Tables.

**Table (4.12) The Names of Hospitals In Ramallah Governorate**

#	Ramallah Governorate
1	Palestinian Medical complex
2	Istishari Hospitals
3	Arab care Hospitals
4	Red Crescent Society,
5	AL- Mostaqbal Hospitals
6	Muslam Hospitals

**Table (4.13) The Names of Hospitals In Hebron Governorate**

#	Hebron Governorate
1	Red Crescent Society Hospital
2	Al-Ahli Hospital
3	Alia Hospital
4	Al Mezan Hospitals

In addition, each table from (4.14 & 4.15) below related to each city, while defining the name of Hospitals and the number of Respondents as follow.

**Table (4.14)The Distributions of Ramallah Hospitals.**

Ramallah Hospitals	
Name of Hospitals	Number of Respondents
Palestinian Medical complex	38
Istishari Hospitals	20
Arab care Hospitals	8
Red Crescent Society,	13
AL- Mostaqbal Hospitals	4
Muslam Hospitals	3
Total	86

**Table (4.15) The Distributions of Hebron Hospitals.**

Hebron Hospitals	
Name of Hospitals	Number of Respondents
Al Mezan	16
Red Crescent Society Hospital	13
Al-Ahli Hospital	26
Alia Hospital	22
Total	77

#### **4.4.1.1 Proportion Stratified Sample**

The researcher uses a Proportion Stratified Sample, while the method of the chosen sample is identified in the following table from (4.16&4.17).

**Table (4.16) First Liar of proportion Stratified Sample.**

<b>No</b>	<b>The Hospitals</b>	<b>Number of Respondents</b>	<b>The percentage</b>
1	Palestinian Medical complex	38	23.31 %
2	Istishari Hospitals	20	12.26 %
3	Arab care Hospitals	8	4.90 %
4	Red Crescent Society,	13	7.97 %
5	AL- Mostaqbal Hospitals	4	2.45 %
6	Muslam Hospitals	3	1.84 %
7	Al Mezan	16	9.81 %
8	Red Crescent Society Hospital	13	7.97 %
9	Al-Ahli Hospital	26	15.95 %
10	Alia Hospital	22	13.49 %
	Total	163	100%

The number of managers need is = 150 managers, because of that, each of the sectors will take the manger through following simple calculation according to the following:

**The Ramallah Hospitals**

**.527 \* 150= 79.14 = 79 Respondents from Ramallah Hospitals**

**Table (4.17) Selected Sample from Ramallah Hospitals.**

Hospitals	Number of Respondents	The calculation	The percentage	The calculation	The final number
1	38	$38/86 = .441$	44.1 %	$79 * .441 = 34.8$	35
2	20	$20/86 = .232$	23.2 %	$79 * .1226 = 18.3$	18
3	8	$8/86 = .093$	9.3 %	$79 * .04 = 7.34$	7
4	13	$13/86 = .151$	15.1 %	$79 * .07 = 11.9$	12
5	4	$4/86 = .046$	4.6 %	$79 * .02 = 3.8$	4
6	3	$3/86 = .034$	3.4 %	$79 * .018 = 2.6$	3
	86		100%		79

**The Hebron Hospitals**

<b>.4723 * 150 = 70.85 = 71 Respondents from Hebron Hospitals</b>
---

**Table (4.18) Selected Sample from Hebron Hospitals.**

Hospitals	Number of Respondents	The calculation	The percentage	The calculation	The final number
1	16	$16/77 = .207$	20.7 %	$71 * .207 = 14.69$	15
2	13	$13/77 = .168$	16.8 %	$71 * .168 = 11.92$	12
3	26	$26/77 = .337$	33.7 %	$71 * .337 = 23.92$	24
4	22	$22/77 = .285$	28.5%	$71 * .285 = 20.23$	20
	77				71

## 4.5 The sample

According to categorization, the population size is: (163 Respondents) in 12 Hospitals.

While the sample size is: (150 Respondents) selected through using a: Proportion Stratified Sample technique, as identified in the table (4.14)& (4.15)

**Table (4.19) The Sample of the Research Using a Proportion Stratified Sample.**

No	Ramallah	The Hospitals	Number of Respondents
1		Palestinian Medical complex	35
2		Istishari Hospitals	18
3		Arab care Hospitals	7
4		Red Crescent Society,	12
5		AL- Mostaqbal Hospitals	4
6		Muslam Hospitals	3
7	Hebron	Al Mezan	15
8		Red Crescent Society Hospital	12
9		Al-Ahli Hospital	24
10		Alia Hospital	20
		Total	150

## 4.6 Research Tool

Through conducting a Research, a researcher used some Quantitative tool, Like Questionnaires for a quantitative Data.

### 4.6.1. First: Questionnaires

In order to collect data from the sample, the researcher designed a questionnaire as a Research tool taking into consideration, that a questionnaire takes a (48 statement)



divided into Two parts, on a five-point Likert scale that represented in table (4.20) bellows.

#### 4.6.1.1 Method Correction:

Some of the result was produced by Likert scale method and the following distribution was used in the correction of questionnaire's paragraphs:

**Table (4.20): Likert Scale**

<b>Very high (Strongly Agree)</b>	<b>High (Agree)</b>	<b>Moderate (Neutral)</b>	<b>Low (Disagree)</b>	<b>Very low (Strongly Disagree)</b>
<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>

**Table (4.21): Correction Key**

<b>Mean</b>	<b>Degree</b>
More 3.5	High
2.5-3.5	Moderate
Less 2.5	Low

The researcher uses this scale because it is the suitable one, and gives the best answer for Questionnaires statements.

#### 4.6.1.2 Description of Questionnaires

*The questioner consists of two parts.*

\_ Part one: include the demographic & personal factors of participants, and some organizational factors.

\_ Part two: consists of 48 questions that were divided into 4 domains and related on a five-point Likert scale ranging from one form 1 strongly disagree to 5 strongly agree, the dependent variables were the Publish performance reports and improve quality (11 questions) and, transparency, responsibility and accountability result (12 questions ).

Where are the independent variables were to Evaluate the quality of the current health system (13 questions), and publicizing hospital performance reports (12 questions).

In the Research targeted all the quality officers, quality managers and the first-line managers in all medical services departments -head nurses, head of radiology technicians, head of the laboratory technicians, head of Pharmacists, head of nutritious, chief residents- in all hospitals in Ramallah and Hebron .`

#### **4.6.1.3 Pilot Research**

The questionnaire of the Research was manipulated after **a pilot Research**, which was made to measure the simplicity of filling the questionnaire and the required time to fill it, also to measure the validity and reliability of the questionnaire's paragraphs .after that some questions were deleted and others were replaced.

#### **4.6.1.4 Validity of the Instrument**

The validity of the instrument means that the instrument measures what supposed measure and what it is designed for. The content validity is the degree to which the items in an instrument adequately represent the universe of the content ( Polit, 2006).

The validity of the questionnaire was checked by two methods:

#### 4.6.1.4.1 First: Context validity:

The validity of the questionnaire was checked by presenting the questionnaire to academic supervisor and specialists in the field of the Research, they reviewed the questioner and gave the fruitful comments for modifying and enriching the questioner used in this Research, and the questioner modifying based on the experts' recommendations. They reported that the questionnaire is valid, and appropriate to achieve the purpose of the Research. (See the list of experts reviewers in appendix).

#### 4.6.1.4.2 Second: Structural Validity:

The structural validity was checked by measuring the **Pearson correlation** between each section of the questionnaire and the total degree of it. The results showed that all correlations are statistically significant with P-values less than  $\alpha=.05$ . This indicates that there is a high internal consistency between paragraphs in the questionnaire and the instrument is measure what is intended to measure. As clarified in table No 4.22.

**Table (4.22) Pearson Correlations Between Questionnaire's Sections and Total Degree of Questionnaire.**

Section's Number	Section's Title	Pearson correlation	Sig.
1	Evaluation of the quality of the current health system.	.510 <sup>**</sup>	.000
2	Publicizing hospital's performance reports.	.863 <sup>**</sup>	.000
3	Publicizing performance reports and improves quality.	.855 <sup>**</sup>	.000
4	Transparency, responsibility, and accountability.	.851 <sup>**</sup>	.000

#### 4.6.1.5 Reliability of the instrument:-

The reliability of the questionnaire was checked by the test of internal consistency and the calculation of the extraction of reliability coefficient (Cronbach's alpha) for each section, and for the whole questionnaire, it is (.875), which is a very good reliability coefficient for the research. As clarified in table No 4.23, the reliability coefficient of all sections is acceptable and meets the objectives of the Research.

**Table (4.23) Reliability Coefficients of Questionnaire's Sections**

<b>Section's Number</b>	<b>Section's Tittle</b>	<b>Reliability coefficient</b>
<b>1</b>	Evaluation of the quality of the current health system.	.802
<b>2</b>	Publicizing hospital's performance reports.	.857
<b>3</b>	Publicizing performance reports and improves quality.	.928
<b>4</b>	Transparency, responsibility, and accountability.	.932
	<b>Total</b>	.857

#### 4.6.1.6 Survey Administration

The survey was administered by the researcher, through identifying their sample, and defines a number of copies to be distributed. The researcher himself to all Managers distributed a Questionnaire, after contacting and taking a certain appointment, delivering by hand, in a personalized envelope to be more accurate of several copies for each company and sector, then distributed it and explaining the questionnaire to the respondent to provide them with additional information. Furthermore, a researcher gives hospitals 2 ways to collect a questionnaire, through send it by mail or come to collect it a few days later, this situation takes a time frame from 2 weeks and more for

some companies s, after a number of reminders.

Although, the researcher before distributing a questionnaire he conducted the validity of such a tool, though tested it on a small sample. In addition, the concept validity occurs through using SPSS.

150 Questionnaires' were distributed to all sample during (December 2018 –January of 2019).

#### **4.6.1.7 Survey Responses**

126 Questionnaires' were returned from respondents, despite of that a researcher went to respondents several times with extra Questionnaires copies and pens to give them a new one because number the of questionnaires was missed. Of the 125 responses received, five were unusable because they are not answering all questions, and do not give useful information. Therefore, a total number of 120 Questionnaires from all companies s.

### **4.7 Permission and Ethical Consideration**

An official letter was obtained from Arab American University to allow the researcher to carry out the Research on the hospitals that include in the Research, an approval letters obtained for the managers of these hospitals to facilitate data collection at these hospitals.

An informed consent obtained for the participant as minted in the first page of the questioner as returned complete questioners will indicate your agreement to participate in the Research. Participation in the Research was voluntary and confidential; each one has the right to refused to participate.

## 4.8 Data Coding Process

The researcher on SPSS (Statistical Package for Social Sciences) coded primary data collected, after inserting it and give each statement a specific code in order to make the coding process easier on software sheet. In addition, define the dependent and independent variable through giving each variable specific code to determine the relationship between it through appropriate statistical tests to reach the valuable outcomes and indicators support the subject of the Research.

## 4.9 Data Analysis

The data obtained were analyzed using SPSS (Statistical Package for Social Sciences) for Quantitative data, the results were presented using tables and charts in chapter 5 in details manner.

## 4.10 Statistical Analysis:

The data analysis was performed by using Statistical Package for Social Science (SPSS) version 20. Frequencies and percentages were calculated for all categorical variables, Median and Mean were used as the measures of central tendency for Likert-scale variables.

**Kolmogorov-Smirnov** test was conducted to test the normality of the distribution of the data.

For normally distributed data **One-Way ANOVA** test was conducted to check the differences between groups for ordinal variables, **Post Hoc (Tukey's test)** was conducted to find the source of difference between the groups, and **Independent**

**sample T-test** was conducted to check the differences between groups for nominal variables.

For not normally distributed data, **Kruskal-Wallis's** test was conducted to check the differences between groups for ordinal variables, **Pairwise comparison** was conducted to find the source of difference between the groups, and **Mann-Whitney's** test was conducted to check the differences between groups for nominal variables.

#### **4.10.1 Test of Normality**

**H0:** The sample data are not significantly different than a normal population (the data is normal).

**H1:** The sample data are significantly different than the normal population (the data isn't normal).

**Kolmogorov-Smirnov** test was used to test the normality. The mean of each section of Likert scale questions was used to apply the test of normality for data. The results showed that data of "quality of the current health system and Publicizing hospital's performance reports" sections are normally distributed with (P-value 0.200 and 0.085) respectively. Which are more than (0.05) so we can't reject H0.

However, the other sections in the questionnaire are not normally distributed with P-values less than (0.05), so we reject the H0. (See table 4.25).

**Table (4.24) Test of Normality**

Section's No	Domain	Kolmogorov-Smirnov <sup>a</sup>		
		Statistic	Df	Sig.
1	Quality of the current health system.	.066	105	.200*
2	Publicizing hospital's performance reports.	.081	105	.085
3	Publicizing performance reports and improves quality.	.124	105	.000
4	Transparency, responsibility, and accountability.	.125	105	.000

#### 4.11 Summary

This chapter provides an overview of the methodology, which was used in this Research, describing the Research design, targeted population, select the sample, and data collection and the methods were used to analyze the data.



## **Chapter 5**

### **Results and Discussion**

#### **5.1 Introduction**

This chapter displays a description of the research's sample while addressing the description of the research's tool and the procedures followed in the implementation process. This chapter also includes the statistical treatments that have been used in the analysis of the results. This chapter presents the research results including the demographic characteristics of the respondents. It also presents the respondents' perception towards the impact of publicizing hospital performance on quality improvement and the relationship between the publicizing hospital performance reports and the hospital's transparency, responsibility and accountability. The findings from this research suggest that publicizing hospital performance reports may improve the quality in the hospitals. This chapter includes the discussion of the research findings in relation to previous studies.

#### **5.2 Characteristics of Respondents:**

Table 5.1 represents the total of the (120) respondents' socio-demographic characteristics of the research in five separated hospitals among Hebron and Ramallah regardless of the type of hospitals, government, non-profit, and private.

The results show that more than half of the respondents were males (58.9%) while females' percentage was (41.1%). Most of them aged between "25 to 35), where (25.9%) of them were between 25 to 30 years, and (28.6%) of them were between 31-35 years. Whereas (2.5%) of them were above 50 year-old.

Regarding academic qualification, most of the respondents held bachelor's degrees making (64.1%) of the study. Furthermore (12%) held a higher diploma, (12%) of them had Master's degrees and (3.4%) had PhDs. Also for their position, (64.4%) of the respondents were head of nurses, and (3.4%) of them were quality managers and only (5.9%) were quality officers. Also, (45%) of the respondents were from Hebron and (55%) of them were from Ramallah.

The results showed that (38.8%) of the respondents had between 5-10 years of experience while (38.8%) of them had between 11-20 years of experience. (9.5%) have less than 5 years. Also the results showed that (45.8%) of the respondents took training courses related to quality, while 54.2% of them have not received any training about quality.

The most respondents (42.5%) worked in nonprofit hospitals, while (25%) worked in government, and (32.5%) worked in private hospitals. The Medical Palestinian Center is the only hospital that had quality certificates, Patient Safety Level 2 and ISO in medical laboratory.

**Table (5.1) Characteristics of the Respondents**

Variable	Classifications	Frequency N(120)	Percentage	Missing Data
<b>Gender</b>	Male	66	58.9 %	8
	Female	46	41.1%	
<b>Total</b>		<b>112</b>	<b>100.0%</b>	
<b>Age</b>	Less than 25 years	3	2.5%	1
	25 - 30 years	32	26.9%	
	31 -35 years	34	28.6%	
	36 -40 years	22	18.5%	
	41 - 45 years	13	10.9%	
	46 – 50 years	12	10.1%	
	More than 50 years	3	2.5%	
<b>Total</b>		<b>119</b>	<b>100.0%</b>	

<b>Academic qualifications</b>	Diploma degree	6	5.1%	3
	Bachelor degree	75	64.1%	
	Higher diploma	14	12.0%	
	Master degree	14	12.0%	
	PhD	4	3.4%	
	Others	4	3.4%	
<b>Total</b>		<b>117</b>	<b>100.0%</b>	
<b>Position</b>	Quality officer	7	5.9%	2
	Quality Manager	4	3.4%	
	Head Nurse	76	64.4%	
	Head of Laboratory	5	4.2%	
	Head of radiology department	6	5.1%	
	Other	20	16.9%	
<b>Total</b>		<b>118</b>	<b>100.0%</b>	
<b>Years of Experience</b>	Less than 5 years	11	9.5%	4
	5- 10 years	45	38.8%	
	11 -20 years	45	38.8%	
	More than 20 years	15	12.9%	
<b>Total</b>		<b>116</b>	<b>100.0%</b>	
<b>Quality Training</b>	Yes	54	45.8%	2
	No	64	54.2%	
<b>Total</b>		<b>118</b>	<b>100.0%</b>	
<b>Type of the hospital</b>	Public	30	25.0%	-
	Private	39	32.5%	
	Non- profit	51	42.5%	
<b>Total</b>		<b>120</b>	<b>100.0%</b>	
<b>Quality Certification</b>	Yes	30	25.0%	-
	No	90	75.0%	
<b>Total</b>		<b>120</b>	<b>100.0%</b>	
<b>City</b>	Ramallah	66	55.0%	-
	Hebron	54	45.0%	
<b>Total</b>		<b>120</b>	<b>100.0%</b>	

### 5.3 Study Results:

#### 5.3.1 Section one: Respondents' Perception towards the Quality of the Current

##### Healthcare System:

The results showed that the respondents' perception towards the quality of the current health system in Hebron and Ramallah hospitals was moderate with (mean 3.286) while the majority of them reported that the quality of the current health system in Palestinian hospitals needs lots of improvement with (mean 4.4). They also reported that they need to develop new methods to motivate hospitals to improve the quality of the services provided to patients with (mean 4.29). (See table 5.2).

**Table (5.2) Respondents' perception towards the quality of the current healthcare system**

Paragraph No.	Statement	Freq	Percentage	Mean	Std. Deviation	Level of perception
A1	The quality of the health system in Palestinian hospitals needs improvement.	109	90.8%	4.4083	.75030	High
A7	The Palestinian health system needs to develop new methods to motivate hospitals to improve the quality of services provided to patients	103	85.8%	4.2917	.77129	High
A2	The health system in Palestinian hospitals follows international quality standards.	51	42.5%	3.3333	.91975	Moderate
A10	Hospitals have their own performance documentation system.	52	43.3%	3.2417	1.02896	Moderate
A3	The Palestinian Ministry of Health adopts specific approaches for assessing the quality of services provided to patients in hospitals	49	40.8%	3.2083	.94287	Moderate
A5	There are projects proposed by	42	35.3%	3.2017	.91670	Moderate

	the Ministry of Health to improve the quality of health services provided in Palestinian hospitals					
A6	There are regulations that allow controlling of hospitals' performance related to medical services	44	37.0%	3.1681	.92351	Moderate
A4	The Ministry of Health has its own regulations in controlling the quality of hospitals' services.	44	37.0%	3.1597	.93865	Moderate
A13	It is easy to evaluate the hospital's performance indicators.	49	40.8%	3.1250	1.00889	Moderate
A12	It is easy to determine the hospital's performance indicators.	44	36.7%	3.0833	.93110	Moderate
A11	Hospitals publish their own performance reports to be accessible to everybody	42	35.0%	3.0667	.99354	Moderate
A9	Hospitals measure their performance by collecting and presenting data related to performance indicators	40	33.9%	2.9407	1.04834	Moderate
A8	The Ministry of Health forces hospitals to periodically measure performance indicators to assess the quality of services provided to patients.	44	37.3%	2.8814	1.17793	Moderate
	<b>Total</b>			<b>3.2866</b>	<b>.51768</b>	Moderate

Additionally, the results of one sample t-test indicate that the quality of the health system in Palestinian hospitals needs improvement. For instance, the Palestinian health system needs to develop new methods in order to motivate hospitals to improve the quality of services provided to patients with (P-values .000, and .000), which are less than the significance level ( $\alpha=.05$ ). While the Ministry of Health has not had its own regulations in controlling the quality of hospitals services and the Hospitals do not measure their

performance by collecting and presenting data related to performance indicators, with (P-values .30 and .36) which are more than the significance level ( $\alpha=.05$ ). (See table 5.3).

**Table (5.3)** The results of one sample t-test of Respondents' perception towards the quality of the current healthcare system. (Test value = 3)

Paragraph No.	Paragraph	t	Df	Sig. (2-tailed) (p-value)
A1	The quality of the health system in Palestinian hospitals needs improvement.	22.750	119	.000
A2	The health system in Palestinian hospitals follows international quality standards	3.298	119	.001
A3	The Palestinian Ministry of Health adopts specific approaches for assessing the quality of services provided to patients in hospitals	1.918	119	.057
A4	The Ministry of Health has its own regulations in controlling the quality of hospitals services.	1.210	118	.229
A5	There are projects proposed by the Ministry of Health to improve the quality of health services provided in Palestinian hospitals	1.724	118	.087
A6	There are regulations that allow controlling of hospitals' performance related to medical services	1.433	118	.154
A7	The Palestinian health system needs to develop new methods to motivate hospitals to improve the quality of services provided to patients	20.917	119	.000
A8	The Ministry of Health forces hospitals to periodically measure performance indicators to assess the quality of services provided to patients	-1.566	117	.120
A9	Hospitals measure their performance by collecting and presenting data related to performance indicators	-1.125	117	.263
A10	Hospitals have their own performance documentation system.	1.741	119	.084
A11	Hospitals publish their own performance reports to be accessible to everybody	.199	119	.842
A12	It is easy to determine the hospital's performance indicators.	.717	119	.475
A13	It is easy to evaluate the hospital's performance indicators.	.791	119	.431
	Total	5.885	112	.000

These results match (Zahirah et al., 2015) results which concludes that developing countries still face a problem in the health system regarding how to monitor and enforce the hospital to improve their quality of care. According to the National Health Strategy 2017-2022 of the Palestinian Ministry of Health draft written by Dr. Ola Aker in 2016 in Palestine, the third national objective is "Institutionalize quality systems in all aspects of health services". This goal includes developing National Accreditation System for health facilities through the establishment of a national certified independent entity and system for the accreditation to all Palestinian hospitals and health facilities. Agreeing with the results showed there is no hospital that has any quality national accreditation unit so there is still no regulation to control or investigate the quality of service in Palestinian hospitals.

### **5.3.2 - Section Two: Respondents' Perception Towards Publishing Hospitals' Performance Reports.**

From the respondents' points of view, they saw that the publicizing hospitals' performance reports is important with a mean of (3.72). They also agreed that there needs to be questionnaires measuring the performance reports including patient satisfaction with the services provided with (mean 4.01), and there should be training courses to improve health team skills in using the different measurements of performance indicators assessment methods with (mean 4.1). (See table 5.4).

**Table (5.4) Respondents' Perception Towards Publishing Hospitals' Performance Reports.**

Paragraph No.	Statement	Freq No.	Percentage	Mean	Std. Devi	Level of Perception
B9	There should be training to improve health team skills in using the different measurements of performance indicators assessment methods.	94	78.3%	4.1083	.83812	High
B6	Performance reports should include patient satisfaction with the services provided and measured by a questionnaire.	94	79.0%	4.0168	.81285	High
B10	There should be control over the validity and reliability of information published by hospitals.	87	72.5%	4.0000	.92582	High
B5	Health providers' Performance indicators assessments results should be published as quality assurance methods.	91	75.8%	3.9750	.88368	High
B4	Performance indicators should be published for the results of the services provided (E.g. number of deaths)	88	73.3%	3.9250	.89970	High
B12	There are differences between hospitals in the performance indicators according to the services provided in each hospital and its specialties	84	70.0%	3.9000	.89255	High
B7	The Ministry of Health should publish the performance indicators assessments results on an official website accessible to all people.	88	73.9%	3.8992	.84768	High
B11	Performance indicators are selected according to international health quality systems' standards.	85	71.4%	3.8824	.87504	High
B8	Hospitals should publish performance indicator reports on their official websites accessible to all people.	84	70.6%	3.8655	.85295	High
B1	There is a system to assess the performance of the hospital in providing services to patients.	48	40.0%	3.0750	1.08591	Moderate
B2	There is an indicators assessment to ensure uniform performance in all hospitals.	40	33.6%	3.0168	1.03320	Moderate
B3	The Ministry of Health requires hospitals to publicize its performance indicators assessment periodically.	31	25.8%	2.9333	.99354	Moderate
	<b>Total</b>			<b>3.7210</b>	<b>.57152</b>	<b>High</b>



The results of one sample t-test indicate that hospitals should publish performance indicator reports on their official websites to be accessible to all people. According to the Joint Commission(2018), publicizing hospital performance reports means that the hospitals' performance indicators should be available to various stakeholders (such as patients, professions, insurers, regulators). And this result conforms with Rechel (2016) because the study result shows hospitals often using websites for publishing these report to be available for all people. While Hibbard, Sofaer, and Tusler(2010) agreed that hospitals should make the reports publicly available on the website so they are available to a broad audience including some healthcare information like: structure, process and outcome.

When healthcare services publish their performance reports they should include some performance indicators such as: results of the services provided, health providers' performance indicators assessment and patient satisfaction with the services provided. These indicators should be measured by a questionnaire and should be selected according to the international health quality systems' standards with (P-values 0.000, 0.000, 0.000) respectively which are less than the significance level ( $\alpha=.05$ ).

This result conforms to (Rechel, 2016) results because the study concludes the three main types of information which should be included in the performance report and patient's experience. While (Porter, 2010) argued that healthcare services should publish their key performance indicators while defining six elements; safety, effectiveness, efficiency, timeliness, patient-centeredness and equity. Patient-centeredness measures the satisfaction of the patient and how much the systems succeed or fail in meeting the patient's needs (Wolfe, 2001).

The results show that there are no indicators assessments to ensure uniform performance in all hospitals. There is also a lack of a system to assess the performance of the hospital in providing services to patients while the Ministry of Health did not enforce hospitals to publicize its performance indicators assessment periodically. With (P-values 0.484, 0.925, and 0.099) respectively, which are more than the significance level of  $\alpha=.05$ . (See table 5.5).

**Table (5.5)The Results of One Sample T-Test of Respondents' Perception Towards Publishing Hospitals' Performance Reports. (Test value = 3)**

Paragra ph No.	Paragraph	T	Df	Sig. (2- tailed)
B1	There is a system to assess the performance of the hospital in providing services to patients.	-.095-	119	.925
B2	There are indicators assessments to ensure uniform performance in all hospitals.	-.702-	118	.484
B3	The Ministry of Health requires hospitals to publicize its performance indicators assessment periodically.	- 1.662-	119	.099
B4	Performance indicators should be published for the results of the services provided (E.g. number of deaths, average length of hospital stay, and number of complaints).	11.06 3	119	.000
B5	Health providers' Performance indicators assessments results should be published (Waiting period, medical errors) as quality assurance methods.	12.04 4	119	.000
B6	Performance reports should include patient satisfaction with the services provided and measured by a questionnaire.	14.42 1	118	.000
B7	The Ministry of Health should publish the performance indicators assessments results on an official website accessible to all people.	11.71 8	118	.000
B8	Hospitals should publish performance indicator reports on their official websites accessible to all people.	11.22 4	118	.000
B9	There should be training to improve health teams' skills in using the different measurements of performance indicators assessment methods.	15.43 0	119	.000
B10	There should be control over the validity and reliability of information published by hospitals.	11.54 1	119	.000
B11	Performance indicators are selected according to international health quality systems' standards.	10.98 5	118	.000
B12	There are differences between hospitals in the performance indicators according to the services provided in each hospital and its specialties	10.99 7	119	.000
	Total	13.52 9	114	.000

### 5.3.3- Section Three: Respondents' Perception towards Publishing the Hospitals'

#### Performance Reports and Quality Improvement:

The results showed that the publication of performance reports will raise the quality of hospitals with (mean 4). Also the publication of performance reports will help to better understand the quality concepts within hospitals in high with (mean 4.1), and the publication of performance reports will make the obtaining of international quality certificates easier with (mean 3.7). (See table 5.6).

**Table (5.6) Respondents' Perception Towards Publishing The Hospitals' Performance Reports and Quality Improvement**

Paragraph No.	Statement	FreqN o.	Percentage	Mean	Std. Deviation	Level of perception
C3	The publication of performance reports will help to better understand the quality concepts within hospitals	96	80.0%	4.1000	.79282	High
C1	The publication of performance reports will help to raise the quality of hospitals	100	83.3%	4.0667	.84747	High
C4	Hospitals will be more careful to appear high quality because they have to publish their performance reports	85	70.8%	4.0500	.87783	High
C2	The publication of the performance reports will force hospitals to improve patient services	98	81.7%	4.0417	.82397	High
C7	The publication of performance reports will allow patients to compare hospitals to determine service quality levels	89	74.2%	4.0167	.89802	High
C6	The publication of performance reports will have an impact on improving patient satisfaction with services provided in each hospital	93	77.5%	3.9750	.87411	High
C11	Measuring hospital performance makes it easier for hospitals to compare their performance with the certified global hospitals.	88	73.3%	3.9667	.90687	High
C5	Measuring performance indicators will help to cover the services that need to be improved	86	71.7%	3.9583	.91114	High
C8	There is information comparing with benchmarks of hospitals' performance in order to improve the quality of services provided.	85	70.8%	3.9250	.89970	High
C9	The hospital has an intellectual attitude towards achieving a global quality certificates.	82	68.9%	3.8487	.86982	High
C10	It is easier to obtain international quality certificates.	78	65.0%	3.7083	.87347	High
	<b>Total</b>			<b>3.9641</b>	<b>.66407</b>	<b>High</b>

According to the results, a null hypothesis is rejected; because of the analysis of one sample, t-test indicates that the publication of performance reports will help to raise the quality of hospitals. These results conform to Hibbard, Stockard, & Tosler (2005) 2005 US study which was conducted in Wisconsin measuring the effectiveness of public reporting on hospital performance. The study concluded that hospitals receiving a public or private report showed significant quality improvement statistically compared to the control group that received no report. According to David and Martin (2003), public performance reports motivated the government, healthcare founders, and clinicians to improve professional performance. According to Localio, Hamory, Fisher and Tenhave (1997), the main aims of public reporting of performance are to help the customer to have an informed choice about the provider, promote quality improvement and ensure professional accountability.

Also the result of one sample T-test indicates that, the publication of performance reports will help to better understand the quality concepts within hospitals. However, measuring performance indicators will help to cover the services that need to be improved with (P-values 0.000 and 0.000) respectively, which are less than the significance level of  $\alpha=0.05$ . This is obvious in the below table.

These results agree with (Berwick, James, & Coye, 2003) study that concluded that the public performance reports improve the quality through helping the provider to identify the area that needs improvement which leads to changes in the provider's behavior. Also (Peter, Elias, & Irene, 2008) concluded that the measure of performance and publishing it will help ensure alignment with different health system mechanisms and identify areas for improvement. In addition, measuring performance indicators is a tool for covering services that need improvement. These results conform to (Khalifa

&Khalid, 2015) because they agreed that the indicators help managers at all levels to make decisions based on available evidence in order to highlight performance gaps and improve deficiencies.

The results show that the performance of hospitals can be used to compare the hospital's performance with other hospitals in order to improve the quality of the services delivered. This conforms to (Hwang et al., 2011), which agreed that the hospitals monitor and evaluate performing against a benchmark standard and explain how improvements are being made over time. It can also help to compare results with approved standards or against other similar comparable organizations which helps the hospital to identify if their performance is at the desired level. As well as, agreeing to Anderson (2017), quality performance reports hold great energy and insight for hospitals that could figure out a workable method for analyzing overall performance data and setting benchmarks.

The result founded the relation between public reporting of hospital performance and the hospital's intellectual attitude towards achieving a global quality certificate. It would become easier to obtain international quality certificates. These results back (Ito, 2005) study which concluded that there was a positive correlation between accreditation scores and publicizing hospital performance report.

**Table (5.7) The Results Of One Sample T- Test of Respondents Perception Toward Publishing The Hospital Performance Reports And Quality Improvement. (Test value =3).**

<b>Paragra ph No.</b>	<b>Paragraph</b>	<b>T</b>	<b>Df</b>	<b>Sig. (2- tailed)</b>
C1	The publication of performance reports will help to raise the quality of hospitals	13.984	119	.000
C2	The publication of the performance reports will force hospitals to improve patient services	14.444	119	.000
C3	The publication of performance reports will help to better understand the quality concepts within hospitals	16.877	119	.000
C4	Hospitals will be more careful to appear high quality because they have to publish their performance reports	13.768	119	.000
C5	Measuring performance indicators will help to cover the services that need to be improved	11.356	119	.000
C6	The publication of performance reports will have an impact on improving patient satisfaction with services provided in each hospital	12.176	119	.000
C7	The publication of performance reports will allow patients to compare hospitals to determine service quality levels	12.399	119	.000
C8	There is information comparing with benchmarks of hospitals' performance in order to improve the quality of services provided.	11.175	119	.000
C9	The hospital has an intellectual attitude towards achieving a global quality certificates.	10.693	118	.000
C10	It is easier to obtain international quality certificates.	8.666	119	.000
C11	Measuring hospital performance makes it easier for hospitals to compare their performance with the certified global hospitals.	11.476	119	.000
	Total	15.837	118	.000

#### **5.3.4 Section Four: Respondents' Perception towards Publishing Hospitals'**

##### **Performance Reports and Improving Hospitals Transparency, Responsibility and Accountability:**

The research outcomes showed that the publication of hospital performance reports will support the transparency of hospital performance and the hospitals will be more

accountable for providing services to patients with means (4.025) and (3.815) respectively. Furthermore, the publication of performance reports will make the hospitals more competitive in providing better services with mean (3.87). (See table 5.8).

**(Table 5.8) Respondents' Perception Towards Publishing The Hospitals' Performance Reports And Improving Hospitals Transparency, Responsibility And Accountability:**

Paragraph No.	Paragraph	Freq No.	Percentage	Mean	Std. Devi	Level of perception
D1	The publication of hospital performance reports supports transparency of hospital performance.	96	80.7%	4.0252	.84835	High
D12	These reports can be used by the Ministry of Health to referral a patients to higher performing hospitals	91	76.5%	3.9916	.92513	High
D8	There will be a greater hospital accountability system for its performance	92	78.0%	3.9746	.76752	High
D10	These reports can be used to provide rewards for the best performing hospitals	88	73.9%	3.9496	.86209	High
D4	The hospital becomes more careful in order to avoid mistakes	91	77.8%	3.9402	.86394	High
D11	These reports can help in computing the decreasing in hospitals performance	86	72.3%	3.9328	.88040	High
D2	It is easier for the patient to choose the hospital that he or she deems appropriate by reviewing performance reports.	85	71.4%	3.8908	.89053	High
D5	The hospital will be giving more attention to the preventive side to avoid loss of reputation	82	69.5%	3.8814	.89795	High
D6	The publication of performance reports makes hospitals more competitive in providing better services	80	67.2%	3.8739	.88829	High
D9	Dissemination of performance reports helps regulators monitor hospital performance better	84	70.6%	3.8739	.89778	High
D7	There will be a sense of greater control over the services provided	90	75.6%	3.8571	.86637	High
D3	Hospitals are more accountable for providing services to patients.	83	69.7%	3.8151	.83327	High
	<b>Total</b>			<b>3.9319</b>	<b>.65296</b>	High

According to the results below, a null hypothesis is rejected, because the analysis of one sample t-test shows that The publication of hospital performance reports supports



transparency, responsibility of hospital performance, also there will be a greater hospital accountability system for its performance, (with P-values 0.000, 0.000 and .000) respectively, which are less than the significance level ( $\alpha=.05$ ). (See table 5.9)

These results is conformity with (Robinowitz & Dudley, 2006) and (Rachel, 2016), which conclude that, publishing performance report lead to increase accountability and responsibility. Moreover, according to (Hafner et al., 2011) publishing overall performance report has moved the health sector towards extra transparency and accountability.

The result shows publicizing of performance reports help regulators monitor hospital performance better. And enable the patient to choose the hospital that he or she deems appropriate by reviewing performance reports, and these reports can be used by the Ministry of Health to referral patients to higher performing hospitals with (P-values 0.000, 0.000 and .000) respectively. Although these results are matched with (Faber, Bosch, Wollersheim, Leatherman, & Grol, 2009) study which conclude that the public reporting can provide patients, payers, and purchasers with needed information, to enable them choose high-quality providers, low cost or providers that demonstrate both characteristics.

Additionally, a study by (Berwick, James,& Coye, 2003) concluded that the transparency report system improves the performance and it affects the consumer's choice. On the other hand, the public reporting used by a federation of American hospitals in order to guide hospitals and providers in the direction of improving the quality of inpatient care introduced to patients give incentive for the higher performance hospital according to (Marjoua & Bozic, 2012) study. However, the result did not match with (Schneider, 2001) which concluded that there is little empirical evidence that the

consumers use comparative information to select high-quality providers. Also, the results did not match with (Marshall et al., 2000) where they argued that public reporting of performance has had a limited impact on decision making in consumers. Also according to Totten et al (2012) who said that there is still no evidence or only weak evidence between public reporting and the selection of healthcare providers by patients.

Also, the results illustrated that the publication of performance reports makes hospitals more competitive in providing better services. The hospital becomes more careful in order to avoid mistakes, and will be giving more attention to the preventive side to avoid loss of reputation; these results matched with (Lamb Smith, Weeks, & Queram, 2013) study, which concluded that the transparency by publicizing hospital performance reports stimulated competition among the professionalism of physicians, and nurses. Likewise (Berenson & Rice, 2015) discussed that for the transparency of performance outcomes, hospitals need measures in order to identify strengths and weaknesses in order to improve their performance activities and monitor their progress. Conferring to (Hafner et al., 2011), the public reporting of hospital data is a representation of a more substantial environmental change and stimulated involvement with quality improvement activities while the healthcare industry moves towards greater transparency and accountability.

**(Table 5.9)The Results of One Sample T-Test of Respondents' Perception Towards Publishing The Hospitals' Performance Reports And Improve Hospitals Transparency, Responsibility And Accountability. (Test value = 3).**

<b>Paragra ph No.</b>	<b>Paragraph</b>	<b>T</b>	<b>Df</b>	<b>Sig. (2- tailed)</b>
D1	The publication of hospital performance reports supports transparency of hospital performance.	13.465	118	.000
D2	It is easier for the patient to choose the hospital that he or she deems appropriate by reviewing performance reports.	10.810	118	.000
D3	Hospitals are more accountable for providing services to patients.	10.867	118	.000
D4	The hospital becomes more careful in order to avoid mistakes	11.774	116	.000
D5	The hospital will be giving more attention to the preventive side to avoid loss of reputation	10.510	117	.000
D6	The publication of performance reports makes hospitals more competitive in providing better services	10.755	118	.000
D7	There will be a sense of greater control over the services provided	10.682	118	.000
D8	There will be a greater hospital accountability system for its performance	15.113	117	.000
D9	Dissemination of performance reports helps regulators monitor hospital performance better	10.423	118	.000
D10	These reports can be used to provide rewards for the best performing hospitals	12.260	118	.000
D11	These reports can help in computing the decreasing in hospitals performance	11.595	118	.000
D12	These reports can be used by the Ministry of Health to referral a patients to higher performing hospitals	11.200	118	.000
	Total	15.305	114	.000

## **5.4 Demographic Data:**

### **5.4.1 The Respondents' Perception towards the Quality of the Current Health**

#### **System:**

To test the hypothesis which states that “H0: there is no significant difference between respondents' perception towards the quality of the current health system according to the position, Duration of experience, Educational qualifications and Type of hospital”.

A One Way ANOVA (One Way Analysis Of Variance) Test was conducted to check the differences of the views between the respondents' perception towards the quality of the current health system between groups according to the following aspects: Their position, Duration of experience, Educational qualifications and Type of hospital.

The results showed that there are significant differences in the views among the respondents about the evaluation of the current health system according to their position and their educational qualifications with (P-values 0.002 and 0.010) respectively. This is less the significance level of ( $\alpha = .05$ ). So the null hypotheses is rejected

Whereas, the views among the respondents according to the duration of their experience and the type of hospital they are part of, there were not significant differences with (P-values 0.720 and 0.967) respectively. (See table 5.10).

**Table (5.10) Results Of ANOVA (One Way Analysis Of Variance) of The Respondents' Perception Towards The Quality Of The Current Health System, According To The Following Aspects: The Position, Duration of Experience, Educational Qualifications And Type of Hospital.**

Variable		Sum of Squares	Df	Mean Square	F	Sig.
Position	Between Groups	4.695	5	.939	3.979	.002
	Within Groups	24.781	105	.236		
	Total	29.477	110			
Duration of experience	Between Groups	.368	3	.123	.446	.720
	Within Groups	28.877	105	.275		
	Total	29.245	108			
Educational qualifications	Between Groups	3.875	5	.775	3.179	.010
	Within Groups	25.602	105	.244		
	Total	29.477	110			
Type of hospital	Between Groups	.019	2	.009	.034	.967
	Within Groups	29.996	110	.273		
	Total	30.015	112			

#### **Post Hoc Tests: Multiple Comparisons:**

The **Tukey's Test** was used to check the source of differences of the respondents' perception towards the quality of the current health system between groups according to their position and Educational qualifications.

The two-dimensional comparisons show that there is a difference in the perception towards the quality of the current health system between the quality officer and other

respondents (Pharmacy, Nutrition, resident doctors, Phys therapy), with (P-value .037) which is less the significance level of ( $\alpha=.05$ ). (See table 5.14).

According to table (5.11), "The respondents in the quality officer positions think that the quality of the current health system needs improvements more than the others in Pharmacy, Nutrition, resident doctors, physiotherapy positions think". Furthermore, there is a difference in the perception towards the quality of the current health system between the Head Nurse and others as well, with (P-value 0.003) which is less the significance level of ( $\alpha=.05$ ). This concluded that, "The respondents in Head Nurse Positions think that the quality of the current health system needs improvements more than the others in Pharmacy, Nutrition, resident doctors, physiotherapy positions think." (See table 5.11)

**Table (5.11) Results of Tukey Test of Source of Difference of The Perception Towards The Quality of The Current Health System According To Position.**

Variable	(I) Position	(J) Position	Mean Difference (I-J)	Sig
Position	Quality officer	Others	.65263*	.037
	Head Nurse	Others	.49321*	.003

According to (5.12) table, the result showed that there is a difference in the perception towards the quality of the current health system between respondents who hold a diploma degree, bachelor degree and others with (P- values 0.011 and 0.008), which is less than the significance level of ( $\alpha=0.05$ ) that the two-dimensional comparisons have). This showed that "The respondents who have diploma degrees or bachelor degrees think that the quality of the current health system needs improvements more than the others think" (See table 5.12).

**Table (5.12)Results of Tukey Test of Source of Difference In The Perception Towards The Quality of The Current Health System According To Educational Qualifications.**

Variable	(I)Educational qualifications	(J) Educational qualifications	Mean Difference (I-J)	Sig
Educational qualifications	Diploma degree	Others	1.19231	.011
	Bachelor degree	Others	.89805	.008

#### **Independent Sample T-Test:**

To test the hypothesis, which states “.H0: there is no significant difference between respondents' perception towards the quality of the current health system according to quality certifications and the city”.

Independent sample t-test was conducted to check the difference of the respondents' perception towards the quality of the current health system between groups according to quality certifications and the city.

According to table (5.13),the results showed that there is no significant difference in the respondents' perception towards the quality of the current health system between groups according to quality certifications and the city, with (P-values 0.835 and 0.238) respectively, which is larger than the significance level of ( $\alpha=.05$ ). (See table 5.13).

**Table (5.13) The Results of t-test for Equality of Means**

Variable		Levene's Test for Equality of Variances	T-test for Equality of Means			
		F	Sig.	T	df	Sig. (2-tailed)
<b>Quality Certification</b>	Equal variances assumed	.990	.322	.209	111	.835
	Equal variances not assumed			.228	50.543	.821
<b>City</b>	Equal variances assumed	.453	.502	-1.188-	111	.238
	Equal variances not assumed			-1.174-	101.934	.243

#### **5.4.2 - The Respondents' Perception towards Publishing Hospitals' Performance**

##### **Reports:**

To test the hypothesis, which states “H0: there is no significant difference between respondents' perception towards the publishing of hospital's performance reports according to the position, Duration of experience, Educational qualifications and Type of hospital.”

One Way ANOVA (One Way Analysis Of Variance) Test was conducted to check the differences of the perspectives of publicizing hospitals' performance reports among groups according to their position, Duration of experience, Educational qualifications and Type of hospital.

According to table (5.14), the results showed that there is a significant difference in the perspectives of publicizing hospitals' performance reports among groups according to



the type of hospital, with (P-value 0.008), which is less than the significance level of ( $\alpha=.05$ ). On other hand, the differences according to the position, educational qualifications, and duration of experience were not significant with (P- values 0.119, 0.653, 0.686) respectively. Which are more than the significance level of ( $\alpha=.05$ ). (See table 5.14)

**Table (5.14)Results of ANOVA (One Way Analysis Of Variance) Regarding The Difference In The Perception Towardspublishing Hospitals' Performance Reports.**

Variable		Sum of Squares	Df	Mean Square	F	Sig.
Position	Between Groups	2.818	5	.564	1.800	.119
	Within Groups	33.502	107	.313		
	<b>Total</b>	36.320	112			
Educational Qualifications	Between Groups	1.047	5	.209	.662	.653
	Within Groups	33.556	106	.317		
	<b>Total</b>	34.603	111			
Duration of experience	Between Groups	.493	3	.164	.496	.686
	Within Groups	35.407	107	.331		
	<b>Total</b>	35.900	110			
Type of hospital	Between Groups	3.104	2	1.552	5.093	.008
	Within Groups	34.132	112	.305		
	<b>Total</b>	37.237	114			

Also, The **Tukey's Test** was used to check the source of differences in the perspectives of publicizing hospitals' performance reports among groups according to the type of hospital.

The result showed that there is a difference in the perspectives of publicizing hospitals' performance reports between respondents in public hospitals and respondents in non-profit hospitals through the two-dimensional comparisons with (P-value .005), which is less than the significance level of ( $\alpha=.05$ ).

Which resulted in: "The respondents in public hospitals think that hospitals should publish performance reports more than the respondents in non-profit hospitals think"

**Table (5.15) Results of Tukey Test of Source of Differences of The Perspectives of Publishing Hospitals' Performance Reports Among Groups According To Type of Hospital.**

Variable	(I)Type of hospital	(J) Type of hospital	Mean Difference (I-J)	Sig
Type of hospital	Public	Non – Profit	.41284*	.005

#### **Independent Sample t-test:-**

To test the hypothesis, which states "H0: there is no significant difference between respondents' perception towards publicizing hospitals' performance reports according to gender, quality training, quality certifications and the city."

The Independent sample t-test was conducted to check the differences of the respondents' perception towards publicizing hospitals' performance reports among groups according to: Gender, quality training, quality certifications and the city.

The analysis showed that there is a significant difference in the respondents' perception towards publicizing hospitals' performance reports according to the quality certification of the hospital, with (P-value 0.006), which is less than the significance level of ( $\alpha=.05$ ). Whereas, as summarized in table(5.16), the results showed that the difference according to gender, quality training, and the city, is not significant with (P-values 0.293, 0.236 and 0.249) respectively, which is more than the significance level which is clear in the below table (5.16).

**Table (5.16) Differences of The Respondents' Perception of Publishing Hospitals' Performance Reports By Gender, Quality Training, Quality Certifications And City. (The Results Of T-Test For Equality Of Means)**

		Levene's Test for Equality of Variances	t-test for Equality of Means			
		F	Sig.	t	Df	Sig. (2-tailed)
<b>Gender</b>	Equal variances assumed	2.842	.095	-1.056-	105	.293
	Equal variances not assumed			-1.094-	103.882	.277
<b>Quality training</b>	Equal variances assumed	2.058	.154	1.190	111	.236
	Equal variances not assumed			1.213	110.411	.228
<b>Quality certification</b>	Equal variances assumed	8.009	.006	2.773	113	.006
	Equal variances not assumed			3.601	86.074	.001
<b>City</b>	Equal variances assumed	3.910	.050	1.158	113	.249
	Equal variances not assumed			1.127	93.055	.263

#### **5.4.3 – The Relation between Publishing Performance Report, Quality Improvement and Position, Education Qualifications, Experience and Type of Hospitals:**

To test the hypothesis, which states “H0: there is no significant difference between the respondents' perception towards the relation between publicizing performance reports

and quality improvement according to the position, Duration of experience, Educational qualifications and Type of hospital”

**The Kruskal-Wallis Test** was conducted to check the differences of the respondents’ perspectives of publicizing performance reports and quality improvement according to: Position, Educational qualifications, Duration of Experience and the type of hospital.

The results showed that there is a significant difference in the respondents’ perspectives on publicizing performance reports and quality improvement according to the type of hospital, with (P value 0.029), which is less than the significance level of ( $\alpha=.05$ ). While the differences were found among publishing performance reports and Position, Educational Qualifications and Duration of Experience with (P values 0.494, 0.155, 0.818) respectively which is not significant but still more than the significance level of ( $\alpha=.05$ ). This is presented in the below table (5.17).

**Table (5.17) Results of Kruskal-Wallis test of differences between publishing performance reports, quality improvement and position, education qualifications, experience and type of hospitals.**

Variable	Df	Test statistic	Asymp. Sig
Position	5	4.397	.494
Educational Qualifications	5	8.029	.155
Duration of Experience	3	.929	.818
Type of hospital	2	7.105	.029

Although, the Pairwise comparison of type of hospitals showed that there is a difference in respondents' perspectives of publishing performance reports and quality improvement between respondents in public hospitals and respondents in non- profit hospitals, with (P value 0.043), which is less than the significance level of ( $\alpha=0.05$ ). (See table 5.18)

which concluded that “The respondents from Public hospitals thought that the publishing of performance reports will improve the quality of the health system more than the respondents from Non-Profit hospitals think.”

**Table (5.18) Pairwise Comparisons of Type of Hospital, Differences of Perspectives of Publishing Performance Report And Quality Improvement**

Sample1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Significant	Adjustment Significant
Private – Nonprofit	.03	7.327	.004	.997	1.000
Private-Public	19.622	8.446	2.323	.020	.061
Nonprofit-Public	19.592	8.011	2.446	2.446	.043

#### **Mann-Whitney U Test:**

**Mann-Whitney U Test** was conducted to check the differences in the respondents’ perspectives of publicizing performance reports and quality improvement according to: gender, quality training, quality certification, and the city.

The analysis showed that there is a significant difference in the respondents’ view of publicizing performance reports and quality improvement according to the hospitals obtaining a quality certification, with (P-value 0.008), which is less than the significance level of ( $\alpha=.05$ ).

In addition, the differences existed between publishing hospital performance reports, quality improvement and gender, quality training and the city, were not significant with (P-values 0.574, 0.683 and 0.115) respectively, which is more than the significance level, (See table 5.19).

**Table (5.19) Results of Mann-Whitney Test of Differences Between Publishing Hospital Performance Reports, Quality Improvement And Gender, Quality Training, Quality Certification, And The City**

Variable	Mann-Whitney U	Significance
Gender	1391.500	.574
Quality Training	1626.500	.683
Quality certification	875.000	.008
City	1460.500	.115

#### **5.4.4 - The Respondents' Perception towards Publishing Hospitals' Performance Reports and Transparency, Responsibility and Accountability:**

To test the hypothesis which states “H0: there is no significant difference between respondents' perception towards the publishing of hospital performance reports and transparency, responsibility and accountability according to the position, Duration of experience, Educational qualifications and Type of hospital”

**The Kruskal-Wallis Test** was conducted to check the differences in the respondents' perspectives of publicizing performance reports and Transparency, Responsibility and Accountability according to: Position, Educational qualifications, Duration of experience and the type of hospital.

The results showed that there is a significant difference in the respondents' perspectives of publicizing performance reports and Transparency, Responsibility and Accountability according to the type of hospital, with (P value 0.002). Which is less than the significance level of ( $\alpha=0.05$ ).

While the differences were found between publishing hospital performance reports and transparency, responsibility and accountability according to Position, educational qualifications and duration of experience is not significant with (P- values 0.927, 0.235,

0.412) respectively. Which are more than the significance level of ( $\alpha=.05$ ). (See table 5.20).

**Table (5.20) Test of The Differences of The Respondents' Perspectives of Publishing Performance Reports And Transparency, Responsibility And Accountability**

Variable	Df	Test statistics	Significance
Position	5	1.379	.927
Educational Qualifications	5	6.813	.235
Duration of Experience	3	2.868	.412
Type of hospital	2	12.316	.002

Furthermore the Pairwise comparison showed that there is a difference in perspectives of publishing performance reports and Transparency, Responsibility and Accountability between respondents in non-profit hospitals and respondents in public hospitals, with (P-value 0.002), also, there is a difference between respondents in private hospitals and public hospitals with (P-value 0.019), which are less than the significance level of ( $\alpha=.05$ ). (See table 5.21). Which resulted in, the respondents from non-profit hospitals and private hospitals thought that the publishing of performance reports will improve Transparency, Responsibility, and Accountability of the health system more than the respondents from public hospitals think.

**Table (5.21) Pairwise Comparisons of Types of Hospital, The Differences of The Respondents' Perspectives of Publishing Performance Reports And Transparency, Responsibility And Accountability**

Sample1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Significant	Adjustment Significant
Private – Nonprofit	3.902	7.249	.538	.590	1.000
Private-Public	26.463	7.797	3.394	.001	.002
Nonprofit-Public	22.562	8.254	2.733	.006	.019

#### **5.4.5 –Respondents' Perception of Publishing Performance Reports and Improving Transparency, Responsibility, and Accountability according to: Gender, Quality Training, Quality Certification and the City.**

To test the hypothesis which states “H0: there is no significant difference between respondents' perception towards publicizing hospitals' performance reports and transparency, responsibility and accountability according to Gender, Quality training, Quality certification and the city.”

**The Mann-Whitney U Test** was conducted to check the differences in the respondents' perspectives of publicizing performance reports and improving Transparency, Responsibility, and Accountability according to: Gender, Quality training, Quality certification and the city.

The analysis showed that there is a significant difference in the respondents' view of publicizing performance reports and improving Transparency, Responsibility and Accountability according to the hospitals obtaining a quality certification, with (P-value .001), which is less than the significance level of ( $\alpha=.05$ ). It also showed differences in the respondents' view of publicizing performance reports and improving Transparency, Responsibility and Accountability according to Gender, Quality training and the city



were not significance with (P-values 0.108, 0.917 and 0.066) respectively, which is more than the significance level, this is clear in the below table.

**Table (5.22) Respondents' Perception of Publishing Performance Reports And Improving Transparency, Responsibility, And Accountability According To: Gender, Quality Training, Quality Certification And The City (Results of Mann-Whitney Test).**

Variable	Mann-Whitney U	Asymp. Sig. (2-tailed)
Gender	1141.000	.108
Quality training	1568.000	.917
Quality certification	709.500	.001
City	1306.500	.066

## 5.5 Summary

This chapter included the results of the findings related to dependent and independent variables of the study. The chapter discussed and described the findings of the study in relation to the previous studies that relate to the publication of hospital performance reports and its impact on the quality improvement in hospitals.

## **Chapter 6**

### **Conclusions and Recommendations**

#### **6.1 Research Results**

From the point of view of healthcare providers it was found that:

- 1- The research showed that the existing quality system for healthcare providers is running badly and needs improvement.
- 2- The lack of assessment criteria from the Ministry of Health criteria to evaluate and control both hospitals' performance and the quality of the services provided.
- 3- The lack of policies and regulations issued by the Ministry of Health to force hospitals to measure their performance periodically in order to assess the quality of the services they provide to the patients.
- 4- The research showed that a number of hospitals still do not measure their performance through collecting and presenting data related to performance indicators.
- 5- The research showed that there are no Palestinian hospitals who publish their own performance reports to be accessible to the public.
- 6- The research showed that the validity and reliability of hospitals published information needed to be controlled to ensure their credibility.
- 7- The research found that the publication of healthcare performance reports affected the quality system through:-
  - Better understanding of quality concepts within hospitals.

- Forcing the hospitals to provide the best possible service with the best quality to maintain their image to the public.
- Avoiding medical errors and prevent any mistakes in dealing and providing services to the patients to maintain their reputation.
- Increasing hospitals' competition, and following hospitals' 'benchmarks' for performance in order to provide better services.
- Measuring and publishing hospital performance reports helps the hospital move towards achieving a global quality certificate, and have better chances in obtaining international quality certificates.

8- The research found that the publication of healthcare performance reports affected the hospitals' performance through :-

- Supporting transparency of hospital performance.
- More accountability for providing services to the patients.
- Increasing the hospital's accountability system for its performance lead to greater control over the services provided.

9- The research found that regulators can use publicizing performance reports to monitor hospitals' performance and providing rewards for the best performing hospitals for example by referring patients to the higher performing hospitals.

10- The research showed that the publication of hospital performance reports affected the patients' opinion while choosing the hospital that he or she deems appropriate by reviewing the performance reports.

11- Publishing hospital performance reports helps hospitals to compare their performance with benchmarking and certified global hospitals in order to improve

their overall performance. In return, this will affect the overall quality and patient safety through all the provided hospital's health services.

## **6.2 Recommendations:-**

- 1- The research recommends healthcare providers to develop new methods in order to motivate hospitals to improve their quality of the provided services to the patients.
- 2- The research recommends healthcare providers to follow international health quality systems' standards to prepare their performance indicators and reports.
- 3- The research recommends healthcare providers to include three types of information while preparing their own reports containing: patients' satisfaction from the services delivered, the results of the services provided, and performance indicators assessment results.
- 4- Healthcare providers must consider the differences in the performance indicators according to the services provided in each hospital and its specialties.
- 5- The research recommends that healthcare providers should take some training courses in order to improve their skills in using the different measurements of performance indicators.
- 6- The research recommends healthcare providers, health administrators, managers, leaders, and policymakers to improve quality services and make them a high strategic priority.
- 7- The research recommends healthcare providers to use new methods that are applied worldwide in order to improve quality.

- 8- The research recommends healthcare providers to commit to improving their quality by issuing policies, procedures, and protocols that support quality improvement as the following:-

**Policy Makers are Recommended to:-**

- 1- Develop new methods to enforce the hospitals (private, non-profit, and governmental) to improve their quality in order to improve health status in the state of Palestine.
- 2- Start to assess, measure, and control hospital performance in order to check their performance, reward higher performance through defect checking, analyzing, and applying corrective actions in low-performance activities.
- 3- Encourage hospitals to adopt a periodical performance auditing process, and embrace the key performance indicators (KPIs) as a quality assurance method.
- 4- Establish an official website and journals to publicize hospital performance reports and make them available for all people.
- 5- Develop a national entity that includes quality and healthcare experts to check the quality of the hospitals and provide quality training courses to ensure the validity and reliability of the information related to performance. This entity can also measure the effects of publishing performance reports on the quality of health services and patient safety.

**Hospitals are Recommended to:-**

- 1- Start measuring performance and checking service quality while applying improvement actions.
- 2- Establish a quality department to measure the hospital's performance upon the international guidelines and standards by applying intensive staff training courses to

build quality concepts awareness and improve the staff's understanding regarding the results of performance and quality evaluation. The department can also read the different indicators and take corrective actions when needed while working on performance improvement.

- 3- Establish domestic guidelines and standards for quality performance of healthcare providers as a step towards accomplishing and applying international standards.
- 4- Start to publicize hospitals' performance reports on official sites that are available for everyone to review.

### **6.3 Future Research**

- 1- Conducting a research on all Palestinian hospitals in the West Bank to measure the impact of publishing hospitals' performance reports on quality improvement.
- 2- Starting an in-depth assessment of the impact of publicizing hospitals' performance reports on increasing hospitals' responsibility, accountability, and transparency.
- 3- Conducting an in-depth Research to assess the impact of publicizing hospitals' performance reports on increasing patients' satisfaction.
- 4- Researching the relation between publicizing hospitals' performance reports and gaining international quality accreditation.

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## Appendixes

### Appendix (1) Questioner in English Language



الجامعة العربية الأمريكية  
THE ARAB AMERICAN UNIVERSITY

Our Dear Participants

All regards

The researcher is a student in the quality management master program in the Arab American University and under supervision from the Faculty of Graduate Studies, He is conducting this research to complete the requirement of the Master's degree of quality management. The purpose of this Research is to assess the impact of publicizing hospital performance report on quality improvement.

This research is for academic purposes only. The estimated time for filling the questionnaire is 10-15 minutes to complete answering. The researcher will highly appreciate your participation as your input will add value to the findings of the Research, and assures that any information given will be accorded the necessary confidentiality. The questionnaire is anonymous and you are not required to put your name. The aggregated data will be reported as summary statistics only. You have the right to reject participating in the Research. Returned complete questioners will indicate your agreement.

Thank you for your cooperation.

**Presented by:-**Mohammad Foud Al-Batran

**Under the supervision of** Dr. Salwa Barghouthi

**2018**

For any question:- mbatran013@hotmail.com

<b>Part One:</b>	
<b>Personal and Demographic Information</b>	
<b>1- Gender</b>	
Male [    ]	Female [    ]
<b>2- Age</b>	
Less than 25 years [    ]	25 – 30[    ]    31-35[    ]    36-40[    ]    41-45 [    ]    46-50[    ]    more than 50 years [    ]
<b>3- What is your highest educational level?</b>	
Diploma degree [    ]	Bachelors [    ]    Higher Diploma [    ]    Master's degree [    ]    PhD [    ]    others .....
<b>4- What is the position?</b>	
Quality Officer [    ]	Quality Manger [    ]    Head Nurse [    ]    Head of Laboratory [    ]
Head of radiology Department [    ]    Other, please specify .....	
<b>5- Duration of Experience</b>	
Less than 5 years [    ]	5 - 10yrs [    ]    11 – 20yrs [    ]    more than 20 yrs [    ]
<b>6- Did you have training related to quality?</b>	
Yes [    ]	No [    ]
<b>7- Type of the hospital</b>	
Public [    ]	privet [    ]    non-profit [    ]
<b>8 - Does the hospital hold a quality certification?</b>	
Yes [    ]	No [    ]
<b>9 - If the answer of question 8 is Yes, Pleas list them:.....</b>	
<b>10 – City</b>	
Ramallah [    ]	Hebron [    ]

<b>Part 2</b>  <b>Please Indicate The Extent To Which You Agree Or Disagree With The Statement By Placing (✓) On The Appropriate Response (1= Strongly Disagree....5 = Strongly Agree).</b>					
<b>Section (A)</b>  <b>Evaluate the quality of the current health system</b>	Strongly Agree  (5)	Agree  (4)	Neutral  (3)	Disagree  (2)	Strongly Disagree  (1)
A1- The quality of the health system in Palestinian hospitals needs improvement.					
A2- The health system in Palestinian hospitals follows international quality standards					
A3- The Palestinian Ministry of Health adopts specific approaches for assessing the quality of services provided to patients in hospitals					
A4- The Ministry of Health has its own regulations in controlling the quality of hospitals services.					
A5- There are projects proposed by the Ministry of Health to improve the quality of health services provided in Palestinian hospitals					
A6- There is regulations that allows controlling of hospitals' performance related to medical services					
A7- The Palestinian health system needs to develop new methods to motivate hospitals to improve the quality of services provided to patients					
A8- The Ministry of Health forces hospitals to periodically measure performance indicators to assess the quality of services provided to patients					
A9- Hospitals measure their performance by collecting and presenting data related to performance indicators					

A10- Hospitals have their own performance documentation system.					
A11- Hospitals publish their own performance reports to be accessible to everybody					
A12- It is easy to determine the hospital's performance indicators.					
A13- It is easy to evaluate the hospital's performance indicators.					
<b>Section (B): Publicizing hospital's performance reports</b>					
<b>B1-There is a system to assess the performance of the hospital in providing services to patients.</b>					
B2-There are indicators assessment to ensure uniform performance in all hospitals.					
B3-The Ministry of Health requires hospitals to publicize its performance indicators assessment periodically.					
B4-Performance indicators should be published for the results of the services provided (E.g. number of deaths, average length of hospital stay, and number of complaints...).					
B5- Health providers' Performance indicators assessments results should be published (Waiting period, medical errors...) as a quality assurance methods.					
B6-Performance reports should include patient satisfaction with the services provided and measured by a questionnaire.					
B7-The Ministry of Health should publish the performance indicators assessments results on an official website accessible to all people.					
B8-Hospitals should publish performance indicator					

reports on their official websites accessible to all people.					
B9-There should be training to improve health team skills in using the different measurements of performance indicators assessment methods.					
B10- There should be control over the validity and reliability of information published by hospitals.					
B11-Performance indicators are selected according to international health quality systems' standards.					
B12-There are differences between hospitals in the performance indicators according to the services provided in each hospital and its specialties					
<b>Section (C):Publish performance reports and improve quality</b>					
C1-The publication of performance reports will help to raise the quality of hospitals					
C2-The publication of the performance reports will force hospitals to improve patient services					
C3-The publication of performance reports will help to better understand the quality concepts within hospitals					
C4-Hospitals will be more careful to appear high quality because they have to publish their performance reports					
C5-Measuring performance indicators will help to cover the services that need to be improved					
C6-The publication of performance reports will have an impact on improving patient satisfaction with services provided in each hospital					
C7-The publication of performance reports will allow patients to compare hospitals to determine service quality levels					

C8-There are information comparing with benchmarks of hospitals' performance in order to improve the quality of services provided.					
C9- The hospital has an intellectual attitude towards achieving a global quality certificates.					
C10-It is easier to obtain international quality certificates.					
C11-Measuring hospital performance makes it easier for hospitals to compare their performance with the certified global hospitals.					
<b>Section (D)Transparency, responsibility and accountability</b>					
D1-The publication of hospital performance reports supports transparency of hospital performance.					
D2-It is easier for the patient to choose the hospital that he or she deems appropriate by reviewing performance reports.					
D3-Hospitals are more accountable for providing services to patients.					
D4-The hospital becomes more careful in order to avoid mistakes					
D5-The hospital will be giving more attention to the preventive side to avoid loss of reputation					
D6-The publication of performance reports makes hospitals more competitive in providing better services					
D7-There will be a sense of greater control over the services provided					
D8-There will be a greater hospital accountability system for its performance					
D9-Dissemination of performance reports helps regulators monitor hospital performance better					

D10-These reports can be used to provide rewards for the best performing hospitals					
D11-These reports can help in computing the decreasing inhospitalsperformance					
D12-These reports can be used by the Ministry of Health to referral a patients to higher performing hospitals					



## Appendix (2) Hospitals Permeations.

Hospital Name	Type	المستشفى
Al-AHLI	Nonprofit	الأهلي
Al- Mezan	Private	الميزان
Red Crescent Society Hospital / Hebron	Nonprofit	الهلال الأحمر الخليل
Red Crescent Society Hospital / Ramallah	Nonprofit	الهلال الاحمر رام الله
Istishari Arab Hospital	Private	الاستشاري
palestinian medical complex	Government	مجمع فلسطين الطبي

Arab American University



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1/9/2018

رأس  
السلامة  
1/9/2018

المستشفى الإقليمي العربي / رام الله  
لن يهمل الأمر

تحية طيبة وبعد،

تشهد كلية الدراسات العليا في الجامعة العربية الأمريكية ان الطالب محمد فؤاد موسى البطران طالب في ماجستير  
إدارة الجودة في الجامعة، الرجاء مساعدته لأخذ معلومات لأغراض البحث والدراسة.

مع الاحترام،،،

لأخذ الموافقة من السيد  
السيد العتيبي

24/11/2018

عميد الدراسات العليا

د. عبد الرحمن أبو لينة

د. عبد الرحمن أبو لينة



Arab American University



الجامعة العربية الأمريكية

1/9/2018

لمن يهمه الامر

تحية طيبة وبعد،

تشهد كلية الدراسات العليا في الجامعة العربية الأمريكية ان الطالب محمد فؤاد موسى البطران طالب في ماجستير  
إدارة الجودة في الجامعة، الرجاء مساعدته لأخذ معلومات لأغراض البحث والدراسة.

مع الاحترام،،،

عميد الدراسات العليا

د. عبد الرحمن أبو لبدة



Arab American University

Faculty of Graduate Studies



الجامعة العربية الأمريكية

كلية الدراسات العليا

التاريخ 3/ 12/ 2018

حضرة الدكتور يوسف التكروري المحترم

مدير عام المستشفى الاهلي

تسهيل مهمة بحثية

تحية طيبة وبعد،

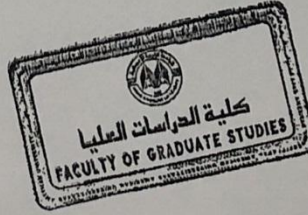
تهديكم الجامعة العربية الأمريكية أطيب التحيات، وبالإشارة الى الموضوع أعلاه، تشهد كلية الدراسات العليا في الجامعة أن الطالب محمد فؤاد موسى البطران، والذي يحمل الرقم الجامعي 201612863 هو طالب ماجستير في الجامعة العربية الأمريكية تخصص ادارة الجودة، نأمل من حضرتكم الاعياز لمن يلزم لمساعدته للحصول على المعلومات اللازمة، علماً ان هذه المعلومات ستستخدم لغاية البحث فقط وسيتم التعامل معها بغاية السرية.

شاكرين لكم تعاونكم

مع اطرافكم

٢٠١٨/١٠/٢٠  
 ح. ك. محمد  
 ح. ك. محمد

كلية الدراسات العليا



0998 13 13 08

Page 1 of 1

Jenin Tel: +970-4-2418888 Ext.:1471,1472 Fax: +970-4-2510810 P.O. Box:240  
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1/9/2018

مستشفى الميزان / الخليل

لمن يهمه الامر

تحية طيبة وبعد،

تشهد كلية الدراسات العليا في الجامعة العربية الأمريكية ان الطالب محمد فؤاد موسى النبطران طالب في ماجستير  
ادارة الجودة في الجامعة، الرجاء مساعدته لأخذ معلومات لأغراض البحث والدراسة.

مع الاحترام،،،

عميد الدراسات العليا

د. عبد الرحمن أبو لبدة



المدير الإداري

لما صاغ  
الرجاء مساعدته في شؤون الدراسات  
مساعدة الطالب المذكور  
بشعبته الإدارية

25.11.2018

Arab American University



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1/9/2018

مستشفى الحلال الأحمر / التحليل

لمن يهمة الامر

تحية طيبة وبعد،

تشهد كلية الدراسات العليا في الجامعة العربية الأمريكية ان الطالب محمد فؤاد موسى البطران طالب في ماجستير  
إدارة الجودة في الجامعة، الرجاء مساعدته لأخذ معلومات لأغراض البحث والدراسة.

مع الاحترام،،،

بحول الروح زمار محمد المحرم  
رئيس الفريق  
لذ مانع

25.11.2018

عميد الدراسات العليا

د. عبد الرحمن أبو لبدة



Arab American University



الجامعة العربية الأمريكية

1/9/2018

مستشفى الهلال الأحمر / البيرة

لمن يهمه الأمر

تحية طيبة وبعد،

تشهد كلية الدراسات العليا في الجامعة العربية الأمريكية ان الطالب محمد فؤاد موسى ليضران طالب في ماجستير  
ادارة الجودة في الجامعة، الرجاء مساعدته لأخذ معلومات لأغراض البحث والدراسة.

مع الاحترام،،،

عميد الدراسات العليا

د. عبد الرحمن أبو لبدة



22/11/18  
د. رمان فلاح

**Appendix (3) List of Arbitrators**

- 1- Dr. Raj'a Zyoud. Nursing faculty, Arab American University
- 2- Ahmad Juma Ayed , pediatric nursing lecturer, Arab American University
- 3- Basma Salameh , Assistant Professor , Arab American University
- 4- Mrs Maha Tarayrah, nursing director, Augusta Victoria Hospital, Jerusalem.
- 5- Dr. Hussen Jabareen, Dean of nursing Faculty , Hebron University.



## ملخص الدراسة

هدف البحث للإجابة على الأسئلة البحثية المتعلقة بمدى تأثير نشر التقارير المتعلقة بأداء المستشفيات على تحسين الجودة، بالإضافة إلى الوقوف على تأثير نشر التقارير على تحسين الصورة النمطية للمستشفيات من وجهة نظر مدراء الأقسام ومدراء الجودة والعاملين في مجال الجودة داخل المستشفيات.

بالإضافة لذلك، يهدف البحث إلى توفير توضيح تفصيلي حول تأثير نشر التقارير الطبية الخاصة بالمستشفيات ومدى تأثيرها على مجموعة من المحاور المتعلقة بتحول المستشفيات لتصبح أكثر مسؤولية ومحاسبية وشفافية، الوضوح في جودة الخدمات المقدمة، بالإضافة إلى كون هذه التقارير تؤثر سلباً أو إيجاباً على اختيار متلقي الخدمة للجهة المعنية .

واعتمدت الدراسة على المنهج الوصفي التحليلي ومنهجية البحث الكمي، من خلال الرجوع إلى العديد من الوثائق والكتب والدراسات السابقة التي تتمحور حول الموضوع، في حين تم الاعتماد على الاستبيان لجمع البيانات الرئيسة لهذه الدراسة ومن ثم تفرغ الاستبيان وتحليله باستخدام برنامج التحليل الإحصائي (SPSS) .

تألف مجتمع الدراسة من مدراء الأقسام ومدراء الجودة والعاملين في مجال الجودة داخل المستشفيات التي تتبع لوزارة الصحة الفلسطينية وتشمل المستشفيات الحكومية والخاصة والغير ربحية في الضفة الغربية، في حين تم الاعتماد على العينة التناسبية متعددة الطبقات من أجل اختيار العينة والتي بلغت (150 مديراً) موزعين على مستشفيات مدينتي رام الله والخليل، حيث تم استرداد 120 استبيان أي ما نسبته (80.00%). حيث تم تحليل متغيرات البحث من خلال استخدام مجموعة من الاختبارات الإحصائية مثل:

Means and Frequencies, (Kolmogorov-Smirnov test, Tukey-test and Kruskal-Wallis's test).

وقد توصل البحث لمجموعة من النتائج ومنها: أن المستشفيات لا تعمل على قياس أدائها من خلال جمع وتقديم وتحليل البيانات المتعلقة بمؤشرات الأداء. بالإضافة إلى عدم وجود مستشفيات فلسطينية تعمل على نشر تقارير الأداء الخاصة في كل مستشفى لتكون في متناول الجمهور.

علاوة على ذلك، توصل البحث إلى أن نشر تقارير أداء المستشفيات وخدماتها الصحية المقدمة ويؤثر على نظام الجودة من خلال: - فهم أفضل لمفاهيم الجودة داخل المستشفيات، بالإضافة إلى زيادة إصرار وعزم المستشفيات لتقديم أفضل خدمة ممكنة مع أفضل جودة مقدمة من أجل الحفاظ على صورتها ضمن الجمهور، تجنب الأخطاء الطبية والاهتمام المتزايد لمنع أي أخطاء طبية قد تحدث في التعامل وتقديم الخدمات للحفاظ على سمعتها. بالإضافة إلى زيادة المنافسة ما بين المستشفيات، وإتباع معايير أداء المستشفيات من أجل تقديم خدمات أفضل.

ويوصي البحث العمل على: قيام المستشفيات ومقدمي الرعاية الصحية بإتباع معايير وأنظمة الجودة الصحية الدولية لإعداد مؤشرات الأداء والتقارير الخاصة بهم.

في حين يوصي البحث بضرورة العمل على تشكيل مجموعة متخصصة تعمل على إعداد التقارير الخاصة بالمستشفيات، من خلال احتوائها على المعلومات المتعلقة برضا المرضى ومتلقي الخدمات عن الخدمات المقدمة من قبل المستشفيات، بالإضافة إلى نتائج الخدمات المقدمة، ونتائج تقييم مؤشرات الأداء .

ويوصي أيضاً بضرورة العمل على مراعاة الاختلافات في مؤشرات الأداء المتبعة في كل خدمة طبية مقدمة داخل كافة التخصصات، أخذة بعين الاعتبار الاختلاف في التخصصات داخل كافة المستشفيات الفلسطينية .

الكلمات المفتاحية: مدراء الجودة، العاملون على الجودة، مقدمي الرعاية الصحية، تقارير الأداء، تقارير الجودة، نشر التقارير الطبية، الجودة، تحسين الجودة، المستشفيات، ومؤشرات أداء الجودة .