

The Availability of Quality Health Service Dimensions in Hospitals (A Field Study of Ibin Sina Teaching Hospital in Sirte)

ABDEL HAKIM SAAD EL SADIG
Faculty of Health Sciences - Sirte University

Abstract

This study aimed to identify the levels of quality of health services in government hospitals. It also aimed to examine the availability of the dimensions of health services quality, which included tangibles, reliability, responsiveness, confidence and empathy. It has been conducted in the Iben Sina teaching hospital in Sirte city. The sample of this study included the all doctors who working in hospital. The respondents are exposed to a questionnaire of (41) statements to measure the dimensions of the availability of quality in the health service. The results of the study showed that the doctors demonstrated a high level of awareness towards the presence and quality of dimensions of health services provided by the teaching hospital. It is also revealed that the five health dimensions of quality are available in Iben Sina teaching hospital in Sirte city.

Keywords: Health service dimensions, Health service quality, teaching hospitals

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I. Introduction

The quality of health services dimensions are among the basic dimensions to achieve the hospital's objectives, which are to improve the quality of health services and make them more responsive to the needs of community members. And since the issue of the dimensions of health service quality is receiving great attention in the field of hospital management because it is related to human life on one hand, and due to the limited studies that dealt with this issue in Libya, we have found it appropriate to address this topic. Quality of care as "the degree to which health care services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge [1].

Health care quality is a multidimensional concept, characterized three components of quality health care: technical quality (the provision of care produces achievable health gain), interpersonal quality (patient needs and preferences are addressed), and amenities (the attributes of the physical setting support care) [2].

Healthcare quality is a broad concept that can be defined as 'the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge' [3].

Health care research and practice has long understood that health care quality consists of both clinical and nonclinical factors that cannot readily be separated. Clearly, the health care literature demonstrates a variety of approaches to defining quality, and it also demonstrates that there is no consensus regarding terms such as "overall quality," "technical (or clinical) quality," "patient satisfaction," and "perceived (or service) quality." [4].

In this new era of globalization, business organizations all over the world are striving hard to evolve effective quality measurement parameters, tools, and strategies to survive competition, and also to achieve differentiation [5]. In this process, the hierarchical classification of key process variables leads to rich source of information [6]. One of the worries that health managers have is to improve overall system effectiveness in order to increase customer satisfaction and loyalty. [7]. The five dimensions, namely reliability, assurance, tangibility, responsiveness and empathy, are the most researched upon dimensions in healthcare services. However, certain dimensions like hospital image indicate towards branding aspect of the healthcare facility.[8]

Quality dimension	Description
Reliability	This factor involves consistency of performance and dependability. Basically, the dimension of reliability refers to the ability to perform the promised service dependably and accurately according to the customers' needs. It means that the organisation should perform their service in the right time and honours their own promises.

Empathy	This dimension refers to the level of caring, knowing customer needs and individualised attention that the organisation needs to provide to their customers.
Tangibles	This factor refers to the appearance of personnel, physical facilities, tools or equipment used to provide the service, physical aspect of facilities such as signs, accessibility, spaciousness, functionality, and cleanliness.
Responsiveness	Responsiveness pertains to the willingness or readiness of service providers to provide prompt services to the customers, the factor of responsiveness deals with timeliness of service such as providing quick services to the customers, setting-up appointments as soon as possible.
Assurance	This service quality dimension refers to employee knowledge, courtesy, and the ability to convey trust and confidence. Firstly, employee knowledge means employees should have knowledge and skills to serve customers in the best possible manner. Secondly, courtesy means politeness, respect, consideration and friendliness of the contact personnel.

TABLE (1) THE HEALTHCARE QUALITY DIMENSIONS

Source: Adapted from Rafikul Islam and others (2016)

These dimensions are context-specific and have been mostly identified from the demand side, that is, patients. In services like healthcare that require high experience and credence properties, the dimensions of healthcare service quality need to be evaluated from the supply side as well, that is, providers' [9]. Health service depends on the encounter between expectations and performance level perceptions and can be measured through the 5 Health service quality underlying dimensions: tangible elements (physical facilities, equipment and appearance of personnel), reliability (ability to perform the promised service dependably and accurately), responsiveness (willing-ness to help customers and provide prompt service), empathy (caring and individualized attention that the firm provides to its customers) and assurance (including competence, courtesy, credibility and security) [10]. The hospitals in the developed countries are aware of the importance of health service quality underlying dimensions as a strategic variable and a crucial determinant of long-term viability and success [11] Therefore, hospital accreditation has been frequently adopted worldwide to assess and improve healthcare service quality [12]. Healthcare service quality indicators, service quality surrogate indicators can be used by patients to assess service provider efficaciousness. The most widely accepted measurement scale for health service quality, which consists of five essential service quality dimensions: (1) tangibles; (2) reliability; (3) responsiveness; (4) assurance; and (5) empathy.[13]

Patients' satisfaction influences the willingness to follow doctor's prescription, which will in turn influence patients' future satisfaction with healthcare results [14]. A healthy population, characterized by balanced birth and death rates, and a low incidence of disease, is fundamental to the growth and prosperity of a nation.[15] This can be achieved if the quality of health care provided to the people is successful in appropriate management of the disease, and is available to the large majority of the population at an affordable cost. Thus, quality patient-care should be an underlying principle of a nation's health system [16]. from the indicators of quality dimensions, hospital administration need to show commitment to provide medical services to patients in a timely manner, give attention to patients' problems, maintain medical records and confidentiality, and develop advanced appointment systems and advice patients of the same, provide patients waiting rooms with appropriate restrooms, provide employees with incentives and training courses, simplify provision of medical services procedures, and establish a unit for quality dimensions administration.[17].

Service quality in hospitals as 'The abilities to reach the desired objectives using legitimate means,' where the desired objectives implied 'the achievable level of health [18] . The hospitals in the developed countries are aware of the importance of delivering patient satisfaction as a strategic variable and a crucial determinant of long-term viability and success [19] . Healthcare quality is a broad concept that can be defined as 'the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge'[20] and comprises multiple dimensions, including: safety, patient-centeredness, timeliness, equity, access, efficiency and effectiveness [21]. However, accurately assessing is difficult, as there is a lack of formal systems to monitor and ensure consistency in healthcare delivery [22]. Healthcare industry is considered as one of the most challenging sector. It is a developing industry globally covering innumerable hospitals, clinics, and institutions meant to provide primary, secondary and tertiary level of patient care [23].

II. The Research Problem

There is no unanimous agreement on determining the quality of services' tools and its related variables, specifically in the field of health sector because of the several schools that defined the concept of quality.

The need for establishing teaching hospitals and dealing with the quality has emerged due to the services provided, such as medical and preventive services, training, and education, and the managements of teaching hospitals in Libya are faced with several challenges and queries when they offer services to patients and customers, also the dimensions of the quality of health services are among the basic dimensions to achieve the hospital's goals, including: Improving the quality of health services, and makes it more responsive to the society needs, the subject of quality health service dimensions was interest by the researcher in the field of

hospital management. Because it is related to human life on the one hand, and the limited studies that dealt with this topic in Libya.

We have found it appropriate to research and to know the dimensions of service quality are available in Ibn Sina teaching hospital of Sirte from the point of view of doctors, through the 5 dimensions:

- The reliability
- The empathy
- The tangibles
- The responsiveness
- The assurance

In trying attempt to answer the following question:

Are the 5 dimensions of service quality are available in Ibn Sina Teaching Hospital in Sirte?

THE RESEARCH HYPOTHESES

Depending on the study problem, the researcher formulates hypotheses for this study as follows: The basic hypothesis:

□ The dimensions of service quality are available in Ibn Sina Teaching Hospital in Sirte, through reliability, empathy, tangibles, responsiveness, and assurance according to the variables of doctors.

The branches of hypothesis:

1. The reliability dimension of the level of health service quality is available in Ibn Sina teaching hospital in Sirte.
2. The empathy dimension of the level of health service quality is available in Ibn Sina teaching hospital in Sirte.
3. The tangibles dimension of the level of health service quality is available in Ibn Sina teaching hospital in Sirte.
4. The responsiveness dimension of the level of health service quality is available in Ibn Sina teaching hospital in Sirte.
5. The assurance dimension of the level of health service quality is available in Ibn Sina teaching hospital in Sirte.

THE RESEARCH OBJECTIVES

This study aims to shed light on:

1. Determine the level of application of the dimensions of health services quality in the Iben Sina hospital, from the viewpoint of the doctors in hospital
2. Activating the role of interested in Iben Sina hospital, and other hospitals to apply the dimensions of health services quality and work on enhancing them.
3. Identify the 5 dimensions of health services quality.
4. Identify the appropriateness of the medical system at the Iben Sina hospital to the dimensions of health services quality.

THE IMPORTANCE OF RESEARCH

The importance of this study lies in adding to the Arab libraries, especially in Libya, also this study represents a reference benefit scholars, medical staff, and those interested in showing the role of management in medical organizations in the process of applying the dimensions of health services quality in improving of medical system as well as being useful for decision makers in health sector, especially in the preparation of the consolidated medical and management staff qualified to lead the process of change and the impact on efficiency, productivity and access of high quality health services.

Also recognizing the opinions and attitudes of doctors towards the quality of health services in teaching hospitals, and Identifying the doctors' awareness about the dimensions of health service quality in teaching hospitals.

Therefore, the researcher will attempt to shed light on the key dimensions of health services quality which mentioned in the problem of study to be more useful for all.

III. Materials And Methods:

This study followed descriptive analytical method, conducted among all the doctors at Ibin Sina Teaching Hospital.

Number of doctors in the hospital was **85**, **72** questionnaires were distributed, **63** valid and complete questionnaires were received. Response rate was **87.5 %**. Data was collected March **2021**.

Questionnaire was the main tool of collecting data and it adopted from an extensive review of the past study (Akram Ahmed Al -Taweel and others, 2009)

The questionnaire was classified into two sections:

Section (A) consisted of the personal characteristics such as gender, age, qualification and experience years.

Section (B) comprised 41 items related to the five dimensions of quality health services: The reliability (7 items), the empathy (8 items), the tangibles (7 items), the responsiveness (9 items), and the assurance (10 items).

All items were captured on five Likert scale, ranges from 1= strongly disagree to 5= strongly agree.

TABLE (2) THE PERSONAL VARIABLES

Variable	Frequency	Percent
Gender		
Male	24	37.8
Female	39	62.2
Age group		
25 - 35	31	49.3
36 - 45	14	22.2
46 years and above	18	28.7
The level of education		
Bachelor	39	61.9
Master	16	25.4
PhD	8	12.7
Experience range		
5 - 10 years	29	46
11 - 20 years	32	50.8
21 years and above	2	3.2

Personal data showed of respondents (61.2%) were females and the remaining (37.8%) were males.

Almost half of respondents (49.3%) were less than 35 years, and (22.2%) were from the age group 35 - 45 years, whereas the age more than 45 years old had the lowest percentage among all age groups, which was (18.9%).

As regards qualification, respondents were mainly divided between three: bachelor's degree, Master, PhD (61.9%, 25.4 % and 12.7%) respectively.

Whereas regards to experience (46 %) of respondents had experience of less 10 years, followed by (50.8 %) were fall into a working experience range between 11- 20 years, and (3.2%) more than 20 years.

The Frequency Tables of dimensions:

TABLE (3) THE SCALE OF RELIABILITY DIMENSION

No	Variable	Std. Deviation	Mean
1	X1	1.12246	3.9516
2	X2	0.99496	4.1613
3	X3	.93368	4.3065
4	X4	1.08850	3.7903
5	X5	.89788	4.3065
6	X6	1.15760	4.0645
7	X7	1.22604	3.8548

TABLE (4) THE SCALE OF EMPATHY DIMENSION

No	Variable	Std. Deviation	Mean
8	X8	1.06926	3.9355
9	X9	1.23763	3.5323
10	X10	1.24264	3.6452
11	X11	1.23421	3.4032
12	X12	1.21597	3.3548
13	X13	1.24051	3.7419
14	X14	1.19059	3.3710
15	X15	1.19225	3.3871

TABLE (5) THE SCALE OF TANGIBLES DIMENSION

No	Variable	Std. Deviation	Mean
16	X16	1.18111	3.4194
17	X17	1.05795	3.2097
18	X18	1.25913	3.3871
19	X19	1.04233	4.2097
20	X20	1.22118	3.8710
21	X21	1.09709	4.0968
22	X22	1.12997	3.6613

TABLE (6) THE SCALE OF RESPONSIVENESS DIMENSION

No	Variable	Std. Deviation	Mean
23	X23	1.13837	3.8226
24	X24	1.31058	3.7097
25	X25	1.21085	3.5323
26	X26	1.21651	3.7903
27	X27	1.19712	3.9032
28	X28	1.09949	4.0645
29	X29	1.17494	3.8871
30	X30	1.14289	3.8065
31	X31	1.09371	3.8710

TABLE (7) THE SCALE OF ASSURANCE DIMENSION

No	Variable	Std. Deviation	Mean
32	X32	1.16636	3.9839
33	X33	1.30248	3.4839
34	X34	1.11774	4.1129
35	X35	.76217	4.5323
36	X36	.73946	4.5484
37	X37	.66649	4.5806
38	X38	.80470	4.5000
39	X39	.69371	4.4516
40	X40	1.09471	3.7714
41	X41	1.09373	3.7712

Testing Hypothesis:

The main hypothesis:

"The dimensions of service quality are available in Ibn Sina Teaching Hospital in Sirte, through reliability, empathy, tangibles, responsiveness, and assurance according to the variables of doctors".

The 1st sub-hypothesis:

"The reliability dimension of the level of health service quality is available in Ibn Sina teaching hospital in Sirte".

TABLE (8) RESULT OF THE 1ST SUB-HYPOTHESIS

Variable	DF	Mean	St.D	Sig* 0.05
The reliability dimension	63	4.04	0.679	0.00

The table above (8) shows that the significant value of **0.00** which is less than the value of **0.05** means that: Means accepting the sample surveyed of the term and the arithmetic mean of the answers respondents is **4.04** which are greater than the Default mean (**3**) thus the respondents approve of the phrase.

The 2nd sub-hypothesis:

"The empathy dimension of the level of health service quality is available in Ibn Sina teaching hospital in Sirte".

TABLE (9) RESULT OF THE 2ND SUB-HYPOTHESIS

Variable	DF	Mean	St.D	Sig* 0.05
The empathy dimension.	63	3.44	0.870	0.00

The table (9) above shows that the significant value of **0.00** which is less than the value of **0.05** means that: Means accepting the sample surveyed of the term and the arithmetic mean of the answers respondents is **3.76** which are greater than the Default mean (**3**) thus the respondents approve of the phrase.

The 3rd sub-hypothesis:

"The tangibles dimension of the level of health service quality is available in Ibn Sina teaching hospital in Sirte".

TABLE (10) RESULT OF THE 3TH SUB-HYPOTHESIS

Variable	DF	Mean	St.D	Sig* 0.05
The tangibles dimension	63	3.83	0.809	0.00

The table (10) above shows that the significant value of **0.00** which is less than the value of **0.05** means that: Means accepting the sample surveyed of the term and the arithmetic mean of the answers respondents is **3.83** which are greater than the Default mean (**3**) thus the respondents approve of the phrase.

The 4th sub-hypothesis:

"The responsiveness dimension of the level of health service quality is available in Ibn Sina teaching hospital in Sirte".

TABLE (11) RESULT OF THE 4TH SUB-HYPOTHESIS

Variable	DF	Mean	St.D	Sig* 0.05
The responsiveness dimension	63	3.88	0.736	0.00

The table (11) above shows that the significant value of **0.00** which is less than the value of **0.05** means that: Means accepting the sample surveyed of the term and the arithmetic mean of the answers respondents is **3.88** which are greater than the Default mean (**3**) thus the respondents approve of the phrase.

The 5th sub-hypothesis:

"The assurance dimension of the level of health service quality is available in Ibn Sina teaching hospital in Sirte".

TABLE (12) RESULT OF THE 5TH SUB-HYPOTHESIS

Variable	DF	Mean	St.D	Sig* 0.05
The assurance dimension	63	4.47	0.625	0.00

The table (12) above shows that the significant value of **0.00** which is less than the value of **0.05** means that: Means accepting the sample surveyed of the term and the arithmetic mean of the answers respondents is **4.47** which are greater than the Default mean (**3**) thus the respondents approve of the phrase.

IV. Results

1. Accept the hypothesis which states: "The reliability dimension of health service quality is available in Ibn Sina teaching hospital in Sirte".
2. Accept the hypothesis which states: "The empathy dimension of health service quality is available in Ibn Sina teaching hospital in Sirte".
3. Accept the hypothesis which states: "The tangibles dimension of health service quality is available in Ibn Sina teaching hospital in Sirte".
4. Accept the hypothesis which states: "The responsiveness dimension of health service quality is available in Ibn Sina teaching hospital in Sirte".
5. Accept the hypothesis which states: "The assurance dimension of health service quality is available in Ibn Sina teaching hospital in Sirte".

V. Discussion

The study had many important findings including that doctors in hospital respond that hospital apply the five medical service dimensions of reliability, tangibility, empathy, responsiveness, and assurance taking into account that application varies among the five dimensions. this is what a study of (Akram and others, 2009, Salah 2012, Atiq Aiasha 2012, Abdula Dawe 2019, Zahra Reada 2018, Salah Deab 2012, Raghav Upadhyai, and others 2019) found.

The results of hypothesis test showed that:

- The 1st sub-hypothesis has been accepted, which states: "The reliability dimension of health service quality is available in Ibn Sina teaching hospital in Sirte". This is what a study of (Rooma 2007) found.
- The 2nd sub-hypothesis has been accepted, which states: "The empathy dimension of health service quality is available in Ibn Sina teaching hospital in Sirte". (Akram and others 2009) found , but there is a decline in the arithmetic mean, although it is greater than 3, but it is not up to 4 of 5, this show that the application is weak, this is what a study of (Salah Deab 2012) found.
- The 3th sub-hypothesis has been accepted, which states: "The tangibles dimension of health service quality is available in Ibn Sina teaching hospital in Sirte". Differed with study of (Habeab and Basel 2014).
- The 4th sub-hypothesis has been accepted, which states: "The responsiveness dimension of the level of health service quality is available in Ibn Sina teaching hospital in Sirte". this is what a study of (Salah Deab 2012) found. and Differed with study of (Mohammednour & Ahmed 2017).
- The 5th sub-hypothesis has been accepted, which states: "The assurance dimension of the level of health service quality is available in Ibn Sina teaching hospital in Sirte". this is what a study of (Keith F, and others 2005) found.

Recommendations

1. Hospital should be supplied with the necessary devices and equipment.
2. Medical staffs should be made available in hospital.
3. Create a small unit concerned with quality and its dimensions
4. Giving quality courses for hospital staffs.
5. Studying the experiences applied in the developed countries, medically and transported properly.
6. Training medical staff up to the highest level to provide proper medical service.

References

- [1]. **Habib Mahmoud, Basel Asaad (2014)** "Measuring the Level of the Quality of the Medical Services Provided at the Health Centers in Lattakia Province from the Beneficiaries' Point of View A Field Study of Supervision Center of al-Shamia - Tishreen University Journal for Research and Scientific Studies -Economic and Legal Sciences Series Vol. (36) No. (5)
- [2]. **Rafikul Islam, Selim Ahmed, and Kazi Md. Tarique (2016)** "Prioritisation of service quality dimensions for healthcare sector" - Int. J. Medical Engineering and Informatics, Vol. 8, No. 2
- [3]. **Kui-Son Choi, Hanjoon Lee, Chankon Kim, and Sunhee Lee (2005)** "The service quality dimensions and patient satisfaction relationships in South Korea: comparisons across gender, age and types of service"Journal of Services Marketing
- [4]. **Keith F. Ward, Erik Rolland, and Raymond A. Patterson (2005)** "Improving Outpatient Health Care Quality: Understanding the Quality Dimensions"Article in Health Care Management Review ·DOI: 10.1097/00004010-200510000-00010 · Source: PubMed
- [5]. **Faisal Talib and Zillur Rahman (2015)** "An interpretive structural modelling for sustainable healthcare quality dimensions in hospital services" Int. J. Qualitative Research in Services, Vol. 2, No. 1.
- [6]. **Akram Ahmed Al-Taweel, Alaa Hasseb Al- Jaleely, and Riyadh Jameel (2010)** "WahabPossibility To Establishment The Dimensions Of Quality Health Services Study in Group Selected From Hospitals in Nineveh"- Takreat Journal of economic and administration sciences Vol. 6, No. 19.
- [7]. **Iram Fatima, Ayesha Humayuna, Usman Iqbal, and Muhammed Shafiq (2019)** "Dimensions of service quality in healthcare: a systematic review of literature" - International Journal for Quality in Health Care.
- [8]. **Raghav Upadhyai, Arvind Kumar Jain, Hiranmoy Roy, and Vimal Pant (2019)** "A Review of Healthcare Service Quality Dimensions and their Measurement" - Journal of Health Management 21(1) 102–127.
- [9]. **Aaron A. Abuosi and Roger A. Atinga (2013)** "Service quality in healthcare institutions: establishing the gaps for policy action" - International Journal of Health Care Quality Assurance Vol. 26 No. 5, pp. 481–492
- [10]. **Mario Lino Raposo Æ, Helena Maria Alves Æ, Paulo Alexandre Duarte (2008)** "Dimensions of service quality and satisfaction in healthcare: a patient's satisfaction index"Article in Service Business · DOI: 10.1007/s11628-008-0055-1 · Source: RePEc
- [11]. **Mahasin A Altaha, Yaseen T Elethawi, and Abd Alfatah Rahed (2014)** "Assessment of the Quality of Primary Health Care services in Al-Ramadi City, West of Iraq" - Al-Anbar Medical Journal Vol.14 No.1.
- [12]. **Claudia A. S. Araujo, Marina Martins Siqueira, and Ana Maria Malik (2020)** "Hospital accreditation impact on healthcare quality dimensions: a systematic review" - International Journal For Quality In Health Care.
- [13]. **Rooma Roshnee Ramsaran-Fowdar (2008)** "The relative importance of service dimensions in a healthcare setting" - International Journal of Health Care Quality Assurance Vol. 21 No. 1.
- [14]. **Alia Almoajel, Ebtisam Fetohi, and Amani Alshamrani (2014)** "Patient Satisfaction with Primary Health Care in Jubail City, Saudi Arabia" - World Journal of Medical Sciences.
- [15]. **Mayuri Duggirala, Chandrasekharan Rajendran, and R.N. Anantharaman (2008)** "Patient-perceived dimensions of total quality service in healthcare" International Journal Vol. 15 No. 5, pp. 560-583
- [16]. **Olgun Kitapcia, Ceylan Akdoganb, and Ibrahim Taylan Dortyolb (2014)** "The Impact of Service Quality Dimensions on Patient Satisfaction, Repurchase Intentions and Word-of-Mouth Communication in the Public Healthcare Industry" - Procedia - Social and Behavioral Sciences 148 . 161 – 169 Turkiye

- [17]. **Mohammednour Eltahir Ahmed and Ahmed Osman Ibrahim (2017)** "The Availability of Quality Health Service Dimensions in Government Hospitals in Sudan (A Case Study of Teaching Hospitals in Sudan)"- International Journal of Business and Management; Vol. 12, No. 6.
- [18]. **Aqsa Siddiq, Qadar B. Baloch, and Kausar Takrim (2016)**"Quality of Health Care Services in Public and Private Hospitals of Peshawar, Pakistan"- City University Research Journal Volume 06 Number 02. PP 242-255
- [19]. **Aljeesh, Yousef and Alkariri, Naeem (2010)** "Patients' Satisfaction with the Quality of Health Services Provided at the Outpatient Department at Al-Shifa Hospital" - The Islamic University Journal (Series of Natural Studies and Engineering)Vol.18, No.2, pp 111 - 121.
- [20]. **Ahmad Mahmoud Zamil, Ahmad Yousef Areiqat, and Waleed Tailakh (2012)** "The Impact of Health Service Quality on Patients' Satisfaction over Private and Public Hospitals in Jordan: A Comparative Study" - International Journal of Marketing Studies Vol. 4, No. 1.
- [21]. **Saadoun F. Al-azmi, Aida M. Mohammed, and Manal I. Hanafi (2006)** " Patients' Satisfaction With Primary Health Care In Kuwait After Electronic Medical Record Implementation"J Egypt Public Health Assoc Vol.81 No.5 & 6.
- [22]. **Mohsin Muhammad Butt and Ernest Cyril de Run(2010)** "Private healthcare quality: applying a SERVQUAL model" - International Journal of Health Care Quality Assurance Vol. 23 No. 7, pp. 658-673
- [23]. **Laith Alrubaiee and Feras Alkaa'ida (2011)** "The Mediating Effect of Patient Satisfaction in the Patients' Perceptions of Healthcare Quality – Patient Trust Relationship" - International Journal of Marketing Studies Vol. 3, No. 1.

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