NEAR EAST UNIVERSITY

INSTITUTE OF GRADUATE STUDIES

DEPARTMENT OF BUSINESS ADMINISTRATION

THE IMPACT OF SERVICE QUALITY ON PATIENT SATISFACTION: COMPARATIVE STUDY BETWEEN PUBLIC AND PRIVATE HOSPITALS

MBA THESIS

DJAWAD QAWASMEH

Nicosia

November, 2021

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M.S.c THESIS

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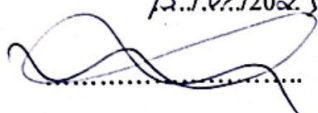
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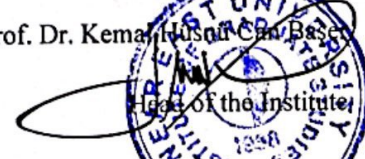
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Approval

We certify that we have read the thesis submitted by **DJAWAD QAWASMEH** titled **"THE IMPACT OF SERVICE QUALITY ON PATIENT SATISFACTION: COMPARATIVE STUDY BETWEEN PUBLIC AND PRIVATE HOSPITALS"** and that in our combined opinion it is fully adequate, in scope and in quality, as a thesis for the degree of Master of Social Sciences.

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Declaration

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ABSTRACT

THE IMPACT OF SERVICE QUALITY ON PATIENT SATISFACTION: COMPARATIVE STUDY BETWEEN PUBLIC AND PRIVATE HOSPITALS

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This study aims to investigate the impact of service quality on patient satisfaction in both private and public hospitals working in Jordan during Covid-19. In order to achieve the research objectives, the questionnaire is used from literature and distributed to the patients to collect data related to their experience with the hospitals in the studied period. After that, the researcher used Excel to compute variables and then used SPSS to apply the following statistical techniques: descriptive statistics (Maximum, Minimum, Median, Mean and Standard Deviation), correlation; which used to measure the strength of relationship between two variables and the direction of it. Regression analysis used only after ensuring the eligibility of data to be tested by using regression analysis, it will be used to understand the relationship among the independent variables (service quality) and the dependent variable (patient satisfaction) and to explore the forms of these relationships. The findings of the study indicate that there is no difference in the impact of reliability of service delivery, assurance of service delivery, empathy of service delivery, responsiveness to patients and tangibility of service delivery on the patient satisfaction in both private and public Jordanian hospitals during the COVID-19 pandemic. The study implies that private hospitals enhanced the responsiveness to patients and tangibility as a service quality dimensions in comparison to the public hospitals which leads to increase the flow of patients to the private hospitals.

Keywords: *service quality, patient satisfaction, private hospitals, public hospitals, covid-19, Jordan.*

ÖZ

THE IMPACT OF SERVICE QUALITY ON PATIENT SATISFACTION: COMPARATIVE STUDY BETWEEN PUBLIC AND PRIVATE HOSPITALS

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Bu çalışma, Covid-19 sırasında Ürdün'de çalışan hem özel hem de kamu hastanelerinde hizmet kalitesinin hasta memnuniyeti üzerindeki etkisini araştırmayı amaçlamaktadır. Araştırma hedeflerine ulaşmak için, literatürden anket kullanılmış ve çalışılan dönemde hastanelerle ilgili deneyimlerine ilişkin verileri toplamak için hastalara dağıtılmıştır. Bundan sonra, araştırmacı değişkenleri hesaplamak için Excel'i kullandı ve ardından aşağıdaki istatistiksel teknikleri uygulamak için SPSS'yi kullandı: tanımlayıcı istatistikler (Maksimum, Minimum, Medyan, Ortalama ve Standart Sapma), korelasyon; iki değişken arasındaki ilişkinin gücünü ve yönünü ölçmek için kullanılır. Regresyon analizi kullanılarak test edilecek verilerin uygunluğu sağlandıktan sonra, ancak bağımsız değişkenler (hizmet kalitesi) ile bağımlı değişken (hasta memnuniyeti) arasındaki ilişkiyi anlamak ve bu ilişkilerin biçimlerini keşfetmek için kullanılacak olan regresyon analizi kullanılacaktır. . Çalışmanın bulguları, hem özel hem de kamu Ürdün hastanelerinde hizmet sunumunun güvenilirliği, hizmet sunumunun güvencesi, hizmet sunumunda empati, hastalara yanıt verme ve hizmet sunumunun somutluğunun hasta memnuniyeti üzerindeki etkisinde bir fark olmadığını göstermektedir. COVID-19 pandemisi.. Çalışma, özel hastanelerin kamu hastanelerine kıyasla hastalara yanıt verebilirliği ve hizmet kalitesi olarak somutluğu artırdığını ve bunun da özel hastanelere hasta akışını artırdığını ima etmektedir.

Anahtar Kelimeler: hizmet kalitesi, hasta memnuniyeti, özel hastaneler, kamu hastaneleri, covid-19, Ürdün.

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CHAPTER I

Introduction

Health service decisions are influenced by inputs such as available facilities, including medical professionals, supplies and equipment, patients and/or medication. It is necessary to examine how these services are used to manage the patient health and fitness or illness and also to discuss patient experience, including demands for caring personnel, comfortable and healthy structures, and advanced supplies and equipment. Patient satisfaction is a complicated, dynamic problem that needs to be discussed from a variety of angles. It is unsuitable to assess one part of patient satisfaction, such as comfort with the attitude of the doctor, without taking into consideration the quality of hours wasted with the doctor Khamis and Njau, (2014).

Service quality is a continuous process and hard to measure. This is because high-involvement partnerships and certain facilities are high in relevance efficiency, making consumer judgments complicated and difficult (Chirdan, *et al.* 2013). Service quality has become a symbol for consumers when using any services or purchasing a product, and it is also a strategic advantage for companies to succeed and stay competitive in the market by providing higher quality of goods and services based on consumer expectations (Nasim, *et al.* 2014). Patient expectations are considered to be the primary indicator in health care. This means that patient satisfaction is the key instrument for critical decision-making in the selection of services and that the quality of services offered to consumers should be compatible with their expectations (Zeithaml, *et al.* 1993).

The health care sector is basically a business based service, and customer satisfaction is an significant aspect (Shabbir, *et al.*, 2010). Patient satisfaction was considered to be one of the most vital factors and primary performance measures in health care (Pollack, *et al.*, 2011). Consumer satisfaction is about maintaining and fulfilling customer needs and desires to maximize customer service (Minarti, *et al.*, 2014). In addition, patient satisfaction is defined as the judgment of the healthcare consumer as to whether or not their care expectations have been met (Segoro, 2013).

The difference between private and public health organizations is that the government grants public hospitals with funding in compliance with the rules and regulations, while private hospitals have a significant investment in handling a large

number of patients and delivering better quality facilities than their rivals. As a result, for-profit hospitals provide more customized facilities to their patients. Several previous studies have shown that patients tend to attend the private hospital because of certain important factors. Such as; new technology, no waiting list and timely intervention without delay, hygienically safe environments and more personal nursing and medical care (Manimay, 2014).

Healthcare is quickly becoming such a consumerist industry all over the world. Deep participation of medical procedures; treatment methods and the drug companies transformed the face of healthcare in the 21st century. Today, patients are now more conscious and knowledgeable of their conditions than most health-care providers. It is also useful to realize precisely what patients expect of doctors as their healthcare professionals to practice on a regular basis, in addition to ethically acceptable medicine Santosa and Azam, (2019), Rehaman and Husnain, (2018).

Satisfaction is one of the most important aspects of government policy or a successful organisation, and it can only be maintained by providing exceptional service quality, which leads to increased satisfaction. Good service delivery, cost allocation, and management techniques are required to implement these improved provisions. In terms of suppliers, there are two types of service providers that function exceptionally effectively in both commercial and governmental hospitals in developing nations. Choosing the correct health center and trained physician is critical for achieving the goal of patient satisfaction because it has a strong influence on the patient's treatment (Shabbir, *et al.,* 2016).

In the process of improving a health-care delivery system, the patient's perspective is becoming increasingly relevant. The condition of pleasure or enjoyment that patients feel when using a health service is referred to as patient satisfaction. As a result, every health-care provider's primary responsibility is to offer patient care. It is one of the benchmarks used to assess a hospital's efficiency and effectiveness, with the efficiency of a hospital being linked to the delivery of services and the provision of high-quality treatment. Patient satisfaction is the best indicator of how good the healthcare services administration is (Sun, *et al.,* 2017).

Patient satisfaction is a well-known metric for assessing the effectiveness of hospital health services. Patient satisfaction is a key metric used to assess the quality of health-care services delivered. Patients' opinions are now regarded a major role in treatment decisions and delivery of health care services [12]. As a result, the evaluation of health service delivery from the perspective of patients has gotten more attention and has become a primary attribute of any health system, as it acts as a valuable indicator of service provision performance, particularly in public sector institutions (Li, *et al.,* 2012).

1.1 Problem Statement

Service quality is one of the most fundamental elements in management and industry. Service quality in hospitals ought to be guided towards patient satisfaction by the use of two types of hospitals: public hospitals and private hospitals. The aim of this study is to compare the quality of services provided by these different types of hospitals. In order to be competitive in the service sector, they should pay attention to providing high quality of service in order to improve customer satisfaction. In certain cases , patients in public hospitals are undiagnosed and often specialists unable to identify illnesses and when they complain, nobody pays attention to them; in the long run, they are sometimes forced to resort to care in other hospitals, typically in private clinics. It is also complained that contact between healthcare workers and patients in public hospitals is very low, which often makes it seem like patients are completely at the mercy of healthcare workers in these hospitals. The country's health sector needs special attention from the government, as the standard of health care brings hope and comfort to patients and their dependents. It also helps to sustain a healthy human capital that contributes to the growth of the country. In the shortage of research in Jordan on the relative service quality and customer satisfaction in hospitals sector, this study attempts to examine this issue by compare it for both public and private hospitals after the pressure imposed on the Jordanian hospitals during the COVID-19 pandemic when the corona virus cases increased to reach more than 5000 cases a day. This study focuses on the healthcare sector working In Jordan during the COVID-19 pandemic.

1.2 Aims and Objectives of the Study

The objectives of this research are:

1. To investigate the extent of patient satisfaction from patients view during the COVID-19 pandemic.

2. To find if there is a difference in the impact of services quality on the patient satisfaction in both private and public Jordanian hospitals during the COVID-19 pandemic.

1.3 Significance of the Study

The findings of this study are hoped to contribute to the literature about the customer satisfaction and services quality, especially in healthcare sector. To the best knowledge of the researcher, there is shortage in studies related to this topic based on Jordanian data. In addition, the findings of this study are expected to provide managers of hospitals and other interested parties (e.g., investors, creditors and financial analysts) with knowledge about the impact of the service quality and patient satisfaction in comparison between two types of hospitals. This helps them in making different decisions about investing in hospitals or making decisions about enhancing the provided services.

1.4 Research Questions

The research problem can be expressed in the following questions:

1. What is the extent of patient satisfaction from patients view during the COVID-19 pandemic?

2. Is there a difference in the impact of services quality on the patient satisfaction in both private and public Jordanian hospitals during the COVID-19 pandemic?

1.5 Definition of Key Terms

Patient Satisfaction: is referred as the sentence made by recipients of care as to whether their hopes for attention have happened or not.

Service Quality: a universal judgment, or attitude, concerning the supremacy of the service.

Reliability of service delivery: the ability to perform the promised service dependably and accurately. In broad sense reliability means, service firms' promises about delivery, service provisions, problem resolutions and pricing. Customers like to do business with those firms, who keep their promises.

Assurance of service delivery: employee's knowledge, courtesy and the ability of the firm and its employees to inspire trust and confidence in their customers.

Tangibility of service delivery: the appearance of physical facilities, equipments, communication materials and technology. All these provide enough hints to customers about the quality of service of the firm.

Empathy of service delivery: the caring, individualized attention provides to the customers by their banks or service firms. This dimension try to convey the meaning through personalized or individualized services that customers are unique and special to the firm.

Responsiveness to patients: the willingness to help customers and to provide prompt service. This dimension focuses in the attitude and promptness in dealing with customer requests, questions, complaints and problems.

CHAPTER II

Literature Review and Theoretical Framework

2.1 Introduction

Service has been identified to include intangible acts performed by one party to another (in the type of activity) but does not contribute to the ownership of any physical object Al-Neyadi, *et al.* (2016). The programs provided by healthcare providers in healthcare environments include the diagnosis and treatment of patients, initiatives in public health, surgical and non-surgical administration, pharmacological and non-pharmacological management of patients with the primary purpose of either avoiding or treating an illness Quality as stated by Kotler is the entirety of a product or service's features and characteristics that bear on its capacity to meet specified or implied needs. In the context of this analysis, we therefore describe service quality as the judgment of patients(customers) of the full healthcare delivery package to meet and exceed both their defined and implied needs. Quality, like elegance, is claimed tobe in the beholder's eyes, i.e. quality is subjective and better described from the viewpoint of the consumers. The SERVQUAL model is known to be the most common, scrutinized and flexible scale to provide valid service quality assessment and has been thoroughly validated in scientific studies. Originally, the SERVQUAL framework was designed from the work of Parasuraman *et al.,* (1985) to assessing service quality by applying the definition of holes and dimensions of service quality. The study defined 97 qualities that were originally grouped into 10consistency dimensions, which were simplified into five dimensions after iterative improvements: tangibility, reliability, responsiveness, assurance, and empathy.

2.2 Service Quality

In particular, there are five measurements of service quality (tangibles, responsiveness, empathy, assurance and reliability) that could have an impact on customer satisfaction, for the sake of identifying each factor's possible effect on the Jordanian healthcare sector. These measurements involve the five measurements of the SERVQUAL model.

2.2.1 Reliability

Reliability has been discovered to mean that organizations first conduct aservice properly. In addition, it illustrates that companies aim to meet commitments and pay heed to the consequences. As the first factor of theSERVQUAL service efficiency model, reliability has been graded. Reliability was ranked first in the dimensions of the service qualitymodel in Lam's studies (Parasuraman *et al.* 1994).

2.2.2 Assurance

Assurance has been described as the courtesy and competence of employees and their ability to transmit loyalty and confidence to clients. Researchers' views on the rating of guarantee among the measurements of service efficiency are varying. Certainty is hierarchical first while theauthor ranked it in fourth place. Assurance includes keeping clients updated and speaking to them in their natural tongue, irrespective of their level of schooling, age, and nationality. Parasuraman *et al.* (1988) notes that assurance reflects the employees' attitudes and actions, and the willingness of the employees to provide friendly, private, courteous, and professional services.

2.2.3 Responsiveness

Parasuraman *et al*. (1985) stressed that the responsiveness of cooperative workers includes telling clients precisely when tasks are going to be done, giving them complete attention, promoting programs, and listening to their inquiries. Responsiveness in SERVQUAL was graded as the third factor.

2.2.4 Tangibles

Parasuraman *et al*. (1985), Parasuraman *et al*. (1988) and Parasuraman *etal.* (1994). Classifying tangibles as physical devices (equipment, manpower, and communications resources). It is the physical representation of the service that can be used by clients to determine quality. The physical structures, tools and mechanisms used to deliver the service, and also representations of its services, such as reports, debit and credit cards, speed and reliability of trades, are synonymous with tangibles. Several privileges are contained in tangibles, like exterior appearances, bank counters, overdraft

facilities, operating hours, and transaction speed and efficiency. Parasuraman *et al.* (1985)suggested that tangibles are of similar significance to empathy. The authors concluded that it is prudent to consider adding opening hours of operations in the empathy dimension; in addition, overdraft rights can be included in the reliability dimension.

2.2.5 Empathy

Customers like to believe that the company delivering service give them priority. Empathy includes caring for clients, paying personalized attention, and delivering services Fraering and Minor, (2013). The essence of empathy is to express the sense that the client is distinctive and unique. Parasuraman *et al.*(1994) suggested that protection, reputation, and access to quantify empathy have been used by quantitative studies that have established service quality model dimensions.

2.3 Service Quality in Health care

Mostafa, (2005) analyzed medical care by performing a difference assessment from both the provider and patient backgrounds and exposed that physician engagement was one of the most critical independent variable affecting customer fulfilment. Kamyar, *et al.,* (2014). In their research, attention, compassion, dependability and responsiveness were used as the service superiority measurements of US hospital systems. The adaptation of the service quality model to healthcare systems was tested by Thawesaengskulthai, *et al.,* (2015). While the gap ratings were marginally unfavorable, they found that the patients valued the services, suggesting that the negative score was attributable to upper expectations and not due to poorer expectations. Jabnoun and Chaker (2003) related to the patients' views of quality of service among private as well as governmental hospitals within UAE. They considered the dimensions of the service provided to be dependability, receptiveness, supportive abilities, compassion and tangibles, also noticed that private and governmental hospitals varied substantially in standings of all these scopes excluding supportive skills. The value of services rendered by Malaysian private hospitals was assessed by Sohail (2003). It was found that for all aspects of operation, experiences surpassed expectations. In their research on South

African hospitals, Boshoff and Gray (2004) operationalized the quality of care through dimensions, connectivity, tangibles, nursing staff empathy, assurance, administrative staff responsiveness, protection and physician responsiveness. Iyer and Muncy (2004) used SERVQUAL dimensions to assess the expectations of service quality across various groups of patients graded on the basis of confidence.

It was found that the most important characteristics were reliability and responsiveness for the great trust clusters, while empathy and tangibles were necessary for the low trust groups. Wilson and Frimpong (2004) argued that there were insufficient conventional approaches to calculate the dimensions of service quality. To contrast the services rendered by various hospitals based on the dimensions of the SERVQUAL standard, they used Fuzzy AHP. Herstein and Gamliel (2006) discussed the expectations of quality of service in theorganization of health maintenance. The analysis found that private branding has arisen as the sixth dimension of service efficiency, in addition to the five dimensions of the SERVQUAL model. In their study of Bangalore (Indian) hospitals, Rohini and Mahadevappa (2006) used the SERVQUAL paradigm and applied SERVQUAL variables. They gathered both the patients' as well as the hospital management's perspectives. The report concluded that there was an overall difference between the views and expectations of patients and even between the understanding of patient expectations by management and patient expectations. To cover those holes, the authors offered recommendations.In a report on private hospitals, Ramsaran-Fowdar (2008) found that "reliability, fair and equitable treatment" was the most significant dimension of service quality in healthcare systems in Mauritius. For this reason, they used the modified SERVQUAL scale. Some writers, in view of the success of SERVQUAL

2.4 Patients' Satisfaction

Customer satisfaction is the specific sense of a conceptualized transaction. It is focused on the experience of the client in a single serviceinteraction and customer satisfaction is often accumulative founded on the total assessment of service experience. These illustrate the reality that customer satisfaction is dependent on service provider experience and also the result of service. Delaney and Huselid (1996) explicitly state that

there is no generic concept of customer satisfaction, and they established the following definition after carrying out a review on different meaningsof satisfaction, Customer satisfaction is defined by a reaction (cognitive or affective) that relates to a specific focus and happens at a definite time for intance after purchase, after consumption from this concept, it is clear that the satisfaction of the consumer/customer is decided by his/her contact experience with the service provider and this is his/her contact experience with the service provider. Doran and Smith (2004) specifically describes customer satisfaction as an overall consumer post-purchase assessment, and this is similar to that of Irfan, *et al* (2011), who well-defined client satisfaction as the reaction of the client to the assessment of the apparent differencebetween previous expectations and the real performance of the creation or service post consumption. Such concepts consider satisfaction as a response to post purchase, and it is important to assess customer satisfaction in the case of call center experience. It is important to remember that client loyalty is motivated by customer satisfaction Hsieh, *et al.* (2012). A loyal customer will continue to use or maintain the service to repurchase and look for replacement with the least change the positive correlation between consumer satisfaction and the desire to spread word of mouth is empirically supported (Carmen, 1990). Service quality (performance) perception can be divided into three areas, according to Cohen (1998). Customer Satisfaction index rejection, acceptance and desire (CSI).

Satisfaction may be obtained from the consumption of products or services provided by an individual or group of people as happiness achieved, or it can be a state of satisfaction with the situation. Often, since most people have different views and expectations, it becomes very difficult to please everyone or evaluate satisfaction between groups of people. Satisfaction is equivalent to other psychological terms that are easy to understand, but hard to describe. The definition of satisfaction is similar to the themes of happiness, satisfaction, and good quality of life. Satisfaction is not the phenomenon that people are waiting to assess, buta decision of individuals over a period of time as they focus on their experience. The degree to which desired objectives have been attained would be a simple and practical definition of satisfaction" (Andaleeb and Millet, 2010).

Satisfaction can be said to be a positive reaction by people to a particular focus (consumer experience) that is decided at a specific time Alrubaiee and Alkaa'ida, (2011). The quality of treatment in the sense of healthcare needs to be evaluated in order to determine and enhance the quality of health care. The major predictor of health care is patient satisfaction. Quality of work involves research for this function that maps patient satisfaction with many variables (Raposo, 2009).

Patient satisfaction is used by various hospitals as performance of measurement, primarily on instrumental grounds such as adhering to counseling, guidelines and ensuring quality of treatment (Tham *et al*., 2017). Different professionals affect patient satisfaction. In patient evaluation of their satisfaction, health care practices are considered to be the main factor. The measurement of patient satisfaction is not only important for the patient, but also for the health care organization (Pavlouand Fygenson, 2006).

Basically, patient satisfaction is a subjective decision that arises from the evaluation of health care experience and includes the overt and implicit contrast of real outcomes with individual expectations. Patient satisfaction reflects the degree to which the real experience of the client suits the desires regarding their experience. In addition to the judgment atthe end of the procedure, patient satisfaction is also important for the initial treatment decision for future care (Shelton, 2000).

As for the literature, since it depends on many variables, we found that there is no definite concept of patient satisfaction. The key issue is that one aspect satisfies some patients, while others do not. Bakan, (2013) however, proposes the concept of patient satisfaction by content analysis of satisfaction studies in which five psychological factors were suggestedas possible determinants of health care service satisfaction.

- Occurrence: The results of an outcome take place and the person perceives what has happened and the significance of it.

- Value: The consumer considers the product decision viewed as good or poor or health care experience attributes as good or bad "value".

- Expectation: Patients assume that certain attributes can be added to an entity and the building blocks of satisfaction are the determining value of those attributes.

- Interpersonal comparisons: Evaluating the personal experience of the latest

health care interaction with what he/she has previously encountered.

- Entitlement: The person thinks he has a good and sound reason for arguing a specific outcome. The patient satisfaction concept becomes the individual positive assessment of distinct dimensions of health care" by measuring these qualities (Bakan, *et al.* 2013).

2.5 Covid-19 Pandamic

Human coronaviruses have been discovered for more than fifty years. In adding to the existing Coronavirus-19, a number of epidemic of respiratory diseases have been linked to many kinds of such viruses, including SARS and MERS, both caused by SARS-CoV and MERS-CoV, correspondingly, are severe acute respiratory syndromes (SARS) and Middle East respiratory syndromes (MERS) (COVID-19) The novel SARS-CoV-2 virus, which shares some genetic similarities with MERS-CoV and SARS-CoV, causes COVID-19 (Alghezawi, 2020).

These coronaviruses spread from animals to humans via an intermediary host, like camels in the instance of MERS or civet cats in the instance of SARS. Sadly, the intermediary host involved for the novel SARS-interspecies CoV-2's (animal to human) transmission is still unknown; pangolins could be a viable option, but it is unclear if the novel SARS-primary CoV-2's origin is from bats or pangolins (Alqutob, *et al.,* 2020). COVID-19 began spreading over the earth in December of 2019. COVID-19 is characterized by a high rate of infection and human-to-human transmission. Despite the fact that the pandemic is effectively under control, the number of confirmed and suspected cases continues to climb. Physicians, nurses, and ambulance personnel are more prone than any other category to become infected. Healthcare professionals made about 6%, or 90,000, of the confirmed cases worldwide. As of February 11, 2020, 1716 medical personnel in China had been infected (3.8 percent of the country's confirmed cases), with six of them dying, accounting for 0.4 percent of China's total mortality (Al-Tammemi, 2020).

To limit human-to-human transmission within hospitals, some hospitals stopped outpatient clinics while keeping emergency departments and fever clinics (EDFC) operational. Fever clinics are set up in hospitals to prevent and treat acute infectious

illnesses. As gatekeepers to the health-care system, EDFC nurses carefully evaluate clinical signs, contact history, and travel history to separate confirmed cases from suspected individuals. Controlling transmission between patients, employees, visitors, and the general public is the responsibility of EDFC nurses. Nurses from the EDFC are more likely to touch suspected patients, putting them at a higher risk of contracting the virus. Some EDFC nurses, in comparison to isolation ward nurses, may focus less attention on protective measures. Many research focused on nurses' mental health during caring for patients with confirmed sickness in isolation units during the COVID-19 epidemic. A greater knowledge of the anxiety, stress, and coping mechanisms of EDFC nurses can aid in the development of intervention and training courses (Alghezawi, 2020).

The World Health Organization (WHO) declared coronavirus disease 2019 (COVID-19) a Public Health Emergent Situation of International Concern on January 30 and proclaimed it a pandemic on March 11, 2020. COVID-19 is characterized by respiratory symptoms such as coughing, sneezing, and sore throat, as well as fever, tiredness, and myalgia. Droplets, infected surfaces, and asymptomatic individuals are thought to disseminate it. Over 3 million people had been infected worldwide by the end of April (Alqutob, *et al.,* 2020).

China was the first nation to recognize the new virus as the source of the epidemic. The government retaliated by imposing extraordinary movement restrictions. Stopping public transportation before Chinese New Year, an annual holiday that sees workers mass emigrate to their hometowns, and a closure of entire cities and provinces were among the responses. In Wuhan, two new facilities dedicated to COVID-19 patients were developed quickly. Such methods aid in the slowing of COVID-19 transmission in China. As of May 2, China has 83,959 confirmed cases of the virus, with 4,637 deaths. The Philippines was one of the first countries to be affected by the present crisis. On January 22, the first case was anticipated, and the country announced the first COVID-19 death beyond the mainland China. The Philippines, like China, conducted lockdowns in Manila. School closures and arrests for non-compliance with the regulations were among the other actions. The Philippines had 8,772 cases and 579 deaths as of the beginning of May.

2.5.1 Jordan's Response

As per data from Jordan's Ministry of Health, 389 cases had been verified across the region as of April 12, 2020. The amount of daily verified COVID-19 cases as of April 12, 2020. On March 3, the first verified instance was reported. Nevertheless, starting on March 15, the quantity of incidents surged dramatically to eight, and has been steadily increasing since then. Jordan was classed as having a "bunch of instances" transmission for the virus, based on the current World Health Organization's (WHO) Situation Report 83, which was published on April 12, 2020. Jordan has implemented public health infection prevention and control strategies to combat this looming threat. As of March 17, 2020, the government has termed for community distancing, stopped all incoming and outgoing mobility as well as international travel, and adopted the Defence Law, which gives the Minister of Defense the authority to work and issue instructions based on the situation. As a result, a countrywide curfew was imposed to ensure the country's complete isolation. It also imposed a quarantine on all border arrivals from pandemic-affected nations before March 17, and administrative governorates were separated from one another (Alghezawi, 2020).

Jordan's healthcare system got to action right once, implementing a series of preventive procedures to guarantee that all hospitals were prepared to admit any prospective COVID-19 cases. Major government hospitals began creating quarantine zones in which any patient infected with the virus may be admitted. One of the kingdom's main government hospitals has set up a "Triage tent" to deal with emergency cases and relieve pressure on hospitals, allowing the line to move faster (Al-Tammemi, 2020).
The Jordanian Ministry of Health released a variety of educational materials to inform Jordanians about the virus and how to avoid contracting it. To help promote awareness about the condition, the ministry also developed a dedicated website with COVID-19-related news, emergency hotlines, and FAQs (Alqutob, *et al.,* 2020).

The Emergency Medical Services (EMS) started working tougher than ever before to help people who need medical assistance or in an emergency, efficiently reacting to thousands of instances daily, which include critical medical conditions such as renal failure patients, cancer patients, and heart disease patients, by enabling their mobility to hospitals for dialysis or chemotherapy sessions. The Ministry of Health has approved the

controversial medicine hydroxychloroquine as a supportive treatment for all instances in the kingdom (Algunmeeyn, *et al.,* 2020).

To try flatten the curve and check as many people as possible, epidemiological groups have performed thousands of tests around the kingdom, including at refugee camps. Special precautions were made in the kingdom to secure Syrian refugee camps in order to avoid the virus from spreading throughout the camps (Algunmeeyn, *et al.,* 2020). Epidemiological teams performed mass testing and contact tracking operations to establish the source of the virus in those locations, which were quarantined from the rest of the kingdom. Throughout the kingdom, a comprehensive sterilization program was carried out to disinfect all public places, roadways, malls, and tourist attractions (Alghezawi, 2020).

2.6 Related Research on Service Quality

Recognizing clients' aspirations and views of the services supplied is an important part of quality evaluation, which may be quantified by combining the different dimensions above. The services given are deemed outstanding if they go above and beyond client expectations. A disparity here between two doesn't really necessary mean poor treatment; rather, it indicates that the patient's needs were not addressed, resulting in his or her discontent. Goula, *et al.,* (2021).

Goula, *et al.,* (2021), focused mainly on look into individuals' opinions and expectations about health-care quality. They depend on a cross-sectional study was directed at five public general hospitals, with convenience sampling as the sampling method. Study revealed that patients' expectations for the quality of the services offered were not met. There was a negative discrepancy among patients' expectations and perceptions in all five quality parameters. In addition, hospital executives and health-care professionals. In addition, hospital executives and health-care personnel should be engaged in patient expectations and, as a result, should seek out ways to meet them. The essential aspects that impact the patient's judgement regarding quality are open communication with them, individualised attention, and responsiveness to their needs, polite behaviour, a trustworthy ambiance throughout the hospital, and better physical facilities. According to Lee and Kim, (2020), who investigated the effects of healthcare

service quality. The study tested the items of health care variable by using a data composed from a hospital work in South Korea, the study findings showed a significant variation between dimension items of HEALTHQUAL based on the kind of patient handling, while there were no significant variations between measurement items of HEALTHQUAL between patients and the public. While the study of Guo, *et al.,* (2020), The effects of healthcare service quality, client value perception, satisfaction, and loyalty were investigated. The analysis revealed that client perception of value, patient happiness, and loyalty were all positively connected with the quality of care offered by private clinics. Patient satisfaction was positively connected with patient perceived quality. Patient loyalty was strongly connected with patient perceived usefulness and also client experience. Patient happiness and perceived value play a significant role in moderating the relationship among medical quality of service and loyalty. Level of satisfaction and value perception serve as a link between both the quality of medical services and patient loyalty. To conclude, enhancing the quality of medical services is the most effective way for private clinics to gain patient satisfaction. Patients who accept high-quality healthcare care will believe that the price they pay is appropriate, and their contentment with private clinics will rise as a result. When patients' contentment with private hospitals reaches a particular level, they are more likely comes to choosing them again and to suggest them to others.

Furthermore, Zin (2019) employed a documentary research approach to demonstrate how customers ' perception affects quality service and has an impact on the satisfaction and brand awareness. It also demonstrated that dependability, confidence, tangibles, compassion, and reactivity affect the quality of service of private practices, as well as another customer happiness and word - of - mouth have an effect on customer impression. Customer happiness and word - of - mouth are directly affected by good quality service and customer impression. Customer contentment generates good word of mouth, and the both satisfied customer and satisfaction have immediate positive impacts on loyalty and the private clinic's image, according to the report's results. As a result, as so many writers have stated, good service quality is critical in generating client satisfaction and positive word of mouth. The report also suggests that private practices could enhance

quality of service by concentrating their strategy on customer satisfaction, minimizing wait times, and improving patient communication.

Service quality gives you a great chance to meet or surpass patient preferences for the total service experience. An entity that generates services must assess the level of service it provides to customers. D'Cunha and Suresh (2015) state that this allows them to detect problems, check up with corrective actions, and focusing on particular opportunities for improvement.

According to D'Cunha and Suresh, (2015), who studied patients' perceptions of the quality of their care are important for healthcare providers to be aware of. Patient satisfaction is the major measure used to assess the quality of care when determining patient perceptions it conclude that customers' satisfaction and quality parameters were assessed using a structured questionnaire. Patients' perceptions of quality differed across several aspects, according to the findings. The majority of patients were satisfied with the hospital's facilities, physicians' excellent care, and the hospital's staff.

The relevance of quality of service as a metric for improving a national healthcare agency's competiveness is well understood. When it comes to picking a hospital, clients' views of medical services are crucial. In Kumaraswamy's research (2012), The quality of service in both company and non-corporate health care centres has been assessed. Truly, this investigation effort is a continuation of Sharma and Chahal's research from 2003 and Chahal and Sharma's research from 2004. An examination of 200 patients from both business and non-business health care facilities. Physician behaviour, supporting staff, atmospheres, and operational performance are all key service quality criteria in health care centres. The patients' perceptions of service quality characteristics in health care centres have a significant and beneficial impact on the health care center's overall performance.

All previous studies had the same studied sector which is healthcare sector while there is a difference between them in the country and the characteristics used Goula, *et al.,* (2021) and Zin, (2019) used the same service quality characteristics (reliability, assurance, tangibles, empathy and responsiveness), while D'Cunha and Suresh, (2015) used patient satisfaction as a measure of quality.

Findings of the previous studies indicated that there are good relationships between services quality and the performance of healthcare sector. The current study benefit from using the same service quality dimensions.

Client satisfaction refers to patients' ideas and views about health care services. Client comfort is conceptualized by Manzoor *et al.* (2019) as the feeling of joy or contentment that patients have when using a healthcare system.

Level of satisfaction is indeed a measurement of several aspects of health care which can be anticipated by qualities including such compassion, dependability, and attentiveness. Medical treatments, the accessibility and consistency of treatments, the patient's faith in the quality of care offered to person, as well as the efficiency with which the service is supplied can all be used to assess it. When it comes to assessing patient satisfaction.

Farooq, et al., (2020) investigated positive patient outcomes in various Pakistani medical centers and compared the results. The bulk of those who took part were men (71.2%), who were eligible for free treatment (58.4%), and who were working (59.7 percent). The survey found that CMH Lahore outperformed the other hospitals in all seven patient satisfaction dimensions, with substantial changes in six of them: general contentment, interpersonal style, interaction, financial factors, time being spent seeing doctors, as well as ease of access. Ultimately, takes long time and eligibility for free medical care were found to be significant drivers of satisfaction, despite CMH having lower waiting lists and treating a greater amount of patients for free. In CMH, the average waiting time was 1 - 15 mins (44.9%), compared with 15 - 30 mins (50.9%) in Jinnah Clinic. Furthermore, in CMH, 78.2 percent of patients were eligible for free care, comparing to 35.5 percent in Jinnah Hospital. In six of the seven categories studied, patients ' satisfaction was shown to be significantly higher in CMH. Its appraisal, as well as its significance in healthcare policies, both require more effort. The SERVQUAL has been used in a research by Umoke, et al., (2020) to evaluate clients' satisfaction levels of care in clinics in Ebonyi State. And useed a multi-stage cluster sampling method with a 27-item structured open-ended client questionnaire. Study participants required to attend an outpatient department during in the course of the study and sign a consent form. Three hundred and ninety-six questionnaires were returned, out of a total of 400. There have been a total of 396 participants, comprising 156 men and 240 women. The majority of patients were between

the ages of 18 and 39, had a secondary education (139), were married (221), earned less than $18,000 (170), and were traders (136). Patients were pleased with the tangibility and dependability of the service, as well as the responsiveness, assurance, and empathy it provided.

In Cosma, *et al.,* (2020), study which use exploratory and descriptive. Face-to-face interviews with Romanian patients based on a questionnaire were used to collect data. The findings revealed that romanian hospitals' accommodations, food, and other amenities were thought to be inadequate. In terms of the general perception of the Romanian HS, one-third of the respondents were dissatisfied or extremely dissatisfied. Furthermore, research revealed a statistically significant link between HS confidence, age, and gender, as well as a link between overall opinion of the HS, age, and income. Study made in the Cape Metropolitan District, Western Cape, South Africa by Steyl, (2020), that Patients with type 2 diabetes were requested to degree their satisfaction with the quality of care they got using the Patient Survey for Quality of Care scale. And the results presented that the majority of participants were content with the general quality of care, according to the study's findings. Dissatisfaction was expressed with the length of time it took to get an appointment at the clinic, the ability to see a healthcare expert on the same day, and the clarity of diabetes management recommendations.

In the study of Sarfraz, *et al.,* (2019), A scoping review process was used to compile works on patient care and gratification. Information was gathered using PubMed, CINAHL Plus, and Scopus. According to the findings, 74 abstracts and titles were deliberated for full-text examination and possible addition in the scoping review out of 467 that were assessed for relevance. Seven of the 16 papers considered in the review originated in Pakistan. The characteristics of the studies that were included, such as care quality and patient satisfaction, were tallied. In Manzoor, *et al.,* (2019), The research aims to assess client experience with medical services such as lab and diagnosis care, preventative healthcare, including prenatal care in Pakistan's government healthcare systems. This study adopted a descriptive research approach. The regression's major findings revealed that health-care services including such lab and diagnosis treatment, preventative care, and prenatal care have such a substantial and favorable impact on patient contentment. In particular, the study reveals that a physician's behavior moderates

the impact of health care services on patients' satisfaction. The general level of satisfaction of clients with the availability of medical care in hospitals was positive. In terms of lab and diagnosis treatment, preventative care, and prenatal healthcare, contentment was acceptable. The investigation shows that the research hypotheses are statically significant basis of the findings. In addition, the study's recommendations for further research are presented.

Mahmoud, *et al.,* (2019) Despite strong degrees of contentment and repeat purchase, the findings indicates that organizational quality was much less than required standard. Ultimately, it was discovered that level of satisfaction fully transmits the indirect impacts of two out of the three characteristics, quality sensitivity and dependability, onto repeat purchase, however tangibility had no indirectly important affect on repeat purchase via patients' satisfaction.

Almomani, *et al.,* (2020), The purpose of this research is to see how health-care quality affects positive patient outcomes. The research was conducted in Jordan's governmental hospitals. To test the postulated structural model, The degree whereby the quality of health care had the capacity to influence the difference in patient happiness in public hospitals was further indicated by the fact that health service quality accounted 65.7 percent of the variation in patients' satisfaction. Because the quality of health care has a favorable impact on patient happiness, academics have made several recommendations for government hospital upper executives and decision-makers.

All previous studies related to patient satisfaction are empirical studies except for Sarfraz, *et al.,* (2019) that depends on 74 abstract. In addition, studies in Pakistan revealed that the patients are highly satisfied with provided services on the other hand patients in romanian hospitals' were not satisfied with the services and the findings revealed that the accommodations are inadequate.

Almomani, *et al.,* (2020) study in Jordan found that the patients are satisfied with services provided by public hospitals. This will help the current study to set preliminary imagination about the health sector in Jordan. But still there is a gap between the previous study and current study in Jordan to make a comparison between public and private hospitals which done by the current study.

2.7 The relationship between Service Quality and Patient Satisfaction

Service efficiency and patients' satisfaction have been regarded in the literature as two sides of a coin. Oliver (1980) indicated that the disconfirmation of results from anticipation is a function of satisfaction. Gro'nroos (1982) argues that marketing practices, social pressures and word-of-mouth also affect customer perceptions of the service delivered. Based on this disconfirmation model, Parasuraman *et al.* (1985) conceptualized service quality and concluded that quality is a function of the discrepancy among perceived and anticipated service. Satisfaction was described by Oliver (1989) as an evaluative, affective or emotional reaction. So after evaluating the object, consumers can only test the object. Therefore, satisfaction is the assessment of goods or service following purchase, considering the requirements prior to purchase (Kotler, 1991). Satisfaction relies on the supplier's willingness to fulfill the norms and desires of the consumer, and consumers can constantly demand more services, no matter how successful the services are. Although customer satisfaction can be connected to values and costs, the level of service does not normally depend on prices.

Judgments of service quality are very unique to the service provided, but satisfaction can be measured bya larger range of variables, including those beyond the direct experience of service delivery. Service quality expectations are not dependent on interactions withthe service environment or providers, whereas satisfaction decisions rely on previous experiences (Oliver, 1993). In their perspectives on service quality and satisfaction, researchers are divided. Some researchers Sureshchandar *et al.,* (2002) tried to operationalize satisfaction as both styles of attitudes in the same lines of service quality. They addressed that while the standard of service provided by the companies was demonstrated by things to quantify service quality, they may also serve asindicators of total service satisfaction with regard to the various interactions that consumers had with the company.

Santosa and Azam, (2019), The study aimed to evaluate patient anticipations, patients' satisfaction heights and amount the quality gap for SERVQUAL dimensions. In command to attain the research objectives the study used a quantitative descriptive research approach. The information was gathered from clients at Indonesian dentistry clinics, with a focus on Jakarta and Bali. The latest results revealed that, utilizing several

measures patients' expectations and contentment with healthcare quality really aren't met, so there is a disparity in service quality. Furthermore, the studies revealed that both dental clinics had a service quality gap. Clients' satisfaction in the qualities of tangibility, dependability, reactivity, sympathy, and confidence has also been found to be influenced by the type of institution. While the study of Rehaman and Husnain, (2018), done in the private sector in the Pakistani district of Sargodha The research work presents a survey to collect data in order to address the research objectives, which consisted of subtests on a five-point likert scale. The research revealed that physical "(Physical facilities, technology, and look of employees)" and empathy "(Compassion, individualized attention the organization delivers its consumers)" are the main SERVQUAL model components that influence service quality.

Al-Damen, (2017), in another one of Jordan's major government hospitals The research had used a modified 'SERVQUAL' scale that included five dimensions of service quality, Statistical approaches such as descriptive and correlation techniques were used to analyze the acquired data. The results of the study suggest that perceived health-care service quality had an impact on total patient satisfaction. The most influential factor was reliability, following after compassion and confidence.

Golmohammadi, *et al.* (2014), The finest and most prevalent aspects for service quality in Malaysian institutions, according to previous study, are efficacy, tolerance, and appropriateness. The numbers was composed by means of a survey in two public hospitals of Malaysia. The number of distributed questionnaires were 100 which and the respondents selected randomly and gathered data was scrutinized by multiple regression examination. According to the results, respect improves patient satisfaction the greatest, however all three service quality characteristics have substantial and favorable influence on health satisfaction. According the study of Alghamdi, (2014), The data was collected using a modified Appraisal of Service Quality survey. The overall outcome showed a statistically significant effects of health care quality on patients ' satisfaction, according to anova. According to the beta-weights (beta), the empathy dimension had the most effect on patient contentment, trailed by the tangible and responsive aspects. Patient satisfaction was affected by the performance of health services, with the empathy factor having the

highest impact. As a result, public hospitals should make a serious effort to train specialists in interpersonal and social skills in order to improve the doctor-patient connection.

Santosa and Azam, (2019), Dentistry Clinics in Indonesia were utilized as a group, and the study used a quantitative descriptive research method to attain its goals by evaluating a series of ideas. A self-administered survey was designed to collect actual data from 350 participants in Indonesian dentistry institutions, with a special focus on Jakarta and Bali. The outcomes of the study show that patients' expectations and satisfaction with treatment SERVQUAL are not aligned, and so there is a service quality disparity. Nevertheless, the findings show that both dentistry hospitals have a service quality difference. Patients' satisfaction i has also been found to be influenced by the type of institution.

The study of lghamdi, (2014), found a statistically important influence of health service superiority on patient fulfilment. The beta-weights (beta) proposed that the empathy element had the highest impact on client fulfilment, trailed by tangible and receptiveness measurements. Superiority in health care had an effects on clinical satisfaction, with the compassion measurement having the greatest impact. As a result, public hospitals should make a serious effort to train professionals in human relationship skills in attempt to optimise the doctor-patient interaction.

The findings of the previous researches that investigated the association among service quality and patient satisfaction revealed that empathy, reliability and responsiveness is the highly dimensions affected the patient satisfaction, all previous studies in this section found that there is a significant connection among service quality and patient satisfaction.

2.8 Research Hypothesis and Conceptual Model

In light of the above discussion, the hypotheses for this study are as listed below;

H1: Service quality of public hospitals during the Covid-19 pandemic has a positive influence on patient satisfaction

H1a: Service quality reliability of public hospitals during the Covid-19 pandemic has a positive influence on patient satisfaction

H1b: Service quality assurance of public hospitals during the Covid-19 pandemic has a positive influence on patient satisfaction

H1c: Service quality tangibility of public hospitals during the Covid-19 pandemic has a positive influence on patient satisfaction

H1d: Service quality empathy of public hospitals during the Covid-19 pandemic has a positive influence on patient satisfaction

H1e: Service quality responsiveness of public hospitals during the Covid-19 pandemic has a positive influence on patient satisfaction

H2: The service quality of private hospitals during the Covid-19 pandemic has a stronger impact on patient satisfaction when compared to public hospitals.

H2a: Service quality reliability of private hospitals during the Covid-19 pandemic has a stronger impact on patient satisfaction when compared to public hospitals.

H2b: Service quality assurance of private hospitals during the Covid-19 pandemic has a stronger impact on patient satisfaction when compared to public hospitals.

H2c: Service quality tangibility of private hospitals during the Covid-19 pandemic has a stronger impact on patient satisfaction when compared to public hospitals.

H2d: Service quality empathy of private hospitals during the Covid-19 pandemic has a stronger impact on patient satisfaction when compared to public hospitals.

H2e: Service quality responsiveness of private hospitals during the Covid-19 pandemic has a stronger impact on patient satisfaction when compared to public hospitals.

In light of the hypotheses stated above the conceptual model for this study is indicated in figure 1.
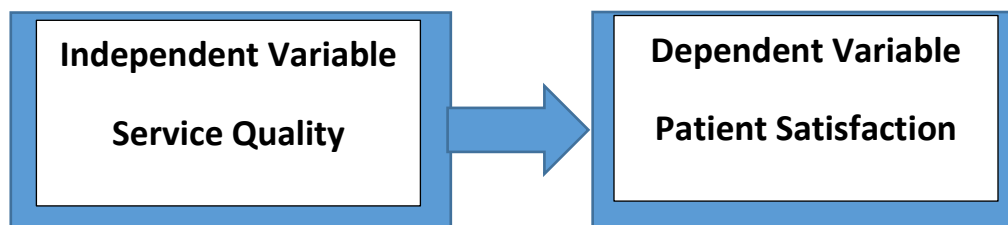
Figure (1) Conceptual Model

Finally, by testing the hypotheses this study will attempt to close the gap in the literature in regards to measuring the service quality in both public and private Jordanian hospitals during the Covid-19 pandemic.

CHAPTER III

Research Methodology

3.1 Research Design

The aim of this research is to examine the impact of service quality on the patient satisfaction in private and public hospitals. This research will utilized the descriptive approach; which is a design that includes establishing what is happening as far as a particular variable is concerned. The data were collected and analyzed in pursuance of acquiring the purpose of the research. Therefore, it collected data describing one phenomenon and the patient's attitude toward hospitals and compare the patient satisfaction at both of them.

This chapter presents the sample and population, the method of data collection, method of data analyzing, model specification and description of the variables.

3.2 Population and Sample Procedure

The population of the study contains of all private and public hospitals patients who visited both private and public hospitals working in Amman and Irbid in Jordan during covid-19 pandemic (List of hospitals working in Jordan in the appendix). The patients who were included in the study consisted of people from different ages with different diseases experiences, in addition to enough percentage from both males and females. The sample size was 500 patients and they were selected based on a convenience sampling method. The data were collected for the in and out-patients who visited the hospitals during the corona virus pandemic.

To select the patients, the convenience sampling method were used where the respondent is chosen conveniently and he/she is implemented by creating criteria that the patient is one of the hospital visitors for all hospital facilities not for a specific disease or illness and he has an intent to fill the questionnaire that matched as well as making the study successful from an objective perspective.

The researcher used respondents who are "convenient" to the researcher. Sample conveniently located around a location or Internet service. The population and sample size can be clarified in the below table.

Distributed Questionnaires	500
Returned Questionnaires	480
Unusable questionnaires	30
Usable quastionnaires	450

The health system in Jordan consists of three main components or key sectors; public sector, private sector and donors. The public sector consists of two types of funders and service providers. First, there's the Ministry of Health, which oversees 31 hospitals, accounting for 37% of Jordan's total hospital bed capacity. The second is the Royal Healthcare Services, which runs eleven hospitals and provides 24 percent of Jordan's beds. University hospitals account for 3% of the country's total beds. The private sector is responsible for 36% of total hospital capacity (Al-Qudah, 2011).

3.3 Data Collection Instrument and Reliability Values

To study the impact of service quality on the patient satisfaction in private and public hospitals, needed data collected from the respondents in the hospitals registered and work in Jordan.

The data were collected using a questionnaire. The questionnaire was adapted from the study of Sie, 2015 to reach the study objectives taking into consideration the dimensions of both dependent and independent variables and previous researches in the same topic, then it was distributed for the research sample who was selected based on probability sampling – convenience selection. The data collected during the research study period between February 2021- August 2021 by distributing the questionnaire to the respondents by hand face to face.

A questionnaire was consisted of two parts; firstly, the personal information for the respondent and secondly, the questions related to study variables service quality and patient satisfaction. The questionnaire designed depending on the study of (Sie, 2015).

In the social and organizational studies, Cronbach's alpha dependability (Cronbach, 1951) is among the most extensively used metrics of reliability. The capability of an instrument for measuring consistently is referred to as reliability. It's worth noting that an instrument's validity is inextricably linked to its reliability. It is impossible for an

instrument to be valid unless it is trustworthy. Cronbach's alpha reliability is a value between 0 and 1 that represents the reliability of a total (or average) of q measurements to get a measurement of a test or scale's internal consistency. Internal consistency reflects the extent to which every one of the questions in a test measure the same notion or construct, and is thus linked to the test's inter-relatedness. To ensure the validity, a test's internal consistency must be validated before it can be used for study or examination. Furthermore, reliability estimates demonstrate how much measurement error there is in a test. Simply said, this definition of dependability is the test's connection with itself.

Table No. (3-1)

Reliability Statistics

Variable Name	Items	Cronbach's alpha
Reliability of service quality	4	.863
Assurance of service quality	4	.893
Tangibility of service quality	6	.900
Empathy of service quality	5	.906
Responsiveness to Patients	5	.894
Service Quality	24	.886
Patient Satisfaction	**9**	.928
Total	**33**	**.975**

In this study, the reliability test showed that there is a high consistency between the measures of the service quality and patient's satisfaction. It is equal 0.975 which means that there is a high internal consistency between the items in the questionnaire as a whole. It is worth to mention here that the items related to the service quality go into the same direction.

Cronbach alpha for social science studies, greater than 0.60 values are acceptable Sekaran and Bougie (2009). According to that and the current study items used have minimum Cronbach alpha .863 which is adequate and acceptable, the accepted values in this study are over 0.60. In the above tables, the values in this study ranged from 0.863 to 0.928. Consequently, these results are to some extent higher than Shah and Ward (2003),

who showed in their study values from 0.51 to 0.81. The results of the reliability tests give evidence that the internal consistency of this study is adequate and acceptable.

Table No. (3-2)

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Reliability of service delivery	14.246741	23.176	.922	.969
Assurance of service delivery	14.248408	22.439	.906	.971
Tangibility of service delivery	14.252481	22.949	.947	.967
Empathy of service delivery	14.248630	23.126	.905	.971
Responsiveness to Patients	14.274408	23.169	.912	.970
Patients Satisfaction	14.254704	23.853	.916	.970

The test shown in the above table (3-2) represent the internal consistency of each variable separately. As we can see both assurance of service quality and empathy of service quality have the higher percent of consistency 97.1%, then come both responsiveness to patients and patient's satisfaction with 97% after that the reliability of service quality percentage equal 96.9% and tangibility of service quality 96.7%

3.4 Data Collection Procedures

The data were collected using a questionnaire. The questionnaire was distributed for the research sample who was selected based on probability sampling – convenience selection. When the patient visit the hospitals we gave him/her the questionnaire and ask then kindly to fill it for research issues (when the visit is over we met them in the exit

door). The data collected during the research study period between February 2021- August 2021 by distributing the questionnaire to the respondents by hand face to face.

3.5 Data Analysis Plan

This research objects to study the impact of service quality on patient satisfaction at private and public hospitals for the period of corona virus pandemic. To reach the study objectives, the researcher used Excel to compute variables and then used SPSS to apply the following statistical techniques: descriptive statistics. Purpose of providing brief summary of the samples as well as the metrics to assist in understanding the sense of the information being investigated, descriptive statistical analysis are subdivided into measures of central tendency and measures of variability, or spread (Lowest amount, Highest, Mean, Midpoint, and Standard Deviation). Correlation test is used to analyse the degree of association between two factors and the direction of a linear relationship. The correlation coefficient value ranges from +1 and -1 in light of the strength of the association. A value of 1 shows that the two variables are perfectly associated. The association between the two variables will become weaker as the correlation coefficient value approaches zero. After ensuring the eligibility of data to be tested by using regression analysis, it will be used to understand the relationship among the independent variables (service quality) and the dependent variable (patient satisfaction), and to explore the forms of these relationships. The researcher used these methods because it is the most appropriate for study topic and research objectives.

3.6 Description of the Variables

3.5.1 Dependent Variable: Patients' Satisfaction

This variable was measured by nine items listed in the questionnaire asked about the patient attitude toward the services presented by the hospitals as follow:

1. Patients find staff courteous and helpful.
2. Patients find staff quick to respond to emergency cases during Covid-19 Pandemic
3. Patients trust staff with confidentiality during Covid-19 Pandemic.
4. Patients do not spend too much time waiting in queues and where there are delays explanations are given during Covid-19 Pandemic.
5. Staff do not discriminate against patients with serious conditions.
6. Staff inspire trust and confidence in patients during Covid-19 Pandemic.
7. Staff ensure medications are taken on time and that no mistakes are made with dosage.
8. Patients find a friendly atmosphere by staff for to feel safe and relaxed.
9. Patients are satisfied the care giver hygienist.

Independent Variables: Service Quality

The independent variable measured by five dimensions and each dimension divided into several items as follow:

- **Reliability of service delivery**
1. Nurses and health assistants ensure patients take their medication as prescribed during Covid-19 Pandemic.
2. Services provided by the hospital are dependablewhen handling patients problems during Covid-19 Pandemic.
3. Nurses are trusted with patient's confidentiality.

4. Services provided as soon as possible without the need to wait during Covid-19 Pandemic.

- **Assurance of service delivery**

1. Staff are courteous and friendly under the pressure of Covid-19 Pandemic.
2. Staff able to inspire trust and confidence in Patients.
3. Nurses ensure medications are taken on time and that no mistakes are made with dosage while working under pressure during Covid-19 Pandemic.
4. Nurses create a friendly atmosphere for patients to feel safe and relaxed.

- **Tangibility of service delivery**
1. Staff are well dressed at all times
2. The hospital have modern medical equipment
3. The hospital has visually attractive and comfortable physical facility (i.e chairs, beds, table)
4. There are appealing materials (i.e brochures, magazines, newspapers, WIFI etc) to engage patients as they wait
5. There directional signs to help patients with easy navigation
6. The hospital structures are disability friendly

- **Empathy of service delivery**

1. Staff are patient when dealing with patients while working under the pressure of Covid-19 Pandemic.
2. The health staff are willing to respond to patients" complaints.
3. Staff are great listeners.
4. Staff remembers names and faces of patients.
5. Staff ensure patients feel good emotionally and psychologically.

- **Responsiveness to patients**

1. Staff are always ready to receive patients during Covid-19 Pandemic.
2. Nurses are willing to help patients even during odd hours during Covid-19 Pandemic.
3. Doctors are will appear at times I feel very sick during Covid-19 Pandemic.
4. Physician understand your problem.
5. Hygiene maintenance in the clinic are satisfied during Covid-19 Pandemic.

3.6 Ethical Consideration

This research based on the questionnaire distributed for the patients. So, the identity of the patients be secret and the study saved the privacy of them.

CHAPTER IV

Findings and Discussion

As mentioned in chapter one, the primary purpose of the study is to examine the impact of service quality on patients' satisfaction in both private and public Jordanian hospitals during the COVID-19 pandemic. The objective of this chapter is to analyze the collected data using appropriate statistical techniques and to test the hypotheses of the study.

4.1 Descriptive Statistics

4.1.1 Respondents Profile

1. **Gender Variable**

In this section the study will represent the frequency test for gender variable as follow:

Table No. (4-1)

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Male	194	43.1	43.1	43.1
	Female	256	56.9	56.9	100.0
	Total	450	100.0	100.0	

Gender

Table (4-1) shows the descriptive statistics for the gender variable, as can be noticed that the number of males between the respondents are 194 with a percent of (43.1%) and the number of female are 256 with a percent of (56.9%). As we can see that the female percent is higher than the male percentage by 13%.

2. Age Variable

In this section the study will represent the frequency test for age variable as follow:

Table No. (4-2)

		Frequency	Percent	Valid Percent	Cumulative Percent
				Age	
Valid	18 or below	2	.4	.4	.4
	19-25	3	.7	.7	1.1
	26-30	1	.2	.2	1.3
	31-35	14	3.1	3.1	4.4
	36-40	119	26.4	26.4	30.9
	41-45	163	36.2	36.2	67.1
	46 -50	132	29.3	29.3	96.4
	51-55	10	2.2	2.2	98.7
	56-60	5	1.1	1.1	99.8
	61-65	1	.2	.2	100.0
	66-70	0	0	0	100.00
	71 or above	0	0	0	100.00
	Total	450	100.0	100.0	100.00

Table (4-2) shows the descriptive statistics for the age variable, as can be noticed that the respondents' ages concentrated between ages ranges 36-40, 41-45 and 46-50 allocated as follow. The number of respondents aged 36-40 are 119 with a percent of (26.4%), the number of respondents aged 41-45 are 163 with a percent of (36.2%) and the number of respondents aged 46-50 are 132 with a percent of (29.3%). As we can see the higher percentage for the respondents aged 41-45 by 36%.

3. Type of patient Variable

In this section, the study will represent the frequency test for type of patient variable as follow:

Table No. (4-3)

Type of patient

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	In-patient	228	50.7	50.7	50.7
	out-patient	222	49.3	49.3	100.0
	Total	450	100.0	100.0	

Table (4-3) shows the descriptive statistics for the type of patient variable, as can be noticed that the number of in-patient are 228 with a percent of (50.7%) and the number of out-patient are 222 with a percent of (49.3%). As we can see the in-patient percentage is higher than the out-patient percentage by 1.4%.

4. **Period For Being a Patient in Jordanian Hospitals Variable**

In this section, the study will represent the frequency test for Period for being a patient in Jordanian Hospitals variable as follow:

Table No. (4-4)

Period for being a patient in Jordanian Hospitals

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 1 year	88	19.6	19.6	19.6
	Between 2 and 5 years	163	36.2	36.2	55.8
	Between 5 and 10 years	181	40.2	40.2	96.0
	More than 10 years	18	4.0	4.0	100.0
	Total	450	100.0	100.0	

Table (4-4) shows the descriptive statistics for the period for being a patient in Jordanian Hospitals variable, as can be noticed that the number of patients for less than 1 year are 88 with a percent of (19.6%), the number of patients for 2 to 5 years are 163 with a percent

of (36.2%). And the number of patients for 5 to 10 years are 181 with a percent of (40.2%). As we can see that the higher percent for patients for 5-10 years with 40%.

5. **Expectations Met When You Visit Jordanian Hospitals Variable**

In this section, the study will represent the frequency test for Expectations met when you visit Jordanian Hospitals variable as follow:

Table No. (4-5)

		Expectations met when you visit Jordanian Hospitals			
		Frequency	Percent	Valid Percent	Cumulative Percent
V	Met	189	42.0	42.0	42.0
ali	Do not	261	58.0	58.0	100.0
d	Met				
	Total	450	100.0	100.0	

Table (4-5) shows the descriptive statistics for the expectations variable, as can be noticed that the number of patients whose expectations were met equal 189 with percent of 42% and the number of patients whose expectations were not met equal 261 with percent of 58%.

6. **The Services Rendered At Jordanian Hospitals**

In this section, the study will represent the frequency test for services rendered at Jordanian Hospitals variable as follow:

Table No. (4-6)

	The services rendered at Jordanian Hospitals			
	Frequency	Percent	Valid Percent	Cumulative Percent
Satisfied	189	42.0	42.0	42.0
Not Satisfied	261	58.0	58.0	100.0
Total	450	100.0	100.0	

Table (4-6) shows the descriptive statistics for the satisfaction variable, as can be noticed that the number of patients whose expectations were met equal 189 with percent of 42% and the number of patients whose expectations were not met equal 261 with percent of 58%.

7.   Service Quality of Jordanian Hospitals

In this section, the study will represent the frequency test for service quality of Jordanian Hospitals variable as follow:

Table No. (4-7)

		Frequency	Percent	Valid Percent	Cumulative Percent
	The service quality of Jordanian Hospitals				
Valid	Good	123	27.3	27.3	27.3
	Average	66	14.7	14.7	42.0
	Below average	114	25.3	25.3	67.3
	Poor	147	32.7	32.7	100.0
	Total	450	100.0	100.0	

Table (4-7) shows the descriptive statistics for the service quality variable, as can be noticed that the number of patients whose answer this question with below average and poor is higher that whose answer it with good or average with percent of 58% collectively.

8. Type of Visited Hospitals

In this section, the study will represent the frequency test for type of visited hospitals variable as follow:

Table No. (4-8)

		Frequency	Percent	Valid Percent	Cumulative Percent
	Type of visited hospitals				
Valid	Private hospitals	209	46.4	46.4	46.4
	Public hospitals	241	53.6	53.6	100.0
	Total	450	100.0	100.0	

Table (4-8) shows the descriptive statistics for the type of visited hospitals variable, as can be noticed that the number of patients whose visited public hospitals equal 241 with 53.6% from the total respondents.

4.1.2 Study Variables

In this section, the study will represent the descriptive statistics for both dependent and independent variables as follow:

Table No. (4-9)

	N	Minimum	Maximum	Mean	Std. Deviation
Descriptive Statistics					
Reliability of service delivery	450	1.00	5.0000	2.8583	1.0061407
Assurance of service delivery	450	1.00	5.0000	2.8567	1.1035022
Tangibility of service delivery	450	1.50	4.5000	2.8526	1.0092356
Empathy of service delivery	450	1.20	4.8000	2.8564	1.0277728
Responsiveness to Patients	450	1.00	5.0000	2.8307	1.0165850
Service Quality	450	1.00	5.0000	2.8463	1.001649
Patients Satisfaction	450	1.44	4.5556	2.8504	.9375990
Valid N (listwise)	450				

Table (4-9) shows the descriptive statistics (Smallest, highest, Mean and standard deviation) for each factor in the study as follow:

The minimum value of reliability of services delivery in the health sector is as low as 1 which means strongly disagree with the items related to reliability of service delivery. While the maximum is 5 which means the respondent is strongly agree with the related items. As seen, the mean value is .2.8583 in the health sector with standard deviation of 1.00614. This means that, on average, the respondents think that the services are reliable

and this is a medium percentage. However, it is noted that there is a great of variations between the observations of companies as it is reflected in the standard deviation (100%).

The minimum value of assurance of services delivery in the health sector is as low as 1 which means strongly disagree with the items related to assurance of service delivery. While the maximum is 5 which means the respondent is strongly agree with the related items. As seen, the mean value is .2.8567 in the health sector with standard deviation of 1.1035. This means that, on average, the respondents think that the services are assured and this is a medium percentage. However, it is noted that there is a great of variations between the observations of companies as it is reflected in the standard deviation (110%).

The minimum value of tangibility of services delivery in the health sector is as low as 1.5 which means strongly disagree with the items related to tangibility of service delivery. While the maximum is 4.5 which means the respondent is strongly agree with the related items. As seen, the mean value is .2.8526 in the health sector with standard deviation of 1.00923. This means that, on average, the respondents think that the services are tangible and this is a medium percentage. However, it is noted that there is a great of variations between the observations of companies as it is reflected in the standard deviation (100%).

The minimum value of empathy of services delivery in the health sector is as low as 1.2 that means strongly disagree with the items related to empathy of service delivery. While the maximum is 4.8 which means the respondent is strongly agree with the related items. As seen, the mean value is .2.8564 in the health sector with standard deviation of 1.0277. This means that, on average, the respondents think that the empathy services of delivery is medium. However, it is noted that there is a great of variations between the observations of companies as it is reflected in the standard deviation (103%).

The minimum value of responsiveness to patients in the health sector is as low as 1 that means strongly disagree with the items related to responsiveness to patients. While the maximum is 5 which means the respondent is strongly agree with the related items. As seen, the mean value is .2.8307 in the health sector with standard deviation of 1.0166. This means that, on average, the respondents think that the responsiveness to patients is medium. However, it is noted that there is a great of variations between the observations of companies as it is reflected in the standard deviation (102%).

The minimum value of service quality in the health sector is as low as 1 that means strongly disagree with the items related to service quality. While the maximum is 5 which means the respondent is strongly agree with the related items. As seen, the mean value is .2.85463 in the health sector with standard deviation of 1.00164. This means that, on average, the respondents think that the service quality is medium.

The minimum value of patient's satisfaction in the health sector is as low as 1.44 that means strongly disagree with the items related to patient's satisfaction. While the maximum is 4.556 which means the respondent is strongly agree with the related items. As seen, the mean value is .2.8504 in the health sector with standard deviation of 0.9376. This means that, on average, the respondents think that the patient's satisfaction is medium. However, it is noted that there is a great of variations between the observations of companies as it is reflected in the standard deviation (93.76%).

4.2 Correlation Analysis

The correlation analysis showed that multicollinearity does not exist. Multicollinearity occurs when independent variables are substantially (but not fully) connected to one another (or combinations of independent variables). Even if the entire regression is important, the regression coefficients may not even be statistically significant separately due to multicollinearity.

4.3 Regression Analysis

Regression analysis is commonly used for predicting, and it shares a lot of ground with machine learning. Regression analysis can also be used to figure out which of the independent variables is linked to the dependent variable, as well as to investigate the types of correlations that exist. Regression analysis can be used to determine causal relationships between the independent and dependent variables in limited conditions.

The linear multiple regression analysis would be used to test the study hypotheses, with the assumptions of the multiple regression analysis ensuring there is no high correlation between independent variables, the multiple regression analysis requiring homogeneity in the random error variance, and in this research it was determined that the data is free of

the previously mentioned barriers. Each test will be discussed and assessed separately in the following paragraph:

4.3.1 The Regression Analysis for Public Hospitals

The VIF test was performed to ensure that there is no multicollinearity between the independent variables as follow:

Table No. (4-12)

Collinearity Statistics		
	Tolerance	VIF
(Constant)		
Reliability of service delivery	.154	6.474
Assurance of service delivery	.167	5.980
Tangibility of service delivery	.112	8.955
Empathy of service delivery	.178	5.634
Responsiveness to Patients	.188	5.329

The results in Table (4-12) indicate that the independent variables in this study are free from the problem of linear interference, as the values of the variance inflation factor (VIF) were less than (10) and even less than (9) for all studied variables and ranged between (5.329) for the responsiveness to patients variable and (8.955) for the tangibility for service delivery variable. This shows that the independent variables are free from the problem of high multicollinearity, and it can all be used in the regression model.

4.3.1.1 Heteroscedasticity Testing

If the regression indicates substantial conditional heteroscedasticity, the normal error and test statistics calculated by the regression programs would be inaccurate because they are corrected for heteroscedasticity.

One basic test for conditional heteroscedasticity is that under the null hypothesis of non-conditional heteroscedasticity (From squared residuals regression to independent variables from the original regression) will be a random vector with the degree of breakdown in the regression equals the number of independent variables. In this research

the test showed that there is unconditional heteroscedasticity which is acceptable for making regression analysis as shown from the chart in the appendix.

4.3.1.2 Serial correlation

Serial correlation in linear regression is that once corrected for serial correlation, the normal errors and test statistics computed by regression programs would be inaccurate. Positive serial correlation usually inflates the t-statistics of predicted regression coefficients as well as the F-statistic for the total importance of the regression. It is possible to use Durbin-Watson statistics for research based on serial correlation. If the Durbin-Watson statistic varies sufficiently, then there is a strong serial association between the regression errors.

After computing the Durbin Watson for the four models all of them showed that it is above from the upper Durbin Watson (lower value of Durbin-Watson= 1.707) and (upper value of Durbin-Watson= 1.831), the results of this test indicated the following:

The Durbin-Watson value for the data in the study equals (2.142) which is above the upper value and this means that there is no serial correlation between the variables so the data are ready for regression analysis.

Table No. (4-13)

Coefficients					
	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
(Constant)	.376	.077		4.867	.000
Reliability of service delivery	.212	.064	.224	3.339	.001
Assurance of service delivery	.235	.054	.283	4.385	.000
Tangibility of service delivery	.259	.074	.276	3.500	.001
Empathy of service delivery	.034	.057	.037	.599	.550
Responsiveness to Patients	.127	.055	.140	2.306	.022
R^2= 0.837 (83.7%)		Adjusted R^2= 0.833 (83.3%)			
F. (Sig.) = 240.818 (0.000)		Durbin-Watson = 2.142			

Regression analysis was conducted according to the multiple regression models discussed in chapter three. Table (4-13) summarize the results of the regression analysis.

Dependent Variable: Patients' Satisfaction (PS)

As seen from the tables above, the regression model was significant at the 1% level (F = 240.818, $Sig.$ = 0.000). In addition, the independent variables included in the model explains 83.3% (adjusted R^2 =.833) of the variability in the dependent variable the patients' satisfaction as measured by the average of the items in the questionnaire in patients' satisfaction section, the R^2 equal 83.7%.

The analysis of individual variables as seen from the table no. (4-13) that:

- There is a significant positive relationship between reliability of service delivery and patients' satisfaction at level of significant 1%.

- There is a significant positive relationship between assurance of service delivery and patients' satisfaction at level of significant 1%.

- There is a significant positive relationship between tangibility of service delivery and patients' satisfaction at level of significant 1%.

- There is a non significant positive relationship between empathy of service delivery and patients' satisfaction at level of significant 1%.

- There is a non significant positive relationship between responsiveness to patients and patients' satisfaction at level of significant 1%.

4.3.2 The Regression Analysis for Private Hospitals

The VIF test was performed to ensure that there is no multicollinearity between the independent variables as follow:

Table No. (4-14)

Collinearity Statistics		
	Tolerance	VIF
(Constant)		
Reliability of service delivery	.138	7.247
Assurance of service delivery	.209	4.778
Tangibility of service delivery	.094	9.601
Empathy of service delivery	.152	6.595
Responsiveness to Patients	.151	6.641

The results in Table (4-14) indicate that the independent variables in this study are free from the problem of linear interference, as the values of the variance inflation factor (VIF) were less than (10) for all studied variables and ranged between (4.778) for the assurance of service delivery variable and (9.601) for the tangibility for service delivery variable. This shows that the independent variables are free from the problem of high multicollinearity, and it can all be used in the regression model.

4.3.2.1 Heteroscedasticity Testing

If the regression indicates substantial conditional heteroscedasticity, the normal error and test statistics calculated by the regression programs would be inaccurate because they are corrected for heteroscedasticity.

One basic test for conditional heteroscedasticity is that under the null hypothesis of non-conditional heteroscedasticity (From squared residuals regression to independent variables from the original regression) will be a random vector with the degree of breakdown in the regression equals the number of independent variables. In this research the test showed that there is unconditional heteroscedasticity which is acceptable for making regression analysis as shown from the chart in the appendix.

4.3.2.2 Serial correlation

Serial correlation in linear regression is that once corrected for serial correlation, the normal errors and test statistics computed by regression programs would be inaccurate. Positive serial correlation usually inflates the t-statistics of predicted regression coefficients as well as the F-statistic for the total importance of the regression. It is possible to use Durbin-Watson statistics for research based on serial correlation. If the Durbin-Watson statistic varies sufficiently, then there is a strong serial association between the regression errors.

After computing the Durbin Watson for the four models all of them showed that it is above from the upper Durbin Watson (lower value of Durbin-Watson= 1.707) and (upper value of Durbin-Watson= 1.831), the results of this test indicated the following:

The Durbin-Watson value for the data in the study equals (2.123) which is above the upper value and this means that there is no serial correlation between the variables so the data are ready for regression analysis.

Table No. (4-15)

	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
(Constant)	.325	.080		4.052	.000
Reliability of service delivery	.183	.067	.200	2.729	.007
Assurance of service delivery	.203	.052	.233	3.921	.000
Tangibility of service delivery	.184	.081	.200	2.263	.025
Empathy of service delivery	.094	.063	.104	1.484	.139
Responsiveness to Patients	.223	.066	.237	3.383	.001
R^2= 0.850 (85.0%)			Adjusted R^2= 0.846 (84.6%)		
F. (Sig.) = 230.214 (0.000)			Durbin-Watson = 2.123		

Regression analysis was conducted according to the multiple regression models discussed in chapter three. Table (4-15) summarize the results of the regression analysis.

Dependent Variable: Patients' Satisfaction (PS)

As seen from the tables above, the regression model was significant at the 1% level (F = 230.214, *Sig.* = 0.000). In addition, the independent variables included in the model explains 84.6% (adjusted R^2 =.846) of the variability in the dependent variable the patients' satisfaction as measured by the average of the items in the questionnaire in patients' satisfaction section, the R^2 equal 85%.

The analysis of individual variables as seen from the table no. (5-15) that:

- There is a significant positive relationship between reliability of service delivery and patients' satisfaction at level of significant 1%.

- There is a significant positive relationship between assurance of service delivery and patients' satisfaction at level of significant 1%.
- There is a non significant positive relationship between tangibility of service delivery and patients' satisfaction at level of significant 1%.
- There is a non significant positive relationship between empathy of service delivery and patients' satisfaction at level of significant 1%.
- There is a significant positive relationship between responsiveness to patients and patients' satisfaction at level of significant 1%.

4.4 Hypothesis Testing Results (Comparison between private and public hospitals)

H1: Service quality of public hospitals during the Covid-19 pandemic has a positive influence on patient satisfaction

This hypothesis will be tested by testing the following hypothesis:

H1a Service quality reliability of public hospitals during the Covid-19 pandemic has a positive influence on patient satisfaction

Based on the regression analysis for the study model (see Table 5-13), that showed that the (sig. = .001, T= 3.339 for public hospitals so the hypothesis will be accepted at 1% level of significance. This indicates that there is a significant positive relationship between reliability of service delivery on the patient satisfaction in public Jordanian hospitals during the COVID-19 pandemic.

H1b Service quality assurance of public hospitals during the Covid-19 pandemic has a positive influence on patient satisfaction

Based on the regression analysis for the study model (see Table 5-13), that showed that the (sig. = .000, T= 4.385 for public hospitals so the hypothesis will be accepted at 1% level of significance. This indicates that there is a significant positive relationship between assurance of service delivery on the patient satisfaction in public Jordanian hospitals during the COVID-19 pandemic.

H1c Service quality tangibility of public hospitals during the Covid-19 pandemic has a positive influence on patient satisfaction

Based on the regression analysis for the study model (see Table 5-13), that showed that the (sig. = .001, T= 3.500 for public hospitals so the hypothesis will be accepted at 1% level of significance. This indicates that there is a significant positive relationship between tangibility of service delivery on the patient satisfaction in public Jordanian hospitals during the COVID-19 pandemic.

H1d Service quality empathy of public hospitals during the Covid-19 pandemic has a positive influence on patient satisfaction

Based on the regression analysis for the study model (see Table 5-13), that showed that the (sig. = 0.550, T= 0.599 for public hospitals so the hypothesis will be rejected at 1% level of significance. This indicates that there is no significant positive relationship between empathy of service delivery on the patient satisfaction in public Jordanian hospitals during the COVID-19 pandemic.

H1e Service quality responsiveness of public hospitals during the Covid-19 pandemic has a positive influence on patient satisfaction

Based on the regression analysis for the study model (see Table 5-13), that showed that the (sig. 0.022 =, T= 2.306 for public hospitals so the hypothesis will be accepted at 1% level of significance. This indicates that there is significant positive relationship between responsiveness of service delivery on the patient satisfaction in public Jordanian hospitals during the COVID-19 pandemic.

H2: The service quality of private hospitals during the Covid-19 pandemic has a stronger impact on patient satisfaction when compared to public hospitals.

This hypothesis will be tested by testing the following hypothesis:

H2a Service quality reliability of private hospitals during the Covid-19 pandemic has a stronger impact on patient satisfaction when compared to public hospitals.

Based on the regression analysis for the study model (see Table 5-15), that showed that the (sig. = .004, T= 2.729 for private hospitals so the hypothesis will be accepted at 1% level of significance. This indicates that there is a significant positive relationship between reliability of service delivery on the patient satisfaction in public Jordanian hospitals during the COVID-19 pandemic.

H2b Service quality assurance of private hospitals during the Covid-19 pandemic has a stronger impact on patient satisfaction when compared to public hospitals.

Based on the regression analysis for the study model (see Table 5-15), that showed that the (sig. = 0.000, T= 3.921 for private hospitals so the hypothesis will be accepted at 1% level of significance. This indicates that there is a significant positive relationship between assurance of service delivery on the patient satisfaction in public Jordanian hospitals during the COVID-19 pandemic.

H2c Service quality tangibility of private hospitals during the Covid-19 pandemic has a stronger impact on patient satisfaction when compared to public hospitals.

Based on the regression analysis for the study model (see Table 5-15), that showed that the (sig. = 0.025, T= 2.263 for private hospitals so the hypothesis will be accepted at 1% level of significance. This indicates that there is a significant positive relationship between tangibility of service delivery on the patient satisfaction in public Jordanian hospitals during the COVID-19 pandemic.

H2d Service quality empathy of private hospitals during the Covid-19 pandemic has a stronger impact on patient satisfaction when compared to public hospitals.

Based on the regression analysis for the study model (see Table 5-15), that showed that the (sig. = 0.139, T= 1.484 for private hospitals so the hypothesis will be rejected at 1% level of significance. This indicates that there is a significant positive relationship between empathy of service delivery on the patient satisfaction in public Jordanian hospitals during the COVID-19 pandemic.

H2e Service quality responsiveness of private hospitals during the Covid-19 pandemic has a stronger impact on patient satisfaction when compared to public hospitals.

Based on the regression analysis for the study model (see Table 5-15), that showed that the (sig. = 0.001, T= 3.383 for private hospitals so the hypothesis will be accepted at 1% level of significance. This indicates that there is a significant positive relationship between responsiveness of service delivery on the patient satisfaction in public Jordanian hospitals during the COVID-19 pandemic.

Table (4-16) Hypothesis Testing Results

No.	Hypothesis	Expected Relationship	Observed Relationship	Decision
H1a	Service quality reliability of public hospitals during the Covid-19 pandemic has a positive influence on patient satisfaction	positive	positive	Accept the hypothesis
H1b	Service quality assurance of public hospitals during the Covid-19 pandemic has a positive influence on patient satisfaction	positive	positive	Accept the hypothesis
H1c	Service quality tangibility of public hospitals during the Covid-19 pandemic has a positive influence on patient satisfaction	positive	positive	Accept the hypothesis
H1d	Service quality empathy of public hospitals during the Covid-19 pandemic has a positive influence on patient satisfaction	positive	positive	Reject the hypothesis due to non-significance
H1e	Service quality responsiveness of public hospitals during the Covid-19 pandemic has a positive influence on patient satisfaction	positive	positive	Accept the hypothesis

H2a	Service quality reliability of private hospitals during the Covid-19 pandemic has a stronger impact on patient satisfaction when compared to public hospitals.	positive	positive	Accept the hypothesis
H2b	Service quality assurance of private hospitals during the Covid-19 pandemic has a stronger impact on patient satisfaction when compared to public hospitals.	positive	positive	Accept the hypothesis
H2c	Service quality tangibility of private hospitals during the Covid-19 pandemic has a stronger impact on patient satisfaction when compared to public hospitals.	positive	positive	Accept the hypothesis
H2d	Service quality empathy of private hospitals during the Covid-19 pandemic has a stronger impact on patient satisfaction when compared to public hospitals.	positive	positive	Reject the hypothesis due to non-significance
H2e	Service quality responsiveness of private hospitals during the Covid-19 pandemic has a stronger impact on patient satisfaction when compared to public hospitals.	positive	positive	Accept the hypothesis

CHAPTER V

Discussion

Services are becoming an increasingly important part of organizations on a national, regional, and worldwide scale, and are seen as a valuable source of revenue. As a consequence, a services supplier's performance is frequently dependent on a superior client relation, which affects client loyalty and satisfaction, and the service quality influences results and performance such as increasing sales and profit (Lanka et al., 2009). (Newman, 2001). Customer loyalty is associated with customer happiness and service quality via repeat purchase, hence offering better services to the patients is an essential prerequisite for hospitals' survival and success in today's dynamic and competitive world. After analyzing the collected data, the results showed that there is no difference in the impact of reliability of service delivery, assurance of service delivery, empathy of service delivery, responsiveness to patients and tangibility of service delivery on the patient satisfaction in both private and public Jordanian hospitals during the COVID-19 pandemic.

Customer relationships, performance excellence, customer base, consumer loyalty, and image of the company are all enhanced (Newman, 2001). Customer retention is associated with customer happiness and service quality via repeat purchase, hence offering better care to the patients is an essential prerequisite for hospitals' success and survival in todays modern vibrant and challenging world.

In different service environments, the relative relevance of service quality aspects varies and does not have to be the same. For example, in a study of the relative importance of service quality dimensions in a multi-sector study, Sachdev and Verman (2004) discovered that responsiveness was the most important dimension in the banking sector, while reliability and tangibility were critical in the insurance and fast food sectors, respectively. This contrasts with the findings of Parasuraman et al. (1988), who discovered that all SERVQUAL aspects were equally important in diverse service organisations. This conclusion could aid decision-makers in service organisations in allocating resources optimally across different dimensions and tailoring business strategies based on the relevance of each. However, responsiveness and tangibility were shown to be the most

essential features in the current study, with a substantial difference between private and public hospitals.

Delivering high-quality services might help clients feel more satisfied with their service providers. From the perspective of the consumer, responsiveness and tangibility are crucial factors in achieving better levels of satisfaction, whereas reliability, assurance, and empathy are not important determinants of customer happiness in hospitals. To produce high-quality services that promote customer satisfaction and profitability, service providers must revise their performance in aspects connected to consumer satisfaction. The outcomes of this study back up earlier research on service quality in the healthcare industry. The factors used to assess service quality were derived from studies conducted in public and private hospitals, and they may not fully reflect service requirements. Because of the limits of the instrument, the relationships formed between service quality, demographic data, and overall satisfaction in this study may not have been actually reflective of the relationships of services at this institution, despite their practical importance. This gives hospital executives the justification they need to make changes to existing service quality to make them more relevant to their organization and their users. A rationale has been created in academics for the ongoing development and testing of an instrument focused on service quality factors that are essential to hospitals. The tool would help managers better understand their users' demands and perceptions, as well as the links between these perceptions and crucial outcome variables like overall satisfaction. Theoretically, this research adds to the body of knowledge about service quality and customer satisfaction by expanding the content of service quality dimensions applicable to the healthcare provider sector, and it tested five key service quality dimensions in the healthcare provider context based on existing theories. The main contribution has been to add to the body of knowledge. More particular, the bulk of the findings for research question one corroborated previous literature. From qualitative empirical data, new findings were revealed. In this study, two previous ideas were supported and developed in relation to the research subject. It also improved and increased awareness of the relative value of service quality dimensions.

CHAPTER VI

Conclusion and Recommendations

6.1 Summary

The results of the study showed the following:

- There is a significant positive relationship between reliability of service delivery on the patient satisfaction in public Jordanian hospitals during the COVID-19 pandemic.

- There is a significant positive relationship between assurance of service delivery on the patient satisfaction in public Jordanian hospitals during the COVID-19 pandemic.

- There is a significant positive relationship between tangibility of service delivery on the patient satisfaction in public Jordanian hospitals during the COVID-19 pandemic.

- There is no significant positive relationship between empathy of service delivery on the patient satisfaction in public Jordanian hospitals during the COVID-19 pandemic.

- There is significant positive relationship between responsiveness of service delivery on the patient satisfaction in public Jordanian hospitals during the COVID-19 pandemic.

- There is a significant positive relationship between reliability of service delivery on the patient satisfaction in public Jordanian hospitals during the COVID-19 pandemic.

- There is a significant positive relationship between assurance of service delivery on the patient satisfaction in public Jordanian hospitals during the COVID-19 pandemic.

- There is a significant positive relationship between tangibility of service delivery on the patient satisfaction in public Jordanian hospitals during the COVID-19 pandemic.

- There is a significant positive relationship between empathy of service delivery on the patient satisfaction in public Jordanian hospitals during the COVID-19 pandemic.

- There is a significant positive relationship between responsiveness of service delivery on the patient satisfaction in public Jordanian hospitals during the COVID-19 pandemic.

6.2 Conclusion

The study's results are expected to have real impact in the private and public hospitals. In fact, hospitals managers and owners can use the results of research to making decisions related to the dealing with the patients and to increase their satisfaction. This benefit them deciding about their services in the hospitals in order to enhance the quality of it. All research questions answered and the hypothesis tested.

This study support the idea that both private and public hospitals worked side by side during the pandemic to increase the safety in the country. In addition to that Private sector hospitals improve the quality of their services as a part of the strategic vision when building the strategy in private hospitals by emphasizing sympathy, since this dimension obtained the degree of quality of health service and its importance in strategic success to achieve hospital goals.

Many factors affect the quality of service in the public health sector, including bureaucracy, a lack of expert staff on both physician and nurse levels, poor catering services, rigid organizational management, an insufficient supply of technology to improve medical tests, a lack of training programs, and overcapacity in some public hospitals (Quiblawi, 2005). Jordan's private sector is beset by issues such as a lack of rules, equity, bad management, insufficient health information systems, and poor utilization (Ajlouni, 2011). The private hospital service is regarded as being of superior quality to that provided by the public hospitals.

In terms of both financing and delivery of services, the private sector plays a critical role. Many private companies provide healthcare coverage for their employees by self-insuring or purchasing private health insurance. From 1998 to 2010, a national health strategy was adopted with the goals of supporting and strengthening primary health care, improving managerial, technical, and professional performance in the public health sector, and strengthening the public-private partnership. Implement a National Health Insurance System, improve the country's health-care financing, and promote Jordan's regional role in providing high-quality, low-cost medical care to attract patients from other countries (Medical tourism), as well as improve the quality of health-care services and patient satisfaction.

Research Implication

According to the findings, tangible has the greatest impact on patient satisfaction. As a result, it is suggested that the management make more efforts to improve the facilities and cleanliness. As a healthcare facility, hygiene is critical to preventing infection and worsening the patients' situation.

When medical specialists are required, patients in private hospitals have greater access to them than patients in public hospitals. In addition, patients in public hospitals spend less time having received medical care than patients in private hospitals. Seemingly, private hospitals provide better diagnostic services than public hospitals.

The results will assist hospital administrators in implementing strategies to provide superior quality healthcare services to patients. The study will encourage hospital administrators to pay attention to the quality of private healthcare service systems and to make enhancements to lacking in intelligence healthcare services. Moreover, the research will provide a good overview of patients' behavioral attitudes, as well as level of satisfaction motives toward the quality of healthcare services.

6.4 Policies Recommendations

The following available recommendations for this study have been presented on the basis of the research results:

1. To study the effect of the same variables on the firm's quantitative and qualitative performance such as financial returns.

2. The study recommends that the researchers use other questions that could measure the customer satisfaction and service quality also by taking different dimensions to measure the service quality.

3. The study recommends that the ministry of health should keep an eye on the public hospitals performance and its service quality to satisfy the patients' needs.

Research Limitations

Limits of the research summaries as follow:

1. The study depends mainly on patients opinions.

2. Restrictions in hospitals due to corona pandemic make the data collection hard.

3. There is a lack of previous studies in the same topic.

4. The study took a large sample in order to represent population.

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Appendix A

SPSS Results

Descriptives

	N	Minimum	Maximum	Mean	Std. Deviation
					Descriptive Statistics
Reliability	450	1.0000	5.0000	2.858333	1.0061407
Assurance	450	1.0000	5.0000	2.856667	1.1035022
Tangibility	450	1.5000	4.5000	2.852593	1.0092356
Empathy	450	1.2000	4.8000	2.856444	1.0277728
Responsivness	450	1.0000	5.0000	2.830667	1.0165850
Satisfactio	450	1.4444	4.5556	2.850370	.9375990
Valid N (listwise)	450				

Correlations

		Reliability	Assurance	Tangibility	Empathy	Responsiveness
Reliability	Pearson Correlation	1	.860**	.905**	.850**	.870**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	450	450	450	450	450
Assurance	Pearson Correlation	.860**	1	.883**	.837**	.844**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	450	450	450	450	450
Tangibility	Pearson Correlation	.905**	.883**	1	.896**	.882**
	Sig. (2-tailed)	.000	.000		.000	.000

		450	450	450	450	450
Emp athy	Pearson Correlation	.850**	.837**	.896**	1	.861**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	450	450	450	450	450
Res pons ivne ss	Pearson Correlation	.870**	.844**	.882**	.861**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	450	450	450	450	450

**. Correlation is significant at the 0.01 level (2-tailed).

Reliability

Reliability Statistics

Cronbach's Alpha	N of Items
.975	6

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Reliability	14.246741	23.176	.922	.969
Assurance	14.248408	22.439	.906	.971
Tangibility	14.252481	22.949	.947	.967
Empathy	14.248630	23.126	.905	.971
Responsivne ss	14.274408	23.169	.912	.970
Satisfactio	14.254704	23.853	.916	.970

Regression

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.918[a]	.842	.841	.3742927	2.171

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	332.510	5	66.502	474.692	.000[b]
	Residual	62.202	444	.140		
	Total	394.712	449			

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	.352	.055		6.389	.000
	Reliability	.199	.045	.214	4.383	.000
	Assurance	.216	.037	.254	5.845	.000
	Tangibility	.227	.054	.244	4.187	.000
	Empathy	.066	.042	.072	1.584	.114
	Responsivness	.169	.042	.183	4.032	.000

Collinearity Statistics		
	Tolerance	VIF
(Constant)		
Reliability	.149	6.711
Assurance	.188	5.313
Tangibility	.104	9.585
Empathy	.170	5.877
Responsivness	.173	5.786

Residuals Statistics[a]					
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.739743	4.222208	2.850370	.8605562	450
Residual	-.8759031	.9139518	.0000000	.3722028	450
Std. Predicted Value	-1.291	1.594	.000	1.000	450
Std. Residual	-2.340	2.442	.000	.994	450

Charts

Histogram
Dependent Variable: Satisfactio

Mean = 1.14E-15
Std. Dev. = 0.994
N = 450
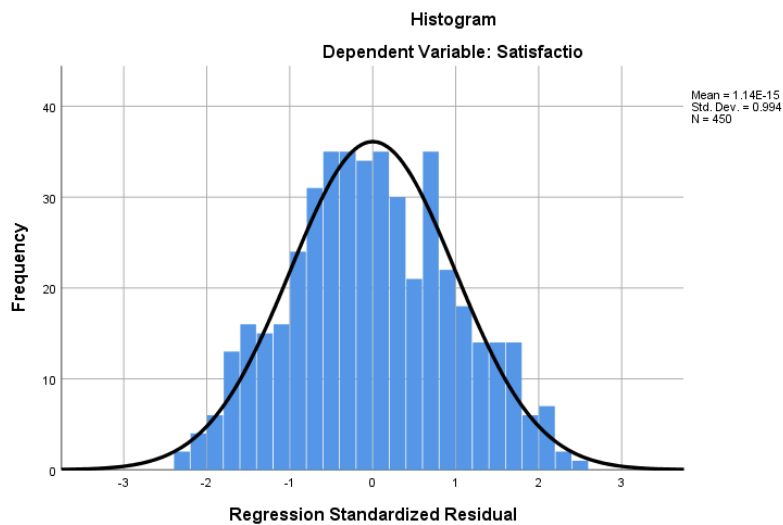
Normal P-P Plot of Regression Standardized Residual

Dependent Variable: Satisfactio

Scatterplot

Dependent Variable: Satisfactio
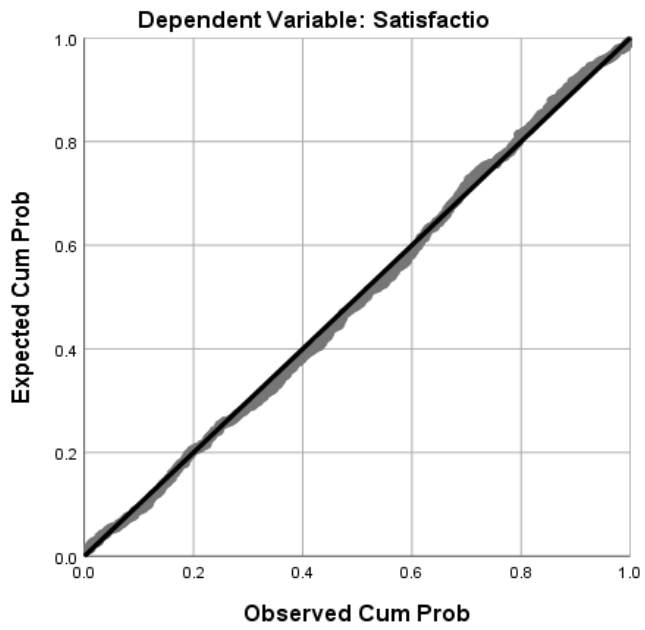
Frequencies

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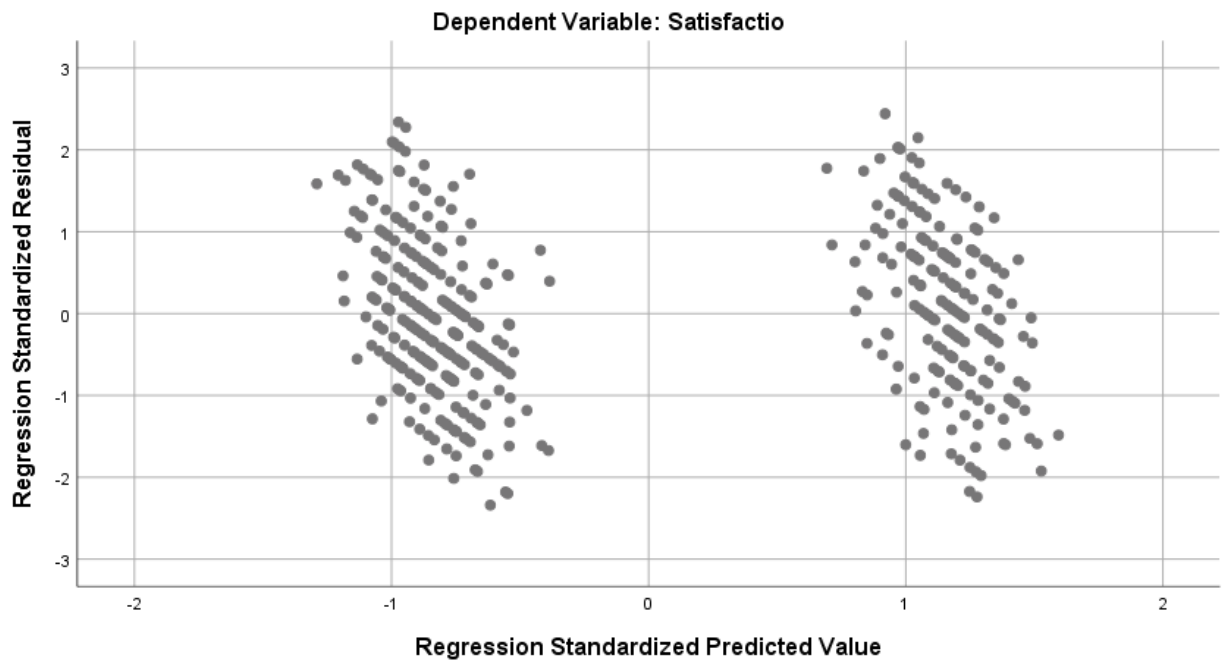<tr><td></td><td>2</td><td>222</td><td>49.3</td><td>49.3</td><td>100.0</td></tr>
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VAR00010

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	88	19.6	19.6	19.6
	2	163	36.2	36.2	55.8
	3	181	40.2	40.2	96.0
	4	18	4.0	4.0	100.0
	Total	450	100.0	100.0	

VAR00011

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	189	42.0	42.0	42.0
	2	261	58.0	58.0	100.0
	Total	450	100.0	100.0	

VAR00012

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	189	42.0	42.0	42.0
	2	261	58.0	58.0	100.0
	Total	450	100.0	100.0	

VAR00013

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	123	27.3	27.3	27.3
	2	66	14.7	14.7	42.0

		Frequency	Percent	Valid Percent	Cumulative Percent
	3	114	25.3	25.3	67.3
	4	147	32.7	32.7	100.0
	Total	450	100.0	100.0	

VAR00014

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	209	46.4	46.4	46.4
	2	241	53.6	53.6	100.0
	Total	450	100.0	100.0	

Appendix B

Questionnaire

"The Impact of Service Quality on Patient Satisfaction:Comparative Study between Public and Private Hospitals"

Dear Respondent

This questionnaire aims to investigate the impact of the service quality on patient satisfaction at both Jordanian public and private hospitals during the Covid 19 pandemic. Kindly indicate your preference among alternative answers for each question by ticking in the appropriate box. Where alternative answers are not provided, fill in the gaps provided. Respondents are assured of confidentiality of this exercise because it will be solely used for academic purpose.

Thank you for your cooperation and assistance.

Researchers:

Djawad Qawasmeh (Master student)   **Prof. Dr. Serife Eyupoglu**

Department of Business Administration **Department of Business Administration**

Near East University   **Near East University**

Lefkosa, North Cyprus   **Lefkosa, North Cyprus**

Email: Jawad.qawasmi@hotmail.com   **Email: serife.eyupoglu@neu.edu.tr**

,

A. Respondent Information

1. What is your gender?

A. Male [ ]   B. Female [ ]

2. What is your age?

18 or below [ ]   19-25 [ ]   26-30 [ ]   31-35 [ ]   36-40 [ ]

41-45 [ ]   46 -50 [ ]   51-55 [ ]   56-60 [ ]   61-65 [ ]

66-70 [ ]   71 or above [ ]

3. What type of patient are you?

A. In-patient [ ]   B. out-patient [ ]

4. How long have you been a patient in Jordanian Hospitals?

A. Less than 1year [ ]   B. Between 2 and 5years [ ]

C. Between 5 and 10 years [ ]   D. More than 10years [ ].

5. Are your expectations met when you visit Jordanian Hospitals?

A. Yes [ ]   B. No [ ]

6. Do you feel satisfied with the services rendered at Jordanian Hospitals?

A.Yes [ ]   B. No [ ]

7. How would you rate the service quality of Jordanian Hospitals?

A. Good [ ]   B. Average [ ]   C. Below average [ ]   D. Poor [ ]

8. What type of hospitals do you visit?

A. Private hospitals [ ]   B. Public hospitals [ ]

B. Assessment of service quality and patients satisfaction Jordanian Hospitals

Part One (Service Quality)

Indicate the most appropriate response for each of the questions listed below;

Key: 5= strongly agree, 4= Agree, 3=Neutral, 2= Disagree 1=strongly disagree

Reliability of service delivery		1	2	3	4	5
1	Nurses and health assistants ensure patients take their medication as prescribed during Covid-19 Pandemic					
2	Services provided by the hospital are dependable when handling patients problems during Covid-19 Pandemic					
3	Nurses are trusted with patient's confidentiality					
4	Services provided as soon as possible without the need to wait during Covid-19 Pandemic					
Assurance of service delivery						
5	Staff are courteous and friendly under the pressure of Covid-19 Pandemic					
6	Staff able to inspire trust and confidence in Patients					

7	Nurses ensure medications are taken on time and that no mistakes are made with dosage while working under pressure during Covid-19 Pandemic					
8	Nurses create a friendly atmosphere for patients to feel safe and relaxed					
Tangibility of service delivery						
9	Staff are well dressed at all times					
10	The hospital have modern medical equipment					
11	The hospital has visually attractive and comfortable physical facility (i.e chairs, beds, table)					
12	There are appealing materials (i.e brochures, magazines, newspapers, WIFI etc) to engage patients as they wait					
13	There directional signs to help patients with easy navigation					
14	The hospital structures are disability friendly					
Empathy of service delivery						
15	Staff are patient when dealing with patients while working under the pressure of Covid-19 Pandemic					
16	The health staff are willing to respond to patients" complaints					
17	Staff are great listeners					
18	Staff remembers names and faces of patients					
19	Staff ensure patients feel good emotionally and psychologically					
Responsiveness to patients						
20	Staff are always ready to receive patients during Covid-19 Pandemic					

21	Nurses are willing to help patients even during odd hours during Covid-19 Pandemic					
22	Doctors are will appear at times I feel very sick during Covid-19 Pandemic					
23	Physician understand your problem					
24	Hygiene maintenance in the clinic are satisfied during Covid-19 Pandemic					

Source: Sie, S. (2015), Examining the Service Quality and Patient Satisfaction at ANKAASE Methodist Hospital, master thesis, College of Arts and Social Science, KNUST School of Business, KWAME NKRUMAH University of Science and Technology

Phase Two (Patients satisfaction)

Indicate the most appropriate response for each of the questions listed below;

Key: 5= strongly agree, 4= Agree, 3=Neutral, 2= Disagree

Patients satisfaction		1	2	3	4	5
25	Patients find staff courteous and helpful					
26	Patients find staff quick to respond to emergency cases during Covid-19 Pandemic					
27	Patients trust staff with confidentiality during Covid-19 Pandemic					
28	Patients do not spend too much time waiting in queues and where there are delays explanations are given during Covid-19 Pandemic					
28	Staff do not discriminate against patients with serious conditions					
29	Staff inspire trust and confidence in patients during Covid-19 Pandemic					
30	Staff ensure medications are taken on time and that no mistakes are made with dosage					
31	Patients find a friendly atmosphere by staff for to feel safe and relaxed					
32	Patients are satisfied The care giver hygienist					
Source: Sie, S. (2015), Examining the Service Quality and Patient Satisfaction at ANKAASE Methodist Hospital, master thesis, College of Arts and Social Science, KNUST School of Business, KWAME NKRUMAH University of Science and Technology.						

Appendix C

YAKIN DOĞU ÜNİVERSİTESİ

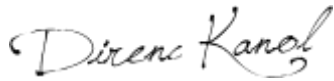**BİLİMSEL ARAŞTIRMALAR ETİK KURULU**

25.05.2021

Dear Djawad Qawasmeh

Your application titled **"The Impact of Service Quality on Patient Satisfaction: Comparative Study Between Public and Private Hospitals"** with the application number NEU/SS/2021/1029 has been evaluated by the Scientific Research Ethics Committee and granted approval. You can start your research on the condition that you will abide by the information provided in your application form.

Assoc. Prof. Dr. Direnç Kanol

Rapporteur of the Scientific Research Ethics Committee

Note: If you need to provide an official letter to an institution with the signature of the Head of NEU Scientific Research Ethics Committee, please apply to the secretariat of the ethics committee by showing this document.

Appendix D

THE IMPACT OF SERVICE QUALITY ON PATIENT SATISFACTION: COMPARATIVE STUDY BETWEEN PUBLIC AND PRIVATE HOSPITALS by Djawad Qawasmeh (20185870)

ORIGINALITY REPORT

7% SIMILARITY INDEX	4% INTERNET SOURCES	5% PUBLICATIONS	% STUDENT PAPERS

PRIMARY SOURCES

1 Gyaneshwar Singh Kushwaha, Shiv Ratan Agrawal. "chapter 81 Customer Satisfaction via Service Quality Dimensions", IGI Global, 2016
Publication — 1%

2 Panchapakesan Padma, Chandrasekharan Rajendran, L. Prakash Sai. "A conceptual framework of service quality in healthcare", Benchmarking: An International Journal, 2009
Publication — 1%

3 ijrcm.org.in
Internet Source — <1%

4 www.frontiersin.org
Internet Source — <1%

5 eprints.utar.edu.my
Internet Source — <1%

6 www.icoaef.com
Internet Source — <1%

Appendix E

List of Hospitals in Jordan

1. Abdali Hospital - Amman
2. Abdulhadi Eye Hospital - Amman
3. Ash-Shaami Hospital- Amman
4. Abu Obaida Hospital - Irbid
5. Akilah Hospital - Amman
6. Al Ahli Hospital - Amman
7. Al Bayader Hospital - Amman
8. Al Dhalil Hospital - Zarqa
9. Al Hanan General Hospital - Amman
10. Al Hayat General Hospital - Amman
11. Al Khalidi Medical Center - Amman
12. Al Maqased Hospital - Amman
13. Al Nadeem Hospital - Madaba
14. Al Quds Hospital - Amman
15. Al Safa Specialized Hospital - Jerash
16. Al Shaheed Abu Diah Hospital - Amman
17. Al-Amal Hospital - Amman
18. Al-Aqsa Hospital - Amman
19. Albashir Hospital - Amman
20. Al-Essra Hospital - Amman
21. Al-Hikma Modern Hospital - Zarqa
22. King Hussein Cancer Center - Amman
23. King Hussein Medical Center - Amman
24. Al-Iman Hospital - Ajloun
25. Al-Jazeera Hospital - Amman
26. Al-Karak Hospital - Karak
27. Al-Karama Hospital for Psychological Rehabilitation - Amman
28. Al-Kindi Hospital - Amman
29. Al-Mafraq Hospital - Mafraq

30. Al-Mahaba Hospital - Madaba

31. Almowasah Hospital - Amman

32. Al-Najah Hospital - Irbid

33. Al-Nour Sanitarium - Mafraq

34. Al-Qawasmi Hospital - Irbid

35. Al-Ramtha Hospital - Irbid

36. Al-Rashid Hospital Center - Balqa

37. Al-Razi New Hospital - Zarqa

38. Al-Ruweished Hospital - Mafraq

39. Al-Salam Hospital - Karak

40. Al-Yarmouk Hospital - Irbid

41. Amman Surgical Hospital - Amman

42. Aqaba Modern Hospital - Aqaba

43. Arab Medical Center - Amman

44. The Arab Potash Co. Hospital - Karak

45. Dr. Ahmed Hamayda General Hospital - Amman

46. Dr. Jameel Al-Toutanji Hospital - Amman

47. Eye Speciality Hospital - Amman

48. Farah Center for Rehabilitation - Amman

49. The Farah Hospital - Amman

50. Ghor Al-Safi Hospital - Karak

51. Heba Hospital - Amman

52. Ibn-Alhaytham Hospital - Amman

53. Ibn-Alnafees Hospital - Irbid

54. The International Hospital - Amman

55. Irbid Islamic Hospital - Irbid

56. Irbid Speciality Hospital - Irbid

57. The Islamic Hospital - Amman

58. The Islamic Hospital - Aqaba

59. Istiklal Hospital - Amman

60. Istishari Hospital - Amman

61. The Italian Hospital - Amman

62. The Italian Hospital - Karak

63. Jabal Al Zaytoon Hospital - Zarqa

64. Jabal Amman Hospital - Amman

65. Jerash Hospital - Jerash

66. Jordan Hospital - Amman

67. Jordan Red Crescent Hospital - Amman

68. Jordan University Hospital - Amman

69. King Abdullah University Hospital - Irbid

70. King Hussein Cancer Center - Amman

71. Luzmila Hospital - Amman

72. Ma'an Hospital - Ma'an

73. Malhas Hospital - Amman

74. Marka Islamic Speciality Hospital - Amman

75. Maternity and Children Hospital - Mafraq

76. Milad Hospital - Amman

77. Muaath Bin Jabal Hospital - Irbid

78. National Center for Rehabilitation of Addicts - Amman

79. The National Centre for Diabetes, Endocrinology & Genetics - Amman

80. The National Centre for Mental Health - Balqa

81. Palestine Hospital - Amman

82. Philadelphia Hospital - Amman

83. Prince Ali Bin Al-Hussein Military Hospital - Karak

84. Prince Faisal Ben Al-Hussein Hospital - Zarqa

85. Prince Hamzah Hospital - Amman

86. Prince Hashem Bin Al-Hussein Military Hospital - Aqaba

87. Prince Hussein Ben Abdulla II Center of Urology and Organ Transplant - Amman

88. Prince Rashid Bin Al-Hassan Hospital - Amman

89. Prince Zaid Bin Al-Hussein Hospital - Tafilah

90. Princess Badeea Hospital - Irbid

91. Princess Basma Hospital - Irbid

92. Princess Haya Bint Al-Hussein Military Hospital - Ajloun

93. Princess Iman Hospital - Balqa

94. Princess Rahma Hospital - Irbid

95. Princess Raya Hospital - Irbid

96. Princess Salma Hospital - Madaba

97. Qasr Shabeeb Hospital - Zarqa

98. Queen Alia Heart Institute - Amman

99. Queen Alia Military Hospital - Amman

100. Queen Rania Hospital - Ma'an

101. Queen Rania Pediatric Hospital - Amman

102. Rahbat Al-Wardieh Hospital - Irbid

103. Roman Catholic Hospital - Irbid

104. Royal Jordanian Rehabilitation Center - Amman

105. Shmaisani Hospital - Amman

106. South Shona Hospital - Balqa

107. Speciality Hospital - Amman

108. Tla' Al-Ali Hospital - Amman

109. Zarqa Hospital - Zarqa

110. Zarqa National Hospital - Zarqa