The Impact of Evaluating Service Quality Dimensions on Patient Satisfaction: A Study of Private Hospitals in Irbid City / Jordan

Dr. Abdel Fattah Mahmoud Al-Azzam
Department of Business Administration
Faculty of Economic and Administration Sciences
Al al-Bayt University
Jordan, P.O. Box, (130040)
Mafraq, 25113

Abstract

Over the past decades, the Jordanian Ministry of Health has decided to continue to develop the quality of healthcare and improve patient satisfaction in the most cost-effective way in Jordan. Though, there are major challenges faced by the implementation of these aims in some hospitals, according to Jordan's (2019) health assessment report on patient satisfaction with quality healthcare delivery. The aim of this study is to evaluate the effects of service quality dimensions on patient satisfaction as a study of private hospitals sector in Irbid city/Jordan. Furthermore, quality of service is considered to be one of the important factors in keeping people safe and healthy from illness. However, this study has also assessed the opinions of the patients about service quality obtainable to private hospitals and their level of satisfaction. However, this study was conducted using questionnaire as a data collection technique by measuring 30 items on a five-point likert scale. The sample size of the research is consisting of 450 patients from different three private hospitals namely Irbid specialized hospital, Irbid Islamic hospital and Ibn- Al-Nafees hospital at district Irbid city, Jordan. The result of the research demonstrated that the most significant factors impact on the service quality were tangibles, reliability, responsiveness, empathy and security.

Keywords: Service quality, patient satisfaction, Hospital industry, Jordan.

1. Introduction.

Today, there is a growing international interest in the quality of healthcare services, as the standard of living has been spread and there is an increasing commitment to better medical care to change the lifestyle. Additionally, changing the quality of medical care accommodation has been a key concern for patients so providing better accommodation to the quality of patient care is increasingly important for hospitals by respecting patient satisfaction and retaining patients (Rehaman,&Husnain, 2018). Furthermore, patient satisfaction is a judgment of a patient on health care services and healthcare systems and is often used as a quality indicator (Christine, et al., 2019). In addition, to improve the health system and ensure that patients receive the quality of service they need, patient satisfaction created analysis is vital to healthcare managers and policy analysis (Ahmed, et al., 2017). This study is an attempt to comprehend patients' satisfaction with the overall healthcare scheme and how residents are satisfied with general healthcare services without emphasis on specific health facilities or healthcare providers. Also, amid rising healthcare costs, hospitals are facing a number of issues, such as demand for better services and higher care. Therefore, improving the performance of healthcare schemes is often asked understand the variables that influence patient satisfaction (Serdar, 2018). Health administrators are aware that in order to overcome these barriers, they need to focus on patients demands (Amin, &Nasharuddin, 2013).In other word, increased Patients satisfaction leads to behavioral results such as commitment, customer retention and the creation of rewarding relationships with service and patients service, increased patient tolerance for service failure and positive word-of-mouth advertising (Rehaman,&Husnain, 2018 ). Hence, It is essential for hospitals to continuously measure the quality of service to their customers' satisfaction in identifying areas that need enhancement and to determine whether their patients are satisfied or not. Finally, the main contribution of this study is an integrated methodology for identifying healthcare needs and improving service quality that can be used to understand the complex patient needs associated with the complete life cycle of any healthcare service unit. More specifically, the proposed methodology can be efficiently used to meet patient needs related to the entire healthcare system based on patient satisfaction and quality perception to provide safe, effective, timely, efficient, and equitable care. This methodology also enables a widespread understanding of the quality, satisfaction and opinions of all stakeholders in healthcare hospitals.
2. Problem statement. In the last decades the healthcare is a rising industry in the Middle East region and the countries are actively promoting it and others like Jordan had struggled to enter the market. However, although studies on the quality of healthcare services mainly on patient perceptions have been widely examined, no recent researches have been carried to explore the impacts of the dimensions of service quality on patient satisfaction in the integrated model (Christine, 2019, Tejaswimateri, 2018). Hence, enhancing service delivery in the healthcare is expected to affect the quality of service and patient's satisfaction. On the other hand, patient satisfaction became a main focal point of hospitals sector and is now considered a key part of the healthcare quality enhancement initiative in the hospitals sector in Jordan, particularly in Irbid city. Finally, as described before, service quality was found to impact the patient satisfaction. This study attempts to examine the impact of service dimensions/attributes on perceive service quality and patient satisfaction based on the following question.

Q1. Is there impact of service quality (such as tangibility, reliability, responsiveness, empathy, security,) on patient satisfaction with services provided by the private's hospitals in Irbid city?

3. Significance of Study

Currently, healthcare and patient satisfaction have become the latest trend in developing quality to have a competitive advantage or best practice in the healthcare sector (Serdar, 2018). Over the previous ten years patient satisfaction has increased widespread recognition as a measure of quality in numerous services and is a hallmark of quality, genuine and preferred healthcare goal (Ali, 2015). Care quality measurement provides information on provider success in meeting patients' values and expectations, which is a significant tool for researchers, administrators, and planners to assess health care systems (Alrubaiee, 2011). Therefore, the purpose of this study is to find out the effect of service quality on patient's satisfaction. Patients are the main factor at all of sectors in hospitals, particularly in health care. Additionally, the tendency on services improving, health care also focus on patient's satisfaction. Furthermore, service quality effect directly on patients satisfaction, the health care should emphasis on service quality or service product, introduce new packages for patients and all researches should focus on service quality (Ali, 2015). This study discovered the impact of service quality on patient's satisfaction and will give some recommendations that can be used as strategies for enhancing the patient's satisfaction.

4. Literature Review

Service quality is regarded a critical success factor for private hospitals to distinguish it from competitors. Furthermore, numerous studies have been conducted to determine the quality of service. Therefore, in view of the competitive environment, hospitals are required to improve their strategies to distinguish them from others that can only be achieved through excellent service delivery. Additionally, the high level of service quality decides patient satisfaction and patient satisfaction importantly leads hospitals to obtain sustainable competitive advantage in the unstable market (Gustavsson, et al., 2016, Materla, et al., 2017). Finally, several studies have explored that quality of service can lead to patient satisfaction (Morris, 2013; Siverbo, 2014, Wongrukmit, & Thawesaengskulthai, 2014).

4.1. Service quality

To achieve competitive advantage, it is important to emphasis on service quality as patients are more aware of quality, so it is important to provide higher quality of service than their competitors (Aldana, 2012). More specifically, firms, industries and hospitals provide services to reach customers with the products and services they need. Therefore, service quality offering is essential component of business function which is the method hospitals communicate and deliver its products to patient and to the extent it operates for patient comfort, attractiveness and organizational performance (Yeboach et al., 2014). Consequently, the success of service provider often clearly depend on the high level of relationship with the patient which determines patients satisfaction and the quality of service impacts hospitals results such as increasing sales and profit (Kofiaduo, 2015). Furthermore, there are several definitions and measures of service quality, but there is no agreement on a single definition. Quality of service has been defined as an overall assessment done by the patients service (Aldana, 2012), while other researchers have defined the patients service as the extent to which services meet patients' needs or expectations (Abdalla, 2014). In this method, most of the studies suggested that service quality is significant factor to meet patient satisfaction, which is essential especially in service driven sector like healthcare sector (Alrubaiee, & Alkaaida, 2012, Samuel, 2013). It is expected that higher the service quality, the more opportunities of meeting patient satisfaction and the higher customer satisfaction leads more chance for the hospitals to beat the competition by realizing improved sale and market growth (Elhas, et al., 2015, Amin et al., 2013). As a result, obtaining improved understanding of attitudes of patients assists to know how patients perceive quality of service in operation of hospitals.
4.2. Service quality Model

Several studies recognized the significance of SERVQUAL and used the service quality measuring model for numerous types of hospitals, which is developed by Zeithaml et al., (1995). This research depends on the SERVQUAL model to examine the service quality factors of patients' satisfaction in Jordanian private hospitals. The SERVQUAL model developed by Christine (2019) provides a suitable means for measuring healthcare services by evaluating both the patient service expectations and perceptions of the provider’s performance. Finally, the service quality model of Parasuraman et al. (1988) suggested a five dimensional structure of perceived service quality tangibles, reliability, responsiveness, empathy and security as the instruments for measuring the service quality.

4.2.1. Tangibles as a SERVQUAL dimension

Tangibles are an essential component of the hospital's physical environment, so hospitals should have the latest amenities, modern equipment and ample seating for patients (Johnson, & Russell, 2015). These facilities in some way effect the patient's personal decision to understand that healthcare delivery is of a high standard. Patients indicate that physical facilities related to equipment and logistics confirm that patients’ well-being is seen as quality healthcare in private hospitals (Johnson, & Russell, 2015). Also, tangibles refers to physical environment that serves as clear evidence of the care and attention paid to the details offered by the service provider ((Parasuraman et al., 1988). So, this facility in some way impacts the personal decision of the patient to realize that healthcare delivery is a quality standard (Park et al., 2016). In addition, patients disclose that physical facilities related to equipment and logistics ensure the well-being of the patient and thus provide quality healthcare at the Hospitals in Irbid city (Wu, 2011). Finally, Tangibles refers to the emergence of equipment, physical facilities, written materials and personnel which is also a main factor that makes patients feel happy and ownership of the hospital brand image (Park et al., 2016). Hence, based on the above arguments, the following hypothesis is offered

Hypothesis 1: There is a significant positive influence of between Tangibles and patient satisfaction with services provided by the private hospitals in Irbid city.

4.2.2. Reliability as a SERVQUAL dimension

Reliability is to provide the patient with the promise, reliable, accurate and consistent service. Though, reliability relies on handling patient service issues, performing services correctly for the first time; offer timely service, and preserve a record of errors (Khan and Fasih, 2014). More specifically, reliability is an important variable in dealing with patient services issues, performing services at the right time such as delivering services at the time promised and maintaining an error-free record for each patient (Muhammad, 2018). Likewise, reliability is about fulfilling the right order as the right quote, accurate record, accurate billing, and preserving service promise (Lien et al., 2014). Also, reliability guarantees patients the ability of the service provider to consistently provide the quality of service they feel. Reliability has an influence on the trust and overall impact left on the mind of the patient after service use (Maqsood, 2017). According to Quddus, & Hudrasyah, (2014) reliability is very important in the healthcare sector as it requires dynamic potential to perform very promising and accurate services. Finally, the reliability dimension of service quality is important and apparent through the patient aspect of service quality (Christine, 2019). Thus, reliability is a significant variable to evaluate the performance of private hospitals, therefore, the following hypothesis is offered

Hypothesis 2: There is a significant positive influence of between reliability and patient satisfaction with services provided by the private hospitals in Irbid city.

4.2.3. Responsiveness as a SERVQUAL dimension

Responsiveness is defined as "willingness to assist patients and provide fast service. Particularly, responsiveness is defined as the willingness or willingness of staff to provide services (Parasuraman et al., 1985). Additionally, responsiveness is another quality of service that plays an important role in surpassing patient expectations, which is the willingness and willingness of employees to offer services that include timely service delivery (Ahmed, et al., 2017). It also includes an understanding of patient's safety and issues in their transactions, individual attention given to employees, and easy operating hours (Ehas et al., 2015). It is important to meet patient expectations that response will delight patients and increase their chances for the hospitals. Furthermore, responsiveness is defined as "the willingness to help patients and provide quick service" (Kofiaduo, 2015). Moreover, Ehas, et al., (2015) defines responsiveness as an instrument of speed and timeliness of service delivery. More particularly, responsiveness is defined as the willingness or readiness of employees to provide service. Therefore, based on the above arguments, the following hypothesis is offered
4.2.4. Empathy as a SERVQUAL dimension.

Empathy is the care of the individual and the hospital care offered to his clients involves the individual's attention to the client, and the opening hours of the facility (Perasuraman et al., 1995). This model represents the quality of service as the difference between customer expectations of the services offered and their perception of the services received. Patients perceive empathy as a relevant dimension of quality of service that discusses how staff emotionally responds to patient care (Stephen, 2016). Perceived empathy includes how staff responds to patients' weaknesses (Bradford, 2017). This dimension obviously explains how the staff responds to the needs of the patient and provides timely service. Again, it defines how caring staff are for the patients and the patients' interests at heart (Kumar, et al., 2019). Patients feel that empathy is a key determinant of patient satisfaction, so patients are sensitive to how staff treat them and take care of their ill health. Kumar, (2018), stated that empathy is the ability of hospital service providers to pay attention to individual patients' issues and demands, and then effectively address these issues. Mohammed, et al., (2016) also argue that the way hospitals take responsibility for addressing the problems faced by their patients at the individual or group level is classified as empathy. Therefore, empathy is a significant variable to evaluate the performance of private hospitals, therefore, the following hypothesis is offered

Hypothesis 4: There is a significant positive influence of between empathy and patient satisfaction with services provided by the private hospitals in Irbid city

4.2.5. Security as a SERVQUAL dimension

Security refers to the safety and security of the patient's transactions with the hospital including the privacy policy (Asyraf, et al., 2019). Furthermore, Security occurs when services are secure, and patient information is protected (Kumar, 2018). However, healthcare providers need to confirm the safety and security of patients is their highest priority (Stephen, 2016) as they relate to the patient's concerns. Also, Hospitals need to focus on critical safety matters to provide quality services to their patients. However, patient security defined is the extent to which those involved in health care provide can reduce medical mistakes in treating patients (Christine, 2019). Additionally, safety concerns such as slopes and elevations, or examining the allergic effects of certain drugs on patients, are some of the safeguards that hospitals need to take (Ahmed, et al., 2017). This prevents unexpected disasters and facilitates a comfortable stay for the patient. In addition, the safety of patients with special needs (Examples, use of slopes, elevators, etc.) should also be considered (Amin, & Nasharuddin, 2013). The elderly and bodily challenged patients need special services to care for their needs (Serdar, A, 2018). This is particularly significant in health care services, as it relates to patient safety. Consequently, hypothesis 5 is as follows: There is a significant positive influence of between Security and patient satisfaction with services provided by the private hospitals in Irbid city.

4.3. Patient Satisfaction

Patient/ customer satisfaction indicates to the psychological state of the patient involving their positive or negative feelings or experiences and some specific aspects of the service encounter (Ramesh, & Manju, 2017). This is the key to long-term business success, which is a key variable in shaping the customer's intent to buy back. It provides important links among the phenomenon of post-purchase and increasing purchases in relation to brand loyalty, recurring purchases, change of attitude (Ramesh, & Manju, 2017). It is said that satisfied customers prefer to share their good experiences with their friends and relatives so that they will work for word of mouth, which motivates others to make their purchase desire with the company (Neupane, 2014). Satisfaction is the dissimilarity among performance and expectations but some patients still think that there is a dissimilarity among satisfaction and quality. As Parasuraman et al. (1995) found that satisfaction is the result of experience or decision made after service experience while quality is something that is ready to be conveyed to customers or patients. Furthermore, satisfaction is the feeling of preference that results from achieving something, and the act of fulfilling desires, hopes and needs (Ehan et al., 2015). Also, Customers are always selective so that they compare their expectations of a particular service or product and the benefits they have gained from the service. However, according to Rehman, & Husnain, (2018), satisfaction is the feeling of frustration or preference that results from the comparison of expectations that indicate to the performance of the product or service perceived. Likewise, Zeithaml et al. (2009) found that satisfaction is a measure of service / product ability to meet customer expectations. More specifically, they refer that there is an agreement that definitive concepts of satisfaction with health care have not been reached and that the understanding of methods by which patients are satisfied or dissatisfied remains unanswered. Finally, as a result, the use of patient satisfaction indicates in
the health sector is increasing. For instance, evaluating patient satisfaction has been obligatory for Jordan private hospitals since 2015; it is used to develop the hospital environment, and convenience of the patient in the sense of consumer, but not essentially to develop care (Yeser, et al., 2019; Mahmoud, 2020).

4.4. Jordanian Healthcare System

Jordan is the upper middle-income country whose composition is much younger than other Middle Eastern countries. Also, Jordan has developed its demographic, epidemiological, economic, and social improvement in recent decades. Therefore, Economic growth is generally associated with health outcomes; Jordan health outcomes have mirrored Jordan's rapid economic growth (Musa, 2011). Over the previous decade, Jordan has applied health care reform, which is reflected in important enhancement between indicators such as maternal mortality, lifespan and accessibility. Jordan's success in enhancement healthcare coverage and scheme performance has been impressive in the Middle Eastern countries (Mahmoud, 2020). It is clear that increasing use of healthcare also leads to developed health status indicators in Jordan. Rates of prenatal and childbirth use in health facilities have increased significantly over the last ten years (Yeser, et al., 2019). Finally, numerous studies on the efficiency of health care reform in Jordan over the past decade indicate that health care and health care funding interventions under the Health Transformation Program (HTP) have led to important contributions in enhancing health status indicators in Jordan (Al-Sghayer, et al., 2016, Hesham, et al., 2019). All the studies show how effective and effective health policy decisions on healthcare delivery and funding might be in enhancing the effectiveness of health systems in countries like Jordan (Yeser, et al., 2019).

4.4. Theoretical Framework Based on the earlier literature, the theoretical framework for the current research was developed as shown in Figure 1. The major aim of this research is to deliberate the influence of the five dimensions of service quality on patient satisfaction. These five dimensions were extracted from the service quality considered as the best select for the academic context (Parasuraman et al. 1995, Zineldin, 2006)). As a result of numerous modification and refinements the service quality through 30 questions on five dimensions such as: tangibles, reliability, responsiveness, empathy, security and patient satisfaction. Based on the earlier studies the following framework is developed.

![Figure 1](image)

5. Methodology

This study was carried out using quantitative techniques to analyses primary data to test the hypothesis of this study. It used a five-point self-administered questionnaire based on survey strategies to collect primary data for studies where assessment sampling was applied to obtain large sample populations. The data acquired were tested and analyzed using statistical tools such as regression analysis, research design, data analysis, population and sample, reliabilities, descriptive statistics, correlation with the use of SPSS software.

5.1. Research Design

This research uses quantitative causal research method. The aim of quantitative research is to determine the quantities or estimates of some phenomena in the form of figures (Gupta, & Rokade, 2016).
Furthermore, data in the form of numbers were gathered from participants by means of a questionnaire. Cooper and Schindler (2008) propose that causal studies are usually structured with clear hypotheses and that the purpose of research is to find associations between different variables. Finally, the objective of the study is to determine the impact of service quality, on patient's satisfaction in hospital Irbid city/ Jordan.

5.2. Data Analysis

In this study, primary data were applied to evaluate the hypothesis and to meet the research objectives. To get primary data, questionnaire methods were used. This study used survey strategies to obtain the required data from private hospital patients in the city of Irbid / Jordan as it facilitated the data collection process; and also facilitates quantitative data analysis applying inferential and descriptive statistics. In addition, it is cost effective and facilitates powerful questionnaire tools to collect individual opinions from large samples, and is easy to use with less understanding and knowledge (Saunders et al., 2009, Ramesh, & Manju, 2017). Therefore, the main data were gathered in this study through the use of simple self-questionnaires for interpretation, testing and analysis using statistical tools. Finally, all participated were formulated on a five-point rating scale where 1 strongly disagrees and 5 strongly agree.

5.3. Population and Sample

Sampling design begins with specifying the target population, which must be specific (Hair et al., 2007). Population is a larger group of individual from whom the sampling element is extracted and whose findings are general (Sekaran, 2007). Furthermore, the population of this research comprises all the patients of private hospitals that currently operating in Irbid city. There are five hospitals private in Irbid city. Among them, three hospitals of different are randomly selected for data collection. They are three hospitals such as, Irbid specialized hospital, Irbid Islamic hospital and Ibn- Al-Nafees hospital. Too, in an attempt to attain increase representativeness, data for this research applied random sample of patients in the Irbid city. Therefore, this research applied simple random sampling. In this study, a total of 450 sets of questionnaires were prepared and distributed to patients at the patients of three different private hospitals based on Irbid City / Jordan. Patients and their relatives were asked to fill out the questionnaire, and a set of questionnaires was answered immediately. Out of the 450 sets of questionnaires distributed, 400 sets of questionnaires were available.

5.4. Results and Implications

5.4.1. Scale Reliabilities

Reliability analysis aims to establish the internal consistency of factors in research instruments, and in other words aims to prove the overall reliability of any research instrument (George and Mallery, 2003). In addition, by convention, Alpha Cronbach is the best technique to use for reliability analysis. The alpha statistics range between 0 and 1. According to Hair et al., (2007), a minimum threshold of 0.6 is acceptable for instrument reliability. Finally, in this study, with the aim of establishing the reliability of the study instrument used, Alpha Cronbach's statistics were calculated for the five variables used in the SERVQUAL model. The findings are demonstrated in the Table.1. Below

<table>
<thead>
<tr>
<th>Factors</th>
<th>Number of items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>patient satisfaction</td>
<td>5</td>
<td>.794</td>
</tr>
<tr>
<td>Tangibles</td>
<td>5</td>
<td>.808</td>
</tr>
<tr>
<td>Reliability</td>
<td>5</td>
<td>.894</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>5</td>
<td>.866</td>
</tr>
<tr>
<td>Empathy</td>
<td>5</td>
<td>.815</td>
</tr>
<tr>
<td>Security</td>
<td>5</td>
<td>.813</td>
</tr>
</tbody>
</table>

Table.1. Above demonstrates the Cronbach Alpha coefficient scores with a value more than 0.70 (Pallant, 2013:101) were recorded for each of the six variables. The questionnaire can therefore be considered as reliable

5.3.2. Multiple Regressions

Multiple regression analysis was used to investigate the impact of service quality dimensions on patient satisfaction. It is a statistical method that can be used to analyze to impact of dependent variables on numerous independent variables (Hair et al., 2007). One of the important considerations in multiple regression analysis (Cooper,&Pallant, 2014) is the size of the sample data. According to Pallant (2013), the sample size to estimate a ratio of 15: 1 or better with 20: 1 is sufficient to reach a meaningful estimate. The sample size of this study has a ratio of approximately 60: 1 parameters for patients. Therefore, the researchers concluded that the sample size was suitable. Based on this technique, five major factors (service quality dimensions) and dependent factor (patient satisfaction) were including. Details of the regression
output are demonstrated in Table 2. Each factor has a tolerance value of greater than 0.10 and a variance inflation factor (VIF) of less than ten. The results show that there are no serious multicollinear problems (Hair et al., 2007).

From this analysis, it can be decided that the multiple regression model in this study fulfills the assumptions needed to ensure the validity of the test (Cooper, & Pallant, 2014). Finally, this shows that there was a statistically significant link impacts service quality dimensions on patient satisfaction.

Table 2

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized coefficient</th>
<th>B</th>
<th>Std. error</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td></td>
<td>.087</td>
<td>.209</td>
<td>.417</td>
<td>.677</td>
<td></td>
</tr>
<tr>
<td>Tangibles</td>
<td></td>
<td>.241</td>
<td>.030</td>
<td>.340</td>
<td>8.143</td>
<td>.000</td>
</tr>
<tr>
<td>Reliability</td>
<td></td>
<td>.238</td>
<td>.038</td>
<td>.174</td>
<td>6.277</td>
<td>.000</td>
</tr>
<tr>
<td>Responsiveness</td>
<td></td>
<td>.165</td>
<td>.041</td>
<td>.155</td>
<td>4.006</td>
<td>.000</td>
</tr>
<tr>
<td>Empathy</td>
<td></td>
<td>.368</td>
<td>.040</td>
<td>.376</td>
<td>9.287</td>
<td>.000</td>
</tr>
<tr>
<td>Security</td>
<td></td>
<td>.052</td>
<td>.036</td>
<td>.039</td>
<td>1.425</td>
<td>.155</td>
</tr>
</tbody>
</table>

R = .898
Adjusted R Square = .803
R Square = .806
Sig = .000

Note. Dependent variable: patient satisfaction
To evaluate which variables have the most influences on Attractions of patients, we applied the beta values as demonstrated in Table (2). Based on the beta values of the five significant variables, the predictor variables that most influence patient attraction are: Empathy, (β = .368), followed by Tangibles (β = .241), Reliability (β = .238), Responsiveness, (β = .165) and Security, (β = .052).

5.3.4. Correlation of Analysis
Pearson correlation coefficients were applied to analyze all factors to determine the strength and direction of any correlation.

Table 3 Pearson Correlations for Independent Variables and Dependent Variable

<table>
<thead>
<tr>
<th></th>
<th>Patient satisfaction</th>
<th>Tangibles</th>
<th>Reliability</th>
<th>Responsiveness</th>
<th>Empathy</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient satisfaction</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tangibles</td>
<td>.803(***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reliability</td>
<td>.232(**)</td>
<td>.396(**)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responsiveness</td>
<td>.556(**)</td>
<td>.387(**)</td>
<td>.534(**)</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathy</td>
<td>.759(**)</td>
<td>.726(**)</td>
<td>.204(**)</td>
<td>.417(**)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td>.822(**)</td>
<td>.711(**)</td>
<td>.085</td>
<td>.496(**)</td>
<td>.734(**)</td>
<td>1</td>
</tr>
</tbody>
</table>

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

There was a notable positive impact of the five dimensions of service quality on patient satisfaction (see Table 3). The highest correlation figure of influences Security and Patient satisfaction (.822), followed by Tangibles (.803), Empathy (.759), Responsiveness, (.556) and Reliability (.232) respectively. The weakest correlation was impacts reliability and patient satisfaction (.232). Furthermore, the correlation was positive, service quality and patient satisfaction are positively related, which shows the better the service quality the more the patient satisfaction. Finally, the high positive correlation among the five independent factors demonstrates that the five independent factors were fundamentally measuring the same thing or that the patients did not differentiate among them in their responses.
5.3.5 Descriptive Statistics

The patient satisfaction in private hospitals in Irbid city, Jordan is investigated by using five components: tangibles, reliability, responsiveness, empathy and security. Patient satisfaction levels were also analyzed through mean scores obtained on the five-point assessment scale provided by the survey participants. The mean scores are demonstrating in table 4.

<table>
<thead>
<tr>
<th>Component</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient satisfaction</td>
<td>4.07</td>
<td>.669</td>
</tr>
<tr>
<td>Tangibles</td>
<td>3.58</td>
<td>.943</td>
</tr>
<tr>
<td>Reliability</td>
<td>3.81</td>
<td>.503</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>4.21</td>
<td>.489</td>
</tr>
<tr>
<td>Empathy</td>
<td>3.99</td>
<td>.628</td>
</tr>
<tr>
<td>Security</td>
<td>3.89</td>
<td>.683</td>
</tr>
</tbody>
</table>

The above table demonstrates that each variable of patient satisfaction has arithmetic mean score more than 3.58 acquired in the five point rating scale. The greatest value of mean is 4.27 from Responsiveness of the corresponding hospital and smallest value of mean is 3.58 from Tangibles and empathy for the service offered by private hospitals in Irbid city. The mean score for Security is 3.89 out of 5. Therefore, evaluate of mean scores for the components of patient satisfaction demonstrates that each variables of patient satisfaction has mean score more than 3.58 out of five; and overall patient satisfaction has mean score of 4.7 which is about 86.2% representative that there is high level of patient satisfaction at the private hospitals in Irbid city/ Jordan.

5.3.5. Discussion

This research has investigated the effect of service quality on patient satisfaction in the private hospitals in Irbid City. It has also examined perceptions of the quality of private hospital patient services as well as patient satisfaction levels in private hospitals in Irbid City. Also, evaluation of the mean score for service quality variable suggests that all service quality components have a mean score greater than 3.58 out of 5; and the overall quality of service had a mean score of 4.7 representing 86.3% indicating that private hospitals in Irbid city provide high quality of service to the patients. This means that patients are very pleasure with the services provided by private hospitals in Irbid City. In addition, an inter-correlation analysis of the variables of service quality and patient satisfaction demonstrated that each dimension of service quality was positively correlated with patient satisfaction, and overall service quality and patient satisfaction had a correlation coefficient of 0.822 which was also significant at the 0.01 level. Also, this shows that the quality of service and patient satisfaction are correlated. Finally, it was firstly shows that the service quality dimensions impact on patient satisfaction in private hospitals in Irbid City/Jordan. The finding is consistent with that reported by previous studies such as (Ramesh, & Manju, 2017, Ehas et al., 2015, Rehman, & Husnain, 2018, Nushrat, 2019).Therefore, it is needed to provide special attention to this dimension in service quality and effort to use it for obtaining the essential information about patient satisfaction 5.3.6. Conclusion

As competition continues to develop in the healthcare sector, measured of service methods and tools used by healthcare offers to understand patient needs can be complied with. Though, healthcare providers may not fully understand the different patient needs that differ from the types of care and services available. As expected, this research also discovered a strong impact among service quality and patient satisfaction. But when service quality is learned to build multidimensionality, it also provides invaluable tips for managers and decision makers. Also, the study of service quality as a multidimensional construct makes service quality effective in creating patient satisfaction. Therefore, managers can emphasise their efforts on improving the quality of service that has a greater impact on patient satisfaction. However, the current research indicated that service’s responsiveness, reliability, empathy, and tangibles interaction with the patient had the most important positive impacts on the overall patient's satisfaction. Also, for hospital managers, this research indicates the need to observe rates and maintain high standards in the process of providing services. Finally, Managers and owners of private hospitals must set rational prices in relation to the quality of services. Regarding the quality of the process, they must reduce the waiting time for visits, hospital operations and surgery for services to be delivered as soon as possible. In addition, emphasize the interpersonal aspects of the care and communication skills of doctors, nurses and staff.
5.3.7. Recommendations

The findings indicate that about 51% of patients will not be expected to continue private hospital service for the next three years. This is a large percentage of patients with uncertainties.

Though, this percentage is acquired by addition the percentage of patients who said ‘may be’ and ‘no. The private hospital management must preserve their eyes on this issue as most of their patients / clients do not have the confidence to continue providing hospital services from private hospitals. It resolutions the recommended to examine the causes by performed extensive patient survey and removing if any. Private hospitals need to pay attention to any complaints from patients, and resolve them promptly to enhance patient satisfaction. Furthermore, Private hospitals can focus on training and staff development to improve the quality of services by focusing on improving patient services.

There are numerous issues regarding patient care at some private hospitals in Jordan. Management should emphasis on providing the best level of patient care in order to compete in the market. More specifically, Private hospitals should not always focus on profits because the sector is very sensitive and is associated with the well-being of the people. Therefore, it is recommended that private.

6. References


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