

QATAR UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

UNDERSTANDING CUSTOMER SATISFACTION AT AL-AHLI HOSPITAL IN QATAR

BY

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## **ABSTRACT**

This paper starts by discussing the importance of the healthcare industry in Qatar and provides a brief about Al-Ahli hospital and why is it important for Al-Ahli Hospital to understand their customer satisfaction. It also provides an overview about the customer satisfaction, the factors that impact customer satisfaction, why customer satisfaction is important and how to measure customer satisfaction.

This research paper discusses seven studies conducted around the world tackling the customer satisfaction in the healthcare industry from different perspectives. The research paper uses a quantitative research methodology to test five hypothesis related to customer satisfaction. The data was collected using a structured questionnaire that was conducted in English and Arabic using an online surveying tool (survey Gizmo). The sampling method was convenient sampling and out of the 206 response attempts, 111 completed questionnaires were collected. The researcher then analyses the results using Statistical Package for Social Sciences (SPSS) using a new model that was created by the researcher. The model suggests that there are nine factors that impact customer satisfaction in the healthcare industry. These nine factors are price, customer efforts score, speed of service, ease of using the service, service escape, staff communication skills, staff courtesy, quality of service and competence. Each of the nine factors are measured using a range of questions. Using regression analysis, it was concluded that the factors that impact customer satisfaction differ based on the service provided (inpatient, outpatient or emergency). The common factor among all services is the speed of service which is

driven by the urgency of getting healthcare services. Furthermore, net promoter score was calculated to test customer loyalty. Based on the analysis conducted, the researcher then provides Al-Ahli hospital with a list of recommendations to take this study forward and improve their services. The researcher also discusses the limitations of the study and provides recommendations to improve similar studies.

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## CHAPTER 1: INTRODUCTION

### A Glance at Healthcare Industry in Qatar:

The Qatari healthcare industry offers variety of services for inpatient and outpatient customers. For inpatient services, the Qatari healthcare industry consists of thirteen hospitals in which four are private, one is semi-public and eight are public. Table–1.1 shows a list of hospitals that operate in Qatar by type.

Table-1.1: List of Hospitals that Operate in Qatar by Type

Type	Hospital Name
Public	<ul style="list-style-type: none"><li>• Hamad General Hospital</li><li>• Rumailah Hospital</li><li>• Women’s Hospital</li><li>• Al Wakra Hospital</li><li>• Heart Hospital</li><li>• Al Khor Hospital</li><li>• The National Center for Cancer Care and Research</li><li>• The Cuban Hospital</li></ul>
	* All hospitals are operated by Hamad Medical Corporation
Semi Public	<ul style="list-style-type: none"><li>• Aspetar</li></ul>
Private	<ul style="list-style-type: none"><li>• Al-Ahli Hospital</li><li>• The American Hospital</li><li>• Doha Clinic Hospital</li><li>• Al Emadi Hospital</li></ul>

Source: (Qatar Healthcare Facilities, 2014)

For outpatient services, there are twenty-one public primary healthcare centres, 253 private clinics/ healthcare centres and other healthcare centres operated by non-healthcare oriented parties as the Red Crescent, Qatar Petroleum and Ministry of Interior. (Qatar Healthcare Facilities, 2014)

### *Importance of Healthcare Industry Growth in Qatar:*

- **Healthcare is a part of Qatar National Vision 2030:**

Human Development is one of the four pillars of Qatar National Vision 2030 in which superior healthcare system that caters to the whole population is aimed for. (Human Development, n.d.)

- **There is a shortage of healthcare facilities:**

According to Qatar Healthcare Facilities Masterplan 2013 – 2033 and by comparing 2014 to 2003, the healthcare capacity have increased by 62% while the population have grown by more than three times. (Qatar Healthcare Facilities, 2014) Table-1.2 shows the population in Qatar since 2000.

Table-1.2: Population in Qatar Since 2000

Year	Population	Percentage of Growth (compared to previous year)
2000	613969	5%
2001	643364	5%
2002	676498	5%
2003	713859	6%
2004	798059	12%
2005	906123	14%
2006	1042947	15%
2007	1218250	17%
2008	1448479	19%
2009	1638626	13%
2010	1715098	5%
2011	1732717	1%
2012	1832903	6%
2013	2003700	9%
2014	2216180	11%
2015	2437790	10%
2018*	2540000	4%
2033*	2510000	-1%

\* indicates that the number is projection

Source: (First Section Population and Social Statistics, 2015)

- **There is a high development in demand for healthcare services:**

In 2018, population in Qatar is expected to grow by 27% compared to 2013 and reduce by 1% in 2033 compared to 2018. As the population projections continue to grow, the Qatar Healthcare Facilities Masterplan 2013 – 2033 anticipates 91% increase in inpatient admissions for 2018 compared to 2013 and another 50% increase in 2033 compared to 2018. In addition to that, outpatients visits is expected to increase by 91% in 2018 compared to 2013 and by 98% in 2033 compared to 2018. (Qatar Healthcare Facilities, 2014)

- **Majority of healthcare facilities are located in Doha municipality while the population is migrating to other municipalities:**

Qatar consists of eight municipalities distributed geographically. These eight municipalities are Doha, Al Rayyan, Al Wakra, Umm Slal, Al Khor and Al Thakhira, Al Shamal, Al Shahniala and Al Daayan. According to Qatar Statistical Authority latest population census that was conducted in April 2015, Doha municipality houses the largest portion of the population as 40% of the population lives in Doha (compared to 47% in 2010). Al Rayyan municipality houses 25% of the population (compared to 23% in 2010) followed by 12% in Al Wakra municipality (compared to 8% in 2010). The rest of the population is distributed among the five other municipalities contributing 23% to the total population while each municipality contributes by less than 10%. (First Section Population and Social Statistics, 2015) Figure-1.1 illustrates population by municipality in 2010 and 2015.

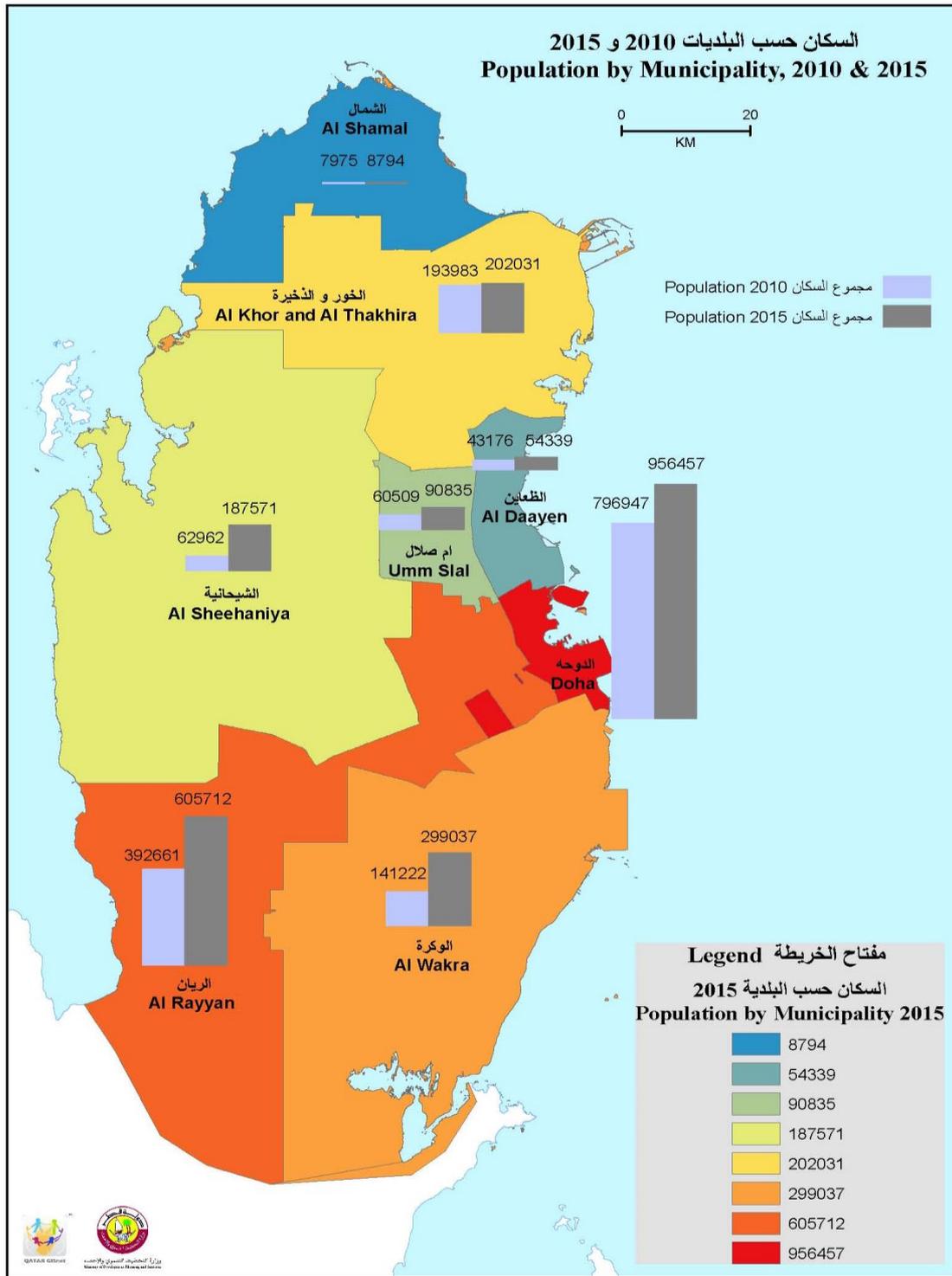


Figure-1.1: Population by Municipality in 2010 and 2015  
 Source: (First Section Population and Social Statistics, 2015)

Doha municipality is expected to continue to host the largest portion of the population as it is anticipated to house 39.4% of the total population in 2018 and 36.6% of the total population in 2033 followed by Al Rayyan municipality that will continue to be the second most populated municipality with 27.3% in 2018 and 28.3% in 2033. Al Wakra municipality will continue to hold the third place in terms of population with 13.2% in 2018 and 14.6% in 2033. (Qatar Healthcare Facilities, 2014)

According to Qatar Healthcare Facilities Masterplan 2013 – 2033, 55% of outpatient activities are expected to be generated from Doha municipality, 20% from Al Rayyan municipality, 10% from Al Wakra municipality and 15% from other municipalities in 2018. In 2033 and as the population is migrating away from Doha municipality, 46% are expected to be generated from Doha municipality, 24% from Al Rayyan municipality, 12% from Al Wakra municipality and 18% from other municipalities. (Qatar Healthcare Facilities, 2014)

As for inpatient activities, Qatar Healthcare Facilities Masterplan 2013 – 2033 anticipates 65% of activities to be generated from Doha municipality, 16% from Al Rayyan municipality, 8% from Al Wakra municipality and 11% from other municipalities in 2018. As for 2033 and as the population is migrating away from Doha municipality, 55% of inpatient activities will be generated from Doha municipality, 20% from Al Rayyan municipality, 10% from Al Wakra and 15% from other municipalities. (Qatar Healthcare Facilities, 2014)

For inpatient services, all four private hospitals, the single semi-public hospital, and five out of eight public hospitals are located in Doha municipality. One public

hospital is located in each of the following municipalities, Al Shahniaa, Al Wakra and Al Khor and Al Thakhira. For outpatient services, majority of private clinics/healthcare centres and thirteen out of twenty-one public healthcare centres are located in Doha municipality while the rest are spread across all other municipalities. (Qatar Healthcare Facilities, 2014)

### **A Glance at Al-Ahli Hospital**

The idea of Al-Ahli Hospital was initiated in 1989 by ten Qatari businessmen who wanted to build a private hospital that specialises in Paediatrics, Obstetrics and Gynaecology with a capacity of one hundred beds. To support building a new healthcare facility, the government awarded them with a piece of land in 1990. On the 17<sup>th</sup> of December 1995, Al-Ahli Hospital Company was listed as a public shareholding company (currently known as Medicare group Q.S.C). Soon after that, the initial plan evolved from building a specialised hospital to a general hospital with a capacity of two hundred fifty beds offering five star healthcare services. The hospital was officially launched to the public in November 2004. (History of Al-Ahli Hospital, n.d.) Al-Ahli Hospital has eighteen medical departments and nine ancillary services units as shown in Table-1.3.

Al-Ahli Hospital vision statement is “to create Al-Ahli Hospital as a holistic embodiment of Love” (Vision and Mission, n.d.)

Table-1.3: Al-Ahli Hospital Medical Departments and Ancillary Services Units

Medical Departments	Ancillary Services Units
<ul style="list-style-type: none"> <li>• Andrology and IVF</li> <li>• Anaesthesiology</li> <li>• Dental Centre</li> <li>• Dermatology</li> <li>• Emergency</li> <li>• Family Medicine</li> <li>• Gastroenterology</li> <li>• General Surgery</li> <li>• Heart Care Centre</li> <li>• Internal Medicine</li> <li>• Neurology</li> <li>• Obstetrics and Gynaecology</li> <li>• Ophthalmology</li> <li>• Orthopaedics and Traumatology</li> <li>• Paediatrics</li> <li>• Psychiatry</li> <li>• Pulmonary and Chest</li> <li>• Urology</li> </ul>	<ul style="list-style-type: none"> <li>• Dietary</li> <li>• Pathology and Laboratory Medicine</li> <li>• Pharmacy</li> <li>• Physiotherapy</li> <li>• Radiology</li> <li>• Speech and Language Therapy</li> <li>• Neonatal Intensive Care Unit</li> <li>• Intensive Care Unit and Coronary Care Unit</li> </ul>

Source: (Sitemap Diagram View, n.d.)

### **Business Problem:**

The Ministry of Public Health in Qatar realises the importance of the private sector in creating healthy competition that positively influences quality and efficiency in the healthcare industry as well as the importance of the private sector contribution to support the development of healthcare in Qatar and in supporting Qatar Vision 2030. (National Health Strategy 2011 - 2016, 2013)

The demand projections in the healthcare industry in Qatar is growing within Doha municipality and the level of competition is quite trivial. The huge growth in Al Wakra and Al Rayyan municipalities is quite appealing in addition to the absence of private hospitals in those municipalities.

Al-Ahli Hospital realises the importance of this growth potential within the Qatari market as well as the importance of customer satisfaction in achieving growth, their customer centric strategy and vision.

### **Research Problem:**

The aim of this study is to understand the factors that drive customer satisfaction in Al-Ahli Hospital through the following research objectives:

- To rank all factors that drives customer satisfaction with Al-Ahli Hospital.
- To measure customer satisfaction score for the factors that drives customer satisfaction with Al-Ahli Hospital.
- To measure the effect of each of the factors that drives customer satisfaction with Al-Ahli Hospital on the overall satisfaction.
- To identify and prioritize improvement areas in Al-Ahli Hospital based on the voice of the customer.
- Set clear targets aiming at performance improvement to achieve superior customer satisfaction.
- Benchmark Al-Ahli Hospital against local, regional and global competition.

## **Research Questions**

- What is the overall customer satisfaction score for Al-Ahli Hospital?
- How the overall customer satisfaction score with Al-Ahli Hospital differs among inpatient, outpatient and emergency customers?
- How the overall customer satisfaction score with different departments (inpatient, outpatient, emergency and pharmacy) impact the overall satisfaction with Al-Ahli Hospital?
- What is the customer satisfaction score for the factors that drives customer satisfaction with Al-Ahli Hospital (service escape, speed of getting the service, ease of getting the service, courtesy of staff, quality of the service, staff communication skills, prices and competence)?
- How the overall customer satisfaction score with different factors that drives customer satisfaction (service escape, speed of getting the service, ease of getting the service, courtesy of staff, quality of the service, staff communication skills, prices and competence) impact the overall satisfaction with Al-Ahli Hospital?
- What is the net promoter score for Al-Ahli Hospital?
- How the net promoter score with Al-Ahli Hospital differs among inpatient, outpatient and emergency customers?
- What is the customer efforts score for Al-Ahli Hospital?
- How the customer effort score with Al-Ahli Hospital differs among inpatient, outpatient and emergency customers?

- How the customer efforts score impact the overall satisfaction with Al-Ahli Hospital?
- How the customer efforts score impact the overall satisfaction of different departments (inpatient, outpatient and emergency)?
- What are the areas that Al-Ahli Hospital should improve?
- How does the demographic factors influence or not influence reason of the visit, customer satisfaction scores, customer efforts score and net promoters score?

## **CHAPTER 2: UNDERSTANDING CUSTOMER SATISFACTION**

### **Definition of Customer Satisfaction**

Customer satisfaction is the feeling that a customer gets when he/ she compares the perceived performance of a product/ service to his/ her expectations from this product/ service. (Keller) This comparison is based on what marketers refer to as the expectancy discomfort model. If the perceived performance matched the customer expectations, the expectations are considered as confirmed expectations and the customer will be satisfied. If the perceived performance did not match the customer expectations, the expectations are considered as disconfirmed expectations. If the perceived performance exceeded the customer expectations, the expectations are considered as positive disconfirmation expectations and the customer will be highly satisfied. If the perceived performance was below the customer expectations, the expectations are considered as negative disconfirmation expectations and the customer will be dissatisfied. (K)

### **Factors Impacting Customer Satisfaction**

The factors impacting customer satisfaction differ based on the nature of the business offering and the industry that the business operates in. As products and services differ enormously, the nature of the business offering influence the factors

that impact customer satisfaction. Factors that impact customer satisfaction in businesses that offer products which are tangible in nature focus on the performance of the product itself. On the other hand, factors that impact customer satisfaction in businesses that offer services which are intangible in nature focus on the performance of the service personnel. In addition to that, the factors that impact customer satisfaction differ from one industry to another based on the type of service or product that the organisation provides. For example, business that exist in the telecommunication industry have different factors impacting customer satisfaction than business that exist in the hospitality or healthcare industry and businesses that exist in the textile industry have different factors impacting customer satisfaction than business that exist in the oil and gas industry. There are some common factors impacting customer satisfaction across all industries and business like the prices or ease of getting the product or the service.

### **The Importance of Customer Satisfaction**

The importance of customer satisfaction cannot be ignored as the customers are the core reason for the existence of the business. (K) Customer satisfaction is a key part in the corporate scorecard as the companies have realised the importance of customer satisfaction in guaranteeing the current and future success of a company. (Kaplan & Norton, 2007)

Customer satisfaction leads to customer retention which can have a huge financial payoff as the cost of attracting a new customer is two to twenty times higher than the cost of keeping an existing customer. In addition to that, customer satisfaction increases the likelihood of repeated purchase by twelve to thirty-two percent. (Carson, n.d.) Moreover, customer satisfaction leads to positive word of mouth which is an indirect advertising method that attracts new customers. Furthermore, customer satisfaction can increase company's competitiveness as the company that has satisfied customers have less probability of losing them to the competition. It also supports the company in isolating themselves from competitive pressure particularly in price as customers might be willing to pay premium prices for a good product or services. (K)

### **Measuring Customer Satisfaction**

Customer satisfaction can be measured through direct or indirect measures. Indirect measures of customer satisfaction are passive as it tracks customer satisfaction through changes in sales, profits, customer complaints or any other information that can be obtained from the company's records. Using indirect measures solely is not enough as it does not reflect the full picture of customer satisfaction. To indicate how the use of one indirect measure (customer complaints) is not enough to assess customer satisfaction, the Technical Assistance Research Program gathered the below figures:

- On average, a business does not hear from ninety-four percent of its dissatisfied customers.
- For every complaints received, there are twenty-six other customers who have the same problem.
- On average, a customer who has a problem, he/ she will tell nine to ten people.

(K)

Direct measures of customer satisfaction are proactive as it involves obtaining the customer's feedback through customer satisfaction surveys. (K) To obtain the customer's feedback, postal or electronic surveys can be distributed, face-to-face or telephonic interviews can be conducted. (Hague, n.d.) Using the direct measures, there are three key tools to measure customer satisfaction:

1. Customer Satisfaction Score (CSAT):

The customer satisfaction score is the traditional and most common tool of measuring customer satisfaction in which the customer is asked to rate his/ her satisfaction regarding a certain attribute. The customer satisfaction score is the sum of customers who answered "very satisfied" and "satisfied".

2. Net Promoters Score (NPS):

The net promoter score was introduced in 2003 in which the customer is asked to assess how likely he/ she would recommend the company to their friends and family on an eleven-point scale (0-10). The net promoters score is percentage of the

promoters (customers who rated 10 and 9) minus the percentage of detractors (customers who rated 0-6).

### 3. Customer Efforts Score (CES):

The customer efforts score takes a different angle compared to the other measurement tools as it asks the customer to rate the amount of efforts that the customer had to put into a certain interaction with the company. The customer efforts score is the average of the aggregated number of customers who answered the question.

Marketers recommend to use a mix of the above mentioned tools to assess customer satisfaction for their company as there is no single measure that can fully address all attributes that impact customer satisfaction within a certain company.

(Measure customer satisfaction: CSAT, CES and NPS compared, n.d.)

Measuring customer satisfaction is critical for businesses as it supports in identifying improvement areas related to their products/ services. In addition to that, customer satisfaction score is used as a tool to manage performance and to benchmark against competition and best practices. Furthermore, by conducting customer satisfaction surveys, customers perceive the company as a company that cares about their customers and their opinions. Moreover, positive customer satisfaction ratings can be utilised in a company's corporate advertising. (K)

## **CHAPTER 3: LITERATURE REVIEW**

### **Dimensions of Service Quality and Satisfaction in Healthcare: A**

#### **Patient's Satisfaction Index**

According to many healthcare managers, factors that influence the patient satisfaction levels is crucial as it affects the final healthcare results and the financial performance of the organization. Since the Healthcare centres form a major part of the healthcare system, it becomes important to evaluate the patient satisfaction with the services that they offer. Therefore, the primary objective of this paper is to analyse the patient's levels of satisfaction by estimating the satisfaction index using the dimensions of healthcare quality. In addition to that, this paper aims at improving the overall effectiveness of healthcare centres to increase customer satisfaction and loyalty. (Ma ´rio Lino Raposo, 2008)

A structured questionnaire was developed to understand patient's perception, experience, and feelings towards the healthcare service centres. It had six sections; the first section was to acquire the individual's general information, frequency, and motives behind using the healthcare centre. The subsequent four sections addressed particular questions about their satisfaction with the administrative staff, nursing, doctor's care and the physical facilities. The last section included questions to evaluate global satisfaction with the centre services. SERVQUAL model scale and attributes were used to measure the perceived quality and to capture both technical

and functional quality. The questionnaire was distributed among four Portuguese Principle Healthcare Centres and the sample size evaluated was 414 patients. Partial Least Square path modelling (PLS) was the technique chosen to explain the proposed model. (Ma ´rio Lino Raposo, 2008)

From the statistical significance relationships, medical care holds the greatest path coefficient indicating that patient perception of quality and empathy of the medical care delivered to them is the strongest predictor of satisfaction. Perception about facilities is the second most important factor impacting patient’s satisfaction. The weakest predictor of satisfaction in the model evaluated was the perception of service provided by the administrators. The average patient satisfaction among the four Portuguese Principle Healthcare Centres is 60.887 on a scale of 1 to 100, showing only a medium level of satisfaction. (Ma ´rio Lino Raposo, 2008)

There are several limitations for this research paper. First, it was an exploratory model. Second, the study used quantitative research methods only while qualitative research methods could have been used to enrich this study. Finally, the study is limited by the sample size and the geographical representation of the survey. (Ma ´rio Lino Raposo, 2008)

## **The Relationships between Service Quality, Customer Satisfaction and Buying Intentions in the Private Hospital Industry**

Marketers always seek to differentiate themselves from their competitors. This differentiation ranges from branding to price. Many firms operate in markets where competing companies have very similar cost structures which make price competition hard. Therefore, the objective of this study is to test whether a private hospital can differentiate itself using superior service quality and excellent transaction-specific customer satisfaction and to investigate whether superior service quality and excellent transaction-specific customer satisfaction will improve loyalty among patients in the private healthcare industry. In other words, the objective of this study is to assess which dimensions of service quality and transaction-specific customer satisfaction that has the strongest influence on two dependent variables (loyalty and customer satisfaction). The dependent variables are measured using cumulative satisfaction. (Gray, 2004)

The SERVQUAL approach (a method that is used to operationalize service quality) was employed to compare the customer expectations with the service performance of the firm for five dimensions (reliability, assurance, responsiveness, empathy and tangibles). All items were linked to a 7-point Likert scale ranging from Strongly Agree (7) to Strongly Disagree (1). Data was collected through a self-administrated questionnaire with an incentive to fill the questionnaire. Convenience and random sampling techniques were used to obtain the sample as the hospitals were selected on a convenience basis and the questionnaires were distributed to patients on a

random basis. The questionnaire distributed to 3800 patients in South Africa, 423 were returned, and 323 only were used for the analysis. Data was analysed in three phases. The first phase was to analyse the discriminant validity of the instrument used to measure cumulative customer satisfaction and loyalty. Second phase was to conduct an analysis to assess the internal reliability of each factor using Cronbach's Alpha. Third stage was to apply multiple regression analysis to determine the relationships predicted by the four hypotheses. (Gray, 2004)

The results of the research concluded that the service quality dimensions (assurance, empathy of nursing staff and tangibles) had a positive impact on customer loyalty. On the other hand, security had a negative impact on customer loyalty. Hence, to maintain patients loyalty, patients has to perceive that the nursing staff as empathetic and feel assured and safe in the hospital. The service quality dimensions explain 58.5% of loyalty. Empathy of nursing staff and assurance have a positive impact on cumulative satisfaction. Service quality dimensions explain 60.3 percent of loyalty. After regressing the individual dimensions of customer satisfaction and loyalty, satisfaction with meals, nursing staff, fees and television service showed a positive impact on loyalty. The strongest predictor of cumulative satisfaction is the satisfaction with the nursing staff. (Gray, 2004)

The limitation of the study is low questionnaire rate of return, 423 questionnaires were returned out of the 3800 questionnaires distributed which represents 11% of the intended sample size. (Gray, 2004)

## **Factors Affecting Patient Satisfaction and Healthcare Quality**

Patient satisfaction is a multi-dimensional as it is affected by multiple variables. The cure is as fundamental as satisfaction as the cure is not limited to just getting the healthcare service. Healthcare quality affects patient satisfaction and can yield in positive customer behaviors such as loyalty. The objective of the study is to create a platform and extensive conceptual model to comprehend and assess quality related variables affecting the level of patient satisfaction. (Naid, 2009)

To analyse and determines factors impacting patient satisfaction and healthcare service quality, a total of 24 articles from international journals were reviewed. (Naid, 2009)

The research paper highlights patient involvement as a factor that influence the quality of outcome as the patient is the one who describes the correct symptoms and undergoes the treatment. It also highlights the impact of service quality and the service quality expectation on service satisfaction. Furthermore, it highlights the impact of service quality on achieving positive customer behaviours such as loyalty and repeated purchase. The findings conclude five dimensions that determines patient satisfaction. These five factors are access, caring, healthcare output, tangibles and communications. (Naid, 2009)

The research had multiple limitations. The articles reviewed were based on analysis conducted in developed countries, therefore the module cannot be generalized to developing countries. In addition to that, the paper produces a conceptual model which needs to be confirmed empirically. (Naid, 2009)

## **Statistical Measures of Customer Satisfaction for Health Care Quality**

### **Assurance: A Case Study**

Satisfying customers is the best business strategy any business can have. Customer satisfaction is not only important for healthcare organizations that exist in the private sector, it is also important to healthcare organizations that exist in the public sector. As total quality management tools are widely applied in the healthcare industry, techniques to understand the determinants of satisfaction and dissatisfaction became a key ingredient of total quality management in healthcare. The main aim of this study is to determine the factors that impact customer satisfaction. (M.A.A. Hasin, 2000)

Information was collected by using both questionnaire and interview surveying tools. The study begins with interviewing the patients on the quality of healthcare and its status by collecting data on the frequency of occurrence of dissatisfactory events, frequency of visiting the hospital and timings of service activities. A structured questionnaire was then created to evaluate eighteen quality factors by rating the importance level and then the service level. General service information and personal data were also collected. The questionnaire was distributed to 460 patients in Muang Petch Thonburi Private Hospital in Thailand. Sample was divided into 300 outpatient customers and 160 inpatient customers. The outpatient questionnaire was distributed to the patients after paying at the cashier and before going to the pharmacy using systematic random sampling methodology. The inpatient questionnaire was distributed to patients admitted everyday. (M.A.A. Hasin, 2000)

From the patient's characteristics, there was noticeable difference in the responsibility for expenditure factor as most of outpatient customers make personal payments and most of inpatient customers depend on the health insurance company to make the payment. The service expense and responsibility of payment did not strongly correlated with the return intention of outpatient customers. On the other hand and for inpatient customers, the responsibility of payment had an impact on return intentions. The researcher then provides a list of recommendations that can be utilized by the hospital to improve their services. (M.A.A. Hasin, 2000)

The writer did not state any limitations for the study. Proposed limitation is the geographical constraint as the study was conducted in Thailand and therefore the results cannot be generalized. (M.A.A. Hasin, 2000)

## **A Study of Patient's Expectations and Satisfaction in Singapore**

### **Hospitals**

In order to exist in today's competitive environment and improve their competitive position, businesses have to focus on their service quality. Hospital choice is highly impacted by the customer's perception of service quality. Hence, the main objective was to determine the expectations of hospital services in the eyes of the patients. (Tang, 2000)

The research paper uses the SERVQUAL methodology to identify the service quality gap by calculating the discrepancy between patient expectations and perceptions. SERVQUAL methodology calculates the service quality gap by evaluating the following six dimensions: tangibility, responsiveness, assurance, affordability, reliability, empathy and accessibility. The convenience sampling method was used to gather the data. Two hundred questionnaires were sent to general practitioners clinics and one hundred questionnaires were sent to two specialist clinics in Singapore. The response rate was 84%. (Tang, 2000)

The study concludes that assurance dimension has the most relative importance to the SERVQUAL followed responsiveness and reliability. On the other hand, tangibility scores the lowest relative importance to the SERVQUAL. Although assurance is the most important dimension of the service, it has the second most negative service quality score. Responsiveness dimension service quality scores is the most negative in comparison to other dimensions of the SERVQUAL. The researcher then provides some recommendations to improve service quality for responsiveness and assurance dimensions. (Tang, 2000)

The study limitation is the small sample size as the sample used as it represents 0.1% of the total hospital admissions. (Tang, 2000)

## **A Case Analysis of Patient Satisfaction Surveys in Saudi Arabia**

Recently, most of the research work done in the healthcare sector is related to determining the patient's perceptions and understanding factors that impact patient's perceptions. The common factor among majority of the recent studies is the importance of patient satisfaction to the healthcare industry. This research study was conducted to reflect on the significance of patient satisfaction surveys in improving the healthcare sector in Saudi Arabia. (Awad, 2014)

The main objective of this study is to investigate which variables are the most significant in determining the positive attitudes of patient towards the healthcare systems in Jeddah hospitals (a major city in Saudi Arabia). It was also conducted to figure out how the healthcare practitioners can improve their patient care. (Awad, 2014)

The possible factors that impact patient satisfaction were evaluated using the Zineldin's framework which includes five factors and fifteen survey questions. The factors were categorized into technical, infrastructure, atmosphere, functional and interaction category. Questionnaire was distributed among adult patients that visit public hospitals in Jeddah. Sampling methodology was probability sampling and the sample size was two hundred patients. The findings deduced from the research revealed that the infrastructure in and around the hospital had the major influence on the patient satisfaction followed by medical and management competencies. (Awad, 2014)

Limitation of the study is that the questionnaires were distributed by the hospital staff which did not provide the researcher with insights about the understanding of the survey questions. (Awad, 2014)

## **Evaluation of Patient Satisfaction in Wishard Memorial Hospital Using**

### **HCAHPS's Standard Survey**

Determining the quality of intangible product poses as a challenge to most managers in today's business environment. In the healthcare industry, this challenge becomes more difficult as the determinants of customer satisfaction differ from a healthcare institute to another. The main objective of this research is to explore factors that affect the patient's satisfaction within the healthcare sector. (Tesfay, 2012)

This research paper applied the HCAHPS's standard survey to evaluate the level of patient satisfaction within Wishard Memorial Hospital in the United States of America. The methodology involved asking patients twenty-seven questions concerning their previous stay in the hospital. They sampling methodology is random sampling of adult patient. (Tesfay, 2012)

Survey results show that doctor communication and proper information provided during the period of recovery is significant factor impacting patient satisfaction. The research also highlights the low satisfaction score in relation to providing proper information about the prescribed medication. In addition to that, low satisfaction scores are also linked to the quietness of the hospital environment. (Tesfay, 2012)

Although the researcher have used HCAHPS's survey system that is used in multiple hospitals, this study was conducted in one hospital only and therefore the results cannot be generalized. (Tesfay, 2012)

### **Concluding Literature Reviewed**

The common factor among all the literature reviewed is that patient satisfaction is important factor for the healthcare industry. It is important for healthcare institutes that exist in the private sector as it supports competitiveness. It is also important to institutes that exist in the public sector to support them in providing better service to their customers. Six of the reviewed studies are quantitative while one was qualitative. Two of the reviewed studies proposed a new model while five used existing modules. SERVQUAL module was used by three studies out of the five studies that that have used existing modules. All of the reviewed studies are restricted by their geographic limitations. The studies have concluded different findings. Table-3.1 illustrates different findings concluded by each study.

Table 3.1: Key Findings of Literature Review Studies

<b>Dimensions of Service Quality and Satisfaction in Healthcare: A Patient's Satisfaction Index</b>
<ul style="list-style-type: none"> <li>• Service quality and empathy are the factors that significantly impact patient satisfaction</li> </ul>
<b>The Relationships between Service Quality, Customer Satisfaction and Buying Intentions in the Private Hospital Industry</b>
<ul style="list-style-type: none"> <li>• Patient satisfaction with service quality dimensions impact patient loyalty</li> </ul>
<b>Factors Affecting Patient Satisfaction and Healthcare Quality</b>
<ul style="list-style-type: none"> <li>• Patient involvements impact the quality of outcome</li> <li>• Service quality expectation impacts patient satisfaction</li> <li>• Service quality impacts patient loyalty</li> </ul>
<b>Statistical Measures of Customer Satisfaction for Health Care Quality Assurance: A Case Study</b>
<ul style="list-style-type: none"> <li>• Service expense and responsibility of expenditure impact the return intention for outpatient customers as majority of them are self-paid</li> </ul>
<b>A Study of Patient's Expectations and Satisfaction in Singapore Hospitals</b>
<ul style="list-style-type: none"> <li>• Assurance dimension of service quality has the most relative importance to the service quality (impacting customer satisfaction) followed responsiveness and reliability</li> </ul>
<b>A Case Analysis of Patient Satisfaction Surveys in Saudi Arabia</b>
<ul style="list-style-type: none"> <li>• Infrastructure is the most important factor impacting customer satisfaction followed by medical and management competency</li> </ul>
<b>Evaluation of Patient Satisfaction in Wishard Memorial Hospital Using HCAHPS's Standard Survey</b>
<ul style="list-style-type: none"> <li>• Communication and proper information by doctors is the most important factor impacting patient satisfaction</li> </ul>

## Discussion

This paper is different from the studies reviewed as it proposes a new module to measure patient satisfaction. In addition to that, this paper is going to use the net

prompters score technique which was not included in any of the reviewed literature. Furthermore, it will study the impact of the customer efforts score on overall patient satisfaction. Moreover, the module includes some questions that were not included in any of the reviewed studies such as hospital attendants using jargon free language and using language that the patient can understand.

## CHAPTER 4: RESEARCH APPROACH

### Research Methodology

This paper is an applied research using quantitative approach. Quantitative approach was used to test the following hypotheses:

- There is statistical significant influence of the overall satisfaction with Al-Ahli Hospital inpatient services, outpatient clinic services, emergency services and pharmacy on overall satisfaction with Al-Ahli Hospital .
- There is statistical significant influence of service escape, ease of getting the service, speed of getting the service, courtesy of staff, quality service, staff communication skills, price, customer efforts score and competence on overall customer satisfaction with Al-Ahli Hospital inpatient services.
- There is statistical significant influence of service escape, ease of getting the service, speed of getting the service, courtesy of staff, quality service, staff communication skills, price, customer efforts score and competence on overall customer satisfaction with Al-Ahli Hospital outpatient services.
- There is statistical significant influence of service escape, ease of getting the service, speed of getting the service, courtesy of staff, quality service, staff communication skills, price, customer efforts score and competence on overall customer satisfaction with Al-Ahli Hospital emergency services.

- There is statistical significant influence of ease of getting the service, speed of getting the service, quality service, staff communication skills and price on overall customer satisfaction with Al-Ahli hospital pharmacy.
- There is statistical significant influence of service escape, ease of getting the service, speed of getting the service, courtesy of staff, quality service, staff communication skills, price, customer efforts score and competence on overall customer satisfaction with Al-Ahli Hospital services.

## **Sampling Methodology**

### *Sampling Method*

Convenient sampling methodology was used. Respondents who were conveniently available for the study were invited to participate.

### *Sample Frame*

The target sample frame (population) is the base of all Al-Ahli Hospital customers.

### *Sample Size*

As Al-Ahli Hospital customers exceed the 1000000, 383 respondents representing different age groups nationalities, genders ....etc. is the representative sample size.

Therefore, the survey was sent to more than 500 customers, 206 respondents approached the survey and 111 have successfully completed the survey.

### *Pilot Testing*

Twelve pilot interviews were conducted to test the weaknesses of the questionnaire in both languages. The result of the pilot testing indicated the questionnaire was understood by all respondents.

### **Data Collection Methodology**

Primary, secondary and tertiary data collection methods were used to conduct this research paper. Secondary and tertiary data collection method were used to review the literature and understand the background of the business problem. Different online sources and books were utilised to collect the secondary and tertiary data. On the other hand, primary data was collected through a structured questionnaire using an online surveying tool (Survey Gizmo). The questionnaire was divided into eight sections and all questions were closed ended except for one question. The survey was conducted in English and Arabic based on the convenience of the respondent. To view the questionnaire in English, please refer to Appendix (A). To view the questionnaire in Arabic, please refer to Appendix (B).

### **Data Analysis Methodology:**

The data collected were analysed using the Statistical Package for Social Sciences (SPSS) computer program version 23.0 for windows XP with service pack version two. The following descriptive and inferential statistical techniques were used to conclude the results in this research paper:

- Descriptive statistics: frequency and percentages.
- Inferential statistics: correlations and multiple linear regressions. An alpha level of 0.05 was used to test the significant level for each regression models.

### **Data Analysis Approach:**

The following three types of data analysis approaches will be utilised to discuss the findings:

- 1) Descriptive research method to answer the following questions:
  - Who visits Al-Ahli Hospital (age, gender, nationality, educational level and marital status)?
  - What do they visit Al-Ahli Hospital for (inpatient, outpatient or emergency services)?
  - Who visits Al-Ahli Hospital for inpatient, outpatient, emergency and pharmacy services (age, gender, nationality, educational level and marital status)?

- What can Al-Ahli Hospital do to improve their services?

2) Explanatory research method to answer the following questions:

- What is the relationship between service escape, ease of getting the service, speed of getting the service, courtesy of staff, quality service, staff communication skills, price, customer efforts score and competence and overall customer satisfaction with Al-Ahli Hospital inpatient services.
- What is the relationship between service escape, ease of getting the service, speed of getting the service, courtesy of staff, quality service, staff communication skills, price, customer efforts score and competence and overall customer satisfaction with Al-Ahli Hospital outpatient services.
- What is the relationship between service escape, ease of getting the service, speed of getting the service, courtesy of staff, quality service, staff communication skills, price, customer efforts score and competence and the overall customer satisfaction with Al-Ahli Hospital emergency services.
- What is the relationship between ease of getting the service, speed of getting the service, quality service, staff communication skills and price and overall customer satisfaction with Al-Ahli hospital pharmacy.
- What is the relationship between service escape, speed of getting the service, ease of getting the service, courtesy of staff, quality of the service, staff communication skills, price and competence and the overall satisfaction with Al-Ahli Hospital?

- What is the relationship between the overall satisfaction with the department visited (outpatient, inpatient or emergency) and the overall satisfaction with Al-Ahli Hospital?

3) Predictive research method to answer the following questions:

- If the overall satisfaction of service escape, ease of getting the service, speed of getting the service, courtesy of staff, quality service, staff communication skills, price, customer efforts score and competence increase by one point, by how much the overall satisfaction with Al-Ahli Hospital inpatient services will increase?
- If the overall satisfaction of service escape, ease of getting the service, speed of getting the service, courtesy of staff, quality service, staff communication skills, price, customer efforts score and competence increase by one point, by how much the overall satisfaction with Al-Ahli Hospital outpatient services will increase?
- If the overall satisfaction of service escape, ease of getting the service, speed of getting the service, courtesy of staff, quality service, staff communication skills, price, customer efforts score and competence increase by one point, by how much the overall satisfaction with Al-Ahli Hospital emergency services will increase?
- If the overall satisfaction of ease of getting the service, speed of getting the service, quality service, staff communication skills and price increase by one

point, by how much the overall satisfaction with Al-Ahli hospital pharmacy will increase?

- If the overall satisfaction with service escape, speed of getting the service, ease of getting the service, courtesy of staff, quality of the service, staff communication skills, prices and competence increase by one point, by how much the overall satisfaction with Al-Ahli Hospital will increase?
- If the overall satisfaction with the department visited (outpatient, inpatient or emergency) increase by one point, by how much the overall satisfaction with Al-Ahli Hospital will increase?

### **Proposed Model:**

The study proposes the following module representing the factors impacting customer satisfaction in the healthcare industry:

- Servicescape: the environment in which the service will take place. Elements evaluated under this factor:
  - Hospital attendants (physicians, nurses, receptionists.... etc.) look and appearance.
  - Quietness in the ward.
  - Privacy in the room provided.
  - Comfort of the bed.

- Comfort of the examination room.
- Cleanness of the room stayed in.
- Location of the hospital.
- Hospital facilities.
- Availability of parking spaces.
- Ease of Getting the Service: how easy was it for the customer to get the requested service. Elements evaluated under this factor:
  - Ease of registration and filling up forms.
  - Ease of making appointments.
  - Convenience of appointment timing.
  - Availability of medication.
- Speed of Getting the Service: time spent before getting the requested service. Elements evaluated under this factor:
  - Time taken before admission.
  - Responsiveness of hospital attendants (physicians, nurses, receptionists.... etc.) and their prompt response to the customer's needs.
  - Time taken for discharge.
  - Availability of appointments.
  - Wait time before attending to the appointment.
  - Time taken to get the prescribed medication.
- Courtesy of Staff: politeness and friendliness of servicer personnel. Elements evaluated under this factor:

- Hospital attendants (physicians, nurses, receptionists.... etc.) courtesy, friendliness and helpfulness.
- Hospital attendants (physicians, nurses, receptionists.... etc.) care, empathy and provide personal attention to the customer's needs.
- Quality of the Service: performance of the service provided. Elements evaluated under this factor:
  - Hospital attendants (physicians, nurses, receptionists.... etc.) providing full information about medications, procedures, treatments, services provided and discharge instructions.
  - Quality of food provided during the stay.
  - Hospital attendants (physicians, nurses, receptionists... etc.) answering all questions and queries.
  - Overall satisfaction with the treatment provided.
  - Quality of refreshments provided in the waiting area.
  - Pharmacist providing full information about the prescribed medication.
- Staff Communication Skills: ability to listen, comprehend and convey information on time. Elements evaluated under this factor:
  - Hospital attendants (physicians, nurses, receptionists.... etc.) using language that the customer can understand.
  - Hospital attendants (physicians, nurses, receptionists.... etc.) using words that the customer can understand i.e. using jargon free language and not complicated medical terms.

- Hospital attendants (physicians, nurses, receptionists.... etc.) keeping the customer informed about their case.
- Hospital attendants (physicians, nurses, receptionists.... etc.) listening and understanding the customer's needs.
- Pharmacist using language that the customer can understand.
- Price: the monetary value of the provided service.
- Competence: trust and confidence in the service provider.
- Customer Efforts Score: the amount of efforts the customer has to put forth to get the requested service.

## CHAPTER 5: RESEARCH FINDINGS

### **Sample Key Characteristics:**

Majority of the sample is females (60.4%). Appendix (C): Figure-C.1 shows the gender split of the sample. The largest age group in the sample is 25-34 (45.9%) followed by 35-44 (31.5). Appendix (C): Figure-C.2 shows the age group split of the sample. The main nationality in the sample is Qataris (59.5%) followed by Arabs (18%). Appendix (C): Figure-C.3 illustrates the sample nationalities. 64.9% of the sample hold a bachelor degree followed by 24.4% who hold a graduate degree. Appendix (C): Figure-C.4 demonstrates the educational level of the sample. Majority of the sample is married (75.7%). Appendix (C): Figure-C.5 exhibits the marital status of the sample.

### **Reason of Visiting Al-Ahli Hospital**

Majority of the sample visit Al-Ahli Hospital for outpatient clinics services. Figure-5.1 illustrates the reason of visiting. Due to the small sample size across each section, the demographics analysis by the reason of visiting was excluded.

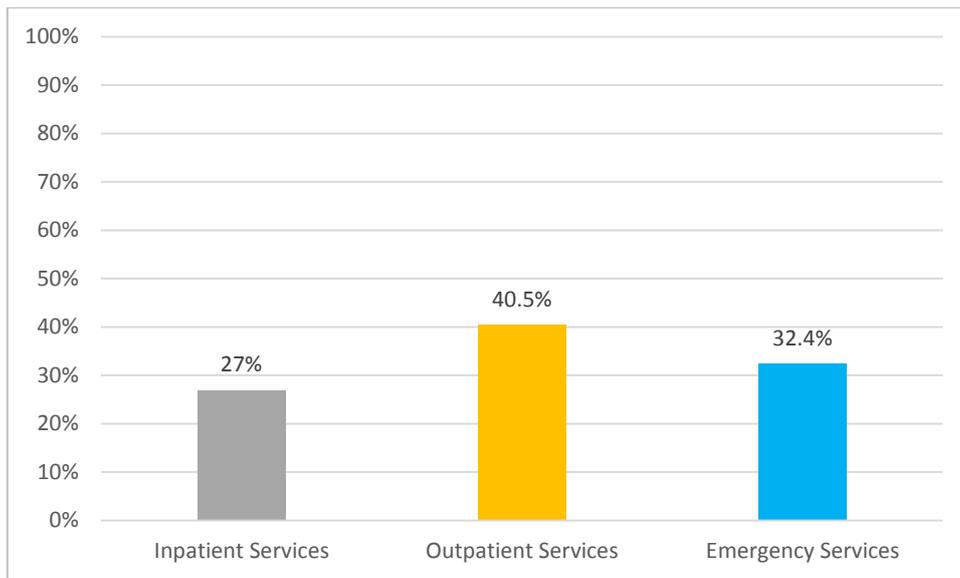


Figure-5.1: Reason of Visiting

***Visiting Al-Ahli Hospital Pharmacy:***

As shown in Figure-5.2, more than 75% of Al-Ahli Hospital patients visit Al-Ahli Hospital pharmacy. 82.2% of outpatient clinics patients visit Al-Ahli Hospital pharmacy, 69.4% of emergency patients and 80% of inpatient patients as illustrated in Figure-5.3.

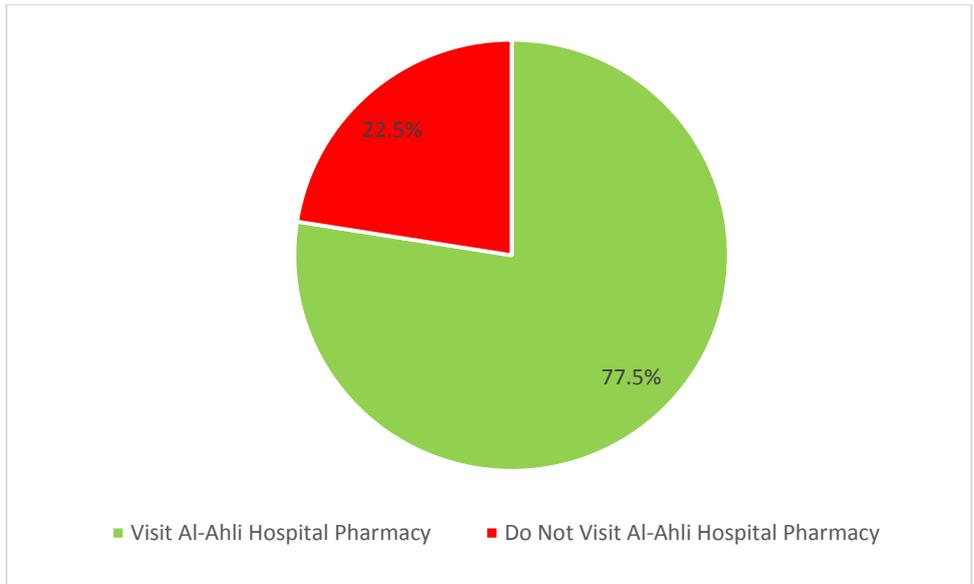


Figure-5.2: Visiting Al-Ahli Hospital Pharmacy

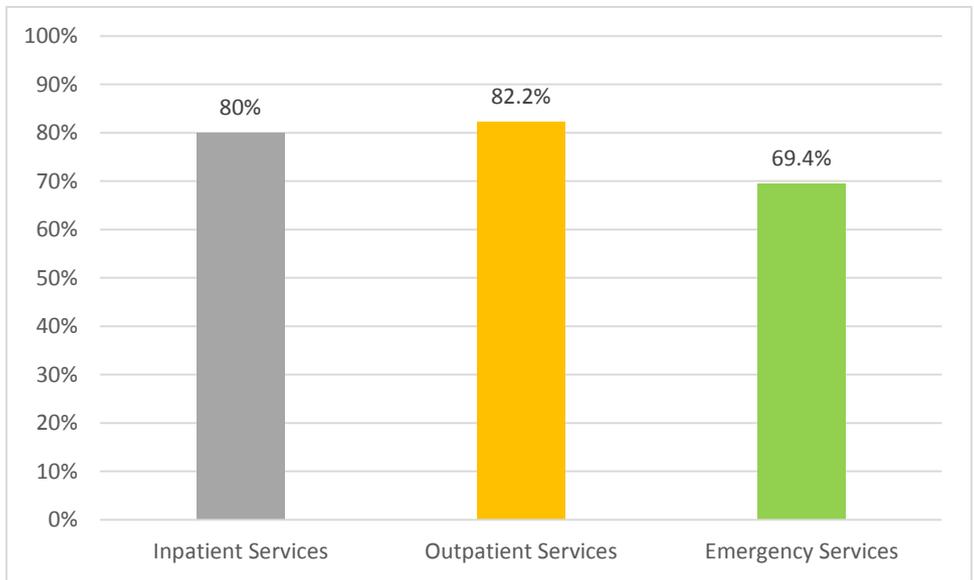


Figure-5.3: Visiting Al-Ahli Hospital Pharmacy by Reason of Visit

## Overall Satisfaction

### *Overall Satisfaction with Al-Ahli Hospital*

The average overall satisfaction with Al-Ahli Hospital is 3.87. Figure 5.4 illustrates the distribution of the customer satisfaction score with Al-Ahli Hospital.

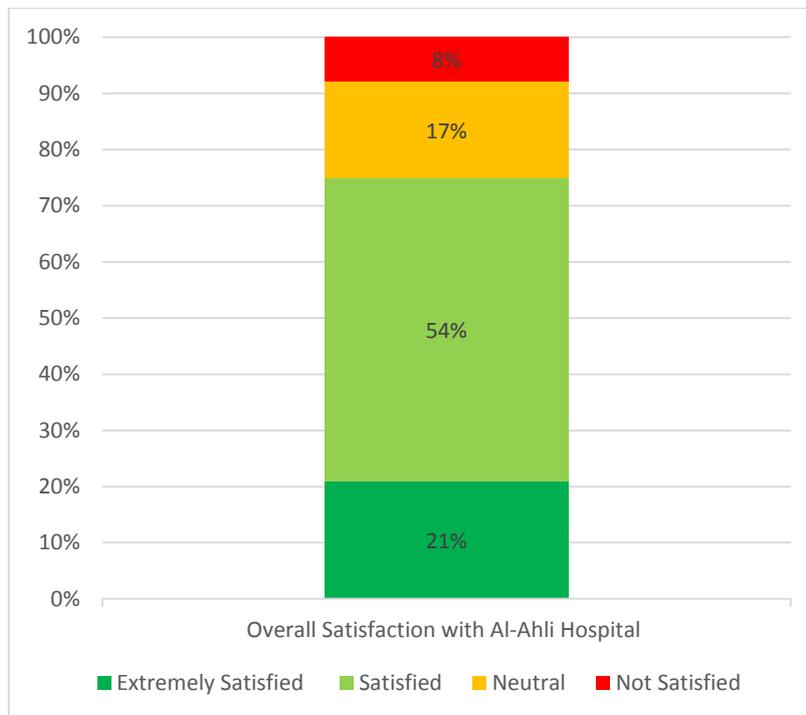


Figure-5.4: Overall Satisfaction with Al-Ahli Hospital

### Overall Satisfaction with Al-Ahli Hospital Departments

The average satisfaction score for inpatient services scores the highest among all departments (4.17) followed by outpatient clinics services (3.93). The average satisfaction score of Al-Ahli Hospital emergency services and pharmacy is 3.86 and 3.67 consequently. Figure 5.5 illustrates the distribution of the customer satisfaction scores with different departments at Al-Ahli Hospital

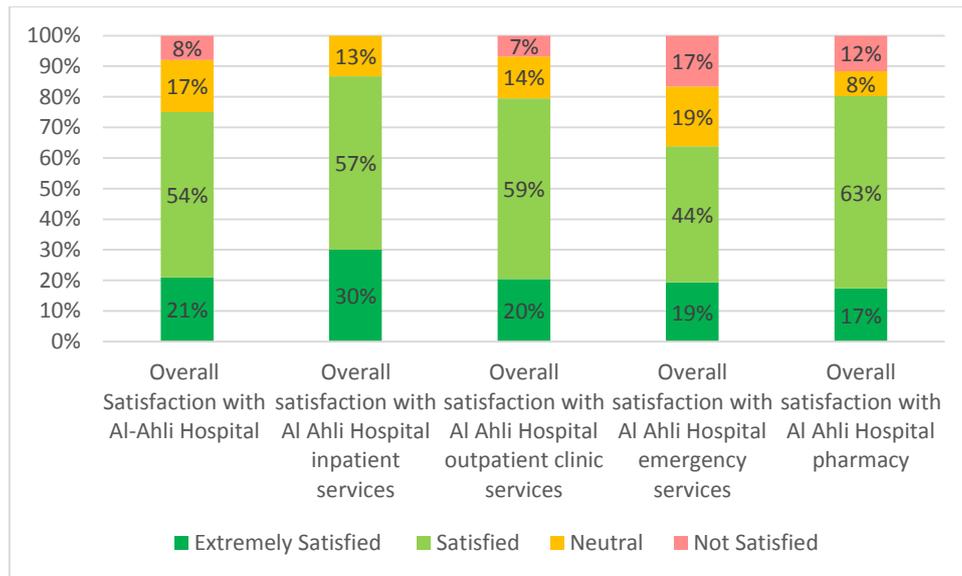


Figure-5.5: Overall Satisfaction with Al-Ahli Hospital Departments

### *Overall satisfaction with Different Factors*

As illustrated in Table-5.1, the price factor has the least customer satisfaction score while the staff communication skills is the factor that has the highest satisfaction score.

Table-5.1: Average Customer Satisfaction Score by Factor

<b>Factor</b>	<b>Average Customer Satisfaction Score</b>
Service Escape	4.01
Ease of Getting the Service	3.82
Speed of Getting the Service	3.47
Quality of Service	3.94
Staff Communication Skills	4.05
Price	3.14
Courtesy of Staff	3.78
CES	3.51

### *Overall satisfaction with Different Factors by the Reason of Visiting*

As illustrated in Table-5.2, among all different services (inpatient, outpatient and emergency) the price factor has the least customer satisfaction score ranging between 2.85 to 3.14. On the other hand, the factors that score the highest differ based on the service provided. For outpatient services the staff communication skills is the factor that has the highest satisfaction score (4.11). For inpatient services, the staff communication skills along with competence score the highest satisfaction

score (4.13). For emergency services ease of getting the service scores the highest satisfaction score (3.97).

Table-5.2: Average Customer Satisfaction Score by Factor vs the Reason of Visiting

Factor	Average Customer Satisfaction Score (Inpatient Services)	Average Customer Satisfaction Score (Outpatient Clinics Services)	Average Customer Satisfaction Score (Emergency Services)
Service Escape	4.09	4.03	3.95
Ease of Getting the Service	4.10	3.70	3.97
Speed of Getting the Service	3.78	3.07	3.65
Quality of Service	4.00	3.95	3.87
Staff Communication Skills	4.13	4.11	3.85
Price	2.85	2.87	3.14
Courtesy of Staff	4.03	3.95	3.58
Customer Efforts Score	3.67	3.40	3.51
Competence	4.13	3.78	3.71

### **Net Promoters Score**

The net promoters score of Al-Ahli Hospital is -3 as the percentage of promoters (31%) is less than the percentage of detractors (34%). Figure-5.6 illustrates the net promoters score of Al-Ahli Hospital.

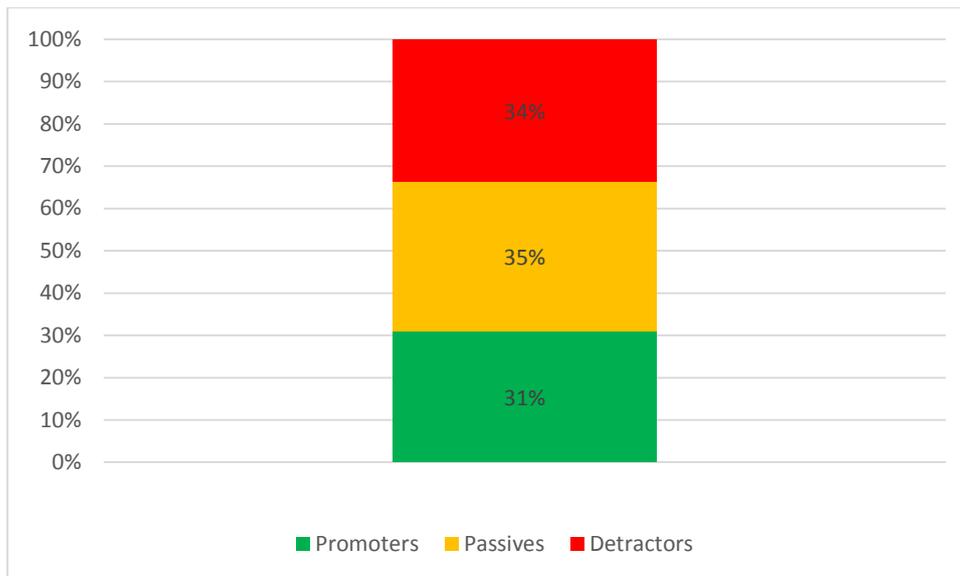


Figure-5.6: Net Promoters Score

***Net Promoters Score by Reason of Visiting***

As illustrated in Figure-5.7, the net promoters score for inpatient is positive (6) while the net promoters score for emergency and outpatient is negative (-3 and -6 consecutively).

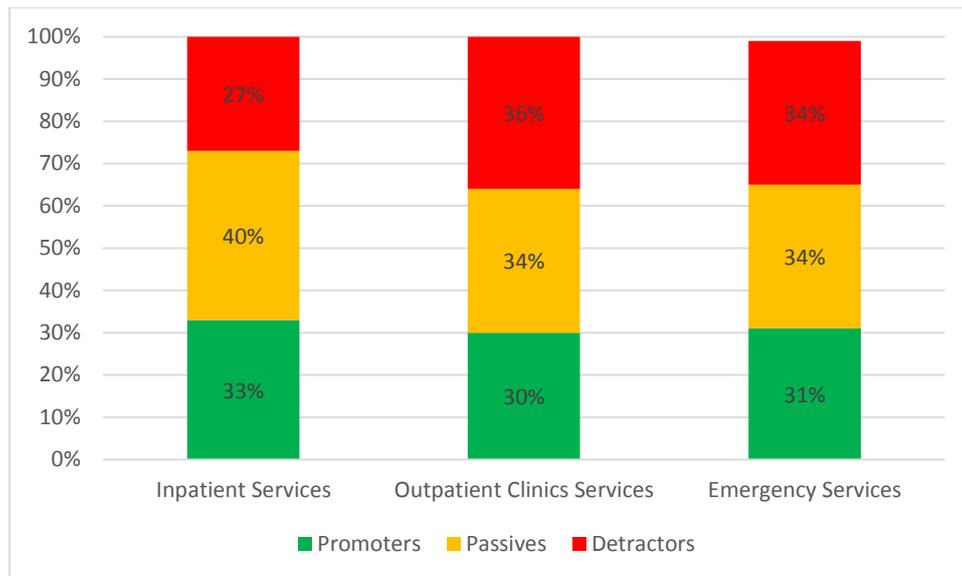


Figure-5.7: Net Promoters Score by Reason of Visiting

## **Hypothesis Testing**

### *Hypotheses 1:*

There is statistical significant influence of the overall satisfaction with Al-Ahli Hospital inpatient services, outpatient clinic services, emergency services and pharmacy on overall satisfaction with Al-Ahli Hospital

- **Testing the Hypothesis**

Multiple linear regression was used, a significant model emerged  $F=36.092$ ,  $Sig. =.000$ . The model explains only 64 % of the overall satisfaction variance ( $R^2 = .64$ ). Appendix (C): Table-C.1 provides information about the predictor variables entered into the model.

- **Testing Outcome**

The overall satisfaction with Al-Ahli Hospital inpatient services, outpatient clinic services and emergency services were significant predictors of overall satisfaction of Al-Ahli Hospital. However, the overall satisfaction with Al-Ahli Hospital pharmacy is not a significant predictor of the overall customer satisfaction. This means that the overall satisfaction with Al-Ahli Hospital inpatient services, outpatient clinic services and emergency services influences the overall satisfaction of Al-Ahli Hospital and the overall satisfaction with Al-Ahli Hospital pharmacy have no influence on the overall satisfaction on Al-Ahli Hospital.

- **Measuring the Impact**

To determine the impact of each category (section) on overall satisfaction, the below model was used:

Overall satisfaction with Al-Ahli Hospital = 0.844 + 0.741 (overall satisfaction with inpatient services) + 0.752 (overall satisfaction within outpatient clinic services) + 0.703 (overall satisfaction within emergency services).

This means that if the overall satisfaction with inpatient services increased by one score the overall satisfaction on Al-Ahli Hospital will increase by 0.741. If the overall satisfaction within outpatient clinic services increased by one score also the overall satisfaction on Al-Ahli Hospital will increase by 0.752. Similarly, if the overall satisfaction within emergency increased by one score, the overall satisfaction on Al-Ahli Hospital will increase by 0.703.

## ***Hypotheses 2:***

There is statistical significant influence of service escape, ease of getting the service, speed of getting the service, courtesy of staff, quality service, staff communication skills, price, customer efforts score and competence on overall customer satisfaction with Al-Ahli Hospital inpatient services.

- **Testing the Hypothesis**

Multiple Linear Regression was used, a significant model emerged  $F=5.105$ , Sig.  $=.002$ . The model explains only 76 % of the overall satisfaction variance ( $R^2 =0.76$ ). Appendix (C): Table-C.2 provides information about the predictor variables entered into the model.

- **Testing Outcome**

Only the speed of getting the service was significant predictors of overall customer satisfaction with Al-Ahli Hospital inpatient services. However, service escape, ease of getting the service, courtesy of staff, quality service, staff communication skills, price, customer efforts score and competence is not a significant predictor of the overall customer satisfaction with Al-Ahli Hospital inpatient services. This means that the speed of getting is the only factor that impacts overall customer satisfaction with Al-Ahli Hospital inpatient services while service escape, ease of getting the service, courtesy of staff, quality service, staff communication skills, price, customer efforts score and competence had no impact on overall customer satisfaction with Al-Ahli Hospital inpatient services.

- **Measuring the Impact**

The impact of speed of getting the service on the overall customer satisfaction with Al-Ahli Hospital inpatient services was measured through the model below:

Overall satisfaction with Al-Ahli Hospital inpatient services = 1.877 + 0.279 (overall satisfaction with speed of getting the service).

This means that if the overall with speed of getting the service increased by one score, the overall customer satisfaction with Al-Ahli Hospital inpatient services will increase by 0.279.

### *Hypotheses 3:*

There is statistical significant influence of service escape, ease of getting the service, speed of getting the service, courtesy of staff, quality service, staff communication skills, price, customer efforts score and competence on overall customer satisfaction with Al-Ahli Hospital outpatient services.

- **Testing the Hypothesis**

Multiple linear regression was used, a significant model emerged  $f=8.492$ , Sig. =.000.

The model explains only 75.9 % of the overall satisfaction variance ( $R^2 = 0.759$ ).

Appendix (C): Table-C.3 provides information about the predictor variables entered into the model.

- **Testing Outcome**

The speed of getting the service and customer efforts score were significant predictors of overall customer satisfaction with Al-Ahli Hospital inpatient services. However, service escape, ease of getting the service, courtesy of staff, quality service, staff communication skills, price and competence is not a significant predictor of the overall customer satisfaction with Al-Ahli Hospital inpatient services. This means that the speed of getting the service and the customer efforts score are the only factors that impacts overall customer satisfaction with Al-Ahli Hospital inpatient services. On the other hand, the service escape, ease of getting the service, courtesy of staff, quality service, staff communication skills, price and competence had no impact on overall customer satisfaction with Al-Ahli Hospital inpatient services.

- **Measuring the Impact**

The impact of speed of getting the service and the customer efforts score on the overall customer satisfaction with Al-Ahli Hospital inpatient services was measured through the model below:

Overall satisfaction with Al-Ahli Hospital outpatient services =  $0.564 + 0.329$  (overall satisfaction with speed of getting the service) -  $0.331$  (how much efforts did you personally have to put forth to be treated)

This means that if the overall with speed of getting the service increased by one score, the overall customer satisfaction with Al-Ahli Hospital outpatient services will increase by 0.279 whereas, if the customer efforts score increased by one score, the

overall customer satisfaction with Al-Ahli Hospital outpatient services will decrease by 0.331.

#### ***Hypotheses 4***

There is statistical significant influence of service escape, ease of getting the service, speed of getting the service, courtesy of staff, quality service, staff communication skills, price, customer efforts score and competence on overall customer satisfaction with Al-Ahli Hospital emergency services.

- **Testing the Hypothesis**

Multiple Linear Regression was used, a significant model emerged  $F=5.11$ ,  $Sig. =.002$ .

The model explains only 61.6 % of the overall satisfaction variance ( $R^2 =0.616$ ).

Appendix (C): Table-C.4 provides information about the predictor variables entered into the model.

- **Testing Outcome**

Only the speed of getting the service was significant predictors of overall customer satisfaction with Al-Ahli Hospital emergency services. However, service escape, ease of getting the service, courtesy of staff, quality service, staff communication skills, price, customer efforts score and competence is not a significant predictor of the overall customer satisfaction with Al-Ahli Hospital emergency services. This means that the speed of getting is the only factor that impacts overall customer satisfaction with Al-Ahli Hospital emergency services while service escape, ease of getting the service, courtesy of staff, quality service, staff communication skills, price, customer

efforts score and competence had no impact on overall customer satisfaction with Al-Ahli Hospital emergency services.

- **Measuring the Impact**

The impact of speed of getting the service on the overall customer satisfaction with Al-Ahli Hospital emergency services was measured through the model below:

Overall satisfaction with Al-Ahli Hospital emergency services = - 1.802 + 0.753  
(overall satisfaction with speed of getting the service)

This means that if the overall with speed of getting the service increased by one score, the overall satisfaction with Al-Ahli Hospital emergency services will increase by 0.753.

### *Hypotheses 5:*

There is statistical significant influence of ease of getting the service, speed of getting the service, quality service, staff communication skills, price, on overall customer satisfaction with Al-Ahli Hospital pharmacy.

- **Testing the Hypothesis**

For testing Hypotheses4: Multiple Linear Regression was used, a significant model emerged  $F= 11.344$ ,  $Sig. =.000$ . The model explains only 45.5 % of the overall satisfaction variance ( $R^2 =0.455$ ). Appendix (C): Table-C.5 provides information about the predictor variables entered into the model.

- **Testing Outcomes**

Only the speed of getting the service was significant predictors of overall customer satisfaction with Al-Ahli Hospital inpatient services. However, ease of getting the service, quality service, staff communication skills and price is not a significant predictor of the overall customer satisfaction with Al-Ahli Hospital pharmacy. This means that the speed of getting is the only factor that impacts overall customer satisfaction with Al-Ahli Hospital pharmacy while ease of getting the service, quality service, staff communication skills and price had no impact on overall customer satisfaction with Al-Ahli Hospital inpatient services.

- **Measuring the Impact**

The impact of speed of getting the service on the overall customer satisfaction with Al-Ahli Hospital pharmacy was measured through the model below:

Overall satisfaction with Al-Ahli Hospital pharmacy = 0.501 + 0.256 (overall satisfaction with speed of getting the service)

This means that if the overall customer satisfaction with speed of getting the service increased by one score, the overall customer satisfaction with Al-Ahli Hospital pharmacy will increase by 0.256.

### ***Hypotheses 6***

There is statistical significant influence of service escape, ease of getting the service, speed of getting the service, courtesy of staff, quality service, staff communication

skills, price, customer efforts score and competence overall customer satisfaction with Al-Ahli Hospital services.

- **Testing the Hypothesis**

Multiple linear regression was used, a significant model emerged  $F= 11.18$ ,  $Sig. =.000$ . The model explains only 55 % of the overall satisfaction variance ( $R^2 = 0.55$ ).

Appendix (C): Table-C.6 provides information about the predictor variables entered into the model.

- **Testing Outcomes**

Only the speed of getting the service was significant predictors of overall customer satisfaction with Al-Ahli Hospital services. However, service escape, ease of getting the service, courtesy of staff, quality service, staff communication skills, price, customer efforts score and competence is not significant predictor of the overall customer satisfaction with Al-Ahli Hospital services. This means that the speed of getting is the only factor that impacts overall customer satisfaction with Al-Ahli Hospital services while service escape, ease of getting the service, courtesy of staff, quality service, staff communication skills, price, customer efforts score and competence had no impact on overall customer satisfaction with Al-Ahli Hospital services.

- **Measuring the Impact**

The impact of speed of getting the service, staff communication a on the overall customer satisfaction with Al-Ahli Hospital services was measured through the model below:

Overall satisfaction with Al-Ahli Hospital services =  $0.642 + 0.226$  (overall with Speed of Getting the Service)

This means that if the overall satisfaction with speed of getting the service increased by one score, the overall customer satisfaction with Al-Ahli Hospital services will increase by 0.226.

### **Concluding the Results**

Majority of Al-Ahli Hospital patient visit their outpatient clinics. More than 75% of the total visitors get the prescribed medication from Al-Ahli Hospital pharmacy. The overall satisfaction with Al-Ahli Hospital is equal to 3.87.

The net promoters score for the hospital is negative which means that patients are not going to recommend Al-Ahli Hospital to their friends and family. Moreover, it also indicates the lack of loyalty of Al-Ahli Hospital patients. The net promoters score across different departments differ significantly as the net promoters score for inpatient is positive while the net promoters score for the other departments is negative.

The overall customer satisfaction with the different departments impact the overall satisfaction with Al-Ahli Hospital at different ranges (between 0.701 and 0.752). The overall satisfaction with the outpatient clinics impact the overall customer satisfaction with Al-Ahli Hospital the most.

For inpatient, emergency and pharmacy departments, the speed of service is the most important factor that impacts customer satisfaction. It has the highest impact on emergency services which is expected due to the urgency of the service requested. For outpatient services, speed of the service also impacts customer satisfaction along with the customer efforts. Customer efforts score is very important for outpatient clinics visitors due to the demand for effortless service.

By compiling all elements related to different factors across the different departments, the speed of service is the most important factor that impacts customer satisfaction of Al-Ahli Hospital generally. This is expected due to the nature of the service provided (healthcare service). The average satisfaction score of different factors impacting customer satisfaction ranges between 3.14 and 4.05.

### **Recommendations to Al-Ahli Hospital**

Although the speed of getting the service is the most important factor that impacts customer satisfaction, the average customer satisfaction of this factor is 3.47. Al-Ahli Hospital management should focus on improving this factor among all departments. In addition to that, Al-Ahli Hospital should focus on improving the customer efforts score for outpatient customers as this factor has significant impact on the overall customer satisfaction of outpatient services. Focusing on this factor is also important because majority of Al-Ahli Hospital customers visit Al-Ahli for outpatient services.

Furthermore, Al-Ahli Hospital should focus on employee satisfaction as it is highly correlated with customer satisfaction. A study that was conducted in 2013 shows that hospitals that are in the top 10% in employee satisfaction score higher on the Hospital Consumer Assessment of Healthcare Providers and Systems by an average of 61 points than hospitals that exist in the bottom 10%. (The Rising Importance of Patient Satisfaction in a Value-Based Environment, 2015)

Benchmark the survey results against global standards and use the current scores as a baseline for future studies to improve customer satisfaction at Al-Ahli Hospital.

## CHAPTER 6: EVALUATION AND VALIDATION

### **Instrument Validity**

The validity of the instruments administered in a research is the key of any successful research. The degree of success or failure of the research is to a considerable extent governed by the validity of the research instruments. (Gay, 2000)

There are four types of validity in research methods: concurrent validity, constructive validity, predictive validity and content validity. (Gay, 2000) Two types of validity testing were conducted to test the content validity of this research tool as below:

### ***Content Validity***

Content validity is achieved by expert judgment. (Gay, 2000) To ensure the content validity in this research, the questionnaire was given to a panel of four experts to give their feedback on the content and translation of the questionnaire and to suggest any deletion, addition, or modification. The researcher modified the questionnaire based on the feedback of the panel of experts.

### ***Constructive Validity***

Based on the data collected from the survey (n =111), the researcher calculated the correlation between each of the items against the whole scale of their section

(category) at  $p < 0.01$  to insure the significant correlations. Significant correlations between all survey items with the whole scale of their sections (categories) was found. As shown in Appendix (D): Table- D.1, significant correlations were found between all items with the whole scale of the inpatient services section. The correlations of the items of this section with the whole scale of the section are between 0.595 – 0.860. For outpatient services section and as shown in Appendix (D): Table- D.2, the correlation of the items of this section with the whole scale is between 0.359 – 0.850. For emergency services section, the correlations of the items in this section with the whole scale are between 0.352 – 0.822 except for the items “comfort of bed” and “cleanness of room” as shown in Appendix (D): Table- D3. For the pharmacy section, the correlation of the items of this section with the whole scale is between 0.368 – 0.805 as shown in Appendix (D): Table- D.4. As for the closing questions category, correlation of items in this section with the whole scale is 0.652 as illustrated in Appendix (D): Table- D.5.

The value of Corrected Item-Total Correlation for all survey items shows a high correlation which indicates that the research instruments has high validity.

### **Reliability**

The reliability of the survey was calculated using Cronbach's Alpha Coefficient of internal consistency. Cronbach's Alpha Coefficient was calculated for five categories (sections): inpatient services, outpatient services, emergency services, pharmacy, and

closing questions. As shown in Table-6.1, the analysis produced alpha coefficient values between 0.787 and 0.958. Based on the criteria suggested by Spicer 200 and as all survey categories have alpha coefficients higher than 0.70, the research instrument has high reliability.

Table-6.1: Cronbach's Alpha Coefficient Results

<b>Categories (Section)</b>	<b>Cronbach's Alpha</b>	<b>No. of items</b>
Inpatient Services	.958	22
Outpatient Services:	.934	20
Emergency Services	0.891	20
Pharmacy	.851	6
Closing Questions	0.787	3

### **Limitations**

Due to time limitation, convenient sampling methodology was conducted which makes the results ungeneralizable. In addition to that and to manage the questionnaire length, there were no separate questions tacking each group of hospital attendants (i.e., physicians, nurses, receptionists... etc.). Furthermore, there is a geographical limitation of the study as the study is conducted in Qatar, therefore the results cannot be generalized.

### *Improving the Study:*

The following factors can be considered in future studies to have better outcomes:

- Have more detailed questions for physicians, nurses and receptionists.
- Conduct the survey among a random sample.
- Have a bigger sample size (at least 383) to have more conclusive results.
- Use alternate questioning technique to reduce the number of questions each responder should answer while covering more questions at an overall level.
- Add a question to rank the different factors impacting customer satisfaction.  
This can help in calculating a more accurate overall satisfaction score using the weighted score methodology.
- Measure the impact of customer satisfaction on the net promoters score.
- Use qualitative research methodology to assess whether there are any missing factors in the module.
- Use open-ended questions to comment on low rating questions in order to understand the reasons of dissatisfaction.
- Observation or mystery shopping in order to calculate actual wait time and time spent with the physician. In addition to that, adherence to process can also be measured using mystery shopping methodology.
- Adding a question to segregate between self-paid patients and patients who depend on insurance to make their payment.

## CHAPTER 7: CONCLUSION

Healthcare industry is very important for the Qatari market as healthcare is a part of Qatar National Vision 2030, there is a shortage of healthcare facilities in Qatar, the demand of healthcare servicing is increasing and majority of healthcare facilities are located in Doha municipality while the population is migrating to other municipalities. Al-Ahli Hospital realises the importance of the growth potential within the Qatari market as well as the importance of customer satisfaction in achieving growth, their customer centric strategy and vision.

The overall satisfaction with Al-Ahli Hospital is equal to 3.87. The overall customer satisfaction with the different departments impact the overall customer satisfaction with Al-Ahli Hospital at different ranges (between 0.701 and 0.752). The speed of service is the most important factor that impacts customer satisfaction. In addition to that, the overall satisfaction with Al-Ahli Hospital is impacted the most by the overall satisfaction with the outpatient clinics services.

The net promoters score for Al-Ahli Hospital is negative which means that patients are not going to recommend it to their friends and family. It also indicates the lack of patients loyalty to Al-Ahli Hospital.

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## **APPENDIX (A)**

### *English Questionnaire*

#### **Introduction:**

This questionnaire is used to understand the factors that drive customer satisfaction in Al-Ahli Hospital in Qatar. Filling up this questionnaire should not take more than ten minutes of your time.

The information collected will be kept strictly confidential. Your participation is voluntary and anonymous. You may withdraw from this study at any time. By clicking “next”, you agree to participate in this research.

If you have any questions, you may contact us at [200652177@student.qu.edu.qa](mailto:200652177@student.qu.edu.qa)

#### **Section 1: Screening:**

S1: Q1: Have you received treatment from Al Ahli Hospital in Qatar within the past three months?

Yes

Continue

No

Go to End

## **Section 2: Opening Questions:**

S2: Q1: On a 5 point scale, where 5 means “Extremely Satisfied” and 1 means “Not Satisfied at All”, how would you rate your overall satisfaction with Al Ahli Hospital?

Extremely Satisfied	Satisfied	Neutral	Not Satisfied	Not Satisfied at All
(5)	(4)	(3)	(2)	(1)

S2: Q2: What kind of service did you get in Al Ahli Hospital during your last visit/ stay?

I was admitted in Al Ahli Hospital for inpatient services	Go to Section 3
I was admitted in Al Ahli Hospital for emergency services	Go to Section 4
I visited Al Ahli Hospital outpatient clinics	Go to Section 5

## **Section 3: Inpatient Services:**

S3: Q1: On a 5 point scale, where 5 means “Extremely Satisfied” and 1 means “Not Satisfied at All”, how would you rate your satisfaction with the followings:

Attribute/ Rating	(5)	(4)	(3)	(2)	(1)
A. Overall satisfaction with Al Ahli Hospital inpatient services					
B. Ease of registrations and filling forms up					
C. Time taken before admission					

- D. Hospital attendants (physicians, nurses, receptionists... etc.) listening and understanding your needs
- E. Hospital attendants (physicians, nurses, receptionists... etc.) answering all your questions and queries
- F. Hospital attendants (physicians, nurses, receptionists... etc.) keeping you informed about your case
- G. Hospital attendants (physicians, nurses, receptionists... etc.) using language that you can understand
- H. Hospital attendants (physicians, nurses, receptionists... etc.) using words that you can understand i.e. using jargon free language and not complicated medical terms
- I. Responsiveness of hospital attendants (physicians, nurses, receptionists... etc.) and their prompt response to your needs
- J. Hospital attendants (physicians, nurses, receptionists... etc.) courtesy, friendliness and helpfulness
- K. Hospital attendants (physicians, nurses, receptionists... etc.) look and appearance
- L. Hospital attendants (physicians, nurses, receptionists... etc.) providing full information about medications, procedures, treatments, services provided and discharge instructions
- M. Quality of food provided during stay
- N. Quietness in the ward
- O. Privacy in the room provided
- P. Comfort of bed
- Q. Cleanness of room

- R. Location of the hospital
- S. Hospital facilitates
- T. Overall satisfaction with treatment provided
- U. Time taken for discharge

S3: Q2: On a 5 point scale, where 5 means “Very Affordable” and 1 means “Not Affordable at All”. How would you rate the price of Al Ahli Hospital inpatient services?

Very Affordable	Affordable	Neutral	Not Affordable	Not Affordable at All
(5)	(4)	(3)	(2)	(1)

S3: Q3: Did you get the prescribed medication from Al Ahli Hospital Pharmacy?

- Yes Go to Section 5
- No Go to Section 6

**Section 4: Outpatient Services:**

S4: Q1: On a 5 point scale, where 5 means “Extremely Satisfied” and 1 means “Not Satisfied at All”, how would you rate your satisfaction with the followings:

Attribute/ Rating	(5)	(4)	(3)	(2)	(1)
A. Overall satisfaction with Al Ahli Hospital outpatient clinic services					
B. Ease of making appointment					
C. Availability of appointments					

- D. Convenience of appointment timings
- E. Ease of registrations and filling forms up
- F. Quality of refreshments provided in reception area
- G. Wait time before attending to your appointment
- H. Hospital attendants (physicians, nurses, receptionists....  
etc.) listening and understanding your needs
- I. Hospital attendants (physicians, nurses, receptionists....  
etc.) answering all your questions and queries
- J. Hospital attendants (physicians, nurses, receptionists....  
etc.) providing full information about medications,  
procedures, treatments and services provided
- K. Hospital attendants (physicians, nurses, receptionists....  
etc.) using language that you can understand
- L. Hospital attendants (physicians, nurses, receptionists....  
etc.) using words that you can understand i.e. using jargon  
free language and not complicated medical terms
- M. Hospital attendants (physicians, nurses, reception....  
etc.) courtesy, friendliness and helpfulness
- N. Hospital attendants (physicians, nurses, reception....  
etc.) look and appearance
- O. Comfort in examination room
- P. Location of the hospital
- Q. Hospital facilitates
- R. Availability of parking spaces
- S. Overall satisfaction with treatment provided

S4: Q2: On a 5 point scale, where 5 means “Very Affordable” and 1 means “Not Affordable at All”. How would you rate the price of Al Ahli Hospital outpatient clinic services?

Very Affordable	Affordable	Neutral	Not Affordable	Not Affordable at All
(5)	(4)	(3)	(2)	(1)

S4: Q3: Did you get the prescribed medication from Al Ahli Hospital Pharmacy?

Yes Go to Section 5

No Go to Section 6

**Section 5: Emergency Services:**

S5: Q1: On a 5 point scale, where 5 means “Extremely Satisfied” and 1 means “Not Satisfied at All”, how would you rate your satisfaction with the followings:

Attribute/ Rating	(5)	(4)	(3)	(2)	(1)
A. Overall satisfaction with Al Ahli Hospital emergency services					
B. Ease of registrations and filling forms up					
C. Time taken before admission					
D. Hospital attendants (physicians, nurses, receptionists... etc.) listening and understanding your needs					
E. Hospital attendants (physicians, nurses, receptionists... etc.) answering all your questions and queries					
F. Hospital attendants (physicians, nurses, receptionists... etc.) keeping you informed about your case					

- G. Hospital attendants (physicians, nurses, receptionists... etc.) using language that you can understand
- H. Hospital attendants (physicians, nurses, receptionists... etc.) using words that you can understand i.e. using jargon free language and not complicated medical terms
- I. Responsiveness of hospital attendants (physicians, nurses, receptionists.... etc.) and their prompt response to your needs
- J. Hospital attendants (physicians, nurses, receptionists... etc.) courtesy, friendliness and helpfulness
- K. Hospital attendants (physicians, nurses, receptionists... etc.) look and appearance
- L. Hospital attendants (physicians, nurses, receptionists... etc.) providing full information about medications, procedures, treatments, services provided and discharge instructions
- M. Quality of food provided during stay
- N. Quietness in the ward
- O. Comfort of bed
- P. Cleanness of room
- Q. Location of the hospital
- R. Hospital facilitates
- S. Overall satisfaction with treatment provided
- T. Time taken for discharge

S5: Q2: On a 5 point scale, where 5 means “Very Affordable” and 1 means “Not Affordable at All”. How would you rate the price of Al Ahli Hospital emergency services?

Very Affordable	Affordable	Neutral	Not Affordable	Not Affordable at All
(5)	(4)	(3)	(2)	(1)

S5: Q3: Did you get the prescribed medication from Al Ahli Hospital Pharmacy?

Yes Go to Section 5

No Go to Section 6

**Section 6: Pharmacy:**

S6: Q1: On a 5 point scale, where 5 means “Extremely Satisfied” and 1 means “Not Satisfied at All”, how would you rate your satisfaction with the followings:

Attribute/ Rating	(5)	(4)	(3)	(2)	(1)
A. Overall satisfaction with Al Ahli Hospital pharmacy					
B. Time taken to get the prescribed medication					
C. Availability of medication					
D. Pharmacist answering all your questions and queries					
E. Providing full instructions about the prescribed medications					
F. Pharmacist used language that you can understand					

S6: Q2: On a 5 point scale, where 5 means “Very Affordable” and 1 means “Not Affordable at All”. How would you rate the price of Al Ahli Hospital pharmacy?

Very Affordable	Affordable	Neutral	Not Affordable	Not Affordable at All
(5)	(4)	(3)	(2)	(1)

**Section 7: Closing Questions:**

S7: Q1: On a 5 point scale, where 5 means “Strongly Agree” and 1 means “Strongly Disagree”. How would you rate the following statement:

Attribute/ Rating	(5)	(4)	(3)	(2)	(1)
A. I have the trust and confidence in Al Ahli Hospital treatments					
B. Hospital attendants (physicians, nurses, receptionists... etc.) at Al Ahli Hospital are caring empathetic and provide personal attention to my needs					

S7: Q2: On a 5 point scale where 5 means “No Efforts” and 1 means “Very High Efforts”, How much efforts did you personally have to put forth to be treated at Al Ahli Hospital?

No Efforts	Low Efforts	Moderate Efforts	High Efforts	Very High Efforts
(5)	(4)	(3)	(2)	(1)

S7: Q3: On a 10 point scale where 10 means “Very Likely” and 1 means “Not Likely at All”, how likely would you recommend Al Ahli Hospital to your friends and family?

(10)	(9)	(8)	(7)	(6)	(5)	(4)	(3)	(2)	(1)	(0)
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S7: Q4: How can Al Ahli Hospital improve their services?



## **Section 8: Demographics:**

S8: Q1: Gender:

Male

Female

S8: Q2: Age:

18 and below

19-24

25-34

35-44

45-54

55-64

65 and above

S8: Q3: Nationality

Qatari

GCC

Arab

Asian

Westerner

African

#### S8: Q4: Educational Level

Some/ finished elementary school

Some/ finished intermediary school

Some/ finished high school

Diploma/ some college

Bachelor degree

Graduate degree (Masters or PHD)

#### S8: Q5: Marital Status

Single

Married

Other

#### **End:**

Thank you for participating in this survey. Your opinion is important to us.

## APPENDIX (B)

### Arabic Questionnaire

#### Introduction:

نشكرك على المشاركة في هذا الاستبيان. الهدف من هذه الدراسة هو معرفة العوامل التي تؤثر على رضا عملاء مستشفى الأهلي. يمكنك الإجابة على هذا الاستبيان في أقل من عشر دقائق.

نؤكد لك بأنه سيتم الاحتفاظ بإجاباتك بسرية تامة. المشاركة في هذا الاستبيان طوعية ويمكنك الانسحاب من هذه الدراسة في أي وقت. إذا كنت موافقاً على الاشتراك في هذا الاستبيان، الرجاء قم باختيار "التالي".

إذا كانت لديك أي أسئلة أو استفسارات، الرجاء قم بالتواصل معنا عن طريق

[200652177@student.qu.edu.qa](mailto:200652177@student.qu.edu.qa)

#### Section 1: Screening:

S1: Q1:

هل قمت بتلقي العلاج من مستشفى الأهلي في قطر خلال السنة الماضية؟

نعم

Continue

لا

Go to End

## **Section 2: Opening Questions:**

S2: Q1:

على مقياس من 5 نقاط، حيث أن 5 تعني "راض تماماً" و 1 تعني "غير راض على الإطلاق"، قيم مستوى رضاك العام عن مستشفى الأهلي؟

راض تماماً	راض	محايد	غير راض	غير راض على الإطلاق
(5)	(4)	(3)	(2)	(1)

S2: Q2:

ما هي نوعية الخدمة التي تلقيتها في مستشفى الأهلي في آخر زيارة لك؟

خدمات الإقامة في مستشفى الأهلي	Go to Section 3
خدمات طوارئ مستشفى الأهلي	Go to Section 4
العيادات الخارجية في مستشفى الأهلي	Go to Section 5

## **Section 3: Inpatient Services:**

S3: Q1:

على مقياس من 5 نقاط، حيث أن 5 تعني "راض تماماً" و 1 تعني "غير راض على الإطلاق"، قيم مستوى رضاك العام عن التالي:

Attribute/ Rating	(5)	(4)	(3)	(2)	(1)
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الرضا العام عن خدمات الإقامة في مستشفى الأهلي

سهولة التسجيل وتعبئة الاستمارات  
الوقت الذي استغرقته عملية تسجيل دخول المرضى  
إمكانية استماع وفهم موظفو المستشفى (الأطباء، الممرضات، موظفو  
الاستقبال... الخ.) لمتطلباتك بسهولة  
قام موظفو المستشفى (الأطباء، الممرضات، موظفو الاستقبال... الخ.) بالإجابة  
على جميع أسئلتك واستفساراتك  
قام موظفو المستشفى (الأطباء، الممرضات، موظفو الاستقبال... الخ.) بإخبارك  
عن تطورات حالتك  
قام موظفو المستشفى (الأطباء، الممرضات، موظفو الاستقبال... الخ.) باستخدام  
لغة تناسبك ويمكنك فهمها  
قام موظفو المستشفى (الأطباء، الممرضات، موظفو الاستقبال... الخ.) باستخدام  
كلمات سهلة الفهم وخالية من المصطلحات الطبية المعقدة  
سرعة تجاوب موظفو المستشفى (الأطباء، الممرضات، موظفو الاستقبال...  
الخ.) لاحتياجاتك  
احترام ومساعدة موظفو المستشفى (الأطباء، الممرضات، موظفو الاستقبال...  
الخ.)  
شكل وهيئة موظفو المستشفى (الأطباء، الممرضات، موظفو الاستقبال... الخ.)  
قام موظفو المستشفى (الأطباء، الممرضات، موظفو الاستقبال... الخ.) بتوفير  
جميع المعلومات المتعلقة بأدويتك، علاجك، تعليمات الخروج من المستشفى  
والإجراءات والخدمات التي تلقيتها  
جودة الأطعمة التي توفرت لك خلال إقامتك  
الهدوء في القسم الذي أقمت فيه  
مستوى الخصوصية في الغرفة التي أقمت فيها  
مستوى راحة السرير  
نظافة الغرفة التي أقمت فيها  
موقع المستشفى  
مباني ومرافق المستشفى  
رضائك العام عن العلاج الذي تلقيته

الوقت الذي استغرقته عملية تسجيل خروجك من المستشفى

S3: Q2:

على مقياس من 5 نقاط، حيث أن 5 تعني "مناسبة تماماً" و 1 تعني "غير مناسبة على الإطلاق"، قيم مستوى مناسبة أسعار الإقامة في مستشفى الأهلي؟

مناسبة جداً	مناسبة	محايد	غير مناسبة	غير مناسبة على الإطلاق
(5)	(4)	(3)	(2)	(1)

S3: Q3:

هل قمت بالحصول على الأدوية المقررة من صيدلية مستشفى الأهلي؟

نعم

Go to Section 5

لا

Go to Section 6

## **Section 4: Outpatient Services:**

S4: Q1:

على مقياس من 5 نقاط، حيث أن 5 تعني "راض تماماً" و 1 تعني "غير راض على الإطلاق"، قيم مستوى رضاك العام عن التالي:

Attribute/ Rating	(5)	(4)	(3)	(2)	(1)
الرضا العام عن خدمات العيادات في مستشفى الأهلي					
سهولة عمل المواعيد					
توافر المواعيد					

مناسبة توقيت المواعيد  
سهولة التسجيل وتعبئة الاستمارات  
جودة المشروبات المتوفرة في قاعة الاستقبال والانتظار  
وقت الانتظار قبل الموعد  
إمكانية استماع وفهم موظفو المستشفى (الأطباء، الممرضات، موظفو  
الاستقبال... الخ.) لمتطلباتك بسهولة  
قام موظفو المستشفى (الأطباء، الممرضات، موظفو الاستقبال... الخ.) بالإجابة  
على جميع أسئلتك واستفساراتك  
قام موظفو المستشفى (الأطباء، الممرضات، موظفو الاستقبال... الخ.) بتوفير  
جميع المعلومات المتعلقة بأدويةك، علاجك والإجراءات والخدمات التي تلقيتها  
قام موظفو المستشفى (الأطباء، الممرضات، موظفو الاستقبال... الخ.) باستخدام  
لغة تتاسبك ويمكنك فهمها  
قام موظفو المستشفى (الأطباء، الممرضات، موظفو الاستقبال... الخ.) باستخدام  
كلمات سهلة الفهم وخالية من المصطلحات الطبية المعقدة  
احترام ومساعدة موظفو المستشفى (الأطباء، الممرضات، موظفو الاستقبال...  
الخ.)  
شكل وهيئة موظفو المستشفى (الأطباء، الممرضات، موظفو الاستقبال... الخ.)  
مستوى راحتك في غرفة الفحص  
موقع المستشفى  
مباني ومرافق المستشفى  
وجود مواقف لسيارتك  
رضاك العام عن العلاج الذي تلقيته

S4: Q2:

على مقياس من 5 نقاط، حيث أن 5 تعني "مناسبة تماماً" و 1 تعني "غير مناسبة على الإطلاق"، قيم مستوى  
مناسبة أسعار عيادات مستشفى الأهلي؟

غير مناسبة على      غير مناسبة      محايد      مناسبة      مناسبة جداً

الإطلاق (1)  
(2) (3) (4) (5)

S4: Q3:

هل قمت بالحصول على الأدوية المقررة من صيدلية مستشفى الأهلي؟

نعم Go to Section 5  
لا Go to Section 6

### **Section 5: Emergency Services:**

S5: Q1:

على مقياس من 5 نقاط، حيث أن 5 تعني "راض تماماً" و 1 تعني "غير راض على الإطلاق"، قيم مستوى رضاك العام عن التالي:

Attribute/ Rating	(5)	(4)	(3)	(2)	(1)
الرضا العام عن خدمات الطوارئ في مستشفى الأهلي					
سهولة التسجيل وتعبئة الاستمارات					
الوقت الذي استغرقته عملية تسجيل دخول المرضى					
إمكانية استماع وفهم موظفو المستشفى (الأطباء، الممرضات، موظفو الاستقبال... الخ.) لمتطلباتك بسهولة					
قام موظفو المستشفى (الأطباء، الممرضات، موظفو الاستقبال... الخ.) بالإجابة على جميع أسئلتك واستفساراتك					
قام موظفو المستشفى (الأطباء، الممرضات، موظفو الاستقبال... الخ.) بإخبارك عن تطورات حالتك					
قام موظفو المستشفى (الأطباء، الممرضات، موظفو الاستقبال... الخ.) باستخدام					

لغة تتاسبك ويمكنك فهمها

قام موظفو المستشفى (الأطباء، الممرضات، موظفو الاستقبال... الخ.) باستخدام كلمات سهلة الفهم وخالية من المصطلحات الطبية المعقدة

سرعة تجاوب موظفو المستشفى (الأطباء، الممرضات، موظفو الاستقبال... الخ.) لاحتياجاتك

احترام ومساعدة موظفو المستشفى (الأطباء، الممرضات، موظفو الاستقبال... الخ.)

شكل وهيئة موظفو المستشفى (الأطباء، الممرضات، موظفو الاستقبال... الخ.)

قام موظفو المستشفى (الأطباء، الممرضات، موظفو الاستقبال... الخ.) بتوفير جميع المعلومات المتعلقة بأدويتك، علاجك، تعليمات الخروج من المستشفى والإجراءات والخدمات التي تلقيتها

الهدوء في القسم الذي أقيمت فيه

مستوى راحة السرير

نظافة الغرفة التي أقيمت فيها

موقع المستشفى

مباني ومرافق المستشفى

رضاك العام عن العلاج الذي تلقيته

الوقت الذي استغرقته عملية تسجيل خروجك من المستشفى

S5: Q2:

على مقياس من 5 نقاط، حيث أن 5 تعني "مناسبة تماماً" و 1 تعني "غير مناسبة على الإطلاق"، قيم مستوى مناسبة أسعار خدمات طوارئ مستشفى الأهلي؟

مناسبة جداً	مناسبة	محايد	غير مناسبة	غير مناسبة على الإطلاق
(5)	(4)	(3)	(2)	(1)

S5: Q3:

هل قمت بالحصول على الأدوية المقررة من صيدلية مستشفى الأهلي؟

نعم

Go to Section 5

لا

Go to Section 6

## **Section 6: Pharmacy:**

S6: Q1:

على مقياس من 5 نقاط، حيث أن 5 تعني "راض تماماً" و 1 تعني "غير راض على الإطلاق"، قيم مستوى رضاك العام عن التالي:

Attribute/ Rating	(5)	(4)	(3)	(2)	(1)
الرضا العام عن صيدلية مستشفى الأهلي					
وقت الانتظار للحصول على الأدوية					
توفر الأدوية					
قام موظف الصيدلية بالإجابة على جميع أسئلتك واستفساراتك					
قام موظف الصيدلية بإعطائك جميع المعلومات المتعلقة بالأدوية					
قام موظف الصيدلية باستخدام لغة تناسبك ويمكنك فهمها					

S6: Q2:

على مقياس من 5 نقاط، حيث أن 5 تعني "مناسبة تماماً" و 1 تعني "غير مناسبة على الإطلاق"، قيم مستوى مناسبة أسعار صيدلية مستشفى الأهلي؟

مناسبة جداً	مناسبة	محايد	غير مناسبة	غير مناسبة على الإطلاق
(5)	(4)	(3)	(2)	(1)

## Section 7: Closing Questions:

S7: Q1:

على مقياس من 5 نقاط، حيث أن 5 تعني "موافق بشدة" و 1 تعني "غير موافق بشدة"، قيم مستوى رضاك العام عن التالي:

Attribute/ Rating

(5) (4) (3) (2) (1)

لدي الثقة في علاج مستشفى الأهلي

موظفو المستشفى (الأطباء، الممرضات، موظفو الاستقبال... الخ.) متعاطفين

ويوفرون اهتماماً شخصياً

S7: Q2:

على مقياس من 5 نقاط، حيث أن 5 تعني "لم أبذل أي مجهود إطلاقاً" و 1 تعني "مجهود كبير جداً"، ما مستوى المجهود الذي بذلته لتلقي العلاج لدى مستشفى الأهلي؟

لم أبذل أي	مجهود بسيط	مجهود متوسط	مجهود كبير	مجهود كبير جداً
مجهود	(4)	(3)	(2)	(1)
(5)				

S7:Q3:

على مقياس من 11 نقطة، حيث 10 تعني "محمتم جداً" و 1 تعني "غير محتمل على الإطلاق"، ما مدى احتمالية ترشيحك لمستشفى الأهلي للأهل والأصدقاء؟

(10) (9) (8) (7) (6) (5) (4) (3) (2) (1) (0)

S7: Q4:

كيف يمكن لمستشفى الأهلي أن تحسن خدماتها؟

**Section 8: Demographics:**

S8: Q1:

الجنس

ذكر

أنثى

S8: Q2:

العمر

أو أقل 18

19-24

25-34

35-44

45-54

55-64

أو أكبر 65

S8: Q3:

الجنسية

قطري

خليجي

عربي

آسيوي

أوروبي

أفريقي

S8: Q4:

المستوى التعليمي

بعض/ أنهيت المستوى الابتدائي

بعض/ أنهيت المستوى الإعدادي

بعض/ أنهيت المستوى الثانوي

دبلوم/ بعض التعليم الجامعي

جامعي

دراسات عليا (ماجستير أو دكتوراه)

S8: Q5:

الحالة الاجتماعية

متزوج

أعزب

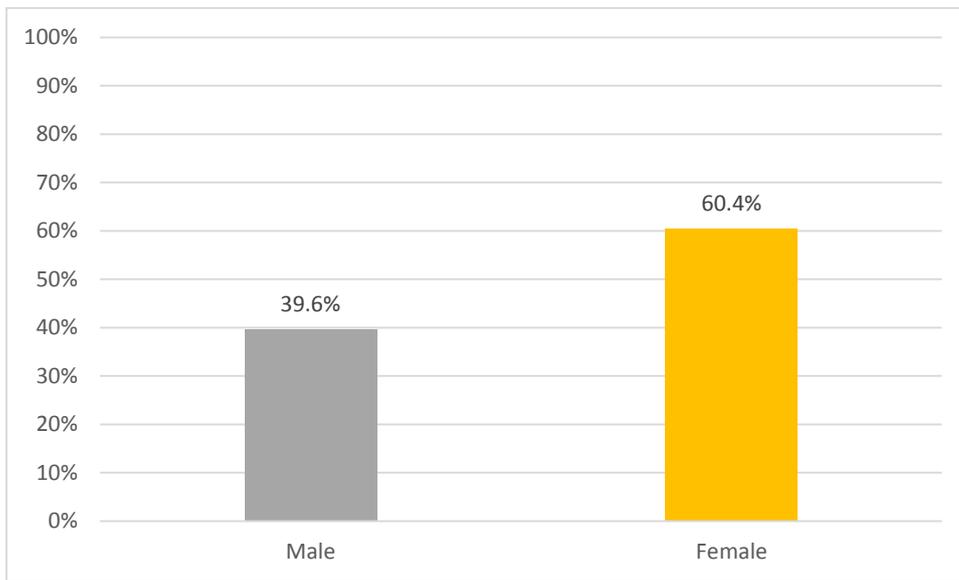
أخرى

**End:**

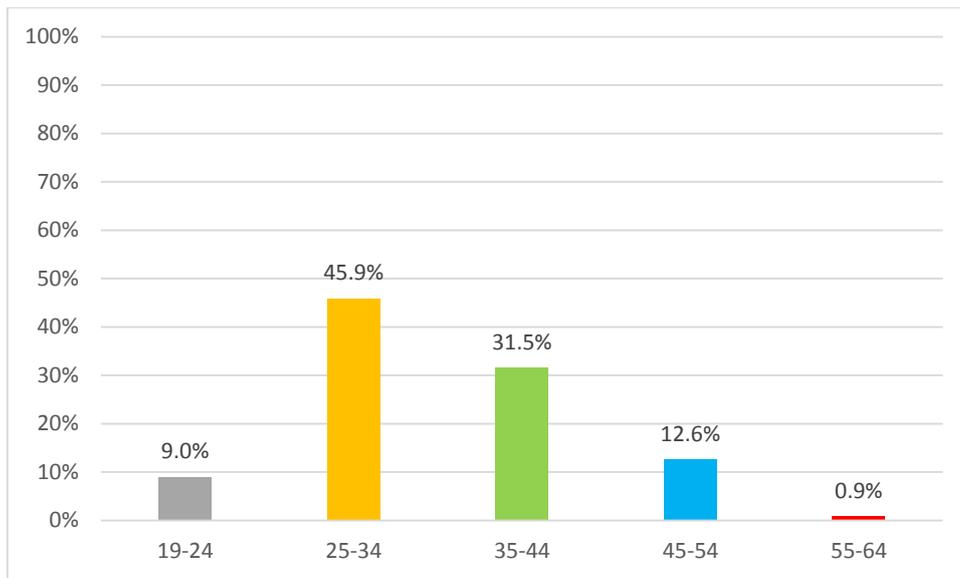
شكراً على مشاركتكم. آراءكم هامة جداً بالنسبة لنا.

## APPENDIX (C)

### *Sample Analysis*



FigureC.1: Sample Gender



FigureC.2: Sample Age Group

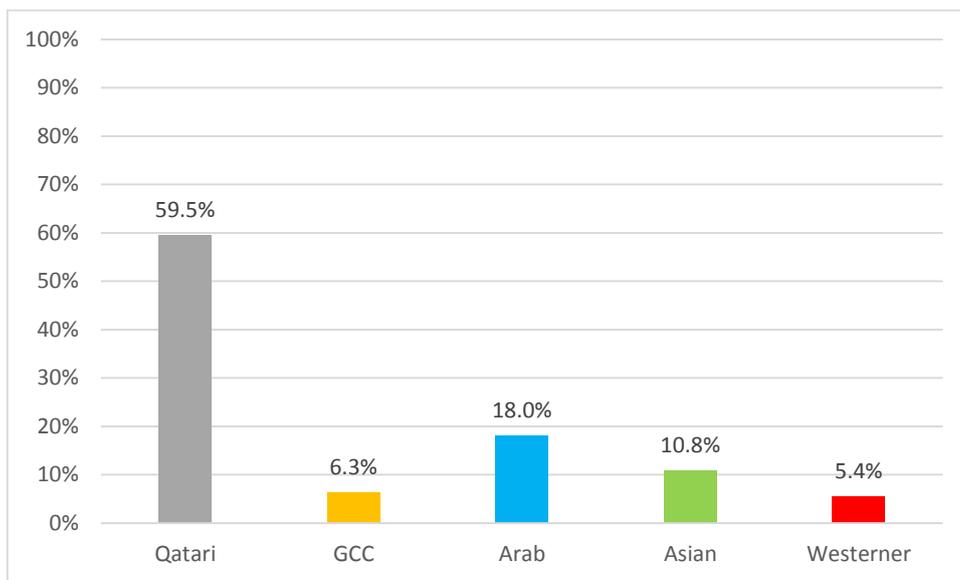


Figure-C.3: Sample Nationality

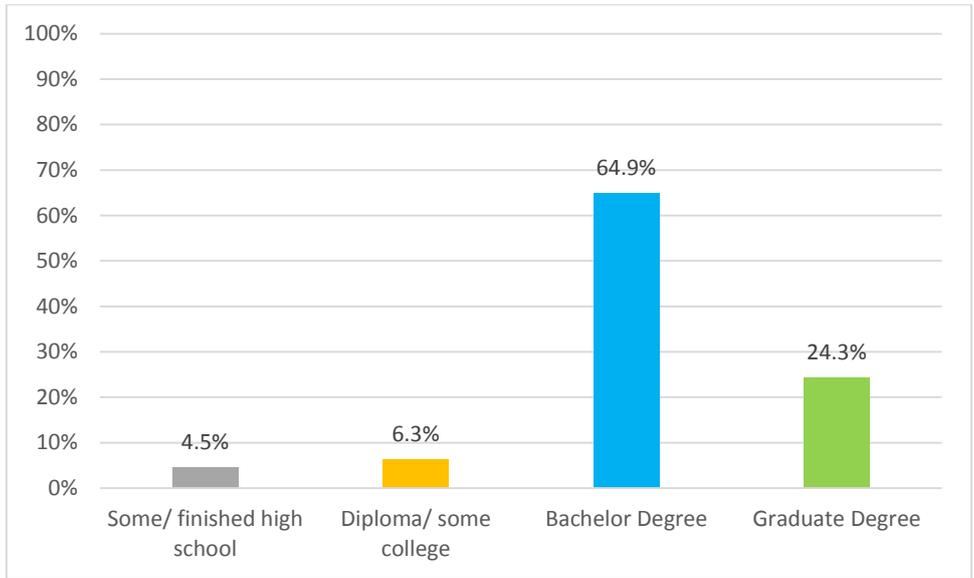


Figure-C.4: Sample Educational Level

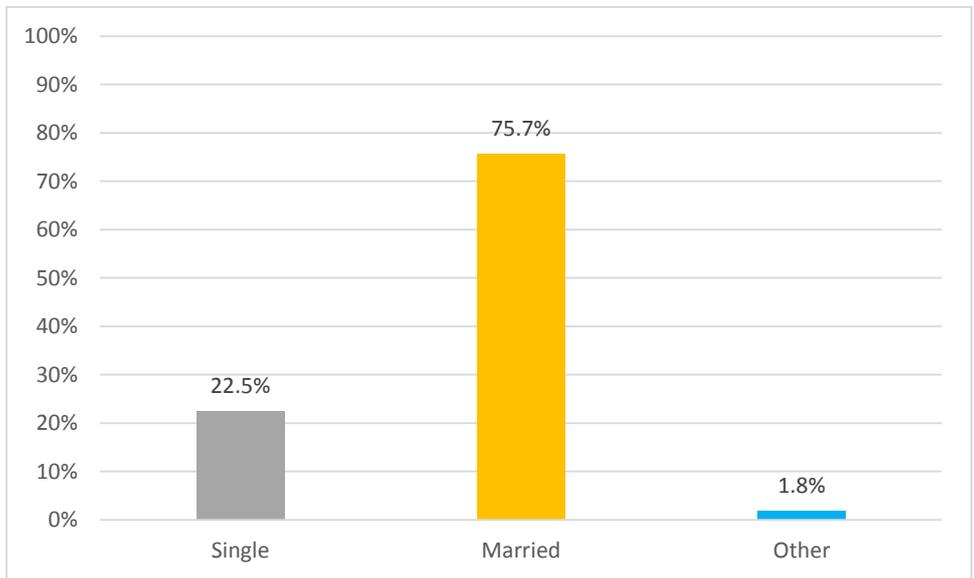


Figure-C.5: Sample Marital Status

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.844	.308		2.736	.008
	S3q1A. Overall satisfaction with Al-Ahli Hospital inpatient services	.741	.070	1.799	10.550	.000
	s4q1A. Overall satisfaction with Al-Ahli Hospital outpatient clinic services	.752	.074	1.882	10.222	.000
	s5q1a A. Overall satisfaction with Al-Ahli Hospital emergency services	.703	.078	1.522	9.018	.000
	s6q1A. Overall satisfaction with Al-Ahli Hospital pharmacy	.046	.070	.048	.666	.508
		R <sup>2</sup> = 0.64, F=36.092 Sig.=.000				

Figure-C.6: Linear Regression Results for Model 1

Dependent Variable: S2Q1: How would you rate your overall satisfaction with Al-Ahli Hospital?

Source: SPSS

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
2	(Constant)	1.877	.763		2.461	.026
	ServiceEscape3	.129	.249	.151	.516	.613
	Ease_of_Getting_the_Service3	.049	.203	.068	.243	.811
	Speed_of_Getting_the_Service3	.279	.130	.410	2.146	.048
	Courtesy_of_Staff3	-.409	.203	-.454	-2.014	.061
	Quality_Service3	-.085	.230	-.108	-.368	.717
	StaffCommunicationSkills3	.240	.244	.264	.983	.340
	Price3	-.020	.079	-.039	-.252	.804
	CES	-.006	.097	-.008	-.066	.948
	Competence	.228	.173	.295	1.318	.206
		R <sup>2</sup> = 0.76, F=5.105 Sig.=.002				

Figure-C.7: Linear Regression Results for Model 2

Dependent Variable: S3Q1A: Overall satisfaction with Al-Ahli Hospital inpatient services

Source: SPSS

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
3 R <sup>2</sup> = 0.759, F=8.492 Sig.=.000	(Constant)	.564	.788		.715	.480
	ServiceEscape4	-.101	.239	-.061	-.422	.677
	SpeedofGetting_the_Service4	.329	.146	.364	2.249	.033
	Staff_Communication_Skills4	.229	.331	.165	.690	.496
	CourtseyofStaff4	.038	.333	.029	.113	.911
	Price4	-.229	.125	-.223	-1.831	.078
	QualityoftheService4	.250	.334	.175	.748	.461
	Ease_of_Getting_the_Service4	.232	.256	.198	.906	.373
	CES	-.331	.139	-.306	-2.377	.025
	Competence	.239	.195	.213	1.223	.232

Figure-C.8: Linear Regression Results for Model 3  
 Dependent Variable: S4Q1A: Overall satisfaction with Al-Ahli Hospital Outpatient Clinic Services  
 Source: SPSS

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
4 R <sup>2</sup> = 0.616, F=5.105 Sig.=.002	(Constant)	-1.802	1.890		-.954	.354
	Service_Escape5	.866	.653	.336	1.326	.202
	EaseofGettingtheService5	-.129	.257	-.130	-.503	.621
	Speed_of_Getting_the_Service5	.753	.234	.599	3.817	.001
	Quality_of_theService5	.799	.463	.528	1.725	.103
	Staff_Communication_Skills5	-.546	.367	-.379	-1.485	.156
	Price5	.071	.161	.077	.440	.666
	Courtsey_of_Staff5	-.308	.457	-.187	-.674	.509
	CES	-.288	.205	-.283	-1.403	.179
	Competence	-.122	.286	-.089	-.428	.674

Figure-C.9: Linear Regression Results for Model 4  
 Dependent Variable: S5Q1A: Overall satisfaction with Al-Ahli Hospital emergency services  
 Source: SPSS

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
5  R2= 0.455, F= 11.344 Sig.=.000	(Constant)	.501	.536		.935	.353
	Speed_of_Getting_the_Service6	.256	.078	.321	3.279	.002
	Quality_of_the_Service6	.327	.193	.280	1.700	.094
	Staff_Communication_Skills6	.026	.172	.021	.152	.880
	Ease_of_Getting_the_Service6	.239	.124	.227	1.917	.059
	Price6	.045	.086	.051	.527	.600

Figure-C.10: Linear Regression Results for Model 5  
 Dependent Variable: S6Q1A. Overall satisfaction with Al-Ahli Hospital pharmacy  
 Source: SPSS

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
6  R2= 0.54, F= 11.18 Sig.=.000	(Constant)	0.642	0.464		1.382	0.171
	Service Escape _total	-0.169	0.148	-0.126	-1.14	0.257
	Ease of Getting Service_ total	0.088	0.123	0.086	0.713	0.478
	Speed of Getting the Service _total	0.226	0.105	0.24	2.15	0.034
	Courtesy of Staff _total	0.266	0.146	0.241	1.821	0.072
	Quality of the Service _total	0.251	0.179	0.213	1.405	0.164
	Staff Communication Skills _total	0.19	0.173	0.154	1.102	0.274
	Price _Total	-0.07	0.071	-0.078	-0.993	0.324
	CES	0.008	0.072	0.009	0.11	0.912
	Competence	0.053	0.115	0.056	0.464	0.644

Figure-C.11: Linear Regression Results for Model 6  
 Dependent Variable: S2Q1: How would you rate your overall satisfaction with Al Ahli Hospital?  
 Source: SPSS

## APPENDIX (D)

### *Correlation Analysis*

Table-D.1: The Inpatient Services category Items Correlations with the Whole Scale

<b>Inpatient Services</b>	<b>Corrected Item-Total Correlation</b>
S3Q1A. Overall satisfaction with Al-Ahli Hospital inpatient services	.762
S3Q1B. Ease of registrations and filling forms up	.677
S3Q1C. Time taken before admission	.549
S3Q1D. Hospital attendants (physicians, nurses, receptionists.... etc.) listening and understanding your needs	.739
S3Q1E. Hospital attendants (physicians, nurses, receptionists.... etc.) answering all your questions and queries	.822
S3Q1F. Hospital attendants (physicians, nurses, receptionists.... etc.) keeping you informed about your case	.731
S3Q1G. Hospital attendants (physicians, nurses, receptionists.... etc.) using language that you can understand	.808

S3Q1H. Hospital attendants (physicians, nurses, receptionists.... etc.) using words that you can understand i.e. using jargon free language and 2t complicated medical terms	.820
S3Q1I. Responsiveness of hospital attendants (physicians, nurses, receptionists.... etc.) and their prompt response to your needs	.826
S3Q1J. Hospital attendants (physicians, nurses, receptionists.... etc.) courtesy, friendliness and helpfulness	.749
S3Q1K. Hospital attendants (physicians, nurses, receptionists.... etc.) look and appearance	.640
S3Q1L. Hospital attendants (physicians, nurses, receptionists.... etc.) providing full information about medications, procedures, treatments, services provided and discharge instructions	.854
S3Q1M. Quality of food provided during stay	.644
S3Q1N. Quietness in the ward	.660
S3Q1O. Privacy in the room provided	.642
S3Q1P. Comfort of bed	.820
S3Q1Q. Cleanness of room	.629
S3Q1R. Location of the hospital	.595
S3Q1S. Hospital facilitates	.759
S3Q1T. Overall satisfaction with treatment provided	.860
S3Q1U. Time taken for discharge	.680

Table-D.2: The Outpatient Services Category Items Correlations with the Whole Scale

<b>Outpatient Services:</b>	<b>Corrected Item-Total Correlation</b>
S4Q1A. Overall satisfaction with Al-Ahli Hospital outpatient clinic services	.713
S4QB. Ease of making appointment	.503
S4QC. Availability of appointments	.618

S4QD. Convenience of appointment timings	.748
S4QE. Ease of registrations and filling forms up	.761
S4QF. Quality of refreshments provided in reception area	.532
S4QG. Wait time before attending to your appointment	.557
S4QH. Hospital attendants (physicians, nurses, receptionists.... etc.) listening and understanding your needs	.801
S4QI. Hospital attendants (physicians, nurses, receptionists.... etc.) answering all your questions and queries	.867
S4QJ. Hospital attendants (physicians, nurses, receptionists.... etc.) providing full information about medications, procedures, treatments and services provided	.811
S4QK. Hospital attendants (physicians, nurses, receptionists.... etc.) using language that you can understand	.850
S4QL. Hospital attendants (physicians, nurses, receptionists.... etc.) using words that you can understand i.e. using jargon free language and 2t complicated medical terms	.815
S4QM. Hospital attendants (physicians, nurses, reception.... etc.) courtesy, friendliness and helpfulness	.734
S4QN. Hospital attendants (physicians, nurses, reception.... etc.) look and appearance	.719
S4QO. Comfort in examination room	.637
S4QP. Location of the hospital	.424
S4QQ. Hospital facilitates	.380
S4Q R. Availability of parking spaces	.359
S4QS. Overall satisfaction with treatment provided	.766

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Table-D.3: The Emergency Category Items Correlations with the Whole Scale

<b>Emergency Services</b>	<b>Corrected Item-Total Correlation</b>
S5Q1A. Overall satisfaction with Al-Ahli Hospital emergency services	.713
S5Q1B. Ease of registrations and filling forms up.	.554
S5Q1C. Time taken before admission	.328
S5Q1D. Hospital attendants (physicians, nurses, receptionists.... etc.) listening and understanding your needs	.595
S5Q1E. Hospital attendants (physicians, nurses, receptionists.... etc.) answering all your questions and queries	.822
S5Q1F. Hospital attendants (physicians, nurses, receptionists.... etc.) keeping you informed about your case	.587
S5Q1G. Hospital attendants (physicians, nurses, receptionists.... etc.) using language that you can understand	.352
S5Q1H. Hospital attendants (physicians, nurses, receptionists.... etc.) using words that you can understand i.e. using jargon free language and 2t complicated medical terms	.538
S5Q1I. Responsiveness of hospital attendants (physicians, nurses, receptionists.... etc.) and their prompt response to your needs	.806
S5Q1J. Hospital attendants (physicians, nurses, receptionists.... etc.) courtesy, friendliness and helpfulness	.782
S5Q1K. Hospital attendants (physicians, nurses, receptionists.... etc.) look and appearance	.554
S5Q1L. Hospital attendants (physicians, nurses, receptionists.... etc.) providing full information about medications, procedures, treatments, services provided and discharge instructions	.721
S5Q1N. Quietness in the ward	.453
S5Q1O. Comfort of bed	-.293
S5Q1P. Cleanness of room	-.197
S5Q1Q. Location of the hospital	.368
S5Q1R. Hospital facilitates	.541
S5Q1S. Overall satisfaction with	.678

treatment provided	
S5Q1T. Time taken for discharge	.772

Table-D.4: The Pharmacy Category Items Correlations with the Whole Scale

<b>Pharmacy</b>	<b>Corrected Item-Total Correlation</b>
S6Q1A. Overall satisfaction with Al-Ahli Hospital pharmacy	.714
S6Q1B. Time taken to get the prescribed medication	.368
S6Q1C. Availability of medication	.665
S6Q1D. Pharmacist answering all your questions and queries	.801
S6Q1E. Providing full instructions about the prescribed medications	.805
S6Q1F. Pharmacist used language that you can understand	.574

Table-D.5: The Closing Questions Category Items Correlations with the Whole Scale

<b>Closing Questions</b>	<b>Corrected Item-Total Correlation</b>
S7Q1A. I have the trust and confidence in Al-Ahli Hospital treatments	.652
S7Q1B. Hospital attendants (physicians, nurses, receptionists.... etc.) at Al-Ahli Hospital are caring empathetic and provide personal attention to my needs	.652