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Collage of graduate studies
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Effect of Internal Customers ' (Doctors and Nurses) Satisfaction Level on the Patients and Co-patients Satisfaction (A Case Study at Royal Care International Hospital)

أثر مستوى رضا العملاء الداخليين (أطباء وممرضين) في رضا المرضى والمرافقين (دراسة الحالة
مستشفى رويال كير الدولي)

Research Submitted for Partial Fulfillment of the Requirement of the Master Degree in Total Quality Management and Excellence.

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بِسْمِ اللّٰهِ الرَّحْمٰنِ الرَّحِیْمِ

Dedication

I dedicate this to my mother and to the soul of my father.

Acknowledgement

First and foremost, I would like to thank god for giving me strength, knowledge, ability and opportunity to undertake this research study.

I would also like to thank Sudan University of science & technology and the entire staff who have been so helpful and cooperative.

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I would like to express my sincere gratitude to my sister Dr. Hind Elrayah Osman for the continuous support of my master study and research, for her patience, motivation and knowledge. Her guidance helped me in all the time of research and writing of this thesis

Last but not the least; I would like to thank my family and my husband for supporting me spiritually throughout writing this thesis and my life in general.

Abstract

The main problem investigated in this thesis is the effect of the internal customer (Doctors and nurse) satisfaction level on the external customer (patient and co patients) satisfaction in RCIH. The objectives of the study are to determine the level of the internal customers' satisfaction, to determine the level of the external customers' satisfaction and to determine the effect of the level of internal customer's satisfaction on the external customer's satisfaction on the service quality delivery. The researcher adopted the descriptive analytical approach .Population consists of internal customers (26)external customers (46).The population represents the sample of this study because it is generally small. Two different questionnaires distributed among the internal and external customers in the hospital. SPSS used for Data analysis. The study hypotheses are there is a relationship between internal customer satisfaction and external customer satisfaction or there is no relationship between internal customer satisfaction and external customer satisfaction. The results revealed that there is an effect of internal customers) satisfaction level on the external customer satisfaction. Recommendation to the hospital staffs the management and the staff must improve the level of service and products.

المستخلص

يتمثل محور هذه الدراسة في تأثير رضا العملاء الداخليين (الأطباء والمرضى) على رضا العملاء الخارجيين (المرضى والمرافقين) في مستشفى رويال كير العالمي. اهدف الدراسة هي تحديد مستوى رضا العملاء الداخليين، تحديد مستوى رضا العملاء الخارجيين وتحديد اثر مستوى رضا العملاء الداخليين في رضا العملاء الخارجيين. اتبعت هذه الدراسة المنهج الوصفي التحليلي. مجتمع الدراسة عملاء داخليين(26) وعملاء خارجيين(46) حيث اختيرت كلها كعينه نسبة لصغر حجم المجتمع.تم تحليل البيانات باستخدام برنامج الحزم الاحصائية للعلوم الاجتماعيه. وقد استخدمت الباحثة استبانتان مختلفتان كأداة لجمع البيانات من العملاء الداخليين والعملاء الخارجيين. فرضيات الدراسة توجد علاقة بين مستوى رضا العملاء الداخليين ورضا العملاء الخارجيين او لا توجد علاقة بين مستوى رضا العملاء الداخليين ورضا العملاء الخارجيين. وقد أظهرت النتائج أن رضا العملاء الداخليين مؤثر على رضا العملاء الخارجيين. وفي التوصيات يجب على الاداره والعاملين تطوير خدمه والمنتج .

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List of Abbreviations

RCIH	Royal Care International Hospital
SPSS	Statistical Package for Social Science

Chapter one
Introduction and previous studies

Introduction

To survive in highly competitive markets, organizations need to provide goods and services that yield highly satisfied and loyal customers. When customers are satisfied, they are more likely to return to those who helped them, while dissatisfied customers are more likely to go elsewhere. To attain sustained excellent external customer support requires internal systems that are aligned to serve the external customer. Thus the internal Customer (Employees) is the back of any organization for sustainable growth.

The problem of the study

This study is concerning of the study of effect of internal customers (doctors and nurses) satisfaction level on the patients and co-patients satisfaction: A case study at royal Care International hospital. This study raises the number of questions.

Questions of the study

- Is there dissatisfaction of the internal customers?
- Is there dissatisfaction of the external customers?

The significance of the study

This study will highlight the level of internal customers' satisfaction and improve the quality of the health services offered to the external customers.

The objectives of the study

- To determine the level of the internal customers' satisfaction.
- To determine the level of the external customers' satisfaction.
- To determine the effect of the level of internal customers satisfaction on the external customers satisfaction on the service quality delivery

The study hypothesis

- There is a relationship between internal customer satisfaction and external customer satisfaction

- There is no relationship between internal customer satisfaction and external customer satisfaction.

The limits of the study

The study will be conducted at Royal Care International Hospital in Khartoum state, Sudan. It will be conducted during the period from April to November 2018.

Research methodology

For the purpose of this study the researchers adopted the descriptive analytical approach to ensure availability of enough information.

This study will be carried out in Royal Care International Hospitals, Khartoum, Sudan. The target respondents for this study were doctors and nurses in the hospital as internal customers, and patient and Co-patients as external customers.

Questionnaires and interviews based surveys with the target respondents will be used in this study to collect the data.

The sample will be estimated according to the total population in the selected hospital using the data of the human resources.

Two different questionnaires will be distributed among the internal and external customers in the hospital. The first part of the questionnaire comprises of demographic information. The second part includes questions related to Internal Customer Satisfaction and /or external customer satisfaction.

Data will be analyzed using SPSS.

Previous studies

Study No. (1)

Managers constantly struggle with where to allocate their resources and efforts in managing the complex service delivery system called a hospital. In the broadest sense, their decisions and actions focus on two important aspects of health care—clinical or technical medical care that emphasizes “what” the patient receives and process performance that emphasizes “how” health care services are delivered to patients. Here, we investigate the role of leadership, clinical quality, and process quality on patient satisfaction. A causal model is hypothesized and evaluated using structural equation modeling for a sample of 202 U.S. hospitals. Statistical results support the idea that leadership is a good exogenous construct and that clinical and process quality are good intermediate outcomes in determining patient satisfaction. Statistical results also suggest that hospital leadership has more influence on process quality than on clinical quality, which is predominantly the doctors' domain. Other results are discussed, such as that hospital managers must be mindful of the fact that process quality is at least as important as clinical quality in predicting patient satisfaction. The article concludes by proposing areas for future research.

Study No. (2)

Purpose

– The purpose of this paper is to conceptualize hospital service quality (SQ) into its component dimensions from the perspectives of patients and their attendants; and to analyze the relationship between SQ and customer satisfaction (CS) in government and private hospitals in India.

(1)The study of Kathryn A. Marley, David A. Collier and Susan Meyer Goldstein (2004).

The Role of Clinical and Process Quality in Achieving Patient Satisfaction in Hospitals.

(2)The study of Panchapakesan Padma, Chandrasekharan Rajendran, Prakash Sai Lokachari (2010).

Service quality and its impact on customer satisfaction in Indian hospitals: Perspectives of patients and their attendants.

Design/methodology/approach

The study employs questionnaire-survey approach to obtain the perceptions of patients and attendants. The instruments developed have been validated using tests for reliability, validity and uni-dimensionality. Data collected have been analyzed by using statistical techniques such as bi-variate correlation and multiple regressions.

Findings

Patients and attendants treat the interpersonal aspect of care as the most important one, as they cannot fully evaluate the technical quality of healthcare services. The study also revealed that the hospital service providers have to understand the needs of both patients and attendants in order to gather a holistic view of their services.

Research limitations/implications

Results of the study are dependent on the nature and number of respondents, i.e. the study has captured only the perceptions of service receivers – patients and attendants; and sample size of the study – 204 patients and 204 attendants – due to limited response rate and other operational constraints.

Practical implications

The present study allows the hospital administrators to benchmark their hospitals with those of their competitors by comparing the mean values of the dimensions of SQ. The study also allows a comparison of the performance of government and private hospitals in terms of the services offered.

Originality/value

The study conceptualizes hospital SQ as an eight-dimensional framework. Further, it also presents the relationship between SQ and CS in Indian Government and private hospitals.

Study No. (3)

In today's world of intense competition, satisfying customers is only the base line and may not be sufficient for survival. Management should focus on gaining customer loyalty by enhancing customer perceptions of service quality and increasing as perceived by the consumer value. Although previous studies have addressed the importance of service quality, satisfaction, perceived value, and image, the precise nature of the relationships that exist between these constructs and the understanding of their effect on customer behavior still remains a key issue. This empirical study seeks to understand the relationships that exist between service quality and perceived value and how they impact customer satisfaction, corporate image, and behavioral intentions.

The proposed model indicates that delivering high quality service and creating superior customer value can result in achieve high customer satisfaction, thus affecting the firm's corporate image, and ultimately leading to consumer retention.

Study No. (4)

States that rapid changes in the environment have exerted significant pressures on hospitals to incorporate patient satisfaction in their strategic stance and quest for market share and long-term viability. This study proposes and tests a five-factor model that explains considerable variation in customer satisfaction with hospitals. These factors include communication with patients, competence of the staff, their demeanors, quality of the facilities, and perceived costs; they also represent strategic concepts that managers can address in their bid to remain competitive. A probability sample was selected and a multiple regression model used to test the hypotheses.

The results indicate that all five variables were significant in the model and explained 62 per cent of the variation in the dependent variable. Managerial implications of the proposed model are discussed.

(3)The study of Hsin-Hui (Sunny) Hu , Jay Kandampully & Thanika Devi Juwaheer(2009).

Relationships and impacts of service quality, perceived value, customer satisfaction, and image: an empirical study.

(4)Study of Syed Saad Andaleeb(1998).

Determinants of customer satisfaction with hospitals: a managerial model.

Study No. (5)

In today's highly competitive healthcare environment, hospitals increasingly realize the need to focus on service quality as a means to improve their competitive position. Customer-based determinants and perceptions of service quality therefore play an important role when choosing a hospital. This paper attempts to determine the expectations and perceptions of patients through the use of a generic, internationally used market research technique called SERVQUAL. An analysis covering 252 patients revealed that there was an overall service quality gap between patients' expectations and perceptions. Thus, improvements are required across all the six dimensions, namely, tangibility, reliability, responsiveness, assurance, empathy and accessibility and affordability.

Study No. (6)

Patients' perceptions about health services seem to have been largely ignored by health care providers in developing countries. That such perceptions, especially about service quality, might shape confidence and subsequent behaviors with regard to choice and usage of the available health care facilities is reflected in the fact that many patients avoid the system or avail it only as a measure of last resort. Those who can afford it seek help in other countries, while preventive care or early detection simply falls by the wayside. Patients' voice must begin to play a greater role in the design of health care service delivery processes in the developing countries. This study is, therefore, patient-centered and identifies the service quality factors that are important to patients; it also examines their links to patient satisfaction in the context of Bangladesh. A field survey was conducted. Evaluations were obtained from patients on several dimensions of perceived service quality including responsiveness, assurance, communication, discipline, and baksheesh.

(5) Study of Puay Cheng Lim, Nelson K.H. Tang (2000)

A study of patients' expectations and satisfaction in Singapore hospitals.

(6) Study of Syed Saad Andaleeb (2001)

Service quality perceptions and patient satisfaction: a study of hospitals in a developing country.

Using factor analysis and multiple regressions, significant associations were found between the five dimensions and patient satisfaction. Implications and future research issues are discussed.

In general the previous studies are focus on the customer satisfaction by delivering high quality service and improving communication and competence of staff.

Differing from my study in that my study was conducted in Sudan.

Chapter two
Literature review

As evident 'Customer Satisfaction' is amalgamation of two terms 'Customer' and 'Satisfaction'. Before analyzing the literature related to Customer Satisfaction, it would be feasible to review these two terms separately (Kavita, S. and Mallikarjun, N. L. , 2016, p.14).

Definitions of customer internal and external

According to Business Dictionary the term 'customer' is defined as "a party that receives or consumes products (goods or services) and has the ability to choose between different products and suppliers (Kavita, S. and Mallikarjun, N. L. , 2016, p.14).

According to Wikipedia a customer (sometimes known as a client, buyer or a purchaser) is the physical recipient of goods or services, or a product, or an idea, obtained from a seller, vendor, or supplier via a financial transaction or exchange for money or some other valuable consideration. But, there are many varied explanations and definitions so far as "Customer" is concerned (Kavita, S. and Mallikarjun, N. L. ,2016, p.14).

So far as the meaning and definition of 'Satisfaction' is concerned, it is a very crucial phenomenon for customers as well as organizations who are selling products and services. 'Satisfaction' ensures the validity of value of the price paid by the customer for the product/ services and for the organizations it is the factor which decides the fate of the organization, hence long term sustenance of the business per se. Now that the two distinctive definitions has been framed on 'customer' and 'satisfaction'(Kavita, S. and Mallikarjun, N. L. ,2016, p.15).

(Paul, S. Goldner ,2006, p27) defines, "...a customer is any organization or individual with which you have done business over the past twelve months".

(Grigoroudis, E. and Siskos, Y. ,2009 ,p.9) provide definition for ‘customer’ upon two approaches: With reference to Quality, “A customer is the person that assesses the quality of the offered products and services “and on process oriented approach, “the customer is the person or group that receives the work output” (Grigoroudis, E. and Siskos, Y. ,2009 ,p.9) .

those who interact with company after process have produces the product have been viewed as customers. (Goetsch,D.L.and davis, S.B. ,2013, p. 96).

Any employee whose work follows that of another employee and is dependent on it in some way is acustomer. (Goetsch,D.L.and davis, S.B. ,2013 ,p. 96).

Historically ,customers were considered outsiders who used a company’s products . (Goetsch,D.L.and davis, S.B. ,2013 ,p.109).

Organizations have defined external customers as people who buy and use their products (Goetsch,D.L.and davis, S.B. ,2013, p. 96).

In atotal quality setting external customers define quality and internal customer produce it. (Goetsch,D.L.and davis, S.B. ,2013, p .96).

Organization have defined internal customers as the staff. (Goetsch,D.L.and davis, S.B. ,2013, p. 96).

An internal customer is any employee whose work depends on that of employee whose work precedes his or hers. (Goetsch,D.L.and davis, S.B. ,2013, p. 109).

Attaining sustained excellent external customer support requires internal systems that are aligned to serve the external customer. Thus the internal customer (doctors and nurses) is the back of any organization for sustainable growth (Sivanesan ,2015, P.613).

To attain sustained excellent external customer support requires internal systems that are aligned to serve the external customer, with each internal subsystem adding value to others within the organization that are dependent on it; as though the other subsystems were its customers. (Sivanesan ,2015, P.614).

Definitions of customer satisfaction

(Caruana A. ,2002 ,p.811) customer satisfaction does play a mediating role in the effect of service quality on service loyalty.

According to (Tse D.K and Wilton ,1988, P.204) customer satisfaction is defined as the consumer's response to the evaluation of the perceived discrepancy between prior expectations (or some other norm of performance) and the actual performance of the product/service as perceived after its consumption.

In a study conducted in Jordan the authors reported that there is an impact for the health service quality on patient's satisfaction (Ahmad, *et al.* ,2012 ,p. 123).

(Nuriye Gures1, et al. ,2013, p.66) reliability and facilities had a significant positive effect on customer satisfaction. In addition customer satisfaction was found to be a significant determinant of customer loyalty.

dissatisfied customers do engage in greater word of mouth than satisfied ones. (Eugene w. Anderso,1998, p.5).

Attainable increases in satisfaction could dramatically improve profitability.(Roger Hallowell ,1996, p .27).

(Berry and Parasuraman ,1991, p.31) argue that since customers' satisfaction is influenced by the availability of customer services, the provision of quality customer service has become a major concern of all businesses. Customer

satisfaction is typically defined as a post consumption evaluative judgment concerning a specific product or service

(Howard and Sheth, 1969, p. 145) define satisfaction as "the buyer's cognitive state of being adequately or inadequately rewarded for the sacrifices he has undergone.

Competition in the markets of health services makes the satisfaction of the external customers, the patients and co-patients, an important target. Thus, as recorded by (Sivanesan, 2015, p.613) health organizations are challenged to create demand for their products and services through outstanding customer support.

Customer satisfaction and loyalty

(Tor W. A. and Bodil L. ,1998 ,P. 7) corporate image and customer satisfaction are not two separate routes to customer loyalty. Corporate image impacts customer loyalty directly whereas customer satisfaction does not.

(Oyeniya, O. and Abiodun, A.J. ,2011, p. 14) Service quality was found to impact positively on satisfaction and loyalty. An understanding of the various dimensions that affect loyalty will help managers to develop appropriate courses of action in providing better services and build customer loyalty.

(Dawn Iacobucci, et al ,1994, p.1) Quality and satisfaction are extremely important concepts to academic researchers, particularly in services marketing, and to practitioners as a means of creating competitive advantages and customer loyalty.

(Hsin-Hui (Sunny) , et al ,2006, p.111) In today's world of intense competition, satisfying customers is only the base line and may not be sufficient for survival. Management should focus on gaining customer loyalty by enhancing customer perceptions of service quality and increasing as perceived by the consumer value.

(Gray,B.andBoshoff,C. ,2004, p .27) the service quality dimensions Empathy of nursing staff and Assurance impact positively on both Loyalty and Cumulative satisfaction. The customer satisfaction dimensions Satisfaction with meals, Satisfaction with the nursing staff and Satisfaction with fees all impact positively on both Loyalty and Cumulative satisfaction

The study by (Parasuraman, et al ,1991 , p. 39) shows that some businesses have more than just a competitive advantage in customer service; they have staunch customer loyalty. They have argued that the key to provide best service is to understand and respond to customer expectations.

(Anton,1996 ,p.73) offers more elaboration: “customer satisfaction is a state of mind in which the customer’s needs, wants and expectations throughout the product or service life have been met or exceeded, resulting in subsequent repurchase and loyalty”.

Organizations attempt to consistently exceed customer expectations for the purpose of creating and maintaining customer loyalty. (Goetsch,D.L.and davis S.B. ,2013, p.106).

Service and service Quality

The service defined as "activity or benefit provided by one party to another and are basically intangible (not entailing of any ownership) and its production might be associated or not with a material commodity. (Kotler and Keller,2006).

(Puay C. L. and Nelson K.H. Tang ,2000 ,p.290) In today’s highly competitive healthcare environment, hospitals increasingly realize the need to focus on service quality as a means to improve their competitive position. Customer-based determinants and perceptions of service quality therefore play an important role when choosing a hospital.

(Panchapakesan P., Chandrasekharan R., Prakash S. L. ,2010, p.807) Patients and attendants treat the interpersonal aspect of care as the most important one, as they

cannot fully evaluate the technical quality of healthcare services. The study also revealed that the hospital service providers have to understand the needs of both patients and attendants in order to gather a holistic view of their services.

And I have been biased to the definition of internal and external customers by Goetsch, D.L. and Davis, S.B: In a total quality setting external customers define quality and internal customer produces it.

As we know, it is very important to satisfy external customers. Increase in external customer satisfaction level leads to customer loyalty and will refer company to others. Conversely external customers who suffers through a negative experience with the company because of an unsatisfied employee can harm an organization by discouraging others from patronizing it.

Then there is a definitely direct relationship between internal customer satisfaction and positive external experience which leads to external customer satisfaction and loyalty.

Chapter three
Methodology and procedure of field study

Introduction

This chapter explains the methodology used in gathering the information **required for the purpose of this research**. It highlights the source of data used, tools used in collection of the data and data analysis.

The methodology

In order to collect data for the determination of the effect of the internal customer satisfaction (Doctors and nurses) on the external customer (patient and co-patients) satisfaction in Royal Care International Hospital, the researcher adopted a descriptive analytical approach.

Population (subject) of the study

Is the collection of units within which the survey will be conducted. Population consists of doctors and nurses as internal **customers (26), patients and co-patients as external customers (46) in two departments (Obstetrics and gynecology &Surgery)** at Royal Care International Hospital.

The population represents the sample of this study because it is generally small.

The study tools

The tools used **for the** collection of data are questionnaire and interview technique to get information from the internal and external customers.

Validity of the questionnaire

Researcher used a statistical tool Cranach's alpha

Also the tool examined by some advisor in the field.

Organization profile: Royal Care International Hospital

The RCIH has been designed, structured and set to operate as an international medical care provider. The building designed was tailored to international standards and hence purpose built .consist of 150 beds (will increase to 400 beds), a tertiary care hospital located in Khartoum.

The hospital has state of the art equipment to serve all purposes in every department therefore the patient will be looked after completely with no need to resort to any other medical facility for any additional testing.

It is a full time, multi -specialty consultant based hospital with the facility to enjoy international connection with medical center anywhere in the world through telemedicine and video conferencing.

Vision Statement

- To be a medical center of excellence in the Middle East and Africa.
- To lead a patient centered and high quality care facility in Sudan
- To be a health care facility of choice in the region.

Mission Statement

To deliver high quality and safe care, through innovative design by dedicated competent, professional staff; seeking efficient equitable and timely services; to achieve the most attainable satisfaction for patients and their families.

Values

- Focus on patients and their families.
- Respect all patients, their rights, privacy and confidentiality.
- Provide full care without discrimination, regardless of the patient's gender, race, and region social class.
- Ensure safety, equity, efficiency, effectiveness, transparency and fairness.
- Comply with and commit to medical ethics and professional law, rules and regulations.

Procedure of field study

Society of the study

The society of the study consist of doctors and nurses as internal customers and patients and co patients as external customers in Royal Care International Hospital.

Questionnaire form was designed according to likert fifth scale

Strongly agree, agree, uncertain, disagree& strongly disagree.

Number of distributed questionnaire forms =72

Number of received questionnaire forms =72

Number of questionnaire forms analyzed = 72

The SPSS program (statistical package for social science) was used for the analysis of the data collected.

The chi- square and correlation coefficient test were adopted to test the hypothesis of the study at $\alpha =0.05$.

Chapter four
Result and discussion

The first topic

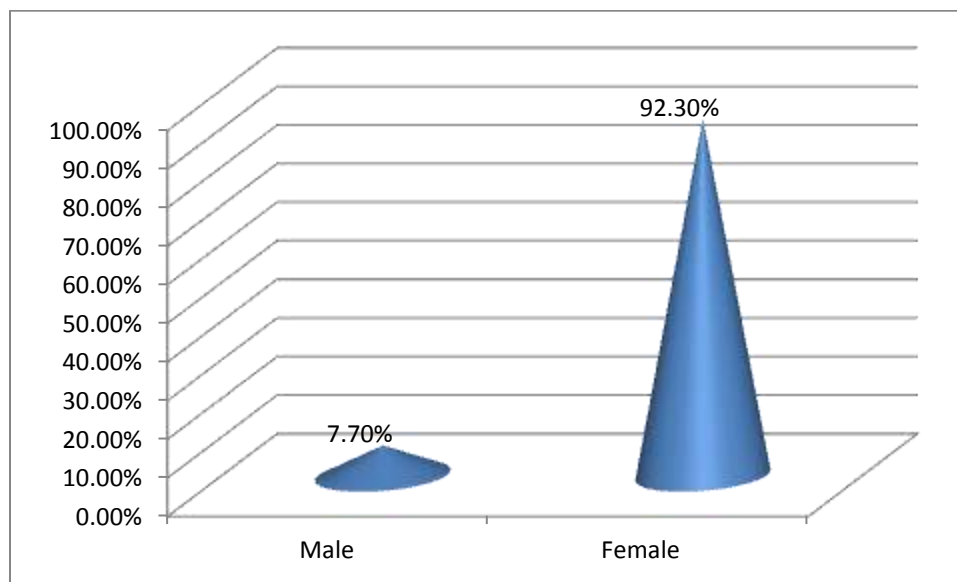
View and analyze data for doctors and nurses

This course deals with the field study procedures under the following sections
First: population and sample of the study

Table (1) illustrates the frequency and percentage for the sex

sex	Frequencies	Percentage
Male	2	7.7%
Female	24	92.3%
Total	26	100.0%

Source: IPM SPSS 24 package



Source: excel 2016

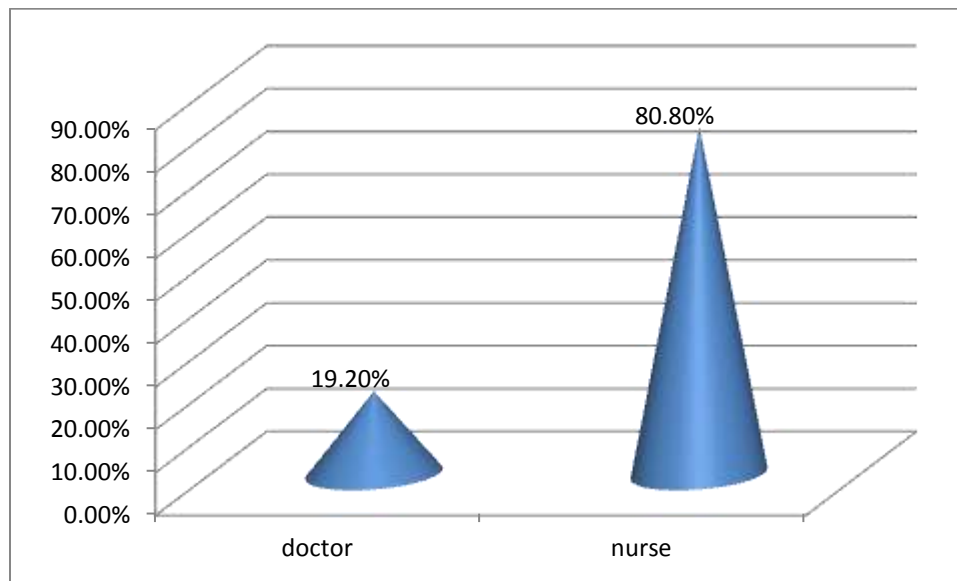
Figure (1) illustrates the views of the distribution of the sex sample by male by (%7.7) and female by (%92.3).

Most of population is females because all of nurses are females.

Table (2) illustrates the frequency and percentage for the Job category

Job category	Frequencies	Percentage
doctor	5	19.2%
nurse	21	80.8%
Total	26	100.0%

Source: IPM SPSS 24 package



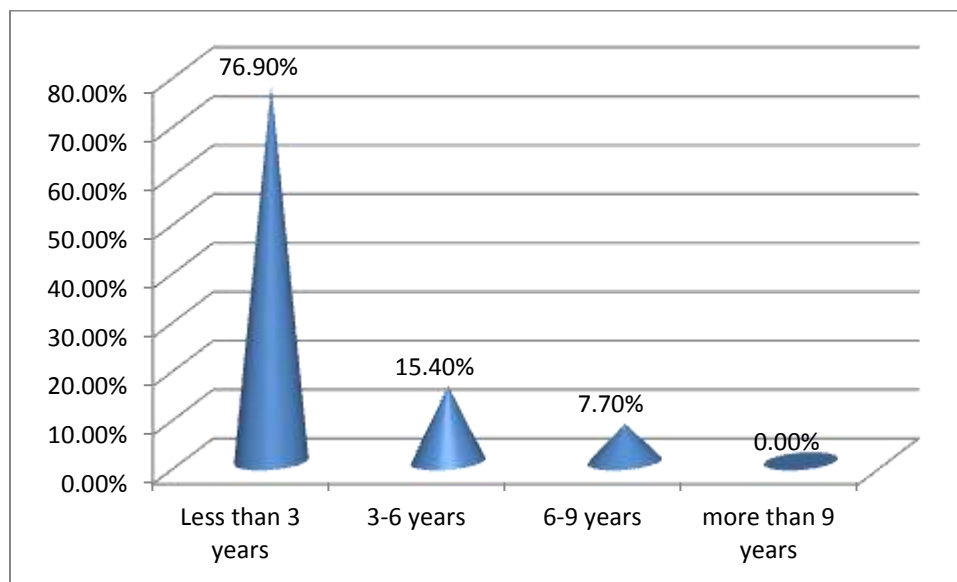
Source: excel 2016

Figure (2) illustrates the views of the distribution of the Job category Sample doctor by (%19.2) and nurse by (%80.8).

Table (3) illustrates the frequency and percentage for the How long have you work in this hospital

years	Frequencies	Percentage
Less than 3 years	20	76.9%
From 3 and less than6 years	4	15.4%
6-9 years	2	7.7%
more than 9 years	0	0.0%
Total	26	100.0%

Source: IPM SPSS 24 package



Source: excel 2016

Figure (3) illustrates the views of the distribution of the How long have you work in this hospital sample by Less than 3 years by (%76.9) and 3-6 years by (%15.4) and 6-9 years by (%7.7) and more than 9 years by (%0.0)

Second: reliability and validity

Cranach's alpha method: -

Where reliability was calculated using Cranach's alpha equation shown below:

$$\text{Reliability coefficient} = \frac{n}{N-1} * \frac{1 - \text{Total variations questions}}{\text{variation college grades}}$$

$$\text{Validity} = \sqrt{\frac{n}{N-1} * \frac{1 - \text{Total variations questions}}{\text{variation college grades}}}$$

Cranach alpha coefficient = (0.84), a reliability coefficient is high and it indicates the stability of the scale and the validity of the study

Validity coefficient is the square of the islands so reliability coefficient is (0.92), and this shows that there is a high sincerity of the scale and that the benefit of the study.

The second topic

View and analyze data

Table (4) illustrates the frequency and percentage for doctors and nurse answers.

Phrase	frequency				
	Strongly agree	agree	uncertain	disagree	strongly disagree
1. Hospital building is suitable for treatment and /or management of patients.	12	14	0	0	0
percentage	46.2%	53.8%	0.0%	0.0%	0.0%
2. Cleaning service of the hospital is good.	13	13	0	0	0
percentage	50%	50%	0.0%	0.0%	0.0%
3. The hospital provides all the equipments, supplies and resources necessary for me to perform my duties.	9	15	1	1	0
percentage	34.6%	57.7%	3.8%	3.8%	0.0%
4. Work load is reasonable.	4	17	1	4	0
percentage	15.4%	65.4%	3.8%	15.4%	0.0%
5. The circumstance of work affecting my personal life.	6	11	2	6	1
percentage	23.1%	42.3%	7.7%	23.1%	3.8%
6. I have an accurate written job description.	4	8	6	6	2
percentage	15.4%	30.8%	23.1%	23.1%	7.7%
7. Feeling contributing to the hospital mission.	8	10	4	4	0
percentage	30.8%	38.5%	15.4%	15.4%	0.0%
8. Managers response to doctors /nurse needs.	9	9	4	4	0

percentage	34.6%	34.6%	15.4%	15.4%	0.0%
9. Hospital management makes changes based on my suggestions and feedback.	5	9	5	6	1
percentage	19.2%	34.6%	19.2%	23.1%	3.8%
10. Empowering system is good in the hospital	11	8	1	5	1
percentage	42.3%	30.8%	3.8%	19.2%	3.8%
11. Find difficulty when I want to see reports about my job performance.	2	11	6	5	2
percentage	7.7%	42.3%	23.1%	19.2%	7.7%
12. Hospital provided with all training necessary for me to perform my job.	10	5	7	4	0
percentage	38.5%	19.2%	26.9%	15.4%	0.0%
13. Feeling problems when dealing with patients	3	6	3	12	2
percentage	11.5%	23.1%	11.5%	46.2%	7.7%
14. Feeling problems when dealing with co- patients.	6	8	5	4	3
percentage	23.1%	30.8%	19.2%	15.4%	11.5%
15. I feel I can easily communicate with members of all levels of this hospital.	12	9	1	3	1
percentage	46.2%	34.6%	3.8%	11.5%	3.8%
16. Feeling cooperation with management.	7	10	3	5	1
percentage	26.9%	38.5%	11.5%	19.2%	3.8
17. Communication between the team and managers is enough to ensure the hospital quality improvement.	8	11	3	2	2

percentage	30.8%	42.2%	11.5%	7.7%	7.7%
18. The spirit of team work in the hospital is good.	13	8	3	2	0
percentage	50.0%	30.8%	11.5%	7.7%	0.0%
19. Feeling satisfied in my work.	9	12	1	3	1
percentage	34.6%	46.2%	3.8%	11.5%	3.8%
20. I would recommend this hospital to other worker as a good place to work.	10	12	2	2	0
percentage	38.5%	46.2%	7.7%	7.7%	0.0%

Table (5) illustrates chi-square test results for respondent's answers

No	Phrases	Chi-square value	df	Sig.	Median	Interpretation
1	Hospital building is suitable for treatment and /or management of patients.	11.154	1	0.000	4.00	agree
2	Cleaning service of the hospital is good.	10.243	1	0.000	4.50	strongly agree
3	The hospital provides all the equipment's, supplies and resources necessary for me to perform my duties.	21.385	3	0.000	4.00	agree
4	Work load is reasonable.	23.538	3	0.000	4.00	agree
5	The circumstance of work affecting my personal life.	12.077	4	0.000	4.00	agree
6	I have an accurate written job description.	14.000	4	0.000	3.00	neutral
7	Feeling contributing to the hospital mission.	14.154	3	0.000	4.00	agree
8	Managers response to doctors /nurse needs.	13.846	4	0.000	4.00	agree
9	Hospital management makes changes based on my suggestions and feedback.	16.308	4	0.000	4.00	agree
10	Empowering system is good in the hospital.	14.769	4	0.000	4.00	agree

Source: IPM SPSS 24 package

The results of table (5) Interpreted as follows:

1. The value of chi – square calculated to signify the differences between Hospital building is suitable for treatment and /or management of patients was (11.154) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.

2. The value of chi – square calculated to signify the differences between Cleaning service of the hospital is good was (10.243) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
3. The value of chi – square calculated to signify the differences between The hospital provides all the equipment, supplies and resources necessary for me to perform my duties was (21.385) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
4. The value of chi – square calculated to signify the differences between Work load is reasonable was (23.538) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
5. The value of chi – square calculated to signify the differences between The circumstance of work affecting my personal life was (12.077) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
6. The value of chi – square calculated to signify the differences between I have an accurate written job description was (14.000) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
7. The value of chi – square calculated to signify the differences between Feeling contributing to the hospital mission was (14.154) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
8. The value of chi – square calculated to signify the differences between Managers response to doctors /nurse needs was (13.846) with P-value

(0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.

9. The value of chi – square calculated to signify the differences between Hospital management makes changes based on my suggestions and feedback was (16.308) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
10. The value of chi – square calculated to signify the differences between Empowering system is good in the hospital was (14.769) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.

Table (6) illustrates chi-square test results for respondents answer (cont.)

No	Phrases	Chi-square value	df	Sig.	Median	Interpretation
1	Find difficulty when I want to see reports about my job performance.	10.538	4	0.000	3.50	Agree
2	Hospital provided with all training necessary for me to perform my job.	3.231	3	0.000	4.00	Agree
3	Feeling problems when dealing with patients.	12.846	4	0.000	2.00	Disagree
4	Feeling problems when dealing with co- patients.	2.846	4	0.000	4.00	Agree
5	I feel I can easily communicate with members of all levels of this hospital.	19.385	4	0.000	4.00	Agree
6	Feeling cooperation with management.	9.385	4	0.000	4.00	Agree
7	Communication between the team and managers is enough to ensure the hospital quality improvement.	12.84	4	0.000	4.00	Agree
8	The spirit of team work in the hospital is good	11.84	3	0.000	4.50	Strongly agree
9	Feeling satisfied in my work.	19.385	4	0.000	4.00	Agree
10	I would recommend this hospital to other worker as a good place to work.	12.769	3	0.000	4.00	Agree

Source: IPM SPSS 24 package

The results of table (6) Interpreted as follows:

1. The value of chi – square calculated to signify the differences between Find difficulty when I want to see reports about my job performance was (10.538) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.

2. The value of chi – square calculated to signify the differences between Hospital provided with all training necessary for me to perform my job was (3.231) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
3. The value of chi – square calculated to signify the differences between Feeling problems when dealing with patients was (12.846) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
4. The value of chi – square calculated to signify the differences between Feeling problems when dealing with co- patients was (2.846) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
5. The value of chi – square calculated to signify the differences between I feel I can easily communicate with members of all levels of this hospital was (19.385) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
6. The value of chi – square calculated to signify the differences between Feeling cooperation with management was (9.385) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
7. The value of chi – square calculated to signify the differences between Communication between the team and managers is enough to ensure the hospital quality improvement was (12.84) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
8. The value of chi – square calculated to signify the differences between The spirit of team work in the hospital is good was (11.84) with P-value (0.000)

which is lower than the level of significant value (5%) These refer to the existence of differences statistically.

9. The value of chi – square calculated to signify the differences between Feeling satisfied in my work was (19.385) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
10. The value of chi – square calculated to signify the differences between I would recommend this hospital to other worker as a good place to work was (12.769) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.

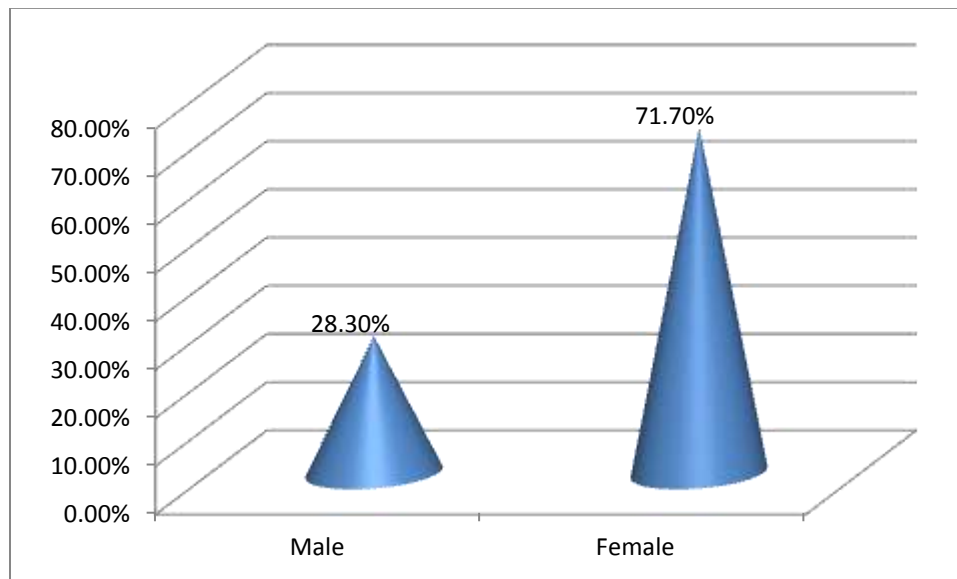
The first topic

View and analyze data for patients and co patients

Table (7) illustrates the frequency and percentage for the sex

sex	Frequencies	Percentage
Male	13	28.3%
Female	33	71.7%
Total	46	100.0%

Source: IPM SPSS 24 package



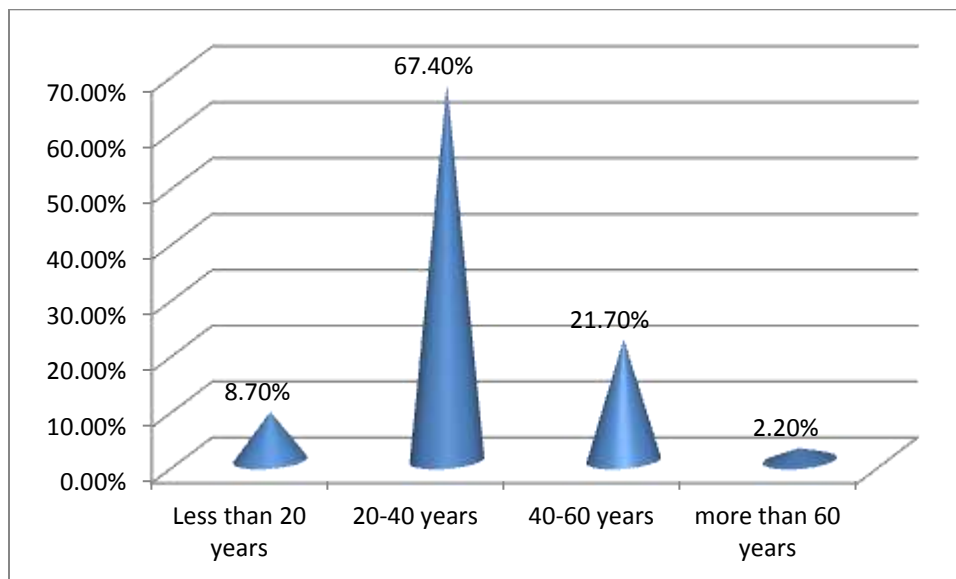
Source: excel 2016

Figure (4) illustrates the views of the distribution of the sex sample by male by (%28.3) and female by (%71.7).

Table (8) illustrates the frequency and percentage for the age

Value	Frequencies	Percentage
Less than 20 years	4	8.7%
20-40 years	31	67.4%
40-60 years	10	21.7%
more than 60 years	1	2.2%
Total	46	100.0%

Source: IPM SPSS 24 package



Source: excel 2016

Figure (5) illustrates the views of the distribution of the age sample by less than 20 years by (%8.7) and 20-40 years by (%67.4) and 40-60 years by (%21.7) and more than 60 years by (%2.2)

Second: reliability and validity

Cranach's alpha method: -

Where reliability was calculated using Cranach's alpha equation shown below:

$$\text{Reliability coefficient} = \frac{n}{N-1} * \frac{1 - \text{Total variations questions}}{\text{variation college grades}}$$

$$\text{Validity} = \sqrt{\frac{n}{N-1} * \frac{1 - \text{Total variations questions}}{\text{variation college grades}}}$$

Cranach alpha coefficient = (0.86), a reliability coefficient is high and it indicates the stability of the scale and the validity of the study

Validity coefficient is the square of the islands so reliability coefficient is (0.93), and this shows that there is a high sincerity of the scale and that the benefit of the study.

The second topic

View and analyze data

Table (9) illustrates the frequency and percentage for patients and co patients answers.

Phrase	frequency				
	Strongly agree	agree	uncertain	disagree	Strongly disagree
1.Cleaning service of the hospital is good	32	13	0	1	0
percentage	69.6%	28.3%	0.0%	2.2%	0.0%
2.I think RCIH has everything needed to provide complete medical care	24	8	4	5	5
percentage	52.2%	17.4%	8.7%	10.9%	10.9%
3.When I go for medical care they are careful to check everything when treating and examining me	29	7	2	4	4
percentage	63.0%	15.2%	4.3%	8.7%	8.7%
4.In the hospital patients haven't to wait too long for emergency treatment	21	8	7	5	5
percentage	45.7%	17.4%	15.2%	10.9%	10.9%
5.I find It easy to get an appointment for medical care right way	29	3	8	2	4
percentage	63.0%	6.5%	17.4%	4.3%	8.7%
6.I have easy access to the medical specialist I need	29	8	4	4	1
percentage	63.0%	17.4%	8.7%	8.7%	2.2%
7.Doctors/ nurses treat me in a very friendly and courteous manner	27	12	1	2	4
percentage	58.7%	26.1%	2.2%	4.3%	8.7%
8.Doctors/ nurses usually spend a plenty of time with me	21	15	5	4	1

percentage	45.7%	32.6%	10.9%	8.7%	2.2%
9.Doctors are good about explaining the reasons of medical tests	15	2	10	11	8
percentage	32.6%	4.3%	21.7%	23.9%	17.4%
10.Feeling satisfied when dealing with RCIH and The medical care I have been receiving is perfect	20	18	2	2	4
percentage	43.5 %	39.1%	4.3%	4.3%	8.7%

Table (10) illustrates chi-square test results for respondents answer

No	Phrases	Chi-square value	df	Sig.	Median	Interpretation
1	Cleaning service of the hospital is good	31.870	2	0.000	5.00	Strongly agree
2	I think RCIH has everything needed to provide complete medical care	30.739	4	0.000	5.00	Strongly agree
3	When I go for medical care they are careful to check everything when treating and examining me	54.652	4	0.000	5.00	Strongly agree
4	In the hospital patients haven't to wait too long for emergency treatment	19.652	4	0.000	4.00	agree
5	I find It easy to get an appointment for medical care right way	55.522	4	0.000	5.00	Strongly agree
6	I have easy access to the medical specialist I need	55.957	4	0.000	5.00	Strongly agree
7	Doctors/ nurses treat me in a very friendly and courteous manner	51.174	4	0.000	5.00	Strongly agree
8	Doctors/ nurses usually spend a plenty of time with me	30.957	4	0.000	4.00	agree
9	Doctors are good about explaining the reasons of medical tests	9.870	4	0.000	3.00	Neutral
10	Feeling satisfied when dealing with RCIH and The medical care I have been receiving is perfect	35.304	4	0.000	4.00	agree

Source: IPM SPSS 24 package

The results of table (10) Interpreted as follows:

1. The value of chi – square calculated to signify the differences between Cleaning service of the hospital is good was (31.870) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.

2. The value of chi – square calculated to signify the differences between I think RCIH has everything needed to provide complete medical care was (30.739) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
3. The value of chi – square calculated to signify the differences between When I go for medical care they are careful to check everything when treating and examining me was (54.652) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
4. The value of chi – square calculated to signify the differences between in the hospital patients haven't to wait too long for emergency treatment was (19.652) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
5. The value of chi – square calculated to signify the differences between I find It easy to get an appointment for medical care right way was (55.522) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
6. The value of chi – square calculated to signify the differences between I have easy access to the medical specialist I need was (55.957) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
7. The value of chi – square calculated to signify the differences between Doctors/ nurses treat me in a very friendly and courteous manner was (51.174) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.
8. The value of chi – square calculated to signify the differences between Doctors/ nurses usually spend a plenty of time with me was (30.957) with P-

value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.

9. The value of chi – square calculated to signify the differences between Doctors are good about explaining the reasons of medical tests was (9.870) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.

10. The value of chi – square calculated to signify the differences between Feeling satisfied when dealing with RCIH and The medical care I have been receiving is perfect was (35.304) with P-value (0.000) which is lower than the level of significant value (5%) These refer to the existence of differences statistically.

The study hypothesis

1\|There is a relationship between internal customer satisfaction and external customer satisfaction.

2\|There is no relationship between internal customer satisfaction and external customer satisfaction.

Table (11) illustrates relationship between internal customer satisfaction and external customer satisfaction

Value	Chi-square	DF	Sig.	Median	Correlation	Statistical significant
internal customer	17.401	6	0.025	4	0.83	Significant
external customer						

Source: IPM SPSS 24 package

Table (11) shows that the value of the Chi-square test (17.401) by significant value (0.025) it's less than the probability value (0.05) this means that there a relationship between internal customer satisfaction and external customer satisfaction by correlation coefficient (0.83).

Discussion

There is a relationship between internal customer satisfaction and external customer satisfaction in RCIH.

And this result agree with the study of

(1)The study of Kathryn A. Marley, David A. Collier and Susan Meyer Goldstein (2004).

The Role of Clinical and Process Quality in Achieving Patient Satisfaction in Hospitals.

(2)The study of Panchapakesan Padma, Chandrasekharan Rajendran, Prakash Sai Lokachari (2010).

Service quality and its impact on customer satisfaction in Indian hospitals: Perspectives of patients and their attendants.

(3)The study of Hsin-Hui (Sunny) Hu , Jay Kandampully & Thanika Devi Juwaheer(2009).

Relationships and impacts of service quality, perceived value, customer satisfaction, and image: an empirical study.

(4)Study of Syed Saad Andaleeb(1998).

Determinants of customer satisfaction with hospitals: a managerial model.

(5)Study of Puay Cheng Lim, Nelson K.H. Tang (2000)

A study of patients' expectations and satisfaction in Singapore hospitals.

(6)Study of Syed Saad Andaleeb(2001)

Service quality perceptions and patient satisfaction: a study of hospitals in a developing country.

Chapter five

Conclusion

Result of study hypothesis:

Accept hypothesis number (1): There is a relationship between internal customer satisfaction and external customer satisfaction.

This study has shown that customer satisfaction in RCIH was high what means there is a small gap for continues improvement. For example :

I have accurate written job description

I feel I can easily communicate with members of all levels of this hospital

Empowering system is good in the hospital

I think RCIH has everything needed to provide complete medical care

Recommendations

Management must clarify everything about the job to the staff.

Management and staff must improve communication.

Management and staff must improve empowering system.

The management and the staff must improve the level of service and products to assure external customer satisfaction.

Recommendations for future researches

Due to time the sample used in this study is limited to two departments on RCIH (Obstetrics and gynecology & Surgery)

Future researches should focus on

1. Effect of Internal Customer Satisfaction level on the External Customer Satisfaction Level in Royal Care International Hospital.
2. Effect of Internal Customer Satisfactions on the External Customer Satisfactions in Two Hospitals (private vs. public hospital).

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Appendix (1)

Sudan University of science & technology

Collage of graduate studies

Deanship of quality and development

Research questionnaire

This questionnaire is presented to get information about **the opinion of** the internal customer (doctors and nurses) satisfaction. Please read it carefully .we are interested in your feelings, good and bad .How strongly do you agree or disagree with each of the following statements.

The following items are for statistical information:

Gender: male () female ()

Job category: doctor () nurse ()

How long have you work in this hospital?

Less than 3 years () 3-6 years () 6-9 years () more than 9 years ()

Thanks for participation.

Doctors and nurses satisfaction questionnaire:

statement	Strongly agree	agree	uncertain	Disagree	Strongly disagree
1. Hospital building is suitable for treatment and /or management of patients.					
2. Cleaning service of the hospital is good.					
3. The hospital provides all the equipments, supplies and resources necessary for me to perform my duties.					
4. Work load is reasonable.					
5. The circumstance of work affecting my personal life.					
6. I have an accurate written job description.					
7. Feeling contributing to the hospital mission.					
8. Managers response to doctors /nurse needs.					
9. Hospital management makes changes based on my suggestions and feedback.					
10. Empowering system is good in the hospital.					
11. Find difficulty when I want to see reports about my job performance.					

12.Hospital provided with all training necessary for me to perform my job.					
13.Feeling problems when dealing with patients.					
14.. Feeling problems when dealing with co- patients.					
15.I feel I can easily communicate with members of all levels of this hospital.					
16.Feeling cooperation with management.					
17.Communication between the team and managers is enough to ensure the hospital quality improvement.					
18.The spirit of team work in the hospital is good.					
19.Feeling satisfied in my work.					
20.I would recommend this hospital to other worker as a good place to work.					

Sudan University of science & technology

Collage of graduate studies

Deanship of quality and development

Research questionnaire

This questionnaire is presented to get information about the external customer (patients and co patients) satisfaction. Please read it carefully keeping in mind the medical care you are receiving now .we are interested in your feelings, good and bad, about the medical care you have received. How strongly do you agree or disagree with each of the following statements.

The following items are for statistical information:

Gender: male () female ()

Age:

Less than 20 years () 20 -40 years () 40-60 years () more than 60()

Thanks for participation.

Patient satisfaction questionnaire:

statement	Strongly agree	agree	uncertain	Disagree	Strongly disagree
1. Cleaning service of the hospital is good.					
2. I think RCIH has everything needed to provide complete medical care.					
3. When I go for medical care they are careful to check everything when treating and examining me.					
4. In the hospital patients haven't to wait too long for emergency treatment.					
5. I find It easy to get an appointment for medical care right way.					
6. I have easy access to the medical specialist I need.					
7. Doctors/ nurses treat me in a very friendly and courteous manner.					
8. Doctors/ nurses usually spend a plenty of time with me.					
9. Doctors are good about explaining the reasons of medical tests.					
10. Feeling satisfied when dealing with RCIH and The medical care I have been receiving is perfect.					

Appendix (2)

جامعة السودان للعلوم والتكنولوجيا

كلية الدراسات العليا

عمادة الجودة والتطوير

استبانة البحث

يتم تقديم هذا الاستبانة للحصول على معلومات حول إرضاء العميل الداخلي (الأطباء والممرضين). يرجى قراءتها بعناية. نحن مهتمون بأرائك، حسناً وسيئاً. وعلى موافتك لكل عبارة من العبارات التالية:

العناصر التالية هي للحصول على معلومات إحصائية:

النوع: () ذكر () أنثى

مجال الوظيفة: () ممرض () طبيب

منذ متى وأنت تعمل في هذا المستشفى؟

أقل من 3 سنوات () 3-6 سنوات () 6-9 سنوات () أكثر من 9 سنوات ()

شكرا على المشاركة.

استبيان رضا الأطباء /المرضات

البيان	أوافق بشدة	أوافق	أوافق	أست متأكد	اعتراض بشده
1/مبنى المستشفى مناسب لعلاج و / أو إدارة المرضى.					
2/خدمة تنظيف المستشفى جيدة.					
3/يوفر لي المستشفى جميع المعدات واللوازم والموارد اللازمة لأداء واجباتي.					
4/كمية العمل معقولة.					
5/ظروف العمل تؤثر على حياتي الشخصية.					
6/لدي وصف دقيق للوظيفة مكتوب.					
7/اشعر بالمساهمة في مهمة المستشفى.					
8/يستجيب المدراء لاحتياجات الأطباء والمرضى.					
9/تقوم إدارة المستشفى بإجراء تغييرات استنادًا إلى اقتراحاتي وتعليقاتي.					
10/نظام التمكين جيد في المستشفى.					
11/توجد صعوبة عندما أريد الاطلاع على تقارير حول أدائي الوظيفي					
12/قدمت المستشفى التدريب اللازم بالنسبة لي لأداء وظيفتي.					
13/توجد مشاكل عند التعامل مع المرضى.					
14/توجد مشاكل عند التعامل مع المرافقين.					
15/أشعر أنني أستطيع التواصل بسهولة مع جميع					

					مستويات هذا المستشفى.
					16/ اشعر بالتعاون مع الإدارة.
					17/التواصل بين الفريق والمدراء يكفي لضمان تحسين جودة المستشفى.
					18/روح العمل الجماعي في المستشفى جيد.
					19/اشعر بالرضا في عملي.
					20/يمكن أن أوصي بهذا المستشفى لعامل آخر كمكان جيد للعمل.

جامعة السودان للعلوم والتكنولوجيا

كلية الدراسات العليا

عمادة الجودة والتطوير

استبانة البحث

يتم تقديم هذا الاستبيان للحصول على معلومات حول مدى ارتياح العميل الخارجي (المرضى والمرافقين). يرجى قراءتها بعناية مع الأخذ بعين الاعتبار الرعاية الطبية التي تتلقاها الآن. إننا نهتم بمشاعرك ، جيدة وسيئة ، حول الرعاية الطبية التي تلقيتها.

إلى أي مدى توافق أو لا توافق على كل عبارة من العبارات التالية

العناصر التالية هي للحصول على معلومات إحصائية:

النوع:

ذكر () أنثى ()

العمر:

أقل من 20 سنة () 20-40 سنة () 40-60 سنة () أكثر من 60 ()

شكرا على المشاركة.

استبيان رضا المريض /المرافق:

البيان	أوافق بشدة	أوافق	لست متأكد	اعتراض	أعترض بشدة
1/ خدمة التنظيف في المستشفى جيدة.					
2/أعتقد أن مستشفى رويال كير لديها كل ما يلزم لتوفير الرعاية الطبية اللازمة.					
3/عندما أذهب للحصول على الرعاية الطبية ، هم حريصون على التحقق من كل شيء.					
4/لا ينتظر المريض وقتا طويلا للعلاج في حالات الطوارئ.					
5/أجد أنه من السهل الحصول على موعد للرعاية الطبية بالطريقة الصحيحة.					
6/لدي سهولة للوصول إلى الطبيب المتخصص الذي أحтаجه.					
7/يعاملني الأطباء والممرضات بطريقة ودية ومهذبة.					
8/عادةً ما يقضي الأطباء والممرضات الكثير من الوقت معي.					
9/الأطباء جيدون في شرح أسباب الاختبارات الطبية.					
10/أشعر بالرضا عند التعامل مع مستشفى رويال كير والرعاية الطبية مثالية.					

Appendix (3)

The adjudicators of the Questionnaire are:

- Dr .Abd- almutalab Ibrahim.
- Dr .Ashraf Hassan.