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Impact of Implementing Marketing Mix Factors on the Quality of hospital Services

(Case Study: Health Care Hospital)

أثر تطبيق عوامل المزيج التسويقي على جودة خدمات المستشفى (در اسة حالة: مستشفى هيلث كير)

A thesis submitted in partial fulfillment for requirement of M.Sc degree in total quality Management & excellence

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#### **Dedication**

# To my parents To my brothers and my sisters To all my friends

#### Acknowledgement

#### All thank to Allah

And a lots of thank to Sudan University of science and technology the place where we gain knowledge.

I would like to acknowledge the assistance of many people, who provided help, support, encouragement, and enabled me to complete my master dissertation.

In Particular, I would like to acknowledge the contribution of my principle supervisor, Dr **Ibrahim fadol almwolly**. who guided and encouraged me, as well as audited my questionnaire besides giving me more advice.

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Finally, I wish to express my gratitude and love to my parents my sisters and my brother for their unreserved Love, support and encouragement. The courage and determination they taught me have made my life so wonderful.

#### **Abstract**

Implementing marketing mix in hospitals ensure that their services meet all customer's requirements with high quality.

The aim of this research is to know the impact of implementing marketing mix factors on the quality of hospital services.

The study population consisted of the personal from all department of health care hospital. The researcher used descriptive approach and system of statistical analysis and Chi-square to calculate the assumptions of statistical significance in the analysis of the questionnaire, which was distributed to a random sample of members of health care hospital.

The analysis of the results showed that there are not statistical significance indicators for implementation marketing mix factors on the quality of hospital services.

#### مستخلص البحث

تطبيق عوامل المزيج التسويقي في المستشفيات يضمن أن خدماتها تلبي جميع متطلبات العملاء وبجوده عاليه.

الهدف من هذا البحث هو معرفة أثر تطبيق عوامل المزيج التسويقي على جودة الخدمات المقدمه من مستشفى هيلث كير للمريض.

تألفت عينة الدراسه من كل الأشخاص في مستشفى هيلث كير .إستخدم الباحث المنهج الوصفي ونظام التحليل الإحصائي ومربع كاي لحساب الفرضيات ذات الدلاله الإحصائيه في تحليل الإستبيان الذي تم توزيعه على عينه عشوائيه من أفراد مستشفى هيلث كير حيث أظهر تحليل النتائج إلى عدم وجود مؤشرات ذات دلالة إحصائيه لتطبيق عوامل المزيج التسويقي على الخدمات المقدمه من المستشفى.

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## CHAPTER ONE INTRODUCTION

#### INTRODUCTION

Marketing has grown in importance for hospitals, looking to strengthen their position in an increasingly competitive healthcare market place.

A world class hospital is a multi-disciplinary super specialty medical center of international standards. Most hospitals today are well equipped with the most advanced diagnostic and treatment facilities. They try for total health care – preventive and curative. Most hospitals in developing counties like Sudan have grown to a truly words class stature over the years. The marketing mix is a model of creating and implementing marketing strategies. It stresses the blending of various factors in such a way that both organizational and consumer objectives are attained. The elements are the marketing tactics, also known as the 'four Ps', the marketing mix elements are price, place, product, and promotion. When blending the mix elements, marketers must consider their target market. They must understand the wants and needs of the market customer then use these mix elements in constructing and formulating appropriate marketing strategies and plans that will satisfy these wants. These four P's are the parameters that the marketing manager can control, subject to the internal and external constraints of the marketing environment. The goal is to make decisions that center the four P's on the customers in the target market in order to create perceived value and generate a positive response.

#### The classic marketing mix or 4Ps consists of:

- **Product** (or **Service**) the product and/or service that is offered to customers.
- **Price** the price point that the customer has to pay.
- **Place** where and in what way in which the products and services are made available to customers.
- **Promotion** how customers are influenced to buy or use the product or service.

Manipulation of these four elements has been the mainstay of marketing thinking for many years. In more recent times, as organizations have started to appreciate that a large proportions of their offerings are services and not products, three additional elements have emerged. These are:

- **People** how the organization communicates its ethos and values to staff and customers and how staff and customers communicate with each other.
- **Process** the flow of activities and how the customer is involved with the process.

• **Physical Evidence** – The design of uniforms, equipment, buildings and other tangible signals.

These three elements of the marketing mix have always been factors that affect how organizations relate to their customers. However, in the past they were not seen as the responsibility of marketing as such. "People" was traditionally a Personnel responsibility, "Process" an Operations responsibility and the responsibility for "Physical Evidence" was often spread across a number of areas, such as Estates and Maintenance.

#### 1-1 Statement of the problem:

The marketing mix is a model of creating and implementing marketing strategies. It stresses the blending of various factors in such a way that both organizational and consumer objectives are attained.

Generally in Sudan all hospital and companies interested about the price of the product or services and don't care about the quality of the product.

Implementingmarket mix in hospital ensure that products and services are safe, reliable good quality, meet customer's requirements and that lead to patient satisfaction.

#### 1-2 Importance of the research:

Nowadays, quality is important in business and industries world. Many of the customer required high quality product and service. In order to fulfill the requirement of the customer, the hospital must have a quality system to ensure that their product or service that provided has high quality to fulfill the customer requirement.

Implementing marketing mix in organizations ensure that their products and services consistently meet customer's requirements, that their sales consistently increases, and that quality is consistently improved.

#### 1-3 Research Objectives:

#### 1-3-1 general objective:

• Assess the impact of the implementation marketing mix on the quality of hospital services.

#### 1-3-2 specific objectives:

• Examine if implementing marketing mix help the hospitals to ensure that products and services are safe, reliable, good quality and lead to patient satisfaction.

#### 1-4 Hypotheses:

- The service provided by the hospitals is poor, not sufficient and low quality.
- There is defect on the training method inside the hospital.
- Price in the hospital doesn't correspond with the service provided and expensive to patients.
- Patients waiting for long time for data entering and suggestions and complaints of patients don't find an answer.

#### 1-5 Methodology of the study:

This study based on **theoretical background** of methodology and the **quantitative design** using **a hypothesis testing approach and descriptive approach** because it fits with the nature of this study.

#### 1-6 Tools of the study:

Researcher uses questioners and observations as means of collecting.

### CHAPTER TWO Previous studies and Literature Review

#### 2.1Previous studies:

The Impact of Marketing Mix Strategy on Hospitals Performance Measured by Patient Satisfaction: An Empirical Investigation on Jeddah Private Sector Hospital Senior Managers Perspective.

#### The Research Problem

The research problem revolves around investigating the marketing mix strategies in Jeddah private sector

Hospitals. This research will answer the following questions:

- Are the marketing mix components achieving the hospital performance measured by patient satisfaction in Jeddah private sector hospitals?
- Is the health service strategy satisfying the patient needs and wants?
- Is the pricing strategy satisfying the patient ability to pay regards the consumption of health services?
- Is the promotion strategy reaching and satisfying the patient needs and wants?
- Is the place /access strategy delivering the health services in terms of physical, time, and informational access to the target patients?
- Is the physical evidence strategy satisfying the patient needs and wants?
- Is the people strategy satisfying the patient needs and wants?
- Is the process strategy satisfying the patient needs and wants?

#### **Conclusion and Recommendation:**

It is found that there is a significant impact of marketing mix strategy component on the hospital performance measured by patient satisfaction at all. The marketing mix strategy components, namely; health service, pricing, distribution, promotion, physical evidence, process, and personal strategies are found to have varied significant and insignificant effects on hospital performance measured by patient satisfaction.

The research recommends that hospitals mangers should pay attention to the pricing strategy by studying the pricing objectives to match the patient's needs and wants. Also studying the distribution strategy by enhances the access of the health services.

#### 2.2 Literature Review

A number of researchers (Ziethaml, 2000; Lovelock, 2001, Ahmad, 2007; Kotler, 2011) have previously argued that the traditional 4Ps of the marketing mix model are inadequate for either the marketing of goods or for services marketing. Services are different from products, because of their characteristics; intangibility, inseparability, heterogeneity, and perish ability. The unique characteristics of services create unique marketing problems and challenges, which need special marketing strategies to deal with them. Consequently, the marketing strategy in the services should include the 7Ps of the services marketing mix and framework, which may have a crucial effect on hospital performance (Lovelock, 2001).

#### 2.2.1 The Marketing Mix Strategy Components

The marketing mix strategy is considered one of the core concepts of marketing theory (Ziethaml and Bitner, 2000).

Booms and Bitner (1981) extend marketing mix for services from 4Ps to 7Ps adding three elements to the traditional model: participants, physical evidence and processes.

By adding personal, physical assets, and procedures to the marketing mix (forming the 7Ps) services marketing theorists ventured out into a new field of management theory and practice separate from the marketing of tangible goods (Lovelock, 2001).

In health care, more than in other services, the product is the person. When the patient thinks of medical care he or she thinks of the physician (Ahmad, 2007). The patient envisions medical care in terms of the people who deliver it. Thus the fifth P of marketing is the organization's people (Kotler, 2011).

#### HOSPITAL MARKETING MIX

#### **PRODUCT:**

A product is a set of attributes assembled in an identifiable form. The product is the central component of any marketing mix. The product component of the marketing mix deals with a variety of issues relating to development, presentation and management of the product which is to be offered to the market place. It covers issues such as service package, core services and peripherals, managing service offering and developing service offering.

#### **Hospitals today offer the following services:**

- **1. Emergency services** Emergency services and care at most of the hospitals is unique and advanced. The hospitals have state-of-the-art ambulances. The CCU's on Wheels under supervision by medical and paramedical staff. There is hi-tech telecommunication available to a patient in an emergency at any given time.
- **2. Ambulance services** Hi-tech ambulances linked by state-of-the-art telecommunications are fully equipped with doctors that are available to render medical attention and assistance in case of emergencies at the patient's doorstep.
- **3. Diagnostic services** Modern Hospitals are multi-spatiality and multi-disciplinary, that can handle any kind of ailment, they offer a wide range of facilities for instance, Oncology, Orthopedics, Neurology, Plastic surgery and so on.
- **4. Pharmacy services** Most of the hospitals also have a pharmacy which is open 24 hours. It caters to the needs not only of the inpatients and outpatients, but also patients from other hospitals who require emergency drugs.
- **5. Causality services** Causality service includes a 24 hrs. Causality department, which attends to the accident or emergency cases. Apart from the above mentioned services, hospital also offers "Health Diagnosis Programmed" which is a complete, comprehensive, periodic health checkup offered for busy executives, professionals, business persons and so on. The health diagnosis programmed comprises of the following:
- 1. Master health checkup.
- 2. Executive Health checkup.
- 3. Diabetics health checkups etc.

Generally, the service offering in a hospital comprises of the following levels:

- 1. **Core level** it comprises of the basic treatment facilities and services offered by the hospital like diagnostic services, emergency services, causality services etc.
- 2. **Expected level** it comprises of cleanliness and hygiene levels maintained in the hospital.
- 3. **Augmented level** it comprises of dress code for staff, air conditioning of the hospital, use of state of art technology, services of renowned consultants.

#### **PRICE:**

It is one of the most prominent elements in the marketing mix. Price charged must be able to target customers and it should co-ordinate with other elements of the marketing mix. Price usually depends on treatment prescribed by the respective consultants and the facilities offered to the patient. As a service is intangible, it is very hard for deciding the price of the particular service offered. Pricing strategy adopted does not depend on the price offered by competitors. The pricing strategy is formulated after consulting the concerned heads of department. Prices of various facilities revised every year depending on the change in technology. Before fixing prices, government controls are also taken into consideration.

On admission, an initial deposit will be collected at the inpatient billing counter. The amount extends on the category of room and the treatment or surgical procedure planned. Various categories of rooms, ranging from the general ward which attends to the needs of the lower classes to the deluxe suite which attends to the needs of the middle and upper classes are available. A hospital does not believe in profit maximization, it aims at providing quality service for its customers at reasonable price.

#### **PROMOTION:**

Promotion function of any service organization involves the transmission of message to present, past and potential customers. Customers need to be made aware of the existence of the service offered. Promotion includes advertising, personal selling, sales promotion and publicity.

Hospitals do not normally undertake aggressive promotion; they rely a lot on a favorable word of mouth. To increase the clientele, a hospital may continuously introduce different health services like the acupressure clinic, master health programmers and diabetes health checkups apart from annual health checkups offered to different companies. (Corporate clients)

Hospitals conduct camps in rural areas to give medical checkups at a reasonable price so that the rural people approach the hospital again in the future. They also sponsor frequent visits to the spastic society, old age homes, etc. Hospitals generally advertise in health and fitness magazines.

#### **PLACE:**

It refers to contact point between the customer and the service provider, who gets the benefit of the service. This element in the marketing mix leads to the identification of a suitable location.

The two major issues considered regarding the decision of a place are accessibility and availability of the service to customers. Accessibility refers to the ease and convenience with which a service can be purchased, used or received. Availability refers to the extent to which a service is obtainable or capable of being purchased, used and received.

Factors influencing the placing decision are market size and structure by geographical regions, number and types of competitors in the region, location of potentially attractive consumer segments, local infrastructure, good road access facilities and public transportation network. A hospital must be ideally located and must be easily accessible to all.

#### **PEOPLE:**

The People component reflects the important role played by individuals in the provision of services. People are also an important element in the marketing mix.

Service personnel play an important role in an organization which offers service. The behavior and attitude of the personnel offering service will influence the customer's overall perception of the service. Customers are a source of influencing other customers by word of mouth.

It is necessary that the staff in hospital is trained to offer quality patient care with human touch using state of the art technology.

The objective of offering quality service to the patients can be attained by:

- Motivating employees to be efficient, dedicated and loyal to the organization.
- Offering regular on-job training of employees to ensure continuous improvement in health care.
- Utilizing services of professional competent medical consultants.
- o Use of latest technology.

Motivation is not necessarily by giving high salaries. There are many other ways to motivate the employees. Concessions should be given to the employee's near ones. There should be regular liaison with them at all times. Knowing what the employees want is very important. There should be active participation of the employees in the activities of the hospital.

In a hotel, where the clientele is happy, free from any kind of tension, the job of the staff becomes much easier, whereas in a hospital, the staff has to cater to the needs of sick, depressed and an agitated lot. Warm ambiences with efficient and cheerful staff help make the experience of the public a memorable one. Therefore, it is very important that the staff of the hospital is friendly and comforting, always wearing a smile.

#### PROCESS:

Process is a set of activities that take an input, convert it and add value to the input and finally create an output. Process has only recently been given much attention in the service sector although it has been the subject to study in manufacturing for many years. Processes are designed by blue a print, which sets a standard for action to take place and to implement the service.

In a hospital, the process is divided into three phases:

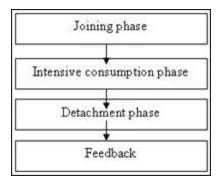


Figure 1. The process in a hospital

#### 1. The Joining Phase

It includes the following:

- \* The arrival of the patient.
- \* Registration where a patient has to make an initial deposit at the inpatient billing counter after which a file is opened in the patient's name to know the patient's medical history.

#### 2. The Intensive consumption Phase

It includes the following:

Diagnosis – where the consultant diagnoses the illness by making the patients undergo various tests.

Treatment – when the illness is treated with proper medication or surgery and so on.

Information about further actions – the consultant will instruct the patient regarding the diet to be followed, the medication to be taken, when to consult him again in the future and so on.

#### 3. The detachment Phase

It includes the following:

- \* Discharge of the patient a patient can be discharged from the hospital on the advice of the consultant
- \* Payment after the patient is discharged, the bill will be paid at the billing counter.

#### 4. Feedback

At this stage, the patient is requested to fill an evaluation form, which assists the hospital authorities to know the level of satisfaction derived by the patient. Patients' suggestions are always welcomed, valued and considered and many times are very useful for improving the services of the hospital.

#### **PHYSICAL EVIDENCE:**

It is the environment in which the service is delivered with physical or tangible commodities and where the firm and the customer interact. Physical evidence plays an important role in hospital services.

It makes a huge impact on the customer. Physical evidence offers customers means of evaluating the service. Corporate image plays in important role in terms of physical evidence. This can be developed through corporate relation programmers.

Modern hospitals need to create a good ambience. Right from the reception one finds very cordial and comforting staff. The ambience plays an important role because when a patient walks into the hospital he immediately forms an opinion about the hospital.

The staff follows a dress code to show professionalism and to maintain discipline. The staff is trained to be understanding, warm and comforting because the clientele that goes to the hospital is usually disturbed or unhappy.

It is necessary for a hospital to be well organized and segregated into different departments. All the doctors should be offered with a well-equipped cabin. The entire hospital requires to be centrally air-conditioned with good lighting. Ventilation is taken care of by air-conditioning.

Special care should be taken to maintain hygienic, cleanliness and whole hospital must be well lit. This is taken care of by the housekeeping department. A hospital has to keep in mind both the aspects of physical evidence that is essential and peripheral evidence. Physical evidence particularly plays an important role in the hospital where the patients are already depressed or traumatized and a good atmosphere could make all the difference.

## **CHAPTER THREE Material and method**

#### 3- Material and method:

#### 3-1 materials:

#### 3-1-1 study design:

Based on research objective, researcher developed the objective, design and the framework of the research.

According to objectives of research four hypotheses are assumed to the impact of the implementation marketing mix on hospital services.

Questionnaire survey was conducted and data was analyzed by using SPSS software program.

#### 3-1-2 Study area:

The study was conducted in Khartoum state during 2015 / 2016.

#### 3-1-3 a- Study population:

The target population of this study including personal from all department of health care hospital.

#### **3-1-3 b- Sampling:**

Random sampling technique is used to select 20 samples from target population.

#### 3-1-4 Inclusion criteria:

The participant in this study is chosen according to the following criteria:

- 1- Top management of health care hospital
- 2- Reception
- 3- Department of Accounting.
- 4- Medical section.

#### 3-1-5 Exclusion criteria:

The participant is excluded if has experience was less than 3 years.

#### 3-1-6 Ethical consideration:

Participant's opinions were treated honestly, fairly and respectfully. Professional and scientific responsibilities were adhering to sticking to highest scientific and professional standard and accept response. Information provided by participants were kept confidential and used only for this study.

#### 3-1-8 Data analysis:

After data collection has finished the researcher used SPSS 11.5 software for the analysis of collected data by using cronbach's Alpha (a) test, Chi-square test and frequency test.

20 questionnaires were distributed.

#### 3-2 Method:

This study based on theoretical background of methodology and the quantitative design using a hypothesis testing approach.

### CHAPTER FOUR Analysis

Table (1): Distribution of the study sample according to (Education qualification)

Education qualification	Frequency	Percent (%)		
Bachelor	10	50.0		
Master	9	45.0		
PhD	1	5.0		
Total	20	100.0		

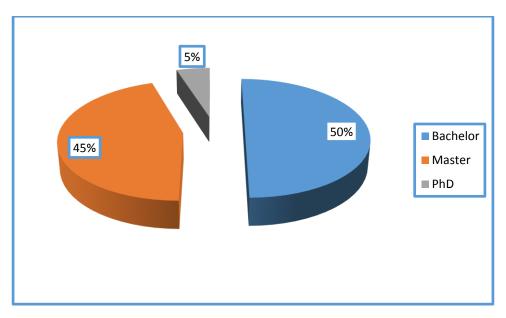


Figure (1): Distribution of the study sample according to (Education qualification)

Table (2): Distribution of the study sample according to (Years of experience)

Years of experience	Frequency	Percent (%)		
Less than a year	1	5.0		
From one year to three years	6	30.0		
From three to five years	8	40.0		
More than five years	5	25.0		
Total	20	100.0		

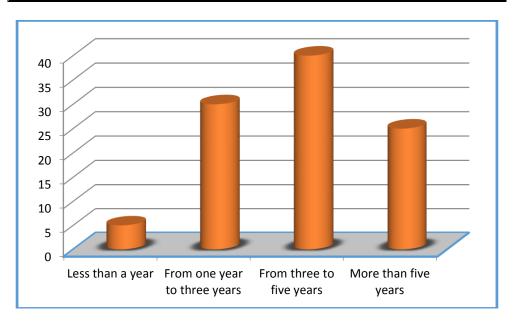


Figure (2): Distribution of the study sample according to (Years of experience)

Table (3): Distribution of the first axes responses

No	Phrase	Stro disaş		Disagree		Neutral		Agree		Strongly agree	
	Product :	No	%	No	%	No	%	No	%	No	%
1	Case history of patients maintained by hospital is always available and helpful to you in treatment.	0	0	0	0	11	55	9	45	0	0
2	In emergency situations you recommend the patients to go some other hospitals.	1	5	0	0	10	50	9	45	0	0
3	Hospital pharmacy services are providing required medicines in the hospital premises.	0	0	13	65	6	30	1	5	0	0
4	ICU services are good and help the patients, who are in critical conditions.	3	15	6	30	8	40	3	15	0	0
5	Hospital is having good patient care.	0	0	9	45	4	20	5	25	2	10

Table (4): Distribution of the second axes responses

No	Phrase	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	Price :	No	%	No	%	No	%	No	%	No	%
1	Hospital is offering services at affordable prices.	15	75	3	15	0	0	2	10	0	0
2	Cost of Laboratory tests is reasonable.	5	25	13	65	1	5	1	5	0	0
3	Hospital follows stable pricing policies.	3	15	11	55	4	20	1	5	1	5
4	The quality of treatment depends on price.	4	20	4	20	6	30	6	30	0	0
5	Hospital has various categories of rooms, ranging from the general ward to the deluxe suite.	1	5	4	20	10	50	5	25	0	0

Table (5): Distribution of the third axes responses

No	Phrase	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	Place :	No	%	No	%	No	%	No	%	No	%
1	The hospital extend its services to some other areas.	1	5	0	0	12	60	6	30	1	5
2	Hospital is adequately protected from pollution.	0	0	8	40	10	50	2	10	0	0
3	Hospital is well noted to other hospitals to refer their patients for better treatment.	0	0	3	15	10	50	7	35	0	0
4	Hospital is having time and place convenience to the patients.	0	0	3	15	13	65	4	20	0	0
5	Hospital is located at a right place.	0	0	0	0	6	30	13	65	1	5

Table (6): Distribution of the fourth axes responses

No	Phrase	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	Promotion :	No	%	No	%	No	%	No	%	No	%
1	Hospital is able to propagate its services to patients and their relatives.	2	10	1	5	8	40	9	45	0	0
2	Talk by doctors in T.V programs is increasing the reputation of hospital.	0	0	1	5	13	65	5	25	1	5
3	Hospital special promotional campaigns are gaining the attention.	0	0	17	85	3	15	0	0	0	0
4	There is good response to special campaigns.	3	15	15	75	2	10	0	0	0	0
5	The hospital have strong brand image in the patients.	0	0	0	0	11	55	9	45	0	0

Table (7): Distribution of the fifth axes responses

No	Phrase	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	People :	No	%	No	%	No	%	No	%	No	%
1	Hospital is having doctors with excellent knowledge, Skills, Right attitude.	0	0	0	0	3	15	13	65	4	20
2	Supporting staff and nursing staff are well qualified.	0	0	1	5	2	10	13	65	4	20
3	The staff are sympathetic towards patient problems.	1	5	0	0	8	40	10	50	1	5
4	The staff in hospital are trained to offer quality patient care with human touch using state of the art technology.	0	0	5	25	10	50	5	25	0	0
5	There is value addition to customer awareness programs.	1	5	12	60	4	20	3	15	0	0

Table (8): Distribution of the sixth axes responses

No	Phrase	Strongly disagree		Disa	Disagree		Neutral		Agree		Strongly agree	
	Physical evidence:	No	%	No	%	No	%	No	%	No	%	
1	Hospital is making a positive impression on patients and their attendants.	0	0	0	0	14	70	6	30	0	0	
2	Lighting and ventilation is good. Especially in patient wards.	0	0	0	0	14	70	6	30	0	0	
3	Hospital is good in the aspects of: Electricity, Drinking Water,	0	0	0	0	10	50	10	50	0	0	
4	Staff follows a dress code to show professionalism and to maintain discipline	0	0	0	0	12	60	7	35	1	5	
5	Hospital is able to build up confidence in the patients by displaying he service certificates won by the hospital.	0	0	2	10	8	40	9	45	1	5	

Table (9): Distribution of the seventh axes responses

No	Phrase	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	Process:	No	%	No	%	No	%	No	%	No	%
1	The length of waiting time of patients in this hospital is reasonable.	2	10	0	0	5	25	13	65	0	0
2	Bill settlement process is simple.	0	0	7	35	9	45	4	20	0	
3	Service counters provided in this hospital are sufficient.	0	0	0	0	12	60	8	40	0	0
4	The process to discharge the patient is simple	1	5	1	5	12	60	6	30	0	0
5	Patients' suggestions are always welcomed	14	70	3	15	0	0	2	10	1	5

#### Table (10): Reliability Analysis – Scale (ALPHA):-

Alpha value is = (0.69), so the Reliability percent is = (69%)

#### Test of the questions:-

No	Product :	Chi-value	P-value	Mode	S.D
1	Case history of patients maintained by hospital is always available and helpful to you in treatment.	.200	.655	3	.51042
2	In emergency situations you recommend the patients to go some other hospitals.	7.300	.026	3	.74516
3	Hospital pharmacy services are providing required medicines in the hospital premises.	10.900	.004	2	.59824
4	ICU services are good and help the patients, who are in critical conditions.	3.600	.308	3	.94451
5	Hospital is having good patient care.	5.200	.158	2	1.07606

#### From the table above:

- The value of chi-square for the first phrase is (.200) with (p-value=.655> 0.05), this indicates that there is no significant differences at the level (5%) between answers of study individuals.
- The value of chi-square for the second phrase is (7.300) with (p-value=.026< 0.05), this indicates that there is significant differences at the level (5%) between answers of study.
- The value of chi-square for the third phrase is (10.900) with (p-value=.004< 0.05), this indicates that there is significant differences at the level (5%) between answers of study individuals.
- The value of chi-square for the fourth phrase is (3.600) with (p-value=.308> 0.05), this indicates that there is no significant differences at the level (5%) between answers of study individuals.
- The value of chi-square for the fourth phrase is (5.200) with (p-value=.158>0.05), this indicates that there is no significant differences at the level (5%) between answers of study individuals.

*Table (11):* 

No	Price	Chi-value	P-value	Mode	S.D
1	Hospital is offering services at affordable prices.	15.700	.000	1	.94451
2	Cost of Laboratory tests is reasonable.	19.200	.000	2	.71818
3	Hospital follows stable pricing policies.	17.000	.002	2	.97872
4	The quality of treatment depends on price.	.800	.849	3	1.12858
5	Hospital has various categories of rooms, ranging from the general ward to the deluxe suite.	8.400	.038	3	.82558

- The value of chi-square for the first phrase is (15.700) with (p-value=.000< 0.05), this indicates that there is significant differences at the level (5%) between answers of study individuals.
- The value of chi-square for the second phrase is (19.200) with (p-value=.000< 0.05), this indicates that there is significant differences at the level (5%) between answers of study.
- The value of chi-square for the third phrase is (17.000) with (p-value=.002< 0.05), this indicates that there is significant differences at the level (5%) between answers of study individuals.
- The value of chi-square for the fourth phrase is (.800) with (p-value=.849>0.05), this indicates that there is no significant differences at the level (5%) between answers of study individuals.
- The value of chi-square for the fourth phrase is (8.400) with (p-value=.038< 0.05), this indicates that there is significant differences at the level (5%) between answers of study individuals.

*Table (12):* 

No	Place :	Chi-value	P-value	Mode	S.D
1	The hospital extend its services to some other areas.	16.400	.001	3	.80131
2	Hospital is adequately protected from pollution.	5.200	.074	3	.65695
3	Hospital is well noted to other hospitals to refer their patients for better treatment.	3.700	.157	3	.69585
4	Hospital is having time and place convenience to the patients.	9.100	.011	3	.60481
5	Hospital is located at a right place.	10.900	.004	4	.55012

- The value of chi-square for the first phrase is (16.400) with (p-value=.001< 0.05), this indicates that there is significant differences at the level (5%) between answers of study individuals.
- The value of chi-square for the second phrase is (5.200) with (p-value=.074>0.05), this indicates that there is no significant differences at the level (5%) between answers of study.
- The value of chi-square for the third phrase is (3.700) with (p-value=.157> 0.05), this indicates that there is no significant differences at the level (5%) between answers of study individuals.
- The value of chi-square for the fourth phrase is (9.100) with (p-value=.011< 0.05), this indicates that there is significant differences at the level (5%) between answers of study individuals.
- The value of chi-square for the fourth phrase is (10.900) with (p-value=.004< 0.05), this indicates that there is significant differences at the level (5%) between answers of study individuals.

*Table (13):* 

No	Promotion:	Chi-value	P-value	Mode	S.D
1	Hospital is able to propagate its services to patients and their relatives.	10.000	.019	4	.95145
2	Talk by doctors in T.V programs is increasing the reputation of hospital.	19.200	.000	3	.65695
3	Hospital special promotional campaigns are gaining the attention.	9.800	.002	2	.36635
4	There is good response to special campaigns.	15.700	.000	2	.51042
5	The hospital have strong brand image in the patients.	.200	.655	3	.51042

- The value of chi-square for the first phrase is (10.000) with (p-value=.019< 0.05), this indicates that there is significant differences at the level (5%) between answers of study individuals.
- The value of chi-square for the second phrase is (19.200) with (p-value=.000< 0.05), this indicates that there is significant differences at the level (5%) between answers of study.
- The value of chi-square for the third phrase is (9.800) with (p-value=.002< 0.05), this indicates that there is significant differences at the level (5%) between answers of study individuals.
- The value of chi-square for the fourth phrase is (15.700) with (p-value=.000< 0.05), this indicates that there is significant differences at the level (5%) between answers of study individuals.
- The value of chi-square for the fourth phrase is (.200) with (p-value=.655> 0.05), this indicates that there is no significant differences at the level (5%) between answers of study individuals.

*Table (14):* 

No	People :	Chi-value	P-value	Mode	S.D
1	Hospital is having doctors with excellent knowledge, Skills, Right attitude.	9.100	.011	4	.60481
2	Supporting staff and nursing staff are well qualified.	18.000	.000	4	.72548
3	The staff is sympathetic towards patient problems.	13.200	.004	4	.82717
4	The staff in hospital is trained to offer quality patient care with human touch using state of the art technology.	2.500	.287	3	.72548
5	There is value addition to customer awareness programs.	14.000	.003	2	.82558

- The value of chi-square for the first phrase is (9.100) with (p-value=.011< 0.05), this indicates that there is significant differences at the level (5%) between answers of study individuals.
- The value of chi-square for the second phrase is (18.000) with (p-value=.000< 0.05), this indicates that there is significant differences at the level (5%) between answers of study.
- The value of chi-square for the third phrase is (13.200) with (p-value=.004< 0.05), this indicates that there is significant differences at the level (5%) between answers of study individuals.
- The value of chi-square for the fourth phrase is (2.500) with (p-value=.287>0.05), this indicates that there is no significant differences at the level (5%) between answers of study individuals.
- The value of chi-square for the fourth phrase is (14.000) with (p-value=.003< 0.05), this indicates that there is significant differences at the level (5%) between answers of study individuals.

*Table (15):* 

No	Physical evidence:	Chi-value	P-value	Mode	S.D
1	Hospital is making a positive impression on patients and their attendants.	3.200	.074	3	.47016
2	Lighting and ventilation is good. Especially in patient wards.	3.200	.074	3	.47016
3	Hospital is good in the aspects of: Electricity, Drinking Water,	.000	1.000	3	.51299
4	Staff follows a dress code to show professionalism and to maintain discipline	9.100	.011	3	.60481
5	Hospital is able to build up confidence in the patients by displaying he service certificates won by the hospital.	10.000	.019	4	.75915

- The value of chi-square for the first phrase is (3.200) with (p-value=.074>0.05), this indicates that there is no significant differences at the level (5%) between answers of study individuals.
- The value of chi-square for the second phrase is (3.200) with (p-value=.074>0.05), this indicates that there is no significant differences at the level (5%) between answers of study.
- The value of chi-square for the third phrase is (.000) with (p-value=.011< 0.05), this indicates that there is significant differences at the level (5%) between answers of study individuals.
- The value of chi-square for the fourth phrase is (9.100) with (p-value=.011< 0.05), this indicates that there is significant differences at the level (5%) between answers of study individuals.
- The value of chi-square for the fourth phrase is (10.000) with (p-value=.019< 0.05), this indicates that there is significant differences at the level (5%) between answers of study individuals.

*Table (16):* 

No	Process:	Chi-value	P-value	Mode	S.D
1	The length of waiting time of patients in this hospital is reasonable.	9.700	.008	4	.94451
2	Bill settlement process is simple.	1.900	.387	3	.74516
3	Service counters provided in this hospital are sufficient.	.800	.371	3	.50262
4	The process to discharge the patient is simple	16.400	. 001	3	.74516
5	Patients' suggestions are always welcomed	22.000	.000	1	1.22582

- The value of chi-square for the first phrase is (9.700) with (p-value=.008< 0.05), this indicates that there is significant differences at the level (5%) between answers of study individuals.
- The value of chi-square for the second phrase is (1.900) with (p-value=.387>0.05), this indicates that there is no significant differences at the level (5%) between answers of study.
- The value of chi-square for the third phrase is (.800) with (p-value=.371> 0.05), this indicates that there is no significant differences at the level (5%) between answers of study individuals.
- The value of chi-square for the fourth phrase is (16.400) with (p-value=. 001< 0.05), this indicates that there is significant differences at the level (5%) between answers of study individuals.
- The value of chi-square for the fourth phrase is (22.000) with (p-value=.000< 0.05), this indicates that there is significant differences at the level (5%) between answers of study individuals.

# CHAPTER FIVE Discussion, Conclusion and Recommendation

# 5- Discussion, Conclusion and Recommendation:

# 5-1 Discussion:

When the researcher study the impact of the implementation marketing mix on hospitals services, the researcher has find out that the hospitals services is suffering from decreasing of service due to the absent of quality management system, lake of training and participation and poor environment which are main issues in good quality system.

Implementing marketing mix in the hospitals ensures that their products and services consistently meet customer's requirements, that their sales consistently increases, and that quality is consistently improved.

According to Chi-square test result in the previous chapter which result Sig. Value < 0.05 for all hypotheses and which reject the null hypotheses and accept the researcher hypotheses as shown in the following table.

Table 5-1

Hypotheses	Result
The service provided by the hospitals is poor, not	True
sufficient and low quality.	
There is defect on the training method inside the hospital.	True
Price in the hospital doesn't correspond with the service provided and expensive to patients.	True
Patients waiting for long time for data entering and suggestions and complaints of patients don't find an answer.	True

# **5-2 Conclusion:**

- The service provided by the hospitals is low quality.
- The work environment inside the hospital is not suitable and not helps in provide reliable and high quality result.
- There is defect on the training method in hospitals.

# **5-3 Recommendation:**

- Implementing marketing mix on hospitals.
- Keep improving measurement accuracy and ensure the consistency of the results.
- Always ensure that meeting the needs of customers to highest level of quality.
- Continuous improvement and development to achieve customer satisfaction.
- Continuous training of staff and finding out their needs.

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# جامعة السودان للعلوم والتكنولوجيا كلية الدراسات العليا عمادة التطوير والجودة ماجستير إدارة الجودة الشاملة والامتياز استبانة بحث علمي

الباحث: مهند بشير علي

<b>Product:</b>	Strongly	agree	neutral	strongly	disagree
	agree			disagree	
1. Case history of patients maintained					
by hospital is always available and					
helpful to you in treatment.					
2. In emergency situations you					
recommend the patients to go some					
other hospitals.					
3. Hospital pharmacy services are					
providing required medicines in the					
hospital premises.					
4. ICU services are good and help the					
patients, who are in critical					
conditions.					
5. Hospital is having good patient care.					

Price:-	Strongly	agree	neutral	strongly	disagree
	agree			disagree	
1. Hospital is offering services at					
affordable prices.					
2. Cost of Laboratory tests is					
reasonable.					

3.	Hospital follows stable pricing			
	policies.			
4.	The quality of treatment depends on			
	price.			
5.	Hospital has various categories of			
	rooms, ranging from the general ward			
	to the deluxe suite.			

Place:	Strongly	agree	neutral	strongly	disagree
	agree			disagree	
1. The hospital extends its services to					
some other areas.					
2. Hospital is adequately protected					
from pollution.					
3. Hospital is well noted to other					
hospitals to refer their patients for					
better treatment.					
4. Hospital is having time and place					
convenience to the patients.					
5. Hospital is located at a right place.					

<b>Promotion:</b>	Strongly	agree	neutral	strongly	disagree
	agree			disagree	
1. Hospital is able to propagate its					
services to patients and their					
relatives.					
2. Talk by doctors in T.V programs is					
increasing the reputation of					
hospital.					
3. Hospital special promotional					
campaigns are gaining the					
attention.					
4. There is good response to special					
campaigns.					
5. The hospital have strong brand					

image in the patients.			

People:	Strongly	agree	neutral	strongly	disagree
-	agree			disagree	
1. Hospital is having doctors with					
excellent knowledge, Skills, Right					
attitude.					
2. Supporting staff and nursing staff are					
well qualified.					
3. The staff is sympathetic towards					
patient problems.					
4. The staff in hospital is trained to offer					
quality patient care with human touch					
using state of the art technology.					
5. There is value addition to customer					
awareness programs.					

Physical evidence:	Strongly agree	agree	neutral	strongly disagree	disagree
1. Hospital is making a positive impression on patients and their attendants.					
2. Lighting and ventilation is good. Especially in patient wards.					
<ul><li>3. hospital is good in the aspects of: Electricity, Drinking Water,</li><li>4. Transportation, Security.</li></ul>					
5. staff follows a dress code to show professionalism and to maintain discipline					
6. Hospital is able to build up					_

confidence in the patients by		
displaying he service certificates		
won by the hospital.		

Process:	Strongly agree	agree	neutral	strongly disagree	disagree
1. The length of waiting time of patients in this hospital is reasonable.					
2. Bill settlement process is simple.					
3. Service counters provided in this hospital are sufficient.					
4. the process to discharge the patient is simple					
5. Patients' suggestions are always welcomed					

