

# Hebron University Postgraduate College Business Administration (MBA)

## "Quality Attributes of Palestinian Outpatient Healthcare Services"

## An Implementation of Kano Model

"سمات جودة الخدمات الصحية في العيادات الخارجية الفلسطينية: تطبيق نموذج كانو"

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This thesis was submitted in fulfillment of the requirements for obtaining a Master's degree in business administration at postgraduate College at Hebron University

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## إجازة الرسالة

''سمات جودة الخدمات الصحية في العيادات الخارجية الفلسطينية: تطبيق نموذج كانو''

"Quality Attributes of Palestinian Outpatient Healthcare Services" An Implementation of Kano Model

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## شكر وتقدير

أتقدم بجزيل الشكر إلى كل من ساهم في إنجاز هذه الدراسة، وأخص بالذكر الدكتور

المشرف وسيم سلطان لمساعدتي وتقديم النصائح لي لغاية اتمام هذه الرسالة.

أقر أنا معدت الرسالة بأنها قدمت لجامعة الخليل لنيل درجة الماجستير، وأنها نتيجة أبحاثي الخاصة، باستثناء ما تمت الإشارة له حيثما ورد، وأن هذه الدراسة، أو أي جزء منها، لم يقدم لنيل درجة عليا لأي جامعة أو معهد آخر.

التوقيع:....

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سمات جودة الخدمات الصحية في العيادات الخارجية الفلسطينية: تطبيق نموذج كانو" إعداد: غادة غالب الجنيدي إشراف: د. وسيم سلطان

### ملخص الدراسة

هدفت الدراسة إلى التعرف على سمات الجودة لخدمات الرعاية الصحية في العيادات الخارجية في حسب نموذج كانو، وتكون مجتمع الدراسة من جميع المرضى المراجعين للعيادات الخارجية في المستشفيات الخاصة الفلسطينية، واستخدمت الدراسة المنهج الوصفي، حيث أجريت الدراسة على عينة مكونة من (100) مريض، حيث قامت الباحثة بتطوير استبانة وفق نموذج كانو، وتكونت من (20) سؤالاً وظيفياً، و (20) سؤالاً غير وظيفي، وبعد التحقق من صدقها وثباتها، تم إجراء المعالجة الإحصائية وشكرين مريض من (20) سؤالاً وظيفياً، و (20) سؤالاً غير وظيفي، وبعد التحقق من صدقها وثباتها، تم إجراء المعالجة الإحصائية حسب طريقة كانو، وقد أظهرت نتائج الدراسة أن هناك حالة من عدم من حيث خدمات الراضا بين المرضى الذين يترددون على العيادات الخارجية في المستشفيات الخاصة الفلسطينية من حيث خدمات الأطقم الطبية، وخدمات المرافق، والخدمات الإدارية، بينما كان هناك رضا عن خدمات التفاعل والتواصل وخدمات المرافق، والخدمات الإدارية، بينما كان هناك رضا الخدمات إلى وجود الرضا عنها، وأظهرت التتائج أيضاً أن عالبية المنطبية عن خدمات المرضى الذين يترددون على العيادات الخارجية في المستشفيات الخاصة الفلسطينية عن خدمات الأطقم الطبية، وخدمات المرافق، والخدمات الإدارية، بينما كان هناك رضا الخدمات الدراض البين المرضى الذين يترددون على العيادات الخارجية في المستشفيات الخاصة الفلسطينية عن خدمات الموضى الذين يترددون على الطبية، حيث أسارت عالبية مؤسرات هذه الخدمات إلى وجود الرضا عنها، وأظهرت النتائج أيضاً أن عالبية المتطلبات كانت متطلبات عن خدمات الموضى الذين يترددون على العيادات الخارجية، حيث تبين أن أحدية البعد من وجهة نظر المرضى الذين يترددون على العيادات الخارجية، حيث تبين أن أحدية البعد من وجهة نظر المرضى الذين يترددون على العيادات الخارجية، حيث تبين أن أحدية العدات الذروعت باقي الخارية مؤمانية أمانة من من أحدات التي أحدمة من أصل (20) خدمة تم فحصها ذات بعد واحد، بينما توزعت باقي الخدمات التي أحدية من أصل (20) خدمة تم فحصها ذات بعد واحد، بينما توزعت باقي الخدمات التي مندمها العيادات الخارجية، من من أصل (20) خدمة تم فحصها ذات بعد واحد، بينما توزعت باقي الخدمات التي أحادية تقدمها العيادات الخارجية، مزيمات قرعت باقي الخدمات التي من مري من أمل (20) خدمة تم فحصها ذات بعد واحد، بينما توزعت باقي الخدائية، من ملحا

وفي ضوء النتائج التي توصلت إليها الدراسة، أوصت بمجموعة من التوصيات أهمها: ضرورة الاهتمام الكافي من قبل المستشفيات الخاصة بالعيادات الخارجية لتقديم خدمات أساسية وأحادية البعد للمرضى بجودة عالية، ومضاعفة الجهود لتقديم خدمات جذابة تزيد من رضا المرضى الذين يترددون على العيادات الخارجية في المستشفيات الفلسطينية الخاصة، والحاجة إلى توفير كوادر طبية مؤهلة ومتخصصة لتقديم العلاج المناسب للمرضى، والعمل على توفير وسائل الراحة للمرضى والحفاظ على خصوصيتهم من خلال تجهيز المرافق الطبية بحيث يكونون مرتاحين.

الكلمات المفتاحية: سمات الجودة، الرعاية الصحية، نموذج كانو

## "Quality Attributes of Palestinian Outpatient Healthcare Services" An Implementation of Kano Model

Prepared by: Ghada Ghalib Aljuneidi

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## Abstract:

The study aimed to identify the quality features of health care services in outpatient clinics according to the Kano model, and the study population consisted of all outpatients in Palestinian private hospitals, and the study used the descriptive approach, where the study was conducted on a sample of (100) patients, where the researcher developed a questionnaire according to the Kano model, where it consisted of (20) functional questions, and (20) non-functional questions, and after verifying their validity and reliability, statistical treatment was performed according to the Kano method.

The results of the study showed that there is a state of dissatisfaction among patients who attend outpatient clinics in Palestinian private hospitals in terms of medical staff services, utility services, and administrative services, while there was satisfaction with interaction and communication services and medical reporting services, as the majority of the indicators of these services indicated that there is satisfaction with them, and the results also showed that the majority of the requirements were one-dimensional requirements from the point of view of patients who frequent outpatient clinics, where it was found that (15) services Out of (20) services examined one-dimensional, while the rest of the services provided by outpatient clinics were divided into requirements (attractive, non-distinctive requirements, a combination between attractive and one-dimensional, a combination of attractive and unimportant requirements).

In light of the findings of the study, it recommended a set of recommendations, the most important of which are: the need for adequate attention by private hospitals to outpatient clinics to provide basic and one-dimensional services to patients of high quality and to redouble efforts to provide attractive services that increase the satisfaction of patients who frequent outpatient clinics in Palestinian private hospitals, and the need to provide qualified and specialized medical cadres to provide appropriate treatment to patients and work to provide amenities for patients and maintain their privacy by equipping medical facilities so that they are comfortable.

Keywords: Quality Traits, Health Care, Kano Model.

Chapter One Introduction

#### **1. Chapter Overview**

This chapter gives an overview of the research that was conducted. It consists of a brief description of the healthcare sector and clarifies the problem statement, research objectives, research questions, and the significance of the research.

#### **1.1 Background**

In recent years, the service sector has experienced significant growth and has been prominent in the economies of many countries. Among them, the health services sector occupies a special place because, due to the nature of the services it provides, it is an important sector that is directly related to the health and livelihood of people in society. The health status of a society is a clear indicator of its level of economic, social and cultural development, which is why countries striving for progress and growth are increasingly interested in the services provided by health care organizations.

Quality in health care organizations is seen as a reliable method and approach for improving and delivering excellent health care services in order to meet patient requirements, obtain patient satisfaction, and make full use of available resources (Malika, 2014).

One of the most significant international systems that aims to raise the standard of healthcare by fostering patient and hospital confidence is the quality accreditation system. observing their rights, and ensuring their satisfaction, and compliance with safety and patient safety standards is one of the most important standards on which it is based. Quality Accreditation Program (Kurdi, 2010).

Institutional quality in health care institutions is an important step towards raising the internal efficiency of performance within hospitals and medical clinics so that the

theory of total quality management provides effective standards aimed at improving the level of product and service for the customer through a realistic view that begins with philosophy and objectives, then procedures, training, implementation, and follow-up (Mosleh, 2011).

Jerry (2011) considers that providing the best and highest-quality health services is one of the most important priorities of health organizations, as it contributes to strengthening their position, gaining them a larger audience, strengthening their competitive capabilities, and verifying them. Continuity and sustainable success are necessary in a dynamic competitive environment, and in order to achieve this goal, it is necessary to adopt modern methods that are in line with the requirements of the modern era and the necessities of organizational work. Therefore, it was not necessary to employ the methods of vigilance, strategic management and success.

So, because the opinion and satisfaction of service recipients have become a general requirement in all countries, attention has become focused on the quality of services in general, with institutions in the public sector aware of the importance of improvement. and continuous development in the field of service provision, so service organizations should look for ways and means to develop and improve the provided service that fits the expectations and desires of citizens and meets their needs (Pheng & Rui, 2016).

Therefore, health institutions should be keen to meet these expectations and what exceeds the expectations of the customer, and to identify the requirements that citizens resort to judge their satisfaction or dissatisfaction with the quality of the service provided to them and the possibility of meeting these expectations. Accordingly, medical institutions are required to achieve their goals according to the

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highest levels of performance and excellence in order to achieve customer satisfaction, because the customer is the focus of this organization's work. This is what made health institutions realize the importance of customer satisfaction and their knowledge of their requirements, which led to the search for how to determine and measure patients' satisfaction with the quality of health services provided to them (Gupta & Srivastava, 2011).

Therefore, the kano model for measuring customer satisfaction is one of the important models in hearing the voice of patients and categorize their requirements into Kano attributes in order to distinguish and rank of the requirements that have the most impact in their satisfaction and giving it priority when providing services that would achieve their satisfaction, as is distinguished this model is easy to apply and deal with, so this research came to apply the kano model to determine satisfaction Clients about the quality of health services in outpatient clinics in Hebron, and Ramallah.

#### **1.2 Problem Statement**

Given that it deals with issues of human life, death, and disability, the health sector is among the most crucial service sectors in any nation, or survival in good health. Therefore, any nation's strategic objective should be to expand this industry in order to receive high-quality healthcare services. In order to ascertain the causes of patients' discontent with the healthcare services offered to them in these clinics, it is urgently necessary to assess the quality of healthcare provided in Palestine's outpatient clinics. The research problem lies in identifying the opinions of patients about the health services provided to them in the outpatient clinics in Palestine in order to determine whether the services provided meet those needs or are there services that exceed their expectations, and if they are not satisfied, how can they reach satisfaction with the services provided? From here, the primary issue with the study is as follows: What is the important attributes Quality Healthcare Services provided by outpatient clinics in Palestine according to the Kano model viewed from the perspectives of the patients?

#### **Study Questions**

The study seeks to answer the following questions:

- 1. What is the classification of service requirements according to the KANO model, in accordance with the needs of the patients?
- 2. To what extent is the client satisfied or dissatisfied with the services provided to him in the Palestinian outpatient clinics?

#### **1.3 Objectives of the study**

The study aims to:

- 1. Knowing the important requirements that have a direct impact on patients satisfaction and their evaluation of the service provided and the possibility of determining the characteristics and features of those services.
- Assessing how satisfied patients are with the services offered by Palestinian outpatient clinics.
- 3. Knowing the factors of attraction in services in order to improve them, while defining the specifications that the patients wants and does not want in the service.
- 4. Accurately determine the requirements of patients and then classify them into basic requirements (M), performance (one-dimensional) (O), and attractive (A) requirements using the Kano model, in order to focus on the requirements of great importance from the point of view of patients that generate in them a feeling of satisfaction and happiness, which helps outpatient clinics focus on them for the sake of serving the citizens.

#### **1.4 Significance of the study**

The importance of the theory for the study lies through reviewing books and studies that dealt with the issue of health service quality, and the satisfaction of the patients with it, the aim of filling scientific research to help researchers and those interested in this field. It is also considered one of the first studies, to the researcher's knowledge, that deals with measuring and knowing the level of quality attributes of health services in outpatient clinics in Palestine using the Kano model.

The scientific importance of this study is embodied in the role played by the quality of the health service in patient and patient satisfaction and its impact on the outpatient clinics in Palestine, in light of the findings and recommendations that it is hoped that the outpatient clinics in Palestine in particular and all health care institutions in general will benefit from, as the focus and interest of this study, through the application of the results and recommendations that resulted from the study.

This study also seeks to clarify the importance of the quality of the health service provided by outpatient clinics in Palestine, to improve and develop the service provided to achieve the satisfaction of patients, and to identify points for future research. Strengths and weaknesses of the service, as well as to prevent flaws and negligence brought on by a lack of purposeful or human perception, which improves performance effectiveness and produces the best desired results.

#### **1.5 Scope and limitations of the study**

Spatial limits: Outpatient clinics in Hebron and Ram Allah.

**Time limits**: (2022-2023).

Human limits: Patients receiving health services in outpatient clinics.

**Objective limits**: Quality attributes of health services in Palestinian outpatient clinics: application of the Kano model, and the results of the study will be determined by the tool used.

#### **1.6 Terms definition**

**Quality of services**: the extent to which a product's inherited qualities satisfy the needs of the consumer (Ezell, et al., 2016: 41).

**The quality of health care services**: the degree of health standards compliance for services offered to patients, which improve to the level of outcomes to provide amenities and are correlated with patient happiness (Squires and Anderson, 2015: 101).

**Health services**: an interconnected system made up of all groups, individuals, and processes whose major goal is to advance, preserve, or restore health. This includes work to change the factors that influence health as well as raise the bar for health system operations. both, services Health is made up of a seamless combination of material and immaterial components that provide the beneficiary with a particular level of enjoyment (Vassiliadis, et al., 2014: 3).

**Patients' satisfaction**: the total of patients' good attitudes regarding the medical care they receive there and until they leave, assuming that they have access to the psychological and physical comfort and medical care they need and understanding what they should actually obtain from medical care (Yeboah, et al., 2014: 147).

**Outpatient:** a patient who seeks diagnosis or treatment at a hospital, clinic, or related facility without spending the night there (Webster, 2022).

**Response**: It is the ability to meet the new or emergency needs of the patient through flexibility in the procedures and means of providing the service (Gosavi, et al., 2016: 139).

**Safety (warranty):** It means adequate security surrounding the place of service and the feeling of obtaining a good service maintaining the confidentiality and privacy of service beneficiaries, as well as reassurance of lives and property Service seekers (Materla, et al., 2019: 7).

**Reliability**: It refers to the service provider's ability to fulfill and commit to providing the service with reliability, accuracy, and stability (Sulisworo, 2015: 10).

**Concrete**: What is meant by tangible aspects is the modernity and attractiveness of buildings, interior design and technical development for equipment, devices and other physical facilities used in the end of the service (Shamshirsaz and Dong, 2014: 7).

**Sympathy**: It describes the extent of care and particular care provided to the beneficiary, attention paid to his difficulties, and efforts made to find honorable, compassionate, and sincere solutions to them (Shadley, 2019: 24).

**The Kano model**: is a theory for developing goods and services, as well as improving customer satisfaction. This model was developed by the Japanese scientist Noriaki Kano and a team of three scientists (N. Seraku, F. Takahahi, S. Tsuji) in (1984) (Colman, 2015: 1).

 Table (1.1): The six quality attributes with their symbols in the Kano evaluation table

No.	Quality attributes	Symbol
1	Must-Be Attributes	М
2	One-Dimensional Attributes	0
3	Attractive Attributes	А
4	Indifferent Attributes	Ι
5	Reverse Attributes	R
6	Questionable Results	Q

If, for example, the customer answers the functional question by choosing (I like) and answers the question the non-functional by choosing (no objection) and by adding the two answers (functional and non-functional) in an evaluation table (Kano evaluation table) It is through the intersection between the row and the column that the quality characteristic can be found from the point of view of patients, it is an attractive attributes or requirement (Mikulic & Prebezac, 2011).

#### **1.7 Conceptual Framework:**

In order to achieve the quality of health services as a final product for the patient, it is necessary to work on Achieving the differences between the health services provided or actually completed, and the health services desired by patients, with the aim of achieving their satisfaction, which is dependent on psychological feeling, contentment, happiness and satisfaction to satisfy needs, desires and expectations with confidence and safety, and therefore the relationship between the quality of health services and patient satisfaction has two positive and negative aspects. This is what the following figure shows:

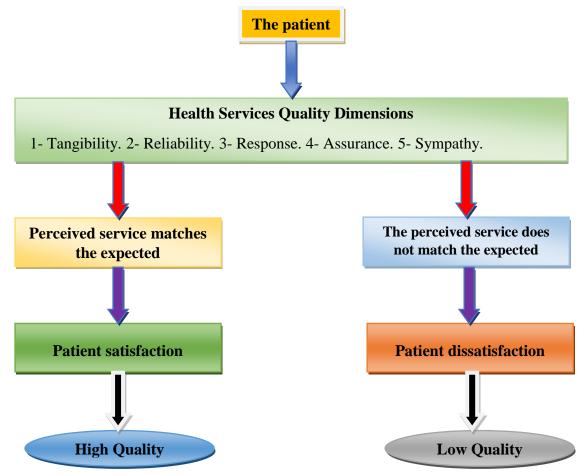


Figure (3): Conceptual framework

**Chapter Two** 

**Literature Review** 

#### **Chapter Two**

#### **Literature Review**

Providing safe, high-quality health services, as well as providing health services with efficiency, effectiveness, and fairness is of paramount importance to health organizations and their management, as they always seek to match the quality of their services with specific global standards for safe service, as well as in order to reach the satisfaction of beneficiaries where the beneficiary is the one who receives the service and its effects are directly reflected on him. He must be a partner in the process of evaluating the quality of the service provided to him. Therefore, in this chapter, the researcher will review the theoretical and conceptual framework of the study.

#### 2.1 Service concept

Because the idea of a service is tied to human existence, there are two people involved: the one who requests the service and the person who actually provides it. The requirement of a party or a particular entity for a benefit that is offered by another party or entity is considered the origin of the service and its primary source.

Services are "intangible actions that generate a benefit for the consumer or beneficiary and are not necessarily tied to the sale of a thing or other service; that is, the production or provision of a particular service does not require the use of a physical good," according to Ateeq (2016: 19).

The definition of service given by Abbas (2011: 106) is "the intangible activity that tries primarily to satisfy the desires and expectations of clients, so that this activity is not tied to the sale of another good or service."

According to Kotler (2000: 42), a service is any task, consequence, or advantage that one person offers to another without resulting in ownership of anything. A physical product may or may not be connected to the service's provision. The service is "a social relationship between the service provider and the consumer, and this connection seeks to promote efficiency for both," according to Squires & Anderson (2015: 101).

The preceding definition said that the presence of the service provider and the consumer produced the service, but in reality, other elements needed to complete the service are present as well (location, equipment, devices, materials, and others).

#### **2.2 Theories**

Service quality literature is progressing; However, its conceptualization and measurement methods remain controversial. There are two conceptualizations of service quality commonly adopted by researchers. First, Gronroos (1984) found that technical and functional quality are the two components used to quantify the quality of a service (i.e., what the customer actually gets out of the service). The other is the discontinuity model developed by Parasuraman et al. (1985). The original dimensions of this model were: accessibility, reliability, responsiveness, communication, reliability, safety, competence, courtesy, understanding, and access. In 1988, these dimensions were reinterpreted and transformed into five useful dimensions that became known as the SERVQUAL (Parasuraman et al., 1985). The SERVQUAL is the most widely used, but is not appropriate for measuring the quality of health care services.

#### **2.2.1 Service Quality Theories**

Senge and Oliva (1993) developed their own basic model of the interaction of capacity and quality costs into a general theory for application to a wide range of service industries. The theory can be summarized in the following propositions: (Mohammad, 2019)

- Because it is a subjective, ethereal concept, service quality is always challenging to quantify.
- 2- As a result, management decisions in the service sector typically rely on easier to measure factors like expenses and production.
- 3- This results in a consistently biased investment in the ability to offer services of a particular caliber (service capacity). It is possible to define service capacity as a function of the workforce size, experience level, skill set, and infrastructure. As a result, gauging service capacity based on costs or output levels may not be helpful in determining service quality.
- 4- This underinvestment leads to a number of consequences, including the lowest possible level of service, excessive costs as a result of subpar quality, a lack of client loyalty, a high staff turnover rate, and average financial performance.
- 5- As a result, patients and patients have become accustomed to expecting "average" service and evaluating current services based on past experience rather than on an absolute basis.
- 6- As this cycle of low investment and low levels continues, industry regulations that reinforce cost-containment mechanisms will have a greater impact on individual company decision-making.

This general theory (Figure 1) is illustrated by a system feedback model that simulates its application (Senge & Oliva, 1993). The service backlog, quality, lack of time, and capacity subsystems are all connected in one way or another. These "internal" subsystems are influenced by market reaction as well. Due to the feedback interactions between the various organizational subsystems, it is simple to understand the "spillover" effect of underinvestment in pertinent indicators of service quality in this diagram.

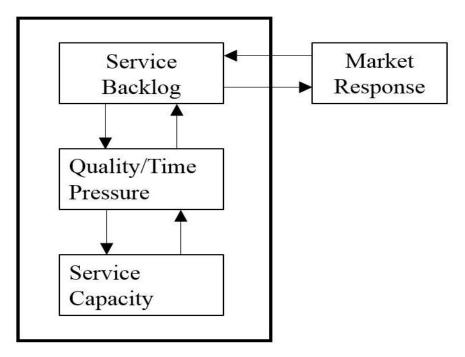


Figure 1. System Dynamics of the Generic Theory

(source: Rahman et al., 2012)

### 2.2.2. The Nordic Perspective

From a Nordic perspective, the two components of quality that are most significant are technical quality and functional quality (Gronroos, 1984). According to this viewpoint, quality is determined by comparing actual performance to what was anticipated. According to this paradigm, the outcome that the patient obtains (technical quality) and the method of delivery (functional quality) both have a significant impact on the perceived service quality (Cronin & Brady, 2001). Technical quality is mostly dependent on the perceived abilities of medical staff and is decided by medical diagnosis, treatment, and procedures (Ayad, 2013).

The communication between healthcare professionals and their patients is largely what determines functional quality. This covers manner, communication, and relationship issues that would affect how interpersonal rapport develops (Yeboah et al., 2014).

Unfortunately, interpersonal assessment is frequently overlooked in underdeveloped nations when it comes to the quality of healthcare services. However, as it is a crucial element in raising the standard of the current healthcare systems, researchers have recommended that this component be given more weight (Squires & Anderson, 2015). Functional quality, Gronroos (1984) assert that is more important than technical quality (given that technical quality is at a satisfactory level). He argues that functional quality can considerably contribute to maintaining high levels of satisfaction by compensating for momentary problems with technical quality.

Service quality was viewed by Lehtinen and Lehtinen as a three-dimensional construct in 1982. according to the same Nordic perspective. where the three distinct categories were physical quality, corporate (image) quality, and interaction quality. The first two quality aspects, physical and corporate/image quality, reflect how patients and patients perceive the service provider and the service's external manifestations, respectively. The interactive quality suggested by Lehtinen & Lehtinen (1982) is defined as the animated (interpersonal) and automated (machine-driven) interactions (Vassiliadis et al., 2014).

#### 2.2.3. The Gap Perspective

According to the Gap perspective, quality is defined as the discrepancy (gap) between the expected and actual quality of care across various dimensions (Cronin & Brady, 2001; Parasuraman et al., 1985).

Terms that describe the customer experience are used to characterize these dimensions (Reliability, Tangibles, Empathy, etc.). According to Parasuraman et al.,

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(1985), Figure 2 below depicts the numerous gaps and their relationships in the Service Quality Gap Model (1985). The customer gap (Gap 5) is regarded as the most significant gap out of the five.

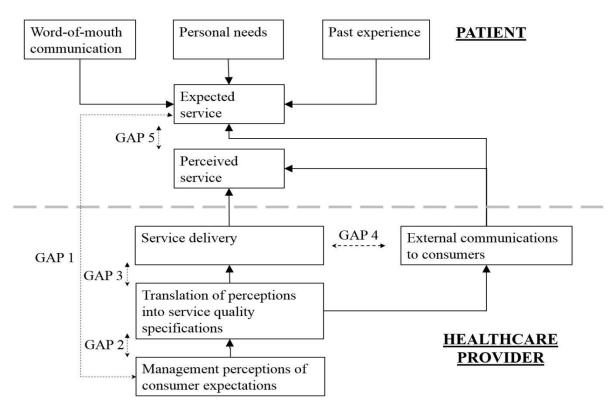


Figure 2. Service Quality Gap Model

(Khanchitpol and William, 2013)

It can be claimed that the other four gaps in this model impact and lead to the perception-expectations gap. The following is a description of these distinct gaps (Khanchitpol and William, 2013):

**Gap 1:** This discrepancy is the manager perceptions against customer expectations gap. The disparity in expectations and perceptions of security and privacy is how this gap manifests itself. Due to a lack of communication between executive management and patients, requests and needs that must be met in order to raise patient satisfaction ratings are misunderstood. Focus on market research, upward communication, and the

amount of management levels that customer contact people must navigate are some of the theoretical components that drive this gap (Zeithaml et al., 2013).

**Gap 2:** Healthcare facilities struggle to respond to the services that people expect from them. The discrepancy between management's view of patient expectations and service quality requirements is this gap. Aspects of management's commitment to service quality, goal-setting, work standardization, and sense of feasibility are among the structures that govern this difference (Zarei et al., 2013).

**Gap 3**: Is the distinction between the service quality expectations and the service that is actually provided. Due to the unpredictable nature of patient behavior, this is a particularly challenging component (Zarei et al., 2013).

**Gap 4**: This is the disconnect between service delivery and outside communications. Healthcare facilities occasionally fail to inform patients of their efforts to live up to their expectations and fulfill commitments. Patient expectations are not in line with the facility's aims and strategy as a result. There will be less of a disparity in the expectations vs perception gap if patients are aware of their rights (Zeithaml et al., 2013).

**Gap 5**: The difference between what is anticipated from the supplier and what is actually received is referred to as this gap. Expectations are seen as the criteria the patient uses to evaluate the quality of the treatment, whereas perceptions are the subjective evaluation of the actual experience (Khanchitpol and William, 2013).

To ensure that patients are pleased, healthcare facilities must close this gap (Zarei et al., 2013).

#### **2.3 Health service quality**

#### **2.3.1** Concept of health service quality

A British nurse by the name of Florence Ninequil was the first to apply this idea to medicine. She oversaw the delivery of healthcare in military hospitals during the war and implemented straightforward performance standards into her work, which significantly reduced the number of deaths in those facilities (Sulisworo, 2015).

In order for the departments of health centers, as well as the recipients of health care services, to achieve their goals and interests, Nuseirat (2008) emphasizes that the issue of health service quality has evolved into one of the fundamental topics in the marketing of health care services. This is because errors and imbalances in the quality of healthcare are intolerable, and their effects go beyond simple financial harm to include physical and psychological harm. We need to focus on perfect medical procedures.

Al-Taweel et al. (2010: 13) defined the quality of health services as: "a set of procedures established to ensure and/or ensure the achievement of high levels of quality of health service provided to visitors to health institutions, and it also represents a form of the methods used by the health institution to distinguish the same from other health institutions and similar in activity by forming an image of the institution through which the institution's personality is determined at all levels".

The American Joint Commission on Accreditation of Health Institutions (JACH, 1987: 26) defines health service quality as "the degree of compliance with recognized contemporary standards for determining a good level of practice and knowing the expected outcomes of a specific service or diagnostic procedure for a particular medical problem".

And the World Health Organization (WHO, 1988: 14) defined the quality of health services as "compliance with standards and correct performance in a manner that is

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safe, acceptable to society, at reasonable costs, and so as to have an impact on rates of disease, mortality, disability and malnutrition".

"All of the services offered by the state-level health sector, whether they are preventive services aimed at society and the environment, curative services aimed at the individual, or productive services aimed at producing drugs, medical devices, and other items with the goal of improving people's health Debon (2012: 216) defined the word "health service" as "taking care of people's health and preventing them from getting sick."

It is also known as "the specialized diagnostic, therapeutic, rehabilitative, social and psychological services that are Provided by the therapeutic departments and the support departments and what is associated with these services of regular and specialized laboratory examinations, ambulance and emergency services, nursing services and pharmaceutical services (Wongrukmit & Thawesaengskulthai, 2014: 5).

#### 2.3.2. Health Services Quality Objectives

Debsawy (2017) summarized the most important objectives of the quality of health services in the following:

- 1. Ensuring the recipients' physical and mental wellbeing.
- 2. Providing a high-quality health service that will satisfy the beneficiary (the patient) and promote his adherence to the medical institution.
- 3. Measuring patient satisfaction with medical services and understanding their thoughts and perceptions are crucial methods. planning and creation of health care policies, and administrative research.
- 4. Establish and enhance avenues of communication between recipients and suppliers of health services.

- 5. Making it possible for health organizations to carry out their duties effectively and efficiently.
- 6. Improving productivity levels, since the main goal of applying quality is to provide patients with the necessary level of healthcare.
- 7. Increasing the confidence and morale of employees (Debsawy, 2017).

#### **2.3.3 Factors affecting the quality of health services**

According to Salah (2012), the following variables are among the many factors that have an impact on the quality of health services:

- 1- Analysis of patient expectations: Health organizations must take into account patients' attitudes while developing health services so that they exceed patient expectations because this is the only way to ensure that the services are of a high caliber. Patients can determine how they feel about the service by identifying the various levels of quality, specifically.
- a) **Expected quality:** It is the amount of quality that the patient feels is necessary, and this level of quality is frequently challenging to ascertain because it fluctuates depending on the nature and circumstances of the patient's treatment as well as the various services they anticipate receiving (Kotler & Keller, 2009).
- b) **Perceived quality**: It is the patient's perception of the quality of the health service provided to him by the health center, i.e., the patient's perception of the quality of the health services provided to him.
- c) **Standard quality**: The degree of service that is rendered that both reflects the management of the health center's perspectives and complies with the requirements outlined in the basis for the service.
- Actual quality: This refers to the standard of care that patients received from clinics.

- 2- **Determining the quality of services:** After determining the needs of the patients, the health center must create the proper description to make sure the needed standard of quality is met in the medical services offered. This description is typically connected to the effectiveness of the health center staff as well as the caliber and effectiveness of the tools and equipment utilized to complete the medical service (Singh et al., 2012).
- 3- Employee performance: When the management of the health center establishes quality standards for the medical services offered and the medical staff commits to upholding them, the management must then work to find appropriate means of ensuring appropriate performance. It is crucial that the administration expects the patient to evaluate the quality of the medical services he has received and that these expectations are justified (Mosadeghrad, 2012).

#### **2.3.4 Health Services Quality Dimensions**

Many researchers concur that the following characteristics of effective health care are important to consider: tangibility, dependability, responsiveness, safety, and sympathy.

**Tangibility:** Refers to the physical equipment, equipment and personal appearance of the employees of the organization. Buildings, information and communication technologies, internal health organization facilities, and waiting areas for service recipients are all factors that contribute to the service's tangible nature (Zeithaml et al., 2013).

The researcher believes that the dimension of tangibility in the quality of health services refers to the physical facilities that increase the turnout of the beneficiaries (patients and clinic auditors) and their return to the same health service provider, and it includes the exterior of the building and amenities and entertainment such as medical educational programs, as well as the physical appearance of health facilities and their cleanliness, the workmanship used and modernity sanitary equipment, devices and tools (medical, laboratory, radiology, nursing, etc.), the cleanliness and proper grooming of the employees, the appearance of the furniture, the attractiveness of the health institution, its design and internal organization.

**Reliability:** It refers to the company's capacity to provide the services it has committed to reliably and precisely. Additionally, it refers to the provider of the health service's (doctor, analyst, nurse, and others) capacity to deliver the promised health service with a high level of accuracy and health (Vassiliadis et al., 2014).

**Response:** It means the organization's willingness to help patients and provide service quickly and without delay. The response in the field of health services means the extent, ability, desire and readiness of the service provider on a permanent basis In providing the service to the beneficiaries when they need it (Barrios-Ipenza, et al., 2021).

That is, it can be said that after the response in the field of quality of health services indicates that the health institution workers are able to respond quickly and at all times to the sick cases and injuries that come to it, as well as the quick initiative to provide assistance to patients and quickly answer all their inquiries and complaints submitted by them. As well as the speedy completion and provision of health services to them when they need them.

**Assurance:** It means the employees' information, their respect for patients and their ability to give confidence and security to patients. The guarantee in the field of health service results from the patients' accreditation or confidence in doctors and clinic staff and trust in their qualifications and abilities (Al-Taweel et al., 2010).

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It can be said that the assurance as one of the dimensions of the quality of the health service is intended to confirm the health institution's management on health quality and to support that with qualified workers (doctors, nurses, and others), as well as the provision of modern physical supplies in the health field, which leads to the provision of health services with matching quality.

**Sympathy:** It means the special care and attention offered by the organization to the patients. Sympathy refers to the degree of care and special care for the patient, concern for his problems and working to find solutions to them in humane ways (Materla et al., 2019).

We list the following as evaluation criteria for this dimension: a genuine interest in the patient, attentive listening to the patient's complaint, and meeting the patient's needs in a friendly and kind manner. It can be said that sympathy refers to the level of care and personal attention given to the beneficiary.

#### 2.4 Health Services Quality Measurement

It is now urgently necessary to measure the quality of the healthcare system, but before doing so, it is important to consider the goals of the measurements as well as the kinds of variables that will be used. The following is a summary of the techniques used to gauge the caliber of health services:

#### 2.4.1 The traditional way to measure the quality of health services:

It includes three types of scales, which summarized by (Abdul Qadir, 2012) as the following:

**Structural scales:** The people involved, the facilities used to deliver the service, and how they are set up all have an impact on the quality of healthcare. As a result, the organization, the people, and the facilities present in the healthcare institution are included in the dimensions of the structural measurements.

**Measures of procedures (operations standards):** The notion of operations describes the order in which labor is done in order to deliver or reach the health care, and it is what makes it possible to get outcomes (outputs).

**Outcome measures:** They depict the overall improvements in health condition as a result of medical treatment. The following are some of the indications utilized in this:

- 1- General health status: This refers to the use of the characteristics of the impact of the disease and is reflected by a set of measurements such as mortality rates or one of the diseases as a measure.
- 2- Outcome indicators for specific diseases: This includes mortality rates for certain diseases, the presence of known symptoms associated with the disease, or behavioral impediments associated with certain diseases.

### 2.4.2 The modern way to measure the quality of health services:

This approach places a premium on quality, and its control should be directed not only to specific features of the outputs, processes and structure, but also to each health service institution through: (Materla et al., 2019)

- 1- Researching and figuring out what patients who receive medical care expect.
- 2- Create detailed, declared, and researched specifications at every level of the healthcare facility as a key instrument for creating services that meet the needs of patients and guests.
- 3- Evaluate the actual performance on a regular basis to identify the extent to which the service meets the aspirations and expectations of the health service seekers.

Achieving high quality in the field of health services is an important and essential element in any health institution, but there is a difficulty in measuring and controlling quality in the field of services compared to the field of production, due to the factors or characteristics that are difficult to quantify in the service.

#### 2.4.2.1 SERVQUAL as an Assessment Tool of Service Quality

The basic SERVQUAL questionnaire consists of 22 questions and measures perceived and expected quality levels along five suggested criteria. Ten dimensions of service quality were proposed during the initial scale development phase (Parasuraman et al., 1985):

- 1. Tangibles: the physical appearance of personnel and artifacts.
- 2. Reliability: The capacity to provide the service that has been promised.
- Responsiveness: The staff's willingness to assist patients in a pleasant and efficient manner.
- 4. Competence: The staff members' capacity to deliver the service.
- 5. Courtesy: The staff's consideration, attentiveness, and civility.
- 6. Credibility: The service provider's reliability and integrity.
- 7. Security: the lack of uncertainty, financial risk, and bodily peril.
- 8. Accessibility: How easily the service provider may be reached.
- 9. Clear communication: using language and behavior that is understandable.
- 10. Customer understanding: the service provider's attempts to get to know and comprehend the client.

Later, these were condensed to only five effective dimensions. Reliability, Empathy, Assurance, Responsiveness, and Tangible Assets are some of them, each with a unique set of related phrases (Parasuraman et al., 1985). The SERVQUAL questionnaire's questions rate pertinent statements to determine how each dimension is perceived.

The appearance of facilities is referred to as a tangible. This dimension includes the surroundings' overall condition, as well as the staff's, equipment's, and cleanliness levels. Patients' assessments of service quality have been demonstrated to be

favorably correlated with the physical setting (Grewal, Gotlieb & Marmorstein, 2000).

#### 2.4.2.2. Total Quality Management (TQM)

The definition of TQM is hotly contested. Despite extensive research, there is little consensus on what the phrase actually signifies (Attakora-Amaniampong, et al., 2014).

Quality is thought to be time- and money-consuming, according to Melsa (2011. It has also been widely contested that TQM is not the only solution to all quality problems. Thamizhmanii & Hasan (2010) contend that TQM is a method of management that may be used to improve the efficiency, adaptability, and competitiveness of the entire organization. TQM, according to Fening et al. (2013), is a system used to manage quality issues in businesses with a goal of enhancing products.

The approach to TQM taken by the UN is relatively straightforward. Their interpretation of TQM is limited to satisfying consumer demands (UN, 2007). TQM, according to the ISO, is a "management style of an organization focused on quality, formed on participation of all its members and targeted at long-term success based on customer satisfaction and benefits to the organization's members." TQM is a strategy that aims to involve all employees of an organization at every level of management in improving the goods that are produced by the company, according to ISO (2012). (Gustavsson et al., 2016).

#### **2.4.2.3.** Quality function development (QFD)

The Quality Function Development (QFD), a TQM subsystem, is one option to system development process. According to Hauser and Clausen, QFD was first created by Mitsubishi in Japan in 1972 and afterwards adopted by Toyota (1988). Recently, QFD has been applied to a wide range of tasks to enhance operations and boost business competitiveness (Munizu, 2013).

The QFD concept is based on a collaborative approach of multiple functional areas of a business to improve IT by improving communication, product development, and measurement process and systems, in contrast to the traditional System Development Life Cycle (SDLC). This strategy involves MIS experts, end users, and middle management in the creation of a high-quality final product. QFD is, per Al-Jaf (2016), as follows:

It can be viewed as one of the methods of Total Quality Management (TQM), which puts an emphasis on continual quality improvement and customer satisfaction. Through the design and development process, QFD seeks to identify and protect the requirements and desires of patients, also referred to as the Voice of the Customer (YOG). The QFD technique is multifunctional, and diverse design process participants—marketing staff, planners, researchers and developers, designers, engineers, manufacturing staff, and so on—join forces from the outset of a project to concurrently plan, create, and build a good or service (Nordin & Razak, 2014).

QFD in hardware and software creation has a substantial impact on the final output. Major obstacles to the implementation of QFD in the majority of enterprises include communication problems. The QFD strategy, which is multifunctional (i.e., marketing staff, planners, R&D, designers, engineers, manufacturing, and distribution), can make QFD work for customer advantage and satisfaction provided functional areas made serious efforts to break down communication difficulties. The QFD approach is regarded to be better to the traditional system development approach when developing information systems. One of the key distinctions between QFD and conventional system development is that the former places more emphasis on individual projects or individuals than the latter does on collaborative efforts between functional domains. Reworking or refitting the plan into a workable design may be challenging if planning and design have no idea what kinds of issues manufacturing may encounter later on (Priyono and Yulita, 2017).

#### 2.4.3. Kano Model

#### 2.4.3.1 Genesis and concept of Kano model:

The Kano model is a theory for developing goods and services, as well as improving customer satisfaction. This model was developed by the Japanese scientist Noriaki Kano and a team of three scientists (N. Seraku , F. Takahahi , S. Tsuji), According to a study (Attractive quality & must -be quality) which was published in the Journal of the Japanese Society for Quality Supervision in 1984. The study included a Kano model diagram that explains the requirements of patients for the quality of goods or services (Coleman, 2014).

The Kano model is one of the models that shows customer satisfaction and illustrates different situations and issues Various factors that affect customer satisfaction (Al Barwari and Bashiwa, 2011).

The Kano model's goal is to assess customer satisfaction in relation to particular features and characteristics of the services offered by the firm, with the hope of identifying and differentiating factors that significantly affect customer satisfaction. The unspoken requirements of clients exist invisibly (Gupta & Srivastava, 2011).

Paraschivescu & Cotirlet (2012) argue that the goal of the theory of Kano model (Attractive Quality) is to achieve a better understanding of how customer satisfaction develops, evaluate and perceive the qualities of quality, and pay attention to the qualities that are more important to patients in order to improve them, as well as.

Kazemi, et al., (2013) indicated that Kano model is one of the important tools for understanding the needs and requirements of patients and their desires and their impact on their satisfaction. It is widely used as an effective means to classify the various requirements of patients to understand the nature of their requirements.

The difference between Kano model and other widespread quality models is that Kano model is based on the assumption that there are non-linear and asymmetric relationships between the level of commodity performance and customer satisfaction in general, and this reflects to us the complexity of preferences (customer desires) (Rashid, 2010).

### **2.4.3.2.** Kano pyramid to manage the quality of customer requirements:

It is not possible to achieve the goal of achieving the highest quality and obtaining complete customer satisfaction All at once, however, it can be achieved with hierarchical levels, according to what the world presented by Noriaki Kano, as shown in Figure (2), similar to Maslow's hierarchy for the hierarchy of human needs, he explained Kano and that this hierarchy consists of three levels or hierarchical levels of requirements on the organization hierarchy. In meeting these requirements, it begins with the rule that is the basic requirements that must be met in the commodity or Service to the top of the pyramid when you can include features that patients did not imagine, which magnifies their happiness and joy (Rashid, 2010), and organizations that want to implement a correct philosophy and methodology for quality management must achieve three levels or hierarchical degrees as shown as follows: (Barrios-Ipenza, et al., 2021)

The first level: This level of quality represents the minimum advantages that must be available in the service, and these advantages are usually known in advance to patients and they are sure of obtaining them. The second level: includes the advantages of the first level, but with a higher quality level than the first level.

The third level: This level includes aspects of quality that patients did not expect, as it not only achieves satisfaction, but makes him feel happy and pleased, as it exceeded their expectations.

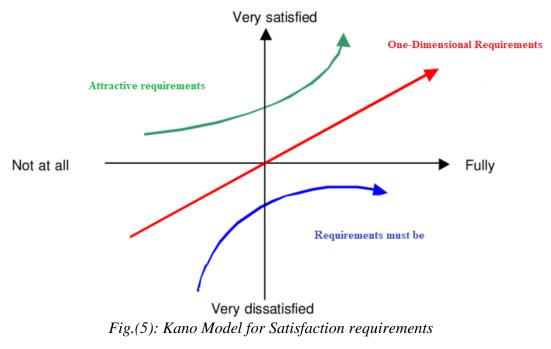


Fig. (4): Kano pyramid for total quality management

(Source: Debsawy, 2017)

### **2.4.3.3** Classification of customer requirements according to Kano model:

Customer happiness is the most crucial factor to take into account when developing or designing any good or service, and it's crucial to any company's success. Therefore, retaining satisfied existing patients can be a potential target for any customer. A work plan and in order to move towards customer satisfaction, it is necessary to take into account their voice, as the customer's Satisfied people are the key to success in any business, and the question now is how any organization can Integrate the customer's present and future declared and implicit needs and requirements within the commodity or service? The Kano model is one of the methods related to customer satisfaction, as shown in Figure (3) which indicates that patients are more satisfied when implicit requirements are fulfilled while the level of dissatisfaction increases if the requirements declared in the commodity are not fulfilled, and it is clear that the satisfaction The customer is an ongoing process as in the new requirements (discovered), which come from the use recurring requirements (Shil et al, 2010). Kano in his model was distinguished between three main types of requirements. These are the conditions that (must be), (one-dimensional) and (attractive) that the Kano model for the good or service that influences customer satisfaction in various ways. consists of two primary axes, the horizontal axis representing the level of performance on the job. from high performance to low performance depending on the unique needs and characteristics of the customer. While the vertical axis shows how satisfied or unsatisfied patients are with the degree of performance (Al-Jaf, 2016). Three curves that depict the links between the consumers' needs and attributes are displayed. The degree of requirement fulfillment as opposed to client satisfaction.



(source: Hogstrom et al., 2010)

The Kano model divides customer requirements in terms of their impact on their satisfaction into three groups, as shown as follows:

- 1- Basic requirements (Must-Be Requirements): The characteristics that must be available in the service provided, and in the event that these characteristics will not meet the patients, it will be completely satisfied as it is in the event that they meet them, so that will not increase the satisfaction of the patients. Thus, if the basic requirements are provided. These requirements represent basic standards in the service requested by patients and are represented by the lower right curve of the Kano model shown in Figure (1). These requirements must be met in the service and described as (obvious, implicit, clear, not special), and that their presence does not mean that the customer is in complete satisfaction with the commodity, as there are decisive factors for the commodity and service requirements (Pheng & Rui, 2016).
- 2- One-Dimensional Requirements: According to the requirements of performance, which is one of the directions of one of the levels of the satisfaction of the patients, it will be attributed to a degree with a degree that meets these requirements. for measurement and appear in the form as Diagonal (Italic) and easily identifiable and expected to be met, the level of customer satisfaction is proportional to the extent to which those requirements are met (Paraschivescu & Cotirlet, 2012).
- 3- Attractive Requirements: It represents the standards of the custody or the service that has the effect of the dazzling in the satisfaction of the patients on a specific service, and is characterized by being a non -expression of it, attracting the customer, causing joy, designed for the customer, and the composer is represented in the left side of the high -level side of the form of the kano that does not ask for

this. It thinks about its existence, as it represents the narratives, innovations, and the new creativity that cause it causes the ambiguities and looks at them on the fact that it is a superior and always -values that exceed the expectations of patients, that the fulfillment of these requirements leads to an increase in the satisfaction of the customer (Boonsener et al., 2011).

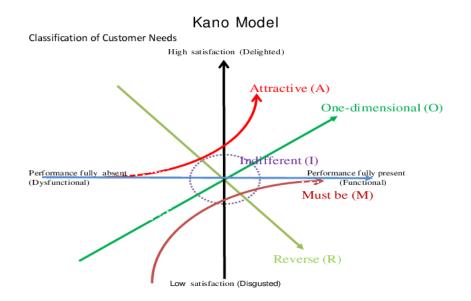
#### 2.4.3.4. How to apply Kano model:

Kano model is one of the simplest ways to get patients' opinions. The model is managed and analyzed in three steps:

#### The first step: identifying customer requirements to quality service attributes

Kano model focuses on the existence of an integrative relationship between customer satisfaction requirements and the quality levels of the commodity or service, The model focuses on three basic categories of Customer requirements have the greatest impact, and they are as mentioned earlier (Must be, one dimension, Attractive) (Vassiliadis et al., 2014).

Scientist Noriaki Kano and his colleagues have presented a more detailed classification on the basis that the different requirements of patients can be classified according how to use the Kano model effectively from the six groups of quality attributes associated with the customer, as in figure (4).



*Fig. (6): Attributes of service quality according to the Kano model* (source: Hogstrom et al., 2010)

From figure (4), it is shown that there are six attributes of quality according to Kano model, which are: (Lilja, 2010)

- 1- Must-be quality attributes: It refers to the elements of quality expected by patients and whose fulfillment is a given, but it leads to dissatisfaction when it is not met.
- 2- One-dimensional quality attributes: Elements of quality that lead to satisfaction when fulfilled and dissatisfaction when not.
- 3- Attractive quality attributes: Elements of quality that, when met, provide joy Also, not achieving it does not make him feel satisfied.
- 4- Indifferent quality attributes: Elements of quality that do not lead to satisfaction or satisfaction regardless of whether they are met or not.
- 5- Reverse quality attributes: The presence of these qualities in the commodity leads to the dissatisfaction of the customer, and their absence leads to the satisfaction of the customer, which is the exact opposite of the quality characteristics of one dimension.
- 6- Questionable Results: These results appear due to lack of understanding or misinterpretation Answers to questions about the Kano Questionnaire As a result

of inconsistency and doubt in the answers of patients (These results do not appear in the Kano model, because they are usually Its proportion is small and does not affect the rest of the characteristics).

#### Second Step: Preparing the data for Kano model

After knowing and classifying the requirements of the customer from the viewpoint of the Kano model, a Kano is created data by asking a pair of questions (functional question and non-functional question) about the commodity or the service provided that enables the beneficiary patients to answer this pair of questions in one of the five choices for each part of the question as shown in table (1), the first question (figure the functional question) relates to the customer's reaction if the commodity or service has this feature, and the second (figure the non-functional question) relates to his reaction if the commodity does not have this feature (Gupta & Srivastava, 2011).

Functional question figure	1- I like the presence of this requirement
What do you think if requirement (x) is	in the service.
present in commodity or service?	2- This requirement must be present in
	the service.
	3- I'm neutral.
	4- I do not object to the presence of this
	requirement in the service.
	5- I don't like having this requirement in
	the service.
Non-functional question figure	1- I like that there is no such requirement
What do you think if requirement (x)	in the service.
does not exist in the commodity or	2- This requirement should not be present
service?	in the service.
	3- I am neutral.
	4- I do not object to the absence of this
	requirement in the service.
	5- I do not like the lack of this
	requirement in the service.

 Table (2.1): the pair questions according to Kano model

#### Third step: Analyze the data and determine the type of service quality attributes

After patients answer functional and non-functional questions from patients and by combining the two answers and their interruption in the Kano evaluation table, as shown in table (2) are done Analyze the data then to enable the classification of customer requirements in one of the six quality characteristics the aforementioned: (must be, one-dimensional, attractive, undistinguished (neutral), inverse, and doubtful) (kazemi et al., 2013).

		Non-functional question							
Customer requirements		I like him	must be	neutral	I don't object	l do not like it			
	I like him	Q	А	А	А	0			
ona	must be	R	Ι	Ι	Ι	М			
ctic	neutral	R	Ι	Ι	Ι	М			
Functional question	I don't object R		Ι	Ι	Ι	М			
ш	I do not like it	R	R	R	R	Q			

Table (2.2): Kano evaluation table to classify customer requirements

Table (3) shows the symbols of the six quality attributes mentioned in the table (Kano evaluation table).

#### 2.6 Previous Studies:

Due to the importance of the issue of evaluating the quality of health services, many previous studies have dealt with the issue of evaluating the quality of health services from the point of view of patients or beneficiaries, and from the point of view of workers in health organizations. Whether they are hospitals or primary health care centers. The researcher referred to a number of them so that they could benefit from them in the study and to compare the results. The previous studies were divided into two fields: the first field is related studies using the Kano model, and the second field is studies related to the quality of health services, where the studies were arranged in each field from the newest to the oldest .

#### 2.6.1. Related studies using the Kano model:

**Barrios-Ipenza, et al., (2021)** conducted astudy aimed to assess the quality of health services using the Kano model in two hospitals in Peru. The study used the health service satisfaction survey method to conduct a descriptive cross-sectional study using the Kano model approach, which measures six categories of features. The study was conducted on a sample of (250) health care users using convenient non-probability sampling at PPP facilities in Lima and Callao. Of the 31 traits evaluated by patients, 27(81%) were described as one-dimensional traits, 3(10%) were considered required, and 1(3%) were classified as inverted. These results indicate that the presence of most of the attributes evaluated was important in maintaining user satisfaction, and that the absence of these attributes caused user dissatisfaction. The results revealed that consumer evaluations of health services were multimodal, and include not only the interaction space between patient and medical staff, but also additional interaction services.

**Howsawi et al.**, (2019) study aimed to identify the role of applying the Kano model in determining the characteristics of patient care quality in the primary health care centers of the Ministry of Health in the Kingdom of Saudi Arabia. A cross-sectional study was conducted in the primary health care centers (PHCs) of the Ministry of Health in the Kingdom of Saudi Arabia. Saudi Arabia. All adult Saudi patients aged (18 years and over) who visited primary health care centers selected by the Ministry of Health were included in the study. Patients with comprehension problems were not allowed to participate. A systematic questionnaire based on the Kano model was used to collect data on patients' expectations regarding the quality of treatment and services provided. The study was applied to a sample of (243) patients, and the results showed that the respondents answered that fourteen out of (18) features were onedimensional, three attractive, and one neutral, as it was "friendliness and respect from the receptionist in the clinic." "Friendliness and respect for nurses and laboratory staff" and "doctor's care and attention" are the three most important one-dimensional features.

**Materla et al. (2019)** conducted astudy aimed to an investigation of the use of the Kano model in the healthcare sector was undertaken. The patients' opinions of the given goods and services are the most important factor in determining success in any industry. As a result, businesses prioritize customer pleasure for better service quality, expansion, and sustainability. Although the Kano model has been utilized frequently to ascertain the needs of clients in terms of service quality and boost customer happiness, The Kano model is still being used in healthcare, and customer needs about healthcare services are unclear. Through a thorough search of databases pertaining to the development of service quality in the healthcare industry, this study presents a review of the literature on applying the Kano model in healthcare. This

essay explains the Kano model's use and integration with other quality approaches in order to determine customer requirements and raise the standard of healthcare services. This systematic review has shown that there are different consumer wants and preferences depending on the type of care received and the services provided by healthcare providers. The research enables healthcare professionals to comprehend client requirements for service quality and to create long-term development plans. The goal of this essay is to stimulate additional study on the healthcare sector's efforts to improve service quality.

**Arash and Akashi (2017)** conducted a study aimed at identifying the classification of customer requirements using the Kano model and the Kano map: the state of hospital services, and the study used the descriptive analytical approach. The Servqual-based Kano questionnaire was developed and filled out by the study sample members, and the results showed that out of (18) traits that were checked for availability, it was found that the majority were classified as one-dimensional, which supports the recent findings in the literature on the application of the Kano model. in hospital services.

The study of Priyono and Yulita (2017) aimed to reveal the integration of the Kano model and the dissemination of the quality function of service design in the hospital front office, through the analysis of service attributes in the front office of the hospital, and the development of solutions to improve the attributes of the service. The study tool was designed using a variety of methodologies, and the quality of service (14) required by consumers was determined using a survey applied to (140) clients from an international hospital in Yogyakarta, Indonesia. The Kano model was used to analyze the attributes, which were divided into five attractive attributes, four one-dimensional attributes, and five "must-have" attributes. When a company relied solely on Quality of Service or QFD, how much the study found that comparing

competitors can lead to false results when a comprehensive method of QFD and Kano model is combined, the results are different.

#### 2.6.2. Studies related to the quality of health services

The Shadley study (2019) aimed to identify the assessment of the quality of health services from the customer's point of view. A field study in the multi-service clinic Riziq Younis (Al-Alia), and the study used the descriptive analytical method, where the study was applied to a sample of (50) people who receive health service in multiservice clinics, and the most important results were a difference in the degree of customer satisfaction of different ages, adults More satisfied than the least age, and the reliability is average, and in terms of evaluation, he found that the clinic provides services with a high degree of accuracy and adheres to the specified dates, but there is a weakness in providing services in an appropriate manner, and the response is considered average, and patients trust the qualifications, skills and experience of health tires as the clinic works on confidentiality of information, maintains records, and pays attention to the clinic's reputation, and this represents the safety dimension (guarantee). The clinic provides waiting rooms with all the necessities. The clinic also enjoys a convenient location and is easily accessible quickly. The clinic also provides medicines and workers care about cleanliness and good appearance, and this is manifested in the After tangibility, the clinic's working hours are suitable for all patients, and the clinic gives the patient's best interest and takes into account the customs and traditions prevailing in society, while the general Colored people are not characterized by a sense of humor and friendship in dealing with patients, and this is what represents the dimension of sympathy.

**Abuaker (2017)** Study's objective was to assess the impact of the five criteria on the quality of health care in emergency rooms of private hospitals in Bethlehem Governorate from the perspectives of service providers and beneficiaries, To accomplish the study's goals, the researcher created a questionnaire that was delivered to (293) beneficiaries and (35) service providers on a haphazard sample of the three biggest private hospitals in Bethlehem Governorate. According to the study's findings, private hospitals in the Bethlehem governorate's emergency departments provided high-quality medical care from the perspectives of service providers and beneficiaries. In terms of service providers, the trust factor increased to the highest level (88%) possible. However, from the perspective of the beneficiaries, the responsiveness factor increased to the highest degree (83%) possible. According to the survey, a lack of medical professionals and equipment is the biggest barrier lowering the quality of healthcare services from the perspective of service providers. From the recipients' perspective, the issue is the delay in the delivery of health services.

**Debsawi's study (2017)** aimed to identify the extent to which accreditation standards are applied at Al-Assad Medical Hospital in Hama from the service recipient's point of view. The study also aimed to analyze the nature of the relationship between the application of accreditation standards and the quality of health services from the service recipient's point of view. The researcher followed the descriptive analytical method, relying on the questionnaire as a main tool for the study. The study was conducted from (351) escorts of service recipients in the Pediatric Department of Al-Assad Medical Hospital, and the study concluded that there is an application of accreditation standards in the Pediatric Department of Al-Assad Medical Hospital from the point of view of the service recipient (children's escorts), and the study also showed that there is a strong direct linear relationship between the application of accreditation standards and the quality of health services from the point of view of service recipients (children's escorts), the researcher also recommended the need to establish the "Syrian National Commission for Health Accreditation" as an independent body, working to push health facilities towards accreditation, after defining its objectives and tasks.

The study of Jawabreh (2016) aimed to evaluate the level of the quality of health services provided by military medical health care centers from the perspectives of military beneficiaries in the middle and south of the West Bank. The population of the study was consisted of all military beneficiaries during the period of the study. Also, this research aimed to determine the quality of medical services provided by six military medical services centers in the middle and south of the West Bank and to find out the relationship between the quality standards scale (SERVQUAL) and the quality standards provided by medical services to achieve a measure tool for the Palestinian medical services. The sample was consisted of (370) military beneficiaries who have medical file at the military medical centers during the distribution of questionnaires. The results found that the level of the degree of the quality of health services provided at the Military Medical Services evaluated came with a high degree, there were significant differences in the average of answers to the sample due to the variable level of education were in favor of the center of Hebron. And the variable level of education and the differences were in favor of the least educated. There were no significant differences in the averages of the respondents' answers about the quality of service provided in the military medical services are attributable to the following variables: gender, age, place of residence, military machine that belongs to him and beneficial place to provide medical service

Abu Eid, Darawish and Aida (2016) conducted a study aimed at assessing the quality of health service in government hospitals operating in the southern West Bank using the SERVPERF scale from the point of view of the auditors and patients. The researchers designed a questionnaire consisting of five dimensions, and the questionnaire was distributed to a stratified random sample. Proportionality of the reviewers and patients, numbering (452), then the data were statistically processed through the SPSS program, and the study concluded that the level of health service quality according to the SERVPERF scale from the point of view of patients and reviewers in general is medium on all fields of the study. The study recommended that hospital administrations should pay attention to evaluating the auditors and patients of the quality of the health service.

**Al-Taher study** (2015) aimed to measure the level of quality of health services in government hospitals in Sudan from the point of view of patients and auditors. The study used the descriptive analytical approach, where the study included the study applied to a sample of (586) patients and auditors of three government hospitals in Khartoum. There are statistically significant differences in the levels of health services quality in government hospitals at a significant level of less than 2.25, according to the demographic variables of the sample represented in gender, age, education, income and place of residence.

The study dealt with the Palestinian Ministry of Health (2015), which aimed to assess the quality of government services in primary health care centers in the northern governorates. The study also aimed to know the extent of satisfaction of citizens who benefit from health services. The researcher used the descriptive approach through the use of two questionnaires for the auditors, consisting of (38) items, in total, the integrated dimensions of the concept of patient satisfaction with the quality of the service provided, where the number of sample members reached (5549), and another questionnaire for employees consisted of (29) items, and the number of sample members was (1100) staff. The study concluded that the level of total satisfaction of the auditors with the health service provided in the northern governorates came to a medium degree, and it was found through the study that the majority of centers suffer from a lack of availability of medicines, and that the majority of centers far from the city center suffer from the lack of an appropriate environment in terms of ventilation, low The level of cleanliness, lack of guidance boards, and the waiting period for patients to receive the service was long.

**Johnson & Yousapronpaiboon (2013)** study that aimed to determine Out-Patient Service Quality Perceptions in Private Thai Hospitals. The study sample consisted of (400) patients from five private hospitals in Thailand. Information was collected by distributing a questionnaire to patients and statistically analyzed it. The results indicate that the dimensions The five for service quality had a significant impact on health service quality, as response was the most influential, followed by empathy, tangibility and reliability, and finally reliability.

**Purcarea et al. (2013)** dealt with the use of Servqual in evaluating the quality of services in health institutions in Romania, where he mentioned the importance of health institutions maintaining a high-level service quality that meets the needs of patients. health in Romania. The researcher used the analytical statistical method by using a questionnaire consisting of (22) variables that measures the dimensions of perceived service quality and consisting of five dimensions (tangibility, reliability, trust, response, and sympathy). Experienced the experience of benefiting from medical services in relation to gynecological diseases during the past three months maximum, and the study concluded that there is a gap between the expectations of the

sample members and the service perceived by them, where the gap was greater in the dimension of tangibility, followed by response and then the dimension reliability.

**Mosleh** (2011) conducted a study that aimed to identify the level of actual service quality perceived by workers and patients in hospitals operating in the city of Qalqilya. The study was conducted on a sample of (126) patient employees out of (422) people, or (32%) of the study population, and the results showed that the responses of the study sample towards measuring the quality of actual services The perceptions by employees and patients were high on all fields of study, and on the overall degree. And there were statistically significant differences in the following areas: strength of response, safety, trust, and sympathy due to the gender variable in favor of males.

The study of Syed (2011) sought to assess the quality of health services in Pakistani private hospitals from the point of view of patients. The gap scale and the SERVQUAL component (22) were used, representing the five dimensions of service quality: reliability, response, empathy, assertiveness and tangibility, and the study sample included (375). A patient in Pakistani private hospitals, and the results of the study indicated that all dimensions of service quality had a positive impact, especially after the response (the response of doctors and nurses to the needs of patients) as well as for the tangible dimension, which is related to health conditions, hygiene, laboratory and pharmacy, and the study results showed that the quality of health services in hospitals Private hospitals are better than those in public hospitals in Pakistan.

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**Chapter Three** 

Methodology

### Chapter Three Methodology

This chapter dealt with a complete and detailed description of the method and procedures of the study that the researcher carried out to implement this study. It included a description of the study methodology, the study population, the study sample, the study tool, the validity of the tool, the reliability of the tool, and the statistical analysis.

#### **3 Methodology**

The researcher used the analytical descriptive approach, which is a method in searching for the present, and aims to prepare data to prove certain hypotheses in preparation for answering specific questions - in advance - accurately related to current phenomena and current events that information can be collected about at the time of conducting the research, using appropriate tools. The aim of using the descriptive approach is to identify the "characteristics of the quality of health services in the Palestinian outpatient clinics: applying the Kano model."

#### **3.1 Study population:**

The study population consisted of all outpatients clinics in Palestinian private hospitals in Hebron and Ram Allah.

#### **3.2 The study sample:**

The sample of the study consisted of (100) outpatients in Palestinian private hospitals who were selected through the intended sample, due to the lack of knowledge of the number of members of the study community, as the researcher visited each of the outpatient clinics of the study sample and stayed in the clinic and asked the patients attending these clinics to answer the optional on the questionnaire, and then the questionnaires that were filled out by patients attending outpatient clinics were collected. The following table shows the characteristics of the demographic sample:

The variable	The variable level	Frequency	Percentage %	
	Al-Ahli	36	36.0	
The hear 4-1	AL-Mezan	30	30.0	
The hospital	Arab Care Hospital	34	34.0	
	Total	100	100.0	
	Male	34	34.0	
Gender	Female	66	66.0	
	Total	100	100.0	
	Less than 20 years old	28	28.0	
	From (20-40) years	54	54.0	
Age	More than 40 years old	18	18.0	
	Total	100	100.0	
	Collegiate	68	68.0	
Qualification	less than collectors	32	32.0	
	Total	100	100.0	
D. V II	Yes	72	72.0	
Do You Have	No	28	28.0	
Children?	Total	100	100.0	
	first visit	32	32.0	
Number of visits to	Second or third visit	32	32.0	
outpatient clinics	more than three visits	36	36.0	
during the last year	Total	100	100.0	
	Female	16	16.0	
	Children	10	10.0	
The clinic you are	Bones	36	36.0	
visiting	Interior	27	27.0	
	Other	11	11.0	
	Total	100	100.0	

 Table 3.1: Characteristics of the demographic sample

#### **3.3 Study tool:**

The researcher determined the requirements of the patients attending the Palestinian outpatient clinics for the quality of health services provided to them in the Kano model after defining the requirements of the patients attending the Palestinian outpatient clinics and their desires for the health service, as these requirements are a starting point and the basis for designing the questionnaire, and the requirements represent the patients' stated desires. It is not declared clearly and accurately, as five fields representing services were identified to include the twenty requirements of patients attending outpatient clinics in the questionnaire, which are (medical staff services, facility services, administrative services, interaction and communication services, and medical reporting services). Each of the five fields included several questions, and each question includes two parts (functional question) and (non-functional question) as follows:

#### **Functional questions:**

- 1. Medical staff services, including (3) questions.
- 2. Utilities services, including (3) questions.
- 3. Administrative services, including (4) questions.
- 4. Interaction and communication services, including (6) questions.
- 5. Medical Report Services, including (4) questions.

#### **Non-functional questions:**

- 1. Medical staff services, including (3) questions.
- 2. Utilities services, including (3) questions.
- 3. Administrative services, including (4) questions.
- 4. Interaction and communication services, including (6) questions.
- 5. Medical Report Services, including (4) questions.

#### **3.3.1.** Content Authenticity (Referees):

The researcher designed the questionnaire in its initial form, and then the validity of the study tool was verified by first presenting it to the supervisor and then carrying out a pilot study consist of (20) patients, which is an exploratory study that was distributed to a dedicated and limited sample similar to what the main and original sample will be and on which the content of the research will be prepared. This was done in order to work on identifying all the motives for conducting a test of the efficiency of the questionnaire as a good research tool.

#### **3.3.2. Structural validity:**

The validity of the questionnaire was verified by calculating the Pearson Correlation coefficient for each paragraph of the questionnaire with the total score of the questionnaire for the functional and non-functional questions, as shown in Table (2).

Table (3.2): The results of the Pearson correlation coefficient for the correlation matrix of each paragraph of the questionnaire with the total score of the questionnaire (functional and non-functional questions).

	Functional	questior	15	Non-functional questions					
No.	( <b>R</b> )	No.	( <b>R</b> )	No.	( <b>R</b> )	No.	<b>(R)</b>		
1	.571**	11	.619**	1	.494**	11	.640**		
2	.628**	12	$.680^{**}$	2	.678**	12	.670***		
3	.459**	13	.654**	3	.728 <sup>**</sup>	13	.754**		
4	.405**	14	.564**	4	.679**	14	.767**		
5	.654**	15	.631**	5	.686**	15	.718**		
6	.624**	16	.565**	6	.668**	16	.679**		
7	.712**	17	.548**	7	.635**	17	.793**		
8	.532**	18	.763**	8	.843**	18	$.770^{**}$		
9	.515**	19	.577**	9	.671**	19	.703**		
10	.511***	20	.442**	10	.685**	20	.702**		

\*\* Statistically significant at (0.01)

The data contained in Table (3.2) indicate that all functional questions are statistically significant related to the total score of the questionnaire, and all non-functional

questions are statistically significant related to the total score of the questionnaire, which indicates the strength of the internal consistency of the questionnaire paragraphs, and this thus expresses the validity of the paragraphs. The questionnaire measures what it was designed to measure, and that it shares together to measure Quality Attributes of Palestinian Outpatient Healthcare Services.

#### **3.3.3. Reliability**

The reliability was calculated using the internal consistency method by calculating the Cronbach alpha reliability coefficient, as shown in Table (3.3).

		Cronbach
The Veriable	Items Nu.	Alpha
The Variable	Items Inu.	Reliability
		coefficient
The total degree of the functional question's questionnaire	20	0.879
The total degree of the non-functional question's questionnaire	20	0.944

Table (3.3): Reliability coefficients to identify health services quality attributes

The data contained in Table (3.3) indicate that the value of Cronbach's alpha reliability coefficient for the total degree of the functional questions was high, as the Cronbach's alpha reliability coefficient for the total degree of the questionnaire was (0.879). The value of Cronbach's alpha reliability coefficient for the total degree of the non-functional question's questionnaire was high, as the Cronbach's alpha reliability coefficient for the total degree of the questionnaire for the total degree of the questionnaire was high, as the Cronbach's alpha reliability coefficient for the total degree of the questionnaire was (0.944). Which indicates that the questionnaire has a high degree of reliability, and this indicates that the questionnaire is valid for application and achieving the objectives of the study.

#### **3.3.4.** Questionnaire correction:

The response scores were distributed to the questionnaire items using the five-point Likert method, where the respondent gets five degrees when answering the functional question (I like it), four degrees when responding (it must be), three degrees when responding (neutral), two degrees when responding (I do not disagree), and one degree when responding (I do not like). Also, when answering the non-functional question, the respondent gets five degrees when responding "I like it," four degrees when responding "it must be," three degrees when responding "neutral," two degrees when responding "I do not disagree," and one degree when responding "I do not like."

## **3.4 Analysis and classification of patients' requirements according to the Kano model treatment**

The first steps taken by the researcher after unpacking the questionnaires include processing the data within The matrices of the model provided in appendix (A) by classifying the requirements of the outpatient clinics into the characteristics of Kano based on the response of the research sample of (100) respondents for the Kano model from the questionnaire for the survey of the opinions of the respondents appendix (A), which consists of (20) questions, each question It consists of two parts: the first part represents the functional questions and the second part represents the non-functional questions.

The questionnaire was distributed to the research sample, each according to the hospital in which it is reviewed through outpatient clinics, and the opinion of the research sample was taken in the event that the requirement is available within the service provided (the functional question) and in the event that the requirement is not available and is not provided within the service (the non-functional question). Answer it according to (x), with options ranging from (5) I like presenting this requirement in

the service, to (1) I don't like presenting this requirement in the service). for functional questions. (5) I don't like presenting this requirement in the service, to (1) I don't like not having this requirement in the service) for non-functional questions.

Based on the foregoing, the researcher reviews the process of analyzing the Kano questionnaire according to the response of one of the research samples to the requirements of utility services to classify the customer's requirements into the characteristics of Kano.

 Table (3.4): One of the respondents answered the questionnaire of Kano's model

 of functional questions about outpatient facilities services

No.		Services	I like it	It must be	Neutral	I do not disagree	I do not like
1	ility vices	Clinic facilities are designed to be patient friendly		~			
2	Utility services	The rooms are designed to maintain patient privacy	~				

Table (3.5): The response of one of the respondents, according to the Kano model questionnaire, to the non-functional questions about the facilities services in the outpatient clinics

No.		Services	I like it	It must be	Neutral	I do not disagree	I do not like
1	Utility services	The design of the clinic facilities is not suitable for patients					✓
2	les U	The rooms are not designed to maintain patient privacy				$\checkmark$	

By answering the functional question and the non-functional question, the requirement matrix is found according to the following:

# Steps in the process of classifying the requirements of the respondents into the qualities of Kano

Function	al question form		1- I like it
	Clinic facilities are designed to be patient		2-) It must be
Utility services	friendly		3- Neutral
Util	The rooms are designed to maintain	V	4- I do not disagree
, s	patient privacy	/	<b>5-</b> I do not like
Non-fun	ctional question form		1- I like it
	The design of the clinic facilities is not	1/	2- It must be
Utility services	suitable for patients	/	3- Neutral
Uti) erv.	The rooms are not designed to maintain		I do not disagree
S S	patient privacy		J do not like

 Table (3.6): Classification of requirements of patients attending outpatient clinics according to Kano evaluation
 of patients attending outpatient

		Non-functional questions							
Outpati	Outpatient requirements		It must	Neutral	I do not	I do not			
			be	neutral	disagree	like			
la s	I like it	Q	А	А	A	0			
ons ons	must be	R	Ι	Ι	Ι	M			
ctic	Neutral	R	Ι	I	Ι	М			
Functional questions	I do not disagree	R	Ι	Ι	1	М			
F	I do not like	R	R	R	R	Q			

		A	M	0	R	Q	Ι	Total	The highest frequency category
ervices	Clinic facilities are designed to be patient friendly		1						М
Utility services	The rooms are designed to maintain patient privacy	1						,	А

The symbols in Table (3.6) refer to:

No.	Quality attributes	Ssymbol
1	must be Attributes	М
2	one-dimensional Attributes	0
3	Attractive Attributes	А
4	Indifferent (neutral) Attributes	Ι
5	Reverse Attributes	R
6	questionable results	Q

Table (3.7): The six quality traits with their symbols in the Kano model

After completing the questionnaires and analyzing them according to the Kano model and knowing the classification of the respondents' requirements into Kano characteristics based on the above through direct linking and pairing their responses to the functional question and the non-functional question, and after obtaining Kano's characteristics and proportions, the researcher processed the results according to this classification.

### Chapter Four Results

#### **Chapter Four**

#### **Study results:**

The values of the satisfaction index and the dissatisfaction index were calculated for each of the requirements of the respondents. The satisfaction index indicates the level of increased satisfaction among the respondents to meet their needs and provide them with services. As for the dissatisfaction index, it indicates the amount of decrease in the dissatisfaction of the respondents in the event that a specific requirement is not met or a specific service is not available. and the percentage of influence of the two indicators on each of the patients' requirements. This method is based first on calculating the average of some types of requirements while preserving the characteristics of the classification using the following two equations (Berger et al., 1993):

Respondents' satisfaction index (the best) =  $(A+O) \div (A+M+O+I)$ .....(1) Respondents' dissatisfaction index (the worst) =  $(M+O) \div (A+M+O+I)$ .....(2) Whereas:

- (M): Must be attributes
- (O): One-dimensional attributes
- (A): Attractive attributes
- (I): Indifferent (neutral) attributes.

After calculating the two indicators, the results were as shown in Table (6), which reflects the classification of requirements:

Requirements of the respondents		Attractive attributes (A)	Essential attributes (M)	One- dimensional attributes (O)	Reverse attributes (R)	Reverse attributes Q	Indifferent (I)	Total	satisfaction coefficient	coefficient of dissatisfaction	The difference between the two transactions
s al	1	16	16	40	10	4	14	100	0.48	0.65	-0.17
Medical staff services	2	12	12	46	4	8	18	100	0.55	0.66	-0.11
N N	3	20	16	44	2	6	12	100	0.51	0.65	-0.14
, s	4	12	24	32	4	6	22	100	0.40	0.62	-0.22
Utility services	5	14	22	38	6	8	12	100	0.50	0.70	-0.20
Se	6	20	22	42	6	0	10	100	0.51	0.68	-0.17
e	7	18	14	36	4	4	24	100	0.47	0.54	-0.08
strativ ces	8	12	14	44	6	6	18	100	0.59	0.66	-0.07
Administrative services	9	32	10	20	8	6	24	100	0.34	0.35	-0.01
Ač	10	26	18	18	8	4	26	100	0.32	0.41	-0.09
	11	20	6	40	6	6	22	100	0.58	0.52	0.06
ld rvice:	12	8	16	32	4	0	40	100	0.46	0.50	-0.04
Interaction and communication services	13	12	12	42	12	2	20	100	0.64	0.63	0.01
eracti nicati	14	24	10	44	4	2	16	100	0.62	0.57	0.04
Int	15	14	12	42	8	0	24	100	0.62	0.59	0.03
Ŭ	16	24	18	36	4	0	18	100	0.54	0.56	-0.02
ing	17	30	6	30	2	4	28	100	0.50	0.38	0.12
eport	18	20	18	36	6	2	18	100	0.59	0.59	0.00
Medical reporting services	19	24	14	36	8	0	18	100	0.60	0.54	0.05
Med	20	32	14	32	2	0	20	100	0.53	0.47	0.06

 Table (4.1): The values of the satisfaction index and the dissatisfaction index with the requirements of the respondents

Table (4.1) shows that there is dissatisfaction among patients attending outpatient clinics in Palestinian private hospitals in terms of medical staff services, facility services, and administrative services. Medical reports, as most of the indicators of these services indicate satisfaction with them. While there was satisfaction with interaction and communication services and medical reporting services, the majority of the indicators of these services indicate services indicated the existence of satisfaction with them.

Requirements of the respondents		Attractive attributes (A)	Essential attributes (M)	One-dimensional attributes (O)	Reverse attributes (R)	Reverse attributes Q	Indifferent (I)	Total	satisfaction coefficient	coefficient of dissatisfaction	Kano classification
Medical staff services	1	16	16	40	10	4	14	100	0.48	0.65	One-dimensional attribute
	2	12	12	46	4	8	18	100	0.55	0.66	One-dimensional attribute
	3	20	16	44	2	6	12	100	0.51	0.65	One-dimensional attribute
Utility services	4	12	24	32	4	6	22	100	0.40	0.62	One-dimensional attribute
	5	14	22	38	6	8	12	100	0.50	0.70	One-dimensional attribute
	6	20	22	42	6	0	10	100	0.51	0.68	One-dimensional attribute
Administrative services	7	18	14	36	4	4	24	100	0.47	0.54	One-dimensional attribute
	8	12	14	44	6	6	18	100	0.59	0.66	One-dimensional attribute
	9	32	10	20	8	6	24	100	0.34	0.35	attractive attribute
	10	26	18	18	8	4	26	100	0.32	0.41	A requirement that is a mixture of attractive and indifferent
Interaction and communication services	11	20	6	40	6	6	22	100	0.58	0.52	One-dimensional attribute
	12	8	16	32	4	0	40	100	0.46	0.50	Unmarked attribute
	13	12	12	42	12	2	20	100	0.64	0.63	One-dimensional attribute
	14	24	10	44	4	2	16	100	0.62	0.57	One-dimensional attribute
	15	14	12	42	8	0	24	100	0.62	0.59	One-dimensional attribute
Int	16	24	18	36	4	0	18	100	0.54	0.56	One-dimensional

 Table (4.2): Classification of the characteristics and requirements of the respondents based on Table (4.1)

Requirements of the respondents		Attractive attributes (A)	Essential attributes (M)	One-dimensional attributes (O)	Reverse attributes (R)	Reverse attributes Q	Indifferent (I)	Total	satisfaction coefficient	coefficient of dissatisfaction	Kano classification
											attribute
Medical reporting services	17	30	6	30	2	4	28	100	0.50	0.38	A mixture of attractive and one- dimensional attribute
	18	20	18	36	6	2	18	100	0.59	0.59	One-dimensional attribute
	19	24	14	36	8	0	18	100	0.60	0.54	One-dimensional attribute
	20	32	14	32	2	0	20	100	0.53	0.47	A mixture of attractive and one- dimensional attribute

Through Table (4.2), the researcher classified the respondents' desires for health services based on the values of the index of increasing satisfaction and the values of the index of dissatisfaction into the five categories shown in Table (4.3).

Table (4.3): Results of classifying the requirements of the respondents according							
to the values of the satisfaction index and the dissatisfaction index based on							
Table (4.1)							

<b>D</b> aguirament type	number of	Requirement numbers in		
Requirement type	requirements	the questionnaire		
One-dimensional attribute (O)	15	·11 ·8 ·7 ·6 ·5 ·4 ·3 ·2 ·1		
One-dimensional attribute (O)	15	19 • 18 • 16 • 15 • 14 • 13		
Attractive attribute (A)	1	9		
Indifferent attribute (I)	1	12		
A mix of attractive and one-dimensional	2	20 • 17		
(A+O) attribute	2			
A mixture of attractive and indifferent	1	10		
attribute (A+I)	1			

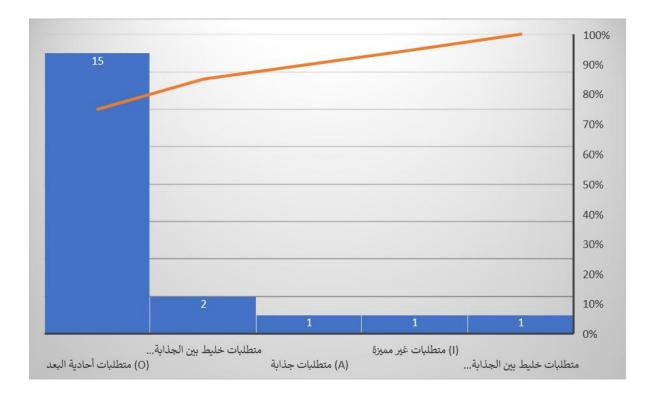


Figure (4.1): Results of classifying the requirements of the respondents according to the values of the satisfaction index and the dissatisfaction

index

No.	Kano	service type	Description of the requirement		
	classification				
2		Medical staff services	The medical staff on duty in the clinic communicate well with each other to ensure effective treatment.		
3		Medical staff services	Appropriately qualified medical personnel are appointed to provide health care		
8		Administrative services	The administration follows up on the patient registration process to be smooth and easy		
14		Interaction and communication services	The clinic staff accommodates my religious beliefs when providing my medical care		
6		Utility services	The clinics take care of the cleanliness of all facilities		
13	nts (O)	Interaction and communication services	The medical staff sympathize with my condition and reassure me		
15	One-dimensional requirements (O)	Interaction and communication services	Clinic staff interact with me and respect my culture during my medical follow-up		
1	sional	Medical staff services	Availability of qualified medical staff within ten minutes of the time you log into the clinic		
11	e-dimen	Interaction and communication services	The staff understands the patients' needs and requirements		
5	On	Utility services	The rooms are designed to maintain patient privacy		
7		Administrative services	The administration makes sure that the clinic staff provides clear instructions to patients about health care		
16		Interaction and communication services	The clinic staff treats you with courtesy		
18		Medical reporting services	The medical staff provides a written report on how to provide me with treatment		
19		Medical reporting services	The medical staff provided sufficient information about my condition and treatment method		
4		Utility services	Clinic facilities are designed to be patient friendly		
9	Attractive requirements	Administrative services	The administration is keen to inform patients of changes in doctors' appointments		
10	(A)	Administrative	The clinic continues to provide emergency		

Table (4.4): Arranging the requirements of the respondents according to their priority according to the Kano classification based on Table (4.1)

No.	Kano	service type	Description of the requirement		
	classification				
		services	care even after working hours		
12	Undistinguished requirements (I)	Interaction and communication services	I communicate with clinic staff about satisfaction with the care provided		
20	A mix between attractive and one-	Medical reporting services	The medical staff involves me in my healthcare process		
17	dimensional (A+O)	Medical reporting services	The clinic staff provides complete information about the prescribed medications		
10	A mixture of attractive and indifferent (A+I)	Administrative services	The clinic continues to provide emergency care even after working hours		

It is clear from Table (4.4) that the majority of requirements were one-dimensional requirements from the point of view of patients attending outpatient clinics, as it was found that (15) out of (20) services that examined were one-dimensional, while the rest of the services provided by outpatient clinics were divided into requirements (attractive, undistinguished requirements, a mix between attractive and one-dimensional requirements, a mixture of attractive and indifferent requirements).

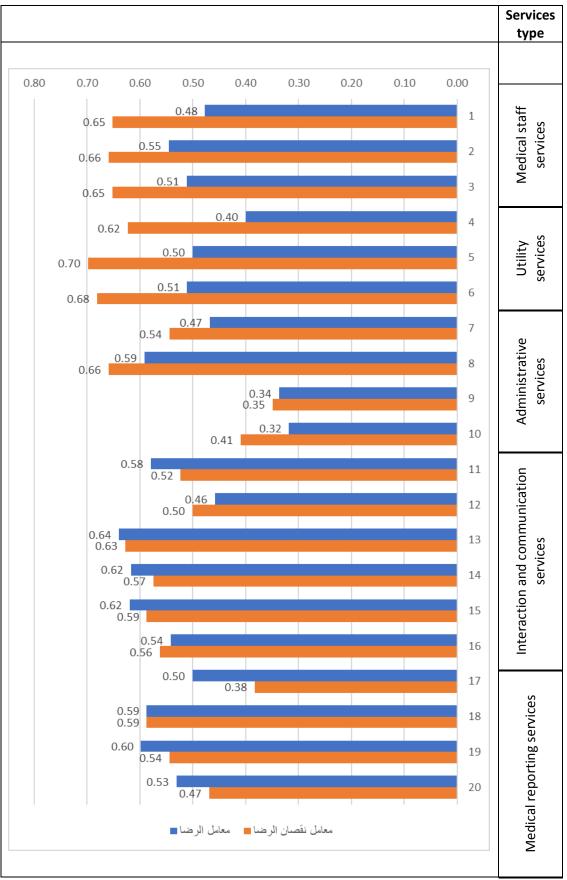


Figure (4.2): Satisfaction and dissatisfaction index values for health services in outpatient clinics

### From Figure (4.2) and Table (4.2), it is clear that:

- 1- It is noted through the opinions of the study sample that paragraphs (1, 2, 3, 4, 5, 6, 7, 8, 11, 13, 14, 15, 16, 18 and 19) are not met if these requirements or deficiencies are met. The lack of quality in providing these services will lead to great dissatisfaction among the respondents, and if these requirements are met, we find that the general satisfaction of the respondents is low, which explains the classification of these requirements as one-dimensional requirements.
- 2- It is noted that in Paragraph (9) which reads: (The administration is keen to inform patients of the change that occurs in doctors' appointments), it is noted through the opinions of the study sample members that if this service is worked on and provided to auditors, this will achieve satisfaction among citizens, and that the lack of meeting this requirement or its shortcomings and failure to provide this service will lead to little dissatisfaction. this is explained by classifying the requirement as one of the requirements or attractive qualities.
- 3- Paragraph (12), which reads: (I communicate with the clinic staff about satisfaction with the care provided), and through the opinions of the study sample members, that if this requirement is not met or the shortcomings and lack of quality of providing this service will lead to great dissatisfaction among the respondents, and if this requirement is met, we find that the general satisfaction of the respondents is low, and this explains the classification of the requirement as one of the undistinguished requirements.
- 4- Paragraphs (17, 20) which stipulate (the clinic staff provides complete information about the prescribed medications), (the medical staff involves me in my healthcare process), came as a mixture of attractive and one-dimensional qualities, meaning that through the opinions of a sample in the study, the level of satisfaction with

these requirements, if these requirements are met, will be average, and dissatisfaction and non-fulfillment of these requirements will cause moderate dissatisfaction.

5- Paragraph (10), which reads: (The clinic continues to provide care for emergency cases even after working hours) came as a mixture of attractive and undistinguishable qualities, meaning that the opinions of the study sample believe that if this requirement is not met and there is a lack of interest in continuing to provide care for emergency cases even after working hours, this service will lead to the dissatisfaction of the auditors, and if this requirement is met, we will find that the general satisfaction achieved with citizens will be few.

# Chapter five

**Discussion and Recommendations** 

### **Chapter Five**

### **5.1 Discussion**

1- The results showed that there is dissatisfaction among patients attending outpatient clinics in Palestinian private hospitals in terms of medical staff services, facility services, and administrative services. While there was satisfaction with interaction and communication services and medical reporting services, the majority of the indicators of these services indicated the existence of satisfaction with them.

The researcher explains this result to the fact that patients feel that there is a shortage in the services of medical staff, administrative services, and facilities services, due to the severe pressure on these clinics, the small number of doctors on duty, the narrow spaces of outpatient clinics, and the routine administrative procedures that do not take into account emergency cases. This result agreed with the result of the Palestinian ministry of health (2015) study.

2- The majority of requirements were one-dimensional requirements from the point of view of patients attending outpatient clinics, as it was found that (15) out of the (20) services examined were one-dimensional, while the rest of the services provided by outpatient clinics were divided into requirements (attractive, undistinguished requirements, a mix between attractive and one-dimensional requirements, and a mixture of attractive and indifferent requirements).

The researcher attributes this result to the fact that these requirements, which were answered by the majority of the respondents, should be available because they are among the necessary services that are provided to patients in outpatient clinics, whether at the level of medical treatment or at the level of facilities and administrative services. It is one-dimensional and irreplaceable. This finding agreed with the study of Barrios-Ipenza, et al., (2021), which was found that of the 31 traits evaluated by patients, 27 (81%) were described as one-dimensional traits.

3- It is noted through the opinions of the study sample that paragraphs (1, 2, 3, 4, 5, 6, 7, 8, 11, 13, 14, 15, 16, 18 and 19) are not met if these requirements or deficiencies are met. The lack of quality in providing these services will lead to great dissatisfaction among the respondents, and if these requirements are met, we find that the general satisfaction of the respondents is low, and this explains the classification of these requirements as one-dimensional requirements.

The researcher explains this result to the fact that these services that are provided to patients are indispensable services, in the sense that these services must be available so that the medical services provided to patients are at the required level, i.e., of high quality, as these are the services that the patient comes to. The clinic to receive it, and the first of them is the medical services related to the medical staff, then the patient wants to feel comfortable while waiting, he also wants to maintain his privacy while receiving treatment, and this is related to the services of medical facilities, and he also wants his transactions and the accompanying procedures to be smooth and not characterized by complexity and this is related to services Therefore, these services came from the patient's point of view as services that should be available.

4- It is noted that in Paragraph (9), which reads: (The administration is keen to inform patients of the change that occurs in doctors' appointments), it is noted through the opinions of the study sample members that if this service is worked on and provided to auditors, this will achieve satisfaction among citizens, and that the lack of meeting this requirement or its shortcomings and failure to provide this service will lead to little dissatisfaction. This is explained by classifying the requirement as one of the requirements or attractive qualities.

5- Paragraph (12), which reads: (I communicate with the clinic staff about satisfaction with the care provided), and through the opinions of the study sample members, we know that if this requirement is not met or the shortcomings and lack of quality of providing this service will lead to great dissatisfaction among the respondents, and if this requirement is met, we find that the general satisfaction of the respondents is low, and this explains the classification of the requirement as one of the undistinguished requirements.

6- Paragraphs (17, 20), which stipulate (the clinic staff provides complete information about the prescribed medications), and (the medical staff involves me in my healthcare process), came as a mixture of attractive and one-dimensional qualities, meaning that through the opinions of a sample In the study, the level of satisfaction with these requirements, if these requirements are met, will be average, and dissatisfaction and non-fulfillment of these requirements will cause moderate dissatisfaction.

7- Paragraph (10), which reads: (The clinic continues to provide care for emergency cases even after working hours) came as a mixture between attractive and undistinguishable qualities, meaning that the opinions of the study sample believe that if this requirement is not met and the lack of interest in continuing to provide care for emergency cases even after working hours, this service will lead to the dissatisfaction of the auditors, and if this requirement is met, we will find that the general satisfaction achieved with Citizens will be few.

### **5.2 Recommendations:**

Through the findings of the study, the researcher recommends the following:

- 1- Need for sufficient attention by private hospitals to outpatient clinics to provide basic and one-dimensional services to patients with high quality, by increasing the number of specialized physicians to attend outpatient clinics
- 2- Redoubling efforts to provide attractive services that increase the satisfaction of patients attending outpatient clinics in Palestinian private hospitals by maintaining the cleanliness of the outpatient clinics' facilities and yards, and providing sufficient and comfortable seats for the patients.
- 3- There is a need to train the medical staff who work in outpatient clinics to provide appropriate treatment to patients.
- 4- Work to provide comforts for patients and preserve their privacy by equipping medical facilities so that they are comfortable.
- 5- Need for management to provide the humanitarian side on the financial side and to provide treatment for needy patients who cannot cover the full costs of treatment, Through the hospital sponsoring the costs of their treatment, even partially.
- 6- Need for private hospitals to benefit from the Kano classification in providing medical services to patients in order to access high quality services.

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### Appendices

Appendix A: the questionnaire



جامعة الخليل كلية الدر اسات العليا

حضرة السيد/ة المحترم/ة؛

تحبة وبعد:

تقوم الطالبة بإجراء دراسة حول (سمات جودة الخدمات الصحية في العيادات الخارجية الفلسطينية: تطبيق نموذج كانو)، لذا أرجو تعاونكم بالإجابة على كل فقرة من فقرات الاستبانة بما يعبر عن وجهة نظرك، لما لأجوبتكم من أهمية بالغة في نتائج هذه الدراسة والتي هي جزء من متطلبات الحصول على درجة الماجستير في إدارة الأعمال، علماً أن إجاباتكم ستحاط بالسرية التامة، ولن تستخدم النتائج إلا لأغراض البحث العلمي فقط. مع فائق الاحترام والتقدير،

الطالبة: غادة الجنيدي إشراف: د. وسيم سلطان

الجزء الأول:

يتضمن هذا الجزء معلومات شخصية عن خلفية المستجيبين، لذا يرجى وضع إشارة (x) في

المكان الذي ينطبق وحالتك، مع الشكر.

اسم المستشفى:

الجنس: ذكر 🗆 أنثى 🗆

العمر:

المؤهل العلمي: جامعي 🗆 أقل من جامعي 🗆

# هل لديك أطفال؟ نعم لا حال لا المسنة الاخيرة كم عدد الزيارات للعيادات الخارجية: اول زيارة المسنة الاخيرة كم عدد الزيارات للعيادات الخارجية: اول زيارة المشنة الاخيرة كم عدد الزيارات للعيادة الخارجية: اول زيارة المشائرة المعيادة التي تزورها: نسائية المفال عظام المعيادة الني المقدمة من قبل المسؤال الوظيفي: ما رأيك إذا كان هذا المتطلب موجود ضمن الخدمات المقدمة من قبل العيادات الخارجية؟

**السؤال غير الوظيفي:** ما رأيك إذا كان هذا المتطلب غير موجود ضمن الخدمات المقدمة من قبل العيادات الخارجية؟

- I				•	•		
نوع الخدمات	الرقم	الفقرات	يعجبني	يجب أن	محايد	لا أعارض	لا يعبني
	.1	<b>يتم إتاحة</b> الطاقم الطبي المؤهل في غضون عشر دقائق من الوقت الذي قمت فيه بتسجيل الدخول إلى					
		العيادة.					
		<b>لا يتم إتاحة</b> الطاقم الطبي المؤهل في غضون عشر					
		دقائق من الوقت الذي قمت فيه بتسجيل الدخول إلى					
خدما		العيادة.					
خدمات الأطقم الطبية	.2	<b>يتواصل</b> أفراد الطاقم الطبي المناوبين في العيادة بشكل					
لمقح ال		جيد فيما بينهم لضمان العلاج الفعال.					
طبية		<b>لا يتواصل</b> أفراد الطاقم الطبي المناوبين في العيادة					
		بشكل جيد فيما بينهم لضمان العلاج الفعال.					
	.3	<b>يتم تعيين</b> أطقم طبية مؤهلة بشكل مناسب لتقديم					
		الرعاية الصحية					
		<b>لا يتم تعيين</b> أطقم طبية مؤهلة بشكل مناسب لتقديم					
		الرعاية الصحية					
·1	.4	<b>يكون</b> تصميم مرافق العيادة مناسب للمرضي					
دمات		<b>لا يكون</b> تصميم مرافق العيادة مناسب للمرضي					
خدمات المرافق	.5	<b>يتم تصميم</b> الغرف بحيث تحافظ على خصوصية					
,"J		المريض					

الرجاء وضع إشارة ( ~ ) في الخانة المناسبة لك، لكل فقرة من الفقرات الآتية:

<b>لا يتم تصميم</b> الغرف بحيث تحافظ على خصوصية			
المريض		 	
<b>تهتم</b> العيادات بنظافة كافة المرافق	.6		
<b>لا تهتم</b> العيادات بنظافة كافة المرافق			
<b>تحرص</b> الإدارة على تقديم موظفو العيادة تعليمات	.7		
واضحة للمرضى حول الرعاية الصحية			
<b>لا تحرص</b> الإدارة على تقديم موظفو العيادة تعليمات			
واضحة للمرضى حول الرعاية الصحية			
<b>تتابع</b> الإدارة عملية تسجيل المريض لتكون سلسة	.8		
وسهلة			
لا تتابع الإدارة عملية تسجيل المريض لتكون سلسة		۰đ	
وسهلة		دمات	
<b>تحرص</b> الإدارة على إبلاغ المرضى بالتغير الذي يطرأ	.9	خدمات إدارية	
في مواعيد الأطباء		۰ <del>۹</del> ,	
<b>لا تحرص</b> الإدارة على إبلاغ المرضى بالتغير الذي			
يطرأ في مواعيد الأطباء			
تستمر العيادة بتوفير الرعاية للحالات الطارئة حتى بعد	.10		
ساعات العمل			
<b>لا تستمر</b> العيادة بتوفير الرعاية للحالات الطارئة حتى			
بعد ساعات العمل			
<b>يتفهم</b> الموظفين احتياجات المرضى ومتطلباتهم	.11		
<b>لا يتفهم</b> الموظفين احتياجات المرضى ومتطلباتهم			
أ <b>تواصل</b> مع موظفي العيادة حول الرضا عن الرعاية	.12		
أ <b>تواصل</b> مع موظفي العيادة حول الرضا عن الرعاية المقدمة	.12	·J	
	.12	خدمات	
المقدمة	.12	خدمات (لتفاع	
المقدمة لا أتواصل مع موظفي العيادة حول الرضا عن الرعاية	.12	خدمات التفاعل والن	
المقدمة لا أتواصل مع موظفي العيادة حول الرضا عن الرعاية المقدمة		خدمات التفاعل والتواصل	
المقدمة لا أتواصل مع موظفي العيادة حول الرضا عن الرعاية المقدمة يتعاطف أفراد الطاقم الطبي مع حالتي الصحية		خدمات التفاعل والتواصل	
المقدمة لا أتواصل مع موظفي العيادة حول الرضا عن الرعاية المقدمة يتعاطف أفراد الطاقم الطبي مع حالتي الصحية ويطمئنوني		خدمات التفاعل والتواصل	
المقدمة لا أتواصل مع موظفي العيادة حول الرضا عن الرعاية المقدمة يتعاطف أفراد الطاقم الطبي مع حالتي الصحية ويطمئنوني لا يتعاطف أفراد الطاقم الطبي مع حالتي الصحية ولا		خدمات التفاعل والتواصل	

		<b>لا يستوعب</b> موظفو العيادة معتقداتي الدينية عند إجراء		
		الرعاية الطبية لي		
	.15	<b>يتفاعل</b> موظفو العيادة معي ويحترمون ثقافتي خلال		
		متابعتي الطبية		
		<b>لا يتفاعل</b> موظفو العيادة معي ويحترمون ثقافتي خلال		
		متابعتي الطبية		
	.16	<b>يتعامل</b> موظفو العيادة مع بتودد		
		<b>لا يتعامل</b> موظفو العيادة مع بتودد		
	.17	<b>يقدم</b> موظفو العيادة معلومات كاملة عن الأدوية		
		الموصوفة		
		<b>لا يقدم</b> موظفو العيادة معلومات كاملة عن الأدوية		
		الموصوفة		
	.18	<b>يقدم</b> الطاقم الطبي تقريراً مكتوبا حول كيفية تقديم		
		العلاج لي		
خدمان		<b>لا يقدم</b> الطاقم الطبي تقريراً مكتوبا حول كيفية تقديم		
خدمات التقارير الطبية		العلاج لي		
ارير ا	.19	<b>يقدم</b> الطاقم الطبي معلومات كافية عن حالتي المرضية		
لطبية		وطريقة العلاج		
		<b>لا يقدم</b> الطاقم الطبي معلومات كافية عن حالتي		
		المرضية وطريقة العلاج		
	.20	<b>يقوم</b> الطاقم الطبي بإشراكي في عملية الرعاية الصحية		
		الخاصبة بي		
		<b>لا يقوم</b> الطاقم الطبي بإشراكي في عملية الرعاية		
		الصحية الخاصة بي		

# شاكرةً لكم حسن تعاونكم

Appendix B: Facilitation book

## HEBRON UNIVERSITY

Ref.

Date

بن\_\_\_\_القرالخزان

الرقم :

التاريخ: 2022/09/19

RARIE ORE

لمن يهمه الامر

تحية طيبة وبعد،

الموضوع / در اسات عليا

يفد برنامج الماجستير في ادارة الاعمال في جامعة الخليل بأن الطالبة غادة غالب عبد السميع الجنيدي ورقمها الجامعي (MBA) هي احدى طالبات برنامج الماجستير في ادارة الاعمال (MBA) وهي في طور جمع المعلومات لبحثها بعنوان (سمات جودة الخدمات الصحية في العيادات الخارجية الفلسطينية تطبيق نموذج كانو).

يرجى مساعدتها في تسهيل مهمتها.

مع الاحترام و التقدير،

د محمد ال

عميد كلية التمويل والإدارة رئيس لجنة الدراسات العليا

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