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**عمادة البحث العلمي والدراسات العليا**  
**كلية التجارة**  
**ماجستير إدارة الأعمال**

**The Reality of Applying Priority Management in  
Emergency Departments & its Effect on the Quality  
of Health Services at large Governmental Hospitals in  
Gaza Strip**

**واقع تطبيق إدارة الأولويات في أقسام الطوارئ وأثرها على جودة الخدمات  
الصحية في المستشفيات الحكومية الكبرى في قطاع غزة**

**By**

**Mahmoud Eid Khattab**

**Supervised by**

**Prof .Dr. Yousif Ashour**

**Professor of Business Administration**

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## إقرار

أنا الموقع أدناه مقدم الرسالة التي تحمل العنوان

### **The Reality of Applying Priority Management in Emergency Department & its Effect on the Quality of Health Services at Large Governmental Hospitals in Gaza Strip''**

واقع تطبيق إدارة الأولويات في أقسام الطوارئ وأثرها على جودة الخدمات الصحية

في مستشفيات الحكومية الكبرى في قطاع غزة

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The Researcher Name: Mahmoud Eid Khattab

اسم الباحث: محمود عيد محمد خطاب

Signature : *Mahmoud Khattab*

التوقيع: *محمود خطاب*

Date : 1/12/2017

التاريخ:

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



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## نتيجة الحكم على أطروحة ماجستير

بناءً على موافقة عمادة البحث العلمي والدراسات العليا بالجامعة الإسلامية بغزة على تشكيل لجنة الحكم على أطروحة الباحث/ محمود عيد محمد خطاب لنيل درجة الماجستير في كلية التجارة/ قسم إدارة الأعمال وموضوعها:

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The Reality of Applying Priority Management in Emergency Departments & its Effect on The Quality of Health Services at Large Governmental Hospitals in Gaza Strip

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أ.د. يوسف حسين عاشور مشرفاً ورئيساً  
د. خالد عبد دهليز مناقشاً داخلياً  
د. أمجد فتحى الشنطي مناقشاً خارجياً

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والله ولي التوفيق،،،

عميد البحث العلمي والدراسات العليا

د. مازن اسماعيل هنية

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

(وَلَنَبْلُوَنَّكُمْ بِشَيْءٍ مِّنَ الْخَوْفِ وَالْجُوعِ وَنَقْصٍ مِّنَ الْأَمْوَالِ  
وَالْأَنْفُسِ وَالثَّمَرَاتِ وَبَشِّرِ الصَّابِرِينَ \* الَّذِينَ إِذَا أَصَابَتْهُمُ  
مُصِيبَةٌ قَالُوا إِنَّا لِلَّهِ وَإِنَّا إِلَيْهِ رَاجِعُونَ \* أُولَئِكَ عَلَيْهِمْ  
صَلَوَاتٌ مِّنْ رَبِّهِمْ وَرَحْمَةٌ وَأُولَئِكَ هُمُ الْمُهْتَدُونَ)

[البقرة/ 155 – 157]

## **Dedication**

To all those who are enlightened by the knowledge of the mind of others

To those who taught me success and patience

To everyone who taught me characters

To my mother and father

To my brothers and sisters

To my wife and children

To my family and tribe

To my teachers

To my colleagues

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## **Abstract**

This study aimed to identify the reality of applying priority management and how to use it successfully to spot the most important problems and the factors that help to implement it in addition to the benefits resulting from it. The study was conducted in the emergency departments(EDs) at large governmental hospitals in Gaza strip(GS) namely (Al-Shifa medical complex, Nasser medical complex, European Gaza Hospital, Al-Aqsa Hospital).and examined reality of applying priority management and effect on quality of health services .

The study also sought to explain the effect of personal information (age, sex, academic qualification, years of work, and place of work) on the respondents' opinions on the reality of applying priority management and its effect on the quality of health services. The study followed the descriptive analytic approach and employed the survey method. Accordingly, a questionnaire was designed specifically to measure the study variables and achieve the study objectives. The questionnaire was distributed to all health staff in emergency departments ( EDs) (physicians and nurses) in the hospitals mentioned totaling (252) employees. However, the researcher received valid (226) scripts with a return rate of (89.6%).

The findings show a positive correlation at ( $\alpha$  equal 0.05) level between the reality of applying priority management and the quality of health services as perceived by health staff in emergency departments (EDs) of the hospitals mentioned. Moreover, the study showed that the application of priority management had a positive significant effect on the quality of health services at level of ( $\alpha$  equal 0.05). Besides, there were no statistically significant differences related to age, gender, education of level and number of years of work.

Finally, the study recommended increasing awareness around benefits of priority management and promoting training in priority management field. promoting emergency departments" (EDs) "specialized medical and nursing staff" to deal with emergency cases and accomplish work and ability regarding classification of cases and their response to treatment and intervention on time.

## ملخص الدراسة

هدفت هذه الدراسة الى التعرف على واقع تطبيق إدارة الاولويات وكيفية استخدامها بنجاح وفاعلية واستخراج اهم المشاكل والمعوقات والعوامل التي تساعد على تطبيقها والفوائد الناجمة عند استخدام ادارة الاولويات والتي اجريت على أقسام الطوارئ في المستشفيات الحكومية الكبرى (مجمع الشفاء الطبي ،مجمع ناصر الطبي ،مستشفى الأوروبي، مستشفى شهداء الاقصى) وكذلك تحديد مدى اثرها على جودة الخدمات الصحية.

كذلك سعت الدراسة الى تبين مدى تأثير المعلومات الشخصية على اراء افراد العينة حول واقع تطبيق ادارة الأولويات وأثرها على جودة الخدمات الصحية واستخدم الباحث المنهج التحليلي الوصفي من خلال إعداد استبيان مصمم خصيصا للتعامل مع أهداف ومتغيرات الدراسة وتوزيعها على جميع العاملين في أقسام الطوارئ من الاطباء والتمريض من المستشفيات المذكورة مقدارها (٢٥٢)، وقد بلغت الاستبانة المستردة والصالحة (٢٢٦) استبانة بنسبة ٨٩.٦%.

وجدت الدراسة وجود علاقة طردية ذات دلالة إحصائية عند مستوى ( ٠.٠٥ ) بين واقع تطبيق ادارة الاولويات جودة الخدمات الصحية من خلال وجهة نظر العاملين في اقسام الطوارئ للمستشفيات المذكورة.

كما تبين النتائج أن تطبيق ادارة الاولويات له تأثير كبير على تحسين جودة الخدمات الصحية ومن جهة العاملين و بينت الدراسة بعدم وجود فروقات ذات دلالة احصائية تعزي الى كلا من العمر والجنس والمؤهل العلمي وعدد سنوات العمل ومكان العمل بتطبيق ادارة الاولويات.

واخيرا بينت نتائج الدراسة على أنه يتوجب زيادة الوعي حول فوائد تطبيق ادارة الاولويات وتعزيز التدريب في مجال تطبيق ادارة الاولويات، وتعزيز اقسام الطوارئ بالطواقم المتخصصة من الاطباء والتمريض للتعامل مع الحالات الطارئة لإنجاز العمل وقدرتهم على تصنيف الحالات ومدى استجابتهم للعلاج والتدخل في الوقت المحدد.

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## **List of abbreviations**

ATS	Australasian Triage Scale
BBO	Batting By Other
CVA	Cerebrovascular Accident
COBD	chronic obstructive pulmonary disease
CT	Computer Tomography
DM	Diabetes mellitus
EDs	Emergency Departments
GP	General Physician
GS	Gaza Strip
HTN	Hypertension
MOH	Ministry Of Health
MMS	Military Medical Services
NGOs	Nongovernment Organizations
PHC	Primary Health Care
PHIC	Palestine Health Information Center
PNA	Palestinian National Authority
RTA	Road Traffic Accident
SHC	Secondary Health Care
SATS	The South African Triage Scale
SPSS	Statistical Package for Social Science
SHCP	Senior HealthCare Professional
WHO	World Health Organization
TEWS	Triage Early Warning Score
TQM	Total Quality Management
UAP	Unlicensed Assistant Personnel

# **Chapter1**

## **Introduction**

# Chapter 1 Introduction

## 1.1 Introduction:

Individuals, communities and nations are facing many crises plaguing the future of their lives and sometimes threaten the entire existence especially in the Arab societies that lack infrastructures of the strategy plans and the capabilities of physical and humanity to face these crises. However, if there are indicators of a crisis, one must deal with them using a systematic scientific approach such as the priorities management in hospitals ( Aljdela, 2006).

The Priorities Management is one of the managerial systems that can be applied in the health field, through identification and classification of requirement to deals patients with response to treatment and optimal use available recourses and building strategic plan according to the hospital policy and Word Health Organization (WHO). the Priorities Management deals with patients through criteria of WHO .These are the extent of saving patients, and their response to treatment by hospital available recourses. They can give good productivity results at work, a decrease in stay period in the hospital, and cost with effective positive results.

The Priorities Management is one of the important sciences in the health field. It is the most commonly used in EDs and Triage room. Sorting of cases means the classification of patients according to priorities in the provision of health services and the extent of the response to treatment. There are several forms in the sorting process of cases by giving colored cards understood by health staff and each color is given priority and importance in the treatment.

The Priorities Management is rapid access to assessment by a health care provider lead to increases patient satisfaction and enhances public relations. An efficient triage system should reduce patient anxiety and increase satisfaction by reducing length of stay and waiting times in the emergency department (Subash, F., Dunn, F., McNicholl, B., & Marlow, J. 2004).

Emergency Departments are sensitive in hospitals, which constitute the main gate to enter the cases to internal departments and accept cases from primary health care, other hospitals, and ambulance unit, civil defense, and military services.

The Quality of Health Services have a close relationship to time as any delay in the process of providing the service could lead to human death or cause damage to

the health aspects and these lead to an increase in the administrative deterioration in terms of harnessing new costs , appointing new staff and adding new resources.

The Quality of Health Services is not easy because it is related to human life, the quality that mean reducing medical errors, therapeutic costs, administrative errors, pharmacy request, job turnover rate and rise in surges capacity of medical departments, reduction of length stay of patients in the hospital, and lessening the waiting time at the EDs.

### **1.3 Problem Statement and Research Questions:-**

Statistics show significance of applying priorities management in EDs because the Palestinian health system in the GS undergoes the circumstances of force majeure from the practices of Israeli occupation such as siege and wars since (2006). This resulted in increasing the number of patients, lack of medical resources, equipment, supplies in addition to not paying the salaries of a large segment of the health sector staff.

The research problem is based on the number of patients at the emergency department of governmental hospitals in the Gaza Strip reached (1,336,441) cases & number of patients in out clinics departments reached (1,048,085) registered cases. This reflects the size of the service& high costs provided to health services in the hospitals (PHIC,MOH,2016). The study was conducted at large governmental hospital in GS "Shifa medical complex, Nasser medical complex, European Gaza hospital, al-Aqsa hospital".

The number of reviewers in public, pediatric, obstetrics EDs amounted to (1105518) cases. The number of those admitted to internal department "in patient" was (117980) amounted admitted percentage 10.7% (annual report to hospitals 2016).This required Applying priority management according to specific criteria, the application priority management in EDs plays a significant role in reducing medical errors and rapid of service which gives more positive results in terms of reducing health costs, human effort and saving a large part of the available resources. this study aims at examining the reality of applying priority management in emergency department &its effect on the quality of health services,. In order to achieve this objective, this work aims to answer the following research questions:

- A. What are the factors affecting Applying Priority Management, used in EDs of governmental hospitals in the GS?
- B. Is there a relationship between preparedness and quality of health services ?
- C. Is there a relationship between classification of patient and quality of health services ?
- D. Is there a relationship between surges capacity and quality of health services ?
- E. Is there a relationship between available resources and quality of health services ?
- F. Is there a relationship between response to treatment and quality of health services ?
- G. Does Reality Applying Priority Management, used in EDs of governmental hospitals in the GS, have the ability to reduce employees workload and wait time?
- H. Can Applying Priority Management access critical patients and deals immediate ?
- I. Does Reality of Applying Priority Management in EDs of governmental hospitals in the GS contribute in Quality of Health Services ?
- J. Does Reality Applying Priority Management help use optimal available resources ?

Answering the above-mentioned questions, this study aims to explain Reality of Applying Priority Management and effect on Quality on Health Services .

#### **1.4 Variables and Conceptual Framework:**

The variables of the study include one independent variable, (Reality of Application Priority Management) which, consists of five dimensions "preparedness, classification of patient, surges capacity, available resources, response of treatment". The dependent variable (Quality of Health Services) consists of five dimensions "Reliability, Responsiveness, Assurance, Empathy, Tangibility".

#### **Research Variables:**

After reviewing the related literature on priority management and quality of health services, the researcher decided to investigate the variables and dimensions connected to priority management (Karen. Murrell, et al, 2010) but the quality of health services depend on "A. Parasuraman, A. Zeithaml, and Leonard L. Berry(1985),and Conceptual Model of Service Quality (Philip Kotler et al, 2012)

### Independent Variables

Reality of application priority management includes five dimensions:

- A. Preparedness
- B. Classification of Patients
- C. Surges Capacity
- D. Available Resources
- E. Response to Treatment

### Dependent Variables

quality of health services include five dimension:

- A. Reliability
- B. Responsiveness
- C. Assurance
- D. Empathy
- E. Tangibility

### The conceptual Framework

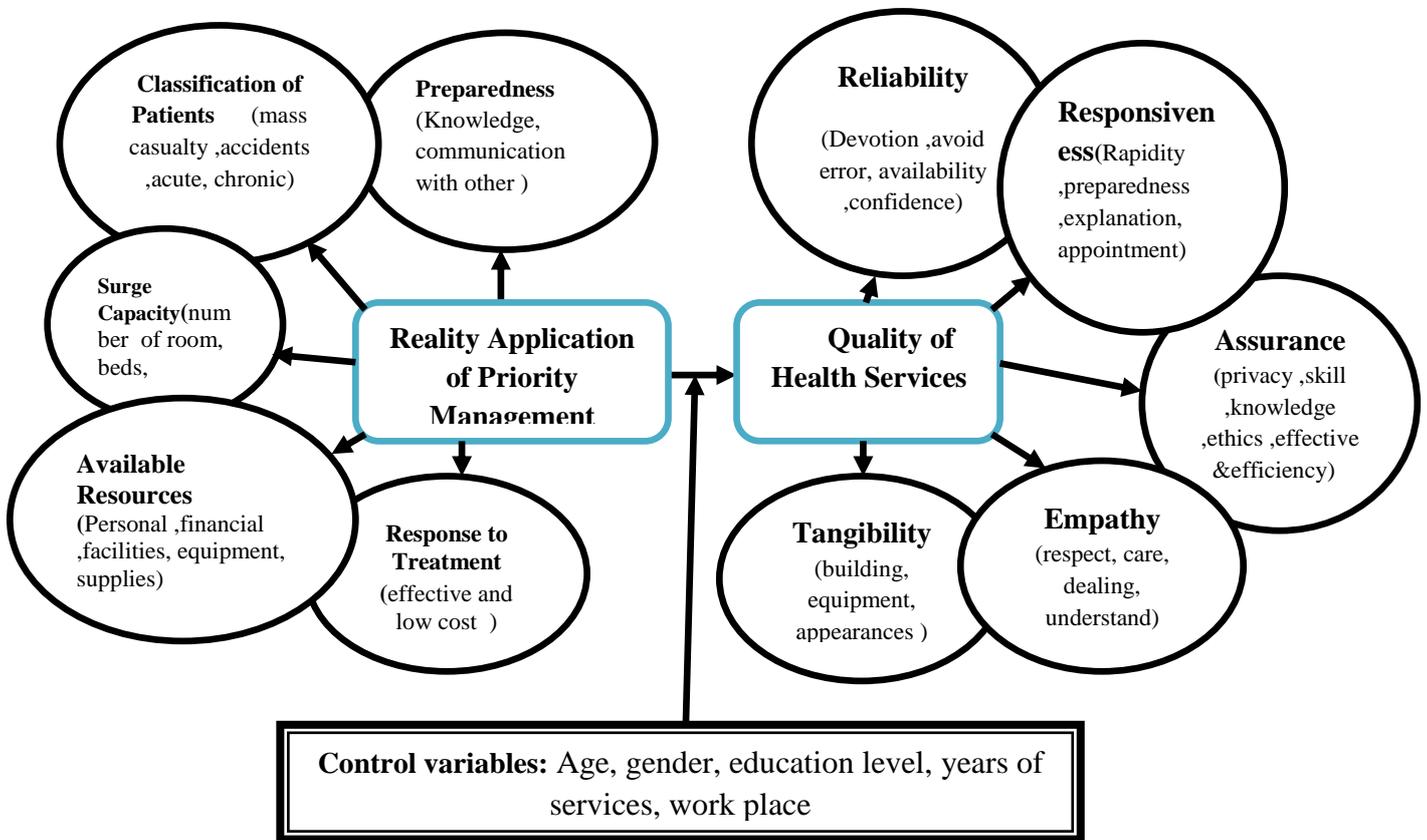


Figure ( 1.1): a conceptual map developed by the researcher based on literature review and A. Parasuraman, A. Zeithaml, and Leonard L. Berry," Conceptual Model of Service Quality"

### 1.5 Hypotheses:

To study the reality of applying priority management in emergency department & its effect on improving the quality of health services, the following hypotheses were constructed:

**H-1** There is positive statistical significant relationship between **application priorities management** "preparedness, number of patients, surges capacity, available resources, response to treatment "and **quality of health services** and include hypotheses subset:

**H1-a)** There is positive statistical significant relationship between **Preparedness** and **Quality of Health Services**.

**H1-b)** There is positive statistical significant relationship between **Classification of Patient** and **Quality of Health Services**.

**H1-c).** There is positive statistical significant relationship between **Surges Capacity** and **Quality of Health Services**.

**H1-d)** There is positive statistical significant relationship between **Available Resources** and **Quality of Health Services**.

**H1-e)** There is positive statistical significant relationship between **Response to Treatment** and **Quality of Health Services**.

**H-2 Application Priorities Management** components "preparedness, number of patients, surges capacity, available resources, response to treatment" effect positively and significantly **Quality of Health Services**.

**H-3** There are statistical significant differences at ( $\alpha = 0.05$ ) level between respondents regarding their perceptions of **Application Priorities Management** and **Quality of Health Services** in emergency department at large governmental hospitals in Gaza strip due to demographics, which are: age, gender ,education level, years of services, work place.

### 1.6 Study Objectives:

The study's main objective is to investigate the **Reality of Applying Priority Management** in emergency department & its effect on the **Quality of Health Services** at large governmental hospitals in Gaza strip. Specifically, the study aims at achieving the following objectives:

A. Examining the relationship between (**Reality of Applying Priority Management**)" preparedness, classification of patient", surges capacity, available

sources, response to treatment " (**Quality of Health Services**) Reliability, Responsiveness ,Assurance ,Empathy ,Tangibility"

B. Examining the (**Reality of Applying Priority Management**)" preparedness, classification of patient, surges capacity, available sources, response to treatment " effect on (**Quality of Health Services**) Reliability, Responsiveness ,Assurance ,Empathy ,Tangibility"

### **1.7 Importance of the Study**

This study contributes to shedding light on one the new and important topics in modern management thought (Priorities Management), which provides the organization a comprehensive and systematic response in dealing with various crises. Thus, the researcher hopes that this study will provide researchers and supervisors, health staff with knowledge. Besides, health institutions, especially the MOH and society as a whole will benefit from this study as follows:

- A. Discovering problems and obstacles of health institutions and giving solutions and suggestions that will help the organization to overcome these obstacles and problems through establish strong system to serve all cases .
- B. Recognizing the concepts relating to the priorities management and the events surrounding EDs, the quality of health services, access to standards suitable for the EDs in hospitals at the Gaza Strip and possibility of its application.

### **Theoretical Importance of Study**

The study has an important scientific use for the management of EDs, as its results will highlight the strengths and weaknesses of application of the priorities management. Besides, the study will uncover obstacles encountering the application of priority management criteria according to the WHO.

### **Practical Importance of Study**

The study has a practical importance, as it will benefit the officials and decision-makers in health institutions. This can lead to the application of priorities Management criteria in Emergency Departments. It is hoped that this study will enhance the awareness among employees in health institutions and motivate officials to apply priorities management in emergency departments and health care in hospitals in the Gaza Strip

## 1.8 Study limitations

The researcher faced some barriers while performing this study:

- A. This study requires a longitudinal study because of changes in processes, department staffing, internal and external factors that may compromise our results.
- B. There is a medical and nursing instability among staff and high job rotation.
- C. The researcher could not identify the total cost of EDs and compare it with cost of PHC.

## 1.9 Definition of Key Terms

**Priority Management:** The process of categorizing and prioritizing patients with the aim of providing the best care to as many patients as possible with the available resources

**Preparedness:** are the knowledge and capacities developed by governments, professional response that enhance organizations, communities and individuals to effectively anticipate, respond to and recover from the impacts of likely, imminent, or current hazardous events or conditions.

**Classification of Patient:** The classification of cases admitted to ED on multiform mass casualty, accidents, acute and chronic by ambulance, civil defense and MMS & PHC and other hospitals transferred and classified according to triage system.

**Surges Capacity:** The ability of a health service to expand beyond normal capacity to meet an increased demand for clinical care.

**Available Resources:** The personnel, finances, facilities, major equipment and supply items available or potentially available for assignment to incident operations.

**Response to Treatment:** The provision of emergency services and public assistance during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety, and meet the basic subsistence needs of the people affected.

**Quality of Health Services:** Providing services with increased patient value, satisfaction, enhanced patient loyalty, improved repeat health routine, enhanced reputation of the hospitals organization, and decreased total cost

**Reliability:** The ability to perform the promised service dependably and accurately to the patient.

**Responsiveness:** Willingness to help patients and provide prompt service.

**Assurance:** The knowledge and courtesy of health teams and their ability to convey trust and confidence.

**Empathy:** The provision of caring, individualized attention to cases.

**Tangibles:** The appearance of physical facilities, equipment, supplies, personnel, and better communication with health systems.

### **1.10 Structure of Thesis**

In light of the previous methodology, the study can be divided into five chapters as follows:

**Chapter One:** This chapter includes background ,introduction , discusses the Problem Statement and study questions ,hypotheses, objectives, importance of the study , structure of the study and definition of key terms .

**Chapter Two:** presents a theoretical framework and previous studies related to priorities management and quality of health services.

**Chapter Three:** includes research design, study population and sample, the instrument, piloting, data collection, data entry and analysis.

**Chapter Four:** provides analysis of the data and the results. The researcher provides analysis of the data and the results include percentages, statistical significance regarding questionnaire's data, study questions and hypotheses.

**Chapter Five:** The finding of the study, recommendations and annexes. An abstract and Glossary are provided at the beginning of the study

### **1.11 Summary of Chapter One:**

This chapter included introduction about Priority management and quality of health services , problem statement and research questions, Variables and Conceptual Framework hypothesis, Study Objectives Importance of the study , study limitations. It also included definition of each independent and dependent variables, and finally , definition Structure of Thesis.

# **Chapter 2**

## **Literature Review and previous studies**

## Chapter 2 Literature Review and previous studies

### 2.1 Theoretical Framework:

#### 2.1.1 Introduction:

This chapter presents information relevant to the GS in Palestine, the location of the study. It presents a brief impression of the capabilities of MOH hospitals, classification of hospitals, and reality of emergency departments in GS, priority management and quality of health services in the Palestinian MOH.

The Palestinian health system operates under exceptional circumstances, such as the ongoing Israeli siege on the GS since 2006, which constitutes a clear violation of human rights in general and clearly reflects in all sectors. The health sector has been complaining of a lack of medication, medical supplies and medical equipment. GS hospitals strive to maintain the continuity of providing health services and achieve the best wishes of the citizen.

Secondary care is provided in the hospitals of the GS through three main sectors: MOH, MMS and NGOs. The Ministry of Health is the main provider of secondary health services in the GS. The most important is the emergency departments, which are the most sensitive that affect other departments in the hospital. The number of hospitals in the GS is 30 hospitals with different clinical capacities as in the following table:

**Table (2.1) shows the number of beds in Gaza Strip hospitals according to the service provider for the year (2013-2016)**

	2013		2014		2015		2016	
<b>Sector</b>	<b># Bed</b>	<b>%</b>						
<b>MOH</b>	2,037	%70,4	2107	%73.6	2081	%73.9	2243	%74.8
<b>MMS</b>	148	%5.1	138	%4.8	161	%5.7	161	%5.4
<b>NGOs</b>	710	%24.5	619	%21.6	574	%20.4	595	%19.8
<b>Total</b>	<b>2895</b>	<b>%100</b>	<b>2,864</b>	<b>%100</b>	<b>2816</b>	<b>%100</b>	<b>2999</b>	<b>%100</b>

Sources :annual report to hospitals, , PHIC,MOH,(2013-2016)

## Work Forces of MOH Hospitals

MOH in hospitals provide health services through work force consisting of physicians, nursing ,technicians and others , whose total number is 5989 employee at2015 but 6237 employee at 2016 Table( 2.2)explains the statistics of work forces in large governmental hospitals which occupies a great percentage namely 66% of MOH employees .

**Table (2.2) explains the distribution of work forces in large governmental hospitals**

<b>complex &amp;Hospital</b>	<b>Number (2015)</b>	<b>Number (2016)</b>
<b>Shifa medical complex</b>	1725	1807
<b>Nasser medical complex</b>	891	953
<b>European hospital</b>	795	836
<b>Al Aqsa hospital</b>	515	537
<b>Total</b>	<b>3926</b>	<b>4133</b>

Sources :annual report to hospitals, , PHIC,MOH,(2013-2016)

SHC provides health services with high cost whence available resources such as medication, medical supplies, laboratory material when compared with PHC cost. This situation results in an increase in the number of patients in hospital and EDs depletes available resources though some simple patients can be treatment at lowest cost in PHC. The following table(2.3) explains the amount cost in SHC and PHC.

**Table (2.3) Explains the amount expenses and costs in SHC and PHC**

<b>Health centers</b>	<b>Medication</b>	<b>Supplies</b>	<b>Laboratory material</b>	<b>Total</b>	<b>%</b>
<b>SHC</b>	71178950	17234452	4696488	135377890	88.5%
<b>PHC</b>	15998992	1316497	273924	17589413	11.5%
<b>Total</b>	<b>87177 942</b>	<b>18550949</b>	<b>49 70412</b>	<b>152967303</b>	<b>100%</b>

Sources: annual financial report ,PHIC,MOH(2016)

### **2.1.2 Classification of Hospitals** (annual report to hospitals, , PHIC,MOH, 2016)

**Hospital:** Every place prepared to receive patients and their stay in it for more than one day for the purpose of diagnosis, treatment or obstetrics or rehabilitation or nursing care.

#### **Classification of Hospitals according to the structure of the Ministry of Health**

**Medical complex:** A complex that includes more than one hospital provided that each hospital has a different specialty than other hospitals such as Shifa medical complex and Nasser medical complex.

**Large Hospital:** A hospital with a clinical capacity of 101 beds or more such as European Gaza Hospital and Aqsa Hospital.

**Small Hospital:** A hospital with a clinical capacity of 100 beds or less such as Kamal Adoan Hospital, Abu yousif ALnagar and others .

#### **Classification of Hospitals based on Specialization**

**General Hospital:** a hospital containing all the possibilities to provide medical care services in the four basic branches of medicine: surgical, medical, obstetrics & pediatric diseases.

**Specialized Hospital:** A hospital that has all the possibilities to provide medical care services and provide secondary medical care in one specialty.

#### **Classification of Hospitals based on Service Providers:**

**Ministry of Health Hospitals:** the Ministry of Health manages them.

**Ministry of the Interior Hospitals:** are affiliated to MMS and National Security.

**Non-Governmental Hospitals:** are affiliated to NGOs

**Private Hospitals:** They are run by the private sector, not affiliated to civil society organizations.

### **2.1.3 Reality of Emergency Departments in Gaza Strip**

**Emergency** "A sudden and usually unforeseen event that calls for immediate measures to mitigate its impact" (Challen , et al,2011).

The emergency department of the hospital is especially important for its rapid orientation towards saving patients in critical cases and provides first aid to the injured in the various emergency incidents as a first step necessary to reduce the risk and complications of these cases. It has become an urgent need due to the increase in diseases that may surprise people at any time as cases of all types of coma, angina, heart attack, poisoning, Road Traffic Accident (RTA), Work injury, burns and natural

disasters. To provide health services at the highest level, it is necessary to establish a system within the emergency department according to international criteria to provide fast and effective medical and nurses care for patients in emergency cases and ensure the availability of specialized staff throughout the day. Cases are divided into five levels as follows" Resuscitation, Emergent, Urgent, Less Urgent (Semi urgent), Non Urgent" Additionally, the emergency departments in the Gaza Strip hospitals suffer from over crowdedness in the last years. The following table shows the number of cases in emergency department services related to public emergencies, accidents , emergencies of pediatric , emergencies of women & obstetrics, .

**Table (2.4) shows the emergency services in the hospitals of the Gaza Strip according to the service provider for the year (2013-2016)**

Sector	2013		2014		2015		2016	
	# reviewer in EDs	%	# reviewer in EDs	%	# reviewer in EDs	%	#reviewer in EDs	%
<b>MOH</b>	1,120,989	%94.1	1,171,004	%90.9	1,110,862	%91.4	1,245,265	%93.2
<b>NGOs</b>	49,241	%4.2	86,126	%6.7	73,645	%6.1	75,871	%5.7
<b>MMS</b>	20,562	%1.7	30,590	%2.4	30,368	%2.5	15,305	%1.1
<b>Total</b>	<b>1,190,792</b>	<b>%100</b>	<b>1,287,720</b>	<b>%100</b>	<b>1,214,875</b>	<b>%100</b>	<b>1,336,441</b>	<b>%100</b>

Sources :annual report to hospitals, PHIC,MOH,(2013-2016)

The services provided in the public emergency departments compared to other departments are manifested in receiving more cases and most supportive and equipped such as"pediatric EDs , women and obstetrics EDs" in terms of manpower , equipment , number of beds and others more than other departments . The majority of the cases are admitted to internal department from public emergency departments. Accordingly, it is given precedence over the rest of the departments because it has an impact on the internal departments of the hospital in terms of the quality of services provided since the rapid intervention to treat the cases reduces the complications and costs resulting from the deterioration of patients. The following table will explain this through statistics.

Table (2.5) shows emergency services in large government hospitals for (2016)

Hospital	Sector	# of Reviewer	# of Admission	%of Admitted
<b>Shifa Medical Complex</b>	ED "Medical"	91001	9384	24.1%
	ED "Surgical"	152325	10030	25.9%
	ED "Obstetrics"	21269	19475	50%
<b>Total</b>		<b>264595</b>	<b>38889</b>	<b>100%</b>
<b>Nasser Medical Complex</b>	ED "Public"	124286	10434	34.9%
	ED "Pediatic "	67537	8735	29.3%
	ED "Obstetrics"	295068	10730	35.8%
<b>Total</b>		<b>486891</b>	<b>29899</b>	<b>100%</b>
<b>European Hospital</b>	ED "Public"	91032	9431	60.5%
	ED "Pediatic "	31053	4137	39.5%
<b>Total</b>		<b>122085</b>	<b>13568</b>	<b>100 %</b>
<b>Al-Aqsa Hospital</b>	ED "Public"	150197	20469	57.5%
	ED "Pediatic "	59808	5649	15.9%
	ED "Obstetrics"	21042	9506	26.6%
<b>Total</b>		<b>231947</b>	<b>35624</b>	<b>100 %</b>
<b>All Reviewer and Admission</b>		<b>1105518</b>	<b>117980</b>	

Sources :annual report to hospital study field, (2016)

Emergency departments include physician, nursing staff, technicians and specialists qualified to deal with emergency cases, especially in times of over crowdedness, as well as triage system of cases according to international standards appropriate with the nature of cases and preparation. This contributes to the provision of distinguished service and intervention timely, and teams are qualified to deal with crises and disasters through continuous training and development of staff to enable them to contribute excellent services in EDs in hospitals. The ongoing unlimited support and follow-up by management officials led to the expansion of EDs in the majority of hospitals in GS. As a result, there was an increase in surges capacity and specialization of emergency departments of public, pediatric, women and obstetrics. Consequently, the services provided were excellent and considered the privacy of patients. EDs receive patients immediately upon their arrival at the hospital or transferred from other sources such as ambulance unit, civil defense, PHC , MMS or

those transferred from other hospitals to get special health care such as burns, fractures, and wounds .Others are received and provided first aid and thence transferred to internal departments or transferred to specialist hospitals.

EDs operate around the clock, where all health teams work to provide health services to patients where the work is divided into three periods, "morning 7 hours and evening, 5 hours and night, 12 hours and all cases are treated through General physicians(GPs) and critical cases are transferred to specialists such as surgery, neurology, blood diseases and others.

The challenges facing EDs in Governmental Hospitals in the GS increase non-urgent cases, which is a burden as most cases can be treated in PHC and health centers, in addition to critical cases from private hospitals without coordination with the Governmental hospitals. Often these cases need specialized hospitals.

Emergency departments are equipped with many beds, equipment, and digital technologies. Each of the emergency departments in Governmental Hospitals in the Gaza Strip include a number of beds to sorting and initial examination , diagnosis and treatment .EDs consists of many rooms ,intensive care room, bones room , general surgery room and hall . The Radiology Department is also adjacent to the EDs. The current study was applied to four large government hospitals in the GS in terms of number of beds, health staff, and the number of cases as follows:

**Table (2.6) shows Possibility of EDs from (bed, employees in EDs of large government hospitals for (2016)**

Public ED					
Hospital	Beds			Employees	
	Triage	Hall	ICU	Physicians	Nurses
Shifa	6	22	8	32	63
Nasser	4	17	4	22	39
European	2	8	2	20	28
Al Aqsa	4	12	2	20	28
Total	16	59	16	94	158

Sources :Shifa Medical Complex, Nasser Medical Complex, European Gaza Hospital and Al-Aqsa Hospital Records, (2016).

#### 2.1.4 Application of Priority Management and Research Model

**Priority Management** setting is a process that ranks alternatives in accordance with normative and technical rules (Tragakes, E., & Vienonen, M. 1998). **Triage** is the process of categorizing and prioritizing patients with the aim of providing the best care to as many patients as possible with the available resources (Scherfigsvej, 2011). **Triage** is the process of assessment of a patient on arrival to the ED to determine the priority for medical care based on the clinical urgency of the patient's present condition (Emergency Nurses Association,2011).

Emergency Nurses Association (2011) **defines Triage in Emergency Care** as a process of collecting pertinent patient information and initiating a decision-making process that categorizes and prioritizes the needs of patients seeking care. A specific amount of time and experience in emergency care alone may not ensure that a registered nurse is adequately prepared to function as a triage nurse.

After reviewing the statistics received by the MOH from government hospitals, the researcher found that the number of patients reached (1.245.265), through the EDs only (194.962) patients were admitted to the internal departments (in-patient). This depletes work force, and available resources, which results in low level of service provided as voiced by the Public( Annual Report to Hospitals, 2016)

The service provided in hospitals is characterized about PHC because it has a high cost and requires many work force "doctors, nurses, technicians, administrators and others". Furthermore, it requires resources and medical equipment more than PHC that contributes to the quality of service provided. In view of the statistics received, most cases in EDs that can be treated in PHC at the lowest cost, as 15.6% of the number of cases are admitted to the internal departments. This indicates that most cases are simple cases. EDs receive many cases coming from PHC, those other hospitals transferred, unit ambulance, and the Civil Defense, and other critical cases that come directly to EDs can be presented to EDs through the following figure:

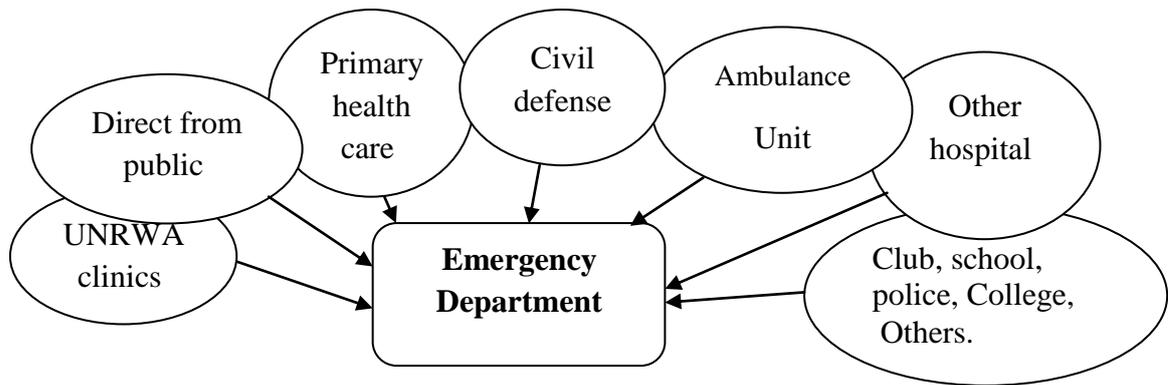


Figure (2.1) explains cases sources to emergency department

**The main reasons for the low level of service in EDs and their impact on other departments:** sources (by interview with head department and head nurse)

- 1- The number of patients coming to the emergency departments is high.
- 2- The number of the workforce is not suitable with number of patients.
- 3- Working hours last for a long period, especially the shifts are more than 12 hours.
- 4- Lack of available resources and medical supplies.
- 5- People's culture and their interaction with the workforce affects the outcomes of the work.
- 6- Lack of a strict policy of simple cases that have the right to be treated in PHC.
- 7- The low salaries of the workforce affects the productivity of the health service.
- 8- Non-activation of the triage system dealing with cases according to priorities in all periods.
- 9- Lack of activation of the PHC around the clock.

**General Flow of Patient in the Main EDs** (Wiler, et al, 2010).

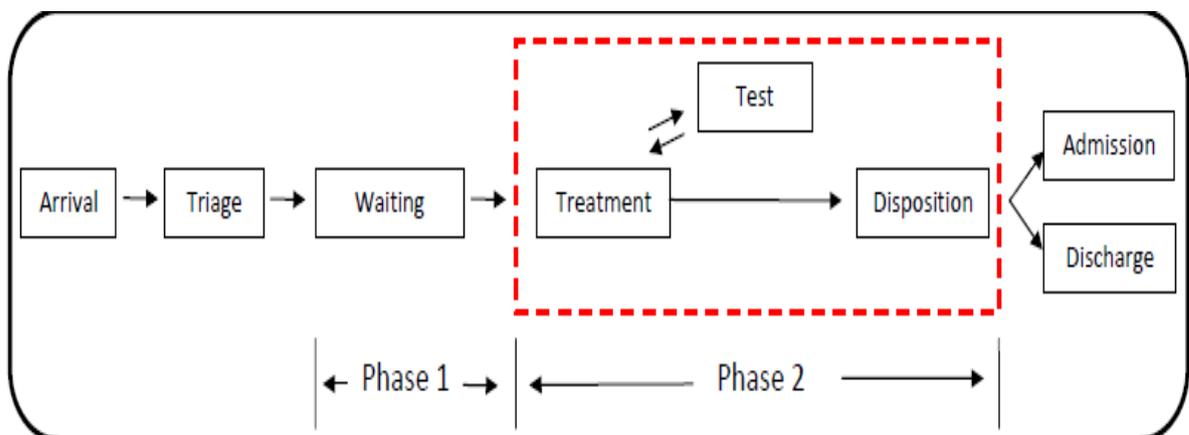


Figure (2.2) Explains dealing with cases in emergency departments

The above figure(2.2) shows the patient flow through the EDs. We largely distinguish four stages: (1) triage, (2) waiting for an EDs bed, (3) treatment, and (4) boarding (if the patient does not leave the EDs immediately after being finished). Patients arriving by ambulance are already triaged on their way to the hospital, so they immediately enter the 'wait for bed' queue.

Walk-in patients go through triage first to determine their urgency. Within each shift, a specific nurse (the triage nurse) takes care of the triage process for each newly arriving patient; the remainder of the time, she serves as a regular EDs nurse for other processes within the EDs. Once the patient has seized a bed, he enters the treatment phase. The treatment phase consists of different steps, depending on patient type and patient urgency. While in treatment, the patients alternates between 2 states: he is either receiving treatment for a given process step, or he is 'waiting for staff' (i.e., waiting for a doctor and/or nurse to receive the next step in his treatment plan).

#### **Step Approach Triage and SATS Process Flowchart** (Twomey ,etals ,2012)

The process of triage starts with a question to the patient or family with a patient as to the reason for coming to the ED. When this question is asked and answered, the triage process already commences with the triage staff rapidly assessing the patient for any critical patient's signs paying particular attention to Airway, Breathing, Circulation, Coma, Convulsion, Dehydration, and others. ABC-c-c-DO approach is used for the patients. If the patient is in critical situation (**emergency**), the patient is assigned a Red priority level and taken immediately to the resuscitation room. If a patient is not classified critical, he is assigned to any of the following **Very Urgent, Urgent or non-Urgent Patients**. Whether these are present or not, vital signs are measured, the TEWS is calculated, key additional investigations are checked and the triage priority adjusted as explained in Figure (2.3) It is important to observe whether a patient has any critical signs then a TEWS does NOT need to be calculated at triage. There should be no delay in taking the patient to the resuscitation room. Finally, the senior health services providers discretion as seen in Figure (2.3), allows the senior nurse or senior physician to override the final triage priority assigned.

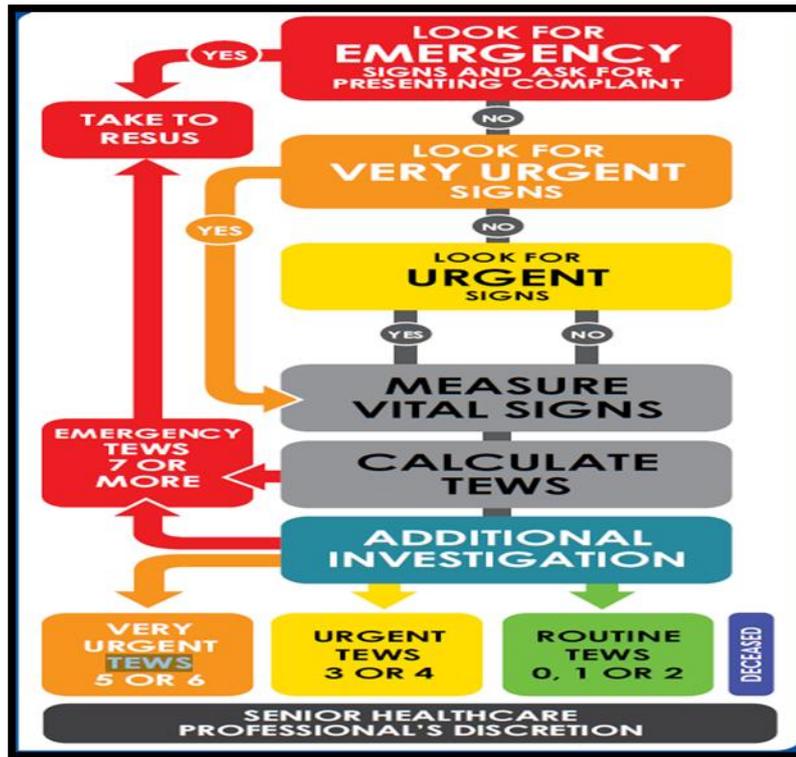


Figure (2.3): The South African Triage Scale (SATS) process flowchart

**Admission:** These cases are officially accepted for hospitalization and are allocated a bed through which medical, nursing and other services are provided to the hospital. The admitted patients are the starting point for intensive consumption of the organization resources.

**Discharge:** The total number of patients (alive and dead) who have completed the period of stay in the hospital, whether according to the advice of the physician or against the advice of the physician or cause of death during a specific period.

**Emergency's Departments in-patient "Admission "process principles (Wiler, et al, 2010).** Following assessment in the Emergency Department, a senior physician in the Emergency Department will:

- A. decide if the patient requires admission
- B. determine the condition(s) necessitating admission
- C. apply the agreed local protocol to determine the clinical team under whose care the patient will be admitted
- D. request the clinical team to accept the admission

The EDs system is based on initial examination, where patients are sorted according to the priority of patients. In times of over crowdedness, nurses, aiders, Doctors and Volunteers to relieve crowd and expedite sort procedures in the patients, carry out initial examination in order to help as many patients in shortest possible time according to their needs and health status. There are several triage systems, some of which divide the priority into 3, 4, or 5 levels:

Priority COLOUR	Target time	Management
RED	IMMEDIATE	Take to the resuscitation room for <b>emergency</b> management
ORANGE	< 10 mins	Refer to majors for <b>very urgent</b> management
YELLOW	< 1 hour	Refer to majors for <b>urgent</b> management
GREEN	< 4 hours	Refer to designated area for non-urgent cases
BLUE	< 2 hours	Refer to doctor for certification

Figure (2.4) explains SATS priority levels and target times

**The Benefits of Implementing SATS**((Twomey ,etals ,2012).

- A. Expedite the delivery of time-critical treatment for patients with life-threatening conditions.
- B. Ensure that all patients are appropriately prioritized according to their medical urgency.
- C. Improve patient flow.
- D. Improve patient satisfaction.
- E. Decrease the patient's overall length of stay.
- F. Facilitate streaming of less urgent patients.
- G. Provide a user-friendly tool for all levels of health care professionals.

However, some cases do not need initial examination. **Critical cases**, in which the vital signs are stable with the patient giving a history, explain that **Serious Cases** such as chest pain, dyspnea, hyperglycemia or hypoglycemia are given priority over **Urgent Cases** such as fever, abdominal pain, mild bleeding and fractures. A doctor can care for these within two hours after initial examination and should not be delayed except when necessary. In crowdedness, cases should be re-evaluated and monitored from time to time .**Non-Emergency Cases** requiring assistance can be provided in PHC, and cases that should be followed-up in out clinics such as headaches, dental pain and mild trauma. These constitute the majority of cases

visiting the emergency department. This classification gives the cases a time limit during which examining after triage system (within 15 minutes - within 1hour - within 2 hours - within 24 hours) can be done.

**Table (2.7) explains priority levels & name of diseases suspected to come to EDs**

Emergencies	Urgent	Semi Urgent	Non Urgent
Cardiac Arrest	Chest pain	Foreign body in "nose, eyes ,ears"	Need report
Sever Apnea	Abdominal pain	Ophthalmitis	Need laboratory test
Sudden coma	Open fracture	Headache	Need X Ray ,CT,US
Deep stab wound	Multi fracture	Fever	Change dressing
Multi fracture	Multi wound	Coughs	Change cast
Convulsion	Fever high	Simple wound	Chronic diseases
Cyanosis	Severe headache	Simple fracture	Removal suture
Explosive injury	Dehydration	Loss appetite	Transfer Non Urgent
Bleeding	Poisoning	General weakness	
Burn second &third degree	Electric shock	Drowsiness	
Chemical Inhalation	Stork	Gastritis	
Obstructive air way	Epispastic	Abscess	
Attempt suicidal	Heart diseases	Cellulitis	
Chest trauma with dyspnea	Hyperglycemia or Hypoglycemia	Hypotension	
Angina &MI		Low back pain	

Sources : Publications in the Emergency department in Ministry of Health

By viewing the reality of applying priority management in emergency department, we found that the nursing staff working in the triage room classify the cases. Cases are classified according to the risk degree and response to treatment , available resources at the hospital using three color "**Red**" is **Immediately** entered into the ICU room , and "**Yellow**" is given sometime between 10 to 30 minutes and is classified as **Urgent** and t" **Green**" is given sometime between 30 to 120 minutes and is classified as **Not Urgent** "

Color	Target time	Classification
<b>Red</b>	<b>Immediate</b>	<b>Emergency</b>
<b>Yellow</b>	<b>10-30 minute</b>	<b>Urgent</b>
<b>Green</b>	<b>30-120 minute</b>	<b>Non Urgent</b>

Figure (2.5) explains priority levels and target times of triage system in emergency department

The triage system needs awareness of cases because there are some cases that are entered immediately to the doctor. This does not mean that the patient is preferred to the other patients as some believe, but his condition is critical and cannot wait for long. The triage system process is applied not only once, but some cases need re-sorting according to the priority system.

**Re-Triage:** The process of re-triage involves an assessment of the waiting patient who has not been assessed by a clinician responsible for care within the period allocated by the initial triage category (Rahmat ,et als, 2013).

**Disaster Triage** – this is triage focused on maximizing the number of lives saved with limited medical resources and personnel. Hospitals will be required to focus on the critically ill while still maintaining core functions (trauma, burn, pediatrics, etc.). During disaster triage, family members may be required to care for patients at home, in hospitals, or alternate care sites (Rahmat ,et als, 2013).

**Emergency Department triage:** Used daily to prioritize patient assessment and treatment in the emergency department during routine functioning. Priority is given to those most in need. Resources are not rationed( Christian, M., Farmer, J., & Young, B. 2009).

**Inpatient Triage:** Applied day-to-day in a variety of medical settings, such as the ICU, medical imaging, surgery, and outpatient areas, to allocate scarce resources. Priority is given to those most in need based upon medical criteria. Resources are rarely rationed( Christian, M., Farmer, J., & Young, B. 2009).

**Incident Triage:** Used in multiple casualty incidents such as bus accidents, fires, or airline accidents to prioritize the evacuation and treatment of patients. These events place significant stress on local resources but do not overwhelm them. Resources are rarely rationed, and most patients receive maximal treatment( Christian, M., Farmer, J., & Young, B. 2009).

**Military Triage:** Used on the battlefield, modern military triage protocols most reflect the original concept of triage and include many of the same principles. Resources are rationed when their supply is threatened( Christian, M., Farmer, J., & Young, B. 2009).

**Disaster Triage:** Used in mass casualty incidents that overwhelm local and regional healthcare systems. Disaster triage protocols both prioritize salvageable patients for treatment and ration resources to ensure the greatest good for the greatest number( Christian, M., Farmer, J., & Young, B. 2009).

**The features of a strong triage system can be evaluated according to the following four criteria** (FitzGerald ,et als,2010).

- A. **Utility:** The scale must be relatively easy to understand and simple to apply by emergency nurses and physicians.
- B. **Validity:** The scale should measure what it is designed to measure; that is, it should measure clinical urgency as opposed to severity or complexity of illness or some other aspects of the presentation or of the emergency environment.
- C. **Reliability:** The application of the scale must be independent of the nurse or physician performing the role, that is, it should be consistent. ‘Inter-rater reliability’ is the term used for the statistical measure of agreement that is achieved by two or more raters using the same scale.
- D. **Safety:** Triage decisions must be commensurate with objective clinical criteria and must optimize time to medical intervention. In addition, triage scales must be sensitive enough to capture novel presentations of high acuity.

**Goals of Triage:** (Engebretsen, et als,. 2013)

- A. To rapidly identify patients with urgent, life threatening conditions.
- B. To determine the most appropriate treatment area for patients presenting to the EDs.
- C. To decrease congestion in emergency treatment areas.
- D. To provide ongoing assessment of patients.
- E. To provide information to patients and families regarding services, expected care and waiting times.
- F. To contribute information that helps to define departmental acuity.

**Factors that Influence Triage Design and Operation Include:** (Beveridge ,et als, 1998)

- A. number of patient visits
- B. number of patients requiring rapid intervention
- C. availability of health care providers in the ED treatment
- D. availability of specialty services
- E. environmental, legal and administrative issues
- F. availability of community care resources

**The Successful Triage Nurse Include:** (Emergency Nurses Association,2011)

- A. Diverse knowledge base
- B. Strong interpersonal skills
- C. Excellent communication skills
- D. Strong critical thinking skills
- E. Ability to conduct a brief, focused interview
- F. Strong physical assessment skills
- G. Ability to make rapid, accurate decisions
- H. Ability of performing multitasks yet with focus
- I. Ability to provide patient education throughout triage process
- J. Ability to work collaboratively with interdisciplinary team members
- K. Ability to work under periods of intense stress
- L. Ability to appropriately delegate responsibilities
- M. Ability to adjust to fluctuations in workload
- N. Ability to communicate understanding of patient and family expectations
- O. Understanding of cultural and religious concerns that may occur

The study on the application of priority management in the emergency departments was based on five dimensions: "Preparedness - Classification of Patients - Surges Capacity - Available Resources - the extent of patients' Response to Treatment". By reviewing previous studies in Arabic, and English", the researcher extracted these dimensions that contribute to successful applied priority management.

### 2.1.5 The Five Dimension of Priorities Management

The sections below highlights all the Five Dimension of Priorities Management .

**Preparedness:** Is the set of elements that reflect the extent to which the management is preparing for crisis prevention, preparing for predictable crises and planning unavoidable situations in order to control the crisis and reduce its severity and impact if it occurs despite efforts to prevent it from happening.

World Health Organization (2011) **defines Preparedness** as the knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to and recover from the impacts of likely, imminent, or current hazardous events or conditions.

**Others define to World Health Organization:** Activities and measures taken in advance to ensure effective response to the impact of hazards, including the issuance of timely and effective early warnings and the temporary evacuation of people and property from threatened locations. The community must have adequate preparedness and methods for crisis prevention, and this emphasizes the importance of early warning signals, because it is difficult to prevent crises or disaster without foreseeing or foreshadowing. The purpose of prevention is to identify weaknesses in the community safety system connected to the relation between the prediction of crises and the preparedness such as pandemics ,earthquakes, fires, floods , collapses of old buildings, mass casualty. These are the most important disasters to which a country is exposed, and reflect in the civil defense and MOH preparedness and prevention plans, including training of personnel and selection of equipment.

#### **Classification of Patients:-**

The Classification of cases admitted to EDs on multiform mass casualty, accidents, acute & chronic by unit ambulance, civil defense and MMS & PHC and other hospitals transferred &classified according to triage system.

**Mass Casualty** namely cases resulting from wars and natural disasters in which the numbers of injured is too large to be caused by explosions , gun shooting and collapses where the diversity degree of injury is between serious, medium and minor and sometimes the arrival of injured cases dead (Aylwin, et als, 2007)

World Health Organization (2007) **defines Casualty** as any human accessing health or medical services, including mental health services and medical forensics/mortuary care (for fatalities), because of a hazard impact.

World Health Organization (2007) **defines Mass Casualty Incident** as an incident which generates more patients at one time than locally available resources can manage using routine procedures. It requires exceptional emergency arrangements and additional or extraordinary assistance.

**Mass Casualty Management System:-**A coherent and interrelated set of established procedures, policies, and plans that contribute to the shared objectives of optimizing the baseline capacity to deal with patient populations expected in a mass casualty incident, and efficiently increasing this capacity during the response to a mass casualty incident (WHO,2007).

**Algorithm for Mass Casualty Pediatric Triage**

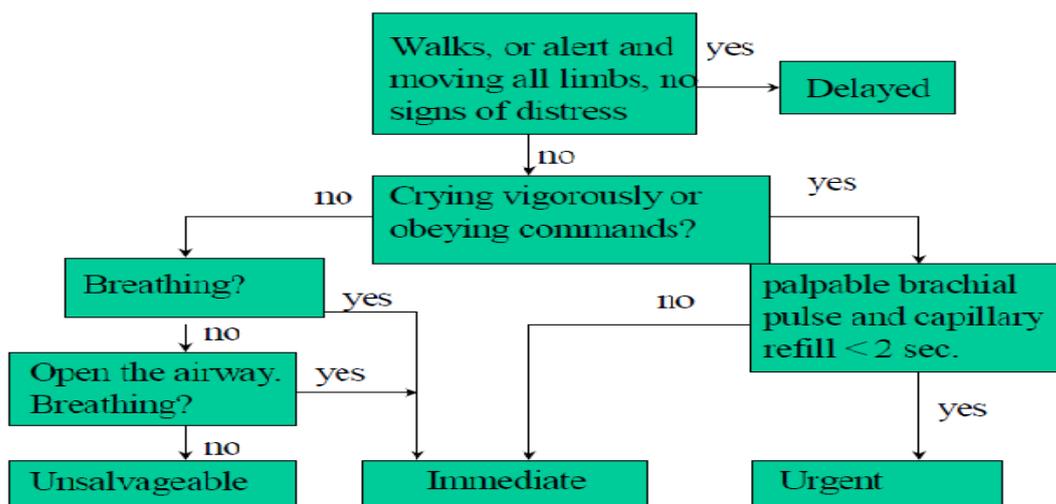


Figure (2.6): explain mass casualty and triage systems in ED

**Pandemic:-** These cases are in large numbers due to the spread of viral epidemics such as H1N1 viral and the degrees of risk among patients vary according to gender, age, and the spread by demographic and geographical area, which requires the provision of isolation rooms for the treatment of patients (Fraser ,etals,2009).

World Health Organization **defines Pandemic:-** is an epidemic that spreads over several countries or continents, affecting a large number of people. “The appearance of a disease in an epidemic form affecting countries sequentially (at the same time)”

**Communicable Disease:-** An illness due to a specific infectious agent or its toxic products that arise through transmission of that agent or its products from an infected person, animal or inanimate reservoir to a susceptible host, either directly or indirectly or through vector(Fraser ,etals,2009)..

**Contagious Disease:** A disease that is transmitted through direct contact" e.g. Scabies, trachoma, and leprosy"(Fraser ,etals,2009)..

**Accidents:** Varied cases resulting from accidents such as RTA, work accidents, burns, BBO, where require surgeons' intervention to deal with them according to the degree of risk and organ injured and level of conscious.

**Acute:** - an acute illness (one that comes on suddenly and lasts for a short time) is one method for classifying a change in health. Influenza is example of an acute illness. However, some lead to long –term problems due to their sequelae . A disease or its treatment "(Glen oaks 2002 can cause ill effects that result from permanent or progressive organ damage.

**Acute Disease:** is a disease characterized by sudden occurrence of symptoms or lasts for a short time period or both and severely affects the vital functions of the organ. The symptoms fade without the need for medical intervention as in the cold and teething child.

**Chronic Illness:** "one that comes on slowly and lasts for a long time" increases as individual age .arthritis, a joint diseases is an example of chronic disease (Timby, etals, 2009).

**Chronic Diseases** are a group or some non- Communicable diseases, but when they become infected, they develop over a long time as they develop relatively slowly, so called chronic diseases and also called non-communicable diseases. These diseases are a global problem as the rate of infection has increased in recent decades very clearly and in the Arab world has increased the incidence of the large extent with the radical changes in the behavior of food and the level of activity and movement(Timby, etals, 2009).

**Chronic Diseases Include Four Major Groups:**

- A. Heart disease, such as heart attacks, Carrboro Vesicular Accidents (CVA) and Hypertension (HTN)
- B. Cancer of all kinds.

C. Chronic respiratory diseases, such as bronchial asthma and Chronic Obstructive Pulmonary Disease (COPD).

D. Diabetics mellitus (DM).

**Department Assessment** (American college of emergency physicians,2005)

The EDs requires on-going assessment and monitoring to ensure early identification of EDs crowding. The EDs charge nurse often performs this on-going assessment. The following list is a sample of suggested criteria to consider when routinely assessing the EDs status:

- A. The number of new patients arriving each hour
- B. The in-patient hospital bed availability and capacity
- C. The length of time patients are waiting to be seen by a triage nurse
- D. The number of staff performing triage
- E. The number of patients (and their triage classification) waiting to be placed into an exam room after completing triage and the length of waiting time
- F. The number of patients in hallway beds, chairs or on ambulance gurneys
- G. The workload and level of experience of the EDs staff "physicians, nurses, Unlicensed Assistant Personnel (UAP) and registration staff".
- H. The number of critical patients in the EDs.
- I. The volume of EDs patients with pending consults/admissions, and the wait time.
- J. The volume of EDs patients awaiting diagnostic test/results and the wait time.

**Surges Capacity:-**

World Health Organization ( 2011) **defines Surge Capacity** as the ability of a health service to expand beyond normal capacity to meet an increased demand for clinical care.

**Surge Capacity** is the ability to respond to an increased number of patients. Surge capability is the ability to address the unusual or specialized medical needs of an increased number of patients.

Another **defines Surge Capacity** as the sudden demand for health services in a mass casualty incident where additional capacities (in terms of the amount of personnel, equipment or supplies) and/or capabilities (in terms of specialized expertise) are required.

**A Critical Care Surge** refers to any increase in the number of critically ill or injured patients beyond the baseline rate a hospital or critical care unit usually experiences.

**Types of Surge Capacity** (Kaji, A., Koenig, K. L., & Bey, T. 2006)

**Minor Surges** are a normal part of a hospital's day-to-day pattern of activity. For example, it is unusual to see the number of visits to the ED increase during long summer weekends. Such surges are typically small, in the range of 15% to 20% above usual capacity, and they are often predictable.

**Moderate Surges**, such as those due to seasonal influenza or summer heat waves, are known to occur regularly, but their exact timing is less predictable.

**Large Surges** typically caused by disasters tend to occur infrequently and with little or no advance warning. Such events may demand up to double the resources required for day-to-day activities.

Finally, it may be helpful to distinguish between large surges and mega surges, such as those seen during influenza pandemics and following large-scale natural disasters (e.g., tsunamis) and terrorist attacks.

**Mega Surges** may demand more than 200% of usual resources, which would overwhelm most healthcare systems.

The number of patients in a surge is only one factor that influences the impact of a surge. The types of illnesses and injuries patients present with as well as the timing of patients' arrivals are also key factors.

Thus, while a relatively small surge of patients with typical illnesses or injuries will not overwhelm a system, the same number of patients all requiring specialized services (e.g., burn management) may overwhelm that same system.

Although the absolute number of patients matters, even more important is the time over which those patients present to the hospital. A hospital is less likely to be overwhelmed if a moderate number of patients present at an even rate over 8 or 12 hours than if the same number of patients present over 2 to 3 hours.

It is important to consider all factors when planning how resources will be allocated during a surge. Those factors include the potential size of the surge, specialized resources that are likely to be required, and the anticipated rate of patient flow. If specific resources are likely to be depleted, it is crucial to begin implementing allocation processes early in the disaster to optimize resource availability.

### **Other Actions to Increase Surge Capabilities** (Christian ,et al,2009) .

- A. Obtain an executive order from MOH and state governments to facilitate lower staff-to-patient ratios.
- B. Decrease the number of routine care activities (frequency of vital signs being taken) that are performed.
- C. Decrease documentation of care.
- D. Decrease stringent rules about privacy and confidentiality to facilitate transfer of information between health care providers.
- E. Cancel elective procedures and appointments.
- F. Use areas of the hospital not normally used for patient care.
- G. Consider performing low-risk births at home, rather than at hospitals.
- H. Within reasonable standards and with appropriate training, consider increasing the scope of practice of midlevel providers, nurses, physicians, dentists, pharmacists, physical therapists, etc. Again, the level of care provided by these practitioners should meet the “reasonable” standard, given the limited resources at hand. Conversely, physicians may need to be flexible and perform secretarial, transportation, or administrative duties.
- I. Mass fatality plans – note that there is no urgent or imminent need for a dead body to be disposed to one of four final dispositions within 24 hours (cremation, burial, refrigeration or embalming), as it has been demonstrated that these bodies are NOT an immediate infection control hazard. There is time to properly respect the cultural and religious beliefs of the affected population.

### **Available Resources**

World Health Organization ( 2011) **defines Available Resources** as the personnel, finances, facilities and major equipment and supply items available or potentially available for assignment to incident operations.

**Resource Allocation Strategies** must take into account both supply and demand. When demand exceeds supply, scarcities will ensue and triage will be required to prioritize rational resources (Christian et al,2009).

**Resources Management include "resource allocation &resource rationing"**(Christian et al,2009).

**A. Resources Allocation:** Resource management strategies should reflect the relationship between the demand for resources and their supply. **Allocation** is a general term that refers to the assigning of resources for specific purposes. **Allocation Strategies** vary greatly depending on whether resources are plentiful or scarce. During minor and moderate surges, when resources are typically adequate, strategies such as discharging patients early, cancelling elective operations and outpatient clinics help redirect resources to the surge event, thus mitigating resource shortfalls(Christian et al,2009).

**B. Resources Rationing:** The term rationing refers to the resource allocation strategies employed when supply will not meet demand. During sudden or large surges, emergency mass casualty critical care is a form of rationing that can improve resource utilization. In medicine, triage has evolved as a tool to address significant resource shortfalls(Christian et al,2009).

### **Response to Treatment**

World Health Organization (2011) **defines Response to Treatment** as the provision of emergency services and public assistance during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety, and meet the basic subsistence needs of the people affected.

**Time Objectives:** Before deciding on the validity of time objectives based on local experience, it must be understood that important differences in patient outcome may only be detected in studies that evaluate the treatment advantage in very large samples. There is a need for more research on the effect time delays have on patient outcomes(Christian et al,2009).

### 2.1.6 Quality of Health Services and Research Model

The concept of quality is due to the Latin word *qualitates*, which means the nature of the person or the object and the degree of validity. That means accuracy and perfecting.

**To determine the concept of quality, it is necessary to review the definitions of it**

- A. **Juran** says that the Quality is appropriate for the purpose or use.
- B. In another definition, **E-Deming** is very similar to what was stated in the previous definition. In his view, Quality is "expected accuracy that fits the market at low cost"(e. g conforming needs).
- C. **Ph - Crosby** also sees that Quality conforms to specifications and says that Quality is the responsibility of all and the consumer desires are the basis of design.
- D. **Christian Meria** defines Quality as the ability of a product to meet the needs of customer at the lowest cost.
- E. While **G.Taguchi** defines it as "avoiding loss caused by the product to the community after delivery to the customer"

World Health Organization (1994) **defines Quality of Life** as individuals' perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns.

Institute of Medicine(2001) **Defines Quality of Care** as the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.

#### **Defining Quality of Services:**

It is important to distinguish between excellence of interpersonal care and patient satisfaction. Patient satisfaction is commonly measured and many consider it an indicator of medical care quality. However, patients may be satisfied with poor quality care (DeLone, W. H., & McLean, E. R. 1992).

#### **Why quality in Health Services:**

Recipients of healthcare expect the HealthCare Delivery System to provide them with 100% quality care but may be satisfied with less, provided they find some relief and succour from their ailments. Ninety-nine percent defect free quality, i.e. one error in a thousand seems to be a high standard and close to flawless performance (Brig Pawan Kapoor, 2011).

The quality of the health services reflects the view of the person or the party making the definition, since the definition of quality in the health service is seen from the viewpoint of ( Kotler, and Clarke, 1987).

- A. The Patient** as provided by the hospital of treatment characterized by sympathy and respect.
- B. The Doctor** develops the most advanced science knowledge and medical skills in patient service.
- C. Hospital Management** Achieving efficiency in service delivery.
- D. Owners Ownership** Get the best staff and the best facilities to provide customer service.

### **Principles of Quality Management and Importance:**

There are simple principles against which we judge the quality of medical performance. Some can be measured objectively and others are subject to personal views. These principles reduce the differences in medical practice and reduce medical errors, waiting times of patients, and develop the patient's attitudes towards health service. Providing medical services in an acceptable and balanced manner to all categories of society (children, women, the elderly, persons with disabilities, people with chronic diseases, etc.), adherence to medical and administrative ethics standards and the existence of clear standards and systems governing the health system is necessary(Samarrai, Jassim, 2000).

### **The Health Services Characteristics**

The characteristics of the health services provided by the hospital are reflected in the privacy of these services, and this is reflected in the method and administrative work that the service can provide to the public. The characteristics can be determined by - (AL Bakri, 2005)

- A.** The services of the hospital shall be public to the people and shall endeavor to provide them with a public benefit and to the various parties benefiting from them, whether they are individuals, organizations or bodies.
- B.** The health service offered is characterized by a high degree of quality because it is related to human life and curing.
- C.** Government laws and regulations affect the work of public health institutions and private hospitals, specifically those of the country or the private sector,

with regard to the determination of their working methods and the medical services they provide.

- D.** In business organizations in general, the decision-making power is the responsibility of one person or a group of persons representing the top of the administration. While the health organizations (hospital) are the power of decision is distributed to some extent between the administration team and the group of doctors.
- E.** The need for direct contact between the hospital and the beneficiary of the health service since the health service cannot be provided mostly in the presence of the patient himself for examination, diagnosis, laboratory test and treatment.
- F.** Because the health service is linked to the human being and is the most expensive thing, it is often difficult for hospital administrations to adopt the same standards and economic concepts applied in other services on their work.
- G.** Due to the fluctuation of demand for health service in the hours of day, week or season, it is necessary to provide health service to its applicants, because they cannot apologize for not providing it to those who need it.

**High-quality Health Services should be** (Philip, and Robert and Jennifer , 2007).

**Safe:** Avoiding causing injuries to patients who are **who are** intended to get help t by the services provided.

**Effective:** Providing services based on scientific knowledge to all who could benefit and refraining from providing services to those not likely to benefit (avoiding underuse and overuse, respectively).

**Patient Centered Providing** services **that** are respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions.

**Timely:** Reducing waits and harmful delays for both those who receive and those who give services.

**Efficient:** Avoiding waste, including waste of equipment, supplies, ideas, and energy.

**Equitable:** Providing services **that** do not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status.

**Improving health care system requires six dimensions including the following** (WHO, Bengoa 2006,P9, 10).

**Effective**, delivering health care that is adherent to an evidence base and results in improved health outcomes for individuals and communities, based on need.

**Efficient**, delivering health care in a manner that maximizes resource use and avoids waste.

**Accessible**, delivering health care that is timely, geographically reasonable, and provided in a setting where skills and resources are appropriate to medical need.

**Acceptable/Patient-Centered**, delivering health care, which takes into, account the preferences and aspirations of individual service users and the cultures of their communities.

**Equitable**, delivering health care, which does not vary in quality because of personal characteristics such as gender, race, ethnicity, geographical location, or socioeconomic status.

**Safe**, delivering health care which minimizes risks and harm to service users.

**The health goals of any health system will normally be set through a political process, and may be wide-ranging. They might fall within the following broad categories** (WHO, Bengoa, 2006,P14).

**Reducing Mortality**: for example, aiming to increase life expectancy for the population as a whole or for groups within the population (e.g. children).

**Reducing Morbidity**: for example, aiming to reduce the incidence of a particular disease such as malaria or diabetes, within the population.

**Reducing Health Inequalities**: for example, aiming to narrow the gap in life expectancy between different social groups within the wider population.

**Improving Outcomes for a Particular Disease**: for example, improving survival rates for people with cancer or Acquired immune deficiency syndrome (AIDS).

**Making Health Care Safer**: for example, reducing the incidence and impact of hospital acquired infections.

## **Quality Dimensions in the Health Services:**

The difficulties that face the employees in their assessment of the service as intangibility, but in their assessment of the quality of health service provided is based on level quality and includes five dimensions" Reliability, Responsiveness, Assurance, Empathy, Tangibles (Parasuraman, Zeithaml, Berry, 1985).

### **2.1.7 Five Dimension the Quality of Health Services**

**Based on this service-quality model, researchers identified five determinants of service quality. The following is an order of importance:** (Philip Kotler et al.2012)

- A. **Reliability** -The ability to perform the promised service dependably and accurately. This dimension represents 32% of the importance of the five dimensions of quality according to Kotler.
- B. **Responsiveness** -Willingness to help customers and provide prompt service. It represents 19% of the importance of the five dimensions of quality according to Kotler.
- C. **Assurance** -The knowledge and courtesy of employees and their ability to convey trust and confidence. This represents 16% of the importance of the five dimensions of quality according to Kotler.
- D. **Empathy** -The provision of caring, individualized attention to customers. This represents 16% as the importance of the five dimensions of quality according to Kotler.
- E. **Tangibles** -The appearance of physical facilities, equipment, personnel, and communication materials. This represents 11% as the importance of the five dimensions of quality according to Kotler.

**These Dimensions can be Illustrated as Follows:-**

#### **Reliability:**

**Cronin** says that reliability means the ability of a health service provider to service performance that is promised reliably and with high accuracy (Tylor, Cronin, 1999).

**Lovelock** explains that reliability refers to the ability of the service provider to meet and commitment to provide the service with reliability, accuracy and consistency (Lovelock,1996).

**Slack believes** that reliability in the field of health services means commitment to specific appointment for patients, delivering the results of laboratory tests and radiations according to specific appointment, and reliability in health services is a solution or finding solutions to the problems expected ( Slack, et.al 2004 ).

**Bakri explains** that reliability in the health service means the ability to perform in the achievement of what has been determined in advance and accurately. The standards of assessment of this dimension are the accuracy of the records approved in the management of the hospital, the exact dates in the health procedures, and the provision of service on time, reliability, accuracy, and stability without errors and can be reliable, and develop solutions to the problems of the patient. This gives him a sense and confidence in the providers of health services (Al-Bakri, Yasser,2005).

#### **Responsiveness:**

**Lovelock says** responsiveness means the ability of service provider to respond to the requests of the beneficiaries and queries, and the response in the field of health services means the ability, willingness and readiness of the service provider to provide service to the beneficiaries when they need it (Lovelock ,1996).

**Al-Bakri argues** the responsiveness means the real assistance in providing the service to the patient and the assessment criteria after the response to provide immediate treatment services, in response to external emergency calls, and work around the clock. One can say that after the response in the quality of health services field , respond all the times for the sick cases and provide assistance to patients & respond to requests , queries & complaints by them as well as the speed of delivery and delivery of health services to them when they need them (Al-Bakri, Yasser,2005).

#### **Tangibles:**

**Shaikh explains** that the tangibles refers to the general appearance of human and facilities and equipment, communication equipment, buildings and technology used, internal facilities for buildings and equipment to provide service, the appearance of the workers, waiting hall for patients, doctors' offices, uniforms, equipment and design, and medical devices (Shaikh and Rabbani 2010).

**Al-Bakri explain thinks** that tangibles are characterized by physical capabilities, facilities, equipment, personnel and communication equipment. Tangibles refers to the consideration of sanitary facilities, the use of clean tools and standard procedures in facilities and finally the prescription which should be easy to understand by the

patients and include the facts and the physical data of the service such as Physical facilities and facilities used by the patient(Al-Bakri, Yasser ,2005).

**Assurance:**

It refers to the information of the providers, their qualifications, and their ability to answer patient questions with confidence . Al-Borie **says** that the guarantee in the health service is the result of the accreditation or trust of patients with doctors and staff of the hospital, and confidence in their qualifications and ability (Al-Borie, Sheikh Damanhour, 2013).

**Al-Bakri** believes that assurance is intended for the characteristics of the employees with knowledge, ability and confidence in providing the service. The criteria for assessing this dimension are the reputation and status of the hospital, the knowledge and skill of the service providers, the personal traits of the employees, kindness and the dissemination of trust and honesty and good communication between patient &employees (Al-Bakri, Yasser, 2005.P215).

**Empathy:**

This dimension includes the attention of hospital staff to patients personally, their understanding of patient needs, and the appropriateness of hospital hours with patients' times. **Al-Allaq argues** that empathy refers to the degree of care and care of the patient in particular, attention to his problems and work to find solutions in humane ways. This dimension includes and extends to the provision of service in terms of time, space, communication, and shows spirit of friendship and care for the patient's interests (Al-Allaq, 2001).

**2.1.8 Operational definitions**

**Tangibles**

Tangibility refers to the appearance of personnel , material facilities, equipment in addition to aspects pertaining to tangible service such as the buildings , information and communication technology used in it, and internal facilities and prepared necessary to provide the service and, the external appearance of the employees , internal arrangements for health organization, sites wait for the beneficiary of the service, and other.

**Reliability:**

It is the ability of a product or service to perform the function required of it successfully under normal and specified conditions of use. This definition has four important elements: service availability, performance, conditions of use, duration of time, and the provision of health services promised on time, and keeping error-free records. So the tendency to overvalued services leads to unrealistic expectations that only result in loss of customer confidence, because the beneficiary of the health service, i.e. the patient looks to service through time, and fulfillment of commitments.

**Responsiveness :**

Responsiveness means the ability of the service provider and fast respond to requests and queries of patients. It reflects the desire or satisfaction with the help of the patients and the provision of fast service. The response in the field of health services means the ability, willingness and readiness of the service provider to provide service to patients when they need them. As you, know: Responding is the real help in providing service to the patient.

**Assurance:**

That means the characteristics of the employees in terms of knowledge, ability, confidence in service delivery, and the use standards of quality related to the reputation and status of the health center is high, the knowledge and skill of distinguished physician and nursing staff, the personal characteristics of employees. It can be said that safety and trust as one of the dimensions of quality of health service is meant to emphasize the health management of the organization on the quality of health and support with qualified staff (physician, nurses and others) as well as providing modern physical requirements in the health field leads to provide high services quality.

**Empathy:**

It refers to the level of care to the patient in particular, the attention to his problems and the work to find solutions to them in scientific ways, including the dimension of other characteristics such as the extent of service provision in terms of time and space, communication, and the degree of understanding of the service provider to the patients. The evaluation criteria for this dimension include personal attention to the patient, full listening to the patient's complaint, meeting the needs of the patient in a spirit of friendliness and kindness .

Some believe that the five dimensions do not all contribute in the same way to explain and interpret the difference and contrast in the total quality of service, and the reliability of the most accurate and sensitive consumers, but tangibility is the least sensitive. (Al Ajarmeh, 2005)

**The Advantages of SERVQUAL:** (Edura Wan Rashid, & Kamaruzaman Jusoff, 2009).

- A. It is accepted as a standard for accessing different dimensions of service quality.
- B. It has been shown to be valid for a number of service situations.
- C. It has been known to be reliable.
- D. The instrument is parsimonious because it has a limited number of items. This means that customers and employers can fill it out quickly.
- E. It has a standardized analysis procedure to aid interpretation and results.

## **2.2 Previous Studies**

The researcher reviewed a number of studies, research & reports including Arabic and English ones related to priority management and quality of health services and visited some electronic libraries and a several journals of Arab and English. This investigation persuaded the researcher that the topic is still under- researched in Palestine in general and Gaza Strip in particular.

**Donk, (2017) Triage and Treat Model of Services: Effective Management of Minor Injuries in the Emergency Department.**

The study aimed to describe the relationship between the triage system and treatment model of services , patient outcomes consisting of effectiveness , length of stay(LOS), patient satisfaction, , patient flow with emergency, and clinical services. The method used was descriptive cross-sectional pilot study in a single Regional EDs. Convenience sampling by a phone call was used to determine the level of satisfaction with the services received and explain any clinical complications or unexpected outcomes. The study found that majority of patients coming to EDs were children. LOS was 19 min with the majority (97%) were with simple wounds. However, those needing surgical interventions were only (n = 27). The informants expressed their dissatisfaction, lack of education on the part of providers of health services, and dissatisfaction with services. The study recommended improving patient satisfaction

and flow, reducing waiting times, designing an effective emergency model of services.

**Ebrahimi ,et al (2016) The Role of Descriptions of Triage Nurse in Emergency Department: A Delphi Study.**

The study aimed to develop the description of the role of nurse triage that depends on emergency medicine experts. The Method used Delphi Study that included three rounds performed from March until October 2014. The researchers applied questionnaire consisting 58 items related to triage system and EDs, representing three rounds. The study found the most items give intervention from doctor after triage by nurses to ensure quality of health services. The study recommended developing nurses and providing comprehensive educational programs to support diagnostic and interventions in triage practice by nurses.

**Jarvis. (2016.) Improving Emergency Department Patient Flow.**

The study explains significant challenges facing EDs from increasing patient numbers, limited hospital resources; limited surges capacity leads to reduction in the quality of the care delivered and poor patient outcomes. A literature review was performed to identify objective strategies to decrease the amount of time patients spend in the EDs in order to improve patient flow and reduce crowding in the EDs, and patient flow. Departmental crowding can be improved by implementing new strategies of working and introducing new technologies such as applied triage system in the EDs. Applying triage system in the EDs can effectively reduce patient time in the EDs.

**Shah ,et al (2015) Managing Patient Expectations at Emergency Department Triage**

The study aimed to identify the overcrowd period, the length of the waiting period and the condition of the patients' treatment rooms in the EDs. as Besides, the study investigated the relationship between patient satisfaction to the length waiting period as expected by the patient before and after the triage system. The researcher used comprehensive survey, and applied all discharge cases in EDs through period (11/4/2008 - 2/5/2009). The sample number was 1209 discharge cases from the EDs. The data was analyzed by using the expected wait time model (e.g. average wait time + one standard deviation). The study found that there were communication delays. Intervention was significant for only overall rating of EDs, while binary

communication status was significantly associated with all three patient satisfaction questions. The patients who did not receive any communication about delays, were between 1.42 to 5.48 times more likely to rate the three satisfaction questions lower than very good. The percentage of patients responding very good and very poor/poor were 14.6% higher and 5.9% lower. The study recommended that communication with patients during the waiting period increases patient satisfaction and motivates employees to improve health service.

### **Groene, et al (2015) Patient Experience Shows Little Relationship with Hospital Quality Management Strategies**

The study aimed to measure the experience of patients and its impact on the quality of health services through regular monitoring of patients, which increases the attention of service providers and deals with patients practically and scientifically. Patients' experience leads to increased management quality in hospitals. Patients experience leads to the maturation of the quality management system through patient interventions and focus on providing the best services. The aim study was the assessment & measurement of this effective strategy. The study was conducted in a large number of European hospitals"74 hospital and 276 hospital departments contributed data on 6,536 patients. (acute myocardial infarction n = 1,379, hip fracture n = 1,503, deliveries n = 2,088, stroke n = 1,566). The study showed patient experience affected the quality of health services.

### **Dridi, (2014) "The Role of the Use of the Queues Models to Improve the Quality of Health Services "Case Study: Public Health Foundation Neighborly Biskra**

This study aimed at identifying the role of using one of the models of operational research, which is the queues models, which help in a scientific way in improving the quality of health services. The analytical descriptive approach was used in presenting the theoretical side and different concepts in order to grasp the aspects of the subject and understand all its components. The study evaluated an alternative to improve the current situation in the public health institution in Biskra (Younes). This alternative has contributed to improving all the performance indicators. The waiting time for patients in the system has decreased from 33.9 minutes to 22.9 minutes. This study proved that it is possible to use the waiting queues models to improve the quality of health services. Therefore, the researcher recommended establishing special departments for operational research in Algerian institutions.

### **Rutland Regional Medical Center, (2014) Faster Emergency Department Communication Increase Patient Satisfaction**

A case study conducted on Rutland Regional Medical Center to unravel important patient service challenges in the emergency department found that these challenges were causing a serious deterioration in patient satisfaction ratings. This center includes 180 beds, more than 200 physicians and 1600 employees nurses and other technicians. Besides, this center uses a patchwork system of communications. With only a few technicians having cell phones, communications consisted mainly of using overhead paging or physically tracking down personnel as quickly as possible. The result was a substantial deterioration of patient satisfaction scores. One of the department's highest priorities became improving satisfaction rates, beginning with streamlining patient service and care through better and faster communications between nurses, technicians and staff. The solution used to improve communication was providing the EDs team with Motorola two-way DTR550 Radios with push to talk capabilities. This improved communication, coordination and more efficient use of resources helps eliminate wasted time, enabling the EDs to optimize front end operations. The two-way radio system also helps make it possible to implement the concept of immediate bedding, the ability to assign a bed to patients as soon as they enter the EDs. As patient service has been streamlined, patient satisfaction has greatly improved.

### **Shah and Jarwani (2014) Study of Patients of Road Traffic Accidents Arriving in Emergency Department of V.S Hospital at Ahmedabad City, Single Centre Pilot Study**

This study aimed to identify various injuries use of safety measures, compliance with traffic laws, the risk factors & emergency department intervention required based on the latest world status report on road safety released by WHO. Our study is a cross sectional observational study in which data was obtained from 150 patients of RTA arriving at any time to EDs. Collected data included information about basic details, basic crash characteristics, risk factors, use of safety measures, injuries sustained, EDs intervention required and disposition. The found study that approximately 77% of the patients belong to 11-50 year age group. The most common time of RTA is between 6 am to 12 noon (36.67%). However, accidents requiring admission were more during nighttime (62.74%). Innocent passengers and pedestrians

contributed to 41% of the accident cases. Noncompliance with traffic laws and safety measures like driving without license [20%], using cellphones while driving [10%], not using headlights at night [26%], not using seatbelts [80%], not using helmets [91%], etc. were found in a huge number of cases. Intracranial bleed and skull fractures were significantly (31.2% v/s 0%) more in drivers without helmets than those with helmets. EDs intervention required in decreasing order were dressing (38%), laceration repair (27.33%), splinting (24%), crash intubation (10%), ICD (2.66%).

**Weinick ,eta l. (2014)Emergency Department Patient Experience of Care Survey, Development and Field Test,**

The study aimed to identify the challenges faced by the public and private sector in dealing with patients in emergency department through reports issued by public and private institutions and interviews with staff (doctors, nurses, patients). The expert panel was used to ensure quality at high levels and objectively. The study found that the patient was dissatisfied with the waiting period. Through interviews with a large number of patients in the EDs, the respondents expressed their inconvenience regarding the delay in admitting admission cases into hospital. The study recommended ensuring the collection of accurate information, which leads to the accuracy of diagnosis and treatment in emergency departments and internal department. The need to focus on the periodic survey of information for patients in emergency departments and internal departments is also recommended because it helps in the process of identifying needs, and preparedness and readiness to receive patients.

**Habib Mahmoud, (2014) Measuring the Level of the Quality of the Medical Services Provided at the Health Centers in Lattakia Province from the Beneficiaries'**

This study aimed to identify the level of quality of health services provided in health centers in the province of Lattakia (supervision area of al-Shamia). It also determined the level of satisfaction of beneficiaries on health services provided in these centers. The study community consisted of families who went repeatedly to the health centers in the area. The researcher has used the descriptive analytical method to measure the satisfaction of the beneficiaries with the quality of health services provided in the centers. A questionnaire has been designed and distributed among the beneficiaries families in order to measure the quality level of health services in the

centers. Data has been also studied and analyzed by using the SPSS program. After analysis of the data, there was clearly lack of quality of health services provided in health centers al-Shamia supervision area, according to the dimensions of quality of health services (tangibility, reliability, power of responsiveness, empathy, trust and safety) from the viewpoint of the beneficiaries of the services provided.

**Mahmoodian, et al (.2014) Waiting Times in Emergency Department After Using the Emergency Severity Index Triage Tool.**

The study aimed to determine the patients' waiting time at Namazi and Shahid Faghihi hospitals in Shiraz, Iran. The method: this study used cross-sectional study and collected data and information from 900 patients who entered the EDs. The researchers used a questionnaire including items about arrival time, level of triage, and time of first visit by physician. The study found average waiting time from arrival to first visit by physician approximate was (5-14) minutes every one from patient, and the patients in triage level one, 84.6% in triage level two, and 95.6% in triage level three were visited within the target time limit. The recommended reducing waiting time, providing rapid services to critically ill patients depends on higher priorities according to triage system.

**Algzaraa et al,(2012)"Measurement and Assessment of Health Services Quality Application Study in AL- Faiha General Hospital – Basrah"**

The study aimed at identifying the extent of interest of the hospital administration in the quality of the health services provided to the patients and discovering the suitable methods to measure the quality of health services in AL-Faiha General Hospital. The researchers adopted the descriptive method in all data related to public services and quality of health services. Furthermore, they adopted a questionnaire including five dimensions by using the modern version of SERVQUAL as an instrument, which is to measure the quality of service. The data was analyzed through the SPSS program. The study found that there was no modernization of the devices, equipment, medical supplies used, and there was poor administrative style in providing service. In addition, there were no waiting areas and the provision of immediate services to patients by the staff was below the level of ambition. The researchers recommended the provision of devices, equipment and medical supplies at the level required would reflect in the quality of health services. They also

recommended enhancing the desire of the staff to help patients permanently through training and improving staff Culture of health service providers.

**Bahdada Njaa ,(2012) "Logistics Challenges in Health Institution" Case Study: Hospitalization of Public Institutions to Moakna**

In recent years, expenditure control leads health establishments to reason and optimize the physical and information flows surrounding the provision of medical services to patients. Logistics can contribute significantly to the performance of the hospital. Logistics performance is measured by the degree of efficiency achieved that is to say by the ratio Inputs/Outputs, on one side (Quality of Services) and the other side by the resources consumed for this intention. The objective is to minimize the total cost of all logistics activities for level of service.

**Salah Dyab (2012) Measuring Quality Dimensions of Government Hospitals Health Services in Jordan: A Staff and Patients Perspective**

The study aimed to measure the quality of medical services provided in Jordanian public hospitals from the perspective of patients and employees. The study tool was a questionnaire distributed to employees and staff nurses. The researcher included 30 hospitals affiliated to the MOH. The percentage of received questionnaires was 90%. The study found that the health staff apply the five dimensions of quality namely "reliability, tangibility, empathy, and safe except responsiveness domination." The researcher recommended that the hospital administration's commitment to provide medical services to the patient on time and to give and maintain confidentiality and privacy patients and provide facilities of service excellence, such as the provision of waiting halls- suitable toilets - preparation of training courses for employees to facilitate and develop therapeutic routines for the quality of health services unit.

**Musleh Ateai (2012) The measurement of quality of services perceived by staff and patients in hospitals operating in the city of Qalqilya,**

This study aimed to identify the quality level of the actual services perceived by staff and patients in hospitals operating.. The questionnaire consisted of 28 items divided into 6 domains: the tangible physical evidence, reliability, strength of response, safety& trust, empathy, characteristics of the hospital. The results showed that the responses of the studying sample towards actual and perceived quality of services, by staff and patients were high on all fields of study and on the total score.

Also there were significant differences on the following areas: power response, safety and trust, and empathy due to the variable of gender was in favor of males, and the study provided a set of recommendations such as providing the requirements of hospitals with modern equipment and providing suitable training courses for workers in their respective fields in order to improve the quality of medical services provided.

**Farrokhnia and Katarina (2011) Swedish Emergency Department Triage and Interventions for Improved Patient Flows.**

The study aimed to improve and develop the triage system in the EDs and to treat the flow of patients in the EDs in Sweden. This study was the result of the test triage scale for the 2009 scale of 2010 scale in Sweden. The researcher used questionnaires to collect data from 74 questionnaires distributed among the managers of the EDs in Sweden. The questionnaire includes items about triage and interventions to improve patient flows. The study found nearly all (97%) EDs in Sweden used a triage scale of 2010, while (73%) used 2009 scale. The Medical Emergency Triage and Treatment System was the triage scale most commonly applied across the state. The application of flow-related interventions was not as common, as but more than half (59%) of the EDs have applied or planned to implement nurse requested X-ray. The study recommended that the problem facing the emergency departments was crowdedness so studies recommended solving crowdedness problem and the costs resulting from it. Interventions are required to solve this problem and the optimal use of available resources.

**McClellan, et al. (2011) a Reduction in Emergency Department Use by Children From a Parent Educational Intervention.**

This study aimed to determine whether a parent- focused educational intervention can reduce non-urgent EDs visits. The study adopted the method of collecting data & information from "central hospital, four satellite hospitals, and two primary care clinics" provided monthly data retrospectively from January 2006 to October 2007 on EDs visits by children. The same information was provided prospectively from November 2007 to April 2009. Starting in November 2007, a family medicine residency program affiliated with the same hospital network distributed a 6.7 grade reading level booklet on non-urgent care of children to the parents who brought their children to the outpatient clinic. The number of EDs visits as a proportion of outpatient clinic visits at the residency program was calculated for

each month and compared to historical and geographic trends. Long-term changes were observed only among the intervention group. There was a substantial and statistically significant reduction in EDs use for non-urgent care of children. There was also a proportional reduction in EDs charges for this group.

### **Aacharya,et al (2011)" Emergency Department Triage: an Ethical Analysis"**

Emergency departments across the globe follow a triage system in order to cope with overcrowding. The intention is improving the emergency care and prioritizing cases in terms of clinical urgency. In emergency department triage, medical care might lead to adverse consequences like delay in providing care, compromise privacy and confidentiality, poor physician-patient communication, failing to provide the necessary care altogether, or even having to decide whose life to save when not everyone can be saved. These consequences challenge the ethical quality of emergency care. This article provides an ethical analysis of “routine” emergency department triage. The four principles of biomedical ethics - viz. respect for autonomy, beneficence, no maleficence and justice provide the starting point and help us to identify the ethical challenges of emergency department triage. However, they do not offer a comprehensive ethical view. To address the ethical issues of emergency department triage from a more comprehensive ethical view, the care ethics perspective offers additional insights. Summary: We integrate the results from the analysis using four principles of biomedical ethics into care ethics perspective on triage and propose an integrated clinically and ethically based framework of emergency department triage planning, as seen from a comprehensive ethics perspective that incorporates both the principles-based and care-oriented approach.

### **Shber, (2010)The Reality of Time Management among Employees Working in Satellite Channels Operating in the Gaza Strip.**

The study aimed to identify the reality of time management among employees of the program management in the satellite channels operating in the Gaza Strip, to show the activities they perform during the daily working hours and to clarify the extent of direction of the organization management towards the methods of preserving time. The researcher used the comprehensive survey of the sample of (70) questionnaires. The researcher designed a questionnaire to measure the time management of employees in satellite channels and used the descriptive analytical approach in the study. The findings showed that the reality of time management was

medium and good. The study recommended the importance of time as a resource, and the enhancement of human resources by providing them with the necessary skills to ensure their ability to deal with this important resource and planning its investment through development, training and motivation employees.

**FitzGerald ,eta l (2010) Emergency Department Triage Revisited.**

This study aimed to review a group of the studies related to EDs and triage system according to priorities and specific scale to triage system in EDs to reduce variation between triage system scales in several countries. They posited an International Triage Scale (ITS) that include" education, guidelines and algorithms" to critical cases in EDs .The researchers used monitoring and evaluation over the last 20 years in multicounty. They found crowdedness and increases in demand on the available resources and services when assessed by scales for international benchmarking and research programs .The authors designed a new International Triage Scale (ITS) derived from The Ipswich Triage Scale (ITS), National Triage Scale (NTS) Australasian Triage Scale (ATS) Manchester Triage Scale (MTS) in the UK, Canadian Triage and Acuity Scale (CTAS).

**Hoot & Aronsky, (2008) Systematic Review of Emergency Department Crowding: Causes, Effects, and Solutions.**

This study aimed to identify emergency department (EDs) crowding &all related to Causes, Effects, and Solutions through comprehensive Publishing Medical search to identify articles that studied causes, effects, or solutions of EDs crowding. The research adopted the definition of the word “crowding” proposed by the American College of Emergency Physicians: “Crowding occurs when the identified need for emergency services exceeds available resources for patient care in the emergency department, hospital, or both.” The study applied a 5-level quality assessment tool to grade the methodology of each study. From 4,271 abstracts and 188 full-text articles, the reviewers identified 93 articles meeting the inclusion criteria. Thirty-three articles studied causes, 27 articles studied effects, and 40 articles studied solutions of EDs crowding. Commonly studied causes of crowding included non- urgent visits, “frequent-flyer” patients, influenza season, inadequate staffing, inpatient boarding, and hospital bed shortages. Commonly studied effects of crowding included patient mortality, transport delays, treatment delays, ambulance diversion, patient elopement, and financial effect. Commonly studied solutions of crowding

included additional personnel, observation units, hospital bed access, non-urgent referrals, ambulance diversion, destination control, crowding measures, and queuing theory. The results illustrated the complex, multifaceted characteristics of the EDs crowding problem. Additional high-quality studies may provide valuable contributions toward better understanding and alleviating the daily crisis. This structured overview of the literature may help to identify future directions for the crowding research agenda.

**Tashkandy, et al. (2008) Reasons for Delay in Hospital Admission at Emergency Department: the Case of Al-Noor Specialist Hospital - Makah, Kingdom of Saudi Arabia"**

This study aimed to identify the causes contributing to longer stay of patients in Emergency Department (EDs) who were advised admission. The Method study was conducted from August 4 to 11, 2004G as a retrospective review of the emergency department cards of patients admitted to in hospital wards of Al-Noor Specialist Hospital, Makah, Saudi Arabia. The demographic data, physicians and nurses notes with their timings were reviewed. The maximum consumed time by a reason was considered as the main reason of delay for that subject. The delayed patients were divided into Group A and B, delayed before and after admission was advised, respectively. Prolonged length of stay (Delay) in EDs was defined as stay longer than 2 hours after patient's arrival in EDs until they were received to wards. **Findings:** Out of total 4876 patient visits during study period, 355 (7.3%) patients were admitted, and 238 (67%) were delayed. Age group 13–30 years was common in delayed 78 (32.8%) and not delayed 56 (47.9%) subjects. The mean length of stay of delayed subjects was 256 minutes. Group A 146 (61.4%) had more subjects than group B 92 (38.6%) ( $p < 0.001$ ). Fifty-eight (39.7%) patients stayed between 2-3 hours in Group A vs. B 23 (25%) (OR 2, 95% CI 1.1–3.5). Common reason of delay in Group A was multiple consultations with further investigations 70 (48%) ( $p < 0.001$ ) while file making process was common 40 (43.5%) in-group B ( $p < 0.001$ ).

**DeLia, D. (2007) Hospital Capacity, Patient Flow, and Emergency Department Use in New Jersey**

This study aimed to measure the increase in the number of patients in emergency departments and its implications for hospital surge capacity in New Jersey compared with other hospitals in (USA) and measure occupancy rates according to

annual statistics. The study used quantitative method analysis of recent trends in EDs utilization, hospital occupancy, ambulance diversion, and potentially avoidable hospital use in New Jersey (NJ). Using a case study approach, it also provides qualitative analysis of patient flow management and surge capacity planning for hospitals in the state.

These recurrent strains on capacity, more so than annualized occupancy rates, should be considered in evaluating the adequacy of hospital capacity in a particular community. Stress on hospitals can be understood and managed in terms of factors that affect EDs input (i.e., the number of patients coming to the EDs for care), throughput (i.e., the movement of patients through the EDs), and output (i.e., the availability of resources in the next level of care). Though performance is uneven, hospitals have a great deal of ability to affect ED throughput and output through patient flow management techniques

Finding: Streamlining EDs output is often hampered by the longstanding disparity in reimbursement for elective surgeries versus other hospital services, which makes it costly to disrupt elective surgery schedules. In the absence of broader health system reform, hospitals will have to find ways to serve an expanding range of patients in a constrained environment. Public policy efforts to assist hospitals in this task would benefit from regular surveillance of measures of hospital patient flow and other efficiency indicators.

### **Aljdela( 2006)"The Reality of the Methods Use of Crisis Management in large Governmental Hospitals in the Gaza Strip"**

This study aimed to identify the attitudes of employees towards the availability of a crisis management system at various stages to determine the preparedness and readiness of these hospitals in dealing with crises and disasters, as well as the relationship between the phases of the crisis management system with each other. The used descriptive analytical method and collected the necessary data through questionnaires prepared for this purpose. The researcher found that there is a severe weakness in the crisis management system in the hospitals of the Palestinian MOH in the Gaza Strip. Accordingly, the researcher recommended the establishment of management units of crises in the Palestinian MOH and the large hospitals of the MOH, providing qualified people in crisis management, and providing ongoing training and education on the latest developments in crisis management.

### **Archer, J. (2004) Time Management, Setting Goals and Priorities.**

The purpose of the study was to learn about the practical steps of using the time on the part of the manager, the role of this in the face of decisions, the heart of organizing, the effective time management, scheduling of weekly work, evaluating time. The questionnaire was used to collect the data. It was distributed to (60) managers. The results indicated that the first step at the time of manger in practice is that there was a clear development of the long-term goals and the Priorities of specific activities in accordance with the implementation of the objectives set, which can force us to face decisions and postponement and evaluate issues that we do not want to solution. The study also pointed out that the need for evaluation, identification of goals, making the scheduling process easy, and making a daily list of things that we want to accomplish on that day can be modified by understanding our goals, to be used with the priority system. To devote time to the schedule, there is fixable time schedule and realistic commitment. Postponement is one of the problems of time management, which explains importance of living on the list, trying to remove unnecessary tasks, identifying the most difficult activities, learning to say no to others and cooperate with others. This will help us manage our time. Recommendations include identifying the most important problems of time management, determining how to solve them, and learning about building methods. The schedule should determine prioritization, allocation of time to activities for the appropriate time, the need to assess how time spent, the use of a scale to evaluate our use of time, and establish a list containing all activities and achievements in an ideal week, focusing on the present time and priorities and capabilities.

### **Subash,eta l (2004) Team Triage Improves Emergency Department Efficiency**

The study aimed to observe whether three hours of combined physician and nurse triage would lead to earlier medical evaluation and treatment. Moreover, whether this benefit will last for the rest of the day when it is normal .The counting process has resumed. Method: Selected eight days randomly which test triage system through time "from 9:00 to 12 noon" and effective triage system by both physician and nurses. Results: The average times (p, 0.05) during the intervention were reduced to triage (2 min v 7 min, p = 0. 029), to see the physician (2 minutes of 32 minutes, p = 0.029), to radiology (11.5 minutes against 44.5 minutes, p = 0.029). The waiting times at midday were longer for patients in the non-intervention group. More patients

(18) of 95 (19%) of 2 out of 69 (3%),  $p = 0.0043$ ). No important knock on the effect was clear for the remaining 21 hours after intervention ceased.

**Assalak, (2003) "Patient Satisfaction for Nursing Services Provided in Selected Hospitals in Gaza Strip"**

This study aimed to measure the level of satisfaction of patients for nursing care provided to them in selected hospitals in the Gaza Strip through a poll of a sample of 247 patients in the different department in both European Hospital and Nasser Hospital. The researcher used the six dimensions represented in the news interaction, presence vigilance openness, environment comfort, and occupational skills of nursing, organization culture, advice and guidance. The study concluded that the level of satisfaction about nursing care in Gaza European Hospital was 84.2% while it was 61.7% in the Nasser hospital.

**ARashid,(2003), "Time Management and its Relationship with the Pressures of Work: Practical Study on Departmental Managers and Department Heads Border Quards in the Cities of Riyadh and Dammam"**

The study was applied to 175 officers in Riyadh and 55 officers in the city of Dammam. The study concluded the following recommendations: to raise awareness of the importance of time management, including trying to organize files in a proper manner so as not to waste time and lead to increased work pressure, accuracy & precision in writing & using Special paper. Time should not be wasted in completing complex clerical work or concentrating only on it. Organizing and distribution of internal tasks & activities between management and employees is done according to their majorities in order to ensure the speed of delivery. There is a need to simplify procedures and concentrate on business discipline. Management policy should follow the method of delegation of secondary tasks & activities to subordinates and training them. Senior management need to study the pressures of labor and rely on its results in the preparation of appropriate solutions, whose application alleviates these pressures. Besides, managers should attend to the subject of pressure.

**Shahry, (2003) Administrative Obstacles Affecting the Effectiveness of Receiving Traffic Accidents in Civil and Military Government Hospitals in Riyadh.**

The study aimed to identify the most important administrative, coordination, organizational and controlling obstacles that negatively affect the reception of traffic accident victims. A questionnaire was distributed to collect the data from emergency

department employees in government hospitals. SPSS was used to analyze study findings. The researcher found that there was a lack of training employees to deal with accidents, lack of health employees, and lack of equipment for the treatment of traffic accident victims. Additionally, there was no clear system excluding non-emergency cases and focus on emergency cases. The researcher recommended that the employees should be trained to deal with victims professionally. Emergency departments should be provided with equipment, which increases the quality of health service, and establishing a clear system for the triage of cases according to priorities.

**Badran Alomer ( 2002) "The Extent of the Application of Total Quality Management in Hospitals of Riyadh City from the Viewpoint of Practitioners of the Profession of Nursing"**

This study aimed to identify the principles of TQM applied in the hospitals of Saudi Arabia, and the differences between the various sectors in the extent applying TOM of this hospital. The study showed that there were different principles of TOM applied between the hospitals, and explained was that the extent of the application of TOM linked to the application of the principle of continuous improvement. The study recommended the need to find an advanced information system to make the right decisions, work hard to spread total quality culture, continue to raise the level of application of the principle of continuous improvement, and to work more on the application of the principle of focusing on the client.

**Mor, M., & Waisman, Y. (2002) Triage Principles in Multiple Casualty Situations Involving Children: The Israeli Experience.**

The study aimed at measuring the effectiveness of the triage system in the emergency departments for the care of children in Israel, and how to deal with multiple cases and measuring the experience of workers in the speed of the process of sorting professionally. The researchers collected information by observation and interview with experts in the field of health. The study concluded the appropriate triage of victims of mass casualty events or disasters will ensure optimal delivery of care and improve outcome. The researcher recommended an algorithm using four triage categories that uses four priority categories instead of three" immediate care/shock room, urgent care/emergency department, delayed care and, unsalvageable, which emphasizes the role of senior physicians& Nurses experienced in trauma care and crisis management.

### **Butler, et al (2001) Observational Survey of Emergency Department Rapid Sequence Intubation – (RSIs)"**

This study aimed to study the current practices of rapid sequence intubation in four variety emergency departments training programs in the UK, using methods of observational study design involving four regional training programs (Wessex, North West, Yorkshire, Avon). Data were collected in real time using a previously piloted survey tool. Specialist registrars in emergency department over a continuous 28-day period collected data. Data collected included: indications for RSI, key timings of RSI procedures, data and information of RSI practitioner, complications and results of procedure.

Finding-Data from 60 RSIs were recorded and collected. The majority of decisions to perform RSIs were made by emergency doctor (74% cases). Over 50% of the RSIs occurred after 4 pm. Emergency physicians performed 26% of RSIs although the majority were performed by anesthetists .Most of the given indications for RSIs were based on an assessment of ABC.

### **Shaheen, (2000) The Psychological Effects of Crisis Management, Disasters and Health Emergencies.**

The study aimed at identifying the psychological effects of crisis management, disasters and health emergencies. It also tried to discover the correlation between experience in crises and disasters management, and health emergencies, with psychological effects resulting from dealing with crises. The sample of the study consisted of (168) individuals, including surgical doctors of all types, orthopedics, anesthesiology , intensive care, nurses, laboratory technician , and auxiliary services from the Ministry of Health hospitals in Dakahlia in Egypt. The sample was divided into two groups (84) each, the first one was a control and the other was the experimental called group crisis and Disaster Management and Emergency Health. Selected groups were required to have at least two years of experience. The results of the study indicate that there is a negative relationship between experience and anxiety. E.g. and there is a positive relationship between experience and the ability to face crisis and deal with it.

**El Telbani,(2000) "Evaluation of the Application of Total Quality Management in the Health Sector-Palestinian lessons and Recommendations to Improve and Develop the Quality"**

This study aimed to identify the problems and obstacles facing the implementation of TOM, as well as recognize the reality of applying TQM in the Palestinian health sector. The study also aimed to identify main acting forces acting during the process of applying TQM in the Palestinian health sector in addition to identifying the lessons learned from the Palestinian experience in beginnings and come up with useful recommendations to develop the quality in the future. The study adopted the case study method by examining the documents available, interviews, observation and questionnaire .The study touched on methods and application methodology that follow the project in successive stages and the most important success factors. In addition, the study addressed the most important obstacles faced by the project, including the external environment unstable& internal problems of the institutions, the lack of follow-up and the resistance to change, centralization style, poor communication, and lack of satisfaction of employees of the health sector.

**Sleman Glal ,(1999) Effect of Some Organizational Factors on the Efficiency of Crisis Management in Mansoura University Hospital.**

The study aimed to determine the degree of variation between the views of the employees of Mansoura University hospitals from physician, nursing staff, technicians and administrators' views about the efficiency of crisis management in hospitals, the availability of the following organizational factors at Mansoura University hospitals: (organization of work, communication, coordination, work facilities, team or independent crisis management unit). The researcher selected a random sample of 357 individuals from various departments. The study found that the degree of preparedness of these hospitals to face their potential crises is low. The reasons are lack of preparedness and readiness plans, lack of early warning devices, and lack of training employees on how to behave systematically during the crisis. Other reasons are lack of care for psychological rehabilitation, and the absence of an independent administrative unit or work team at hospitals for crisis planning to face crises . The study recommended that attention be paid to planning to face possible crises in addition to establishing independent departments or teams in each hospital to deal with potential crises. These departments should include representation of all

departments of the hospital with ensuring that their members have the independence and ability to make decisions in appropriate time.

**Ridwan, Alawa (1997) Communication Skills in Crisis Management: Application to Hospitals.**

The study aimed at explaining the correlation between the extent availability of effective communication systems, their skills, and the repercussions of the crisis and the extent ability to face crisis through real practical models. It also aimed at determining the general aspect of the management pattern in health institutions in the light of the immediate changes and effects that have rapid impacts and various risks. The study pointed to the importance of building and developing a network of effective communication that provides information with due speed, the need for communication skills, and the ability to analyze, classify and analyze data to understand the circumstances and assess future possibilities. The study also pointed out that the crises facing the hospital are non-specializing according to administrative divisions, so that there is a crisis that belongs to a section without another. Yet the crisis affects the management of the whole hospital and affects the reputation and image of the organization. The supporting of communication systems, both vertical and horizontal. Finally, the study pointed out those hospitals by nature of their activities, are exposed to crisis constantly and therefore the management must take the scientific approach in the face of the problems that arise and calculate the occurrence of various crises, and must prepare a strategic plan to prevent crises.

**Plater,(1995) Future Work – Faculty Time in the Century.**

The study aimed to identify the type, importance, and use the time. The results indicated that time is the most important asset for administrators, and that its future management will increasingly become an important factor in management. Besides , the researcher wanted to learn about the impact of poor time management . The program was applied in Academic Support Programs1994. The study indicated that most respondents face poor time management and time was not enough to accomplish any tasks or activities. There was a need to minimize the poor time management and obstacles that face us, setting objectives & strategies, such as determining priorities, accomplishing task, determining specific time for each task, and creating a program and preparation that can organize time.

### **2.3 Research Gap**

After studying the previous Arab, local and English studies related to the priorities management and quality of health services in the emergency departments, the researcher found that most studies were looking for the length of stay , satisfaction with the health service provided by the health staff , how to exploit available resources, and the classification of patients coming to emergency departments. The most study Use the descriptive approach and the questionnaire to collect data from the sample individual of the population. The study is the first in Palestine according to the researcher's knowledge. No studies measured the effectiveness and efficiency of applying priority management in the emergency departments and its effect on quality of health services. Besides, the dimensions of priority management have not all been applied to assess the quality of health service in light of crises and disasters such as "preparedness - surges capacity - response to treatment - and optimal utilization of available resources" in emergency departments.

### **2.4 Summary**

This chapter presented literature review and Research Model related to priority management and quality of health service in EDs. It also presented some statistics related to governmental hospital (MOH). The chapter discussed priority management related to time and crisis, and the quality of health service, and triage system in the emergency. The chapter explained priority management contributes to improving the quality of services according to previous studies , and found that there are several systems to apply priority management in emergency departments such as the Canadian Triage & Acuity Scale (CTAS) system , And others.

# **Chapter 3**

## **Research Methodology**

## Chapter 3

### Research Methodology

#### 3.1 Introduction:

This chapter explains the methodology used in this research. The adopted methodology to accomplish this study used the following: Research Method, Study Population, Period of the Research, Setting of the Research, Selection Criteria, Source of Data, Pilot Study, Ethical Consideration, Reliability and Validity, finally the Data Analysis used in the data to reach results analysis and then achieving the objectives of the study.

#### 3.2 Research Method:

The study applied is descriptive analytical method and use cross sectional study and deductive approach to theory development and test. This study is categorized under applied research that depends mainly on data gathering from primary sources through structured questionnaires. Previous studies, papers, articles, documents, books, and, internet, were considered secondary sources for this study. The researcher answers about the research questions by analyzing the information gathered and comparing the results with those of previous studies. Then, solution to the problem can be applied priorities management and improve quality of health services . Reviewing and studying the previous literature and studies help the researcher to formulate the questionnaire questions, conduct a deep analysis, investigate useful conclusions, and make valuable suggestion for officials and decision makers in the Palestinian MOH to facilitate problem solving. This design is chosen because it is useful for descriptive analysis of the study, constructive, and it is less expensive and enables the researcher to meet the study objectives in a short time period .

#### 3.3 Study Population:

The study population includes all the employees related to the problem statement and work in EDs of governmental large hospitals in GS"252" (94 Physician and 158 nurse). The number of respondents was 226 out of 252 (response rate was 89.7%). Eleventh (11.3%) of health care providers were excluded from the study, and some of them refused to participate.

### **3.4 Sample Size and Sampling Procedure:**

All of the population will be included in the study. comprehensive survey sample will be used for employees (Physician, nurses).

Moreover, this sample will be large and homogenous. This study will include all the members of study population who are (252) employees (Physicians, nurses) divided as:

- A. In Shifa medical complex " (32) Physician, (63 )nurse "
- B. In Nasser medical complex " (22) Physician,(39) nurse "
- C. In European Gaza Hospital " (20) Physician,(28) nurse "
- D. In AL Aqsa Hospital" (20) Physician,( 28) nurse "

### **3.5 Eligibility Criteria:**

#### **Inclusion Criteria:**

- A. All Physicians and nurses who are registered and eligible and work in EDs of large governmental hospitals in GS.
- B. Minimum one year of services ( for both Physician and nurses)

#### **Exclusion Criteria:**

Physician and nurses who aren't eligible, volunteers or working less than one year in EDs of hospitals in the EDs of large governmental hospitals in GS.

### **3.6 Data Collection Resources:**

In order to achieve the study objectives, two essential data collection resources were used, which are:

**Primary Resources:** The primary information was collected from the questionnaire as a main tool.

**Secondary Resources:** This data was collected depending on the review of published data including papers, articles, documents, books, researches, internet and previous studies that are related to priority management and quality of health services in EDs and triage systems.

### **3.7 Period of the Research:**

The study was conducted during the period from April 2017 to December 2017, including questionnaire design, experts' opinion, pilot study, data collection and analysis.

### **3.8 Questionnaire Design:**

The information, which will be collected, must be related to the objectives of the study. The researcher develop a tool that helps in interpretation:

- A. Personal Data
- B. The questions of the study.
- C. Hypothesis test and the researcher can test (validity and the reliability).

In addition, the researcher uses Arabic and English language for the questionnaire .

### **3.9 Pilot Study:**

The pilot study was conducted by the researcher prior to data collection by using a sample of 50 participants selected randomly (30 nurses and 20 physicians) from different EDs in the large governmental of hospital. It was conducted to examine the response rate and clarity of the questionnaire. The response rate was 100% and the questionnaire was finalized, and excluded in the study.

### **3.10 Ethical Consideration:**

An official letter of approval to conduct the study was obtained from the Faculty of Commerce in Islamic university of Gaza. In addition, an official letter of request was obtained from the General Director of MOH to conduct the study in the EDs of MOH hospitals. Consent form was obtained from participants and attached to each questionnaire to ensure their voluntary participation.

### **3.11 Data analysis:**

Data analysis was carried out using SPSS program. Descriptive and analytical statistical tests were used to answer the questions of the study.

### **3.12 Data Measurement:**

The questionnaire depends on the literature review and previous studies related to priorities management and quality of health services. The priority management includes five dimensions: preparedness, classification of patient, surges capacity, available recourse & response to treatment distributed to 34 items ,establish myself based on the literature review . The quality of health services includes five dimensions: tangibility, reliability, responsiveness, assurance, empathy and a tangibility distributed among 22 items identified by (Parasuraman, Zeithaml, Berry 1985). and conceptual model of servies quality (Philip Kotler ,et al, 2012). The tool was directed to the sample and then collected & analyzed to reach the desired results of the study via using the tool (SERVQUAL instrument), which is the newest way to

measure the quality of service. The study tool distributed among female nurses who work in governmental and private hospitals in Gaza Strip. The question includes closed-ended questions on Likert five- point scale from 5, strongly agree, to 1, strongly disagree.

### 3.13 Validity & Reliability

#### Face Validity:

For ensuring validity, the researcher submitted the questionnaire to experts in Faculty of Commerce, Faculty of nurses, health public and health management from the Islamic University and Al-Azhar University in Gaza, university of Palestine to ensure content validity. Their suggestions were considered (Annex 6).

#### Internal Validity:

To check internal validity of the questionnaire, it was evaluated after conducting a pilot study by pilot sample, which consisted of 50 questionnaires, by measuring the correlation coefficients between each item in one field and the whole field.

#### Internal Validity for priorities management and quality of health services :

To check internal validity, the researcher calculated the correlation between each statement and the corresponding field. Tables (3.1) through table (3.10) present the correlation coefficient for each items of a field and the total of the corresponding field. The p-values (Sig.) are less than 0.05, so the correlation coefficients of all items are significant at  $\alpha = 0.05$ , so it can be said that all items of each field are consistent and valid to be measure what it was set for.

**Table (3.1) Correlation coefficient of each item of “Preparedness” and the total score of this field.**

#	Items	Pearson correlation coefficient	P- Value (Sig.)
1	Preparedness to face disaster in emergency departments is based on recommendations from the Ministry of Health and the World Health Organizations	0.724	0.00**
2	The readiness of health staff in the morning period is more than other periods	0.484	0.00**
3	Being prepared in quiet days is based on information from		

#	Items	Pearson correlation coefficient	P-Value (Sig.)
	other sources such as (ambulance - civil defense)	0.643	0.00**
4	Using modern methods of communication help the health staff inside the hospital using to reduce the severity of the crisis or disaster	0.566	0.00**
5	The necessary precautions and measures in emergency departments to face mass casualty in the war are based on the follow-up by multi news media	0.702	0.00**
6	the public relations and the media in the hospital contribute to lifting the state of preparedness for communication with internal and external parties	0.729	0.00**
7	Employees are trained to deal with emergency cases during crises periodically	0.379	0.00**

\*\* Sign indicates correlation significance at ( $\alpha = 0.05$ )

**Table (3.2) Correlation coefficient of each items of “Classification of Patients” and the total score of this field.**

#	Items	Pearson correlation coefficient	P-Value (Sig.)
1	Cases and patients are classified & directed according to specialization and risk degree	0.642	0.00**
2	The health staff use triage systems to the cases according to the hospital's potential in case of mass casualty	0.494	0.00**
3	The triage system is applied to cases according to the risk degree throughout the working period	0.660	0.00**
4	Excluding non-urgent chronic patients during the triage process at the time of the crisis is possible	0.527	0.00**
5	Cases received from the ambulance and civil defense receive greater attention than transfers from other sources	0.398	0.00**
6	Health staff members deal with cases resulting from accidents and burns directly	0.715	0.00**

#	Items	Pearson correlation coefficient	P-Value (Sig.)
7	A waiting period is given to patients with acute or chronic non urgent cases during the triage process	0.316	0.00**
	Critical patients are entered into the ICU immediately	0.486	0.00**

\*\* Sign indicates Correlation Significance at ( $\alpha = 0.05$ )

**Table (3.3) Correlation coefficient of each items of “Surges Capacity” and the total score of this field.**

#	Items	Pearson correlation coefficient	P-Value (Sig.)
1	The hospital and emergency departments have full capacity to receive all pathological cases	0.716	0.00**
2	The number of beds is qualified to assimilate the huge number of cases according to geographic region and population census	0.620	0.00**
3	There are isolation rooms for infectious diseases	0.384	0.00**
4	The hospital and emergency departments can treat cases in various therapeutic specialties	0.557	0.00**
5	Volume of medical supplies are enough in the treatment of patients in the event of crises and disasters	0.782	0.00**
6	Health staff are enough to treat pathological cases in most job periods	0.635	0.00**
7	Surges Capacity is planned through the annual and strategic plan for hospitals	0.673	0.00**

\*\* Sign indicates correlation significance at ( $\alpha = 0.05$ )

**Table (3.4) Correlation coefficient of each items of “Available Resources” and the total of score this field.**

#	Items	Pearson correlation coefficient	P-Value (Sig.)
1	The number of health staff in the hospital and emergency departments is appropriate to the number of cases	0.651	0.00**
2	The location of emergency departments is suitable for health teams to treat the disease as soon as possible	0.513	0.00**

#	Items	Pearson correlation coefficient	P-Value (Sig.)
3	Hospital management is able to cover all costs and expenses incurred by the number of emergency cases	0.638	0.00**
4	The equipment and medical supplies used to provide therapeutic services are adequate, quality and efficient	0.746	0.00**
5	Hospital management and emergency departments can attract and provide new resources at the time of crisis or disaster	0.517	0.00**
6	The requirement of emergency departments are followed-up periodically and continuously	0.497	0.00**

\*\* Sign indicates correlation significance at ( $\alpha = 0.05$ )

**Table (3.5) Correlation coefficient of each items of “Response of Treatment” and the total score of this field.**

#	Items	Pearson correlation coefficient	P-Value (Sig.)
1	Health staff deal with patients according to the degree of response to treatment throughout the working hours	0.612	0.00**
2	Very critical cases are excluded in the case of a huge number of patients and lack of available resources	0.557	0.00**
3	Health staff personnel taking into account the response to treatment and its suitability with the costs incurred when treating cases	0.756	0.00**
4	Time is calculated to treat some cases such as "brain anoxia"	0.577	0.00**
5	Priority is given to patients with good results at the therapeutic and human level	0.667	0.00**
6	The health staff is able to identify patients' response to treatment	0.724	0.00**

\*\* Sign indicates correlation significance at ( $\alpha = 0.05$ )

**Table (3.6) Correlation coefficient of each items of “Reliability” and the total score of this field.**

#	Items	Pearson correlation coefficient	P- Value (Sig.)
1	Medical and health staff are committed to providing treatment services timely and to provide support to the patient's expectations	0.659	0.00**
2	The health staff are committed to international scientific and practical criteria " physical examination, diagnosis and treatment"	0.813	0.00**
3	The hospital management provides the therapeutic departments with all specialties required to treat patients	0.751	0.00**
4	The patients are treated with high professionalism, making them feel safe and confident	0.789	0.00**
5	Health staff are interested in providing health services timely, fast and accurately.	0.744	0.00**
6	The health staff document all information about patients and their health status in all circumstances in the records and computer	0.581	0.00**

\*\* Sign indicates correlation significance at ( $\alpha = 0.05$ )

**Table (3.7) Correlation coefficient of each items of “Responsiveness” and the total of this field.**

#	Items	Pearson correlation coefficient	P- Value (Sig.)
1	The required health services are provided quickly and according to patients' perceptions.	0.678	0.00**
2	Response to the patient's requirements are met immediately even at the degree of preoccupation and stress.	0.702	0.00**
3	The health staff want to help of patients permanently.	0.497	0.00**
4	The response to all inquiries and complaints are prompt and without a sense of discomfort.	0.772	0.00**
5	The service providers inform the patient about the date of service and its completion .	0.615	0.00**

\*\* Sign indicates correlation significance at ( $\alpha = 0.05$ )

**Table (3.8) Correlation coefficient of each items of “Assurance” and the total of this field.**

#	Items	Pearson correlation coefficient	P-Value (Sig.)
1	Patients feel safe and confident when dealt with them by the service providers	0.634	0.00**
2	Health service providers have practical skill and scientific knowledge that are diverse and specialized in the performance of their work	0.692	0.00**
3	The patient should be assured that he is in good hands with the hospital staff when dealing and that he has not lost his right to privacy and confidentiality	0.729	0.00**
4	The health staff interact with the patients and deal with them gently and tactfully	0.583	0.00**
5	The health service providers in the hospital have the courtesy and the credibility of their work, which necessitates the management of the hospital to provide support to these workers.	0.672	0.00**
6	The health service providers continuously follow up patients after conducting laboratory tests.	0.798	0.00**

\*\* Sign indicates correlation significance at ( $\alpha = 0.05$ )

**Table (3.9) Correlation coefficient of each item of “Empathy” and the total of this field.**

#	Items	Pearson correlation coefficient	P-Value (Sig.)
1	Health service providers and hospital management should give patients personal attention	0.735	0.00**
2	Hospital service providers have the ability to provide personal care	0.790	0.00**
3	health service providers in the Hospital know the needs of patients	0.750	0.00**
4	In fact, the hospital management provide their best services for patients	0.748	0.00**
5	The hospital management operates hours of work according to patient needs	0.755	0.00**

\*\* Sign indicates correlation significance at ( $\alpha = 0.05$ )

**Table (3.10) Correlation coefficient of each item of “Tangibles” and the total of this field.**

#	Items	Pearson correlation coefficient	P-Value (Sig.)
1	The hospital needs to develop its buildings and public facilities to support the work.	0.283	0.04*
2	the nature of public rooms and services for patients, waiting hall, doctors' and health staff offices are appropriate .	0.758	0.00**
3	There is clear interest by the hospital management and health staff in a manner and body work clothes commensurate with the level of service provided	0.748	0.00**
4	Management work update equipment and medical supplies used continuously& contribute to the therapeutic service speed	0.810	0.00**

\*\* Sign indicates correlation significance at ( $\alpha = 0.05$ )

**Conclusion:**

Results described in the all tables show that the items of the questionnaire have a strong correlation coefficients and statistically significant at the level  $\alpha = 0.05$ . This indicates that the questionnaire has strong validity .

**Reliability:**

Reliability of an instrument is the degree of consistency in which it measures the level of consistency of the questionnaire results if it will be distributed several times under the same conditions. In other words, questionnaire reliability means that the questionnaire will give the same results if it will be distributed several times to the study sample in specific times. The most reliability coefficient above is 0.7, which is satisfactory George and Mallery,( 2006) for measuring the reliability can be achieved by using Cronbach's Alpha Coefficient and the Split -half Method through the SPSS software .

**Cronbach's Alpha Coefficient:**

This method is used to measure the reliability of the questionnaire between each field and the mean of the whole fields of the questionnaire. The normal range of Cranach’s coefficient alpha value is between (0.0) & (+ 1.0), & the higher values reflect a higher degree of internal consistency. (George and Mallery, 2006)

**Table (3.11) for Reliability Cronbach's Alpha**

Variable and dimension	#. of Items	Cronbach's Alpha
<b>Reality priority management</b>		
Preparedness	7	0.710
Classification of patients	8	0.644
surges capacity	7	0.737
available resources	6	0.641
Response of treatment	6	0.701
<b>All independent variables together</b>	34	0.691
<b>quality of health services</b>		
Reliability	6	0.815
Responsiveness	5	0.669
Assurance	6	0.774
Empathy	5	0.806
Tangibles	4	0.584
<b>All dependent variables together</b>	26	0.783

As shown in Table (3.11), Cronbach's coefficient alpha was calculated and the results were in the range from 0.584 and 0.815, and the general reliability for all the items of independent 0.691, dependent variables together equals 0.783. This range is high; the result ensures the reliability of the questionnaire.

#### **Half- Split Method**

This method is based on finding Pearson correlation coefficient between the means of odd rank questions and even rank questions of each field of the questionnaire. Then, correcting the Pearson correlation coefficients can be done by using Spearman Brown correlation coefficient of correction.

The corrected correlation coefficient (consistency coefficient) is computed according to the following equation:

Consistency coefficient =  $2r/(r+1)$ , where r is the Pearson correlation coefficient. The normal range of corrected correlation coefficient  $2r/(r+1)$  is between 0.0 and + 1.0

**Table (3.12) Split-Half Coefficient method**

items dimension	Pearson correlation coefficient	Spearman-Coefficient	P-Value (Sig.)
<b>priority management</b>	0.658	0.794	0.00**
Preparedness	0.613	0.760	0.00**
Classification of patients	0.577	0.732	0.00**
surges capacity	0.559	0.720	0.00**
available resources	0.611	0.759	0.00**
Response of treatment	0.503	0.669	0.00**
<b>quality of health services</b>	0.668	0.801	0.00**
Reliability	0.509	0.675	0.00**
Responsiveness	0.503	0.676	0.00**
Assurance	0.616	0.763	0.00**
Empathy	0.515	0.687	0.00**
Tangibles	0.446	0.617	0.00**
<b>All items dimension</b>	<b>0.589</b>	<b>0.741</b>	0.00**

As shown in Table. (3.12), all the corrected correlation coefficients values are between 0.617& and 0.801 and the general reliability for all items equals 0.741 . This result ensures the high reliability of the questionnaire.

### **Normality Distributing Test**

One Sample Kolmogorov-Smirnov test was used to identify if the study questionnaire data follows the normal distribution or not. This test is considered necessary in the case of testing hypotheses as most Parametric Tests stipulate data to be normally distributed (Henry and Thode, 2002). Through annex(8), it is clear that the level of significance is greater than 0.05 for each domain, and this shows that the data follow a normal distribution and parametric tests can be used.

### **3.14 Statistical Method**

To achieve the study goal, researcher used the statistical package for the Social Sciences (SPSS) for manipulating and analyzing the data. The following statistical tests were used to analyze the data and the study hypotheses:

- A. **Frequencies, Means and Percentages** to represent the collected data in meaningful figures.
- B. **Pearson Correlation Coefficient** was used to measure the correlation between two variables, where it was applied to test the questionnaire validity.
- C. **The Pearson Correlation Coefficient Test** was used to examine the correlation significance in testing the first main hypothesis.
- D. **Cronbach's Alpha Coefficient** was used to test the questionnaire reliability.
- E. **One Sample Kolmogorov-Smirnov Test** was used to identify if the study questionnaire data follows the normal distribution or not. This test is considered necessary in the case of testing hypotheses as most Parametric Tests stipulate data to be normally distributed.
- F. **T-Test** is used to determine if the mean of the item is significantly different from a hypothesized value 3 (Middle value of Likert scale). If the P-value (Sig.) is smaller than or equal to the level of significance,  $\alpha = 0.05$  then the mean of an item is significantly different from a hypothesized value 3. The sign of the Test value indicates whether the mean is significantly greater or smaller than hypothesized value 3. On the other hand, if the P-value (Sig.) is greater than the level of significance,  $\alpha = 0.05$ , then the mean an item is insignificantly different from a hypothesized value 3.
- G. **The Independent Samples T-Test** was used to examine if there is a statistical significant difference between two means among the respondents toward the reality of applying priority management in emergency department & its effect on improving the quality of health services due to (gender).
- H. **The One- Way Analysis of Variance (ANOVA)** was used to examine if there is a statistical significant difference between several means among the respondents toward the reality of applying priority management in emergency department & its effect on improving the quality of health services due to (age, ,education level, years of services in application priorities management )

### 3.15 Criterion of the Study

The researcher adopted criterion in the study (Ozen ,et al. 2012): To determine the adopted criterion in the study was to determine the length of the columns in the Likert scale by calculating a range between degrees of the scale (5 - 1 = 4) and then divide the largest value in the scale to get the column that mean  $5 / 4 = 0.80$ , (Then is added value to the lowest value in the scale )the beginning of the scale 1 to determine the upper column. The following table shows this:

**Table (3.13) criterion of the study**

Mean	Percentage	Approval Level
From 1 - 1.8	From%20 - %36	Vary low
More 1.80 -2.60	More %36 - %52	Low
More 2.60 -3.40	More %52 -%68	Moderate
More 3.40 -4.20	More %68 -%84	High
<b>More 4.20 -5</b>	More % 84 - %100	Vary high

To explain the results of the study and judge the level of response, the researcher depend on arithmetic Mean Ranking on the level of the field of the questionnaire and the level of items in all dimensions, the researcher has identified the degree of approval by approval creation study.

### 3.16 Summary

Descriptive study design was used in this study; independent variable of reality priority management& the dependent variable is quality of health services in EDs. The variables were measured with the reality priority management questionnaire based on data that was collected using self-report surveys. Study setting was applied on EDs in large governmental hospitals in Gaza Strip.

Finally, the chapter addressed the questionnaire preparation and testing its validity. Besides, it presented the statistical methods used in the analysis of results. All this is to examine reality of applying priority management in emergency departments &its effect on the quality of health services.

# **Chapter 4**

## **Data Analysis & Results**

## Chapter 4

### Data Analysis & Results

#### 4.1 Introduction:

This chapter presents the findings of the study, descriptive analysis of the Study and, provides the variance explained with SPSS tools and discussion of the results with explanations for the meaning of these results. The collected data of the respondents are presented and the findings are described and discussed in three main parts:

- A. The first part tackles the analysis of the general data of the questionnaire respondents.
- B. The second applies the statistical tests indicated in section 3.14 (Statistical Analysis on the collected data from questionnaire). The overall results will be compared with those of the previous studies.
- C. The third part handles the study hypotheses. The findings of this test will be discussed and compared with previous studies results.

#### 4.2 Characteristics of the Study Population

This section introduces the descriptive statistics of the study respondents' characteristics (Personal information). These sample characteristics include: Gender, age, education level, Job title, years of services, work time, and work place they belong to. This descriptive statistical analysis was done using the available data in the first part of the study questionnaire as illustrated in annex (1,2)

##### 4.2.1 Distribution of Study Population by Gender

As shown in Table( 4.1), the majority of the study population were males, with 181 respondents representing 80.1% of the study population, while females represented 19.9% of the study population or 45 respondents. This result is consistent with the distribution of all physicians and nursing personnel working in EDs of large governmental of hospital which male are dominated. This agrees with Palestinian statistical center 2014 total work force from male 83.2% but female 16.8%.EDs require fast performance and coping with problems related to societal behavior from different people. There are ability workforce from male dealing with all patients "man, woman, children" but females deal only with woman and some man and children.

**Table (4.1) Distribution of Gender**

Gender	Frequency	Percent (%)
Male	181	80.1
Female	45	19.9
<b>Total</b>	226	100.0

#### **4.2.2 Distribution of Study Population by Age**

As shown in table (4.2), the majority of the study population, 115 respondents, were from 25 to less than 35 years old, representing 50.9%, followed by 52 respondents between 35 to less than 45 years old, representing 23 %, and 33 respondents were less than 25 years old , representing 14.6% and only 26 respondents were more 45 years old representing 11.5%. Those figures show that most physicians and nurses were between 25 and 45 years old. This target group can be a good decision-making body related to initial examination, identifying diagnosis, and treatment. However, those less than 25 years lack orientation about process of EDs and triage systems.

**Table (4.2) Distribution of Age**

Age	Frequency	Percent (%)
Less than 25 Years	33	14.6%
From 25 to Less Than 35	115	50.9%
From 35 to Less Than 45	52	23%
More 45	26	11.5%
<b>Total</b>	226	100%

#### **4.2.3 Distribution of Study Population by Education level**

As shown in Table (4.3), the majority of the study population, 142 respondents hold bachelor degree, representing 62.8%, followed by those who have diploma degree 45 respondents, representing 19.9% and Master degree 27 respondents, representing 11.9% while only 12 respondents have PhDs representing 5.3%. The bachelor degree category constitute the majority of respondents participating in this study because they haven't added any value by earning an academic degree, and job descriptions are ineffective in distinguishing competencies according to educational backgrounds . Master and PhD holders are new specialists as cardiologist and neurologists and some physicians hold Palestinian board and work in EDs.

**Table (4.3) Distribution of Education level**

Qualification	Frequency	Percentage
Diploma	45	19.9%
Bachelor	142	62.8%
Master	27	11.9%
PhD	12	5.4%
<b>Total</b>	226	100%

**4.2.4 Distribution of Study Population by Job Title**

As shown in Table (4.4), 72 respondents were staff nurse with a bachelor degree, representing 31.9%, followed by General physicians totaling 69 respondents representing (30.5%), and then 53 practical nurse, representing 23.5%, while 23 respondents were specialist physicians representing 10.2%. and 4 respondents are Head nurses representing 1.8% with a bachelor degree and then 5 head departments representing 2.2% . This explains that the majority of services providers in ED are staff nurses and GPs.

**Table (4.4) Distribution of Job Title**

Job title	Frequency	Percent (%)
Practical Nurse	53	23.5%
Staff Nurse	72	31.9%
General Physician	69	30.5%
Specialist Physician	23	10.2%
Head Nurse	4	1.8%
Head Department	5	2.2%
<b>Total</b>	226	100.0

**4.2.5 Distribution of Study Population by Years of Services**

Table (4.5) shows the percentage of years of services working in ED of large governmental of hospital. Sixty –eight respondents were more than 10 years, representing 30.1% & followed by less than 3 years & between 5-10 years 58 respondents representing 25.7%), and then 42 respondents between 3 -5 years, representing 18.6%,. These figures explain that EDs include various experiences from physicians & nurses.

**Table (4.5) Distribution of Years of Services**

Years of services	Frequency	Percent (%)
Less 3 Years	58	25.7
Between 3 -5 Years	42	18.6
Between 5-10 Years	58	25.7
More than 10 Years	68	30.1
<b>Total</b>	<b>226</b>	<b>100.0</b>

#### **4.2.6 Distribution of Study Population by Work Time**

As shown in Table (4.6), the majority of the study population, 161 respondents and representing 71.2%, followed by those 52 respondents and representing 23% and 11 respondents and representing 4.9% while only 2 respondents representing 0.9%. The Mix work time as Morning, Evening, Night category has the most respondents participating in this study because job kind requires providing services throughout hours and job system includes multi shift including "morning ,evening, night and Evening night" but working time in the morning is usually managerial work as head nurses, head departments. Some female nurses cannot work Evening night.

**Table (4.6) Distribution of Work Time**

Work time	Frequency	Percent (%)
Morning	52	23
Evening	2	0.9
Evening night	11	4.9
Mix(Morning, Evening, Night)	161	71.2
<b>Total</b>	<b>226</b>	<b>100.0</b>

#### **4.2.7 Distribution of Study Population by Work Place**

Table( 4.7) shows, 89 respondents worked in Al-Shifa Medical Complex, representing 39.4% , followed by Nasser medical complex 52 respondents representing 23% and then AL Aqsa Hospital 45 respondents representing 19.9% , and European Gaza Hospital40 respondents representing 17.7% . The majority of respondents participating in this study is from Shifa medical complex because it includes two departments providing medical EDs and a surgical department. This result is related to the number of beds.

**Table (4.7) Distribution of Work Place**

work place	Frequency	Percent (%)
Shifa Medical Complex	89	39.4
Nasser Medical Complex	52	23
European Gaza Hospital	40	17.7
AL Aqsa Hospital	45	19.9
<b>Total</b>	226	100.0

### 4.3 Statistical Analysis for the Study Fields

This section is dedicated to answer the study questions. The first question reads “What is the extent of the application of priorities management in the ED and their effect on the quality of health services in governmental hospitals in the Gaza Strip?” The researcher used the arithmetic mean and standard deviation of the weight mean and rank order for each item.

#### 4.3.1 The First Independent Variable" Reality of Priority Management"

**Table (4.8): The respondents’ opinions towards the items of the independent variable**

#	Dimension	Mean	S.D	Percentage	Rank
1	Preparedness	3.594	1.039	71.87	2
2	Classification of Patients	3.793	0.994	75.86	1
3	Surges Capacity	2.883	1.170	57.66	4
4	Available Resources	2.850	1.096	57.01	5
5	Response to Treatment	3.347	1.043	66.93	3
<b>Mean</b>		3.218	1.068	65.87	

\*\*Significance at = 0.01 \* Significance at = 0.05 // Non Significance at = 0.05

#### The following result could be concluded:

The mean of responses to all items in this dimension is (2.85 – 3.793) with percentage of (57.01% - 75.86%). According to the Likert 5 point - scale and the percentage of independent variable equals "65.87% ". This indicates a moderate level of application of priorities management and shows EDs at large governmental hospitals in Gaza strip complain of surges capacity percentage was 57.66%, available resources percentage represent 57.01% which evidences that the EDs need expansion of room and increase of beds, providing more available resources to EDs as medical supplies ,modern equipment ,medication, manpower and others . Preparedness,

Classification of patients, Response to treatment give are a good indication of contributing to improving quality of health services.

**Results in the table show that:**

**Classification of patients**" the percentage equals "75.86%" and ranks" 1" .This result explains that application of triage system is made use of round the clock.

**Preparedness** percentage equals "71.87%" and ranks " 2" .This result showed a good communication with other organizations such as "MOH,WHO, news media & civil community and the most EDs depend on canalization style .

**Response to Treatment** percentage equals "66.93%" and ranks "3". This result explains the health staff need to increase knowledge and training to identify patients with response to treatment and determine effective drugs.

**Surges Capacity** percentage equals "57.66%"and ranks "4". This result explains the EDs need an increase in beds to cope with mass casualty in disaster and crisis at wartime.

**Available Resources** percentage equals "57.01%" and ranks "5". The majority of the organizations complain of scarcity or lack of resources. In addition, EDs requires periodical and continuous follow-up to avoid any defects or problems at the crisis time.

**The results above denote the following facts:**

The respondents' estimate of independent variable in the EDs" was 65.87%," which is moderate.

**4.3.1.1 The First Dimension "Preparedness"**

Table (4.9) shows the results of the first dimension of the study (Preparedness) for all ED of large governmental hospitals. In all items, the respondents agreed that preparedness mechanisms are available and enable the health staff to accomplish the required work, and solve many problems resulting from the potential crises and disasters through communication with the MOH,WHO and community organizations. There are clear general guidelines and timely administrative instructions for dealing with potential crises in EDs with a moderate rate. It is easy to obtain the information required from other departments when needed to deal with cases with a moderate rate. The results show readiness in morning is more than other periods. Besides, programs and training plans are available to deal with cases of crisis and disaster timely. This

item got a moderate rate. Public relations and media in hospitals contribute to raising the state of preparedness and communication with internal and external bodies. This item also received a moderate rate .In general, preparedness shows that mean of the items is 3.594, which is higher than the neutral average" 3 ", and the percentage of all the items of this dimension is 71.87% . This explains that can achieve work at time by **preparedness**. The researcher can conclude from this that there is a medium capacity in the EDs of the large hospitals in the G S for possible crises. In addition, the **Readiness** in the morning period is greater than other periods for the presence of specialized administrative and health staff. EDs applies the Ministry of Health instructions.

**Table (4.9): The respondents' opinions towards the items of the first dimension (Preparedness)**

#	Items	Mean	S.D	Percentage	Rank
1	Preparedness to face disaster in emergency departments is based on recommendations from the Ministry of Health and the World Health Organizations	3.894	0.927	77.88	2
2	The readiness of health staff in the morning period is more than other periods	3.925	1.045	78.50	1
3	Being prepared in quiet days is based on information from other sources such as (ambulance - civil defense)	3.509	1.016	70.18	4
4	Using modern methods of communication help the health staff inside the hospital using to reduce the severity of the crisis or disaster	3.673	1.066	73.45	3
5	The necessary precautions and measures in emergency departments to face mass casualty in the war are based on the follow-up by multi news media	3.319	1.106	66.37	7
6	The public relations and the media in the hospital contribute to lifting the state of preparedness for communication with internal and external parties	3.363	1.038	67.26	6
7	Employees are trained to deal with emergency cases during crises periodically	3.473	1.076	69.47	5
<b>Mean</b>		3.594	1.039	71.87	

\*\*Significance at = 0.01 \* Significance at = 0.05 // Non Significance at = 0.05

**The following results could be concluded:**

The mean of responses to all items in this dimension are between (3.319 – 3.925) and with a percentage (66.37% - 78.50%). According to the Likert five- point scale, the percentage of first dimension equals " 71.87% ". This is a high rate .

**Results in the table shows that the top two items are:**

Item No. (2)" The readiness of health staff in the morning period is more than other periods" the percentage equals "78.50%" and ranks" 1 ". This explains there are biases with administrative health staff.

Item No(1) “Preparedness to face disaster in emergency departments is based on recommendations from the Ministry of Health and the World Health Organizations” the percentage equals " 77.88%" and ranks " 2". This explains all EDs & hospitals depend on centralized managerial style that is why decision-making is very weak.

**The lowest two items are:**

Item No (6) “The public relations and the media in the hospital contribute to lifting the state of preparedness for communication with internal and external parties” .the percentage equals " 67.26%" and ranks " 6". This rate is moderate, and is not effective.

Item No (5) “The necessary precautions and measures in emergency departments to face mass casualty in the war are based on the follow-up by multi news media” the percentage equal " is 66.37%" and ranks equal " 7". Which is moderate.

**The results above denote the following facts:**

The approval of first domain “the extent of the application of priorities management in the ED (Preparedness)” was 71.87%. which is high.

This result disagrees with Aljdela, (2006) in that preparedness was negative rate by using of crisis management in large governmental hospitals in the Gaza Strip. This indicates that large governmental hospitals strive to establish and develop crisis unit, which is not effective. However, this result agrees with Sleman Glal ,( 1999) which proved that preparedness level in Almansora hospital was moderate. In addition, it agrees with Shber (2010) preparedness achieves organization objective (high profits) through using priority management.

### 4.3.1.2 The Second Dimension "Classification of Patients"

Table (4.10) shows the results of the second dimension of the study (Classification of Patients) for all EDs of large governmental hospitals. All items the respondents' opinion confirm that the application of triage system criteria to EDs and enables the health staff to accomplish the required work timely. These items got high rate. The study found that the health staff deal with cases according to the degree of severity at a very high level and the respondents' opinion agreed that they deal with critical cases immediately. The response rate was as vary high as 92.12%. Regarding cases of accidents and burns, the respondents expressed positive approval with a rate of 85.04%, which indicates the speed of dealing with emergency cases. Additionally, there was a high level of trust between the health staff in the EDs, ambulance unit, and civil defense. The ratio of dealing with cases transferred from the ambulance unit and civil defense amounted to 75.31%, which is a high rate. Nevertheless, the respondents assessed that the triage system is based on practical experience. The triage system does not work for all periods, and there is no exception for cases during crises and disasters where the rate of approval of respondents' opinions was between 66.90% and 61.42%. This indicates that there were no waiting halls and the community refuses this behavior .

**Table (4.10): The respondents' opinions towards the items of the second dimension (Classification of Patients)**

#	Items	Mean	S.D	Percentage	Rank
1	Cases and patients are classified &directed according to specialization and risk degree	3.894	1.001	77.88	3
2	The health staff use triage systems to the cases according to the hospital's potential in case of mass casualty	3.779	1.039	75.58	4
3	The triage system is applied to cases according to the risk degree throughout the working period	3.633	1.186	72.65	6
4	Excluding non-urgent chronic patients during the triage process at the time of the crisis is possible	3.345	1.164	66.90	7
5	Cases received from the ambulance and civil defense receive greater attention than transfers from other sources	3.765	0.920	75.31	5
6	Health staff members deal with cases resulting from	4.252	0.896	85.04	2

#	Items	Mean	S.D	Percentage	Rank
	accidents and burns directly				
7	A waiting period is given to patients with acute or chronic non urgent cases during the triage process	3.071	1.026	61.42	8
8	Critical patients are entered into the ICU immediately	4.606	0.718	92.12	1
<b>Mean</b>		3.793	0.994	75.86	

\*\*Significance at = 0.01 \* Significance at = 0.05 // Non Significance at = 0.05

**The following results could be concluded:**

The mean of responses to all items in this dimension is (3.071 – 4.606) with percentage (61.42% - 92.12%).According to the Likert five- point scale, the Percentage of second dimension equals " 75.96% "

**Results in the table show that the top two items are:**

Item No. (8)" Critical patients are entered into the ICU immediately" the percentage equals "92.12%" and ranks" 1"

Item No (6) “Health staff members deal with cases resulting from accidents and burns directly” the percentage equals" 85.04%" and ranks equal "2"

**The lowest two items are:**

Item No (4) “Excluding non-urgent chronic patients during the triage process at the time of the crisis is possible” the percentage equals " 66.90%" and ranks " 7".

Item No (7) “A waiting period is given to patients with acute or chronic non urgent cases during the triage process” the percentage equals " 61.42%" & ranks " 8".

**The results above denote the following facts:**

The approval of second dimension “the extent of the application of priorities management in the EDs (Classification of Patients)” was 75.96%. which is a high rate.

This result agrees with that of Weinick, et al (2014), which reported patients' dissatisfaction about waiting period in EDs. Besides, some patients disapproved of patient classification system. This study shows that approval of the triage system is moderate. In addition, this result agrees with that of Mor, M., & Waisman, Y. (2002) which explains that the appropriate classification of patients and victims of mass casualty events or disasters will ensure optimal delivery of care & improve the outcome. Also this result agrees with the result of Farrokhnia, et al (2011) which proved the majority of EDs use the Medical Emergency Triage and Treatment System.

### 4.3.1.3 The Third Dimension" Surges Capacity"

Table (4.11) shows the results of the third dimension (Surges Capacity) for all EDs in large governmental hospitals. The percentage is less than 60%. Each item in the third dimension, i.e., the respondents opinions agree that the EDs and hospitals complain of lack of surges capacity such as the number of beds, rooms and medical specializations that negatively affect organization performance. The researcher found that the surges capacity of hospitals and EDs is relatively moderate. According to respondents' opinion, the rate of approval is 69.56%. . This means the EDs need to develop and increase their surges capacity in terms of beds, rooms, and therapeutic specializations. The study also found that the health staff knew nothing of the annual and strategic plans in hospitals. This indicates the health staff do not participate in the preparation of annual and strategic plans, which negatively affects the accomplishing of work. It shows that the number of beds is not appropriate to the number of patents a according to geographic region and population census. This result agrees with annual report about hospitals 2016 related to hospitalization beds. The total number of beds in the Gaza Strip was 2,816 and the average population / bed was 657 persons with a rate of 15.2 beds / 10,000 people. The number of beds of health, including 2,081 beds at the rate of 11.2 beds per 10,000 inhabitants. European Union report of 2016 shows that there are 38 beds per 10,000 inhabitants while Gaza strip suffers from siege and war Israel. Another result is that the working hours did not have sufficient therapeutic specialties, as the respondents' approval was 52.48%, which is moderate. There are no isolation rooms for infectious diseases in the EDs. The respondents' opinion was 50.71%, which is low. This indicates that hospitals and EDs are not qualified to deal with pathological cases in the event of a pandemic so hospitals and EDs need to develop a mechanism to deal with epidemics and training health staff to deal with these cases.

**Table (4.11): The respondents' opinions towards the items of the third demission (Surges Capacity)**

#	items	Mean	S.D	Percentage	Rank
1	The hospital and emergency departments have full capacity to receive all pathological cases	3.478	1.175	69.56	1
2	The number of beds is qualified to assimilate the huge number of cases according to	2.850	1.238	56.99	4

#	items	Mean	S.D	Percentage	Rank
	geographic region and population census				
3	There are isolation rooms for infectious diseases	2.535	1.237	50.71	7
4	The hospital and emergency departments can treat cases in various therapeutic specialist	3.084	1.161	61.68	2
5	Volume of medical supplies are enough in the treatment of patients in the event of crises and disasters	2.664	1.120	53.27	5
6	Health staff are enough to treat pathological cases in most job periods	2.624	1.122	52.48	6
7	Surges Capacity is planned through the annual and strategic plan for hospitals	2.947	1.134	58.94	3

\*\*Significance at = 0.01 \* Significance at = 0.05 // Non Significance at = 0.05

### **3.The following result could be concluded:**

The mean of responses to all items in this domain are (2.536 – 3.478) with Percentage (50.71% - 69.56%). According to the five- point Likert scale, the Percentage of first Domain equals " 57.66% "

#### **Results in the table show that the top two items are:**

Item No. (1)" The hospital and emergency departments have full capacity to receive all pathological cases " the Percentage equals " 69.56%" and ranks " 1"

Item No (4) “The hospital and emergency departments can treat cases in various therapeutic specialist” the Percentage equals " 61.68%" and ranks equal " 2"

#### **The lowest two items are:**

Item No(6) “Health staff are not enough to treat pathological cases in most job periods " 52.48%" and ranked equal " 6".

Item No(3) “There are isolation rooms for infectious diseases” the weight mean equal " 50.71%" and ranked equal " 7".this explain EDs need isolation rooms to prevent spared infectious diseases .

#### **The results above denote the following facts:**

The approval of the third domain “the extent of the application of priorities management in the ED (surges capacity)” was 57.66%. , which is moderate .

This result agrees with DeLia (2007) in that Hospital Capacity in Emergency Department of New Jersey explains that an increase in the number of patients in emergency departments affect hospital surge capacity in New Jersey and surge capacity planning for hospitals in New Jersey should done via reviewing the statistics of Patient Flow, constructing annual and strategic plans. Furthermore, this result agrees with Hoot, Aronsky, (2008) which reported that an increase in surge capacity is related to daily crisis. Crowding occurs when the identified need for emergency services exceeds available resources for patient care in the emergency departments.

#### **4.3.1.4 The Fourth Dimension "Available Resources"**

Table (4.12) shows the results of the fourth dimension of the study namely (available resources) for all EDs of large governmental hospitals. the percentage is less than 60%. All items of the fourth dimension, i.e., the respondents agree that EDs and hospital complain of lack of available resources such as number of health staff, equipment and medical supplies & others, which affect organization performance passively. Besides, the location of the EDs is suitable for enabling the health staff to accomplish work on time. The approval rate was 68.23%. This percentage is acceptable. However, EDs need better planning in the facilities i.e., determining the location of entering cases and exit cases from the back gate. So as not to cause overcrowding for the number of visitors and patients in the EDs. This finding show that the respondents' estimating process and follow-up of the needs of the EDs is moderate percentage was 62.92% .This is a moderate rate regarding the lack of participation in the preparation of annual and strategic plans of the hospital. That is why their estimates were not accurate. It was found that large hospitals suffer from a lack of available resources such as "health staff, medical equipment, medical supplies, and drugs". The percentage was 58.67, which is low. Hospitals were unable to cover the expenses and costs of treatment of patients as hospitals could not invest in the health field to increase their financial resources as costs and expenses are linked to the number of cases (Huge of Patients). A hospital depends on financial resources from donations. Yet hospitals totally depend on "MOH" which adopts centralization in management. Unfortunately, this rendered hospital management unable to make decisions related to health investment to increase financial resources or establish a system that excludes non- urgent patients. The researcher found that the medical tools

and supplies are insufficient and of low quality. The percentage was 51.15%, which is low. It was found that there is a severe shortage in health staff due to the increase in the number of cases coming to the EDs. This item percentage was 47.61%, which is a low rate.

**Table (4.12): The respondents' opinions towards the items of the fourth dimension (available resources)**

#	Items	Mean	S.D	Percentage	Rank
1	The number of health staff in the hospital and emergency departments is appropriate to the number of cases	2.381	1.199	47.61	6
2	The location of emergency departments is suitable for health teams to treat the disease as soon as possible	3.412	1.039	68.23	1
3	Hospital management is able to cover all costs and expenses incurred by the number of emergency cases	2.673	1.011	53.45	4
4	The equipment and medical supplies used to provide therapeutic services are adequate, quality and efficient	2.558	1.146	51.15	5
5	Hospital management and emergency departments can attract and provide new resources at the time of crisis or disaster	2.934	1.139	58.67	3
6	The requirement of emergency departments are followed-up periodically and continuously	3.146	1.042	62.92	2
<b>Mean</b>		2.850	1.096	57.01	

\*\*Significance at = 0.01 \* Significance at = 0.05 // Non Significance at = 0.05

**The following results could be concluded:**

The mean of responses to all items in this domain is (2.381 – 3.412) with a percentage of (47.61% for the lowest item and - 68.23% for the highest one). According to the liker scale five- point Likert scale, the percentage of the fourth dimension equals "57.01%".

**Results in the table show that the top two items are:**

Item No (2)" The location of emergency departments is suitable for health teams to treat the disease as soon as possible ".The percentage equals "68.23%" and ranks equal " 1"

Item No (6) which reads "The requirement of emergency departments are follow-up periodically and continuously" got "62.92%" and ranked " 2"

**The lowest two items are:**

Item No (4) "The equipment and medical supplies used to provide therapeutic services are adequate, quality and efficient" .It got "51.15%" and ranked "5".

Item No(1) "The number of health staff in the hospital and emergency departments is appropriate to the number of cases" got " 47.61%" and ranked " 6".

**The results above denote the following facts:**

The approval of fourth domain "the extent of the application of priorities management in the EDs (Available Resources)" got 57.01%. It is moderate.

This result agrees with Hoot, and, Aronsky ( 2008) finding .Most studies attributed crowding to non-urgent visits, "frequent-flyer" patients, influenza season, inadequate staffing, inpatient boarding, and hospital bed shortages. Also this result agrees with A survey of Canadian emergency physicians found that job dissatisfaction was closely related to the perceived scarcity of resources and explained solving crowding needs increased resources, successful management. Additionally , this result agrees with Falsteen,(2015).The world develops every day and this needs to adopt these changes so hospital information system do not cancel human resources but it will support human efforts to overcome problems in practical ways . Gaza is vulnerable to wars so our hospitals need to develop this system to improve doctors and nurses' performance.

**4.3.1.5 The Fifth Dimension: Response of Treatment**

Table (4.13) shows the EDs responses towards the fifth dimension (Response of Treatment). Staff in EDs of large governmental hospitals responses were moderate as the items' percentage 66.93%. The respondents agree that the EDs & hospital apply one criteria from triage system moderately which affects the organization performance. Obviously, the health staff used the criteria related to the response to treatment considering the cases according to response to treatment in most working hours. This item got a high percentage namely 70.53%. This denotes that the health staff depend on the therapeutic experience in identifying patients who respond to treatment. Similarly, item 6 got 69.29% which is high. This undoubtedly indicates that the staff members in EDs have the ability and willingness to identify response to treatment regardless of the suitability of working hours. The study found that the

health staff attend to treatment at low costs. They also give effective treatment. This item got 67.08% which is moderate. Health staff strive to guarantee success of the therapeutic process and select the best alternative in terms of costs. Priority is given to patients who respond to treatment at the therapeutic and human level. Every patient is subjected to this criterion regardless of his influence. For instance, pregnant women are given priority to treatment more than non-emergency cases". This item got 66.46%, which is moderate. And it was shown the time is calculated for unconscious patients such as brain anoxia because of the depletion of available resources such as human resources, medical supplies and drugs . Respondents' assessment amounted to 65.40%, which is moderate. Besides, the study found that excluding critical cases & not response to treatment occurs only during mass casualty and lack of the available possibilities. This indicates that there is a scarcity in the surges capacity and available resources.

**Table (4.13):The respondents' opinions towards the items of the fifth demission (Response of Treatment)**

#	Items	Mean	S.D	Percentage	Rank
1	Health staff deal with patients according to the degree of response to treatment throughout the working hours.	3.527	0.971	70.53	1
2	Very critical cases are excluded in the case of a huge number of patients and lack of available resources	3.142	1.257	62.83	6
3	Health staff personnel taking into account the response to treatment and its suitability with the costs incurred when treating cases	3.354	0.951	67.08	3
4	Time is calculated to treat some cases such as "brain anoxia"	3.270	1.012	65.40	5
5	Priority is given to patients with good results at the therapeutic and human level	3.323	0.988	66.46	4
6	The health staff is able to identify patients' response to treatment	3.465	1.080	69.29	2
<b>Mean</b>		3.347	1.043	66.93	

\*\*Significance at = 0.01 \* Significance at = 0.05 // Non Significance at = 0.05

**The following result could be concluded:**

The mean of responses to all items in this dimension ranges (3.142 – 3.527) with the lowest percentage 65.40% in the case of item No 4 and the highest percentage-70.53%) for No 1. The total percentage of the fifth dimension equals "66.93%" .

**Results in the table show that the top two items are:**

Item No. (1)" Health staff deal with patients according to the degree of response to treatment throughout the working hours.. It got a high weight that equaled "70.53%" and ranked "1"

Item No (6) “The health staff is able to identify patients' response to treatment” got "69.29%" and ranked equal "2"

**The lowest two items are:**

Item No (4) “Time is calculated to treat some cases such as "brain anoxia "" got " 65.40%" and ranked equal " 5".

Item No (2) “Very critical cases are excluded in the case of a huge number of patients and lack of available resources” got " 62.32%" and ranked equal " 6".

**The results above denote the following facts:**

The approval of fifth domain (response of treatment)” was 66.93%., which is moderate.

This result agreed with that of Butler, et al's ( 2001) which reported that health staff knew how to dealt with patients considering response to treatment and there was no difference in the response times between anesthetists and emergency physicians. In addition, complete assessment of the patient can determined by the patient response to treatment. Furthermore, this result agreed with that of Rutland Regional Medical Center, (2014). Images can be taken to track patient progress and responses to treatment over time. Besides, this result agreed with that of Shah, et al's (2015) in that ER physicians should be trained in rapid triage, assessing trauma victims, identifying and treating life-threatening injuries, and basic intervention required in trauma patients.

### 4.3.2 Dependent Variable" Improving Quality of Health Services"

**Table (4.14): The respondents' opinions towards the items of the Dependent Variable**

#	Items	Mean	S.D	Percentage	Rank
1	Reliability	3.511	0.993	70.22	2
2	Responsiveness	3.357	1.037	67.13	4
3	Assurance	3.691	0.990	73.82	1
4	Empathy	3.388	1.019	67.76	3
5	Tangibles	3.280	1.179	65.60	5
<b>Mean</b>		3.445	1.044	68.91	

\*\*Significance at = 0.01 \* Significance at = 0.05 // Non Significance at = 0.05

#### **The following result could be concluded:**

The mean of responses to all domains of the dependent variable ranges (3.280 – 3.691) with a percentage (65.60% - 73.82%). the total percentage of the whole domain "68.91%" .This explains the positive correlation between reality priority management & improving quality of health services as perceived by the respondents.

#### **Results in the table show that:**

**Assurance** percentage equaled "73.82 %" and ranked "1". This result explains that the health staff need to increase knowledge& training commensurate with response to treatment.

**Reliability** percentage equaled "70.22%" and ranked "2" .This result indicated the staff commitment to providing treatment services. This was a high rate.

**Empathy** percentage equaled "67.76%" and ranked equal "3". This result explained that health staff deal with patients kindly and gently". This is a therapeutic relationship".

**Responsiveness** percentage equaled "67.76%"and ranked "4". This result showed that health staff deal with a huge number of patients so they cannot respond to all patients.

**Tangibles** percentage equaled "65.60%" and ranked "5". This result indicated that most hospitals need building development and public facilities to accomplish the required work timely.

#### **The results above denote the following facts:**

The approval of the second domain “improving the quality of health services” got 68.91%. The respondents believed that there was a positive correlation between priorities management in the EDs” and quality of health services.

### 4.3.2.1 The First Dimension "Reliability"

Table (4.15) shows there is a commitment from the health staff to provide the services on time according to the patient's expectations. Item No I got 75.40 %, and this is a high rate. This is due to the chivalries and nobility of the Palestinian employee to fulfill the promise as much as possible. The study also found the health staff are trying to apply the international criteria to deal with patients in terms of examination, diagnosis and treatment. The respondents' opinion amounted to 73.45%, which is high. This indicates that the health staff have good experience in the field of health. To illustrate 168 respondents are with more than 3 years of services and a percentage of 63.15% of the total sample. Additionally, the respondents confirmed that they deal with patients with high professionalism, making them feel confident and safe. This item received 68.58 %. This is a high rate. Documents of information in the records and computer about patients and their health status is below the required level, according to the respondents' opinions, which amounted to 67.43%. This is a moderate rate. Therefore, the quality of health services in the EDs of the large government hospitals has high reliability namely 70.22%.

**Table (4.15): The respondents' opinions towards the items of the first dimension (Reliability)**

#	Items	Mean	S.D	Percentage	Rank
1	Medical and health staff are committed to providing treatment services timely and to provide support to the patient's expectations	3.770	0.933	75.40	1
2	The health staff are committed to international scientific and practical criteria " physical examination, diagnosis and treatment"	3.673	0.993	73.45	2
3	The hospital management provides the therapeutic departments with all specialties required to treat patients	3.292	1.047	65.84	6
4	The patients are treated with high professionalism, making them feel safe and confident	3.429	0.922	68.58	4
5	Health staff are interested in providing health services timely, fast and accurately.	3.531	0.985	70.62	3
6	The health staff document all information about patients and their health status in all circumstances in the records and computer	3.372	1.077	67.43	5
<b>Mean</b>		3.511	0.993	70.22	

\*\*Significance at = 0.01 \* Significance at = 0.05 // Non Significance at = 0.05

**The following result could be concluded:**

The mean of responses to all items in this dimension is between (3.292 – 3.770) with a percentage of (65.84% - 75.40%).According to the Likert scale five point, and the percentage of first dimension equal "70.22%" .It is high rate

**Results in the table show that the top two items are:**

Item No (1)" Medical and health staff are committed to providing treatment services timely and to provide support to the patient's expectations .The percentage equaled "75.40 %" and ranked equal "1" .It is a high rate, which indicates the chivalries & nobility of the Palestinian employee .

Item No (2) “The health staff are committed to international scientific and practical criteria " physical examination, diagnosis and treatment” got a percentage that equaled "73.45%" and ranked equal "2". This indicates the health staff have good experience.

**The lowest two items are:**

Item No(6) “The health staff document all information about patients and their health status in all circumstances in the records and computer” the percentage equal " 67.43%" and ranked equal " 5"it moderate rate this indicate the health status below the required level related to overcrowded in EDs.

Item No(3) “The hospital management provides the therapeutic departments with all specialist required to treat patients” got percentage equaled " 65.84%" and ranked equal " 6" which is moderate . This indicates there is lack of specialist physicians, as the number of those working in EDs from non-specialist physicians is187 respondent from total sample with job title comprising 82.7%.They were GPs, staff nurses, and practical nurses.

**The results above denote the following facts:**

The approval of first dimension (**reliability**) "was 65.60%., which is moderate.

**The results above first denote the following facts:**

The approval of first dimension (**reliability**)” was 70.22%. , which is high.

This result agreed with Dyab (2012) which stated all items are more than the mean of (3). This indicates the health staff are committed to international scientific& documentation style of all information about patients. This result agreed with that of Edura, etals,(2009) which reported that the responses of the study sample to reliability were high. The reason is using medical record by paper & computer, which enable the

staff to get an access to any file easily. Besides, hospitals maintain their patients and are committed to the appointments taken by patients, especially with regard to operations and reviews. Nonetheless, this result disagreed with Habib Mahmoud (2014) which reported that not all information about the patients was not documented in medical records and hence the difficulty of responding to patients' proposals & complaints. Also this result disagreed with Algzaraa et al 's(2012) which confirmed that there was no commitment on the part of hospital administration to promises to patients regarding providing health & therapeutic services & providing appropriate environment at the required level. The interest of hospital management in providing services timely, confidentially and accurately was below the ambition level.

#### 4.3.2.2 The Second Dimension "Responsiveness"

Table (4.16) shows the health staff provide health services timely and according to the patients' perceptions. The rate of this item was high. It amounted to 69.91%. This indicates the degree of busyness of the health staff and the crowdedness from which EDs staff suffer. However, it was found that the degree of responsiveness to requirements of patients now of busyness was moderate and amounted to 63.98%. It was found the health staff in the EDs want to help the patients permanently & this indicates the willingness and readiness of the staff to communicate with patients during the provision of health services and attempt to achieve the work on time. This indicates the honesty of health staff in work. Therefore, the quality of health services in the EDs of large government hospitals is closely related to responsiveness dimension. The rate was moderate and amounted to 67.13%.

**Table (4.16): The respondents' opinions towards the items of the second dimension (Responsiveness)**

#	Items	Mean	S.D	Percentage	Rank
1	The required health services are provided quickly and according to patients' perceptions.	3.496	1.017	69.91	2
2	Response to the patient's requirements are met immediately even at the degree of preoccupation and stress.	3.199	1.011	63.98	4
3	The health staff want to help of patients permanently	3.611	1.037	72.21	1
4	The response to all inquiries and complaints are	3.097	1.066	61.95	5

#	Items	Mean	S.D	Percentage	Rank
	prompt and without a sense of discomfort				
5	The service providers inform the patient about the date of service and its completion	3.381	1.057	67.61	3
<b>Mean</b>		3.357	1.037	67.13	

\*\*Significance at = 0.01 \* Significance at = 0.05 // Non Significance at = 0.05

**The following results could be concluded:**

The mean of responses to all items in this dimension between (3.097 – 3.611) with a percentage that ranges (61.95% - 72.21%). The total percentage of second dimension equaled "67.13% " .

**Results in the table show that the two top items are:**

Item No. (3)" The health staff want to help of patients permanently "got a percentage as high as "72.21%" and ranked equal "1". This indicates the kindness of the Palestinian people

Item No (1) “The required health services are provided quickly and according to patients' perceptions." physical examination, diagnosis and treatment”” got a percentage that equaled " 69.91%" and ranked " 2" which was high . This indicates the degree of busyness of the health staff and crowdedness.

**The lowest two items are:**

Item No (2) “Response to the patient's requirements are met immediately even at the degree of preoccupation and stress.” got a percentage that equaled" 63.98% and ranked "4". This is a moderate and agreed with item No (1)

Item No (4) “The response to all inquiries and complaints are prompt and without a sense of discomfort.” got "61.95%" and ranked "5"which was moderate and this indicated crowdedness in EDs.

**The results above denote the following facts:**

The approval of second dimension (**responsiveness**) was 67.13%., which is moderate.

This result agreed with that of Dyab (2012) which reported that the health staff interacted with the patients and dealt with them gently and tactfully, and accomplished their work on time. Furthermore, this result agreed with that of Habib Mahmoud (2014) which showed that the health staff dealt with patients gently and tactfully and told them accurately about the mechanism of implementation of the service and treatment. What is bad about this domain is that there was a lack of health staff round the clock. Notwithstanding, this result disagreed with that of Alzararaa et

al (2012) which stated that the hospital management informed patients of the times of service. The level of doing this was low. The health staff's desire to help patients permanently was below the required level. Musleh (2012) wrote that responses of the study sample were high on all items, which indicated that patients do not wait long time to get service in the hospitals.

#### 4.3.2.3 The Third Dimension "Assurance"

Table (4.17) shows the patients feel safe and confident when dealing with health staff. This item got 66.99%, which is a moderate rate. This indicates honesty in working and dealing with the spirit of Islam on the part of respondents. It is also shown that the health staff have the practical and scientific knowledge in dealing with patients in examination, diagnosis and treatment. This item got a high percentage of 74.07%, which indicates the health staff have good experience in the health field. This is reasonable because 168 respondents have more than 3 years of service. They constituted 63.15% of the total sample. They confirmed that they deal with patients with high confidentiality & privacy, which makes the patients feel confident and safe. This item was as high as 81.50%. This proves that the health staff respect the ethics of the health job and work in accordance with the teachings of Islam. Moreover, this reveals that the staff deal with patients gently and tactfully. This shows that the health staff abide and respect the ethics of the profession. Besides, the health staff follow up the results of the laboratory tests & the response to treatment. This item got 75.845, which is high. The total percentage of this dimension is 73.82%, which is high.

**Table (4.17): The respondents' opinions towards the items of the third dimension (Assurance)**

#	Items	Mean	S.D	Percentage	Rank
1	Patients feel safe and confident when dealt with them by the service providers	3.350	1.086	66.99	6
2	Health service providers have practical skill and scientific knowledge that are diverse and specialized in the performance of their work	3.704	0.887	74.07	3
3	The patient should be assured that he is in good hands with the hospital staff when dealing and that he has not lost his right to privacy and confidentiality	4.075	0.988	81.50	1

4	The health staff interact with the patients and deal with them gently and tactfully	3.597	0.985	71.95	5
5	The health service providers in the hospital have the courtesy and the credibility of their work, which necessitates the management of the hospital to provide support to these workers	3.628	0.982	72.57	4
6	The health service providers continuously follow up patients after conducting laboratory tests.	3.792	1.009	75.84	2
<b>Mean</b>		3.691	0.990	73.82	

\*\*Significance at = 0.01 \* Significance at = 0.05 // Non Significance at = 0.05

**The following result could be concluded:**

The mean of responses to all items in this dimension range (3.350 – 4.075) with a percentage that ranges (66.99% - 81.50%).

**Results in the table shows that the top two items are:**

Item No. (3)" The patient should be assured that he is in good hands with the hospital staff when dealing and that he has not lost his right to privacy and confidentiality " got a high percentage that equaled " 81.50%" and ranked " 1". This indicates health staff work under oath & ethical criteria.

Item No(6) “The health service providers continuously follow up patients after conducting laboratory tests” the Percentage equal " 75.84%" and ranked equal " 2" which is high this indicate honesty of health staff .

**The lowest two items are:**

Item No(4) “The patient should be assured that he is in good hands with the hospital staff when dealing and that he has not lost his right to privacy and confidentiality” got " 71.95%" and ranked " 5". It high a rate and indicates good communication between health staff & patients, health services required are given to patients gently and tactfully because the health staff dealt with humanely.

Item No (1) “Patients feel safe and confident when dealt with them by the service providers” got " 66.99%"and ranked " 6" .it is a moderate rate and indicates that most cases have been irritable and anxious because health did not respond to patients immediately due to crowdedness in EDs . Besides, some patients and visitors refuse priority management as a principle.

**The results above denote the following facts:**

The approval of third (**Assurance**) dimension from dependent variable got 73.82%. It is high.

This result agrees with that of Dyab (2012) which stated that hospitals maintain the confidentiality of data & information especially those related to patients. Musleh (2012) pointed out that the responses of the study sample towards assurance dimension were high and indicated the patients trusted employees and felt safe when they dealing with them. Yet it disagrees with Habib Mahmoud (2014) which showed the lack of safety, trust & empathy in health centers. The Center staff does not have sufficient knowledge to answer questions from patients. Again this finding disagree with Algzaraa et al's (2012) that there is little trust from patients in the health staff of hospitals & the interaction between the health staff & the patients was below the required level.

**4.3.2.4 The Fourth Dimension "Empathy"**

The table (4.18) shows the health service providers provide personal care according to the respondents' opinion. This item got 69.80 which was moderate. This indicates the overcrowding in the EDs compromised providing personal attention to the patients. Item No 2 shows that the health staff have a reasonable ability to provide health services and personal care because it got 68.60%, which is moderate. This indicates the health staff are committed to providing health services on time, but crowdedness hinders the provision of health services in the specified time. Furthermore, health staff can identify the needs of patients at 70.20 %, which is high. This finding is closely related to the dimension of classification of the patients. It was also found that the hospital management strives to provide appropriate service to the patients. The percentage of this item is 67.20%, which is moderate. This indicates the overcrowding and lack of available resources prove the hospital management try to meet the patients' needs in as much as the resources allow. The percentage this item got is 63.00%, which is moderate and indicates hospital management work in the morning shift with more readiness & preparedness in the more than they do in other periods.

**Table (4.18): The respondents' opinions towards the items of the fourth dimension (Empathy)**

#	Items	Mean	S.D	Percentage	Rank
1	Health service providers and hospital management should give patients personal attention	3.490	1.016	69.80	2
2	Hospital service providers have the ability to provide personal care	3.430	1.040	68.60	3
3	health service providers in the Hospital know the needs of patients	3.510	0.876	70.20	1
4	In fact, the hospital management provide their best services for patients	3.360	1.003	67.20	4
5	The hospital management operates hours of work according to patient needs	3.150	1.162	63.00	5
<b>Mean</b>		3.388	1.019	67.76	

\*\*Significance at = 0.01 \* Significance at = 0.05 // Non Significance at = 0.05

**The following result could be concluded:**

The mean of responses to all items of this dimension range (3.150 – 3.510) with a percent that ranges (63% - 70.20%). According to the Likert five- point scale, the total percent of fourth dimension equals "67.76%" which is moderate.

**Results in the table show that the top two items are:**

Item No. (3)" health service providers in the Hospital know the needs of patients " got " 70.20%" and ranked equal " 1" which is high and agrees with classification of patient dimension.

Item No(1) “Health service providers and hospital management should give patients personal attention” got " 69.80%" and ranked equal " 2" which is high . This indicates that EDs suffer crowdedness from visitor and cases.

**The lowest two items are:**

Item No(4) “In fact, the hospital management provide their best services for patients” got " 67.20%" and ranked " 4". This indicates EDs suffer from crowdedness caused by unnecessary visitors, cases, & lack of available resources.

Item No (5) “The hospital management operates hours of work according to patient needs” got "63%" and ranked "5". This indicates the readiness of health staff in the morning period is more than other periods.

**The results above denote the following facts:**

The approval of fourth dimension (**Empathy**) from dependent variable "improving the quality of health services" got a total percent of 67.76%.

This result agree with that of Dyab, (2012), which reported that the hospital considers the prevailing customs & traditions in the community when providing health services. and the result agrees with Musleh ( 2012) which concluded that the responses of the sample toward the **empathy dimension** was high because the health staff show empathy to the patients based on the nature of the relationship between them & the nature of the Palestinian society .Heath staff members empathize with their compatriots especially in the difficult circumstances and times of suffering . However , this finding disagrees with Habib Mahmoud ( 2014) which showed that most of the patients feel lack of empathy & attention from health staff in the health centers in the study area .also it disagrees with that of Alzararaa et al( 2012 ) which reported that there is some ability on the part of health staff to provide personal care to the patients . There is weakness of hospital management in the working hours in accordance with needs of patients.

**4.3.2.5 The Fifth Dimension "Tangibles"**

Table (4.19) shows the responses of the study sample to the tangibles were moderate of the most items. The mean responses is between (54.51% - 82.57%).However, item No one, (the hospital needs to develop its buildings and public facilities to support the work) is low. This result confirms that the EDs of large government hospitals have advanced equipment and tools with a moderate rate according to the respondents' opinions, especially that the EDs of the large of government hospitals are mostly recently establish . This means that there is a need to develop public facilities such as waiting halls and increase the number of beds, and some medical equipment to accomplish work on time. As for the cleanliness of the health staff and bodywork clothes, the staff members are committed to wearing the clothing allocated to them. This item got a moderate rate, which amounted to 65.22%. This indicates that some health staff do not adhere to uniforms. Finally, (the hospital and EDs need to increase the surges capacity and advanced equipment & the number of beds appropriate for the number of cases) got 82.57% it negative rate. This agrees with surges capacity dimension .

**Table (4.19): The respondents' opinions towards the items of the fifth domain (Tangibles)**

#	Items	Mean	S.D	Percentage	Rank
1	The hospital needs to develop its buildings and public facilities to support the work.	4.128	1.069	82.57	1
2	the nature of public rooms and services for patients, waiting hall, doctors' and health staff offices are appropriate	2.726	1.253	54.51	4
3	There is clear interest by the hospital management and health staff in a manner and body work clothes commensurate with the level of service provided	3.261	1.158	65.22	2
4	Management work update equipment and medical supplies used continuously& contribute to the therapeutic service speed	3.004	1.238	60.09	3
<b>Mean</b>		3.280	1.179	65.60	

\*\*Significance at = 0.01 \* Significance at = 0.05 // Non Significance at = 0.05

**The following result could be concluded:**

The mean of responses to all items in this dimension range (2.726 – 4.128) with percent of (54.51% - 82.57%).The total percent of fifth dimension equals "65.60%"

**Results in the table shows that the top two items are:**

Item No (1)" The hospital needs to develop its buildings and public facilities to support the work." 82. 51%" and ranked equal "1"but it negative rate

Item No(3) “There is clear interest by the hospital management and health staff in a manner and body work clothes commensurate with the level of service provided” got a percentage of " 65.22%" and ranked " 2" This indicates that some health staff do not adhere to uniforms .

**The lowest two items are:**

Item No (4) “Management work update equipment and medical supplies used continuously& contribute to the therapeutic service speed” got " 60.09%" and ranked " 3" which is moderate.

Item No(2) “the nature of public rooms and services for patients, waiting hall,doctors' and health staff offices are appropriate ” got " 54.51%"and ranked " 4". It is a moderate rate and agrees with surges capacity.

**The results above denote the following facts:**

The approval of fifth dimension (**Tangibles**) from dependent variable "improving the quality of health services" got 65.60%.

This result agrees with Dyab ,( 2012) which reported that the hospital location is convenient and easily accessible . and the result agrees with Musleh (2012) which showed that the responses of the study sample toward tangibles dimension range from medium to high. The responses to some items showed there are places reserved for patients. The high responses to most items showed the facilities of the hospitals are limited in providing facilities for the recuperation of patients, and the number of physicians and nurses is commensurate to a certain extent with the number of patients due to the lack of material resources .both MOH and International Relief Agency but it disagree with Habib Mahmoud (2014) which indicated that centers lack a variety of clinics, medical specialties, specialist physicians, modern and sophisticated ambulances, medical and laboratory equipment that meet the needs of those requesting services. The centers also lack the types of services suitable for people with special needs and lack of interest in spreading health culture through seminars and lectures. This finding also disagree that of Alzararaa et al (2012 ) which showed that there is no updating of the equipment and medical supplies currently used in the hospital. The development of health services & the nature of the waiting halls, physician and health staff offices did not match employees' ambition in terms of their suitability to the nature and work environment of the hospital. However,

## 4.4 Test of Hypotheses:

### 4.4.1 The First Hypothesis:

**H-1** There is positive statistical significant relationship between **Application Priorities Management** "preparedness, number of patients, surges capacity, available resources, response to treatment "and **Quality of Health Services** in EDs.

This hypothesis was tested by applying "Pearson correlation coefficient test" to figure out the relationship between the two variables.

**Table (4.20) Shows the number and value of the correlation coefficient and the level of significance" Priorities Management"**

	NO	Pearson	Significance
Priorities Management	226	0.694	0.000**
Quality of Health Services	226		

\*\* Significant at 0.01 \* Significant at 0.05 // not Significant

The table (4.20) shows the significance level equaled 0.000 which is less than 0.05. The Pearson-value was 0.694. This reveals that there is a statistically significant positive correlation at the 0.05 level between application priorities management "preparedness, number of patients, surges capacity, available resources, response to treatment "&improvement of quality of health services. A gain this indicates that increases in application priorities management will result in increases in quality of health services contrary is true.

**H1-a)** There is positive statistical significant relationship between **Preparedness** and **Quality of Health Services** in EDs.

This hypothesis was tested by applying "Pearson correlation coefficient test" to figure out the relationship between **Preparedness** and **Quality of Health Services**.

**Table (4.21) shows the number and value of the correlation coefficient and the level of significance" preparedness"**

	NO	P-coefficient	Significance
Preparedness	226	0.438	0.000**
Quality of Health Services	226		

\*\* Significant at 0.01 \* Significant at 0.05 // not Significant

Table (4.21) is explain there is positive a statistically significant correlation at ( $\alpha \leq 0.05$ ) level between **Preparedness** and **Quality of Health Services**. The significance level is 0.000 which is less than 0.05 and the Pearson -value is 0.438 which indicates

increases in **Preparedness** will lead to increases in **Quality of Health Services** and decreases in **preparedness** will cause decreases in **Quality of Health Services**.

**H1-b)** There is positive statistical significant relationship between **Classification of Patient** and **Quality of Health Services** in EDs .

This hypothesis was tested by applying “Pearson correlation coefficient test” to figure out the relationship between **Classification of patients** and **Quality of Health Services**.

**Table (4.22) shows the number and value of the correlation coefficient and the level of significance" Classification of patients"**

	NO	Pearson correlation coefficient	Significance
Classification of Patient	226	0.441	0.000**
Quality of Health Services	226		

\*\* Significant at 0.01 \* Significant at 0.05 // not Significant

Table (4.22) explains that there is a statistically significant positive correlation at the 0.05 level between **Classification of patients** and **Quality of Health Services**. The significance level is 0.000 (which is less than 0.05 and the Pearson - value equals 0.441, which indicates that increases in **Classification of patients** will increase **Quality of Health Services** & decreases in **Classification of patients** will lead to decreases in **Quality of Health Services**.

**H1-c).** There is positive statistical significant relationship between **Surges Capacity** and **Quality of Health Services** in EDs .

This hypothesis was tested by applying “Pearson correlation coefficient test” to figure out the relationship between the **Surges Capacity** and **Quality of Health Services**.

**Table (4.23) shows the number and value of the correlation coefficient and the level of significance" Surges Capacity"**

	NO	Pearson correlation coefficient	Significance
Surges Capacity	226	0.514	0.000**
Quality of Health Services	226		

\*\* Significant at 0.01 \* Significant at 0.05 // not Significant

Table( 4.23) uncovers that there is positive a statistically significant correlation at the 0.05 level between **Surges Capacity** and **Quality of Health Services** where significance equals 0.000 ,which is less than 0.05 and the Pearson -value equals 0.514 This indicates that increases in **Surges Capacity** will lead to increases in **Quality of**

**health services** and decreases in **Surges Capacity** will result in decreases in **Quality of Health Services**.

**H1-d)** There is positive statistical significant relationship between **Available Resources** and **Quality of Health Services** in EDs.

This hypothesis was tested by applying “Pearson correlation coefficient test” to figure out the relationship between the **Available Resources** and **Quality of Health Services**.

**Table (4.24) shows the number and value of the correlation coefficient and the level of significance" Available Resources"**

	NO	Pearson correlation coefficient	Significance
Available Resources	226	0.528	0.000**
Quality of Health Services	226		

\*\* Significant at 0.01 \* Significant at 0.05 // not Significant

Table (4.24) proves that there is positive a statistically significant correlation at the 0.05 level between **Available Resources** and **Quality of Health Services** .The significance equals 0.000 ‘which is less than 0.05 and the Pearson -value equals 0.528. This indicates increases in **Available Resources** will lead to increases in **Quality of Health Services**.

**H1-e)** There is positive statistical significant relationship between **Response to Treatment** and **Quality of Health Services** in EDs.

This hypothesis was tested by applying “Pearson correlation coefficient test” to figure out the relationship between the **Response to Treatment** and **Quality of Health Services**.

**Table (4.25) shows the number and value of the correlation coefficient and the level of significance" Response to Treatment"**

	NO	Pearson correlation coefficient	Significance
Response to Treatment	226	0.549	0.000**
Quality of Health Services	226		

\*\* Significant at 0.01 \* Significant at 0.05 // not Significant

Table (4.25) explains that there is a statistically significant positive correlation at the 0.05 level between **Response to Treatment** and **Quality of Health Services** where Significance equals 0.000, which is less than 0.05 and the Pearson -value equals 0. This indicates that increases in **Response to Treatment** will lead to increases in **Quality of Health Services** .

#### 4.4.2 The Second Hypothesis

**Application Priorities Management** components "preparedness, number of patients, surges capacity, available resources, response to treatment" positively and significantly affect positively and significantly **Quality of Health Services**.

This hypothesis was tested by applying “Multiple Regression Model test” to figure out the relationship between the two variables.

#### Multiple Regression Model

Calculating a coefficient of multiple determination (or multiple regression coefficient) and regression equation using two or more independent variables is termed multiple regression analysis (Saunders, et al 2009). This analysis is used to assess the strength of a cause-and-effect relationship between variables.

**Table (4.26) shows the multiple regression models**

Dependent Variable: INFOSEU level							
Variable	Coefficient	t-Statistic	Sig	DW	Adj. R <sup>2</sup>	F-test	Sig
Constant	19.275	3.580	0.00	2.094	0.692	44.533	0.000
Preparedness(X1)	0.372	1.827	0.069				
Classification of patient(X2)	0.519	2.654	0.009				
Surges capacity(X3)	0.576	3.255	0.001				
Available resources (X4)	0.636	3.202	0.002				
Response to treatment(X5)	1.155	5.891	0.000				

$$Y = 19.275 + 0.372 * X1 + 0.519 * X2 + 0.576 * X3 + 0.636 * X4 + 1.155 * X5$$

**From the equation above:**

When X1 rises 10% Y will increase 3.72%      X2 rises 10% Y will increase 5.19%  
 X3 rises 10% Y will increase 5.76%      X4 rises 10% Y will increase 6.36%,  
 X5 rises 10% Y will increase 11.55%.

**Previous table shows the following:**

- A. The p-value for F-test is less than 0.05, so the overall model fits, and the independent variables affect the dependent variable.
- B. The Adj.  $R^2 = 0.692$  which means that 69.2% of the variation in the dependent variable is explained by the independent variables, and there is 30.8% other independent variables that impact the dependent variable.
- C. P-value for T-test for independent variables is greater than 0.05 except the last variable is less than 0.05, so there are other variables that affect the model more than these variables do.
- D. The value of the DW- test equals 2.094, which means that the independent variables affect each other.

The researcher considered this result logical ,and the model expresses the fact that the success of each process of impact of **Application Priorities Management** components "preparedness ,number of patients ,surges capacity, available resources, response to treatment " affect positively and significantly **Quality of Health Services**.

However, the effect of each independent variable separately on the target was positive and it produced a suitable simple model, and this agrees with the literature of this study.

#### **4.4.3 Third Hypothesis**

“There are statistical significant differences at ( $\alpha = 0.05$ ) between respondents' perceptions of **Application Priorities Management** and **Quality of Health Services** in emergency departments at large governmental hospitals in Gaza strip due to demographics which are: age, gender, education level, years of services, work place.

**Sub-Hypothesis One:** There are statistical significant differences at ( $\alpha = 0.05$ ) level between respondents' perceptions of **Application Priorities Management** and **Quality of Health Services** in emergency departments at large governmental hospitals in Gaza strip due to demographics age.

This hypothesis was tested by applying One-Way ANOVA Test. (F test)

**Table (4.27) shows the sum of the squares, the degree of freedom, the mean squares, test "F" and the level of significance**

		Sum Of Squares	Df	Mean Square	F value	Sig
<b>Preparedness</b>	Between Groups	136.730	3	45.577	2.685	0.048*
	Within Groups	3768.849	222	16.977		
	<b>Total</b>	3905.580	225			
<b>Classification of Patients</b>	Between Groups	14.840	3	4.947	0.271	0.846//
	Within Groups	4052.239	222	18.253		
	<b>Total</b>	4067.080	225			
<b>Surges Capacity</b>	Between Groups	130.778	3	43.593	1.817	0.145//
	Within Groups	5324.784	222	23.986		
	<b>Total</b>	5455.562	225			
<b>Available Resources</b>	Between Groups	46.271	3	15.424	0.793	0.499//
	Within Groups	4318.388	222	19.452		
	<b>Total</b>	4364.659	225			
<b>Response to Treatment</b>	Between Groups	12.003	3	4.001	0.270	0.847//
	Within Groups	3294.563	222	14.840		
	<b>Total</b>	3306.566	225			
<b>Priority Management</b>	Between Groups	905.516	3	301.839	1.285	0.280//
	Within Groups	52141.232	222	234.870		
	<b>Total</b>	53046.748	225			
<b>Quality of Health Services</b>	Between Groups	645.179	3	215.060	1.107	0.347//
	Within Groups	43147.954	222	194.360		
	<b>Total</b>	43793.133	225			

\*\* Significant at 0.01 \* Significant at 0.05 // not Significant

Table (4.27 ) shows that the significance is more than the significance level at ( $\alpha \geq 0.05$ ). This result indicates that there are no differences between the respondents' perceptions of **Application Priorities Management** (Classification of Patients, Surges Capacity, Available Resources, Response of Treatment, **Priority Management**, and **Quality of Health Services**) in emergency departments at

large governmental hospitals in Gaza strip due to age. The significance is less than the significance level at ( $\alpha \leq 0.05$ ). This result indicates that there are differences among the respondents' perceptions of application priorities management (preparedness ) and Quality of health services in emergency department at large governmental hospitals in Gaza strip due to age

The scheffe test was used to find the differences shown in the following table

**Table (4.28): show the sheffe test for Age**

		Less than 25 years	25-35 years	35-45 years	More 45
<b>preparedness</b>	Less than 25years	-	-0.686	0.626	1.549
	25- 35 years	0.686	-	1.312	2.235
	35-45 years	-0.626	-1.312	-	0.923
	More 45	-1.549	-2.235	-0.923	-

Table (4.28 ) shows that the significance is more than the significance at level ( $\alpha \geq 0.05$ ). This finding indicates that there are no differences among the respondents' estimates due to age.

**Sub-Hypothesis Two:** There are statistical significant differences at level ( $\alpha= 0.05$ ) between respondents' perceptions of **Application Priorities Management** and **Quality of Health Services** in emergency departments at large governmental hospitals in Gaza strip due to gender.

This hypothesis was tested by applying **Two Independent samples T- test**.

**Table (4.29) Shows Two Independent samples T- test for (Gender). number, mean, T value, standard deviation, sign**

	Gender	No	mean	S.D	T value	Significance
<b>Preparedness</b>	<b>Male</b>	181	25.06	4.09	<b>-0.750</b>	<b>0.472//</b>
	Female	45	25.56	4.50		
<b>Classification of Patients</b>	<b>Male</b>	181	30.31	4.27	<b>-0.214</b>	<b>0.831//</b>
	Female	45	30.47	4.20		
<b>Surges Capacity</b>	<b>Male</b>	181	20.36	4.76	<b>1.123</b>	<b>0.263//</b>
	Female	45	19.44	5.52		

	Gender	No	mean	S.D	T value	Significance
Available Resources	Male	181	17.16	4.12	0.337	0.737//
	Female	45	16.87	5.46		
Response to Treatment	Male	181	20.01	3.68	-0.539	0.591//
	Female	45	20.36	4.44		
Priority Management	Male	181	112.91	14.93	0.085	0.933//
	Female	45	112.69	17.14		
Quality of Health Services	Male	181	90.38	13.21	0.689	0.491//
	Female	45	88.78	16.72		

\*\* Significant at 0.01 \* Significant at 0.05 // not Significant

Table (4.29 ) shows that the significance is more than the significance level at ( $\alpha \geq 0.05$ ). This finding indicates that there are no differences between respondents' perceptions of **Application Priorities Management** (Preparedness, Classification of patients, surges capacity, available resources, Response of treatment, and **Quality of Health Services** ) in emergency departments at large governmental hospitals in Gaza strip due to gender.

**Sub-Hypothesis Three:** There are statistical significant differences at level ( $\alpha = 0.05$ ) between respondents' perceptions of application priorities management & Quality of health services in emergency departments at large governmental hospitals in Gaza strip due to education level.

This hypothesis was tested by applying One-Way ANOVA Test. (F test)

**Table (4.30) shows One-Way ANOVA Test for (Education Level) the sum of the squares, the degree of freedom, the mean squares, test "F" and the level of significance**

		Sum of Squares	D.F	Mean Square	F value	Sig
Preparedness	Between Groups	48.762	3	16.254	0.936	0.424//
	Within Groups	3856.818	222	17.373		
	<b>Total</b>	3905.580	225			
Classification of Patients	Between Groups	92.328	3	30.776	1.719	0.164//
	Within Groups	3974.751	222	17.904		
	<b>Total</b>	4067.080	225			

		Sum of Squares	D.F	Mean Square	F value	Sig
<b>Surges Capacity</b>	Between Groups	63.002	3	21.001	0.865	0.460//
	Within Groups	5392.560	222	24.291		
	<b>Total</b>	5455.562	225			
<b>Available Resources</b>	Between Groups	84.650	3	28.217	1.464	0.225//
	Within Groups	4280.009	222	19.279		
	<b>Total</b>	4364.659	225			
<b>Response to Treatment</b>	Between Groups	22.651	3	7.550	0.510	0.675//
	Within Groups	3283.916	222	14.792		
	<b>Total</b>	3306.566	225			
<b>Priority Management</b>	Between Groups	1199.920	3	399.973	1.713	0.165//
	Within Groups	51846.828	222	233.544		
	<b>Total</b>	53046.748	225			
<b>Quality of Health Services</b>	Between Groups	874.448	3	291.483	1.508	0.213//
	Within Groups	42918.685	222	193.327		
	<b>Total</b>	43793.133	225			

\*\* Significant at 0.01 \* Significant at 0.05 // not Significant

Table(4.30 ) shows that the significance is more than the significance level at ( $\alpha \geq 0.05$ ). This finding indicates that there are no differences between respondents' perceptions of **Application Priorities Management** and **Quality of Health Services** in emergency departments at large governmental hospitals in Gaza strip due to education level.

**Sub-Hypothesis Four:** There are statistical significant differences at level ( $\alpha = 0.05$ ) between respondents' perceptions of **Application Priorities Management** and **Quality of Health Services** in emergency departments at large governmental hospitals in Gaza strip due to job title.

This hypothesis was tested by applying One-Way ANOVA Test.(F test)

**Table (4.31) shows One-Way ANOVA Test for( Job Title) the sum of the squares, the degree of freedom, the mean squares, test "F" and the level of significance**

		Sum of Squares	Df	Mean Square	F value	Sig
<b>Preparedness</b>	Between Groups	52.693	5	10.539	0.602	0.699//
	Within Groups	3852.887	220	17.513		
	<b>Total</b>	3905.580	225			
<b>Classification of Patients</b>	Between Groups	63.307	5	12.661	0.696	0.627//
	Within Groups	4003.773	220	18.199		
	<b>Total</b>	4067.080	225			
<b>Surges Capacity</b>	Between Groups	126.564	5	25.313	1.045	0.392//
	Within Groups	5328.998	220	24.223		
	<b>Total</b>	5455.562	225			
<b>Available Resources</b>	Between Groups	119.035	5	23.807	1.234	0.294//
	Within Groups	4245.624	220	19.298		
	<b>Total</b>	4364.659	225			
<b>Response to Treatment</b>	Between Groups	70.128	5	14.026	0.953	0.447//
	Within Groups	3236.438	220	14.711		
	<b>Total</b>	3306.566	225			
<b>Priority Management</b>	Between Groups	759.001	5	151.800	0.639	0.670//
	Within Groups	52287.746	220	237.672		
	<b>Total</b>	53046.748	225			
<b>Quality of Health Services</b>	Between Groups	860.177	5	172.035	0.882	0.494//
	Within Groups	42932.956	220	195.150		
	<b>Total</b>	43793.133	225			

\*\* Significant at 0.01 \* Significant at 0.05 // not Significant

Table (4.31 ) shows that the significance is more than the significance level at ( $\alpha \geq 0.05$ ). This finding indicates that there are no differences between respondents' perceptions of **Application Priorities Management** and **Quality of Health Services** in emergency departments at large governmental hospitals in Gaza strip due to job title.

**Sub-Hypothesis Five:** There are statistical significant differences at level ( $\alpha = 0.05$ ) between respondents, perceptions of application priorities management & Quality of health services in emergency departments at large governmental hospitals in Gaza strip due to years of services. This hypothesis was tested by applying One-Way ANOVA Test.(F test)

**Table (4.32) shows One-Way ANOVA Test.(F test) for (Years of Services) the sum of the squares, the degree of freedom, the mean squares, test "F" and the level of significance**

		Sum of Squares	Df	Mean Square	F value	Sig
<b>Preparedness</b>	Between Groups	185.127	3	61.709	3.682	0.013*
	Within Groups	3720.453	222	16.759		
	<b>Total</b>	3905.580	225			
<b>Classification of Patients</b>	Between Groups	69.854	3	23.285	1.293	0.278//
	Within Groups	3997.225	222	18.006		
	<b>Total</b>	4067.080	225			
<b>Surges Capacity</b>	Between Groups	233.492	3	77.831	3.309	0.021*
	Within Groups	5222.070	222	23.523		
	<b>Total</b>	5455.562	225			
<b>Available Resources</b>	Between Groups	273.685	3	91.228	4.951	0.002**
	Within Groups	4090.974	222	18.428		
	<b>Total</b>	4364.659	225			
<b>Response to Treatment</b>	Between Groups	33.528	3	11.176	0.758	0.519//
	Within Groups	3273.038	222	14.743		
	<b>Total</b>	3306.566	225			
<b>Priority Management</b>	Between Groups	2638.555	3	879.518	3.873	0.010*
	Within Groups	50408.192	222	227.064		
	<b>Total</b>	53046.748	225			
<b>Quality of Health Services</b>	Between Groups	827.972	3	275.991	1.426	0.236//
	Within Groups	42965.161	222	193.537		
	<b>Total</b>	43793.133	225			

\*\* Significant at 0.01 \* Significant at 0.05 // not Significant

Table(4.32 ) shows that the significance is more than the significance level at ( $\alpha \geq 0.05$ ). This result indicates that there are no differences between the respondents' perceptions of application priorities management and Quality of health services in emergency departments at large governmental hospitals in Gaza strip due to years of services. The significance is less than the significance level at ( $\alpha \leq 0.05$ ), which indicates that there are differences between the respondents' perceptions of application priorities management(preparedness, surges capacity, available resources, priority management ) & Quality of health services in emergency departments at large governmental hospitals in Gaza strip due to demographics years of services

The scheffe test was used to find the differences shown in the following table

**Table (4.33): show the sheffe test for Services of Years**

		Less 3 years	3-5 years	5-10 years	More10 years
<b>Preparedness</b>	Less 3 years	-	-1.386	1.086	0.903
	3-5 years	1.386	-	2.472*	2.289*
	5-10 years	-0.903	-2.472*	-	-0.184
	More 10 years	-1.386	-2.289*	0.184	-
<b>Surges Capacity</b>	Less 3 years	-	-1.738	0.586	1.176
	3-5 years	1.738	-	2.324	2.915*
	5-10 years	-0.586	-2.324	-	0.590
	More 10 years	-1.176	-2.915*	-0.590	-
<b>Available Resources</b>	Less 3 years	-	-1.402	1.397	1.446
	3-5 years	1.402	-	2.799*	2.848*
	5-10 years	-1.397	-2.799*	-	0.049
	More 10 years	-1.446	-2.848*	-0.049	-
<b>Priority Management</b>	Less 3 years	-	-6.264	2.862	2.863
	3-5 years	6.264	-	9.126*	9.127*
	5-10 years	-2.862	-9.126*	-	0.001
	More 10 years	-2.863	-9.127*	-0.001	-

Table (4.33 ) shows that the significance is less than the significance level at ( $\alpha \leq 0.05$ ), which indicates that there are differences among the respondents' estimates in due to **Years of Services.** between (3-5 years , 5-10years) 5-10 years better than and (3-5 years , and differences among 5-10years and more 10 years) 10 years better than 5-10years .

**Sub-Hypothesis Six:** There are statistical significant differences at ( $\alpha \leq 0.05$ ) level between respondents regarding their perceptions of application priorities management & Quality of health services in emergency department at large governmental hospitals in Gaza strip due to demographics which is work place.

This hypothesis was tested by applying One-Way ANOVA Test.(F test)

**Table (4.34) Shows One-Way ANOVA Test.(F test) for (Work Place) the sum of the squares, the degree of freedom , the mean squares , test "F" and the level of significance**

		Sum of Squares	Df	Mean Square	F value	Sig
<b>Preparedness</b>	Between Groups	267.415	3	89.138	5.439	0.001**
	Within Groups	3638.165	222	16.388		
	<b>Total</b>	3905.580	225			
<b>Classification of patients</b>	Between Groups	222.588	3	74.196	4.284	0.006**
	Within Groups	3844.492	222	17.318		
	<b>Total</b>	4067.080	225			
<b>surges capacity</b>	Between Groups	267.565	3	89.188	3.816	0.011*
	Within Groups	5187.996	222	23.369		
	<b>Total</b>	5455.562	225			
<b>Available Resources</b>	Between Groups	33.339	3	11.113	0.570	0.636//
	Within Groups	4331.320	222	19.510		
	<b>Total</b>	4364.659	225			
<b>Response to</b>	Between	293.096	3	97.699	7.197	0.000**

		Sum of Squares	Df	Mean Square	F value	Sig
<b>Treatment</b>	Groups					
	Within Groups	3013.470	222	13.574		
	<b>Total</b>	3306.566	225			
<b>Priority Management</b>	Between Groups	2639.112	3	879.704	3.874	0.010*
	Within Groups	50407.636	222	227.061		
	<b>Total</b>	53046.748	225			
<b>Quality of Health Services</b>	Between Groups	3259.667	3	1086.556	5.951	0.001**
	Within Groups	40533.466	222	182.583		
	<b>Total</b>	43793.133	225			

\*\* Significant at 0.01 \* Significant at 0.05 // not Significant

Table(4.34 ) shows that the significance is more than the significance level at ( $\alpha \geq 0.05$ ), which indicates that there are no differences between the respondents' perceptions of application priorities management (**Available Resources** ) and Quality of health services in emergency departments at large governmental hospitals in Gaza strip due to work place. The significance is less than the significance level at ( $\alpha \leq 0.05$ ), which indicates that there are differences among the respondents' perceptions of application priorities management and Quality of health services in emergency departments at large governmental hospitals in Gaza strip due to work place

**The scheffe test was used to find the differences shown in the following table**

**Table (3.35): show the scheffe test for work place**

		Shifa-medical complex	Nasser medical complex	European Gaza Hospital	Al-Aqsa Hospital
<b>Preparedness</b>	Shifa-medical complex	-	0.847	-1.046	-2.262*
	Nasser-medical complex	-0.847	-	-1.892	-3.109*
	European-Gaza Hospital	1.046	1.892	-	-1.217
	Al-Aqsa Hospital	2.262*	3.109*	1.217	-
<b>Classification</b>	Shifa-medical complex	-	-0.019	-0.800	-2.556*

		<b>Shifa- medical complex</b>	<b>Nasser medical complex</b>	<b>European Gaza Hospital</b>	<b>Al-Aqsa Hospital</b>
<b>of Patients</b>	Nasser-medical complex	0.019	-	-0.781	-2.536*
	European-Gaza Hospital	0.800	0.781	-	-1.756
	Al-Aqsa Hospital	2.556*	2.536*	1.756	-
<b>Surges Sapacity</b>	Shifa-medical complex	-	-0.627	-0.561	-2.945*
	Nasser-medical complex	0.627	-	0.065	-2.318
	European-Gaza Hospital	0.561	-0.065	-	-2.383
	Al-Aqsa Hospital	2.945*	2.318	2.318	-
<b>Response to Treatment</b>	Shifa-medical complex	-	1.931*	3.049*	1.101
	Nasser-medical complex	-1.931*	-	1.117	-0.829
	European-Gaza Hospital	-3.048*	-1.117	-	-1.947
	Al-Aqsa Hospital	-1.101	0.829	1.947	-
<b>Priority Management</b>	Shifa-medical complex	-	1.951	0.399	-7.699
	Nasser-medical complex	-1.951	-	-1.552	-9.649*
	European-Gaza Hospital	-0.399	1.552	-	-8.097
	Al-Aqsa Hospital	7.699	9.649*	8.097	-
<b>Quality of Health Services</b>	Shifa-medical complex	-	3.919	9.813*	-0.695
	Nasser v-medical complex	-3.919	-	5.894	-4.614
	European-Gaza Hospital	-9.813*	-5.894	-	-10.508*
	Al-Aqsa Hospital	0.695	4.614	10.508*	-

Table (4.35) shows that the significance is less than the significance level at ( $\alpha \leq 0.05$ ), which indicates that there are differences among the respondents in their **work place** . between (Shifa medical complex and AL Aqsa Hospital) The Shifa medical complex Better than AL Aqsa Hospital and differences among (European Gaza Hospital, AL Aqsa Hospital) European Gaza Hospital Better than AL Aqsa Hospital .

# **Chapter 5**

## **Conclusions & Recommendations**

## Chapter 5

### Conclusions & Recommendations

#### 5.1 Introduction:

This chapter includes the most important conclusions which have addressed the reality of applying priority management in EDs and its effect on improving the quality of health services at the governmental hospitals namely (Shifa medical complex, Nasser medical complex, European Gaza Hospital ,Al-Aqsa Hospital) in Gaza strip through the perspective of health staff (physicians , and nurses). In addition, this chapter proposes the most important recommendations, which may improve application of priority management & quality of health services in the Palestinian hospitals.

#### 5.2 Conclusions:

This study investigated the criteria that improve quality of health services. These are five criteria namely, **preparedness, classification of patients, surges capacity, available resources, and response to treatment**. The total percentage of the criteria was (65.87%), which was low. On the other, quality of health services equaled (68.91%) and the rate was low. There was a significant relationship between the independent & dependent variables.

**The regression Model between dependent and independent variables showed that** the quality of health services was improved by 0.372" via preparedness, 0.519 via classification of patients , 0.576 via surges capacity , 0.636 via available resources, and 1.155 via response to treatment "

**In light of the findings presented in the previous chapter, the correlations between the study domains are as follows:**

**1- The findings confirmed that there is a relationship between reality of applying priority management and quality of health services which equals (0.694) .**The highest correlation coefficient was found in the relationship between **response to treatment & quality of health services**, which equal (0.549). However, the lowest correlation coefficient was in the relationship between **preparedness & quality of health services**, which equals (0.438)

### **First Dimension:**

**There is a significant relationship between Preparedness and Quality of Health Services at level of 0.5.**

There is a statistically positive correlation at the 0.05 between the **preparedness** and **Quality of Health Services** through the perspective of health staff (physicians&nurses) in ED at large governmental Hospital in Gaza. That means that **Preparedness** can **Improve Quality of Health Services** at the level of statistical significance at  $\alpha$  0.05 (0. 438) as perceived by health staff (Physicians& Nurses) in in EDs at large governmental Hospital in Gaza .

### **Second Dimension**

**There is a significant relationship between Classification of Patients and Quality of Health Services at level of 0.5.**

There is a statistically significant positive correlation at the 0.05 level between **Classification of Patients** and **Quality of Health Services** at level of 0.5.as perceived by health staff. That means that **Classification of Patients** can **Improve Quality of Health Services** at the level of statistical significance  $\alpha$  0.05 the direct correlation was (0. 441) .

### **Third Dimension**

**There is a significant relationship between Surges Capacity and Quality of Health Services at level of 0.5.**

There is a statistically significant positive correlation at the 0.05 level between the **Surges Capacity** and **Quality of Health Services** at 0.5.as perceived by the respondents in EDs at large governmental Hospital in Gaza. That means that the **Surges Capacity** can **Improve Quality of Health Services** at the level of statistical significance of 0.05. The positive correlation was (0. 514).

### **Fourth dimension**

**There is a significant relationship between Available Resources and Quality of Health Services at level of 0.5.**

There is a statistically significant positive correlation at the 0.05 level between the **Available Resources** and **Quality of Health Services** in EDs at large governmental Hospital in Gaza. That means that the **Available Resources** can **Improve Quality of Health Services** at the level of statistical significance  $\alpha$  0.05. The positive correlation was (0. 528).

## **Fifth Dimension**

**There is a significant relationship between Response to Treatment and Quality of Health Services at level of 0.5.**

There is a statistically significant positive correlation at the 0.05 level between the **Response to Treatment** and **Quality of Health Services**. That means that the **Response to Treatment** can **Improve Quality of Health Services** at the level of statistical significance that equals 0.05. The positive correlation was (0.549).

**In general, there is a significant relationship between Reality of Applying Priority Management and Improving Quality of Health Services at level of 0.5.**

There is a statistically significant positive correlation at the 0.05 level between the **Reality of Applying Priority Management** and **Improving Quality of Health Services** as perceived by health staff (physicians and nurses) in EDs at large governmental Hospital in Gaza. This means that the importance of the **Application of Priority Management to Improve Quality of Health Services** got a statistical significance at  $\alpha$  equaled 0.05 and positive correlation of (0.694).

**2- Reality of Applying Priority Management directly affects Improving Quality of Health Services at 69.2%.**

**There is significant statistical relation between Reality of Applying Priority Management and Improving Quality of Health Services at level of 0.5**

There is a significant relationship between the dependent variable **Improving Quality of Health Services** and the independent variable **Applying Priority Management** (preparedness, classification of patients, surges capacity, available resources, and response to treatment) "at the 0.05 level.

This means that applying each dimension of **Priorities Management** contributes to **Improving Quality of Health Services** and enable them to accomplish work on time at the level of statistical significance at  $\alpha = 0.05$ .

**3- This study also finds that Application of Priorities Management Improved the Quality of Health Services, and the health staff to achieve work on time via using the Triage systems to Improve Services for Patients.**

**1- Differences among the study respondents' estimates:**

There is no significant difference among the respondents toward each field of **Application of Priorities Management** and **Improvement Quality of Health Services** in EDs at large governmental Hospitals in Gaza due to gender.

There are no significant statistical differences at level ( $\alpha = 0.05$ ) among the respondents' estimates of the study fields attributed to **Age, Gender, Education level, Years of Services, and Work Place.**

### **5.3 Recommendations**

#### **Ministry of Health, Health Institutions, EDs are recommended to:**

- A. Activate the role of public relations and media through strengthening communication between hospitals and the public and civil society institutions to contribute into raising the readiness level of hospitals and raising the necessary support for EDs through donations and others.
- B. Establish a triage system with fair standards to ensure access to health services timely & benefit from previous experiences of hospitals exposed to emergencies during the war.
- C. Provide a number of beds and rooms suitable for patient services and special rooms for infectious diseases.
- D. Provide EDs with various medical specialists.
- E. Engage health staff in the preparation of annual and strategic plans to obtain high productivity in the work and to make the planning of priority management a complementary part of strategic planning because the effectiveness of priorities management lies in dealing with emergencies that occur to avoid crises or minimize their negative repercussions when they occur.
- F. EDs staff members are recommended review the statistics of the numbers of patients coming to EDs and needs for patient services & follow-up the needs of EDs periodically.
- G. Provide the evening and nightshifts with a number of specialized health staff.
- H. Put all the possibilities close to EDs such as radiation departments, laboratory departments & administrative units such as patients services and accounting
- I. Hospitals and EDs are recommended to apply decentralized management style to speed up the decision-making process in the managerial and operational field & encourage health staff to participate in solving the problems of work, and empower health staff members to obtain appropriate authority to help them to tolerate their responsibilities. Besides, employees and managers are encouraged

to provide constructive criticism by at various managerial levels to achieve hospital goal.

- J. Update medical tools and medical supplies to raise the quality of health services
- K. Establish a special committee to crises and disasters management to solve problems caused by crises and disasters at the time of the crisis and hold annual scientific conferences on crisis management to discuss some of the crises faced by the hospital and EDs.
- L. Improve public facilities and building designs to support the accomplishing of work in the specified time, such as the dedication of one entrance to and exit from the EDs.
- M. Train and develop health staff and benefit from the experiences, plans & practices of others to deal with crises in EDs by using the criteria of priority management
- N. Put strict laws to all those who oppose the application of priority management such as the imposition of fees for non-urgent cases or non-transfer from PHC.

#### **5.4 Further studies:**

- A. Comparison of Costs Resulting from Health Services in Primary Health Care and Secondary Health Care.
- B. The Impact of the Number of Reviewers in Emergency Departments on the Quality of Health Services
- C. The Role of Public Relations and Media in Raising Readiness and Empowering Health Staff in Emergency Departments to Achieve Health Service
- D. Evaluation of the Health Services Provided in Emergency Departments of Hospitals in Gaza Strip from Employees' Perspectives.
- E. Methods of Crises Management among Health Staff in Emergency Department and their Relationship to Strategic Planning.
- F. Emergency Department Quality and Safety Indicators in Resource-limited settings

# References

## References

- Annual Report to Hospitals,( 2016) *hospital in Gaza strip*[www.moh.gov.ps](http://www.moh.gov.ps)  
Palestine: ministry of health-Gaza.
- Al-Borie, H. M., & Sheikh Damanhour, A. M. (2013). Patients' satisfaction of service quality in Saudi hospitals: a SERVQUAL analysis. *International journal of health care quality assurance*, 26(1), 20-30.
- Algzaraa et al, (2012)."Measurement and Assessment of Health Services Quality Application Study in AL- Faiha General Hospital – Basrah"
- Aacharya, R. P., Gastmans, C., & Denier, Y. (2011). Emergency department triage: an ethical analysis. *BMC emergency medicine*, 11(1), 16.
- Aylwin, C. J., König, T. C., Brennan, N. W., Shirley, P. J., Davies, G., Walsh, M. S., & Brohi, K. (2007). Reduction in critical mortality in urban mass casualty incidents: analysis of triage, surge, and resource use after the London bombings on July 7, 2005. *The Lancet*, 368(9554), 2219-2225.
- Aljdela.( 2006). The reality of the methods use of crisis management in large governmental hospitals in the Gaza Strip (Unpublished master thesis) *The Islamic university of Gaza*.
- American College of Emergency Physicians. (2006). Approaching full capacity in the emergency department: An information paper.
- Al-Bakri, Yasser. (2005). "Hospital Management", Dar Al-Yazouri Scientific Publishing and Distribution, Amman, p. 199
- Al Ajarmeh, Taysir. (2005), "Banking Marketing", Dar Al-Hamed Publishing and Distribution, Amman, p. 332.
- Archer, J. (2004). Time Management, setting goals and priorities. *University Of Florida Counseling Center*, 301.
- ARashid .(2003). *Time management and its relationship with the pressures of work*, practical study on departmental managers and department heads border guards in the cities of Riyadh and Dammam, unpublished Master Thesis, Riyadh, Naif Academy for Security Sciences.
- Bahdada Njaa.(2012). "Logistics challenges in health institution" Case study: hospitalization of public institutions to Moakna

BadranAlomer, (2002). The extent of the application of total quality management in hospitals of Riyadh city from the viewpoint of practitioners of the profession of nursing (Unpublished master thesis).The Islamic university of Gaza

Butler, J. M., Clancy, M., Robinson, N., & Driscoll, P. (2001). An observational survey of emergency department rapid sequence intubation. *Emergency Medicine Journal*, 18(5), 343-348.

Beveridge, R., Clarke, B., Janes, L., Savage, N., Thompson, J., Dodd, G., ... & Vadeboncoeur, A. (1998). Implementation guidelines for the Canadian emergency department triage & acuity scale (CTAS). *Canadian association of emergency physicians*.

Challen , et al(2011). *Hospital emergency response checklist(P6).*  
WHO/EUROWeb site: [www.euro.who.int](http://www.euro.who.int)

Christian, M., Farmer, J., & Young, B. (2009). Disaster triage and allocation of scarce resources. *Fundamental disaster management*, 1-18.

Cronin,Jr.,and Taylor, S, (1999) *Measuring Service Quality Reexamination and Extension*, Journal of marketing, No. 56 ,p.55.

Dridi Ahlam,(2014). "The role of the use of the queues models to improve the quality of health services "case study :Public Health Foundation neighborly Biskra

DeLia, D. (2007). *Hospital capacity, patient flow, and emergency department use in New Jersey*. Rutgers Center for State Health Policy.

DeLone, W. H., & McLean, E. R. (1992). Information systems success: The quest for the dependent variable. *Information systems research*, 3(1), 60-95.

Ebrahimi, M., Mirhaghi, A., Mazlom, R., Heydari, A., Nassehi, A., & Jafari, M. (2016). The role descriptions of triage nurse in emergency department: a Delphi study. *Scientifica*, 2016.

Engbretsen, S., Røise, O., & Ribu, L. (2013). Triage in Norwegian emergency departments. *Tidsskrift for den Norske laegeforening: tidsskrift for praktisk medicin, ny raekke*, 133(3), 285-289.

Emergency Nurses Association(2011). *trriage qualifications* ,915 Lee Street  
Des Plaines, IL 60016-6569 | 847-460-4000

Edura Wan Rashid, W., & Kamaruzaman Jusoff, H. (2009). Service quality in health care setting. *International journal of health care quality assurance*, 22(5), 471-482.

El Telbani, N. (2000). Evaluation of the application of total quality management in the health sector-Palestinian lessons and recommendations. *To improve and develop the quality* (PHD) university of Berizat.

FitzGerald, G., Jelinek, G. A., Scott, D., & Gerdtz, M. F. (2010). Republished paper: Emergency department triage revisited. *Postgraduate medical journal*, 86(1018), 502-508.

Fraser, C., Donnelly, C. A., Cauchemez, S., Hanage, W. P., Van Kerkhove, M. D., Hollingsworth, T. D., ... & Jombart, T. (2009). Pandemic potential of a strain of influenza A (H1N1): early findings. *science*, 324(5934), 1557-1561.

Farrokhnia, N., & Göransson, K. E. (2011). Swedish emergency department triage and interventions for improved patient flows: a national update. *Scandinavian journal of trauma, resuscitation and emergency medicine*, 19(1), 72.

Groene, O., Arah, O. A., Klazinga, N. S., Wagner, C., Bartels, P. D., Kristensen, S., DerSarkissian, M. (2015). Patient experience shows little relationship with hospital quality management strategies. *PloS one*, 10(7), e0131805.

Gerdtz, M. F., Collins, M., Chu, M., Grant, A., Tchernomoroff, R., Pollard, C., ... & Wassertheil, J. (2008). Optimizing triage consistency in Australian emergency departments: the Emergency Triage Education Kit. *Emergency Medicine Australasia*, 20(3), 250-259.

Gabor, A., & Deming, W. E. (1990). *man who discovered quality*. Times Books/Random House.

Habib Mahmoud, (2014) Measuring the Level of the Quality of the Medical Services Provided at the Health Centers in Lattakia Province from the Beneficiaries' *Tishreen University Journal for Research and Scientific Studies -Economic and Legal Sciences Series Vol. (36) No. (5)*

Helmiö, P., Blomgren, K., Takala, A., Pauniah, S. L., Takala, R. S. K., & Ikonen, T. S. (2011). Towards better patient safety: WHO Surgical Safety Checklist in otorhinolaryngology. *Clinical otolaryngology*, 36(3), 242-247.

Hoot, N. R., & Aronsky, D. (2008). Systematic review of emergency department crowding: causes, effects, and solutions. *Annals of emergency medicine*, 52(2), 126-136.

Institute of Medicine, (2001).behavioral & social sciences research-Evaluating the Quality of Health Care ,e sources p4

- Juran, J. M. (1986). The quality trilogy. *Quality progress*, 19(8), 19-24.
- Jarvis, P. R. E. (2016). Improving emergency department patient flow. *Clinical and experimental emergency medicine*, 3(2), 63.
- Kolotkin, R. L., Davidson, L. E., Crosby, R. D., Hunt, S. C., & Adams, T. D. (2012). Six-year changes in health-related quality of life in gastric bypass patients versus obese comparison groups. *Surgery for Obesity and Related Diseases*, 8(5), 625-633.
- Kaji, A., Koenig, K. L., & Bey, T. (2006). Surge capacity for healthcare systems: a conceptual framework. *Academic Emergency Medicine*, 13(11), 1157-1159.
- Kotler, P., & Clarke, R. N. (1987). *Marketing for Health Organization*.
- Lovelock, Christopher,(1996).*Service Marketing,3rd Ed, Prentice Hall international*, New York ,pp.96, 470.
- Mahmoodian, F., Eqtesadi, R., & Ghareghani, A. (2014). Waiting times in emergency department after using the emergency severity index triage tool. *Archives of trauma research*, 3(4).
- Musleh Ateai (2012) The measurement of quality of services perceived by staff and patients in hospitals operating in the city of Qalqilya,( Unpublished PhD thesis) *Open Al-Quds University*
- McClellan, D. A., & Hung, T. Y. (2011). A reduction in emergency department use by children from a parent educational intervention. *Family Medicine-Kansas City*, 43(2), 106.
- Mousa Abu Assalak,(2003). patient satisfaction for nursing services provided in selected hospitals in Gaza Strip(Unpublished master thesis) *The Islamic university of Gaza*
- Mohammed ,Shahry,( 2003). Administrative Obstacles Affecting the Effectiveness of Receiving Traffic Accidents in Civil and Military Government Hospitals in Riyadh, MBA, *Naif Arab Academy for Security Sciences*.
- Mahmoud, Al-Allaq. (2001). Evaluation of the health services provided in Intensive Care Units of hospitals in organization services: employees perspectives ,*Al-Quds University*.

Mohammad Shaheen,( 2000).The psychological effects of crisis management, disasters and health emergencies, *Annual Conference on Crisis and Disaster Management 5th, Ain Shams University.*

N. Falsteen (2015)The Impact of Hospital Information System Quality on the Health Care Quality(Unpublished master thesis).*The Islamic university of Gaza*

Ozen, Yaman, and Acar, (2012). Determination of the employment status of graduates of recreation department. *The Online Journal of Recreation and Sport* , Vol. 1, Issue 2.

PHIC (2016)*hospital in Gaza strip*[www.moh.gov.ps](http://www.moh.gov.ps) Palestine: ministry of health-Gaza.

Philip Kotler et al,(2012).*Marketing management,Library of Congress Cataloging* .United States of America: New Jersey 07458

Phil ,B. Robert ,H. & Jennifer D.(2007)*Quality in Healthcare: Concepts and Practice(CHAPTER 3)(p68)611-394-V3-003.indd*

Plater, W. M. (1995). Future Work Faculty Time In The 21 St Century. *Change: The Magazine of Higher Learning*, 27(3), 22-33.

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *the Journal of Marketing*, 41-50.

Rutland Regional Medical Center,(2014).Faster emergency department communication increase patient satisfaction ,*Part number CS-RUTLAND*. Printed USA 10/13, [www.motorolasolutions.com/healthcare](http://www.motorolasolutions.com/healthcare)

Rahmat, M. H., Annamalai, M., Halim, S. A., & Ahmad, R. (2013). Agent-based modelling and simulation of emergency department re-triage. In *Business Engineering and Industrial Applications Colloquium (BEIAC), 2013 IEEE* (pp. 219-224). IEEE.

Ridwan, Alawa,(1997) .Communication Skills in Crisis Management: Application to Hospitals, *Annual Conference on Crisis and Disaster Management* 2nd, Ain Shams University, Cairo.

Shah, S., Patel, A., Rumoro, D. P., Hohmann, S., & Fullam, F. (2015). Managing patient expectations at emergency department triage. *Patient Experience Journal*, 2(2), 31-44.

Mor, M., & Waisman, Y. (2002). Triage principles in multiple casualty situations involving children: the Israeli experience. *Pediatric Emergency Medicine Database (serial online)*.

Shah, A., & Jarwani, B. (2014). Study of patients of road traffic accidents arriving in emergency department [ED] of VS hospital at Ahmedabad city, single centre pilot study. *NHL Journal of Medical Sciences*, 3(2).

Salah Dyab, (2012). Measuring Quality Dimensions of Government Hospitals health Services in Jordan: A Staff and Patients Perspective( *iug.journal economics and managerial* , volume 20 p69 –p104

Scherfigsvej,(2011) *hospital emergency response checklist ,an all-hazards tool for hospital administration*(p7)( DK-2100).WHO/EURO)web site ( <http://www.euro.who.int/pubrequest>

Shber .(2010).The reality of time management among employees working in satellite channels operating in the Gaza Strip (Unpublished master thesis),*IUG,MB The Islamic university of Gaza*

Shaikh, B., Rabbani, F., Safi, N., & Dawar, Z. (2010). Contracting of primary health care services in Pakistan: is up-scaling a pragmatic thinking. *Journal of the Pakistan Medical Association*, 60(5), 387.

Subash, F., Dunn, F., McNicholl, B., & Marlow, J. (2004). Team triage improves emergency department efficiency. *Emergency Medicine Journal*, 21(5), 542-544.

Slack, et al ,(2004), *Operation Management*,4<sup>th</sup> ed., Prentice – Hill, New York.

Subash, F., Dunn, F., McNicholl, B., & Marlow, J. (2004). Team triage improves emergency department efficiency. *Emergency Medicine Journal*, 21(5), 542-544.

Samarrai, Jassim, (2000). Pricing of Health Services by Focusing on Dental Services, Higher Diploma of Hospital Management, College of Management and Economics, Baghdad University, Iraq.

Sleman Glal,( 1999).Effect of some organizational factors on the efficiency of crisis management in Mansoura University of Hospitals. *Annual Conference 4th, Crisis and Disaster Management*, Ain Shams University, Cairo.

Twomey, M., Wallis, L. A., Thompson, M. L., & Myers, J. E. (2012). The South African Triage Scale (adult version) provides reliable acuity ratings.

*International emergency nursing*, 20(3), 142-150.

Timby, B. K. (2009). *Fundamental nursing skills and concepts*. Lippincott Williams & Wilkins.

Tashkandy, M. A., Gazzaz, Z. J., Farooq, M. U., & Dhafar, K. O. (2008). Reasons for delay in inpatient admission at an emergency department. *J Ayub Med Coll Abbottabad*, 20(1), 38-42.

Tragakes, E., & Vienonen, M. (1998). *Key issues in rationing and priority setting for health care services*. WHO, Regional Office for Europe, Health Care Systems, Health Services Management.

Taguchi, G. (1985). Quality engineering in Japan. *Communications in Statistics-Theory and Methods*, 14(11), 2785-2801.

Van Donk, P., Tanti, E. R., & Porter, J. E. (2017). Triage and treat model of care: Effective management of minor injuries in the emergency department. *Collegian*, 24(4), 325-330.

Wiler, J. L., Gentle, C., Halfpenny, J. M., Heins, A., Mehrotra, A., Mikhail, M. G., & Fite, D. (2010). Optimizing emergency department front-end operations. *Annals of emergency medicine*, 55(2), 142-160.

World Health Organization. (2007). Mass casualty management systems: strategies and guidelines for building health sector capacity.

WHO, Rafael Bengoa. (2006) *Quality of care, a process for making strategic choices in health system* 20 Avenue Appia, 1211 Geneva 27, Switzerland

Whoqol Group. (1994). The development of the World Health Organization quality of life assessment instrument (the WHOQOL). In *Quality of life assessment: International perspectives* (pp. 41-57). Springer, Berlin, Heidelberg.

Weinick, R. M., Becker, K., Parast, L., Stucky, B. D., Elliott, M. N., Mathews, M., & Kotzias, V. (2014). Emergency department patient experience of care survey: Development and field test. *Rand Health Quarterly*, 4(3).

## Annexes

### Annex (1): Questionnaire (English version)



Questionnaire about The reality of applying priority management in emergency department & its effect on improving the quality of health services "Case study Applied study on emergency department at large governmental hospitals in Gaza strip".

#### **Dear employee:**

I kindly request you to fill in the attached questionnaire, because your contribution is of great importance to the subject matter of the study and the public interest. The questionnaire is part of the requirements for obtaining a master's degree in business administration. Your contribution is a source of thanks, appreciation and respect for the effort you have made to help the researcher to obtain realistic and logical information about the subject of the study which constitutes support for scientific research. For don't any other purposes. I would be grateful if you agreed to fill in the questionnaire and you have absolute freedom not to answer any question you do not want to answer and I appreciate the efforts of how to answer the questionnaire, which takes 15 to 20 minutes. the main objectives of the study is to provide recommendations that can be applied in the institutional and health work, which will have the benefit of reducing medical errors, speed of service performance and optimal used available resources .

Researcher / Mahmoud Eid Mohamed Khattab

Mobile / 0599977351

Thank you for your kind cooperation

**First : Personal Data**

**Gender :** male  female

**Age :** less 25  From 25 to less than 35   
 From 35 to less 45  more 45

**Education level :** diploma  barcaroles   
 Master  doctorate

**Job title :** practical nurse  staff nurse   
 General physician  specialist physician   
 Head nurse  head department

**years of services :** less 3 years  from 30 to less 5 years   
 from 5 to 10 years  more 10 years

**work time:** morning  evening   
 night  evening night

Mix (morning, evening ,night, evening night)

**work place:** Shifa medical complex  Nasser medical complex   
 European Gaza Hospital  AL Aqsa Hospital

Dear employee: Please indicate the extent to which you agree or disagree with each of the items and circle according to reality practices in provision health service in emergency department .

strongly agree	agree	Neutral	Disagree	strongly disagree.
5	4	3	2	1

**Second: Questionnaire Domains related to the dimensions of priority management in emergency departments.**

#	Items	1	2	3	4	5
<b>Preparedness</b>						
1	Preparedness to face disaster in emergency departments is based on recommendations from the Ministry of Health and the World Health Organizations.	1	2	3	4	5
2	The readiness of health staff in the morning period is more than other periods.	1	2	3	4	5
3	Being prepared in quiet days is based on information from other sources such as (ambulance - civil defense).	1	2	3	4	5
4	Using modern methods of communication help the health staff inside the hospital using to reduce the severity of the crisis or disaster.	1	2	3	4	5
5	The necessary precautions and measures in emergency departments to face mass casualty in the war are based on the follow-up by multi news media.	1	2	3	4	5
6	The public relations and the media in the hospital contribute to lifting the state of preparedness for communication with internal and external parties.	1	2	3	4	5
7	Employees are trained to deal with emergency cases during crises periodically.	1	2	3	4	5



7	Surges Capacity is planned through the annual and strategic plan for hospitals.	1	2	3	4	5
<b>available resources</b>						
1	The number of health staff in the hospital and emergency departments is appropriate to the number of cases.	1	2	3	4	5
2	The location of emergency departments is suitable for health teams to treat the disease as soon as possible	1	2	3	4	5
3	Hospital management is able to cover all costs and expenses incurred by the number of emergency cases	1	2	3	4	5
4	The equipment and medical supplies used to provide therapeutic services are adequate, quality and efficient	1	2	3	4	5
5	Hospital management and emergency departments can attract and provide new resources at the time of crisis or disaster	1	2	3	4	5
6	The requirement of emergency departments are followed-up periodically and continuously	1	2	3	4	5
<b>Response of treatment</b>		1	2	3	4	5
1	Health staff deal with patients according to the degree of response to treatment throughout the working hours	1	2	3	4	5
2	Very critical cases are excluded in the case of a huge number of patients and lack of available resources	1	2	3	4	5
3	Health staff personnel taking into account the response to treatment and its suitability with the costs incurred when treating cases	1	2	3	4	5
4	Time is calculated to treat some cases such as "brain anoxia"	1	2	3	4	5
5	Priority is given to patients with good results at the therapeutic and human level	1	2	3	4	5
6	The health staff is able to identify patients' response to treatment	1	2	3	4	5

**Third : Questionnaire Domains related to the dimensions of quality of health services in emergency departments.**

Please indicate the extent to which you agree or disagree with each of the items and circle according to reality practices in provision health service in emergency department .

#	Items	1	5–strongly agree, 1–strongly disagree. 				5
<b>Reliability</b>							
1	Medical and health staff are committed to providing treatment services timely and to provide support to the patient's expectations.	1	2	3	4	5	
2	The health staff are committed to international scientific and practical criteria " physical examination, diagnosis and treatment".	1	2	3	4	5	
3	The hospital management provides the therapeutic departments with all specialties required to treat patients.	1	2	3	4	5	
4	The patients are treated with high professionalism, making them feel safe and confident.	1	2	3	4	5	
5	Health staff are interested in providing health services timely, fast and accurately.	1	2	3	4	5	
6	The health staff documented all information about patients and their health status in all circumstances in the records and computer.	1	2	3	4	5	
<b>Responsiveness</b>							
1	The required health services are provided quickly and according to patients' perceptions.	1	2	3	4	5	
2	Response to the patient's requirements are met immediately even at the degree of preoccupation and stress.	1	2	3	4	5	
3	The health staff want to help of patients permanently.	1	2	3	4	5	
4	The response to all inquiries and complaints are prompt and without a sense of discomfort.	1	2	3	4	5	

5	The service providers inform the patient about the date of service and its completion .	1	2	3	4	5
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#	Items	1	5–strongly agree, 1–strongly disagree.			5
						

**Assurance**

1	Patients feel safe and confident when dealt with them by the service providers.	1	2	3	4	5
2	Health service providers have practical skill and scientific knowledge that are diverse and specialized in the performance of their work.	1		3	4	5
3	The patient should be assured that he is in good hands with the hospital staff when dealing and that he has not lost his right to privacy and confidentiality.	1	2	3	4	5
4	The health staff interact with the patients and deal with them gently and tactfully.	1	2	3	4	5
5	The health service providers in the hospital have the courtesy and the credibility of their work, which necessitates the management of the hospital to provide support to these workers.	1	2	3	4	5
6	The health service providers continuously follow up patients after conducting laboratory tests.	1	2	3	4	5

**Empathy**

1	Health service providers and hospital management should give patients personal attention.	1	2	3	4	5
2	Hospital service providers have the ability to provide personal care.	1	2	3	4	5
3	health service providers in the Hospital know the needs of patients.	1	2	3	4	5
4	In fact, the hospital management provide their best services for patients.	1	2	3	4	5

5	The hospital management operates hours of work according to patient needs.	1	2	3	4	5
<b>Tangibles</b>						
1	The hospital needs to develop its buildings and public facilities to support the work.	1	2	3	4	5
2	the nature of public rooms and services for patients, waiting hall, doctors' and health staff offices are appropriate.	1	2	3	4	5
3	There is clear interest by the hospital management and health staff in a manner and body work clothes commensurate with the level of service provided.	1	2	3	4	5
4	Management work update equipment and medical supplies used continuously& contribute to the therapeutic service speed.	1	2	3	4	5

## Annex (2): Questionnaire (Arabic version)



### استبيان حول واقع تطبيق إدارة الأولويات في أقسام الاستقبال والطوارئ وأثرها على تحسين جودة الخدمات الصحية دراسة تطبيقية على مستشفيات قطاع غزة الكبرى

الأخ الموظف... ، الأخت الموظفة

السلام عليكم ورحمة الله وبركاته... ، أما بعد:

أرجو من حضرتكم التكرم بتعبئة الاستبانة المرفقة، لما تمثله مساهمتكم من أهمية بالغة بالنسبة لموضوع الدراسة و المصلحة العامة. وإن هذه الاستبانة هي جزء من متطلبات الحصول علي درجة الماجستير في إدارة الأعمال، و مساهمتكم هي محل الشكر و التقدير و الاحترام، للجهد الذي تبذلوه لمساعدة الباحث في الحصول على معلومات واقعية و حقيقة عن موضوع الدراسة و التي تشكل دعماً للبحث العلمي و لن تستخدم إجاباتكم لأي أغراض أخرى. وسأكون مشكور لكم ان وافقتم على تعبئة الاستبانة ولكم مطلق الارادة والحرية في عدم الاجابة عن أي سؤال لا ترغبون في الإجابة عنه كما اقدر جهودكم في الاجابة عن الاستبانة والتي تستغرق من ١٥ الى ٢٠ دقيقة . وإن من أهم أهداف الدراسة تقديم توصيات لازمة قابلة لتطبيق في العمل المؤسساتي والصحي لما يكون له مردود على تقليل الاخطاء الطبية وسرعة اداء الخدمة وترشيد الاستهلاك ...

الباحث / محمود عيد محمد خطاب

جوال/ ٠٥٩٩٩٧٧٣٥١

شكرا لتعاونكم الامين

اولا / البيانات الشخصية

الجنس :- ذكر  انثى

العمر :- اقل من ٢٥ سنة  من ٢٥ الى اقل من ٣٥ سنة

من ٣٥ الى اقل من ٤٥ سنة  ٤٥ سنة فأكثر

المستوي العلمي :- دبلوم  بكالوريوس

ماجستير  دكتوراه

المسمى الوظيفي :- ممرض عملي  حكيم جامعي

طبيب عام  طبيب متخصص

حكيم قسم  رئيس قسم

سنوات الخبرة :- اقل من ٣ سنوات  من ٣ الى اقل من ٥ سنوات

من ٥ الى اقل من ١٠ سنوات  ١٠ سنوات فأكثر

فترة العمل الدائمة  صباحي  مسائي  سهر

مسائي سهر  متنوع (صباحي، مسائي، سهر)

مكان العمل :- مجمع الشفاء الطبي  مجمع ناصر الطبي

مستشفى الأوروبي  مستشفى الاقصى

اخي الموظف اختي الموظفة يُرجى وضع دائرة في أحد الأعمدة الخمسة للفقرات التالية أدناه؛ وذلك حسب واقع ممارستك لتقديم الخدمة في اقسام الطوارئ

موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة
٥	٤	٣	٢	١

ثانيا: محور الاستبانة الخاصة بأبعاد إدارة الاولويات

إلى أي مدى توافق على الفقرات التالية والخاصة بإدارة الاولويات في اقسام الطوارئ

#	الفقرة	موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة
<b>الاستعداد Preparedness</b>						
١	يتم الاستعداد لمواجهة الكوارث في اقسام الطوارئ بناءً على توصيات من وزارة الصحة والمنظمات الصحية العالمية .	١	٢	٣	٤	٥
٢	تكون جاهزية الطاقم الصحي في الفترة الصباحية اكثر من الفترات الأخرى.	١	٢	٣	٤	٥
٣	يكون الاستعداد في الايام العادية مبني على معلومات من جهات اخرى مثل (الاسعاف -الدفاع المدني) .	١	٢	٣	٤	٥
٤	تساهم الية التواصل مع الطواقم داخل المستشفى بالطرق الحديثة من تقليل حدة الازمة او الكارثة .	١	٢	٣	٤	٥
٥	يتم اخذ الاحتياطات والتدابير اللازمة في اقسام الطوارئ لمواجهة عدد الاصابات في الحرب بناءً على متابعة الاخبار عبر وسائل الاعلام المختلفة .	١	٢	٣	٤	٥
٦	يعمل جهاز العلاقات العامة والاعلام في المستشفى من رفع حالة التأهب والاستعداد لتواصله مع اطراف داخلية وخارجية .	١	٢	٣	٤	٥
٧	يتم تدريب العاملين على التعامل مع الحالات الطارئة اثناء الازمات بشكل دوري .	١	٢	٣	٤	٥

classification of patients عدد المرضى					
١	٢	٣	٤	٥	١ يتم تصنيف الحالات وتوجيه المرضى حسب التخصص والخطورة.
١	٢	٣	٤	٥	٢ يقوم الطاقم الصحي بفرز الحالات حسب امكانيات المستشفى في حالة الإصابات الهائلة.
١	٢	٣	٤	٥	٣ يتم تطبيق نظام فرز الحالات المرضية حسب درجة الخطورة طول فترة الدوام.
١	٢	٣	٤	٥	٤ يتم استثناء الحالات المزمنة الغير طارئة خلال عملية فرز الحالات المرضية وقت الازمة.
١	٢	٣	٤	٥	٥ تحظى الحالات الواردة من الاسعاف والدفاع المدني باهتمام أكبر من المحولة من مصادر اخري .
١	٢	٣	٤	٥	٦ يتم التعامل مع الحالات الناجمة عن الحوادث والحروق مباشرة .
١	٢	٣	٤	٥	٧ يتم اعطاء فترة انتظار للمرضى ذات الامراض الحادة او المزمنة عند عملية الفرز .
١	٢	٣	٤	٥	٨ يتم ادخال الحالات الحرجة جدا الى غرفة العناية المركزة فوراً .
القدرة الاستيعابية Surges capacity					
١	٢	٣	٤	٥	١ لدي المستشفى واقسام الطوارئ القدرة الكاملة على استقبال جميع الحالات المرضية .
١	٢	٣	٤	٥	٢ عدد الاسرة مؤهلة لاستيعاب اكبر قدر من الحالات المرضية حسب المنطقة الجغرافية والتعداد السكاني .

١	٢	٣	٤	٥	٣	يوجد غرف عزل للحالات المرضية المعدية .
١	٢	٣	٤	٥	٤	تستطيع المستشفى واقسام الطوارئ معالجة الحالات بمختلف التخصصات العلاجية .
١	٢	٣	٤	٥	٥	يكفى حجم الاجهزة والمستلزمات الطبية في معالجة المرضى عند حدوث الازمات والكوارث .
١	٢	٣	٤	٥	٦	عدد الطواقم الصحية كافية لعلاج الحالات المرضية على مدار ٢٤ ساعة .
١	٢	٣	٤	٥	٧	يتم التخطيط للقدرة الاستيعابية من خلال اعداد الخطة السنوية والاستراتيجية للمستشفيات واقسام الطوارئ .
<b>المصادر المتاحة available resources</b>						
١	٢	٣	٤	٥	١	عدد الموظفين في المستشفى واقسام الطوارئ يلائم عدد الحالات الوافدة
١	٢	٣	٤	٥	٢	موقع مكان اقسام الاستقبال مناسب مما يمكن الطواقم الصحية معالجة المرضى بأسرع وقت .
١	٢	٣	٤	٥	٣	ادارة المستشفى قادرة على تغطية جميع التكاليف والنفقات الناجمة عن عدد الحالات الوافدة لأقسام الطوارئ.
١	٢	٣	٤	٥	٤	المعدات والادوات التي تستخدم لتقديم الخدمة العلاجية كافية وذات جودة وكفاءة
١	٢	٣	٤	٥	٥	تستطيع ادارة المستشفى واقسام الطوارئ استقطاب وتوفير موارد جديدة وقت الازمة او الكارثة.
١	٢	٣	٤	٥	٦	يتم متابعة احتياجات اللازمة لأقسام الطوارئ بشكل دوري ومستمر.

الاستجابة للعلاج response of treatment					
١	٢	٣	٤	٥	١ تتعامل الطواقم الصحية مع الحالات المرضية حسب درجة الاستجابة للعلاج طول فترات الدوام .
١	٢	٣	٤	٥	٢ يتم استثناء الحالات شديدة الخطورة في حالة وجود عدد كبير من الحالات المرضية وضعف الامكانيات المتاحة.
١	٢	٣	٤	٥	٣ يؤخذ في عين الاعتبار الاستجابة للعلاج وملائمتها مع التكاليف الناجمة عند معالجة الحالات المرضية .
١	٢	٣	٤	٥	٤ يتم حساب الوقت لعلاج بعض الحالات المرضية الفاقدة للوعى فترة طويلة .
١	٢	٣	٤	٥	٥ يتم اعطاء اولوية للمرضى ذات النتائج الجيدة على المستوى العلاجي والبشرى.
١	٢	٣	٤	٥	٦ تستطيع الطواقم الصحية على تحديد المرضى ذات الاستجابة للعلاج .

### ثالثا : محاور الاستبانة الخاصة بأبعاد جودة الخدمات الصحية

إلى أي مدى توافق على الفقرات التالية والخاصة جودة الخدمات الصحية في اقسام الطوارئ

#	الفقرة	موافق بشدة	موافق	محايد	غير موافق بشدة	غير موافق
<b>الاعتمادية Reliability</b>						
١	٥	٤	٣	٢	١	١ تلتزم الطواقم الصحية بتقديم الخدمات الصحية في موعدها المحدد لها وتوفير ما يدعم توقعات المريض .
٢	٥	٤	٣	٢	١	١ تلتزم الطواقم الصحية بالمعايير العالمية

					العلمية والعملية من حيث الفحص والتشخيص والعلاج .
١	٢	٣	٤	٥	٣ تعمل ادارة المستشفى على تزويد اقسام الطوارئ بجميع التخصصات اللازمة لعلاج المرضى .
١	٢	٣	٤	٥	٤ يتم التعامل مع المرضى بحرفية عالية مما يجعله يشعر بالثقة والامان.
١	٢	٣	٤	٥	٥ تهتم الطواقم الصحية بتقديم الخدمات الصحية في الوقت المحدد وبشكل سريع ودقيق.
١	٢	٣	٤	٥	٦ تقوم الطواقم الصحية بتوثيق جميع المعلومات عن المرضى وحالاتهم الصحية في كل الظروف في السجلات والحاسوب.
<b>الاستجابة Responsiveness</b>					
١	٢	٣	٤	٥	١ يتم تقديم الخدمات الصحية المطلوبة بسرعة وحسب توقعات المرضى .
١	٢	٣	٤	٥	٢ يتم الاستجابة لمتطلبات المرضى بشكل فوري حتى عند درجة الانشغال والضغط الشديد.
١	٢	٣	٤	٥	٣ يرغب العاملون في المستشفى بمساعدة المرضى بشكل دائم.
١	٢	٣	٤	٥	٤ يتم الرد على جميع الاستفسارات والشكاوي بشكل فوري ودون الاحساس بالإزعاج .
١	٢	٣	٤	٥	٥ يقوم مقدمو الخدمة الصحية بإعلام المريض عن موعد تقديم الخدمة والانتهاء منها حسب تقديراتهم .

التوكيد (الامان والثقة) Assurance						
١	٢	٣	٤	٥	١	يشعر المرضى بالأمان والثقة الكاملة خلال التعامل معهم من قبل مقدمي الخدمة
١	٢	٣	٤	٥	٢	يتوفر لدي مقدمي الخدمة الصحية المهارة العملية والمعرفة العلمية المتنوعة والمتخصصة في اداء عملهم .
١	٢	٣	٤	٥	٣	في تصورك، يجب أن يطمئن المريض بأنه بأيدي أمينة مع العاملين في المستشفى عند التعامل و انه لم يفقد حقه في الخصوصية والسرية.
١	٢	٣	٤	٥	٤	هل تلمس أن الطاقم الصحي والعاملين متفاعلين مع المرضى ويتعاملون معهم بلطف ولباقة.
١	٢	٣	٤	٥	٥	يتوفر لدى مقدمي الخدمة الصحية في المستشفى الجدارة والكياسة والمصداقية في أداء عملهم مما يتحتم علي إدارة المستشفى أن تقدم الدعم لهؤلاء العاملين.
١	٢	٣	٤	٥	٦	يقوم مقدمو الخدمة الصحية بمتابعة المرضى بعد اجراء الفحوصات والتحليل بشكل مستمر.
التعاطف Empathy						
١	٢	٣	٤	٥	١	يقوم مقدمو الخدمة الصحية و إدارة المستشفى بتقديم عناية شخصية للمرضى.
١	٢	٣	٤	٥	٢	ان مقدمي الخدمة في المستشفى لديهم القدرة على تقديم عناية شخصية للمرضى.
١	٢	٣	٤	٥	٣	يقوم مقدمو الخدمة الصحية في المستشفى بمتابعة احتياجات المرضى.

١	٢	٣	٤	٥	٤	في الواقع تقدم إدارة المستشفى أفضل ما لديها للمرضى.
١	٢	٣	٤	٥	٥	تعمل إدارة المستشفى بساعات عمل حسب حاجات المرضى.
<b>الأشياء الملموسة ( الملموسية Tangibles )</b>						
١	٢	٣	٤	٥	١	تحتاج المستشفى الى تطوير مبانيها و المرافق العامة مما يدعم انجاز العمل .
١	٢	٣	٤	٥	٢	تعتمد بان طبيعة غرف والخدمات العامة للمرضى و أماكن الانتظار ومكاتب الأطباء والعاملين الحالية تتلاءم مع ما تتوقعه في ذهنك.
١	٢	٣	٤	٥	٣	هناك اهتمام واضح من قبل إدارة المستشفى والعاملين بطريقة وهيئة ملابس العمل تتناسب مع مستوى الخدمة المقدمة.
١	٢	٣	٤	٥	٤	تقوم ادارة المستشفى على تحديث الأجهزة والمعدات والمستلزمات الطبية المستخدمة بشكل مستمر مما يساهم في سرعة الخدمة العلاجية .



Annex (4): Approval from Islamic university to human resources directorate

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

 الجامعة الإسلامية غزة  
The Islamic University of Gaza

Faculty of Commerce

كلية التجارة

ج س غ / 62  
الرقم: 20 ذو الحجة Ref1438  
التاريخ: 11 أيلول 2017 Date:

حضرة الأخ الدكتور/ رامي العبادلة حفظه الله،  
مدير عام تنمية القوى البشرية بوزارة الصحة الفلسطينية  
السلام عليكم ورحمة الله وبركاته،،

**الموضوع: تسهيل مهمة الباحث: محمود عيد خطاب.**

تهديكم كلية التجارة بالجامعة الإسلامية تحياتها، وترجو التكرم بمساعدة الباحث المذكور أعلاه، والملتحق في برنامج ماجستير إدارة الأعمال، برقم جامعي (120151928) في تسهيل مهمته في الحصول على المعلومات والاحصائيات، وكذلك توزيع استبيانات والتي سوف تساعد في عمل رسالة ماجستير بعنوان:  
**(واقم تطبيق إدارة الأولويات في أقسام الاستقبال والطوارئ وأثرها على تحسين جودة الخدمات الصحية)**

وذلك خدمة للبحث العلمي.

وتقبلوا فائق الاحترام والتقدير،،

عميد كلية التجارة  
أ.د. محمد إبراهيم مقداد



صورة إلى:  
\*الملف



### Annex (6): Experts panel

Name	Specialist	College or university
Prof. Dr. Samir Safi	Statistical sciences	Islamic university
Prof Dr. Yousef Aljeesh	Public health	Islamic university
Dr. Khalid Dahleez	Business administration	Faculty of Commerce
Dr. Waseem Elhabeel	Business administration	Faculty of Commerce
Dr. Yaser Shorafa	Business administration	Faculty of Commerce
Dr.Ashraf ALjady	Public health & nursing sciences	Faculty of nursing
Dr. Ahmad Ashaer	Public health & nursing sciences	Faculty of nursing
Dr. Mazen Abu Qamer	health management & nursing sciences	AL-Azhar Faculty
Dr.Mohammed Abu Jaber	Public health & nursing sciences	University college of Applied Science
Dr.Amer Abu SHarea	Hospital management and human resources management	University of Palestine
sDr. Mohammed Alaly	Pharmacist and public health	University of Palestine

### Annex(7) Measurement scale

strongly disagree	Disagree	Neutral	agree	Strongly agree.
1	2	3	4	5

### Annex(8) One Sample Kolmogorov-Smirnov Test

Variable and dimension	Z-value	sig.
<b>priority management</b>	<b>0.095</b>	<b>0.200</b>
Preparedness	<b>0.114</b>	<b>0.141</b>
Classification of patients	<b>0.119</b>	<b>0.083</b>
surges capacity	<b>0.100</b>	<b>0.200</b>
available resources	<b>0.096</b>	<b>0.200</b>
Response of treatment	<b>0.089</b>	<b>0.200</b>
<b>quality of health services</b>	<b>0.125</b>	<b>0.061</b>
Reliability	<b>0.088</b>	<b>0.200</b>
Responsiveness	<b>0.124</b>	<b>0.061</b>
Assurance	<b>0.129</b>	<b>0.060</b>
Empathy	<b>0.094</b>	<b>0.200</b>
Tangibles	<b>0.089</b>	<b>0.200</b>