Deanship of Graduate study

Al-Quds University

Nurses Perceptions of their Preparedness for Disaster Management at Governmental Hospitals in Gaza Strip

Bayan Ibrahim Shikh Aleid

M. Sc. Thesis

Jerusalem- Palestine

1441 / 2020

Nurses Perceptions of their Preparedness for Disaster Management at Governmental Hospitals in Gaza Strip

Prepared by:

Bayan Ibrahim Shikh Aleid

B. Sc. in Nursing- Palestine College of nursing

Supervisor: Dr. Motasem Saied Salah

A Thesis Submitted in Partial Fulfillment of Requirements for the Degree of Master in Nursing Management -Faculty of Health Professions Al-Quds University

1441 / 2020

Al-Quds University
Deanship of Graduate Studies
Nursing Management Program/ Nursing Department

Thesis Approval

Nurses Perceptions of their Preparedness for Disaster Management at Governmental Hospitals in Gaza Strip

Prepared: Bayan Ibrahim Shikh Aleid
Registration No.: 21711118

Supervisor: Dr. Motasem Saied Salah

Master thesis and accepted, Date: / /
The name of signatures of the examining committee members are as follows:

1- Head of committee: Dr. Motasem S. Salah Signature: .....
2- Internal examiner: Dr. Hateem Al-Dbakkah Signature: .....
3- External examiner: Dr. Naseer Abu Al-nour Signature: .....

Jerusalem – Palestine

1441/2020

Dedication

I would like to express my deep sense and admire to my father, to my beloved mother, to my lovely wife and our fetus, to my dear sisters and brothers and to my family with all its members.

To all my colleagues who helped me and contributed to get this study a reality, thank you.

To the martyrs and injured of Palestine and prisoners in prisons.

To everyone who contributed to get this study a reality, thank you.

Today I dedicate them this important professional achievement because without their presence, support, and comprehension I would have not achieved my goal. I love you all, I remain

.

BAYAN I SHIKH ALEID

Declaration

I certify that this thesis submitted for the degree of master is the result of my own research, except where otherwise acknowledged, and that this thesis or any of its parts has not been submitted for higher degree to any other university or institution

Signed:

BAYAN I. SHIKH ALEID

Date:

Acknowledgement

First and foremost, praise is to Allah, the Lord of the world, and peace and blessings of Allah be upon the noblest of all Prophets and messengers, our prophet Muhammad, all thanks for Allah who granted me the help and capability to complete this thesis.

I would like to express my deep appreciation and respect to Dr. Motasem S. Salah, to his supervision, guidance and revision and thank him for his unlimited support, patience and for everything he did to me especially sharing his experience and knowledge with me.

I would like to express my gratitude to all people who contributed to the completion of this thesis.

Deep thanks to all doctors and professors who have checked the study tools.

I would like to thank the academic and administrative staff of the school of public health Al-Quds University for their guidance and support.

My gratefulness is due to all my colleagues in governmental hospitals for their participation and cooperation.

All managers in Ministry of Health are recognized for their significant assistance and facilitation throughout the fieldwork phase of this study.

BAYAN I. SHIKH ALEID

Abstract

Disaster is considered as an unpredicted event that occurs at anywhere in the world with a dramatic impact on individuals , families and communities , and it poses a unique challenge for every medical care facility in terms of infrastructure, capacity, and preparedness. Nurses are important members of the disaster team; they play a central role in disaster preparedness and management. This study aims to assess nurses' perception of their knowledge, skills, roles and preparedness for disaster management and the hospitals readiness for disaster management at governmental hospitals in Gaza Strip. The study population consists of 409 nurses who are working in the following departments:(ICU departments, Operation departments and Emergency department) at governmental hospital in Gaza Strip. By using the sample size calculator program at 95% confidence level, the sample size was 320 nurses, distributed proportionally according to hospital size. The researcher used the analytical descriptive approach to reach the results by designing a study questionnaire. A self-administered questionnaire was distributed to 320 nurses, out of which (83.75%) responded. The results of the study showed that most of the study was between 26-35 years old (66.42%), majority of them are males and married. and most have a bachelor's degree (79.48%), and majority of them have experience between 6-10 years (43.38%). In addition, the largest proportion of nurses participating in the study sample were from the population of Gaza City with (26.49%) of the sample size. At end, it show that the operations department's nurses have the highest percentage of participants by (39.18%). With regard to study domains, the results revealed that field of "Nurses' perceptions of their skills for disaster management" got the highest score (75%) followed by field of "Nurses' perceptions of their preparedness for disaster management" (72.6%), field of "Nurses' perceptions of their roles for disaster management" (72.2%), field of "Nurses' perceptions of their knowledge for disaster management" (71.1%), while field of "Hospital Readiness to Manage Disaster" the last (65.6%). There were statistically significant differences between nurses' responses regarding their age group and (Role) and (Skill), statistically significant differences between nurses' responses regarding their education level and (Hospital Readiness), statistically significant differences between nurses' responses regarding their years of experience and (Role) and (Hospital Readiness), statistically significant differences between nurses' responses regarding hospital workplace and (Role).The study revealed that there was a high level of nurses' perception of their knowledge, skills, roles and preparedness for disaster management and the hospitals readiness for disaster management at governmental hospitals in Gaza Strip. According to the study results, the study recommended several recommendations, including providing guidelines and instructions for nurses about knowledge of disasters management provide by those with experience and responsibilities through holding workshops, conferences and seminars dealing with the issue of disasters and a hospitals should be supported with the required materials and equipment for health care services.

Keywords: Nurse's Perception, Nurse's Preparedness, Disaster, Management, Knowledge, Role And Skills.

Table of Contents

List of Tables

List of Figures

List of Annexes

List of Abbreviations

BN	Bachelor of Nursing
CBRNE	Chemical, Biological, Radiological, Nuclear, and Explosive
ED	Emergency Departments
EN	Emergency Nurses
EP	Emergency Preparedness
EPIQ	Emergency Preparedness Information Questionnaire
GDP	Gross Domestic Product
EURO-MED	Euro-Mediterranean
ICN	International Council of Nurses
IPS	Institute for Palestine Studies
NGOs	Non-Governmental Organizations
OCHA	Office for the Coordination of Humanitarian Affairs
PCBS	Palestinian Central Bureau of Statistics
PNA	Palestinian National Authority
SPSS	Statistical Package for Social Sciences
UNISDR	United Nations Office for Disaster Risk Reduction
WB	West Bank
WHO	World Health Organization

Chapter One

Introduction

1.1 Background

Disaster refers to a significant functional deterioration or loss of life, material, economy or environmental resources. The magnitude, frequency, and type of disaster events vary according to the geographical location, ethnicities, and economic capacities. Natural and human-induced disasters befall every day throughout the biosphere and cause catastrophic impacts on public health in terms of injuries, sufferings, deaths, destruction of infrastructure, and facility. Conferring to the World Disasters Report in 2016 earthquakes, landslides, floods, and heat waves led to 574 reported disasters and had rejected of 32,550 human deaths. In 2015, the majority if disasters' deaths (67% of the global deaths) were in Asia, and it was beyond 50.5% of the decade's annual average (IFRC and RCS, 2016). For that, more attention has been given to planning the health care response to natural and man-made disasters, because disasters and their destruction effects are increasing worldwide (Saidam, 2018).

The issue of the difficulty of predicting disasters before they occur is a motive for decision-makers to work towards access to sound methods of disaster management to avoid large human and material losses by working to avoid disasters or by controlling their results if they occur and protect human lives. It is in this connection that hospital readiness to manage disaster and the roles, preparedness and management of a medical team including the nurses are deemed essential, taking into account that nurses are the largest working group in the health field. Preventing, preparing for, responding to, and recovering from disasters and emergencies has become a priority for everyone (Saidum, 2018).

The objective of disaster preparedness is to ensure that appropriate systems, procedures and resources are in place to provide prompt effective assistance to disaster victims, thus facilitating relief measures and rehabilitation of services. It includes all of the activities that need to be carried out prior to a disaster to ensure that disaster response activities run smoothly. Previous experiences and trainings of nurses affect their preparedness, awareness, self-confidence and skills in disaster response and decrease their vulnerability to unpredictable events. Most nurses are not ready to face mass casualties, and their preparedness, education and skills are not adequate for an appropriate response (Ahmed, 2018).

In order to a treat a huge number of affected people due to a disaster within a short period, it is important to have well-trained first-response personnel or volunteers. An essential role allotted to nurses for integrating communicating efforts across these protagonists and for having role competencies in disaster preparation. It is quite probable that at some time in the future, nurses may be call upon to respond to a mass casualty event or disaster outside of the hospitals (Grochtdreis, De Jong, Harenberg, Görres & Bäck ,2016).

The nurses' play a key role in the health system and contribute the largest number of healthcare providers, and they have major roles in disaster response. Therefore, an important decision which must be made for health care providers to recognize how to provide adequate care, and when they cannot provide effective care for the multiple victims who are arriving in their facility. So they must be prepared for appropriate response in disasters so that they must have sufficient knowledge, skills, and competence to respond to disasters (Seyedin, Dolatabadi & Rajabifard, 2015).

The Gaza Strip has faced many aggressive confrontations, including the intifadas and the Israeli aggression on demonstrations and homes, and during the last 10 years the Gaza

Strip had been fought three wars , in addition to Israeli aggression on people in Great Marches of Return on the eastern border between the Gaza Strip and the occupied territories, all these events led to increase number of the victims and injury in Gaza Strips , in which the nursing staff had played an effective role and they had a significant impact in the treatment of injured and wounded in the ground event (Saidam, 2018).

The population live under the siege imposed and the lack of resources and tools in Gaza from 2006 till present, in addition the large numbers of victims, casualties result from wars. This is considered a great challenge for health field workers in hospitals and emergency departments, so that attention must be paid to the first responders to these disasters in emergency departments within hospitals (Saidam, 2018).

1.2 Problem statement

Disasters occur every day somewhere in the world with dramatic impact on individuals, families and communities. The world has witnessed a series of disasters such as war, terrorism, earthquakes, tsunamis, hurricanes, floods and many more events around the world in the last decade (Ibrahim, 2014).

In many countries, disaster-nursing education is rarely provided to students to the same degree as fundamental nursing education, there are few models and drafts related to the process of understanding disaster nursing to guide nurses. Wherefore, a many recurrent problems, which impede medical response, arise from the inadequate education and training of health care professionals, from not understanding disaster plans and protocols well, and from skill inadequacy and lack of experience. (Ozpulat & Kabasakal, 2018).

The Gaza Strip is vulnerable to various disasters, such as man-made disaster , and one of the most serious disasters facing Gaza Strip is the Israeli wars that leave behind large

numbers of casualties and deaths. These wars coincide with the imposition of a siege on Gaza Strip continues more than ten years from 2006 till now. One of the most prominent wars on Gaza Strip during the last ten years, the war in 2008, which resulted in the deaths of 1315 people and injured more than 5500 others, according to a report issued by the Institute for Palestine Studies (IPS, 2009). In addition the 2012 war, which killed 185 people and wounded more than 1966 others according to a report issued by the (EURO-MED, 2012), and the 2014 war, which resulted in the deaths of 2,147 people and injured more than 2147, according to a report by the (Al Zaytouna Center for Studies and Consultations, 2015). Several studies have shown the importance of the nursing role in providing health care to patients in hospitals during normal conditions such as (Ahmed, 2018), (Shammah,2018) and (Nofal, Alfayyad, Khan, *Al Aseri and Abu-Shaheen*, 2018), but few studies have focused on highlighting the nurses' perceptions of their role about disaster management and the importance of nurses' perceptions of their preparedness for disaster management in Gaza Strip such as (Saidam, 2018).

Gaza Strip is constantly exposed to wars and is expected to be exposed to other types of disasters, whether natural or man-made, so that the focus of this study will be on the level of nurses perceptions of their knowledge, skills, role and preparedness about disaster management, and the level of hospitals readiness to manage disaster , and their ability to provide disaster training and preparedness training to deal with the large and critical number of cases under time pressure and lack of tools.

So that the researcher like to explore the nurses' perceptions of their preparedness for disaster management in Gaza Strip.

1.3 Justification of the Study

Worldwide, the International Council of Nurses (ICN) and the World Health Organization (WHO) recognize the urgent need for building capacities of Health Care Preparedness in disaster management in order to protect populations, decrease the number of injuries and deaths, and to maintain the overall health of the community and the functioning of health systems. Yet data from recent disasters showed that there is a gap in education and training of Health Care Preparedness at all levels, at the personal as well as the system levels (ICN, 2009). Nurses comprise the highest percent of health and medical workforce. Nurses must understand the national disaster management cycle. Without nursing integration at every phase, communities and clients lose a critical part of the prevention network, and the multidisciplinary response team loses a first-rate partner. Eleven million nurses worldwide form the backbone of the health care system and are the frontline health care workers who are in direct contact with the public contribute to health of individuals, families, communities, and the globe (Ibrahim, 2014).

Nurses are important members of the crisis team. Therefore, they need to be able to use their skills and take prompt action to provide the care necessary for the people involved in the accidents, in order to prevent exacerbation of the problem and its complications. Nurses should be aware of their limitations in knowledge, skills, abilities, independence, and self- efficacy before a critical disaster. The assessment of knowledge, skills, and abilities of nurses and identification of the existing gaps in their knowledge and skills, before participating in critical situations, can minimize the risks associated with crisis response (Ahmed, 2018).

Therefore, the result of this study will add an important value to the nursing profession in clinical, administration, research and academic issues. This result will detect the level of nurse's perceptions of their knowledge, skills, role and preparedness for disaster

management at governmental hospitals in Gaza Strip, which will improve the nurses' preparedness. As well as, this result will provide a clear view about the reality of nurses' preparedness for disaster management, and the demand for new policies and strategies that will help in improving their perceptions. Also the result of this study will explore the nurses' knowledge outcome during academic study and the demand for modifying a training program that offers in nursing colleges and university, guide governmental and non-governmental health organizations to focus on disaster-nursing education to newly graduate nurse. Finally, the result of the study will detect the gap and provide recommendation to it. Therefore, the researcher assesses nurse's perceptions of their knowledge, skills, role and preparedness for disaster management.

1.4 General goal

The purpose of the study is to assess nurses' perception of their knowledge, skills, roles and preparedness for disaster management and the hospitals readiness for disaster management at governmental hospitals in Gaza Strip.

1.5 Objectives

1. To assess level of the nurses' perceptions of their knowledge, skills and role about disaster management, at governmental hospitals in Gaza Strip.
2. To assess nurses perceptions about their preparedness for disaster management, at governmental hospitals in Gaza Strip.
3. To assess the governmental hospitals readiness for disaster management in Gaza Strip as perceived by nurses.

4. To identify the relationship between the nurses perception regarding their knowledge, skills and preparedness for disaster management and their demographic variables.
5. To suggest recommendation that may contribute to improving nurses' preparedness for disaster management.

1.6 Research questions

Based on the problem statement as described above, the following research question arises:

1. What is the level of nurses' perceptions of their knowledge, skills and role about disaster management, at governmental hospitals in Gaza Strip?
2. How did the nurses perceive their preparedness for disaster management, at governmental hospitals in Gaza Strip?
3. How much are governmental hospitals in Gaza Strip ready for disaster management?
4. Is there any impact of demographic variables of nurses on manage disaster?

1.7 The context of the study

1.7.1 Sociodemographic context

Palestine lies within an area of 27,000 square kilometers (Km^2), expanding from Ras Al-Nakoura in the north to Rafah in the south. Palestinian territories is divided into three areas separated geographically; the West Bank (WB) 5.655 Km^2, Gaza Strip (GS) 365 Km^2 and East Jerusalem (Annex, 1). Based on estimates prepared by the Palestinian Central Bureau of Statistics (PCBS), the Based on estimates prepared by PCBS There are about 13 million Palestinians in the world, of whom about 5 million in the State of Palestine in mid-2019; 2.53 million males and 2.45 million females. The estimated population of the West Bank

was 2.99 million of which 1.53 million males and 1.46 million females. While the estimated population of Gaza Strip was 1.99 million of which 1.01 million males and 980 thousand females (PCBS, 2019). The population density of Palestine is generally high at 826 persons/km2, particularly in Gaza Strip, where it is 5,453 persons/km2 compared to a lower population density in the West Bank of 528 persons/km2 in mid-2019 (PCBS, 2019). Natural increase rate accounts for 2.8 (2.5 in WB and 3.3 in GS), life expectancy for males 72.1 years and for females 75.2 years, average household size 5.2 (4.8 in WB and 5.7 in GS), total fertility rate 4.1 (3.7 in WB and 4.5 in GS), infant mortality rate 18.2 (17.0 in WB and 19.6 in GS) (PCBS, 2017).

1.7.2 Economic context

The Palestinian economy suffers from continuous pressure caused by long-term siege, imposed by Israeli occupation for more than 12 years. Economic status in the Palestinian territories is very low. A significant increase in poverty rates occurred in GS from 38.8% in 2011 to 53% by the end of 2017 (United Nations Office for the Coordination of Humanitarian Affairs - OCHA, 2018). Gross Domestic Product (GDP) is estimated about 440.2$ (576.0 in WB and 248.7 in GS), unemployment rate accounted for 18.2% in WB and 41.7% in GS and for females unemployment rate is 44.7% (29.8% in WB and 65.2% in GG) (PCBS, 2017).

1.7.3 Health Care system Context

The Palestinian health system consists of different parties. The main parties that offer health services are the Ministry of Health (MOH), Non-Governmental Organizations (NGOs), United Nations Relief and Works Agency for Palestinian Refugees in the Near East (UNRWA), the military health services, and the private sector. The total number of hospitals in Palestine is 81 hospitals, 51 of them in WB including east Jerusalem

and 30 in GS. The number of hospitals owned by MOH is 27 hospitals (14 in WB with bed capacity 1661 beds and 13 in GS with bed capacity 1664 beds). The number of physicians working in different centers and units of MOH is 2529 physicians, with 5.3 physicians per 10,000 population of Palestine; 4.1 physician per 10,000 populations in WB and 7.0 physician per 10,000 populations in GS, and the number of nurses working in MOH in GS is 3580 nurse representing 26.3% of total employees in MOH, and the number of midwives was 337 representing 2.5% of total employees (MOH, 2018).

1.7.4 Governmental Hospital Services

MOH is the main provider of secondary care in the GS. It is responsible for 13 hospitals across the five governorates and the number of hospital beds in GS is about 1593 and percent of the hospital bed per 1000 capita is about 1.4. The average occupancy rate at hospitals in the GS is about 78%. The unstable Palestinian political situation increases the load on the healthcare services in Gaza and West Bank. There is also a great load on the health care workers in the hospitals especially nurses that already undergo shortages. The total number of nurses working at governmental hospitals in GS is about 1788, and this is relatively not the satisfactory number in relation to a large number of the population served in the GS. Shortage of nursing may influence the quality of care provided and greatly stress the need for an effective clinical supervisory system in governmental hospitals. (MOH, 2018).

1.7.5 Governmental hospitals in the Palestinian Health Ministry in the Gaza Strip (MOH, 2018):

1. Al-Najjar Hospital

A small governmental hospital providing services in the fields of surgery, internal medicine and pediatrics. It participates with the European Gaza Hospital in providing

services to the citizens of Rafah Governorate. Its total clinical capacity is 80 beds, 40 of which are reserved for hospitalization. The total number of staff is 270 staff members

2. Gaza European Hospital

A large governmental hospital with a total clinical capacity of 246 beds, of which 203 beds are allocated for overnight use. The population in the southern governorates of the Gaza Strip is particularly distinguished by providing heart catheterization service to all governorates of the Gaza Strip. The total number of hospital staff is 781 employees.

3. Nasser Medical Complex

Medical Complex includes Naser hospital, which is dedicated to surgery, internal medicine, Al Tahrir hospital for women, childbirth and children, and Al Yassin hospital, it located in Khan Younis. Khan Yunis governorate has a total clinical capacity of 322 beds, with a total of 769 employees.

4. Al - Aqsa Martyrs Hospital

A general hospital provides medical and surgical services for women, obstetrics and pediatrics. The population of Middle governorate has a clinical capacity of 129 beds, of which 103 beds are reserved for hospitalization. The staff is 562 employees of all categories.

5. Al -Shifa Medical Complex

The medical complex includes three hospitals: medical hospital, surgery hospital and maternity hospital. It is located in Gaza City. It serves Gaza Governorate in particular and covers the Gaza Strip in general. Its clinical capacity is 619 beds. The total number of employees in the complex is 1,487.

6. Indonesian Hospital

The hospital is located in the north of the Gaza Strip. It is a modern hospital. It was established in 2016. It includes the medical, general surgery and orthopedic departments. It includes four operating rooms, 10 intensive care beds and 100 beds for patients.

7. Beit Hanoun Hospital

A small governmental hospital providing internal medicine, surgery and pediatrics for the residents of Beit Hanoun and the northern Gaza Strip governorates. The hospital has a total of 45 beds, 36 of which are reserved for hospitalization. The total number of hospital staff is 183 from all specialties.

1.8 Theoretical definition

1.8.1 Disaster

A serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources (United Nations Office for Disaster Risk Reduction, 2019).

Disaster is considered as an unpredicted, sudden, and overwhelming event, which results in significant physical change, destruction, drastic environmental change, and loss of life. Moreover, it causes disruptions in the functioning of a society or community through widespread human, economic, and environmental losses.

1.8.2 Nurses

Nurses with a degree in nursing sciences and working in the following departments: (ICU departments, Operation departments, Emergency departments), and agree to participate in this study during period of data collection.

1.8.3 Nurses' Perception

Perception has long been recognized as a concept of importance in nursing, but the meaning of the term has often been ambiguous and unclear (Bunting, 1988).

Perception is an important property for nurses to understand their tasks that they will perform during the disaster response and management phase.

1.8.4 Nurses' Preparedness

Preparedness for disaster management is termed as the knowledge, abilities, and skills, which are required for preparing and responding towards worst situations; such as nuclear or explosive incidents, man-made incidents, and natural disasters (Shammah, 2018). Nurse's preparedness in disasters refers to a process in which nurses involve to properly prepare and effectively respond to emergencies and disasters (Pourvakhshoori, et al. , 2017).Preparation of nurses are closely linked to the level of training rceived, either in acute setting or public health setting, as well as experience through participation in a disaster response (Ismail, Ghazi & M.S, 2016). The preparedness not only involves nurses knowing the location of the disaster plan, but also knowing their roles in it (Alshehri, 2016).

1.8.5 Nurses' Roles

Nurses serve a critical role in emergency preparedness at the local, state, and national levels through planning, community and consumer education, and direct care provided during shortcomings (Awhonn, 2012).

Nurses play a central role in disaster preparedness and management, as well as in emergency response, in many countries over the world. Care in a disaster environment is different from day-to-day nursing care and nurses have special needs during a disaster (Grochtdreis, et al., 2016).

Nurses in disaster situations must be able to assess a wide range of nursing needs and to establish plans within situational context of disasters, which differs from the health care that they normally provide in the clinics or to the local community. They also must be able to maintain a comprehensive and collaborative cooperation system, understand the special environments, and serve to ensure safety (Noh, et al., 2017).

1.8.6 Nurses' Knowledge

Nursing knowledge is the means by which the whole purpose of caring for patients is achieved because it underpins what we actually do. It is what defines us as nurses as opposed to similar professions such as doctors or physiotherapists, and helps to differentiate us from lay carers or care support workers. Knowledge is basically what classifies us as a profession because having a 'unique body of knowledge' is one of the things that defines a profession in society (Hall, 2005)

The previous training and nurses' experiences affect the preparedness and increase their self-confidence, skills, and awareness in disaster response and lessen the susceptibility to impulsive events (Shammah, 2018).

Nurses should be equipped with the necessary knowledge and abilities to work in a disaster and to meet the needs of the respective serving community (Loke and Fung, 2014). It is important for nurses to have adequate knowledge to respond effectively and quickly during disaster (Gladston and Nayak, 2017).

The International Council of Nurses with regard to the importance of the nurses' presence in disasters, states "Nurses with their technical skills and scientific knowledge can collaborate in disaster preparedness programs and during incidents. They play a strategic role as the members of caring team in collaborating with other groups and organizations." (Tabiee and Nakhaei, 2017).

1.8.7 Nurses' Skill

Nursing skill is the practices and abilities that the nurses should have to work in a disaster situation perfectly and to meet the needs of the respective service and ability to carry out a task with determined results often within a given amount of time with good quality.

Nurses should be equipped with the necessary knowledge and abilities to work in a disaster and to meet the needs of the respective serving community (Loke, Fung, 2014).

Previous experiences and trainings of nurses affect their preparedness, increase their awareness, self-confidence and skills in disaster response and decrease their vulnerability to unpredictable events (Seyedin, et al., 2015).

The International Council of Nurses with regard to the importance of the nurses' presence in disasters, states "Nurses with their technical skills and scientific knowledge can collaborate in disaster preparedness programs and during incidents (Tabiee, Nakhaei, 2017).

1.8.8 Disaster preparedness

The concept of disaster preparedness aims to enhance the life safety during the disaster. It may include spills of hazardous materials, protective actions during the earthquake, and terrorist attacks. The preparedness for disasters includes different actions that are designed to enhance the ability for overcoming the emergency situation, protecting property, managing the disaster damage and disruption, and engaging in post-disaster restoration (Shammah, 2018).

Disaster preparedness, including risk assessment and multidisciplinary management strategies at all system levels, is critical to the delivery of effective responses to the short, medium, and long-term health needs of a disaster-stricken population (Ibrahim, 2014).

The most effective way of responding to the emerging needs at this time is preparedness, which is considered as a long-lasting concern by WHO. This organization defines preparedness as a part of the sustainable development of societies and emphasizes the importance of most needed activities to achieve preparedness (Tabiee, Nakhaei, 2017).

1.8.9 Disaster Management

The organization and management of resources and responsibilities for dealing with all humanitarian aspects of emergencies, in particular preparedness, response and recovery in order to lessen the impact of disasters (IFRC, 2014)

1.8.10 Gaza Governmental Hospital

Governmental hospitals affiliated to the Palestinian Ministry of Health in the Gaza Strip, which provide emergency surgical care to all categories of the population including: Indonesian Hospital, Beit Hanoun Hospital, Al-Shifa Hospital, Al-Aqsa Hospital, Nasser Hospital, European Hospital and Al-Najjar Hospital (Saidam, 2018).

Chapter Two

Literature Review

2.1 Introduction

The worldwide number of natural and man-made disasters has increased significantly in recent years. The consequences of high incidence rate of natural or man-made disasters that taking place around the world are increasing, where it lead to impact on life in terms of loss of lives, displacement of people, damage to property, destruction of buildings and damage to the environment, as well as social, economic, psychological and health problems, which if not handled properly, their effects multiply on society and this poses significant challenges for disaster management. Disaster management encompasses all aspects of planning for and responding to disaster. The good preparedness for disaster refers to the readiness of country organizations to a good response to disastrous situations while reducing the negative consequences for the health and safety of individuals, and protect the integrity and functioning of physical structures and systems (Al Khalaileh, et al., 2011).

The hospital disaster preparedness has therefore taken on an increased importance at local, state and national levels. Hospitals would be among the first institutions to be affected after a disaster, natural or man-made. Because of the heavy demand placed on their services at the time of a disaster, hospitals need to be prepared to handle such an unusual workload. This necessitates a well-documented and tested disaster management plan to be in place in every hospital. To increase their preparedness for mass casualties, hospitals have to expand their focus to include both internal and community-level planning (Diab and Mabrouk, 2015).

As the Gaza Strip always passes with unstable conditions as crisis and disasters which include ongoing wars, it is necessary to pay attention to the knowledge of crisis and disasters in terms of the meaning and stages of disasters as well as the phases of management and dealing with them in order to reduce losses and avoid repeating mistakes that may increase the number of victims of disasters (Saidam, 2018).

The Gaza Strip has been subject to many external and internal political, economic and social pressures that led to poor socioeconomic conditions for its population. The occupation, the internal fight, division and the three Israeli military operations on the Gaza Strip in 2008, 2012 and the blockade policy enforced by the Israeli occupation since June 2007 have all contributed to these conditions (Al Wehaidy, 2013). In addition, war at 2014, which resulted in the deaths of 2,147 people and injured more than 2147, according to a report by the (Al Zaytouna Center for Studies and Consultations, 2015).

Therefore, this research study focused on the readiness and preparedness of nurses and their perception of their role, skills and knowledge in the process of dealing with disasters and dealing with victims in order to minimize losses to the extent possible.

2.2 Conceptual framework

The conceptual framework is the map that guides the design and implementation of the study and provides illustration of the study variables. It was designed by the researcher and based on a review of the available literature and previous studies.

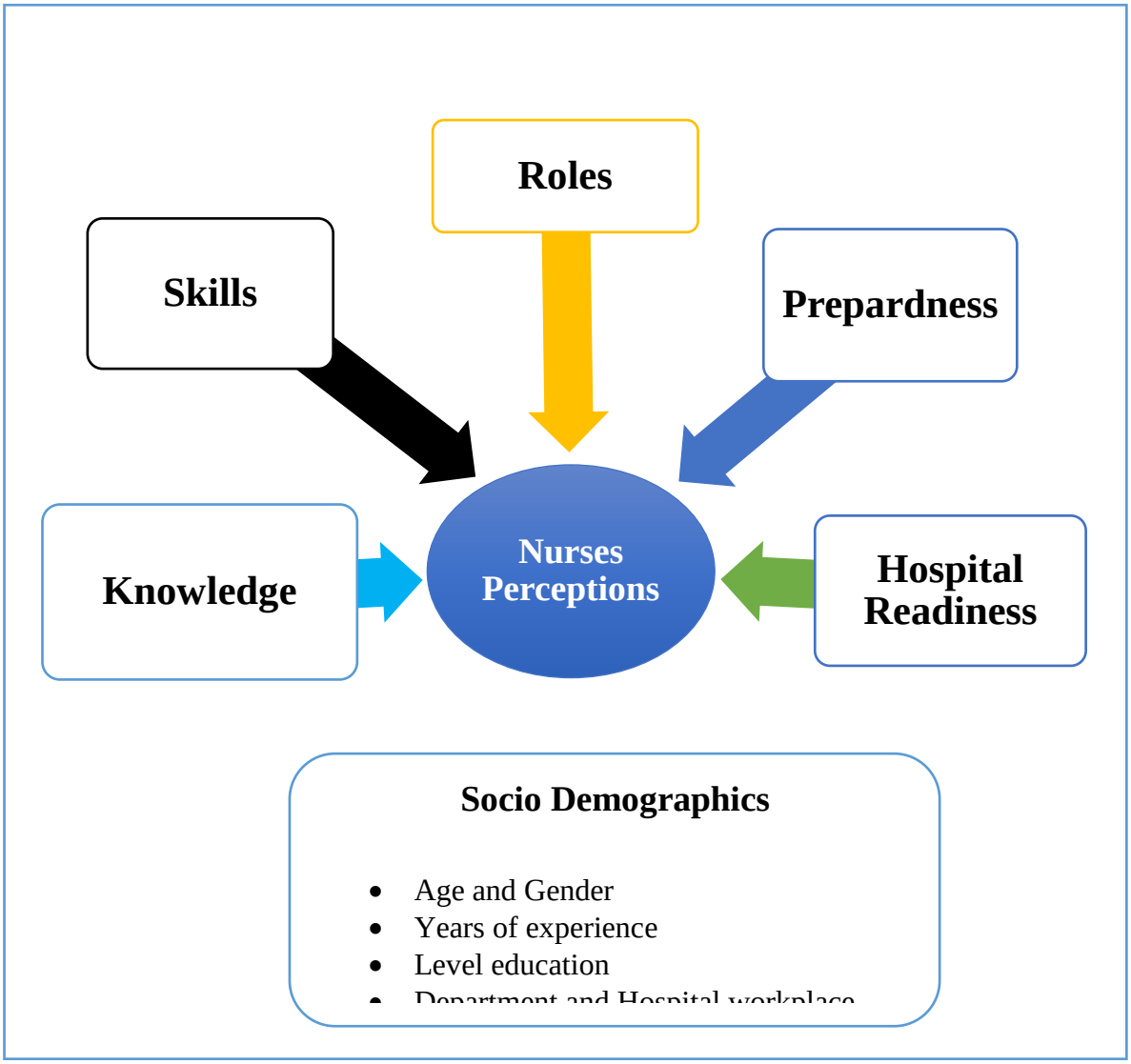

Figure (2.1): Diagram of conceptual framework (Self-developed model).

2.2.1 Research Variables

- **The diagram indicated that two <u>Dependent</u> Variable**

1. **Nurses' Perceptions** is dependent variable and the independent variable in this point were nurses' perceptions of their: (Role, knowledge, skills, preparedness and hospital readiness).

2. **Socio-demographic variables** is dependent variable and the independent variable in this point were nurses' perceptions of their: (Role, knowledge, skills, preparedness and hospital readiness).

2.2.2 Framework Contents

The framework includes five domains: **K**nowledge, **R**ole, **S**kill, **P**reparedness and **H**ospital readiness.

1. Knowledge

Nursing knowledge is the means by which the whole purpose of caring for patients is achieved because it underpins what we actually do. It is what defines us as nurses as opposed to similar professions such as doctors or physiotherapists, and helps to differentiate us from lay carers or care support workers. Knowledge is basically what classifies us as a profession because having a 'unique body of knowledge' is one of the things that defines a profession in society (Hall, 2005)

2. Role

Nurses are the largest group in providing healthcare services and have critical roles in confronting the disasters, providing services as the first responders, conducting triage, coordinating, and also training and giving consultation to those giving services (Tabiee , Nakhaei , 2016).

3. Skill

Nursing skill is the practices and abilities that the nurses should have to work in a disaster situation perfectly and to meet the needs of the respective service and ability to carry out a task with determined results often within a given amount of time with good quality.

4. Preparedness

Preparedness in disasters refers to a process in which nurses involve to properly prepare and effectively respond to emergencies and disasters (Pourvakhshoori, et al. , 2017)

5. Hospital Readiness to Manage Disaster

Hospital readiness has been defined as the ability to effectively maintain hospital operations, sustain a medically safe environment and adequately address the increased and potentially unexpected medical needs of the affected populations (Brebbia, 2018). When we talk about Hospital readiness, we include several points such as:

- Emergency plan within the hospital.
- Equipped hospital environment including supplies.
- Provision of first-aid kits and training of persons to provide first aid.
- Periodic exercises on evacuation and disaster management.
- Enough appropriate wheelchairs and beds.
- There is Traffic system hospital plan.

2.3 Definition of terms related conceptual framework

2.3.1 Types of disaster

According to experts, disasters are of two kinds: natural and manmade (Eshghi & Larson, 2008), the following is a description of each type:

2.3.1.1 Natural disasters

Natural disasters generally affect the communities, people, and healthcare systems (Shammah, 2018).

Natural disasters that frequently occur in Thailand include floods, droughts, tropical cyclones, thunderstorms, storm surges, forest fires, earthquakes and landslides, while man-made disasters as terrorism and protest occur occasionally (Phakdeechanuan, et al., 2015).

They are disasters that occur as a result of natural phenomena without interference or control of humans, such as earthquakes, floods, volcanoes, epidemics and insects. Some researchers classify these disasters based on the speed of their occurrence and the spread of their impact as follows (Al Taher, 2011):

2.3.1.1.1 Sudden catastrophic effects:

People cannot accurately determine when they occur, and they occur because of the forces of nature beyond human control mainly, such as earthquakes, volcanoes and storms.

2.3.1.1.2 Slow-acting disasters:

Occur gradually and increase their impact over days, months or years so that continuing with them in life is difficult and dangerous, and thus become a disaster, such as desertification and drought.

2.3.1.2 Non-natural disasters (man-made)

This includes those disasters directly associated with human practices, whether intentional or unintentional, such as wars, fires and environmental pollution. Natural disasters caused by man are also included in his wrongful actions, such as slips caused by logging, flooding

caused by man building in areas natural drainage of flood waters and rain, has been classified into two types (Okasha, 2004):

- Unplanned (unintentional) disasters: occur as a result of human negligence or lack of awareness of the damage caused by wrong practices, such as: house fires and aircraft crashes.
- Pre-planned (intentional) disasters: that cause destruction and have negative impacts on the urban environment and have specific and pre-planned targets such as: fires, sabotage and war.

2.3.2 Disaster management

The International Federation of Red Cross Societies (IFRC) and the Red Crescent have defined disaster management as the organization and management of resources and responsibilities to deal with all humanitarian aspects of emergencies, particularly preparedness, response and recovery to minimize disaster impact (Moqat, 2013) (IFRC,2000).

The disaster management cycle describes the current processes used by governments, institutions and civil society in the disaster management plan, and interaction with them before, during and after the disaster. Proper actions at the session will lead to effective preparedness, improved warnings, reduced exposure or disaster prevention during the next disaster management cycle (Warfield, 2008).

Appropriate disaster management should be based on a clear plan, preparedness and collaborative and effective efforts on the part of the community and the various responding organizations (Alshehri, 2016) (Powers & Daily, 2010).

2.3.2.1 Disaster Management Continuum

Regardless of the type of event, a basic rule of disaster management is that the response always begins at the local level and is scaled up as necessary to meet needs that exceed local capacity. Therefore, preparedness begins at the community level and emergency managers must plan for the best possible local response, in addition to understanding how to bring in more aid as needed. Of course, it would be impossible to predict and plan for every possible contingency, so plans often use an "all-hazards" approach that could be applied to any kind of disaster rather than focusing on narrowly defined events. Still, lessons can and should be learned from each response and used to improve plans for the next event. This cycle is referred to as the disaster management continuum, which can be broken down into five main phases. With our understanding of human behavior and some familiarity with research on psychological reactions to disasters, health professionals can contribute in important ways to each phase (Halpern and Vermeulen, 2017).

2.3.2.1.1 Planning and Preparedness

Potential hazards are identified and local response capacity and infrastructure are assessed. Plans are created to determine specific roles and responsibilities for those involved in the immediate and longer term responses. Health professionals can contribute to planning by incorporating past research on disasters in order to identify psychologically vulnerable populations within the community and to provide insight into how people can be expected to react to warnings, as well as during and after events (Halpern and Vermeulen,2017)

2.3.2.1.2 Mitigation

This phase focuses on prevention or reduction of the threats identified in the first phase. This could involve the implementation of stronger safety codes (such as strengthening building standards in an area with significant seismic risk), the relocation of at-risk populations (such as those living in flood plains), or the improvement of individual

preparedness (such as developing a campaign to encourage residents to create family emergency plans). Health professionals can help to identify potential sources of resistance to mitigation efforts, and to structure messages to improve compliance (Halpern and Vermeulen, 2017)

2.3.2.1.3 Response

During the response phase, the emergency plans are implemented in reaction to an actual or expected event. The focus is on containing physical damage (such as putting out fires or stabilizing structures), saving lives and treating the injured, ensuring that survivors' basic needs for shelter and sustenance are met, and restoring essential services like power and communications. If an event was expected, health professionals may be present during the response phase, for example, to provide Psychological First Aid and early assessment as displaced residents arrive at shelters. We also may provide mental health support to emergency responders and managers to help maintain workforce resilience in a time of great stress. (Halpern and Vermeulen, 2017)

2.3.2.1.4 Recovery

Efforts in the recovery phase focus on returning the community to its pre-event condition if the event was fairly small, or on creating that new normal since changes from a largescale event are often permanent. While this work generally occurs at the local level, many outside organizations may be involved, providing financial and material resources as well as services such as feeding and sheltering. Health professionals play an essential role during this phase. (Halpern and Vermeulen, 2017)

2.3.2.1.5 Evaluation

Finally, a careful evaluation of the entire event should be conducted. Were the plans thorough and appropriate or did gaps become apparent? Can additional targets for

mitigation be identified in hopes of preventing or reducing harm from a repeat event? Were the response and recovery efforts carried out as planned, or were there lapses in communication or other problems of implementation? Every aspect should be considered thoughtfully—and the conclusions should then be incorporated into updated plans, completing the cycle. It would be regrettable if personal defensiveness were allowed to get in the way of maximizing preparedness, but many people are not comfortable having their actions closely examined. Health professionals can assist in this evaluation by reminding those involved that this is not a critical assessment of individual or agency performance (unless, of course, that's warranted by some actual failure) but an opportunity to improve and protect the community better in the future. (Halpern and Vermeulen, 2017)

As this cycle demonstrates, the actual emergency response falls in the middle of the disaster management continuum. Skimping on the pre-event phases of planning and preparedness and mitigation is likely to mean that a community will be ill-prepared to handle a disaster; failing to evaluate the strengths and weaknesses of the response and recovery and to incorporate that feedback into plans means subsequent responses will be less effective than they might have been. (Halpern, Vermeulen, 2017).

2.3.3 Disaster preparedness

Preparedness assessment for disaster management is considered as a critical competency, which is required by the experienced nurses as well as fresh graduates (Slepski, 2005).

The concept of disaster preparedness aims to enhance the life safety during the disaster. It may include spills of hazardous materials, protective actions during the earthquake, and terrorist attacks. The preparedness for disasters includes different actions that are designed to enhance the ability for overcoming the emergency situation, protecting property,

managing the disaster damage and disruption, and engaging in post-disaster restoration (Shammah, 2018).

Disaster preparedness is considered one of the key steps in emergency management. Emergency medical services (EMS) students had very scanty knowledge, attitude and practices about disaster preparedness and mitigation (Alrazeeni, 2015).

The most effective way of responding to the emerging needs at this time is preparedness, which is considered as a long-lasting concern by WHO. This organization defines preparedness as a part of the sustainable development of societies and emphasizes the importance of most needed activities to achieve preparedness (Tabiee and Nakhaei, 2017).

Preparedness for disaster management is termed as the knowledge, abilities, and skills, which are required for preparing and responding towards worst situations; such as nuclear or explosive incidents, man-made incidents, and natural disasters (Shammah, 2018).

2.3.4 Nurses role

Florence Nightingale demonstrated her role as a disaster management nurse by playing a crucial role during the Crimean war and showed the world the important responsibilities that nurses play on the front lines as a health care worker.

Nurses and other healthcare professionals play an imperative role in the healthcare system, and ought to be prepared for the suitable response in the case of disaster (Shammah, 2018).

Nurses in disaster situations must be able to assess a wide range of nursing needs and to establish plans within situational context of disasters, which differs from the health care that they normally provide in the clinics or to the local community. They also must be able to maintain a comprehensive and collaborative cooperation system, understand the special environments, and serve to ensure safety (Noh, et al., 2017).

During major disaster events, the demand for nursing care services is greater than the demands for any other health care professional. Nurses anticipated an expanded role during disaster events to include; caring for the sick and injured infection control, contingency planning to prevent further damage, triage, mass immunizations, mass evacuations, and treatment for mass casualties (Ebrahim, 2015).

Nurses are the largest group in providing healthcare services and have critical roles in confronting the disasters, providing services as the first responders, conducting triage, coordinating, and also training and giving consultation to those giving services (Tabiee and Nakhaei, 2017).

2.3.5 Nurse preparedness

The unpredictable disasters and the multifaceted damages warrant the healthcare providers to be prepared to handle the victims with various capabilities and care, to lessen the impact of disasters. Moreover, they need to play a crucial role in emergency preparedness and disaster response plan. This would confirm their personnel readiness for disaster from the beginning. Such a readiness may be achieved throughout the periodic training and mock codes, in addition to being aware of any changes or updates in the standing disaster management guidelines (Nofal, et al, 2018).

2.3.6 Hospital

A hospital is a health care institution that treat urgent health problems of patients by specialized medical and nursing staff and medical equipment.

Hospital is at high risk to face disaster which can cause serious problems to the patients such as severe injury and death. Disasters pose unique challenge for every medical care facility in terms of infrastructure, capacity and preparedness (Gladston and Nayak, 2017).

2.3.7 Hospital environment

Countries were encouraged to respond to the World Health Organization (WHO) and the Pan American Health Organization (PAHO) request to take up major steps to ensure safe health care facilities during the emergency. Such response must include evaluation of hospital safety; training and protection of health personnel for emergencies; planning a strategy to handle an emergency; designing and building durable hospitals; adopting national programs and policies; and protecting medical and ordinary equipment, materials, and supplies. During and after the catastrophic disasters, hospitals are considered as the safest environment for people as they provide vital care to the casualties. The unpredictable disasters and the multifaceted damages warrant the healthcare providers to be prepared and handle the victims with various capabilities and care, to lessen the impact of disasters. Moreover, they need to play a crucial role in emergency preparedness and disaster response plan. This would confirm their personnel readiness for disaster from the beginning. Such a readiness may be achieved throughout the periodic training and mock codes, in addition to being aware of any changes or updates in the standing disaster management guidelines (Nofal, et al, 2018).

2.4 Essential elements for hospital disaster management

The essential elements for any disaster management system include the following (Veenema, 2007):

- An appropriate infrastructure to support the disaster response, which includes maintaining services for preexisting patients as well as the new arrivals.
- An appropriately trained staff who are competent to perform their disaster response functional roles and able and willing to report to work during any sort of disaster.
- A clearly defined, executable, practiced emergency response plan.
- A strong foundation of preexisting relationships with partnering organizations and agencies that can be called on to provide mutual aid and support when needed.

2.5 Gaza Strip and Disasters

The Gaza Strip is one of the most densely populated places on earth, with a total area of 365 km2 (45km long, 2-5km wide), a population of over 1.99 million and a population growth of 3% per year, which is the 13th highest growth rate in the world. Population density of Palestine is generally high at 794 persons/km2, particularly in Gaza Strip it is 5,204 persons/km2 compared to a lower population density in the West Bank of 510 persons/km2 in 2017. (PCBS, 2017). The occupation, the internal fight and division the backdrop of Hamas takeover of the Gaza Strip in the summer of 2007, the three Israeli military operations on the Gaza Strip in 2008 and 2012 and the blockade policy enforced by the Israeli occupation since June 2007 have all contributed to these conditions (Al Wehaidy, 2013). In addition, war at 2014, which resulted in the deaths of 2,147 people and injured more than 2147, according to a report by the (Al Zaytouna Center for Studies and Consultations, 2015).

In addition, there are the events of the Great Marches of Return in the Gaza Strip have continued, in which the nursing staff had played an effective role and they had a significant impact in the treatment of injured and wounded in the ground event.

The population live under the siege imposed and the lack of resources and tools in Gaza from 2006 till present , in addition the large numbers of victims, casualties result from wars , this is consider a great challenge for health field workers in hospitals and surgical departments, so that attention must paid to the nurses in surgical departments within hospitals. Thus, the results of this intervention can be learned in the future and the complications are known (Saidam, 2018).

A governmental hospitals in the Gaza Strip is not properly prepared for the reality of the Gaza Strip.The main reason for the lack of medical supplies and equipment in the

departments is the siege imposed on the Gaza Strip and its negative impact on the health sector and hospitals in particular. And these do not fit the required format with a region prone to war disasters repeatedly, and need to provide all the requirements and medical tools that will raise the level of success in disaster management and deal with the large numbers of victims during the occurrence.

2.6 Challenges facing Gaza Strip hospitals during disaster preparedness

Health services in the already exhausted and fragile Gaza are nearing collapse if immediate steps are not taken to support and protect them. The Director General of International Cooperation reviewed the health impact of the siege on the health sector, the most important of which is the shortage of medicines and medical supplies for hospitals and primary care centers, and the crisis of cleaning and nutrition companies that have not received their financial allocations in the form required since the formation of the government of consensus, in addition to the crisis of salaries of employees and current expenses, as well as the shortage of spare parts for medical devices and maintenance materials, in addition to the difficulty of travel of patients as a result of the closure of the Rafah border crossing, and racist practices by the Israeli occupation against Gazan patients through the Beit Hanoun crossing according to the Palestinian Health Information Center (PHIC, 2017).

2.7 Literature Review

Here, the researcher wants to review the previous studies that are related to the research domains and the contents included the research domains.

Previous local, regional and international studies related to our study, which addressed topics related to nurses perceptions of their preparedness for disaster management

1. Local studies

Saidam (2018) conducted a study to identified the level of preparedness of emergency nurses and their perception of their role in disaster management at the governmental hospitals in Gaza Strip by identifying their level of knowledge about disasters, their level of disaster management skills, and the volume of training they received during their work. He used the analytical descriptive approach to reach the results by designing a study questionnaire as well as a checklist to achieve the study objectives. The study population consisted of (180) emergency nurses. He found that the field of "nurses' skills in dealing with disasters" was 83.9%, followed by field of "the role of nurses during disasters" with 81.5%, followed by field of " preparedness of nurses for disasters" with 78.2%, finally, the field of " nurses knowledge of disasters" with 78.03%. According to checklists, the study found that availability of health equipment and tools in emergency departments was 65.3%. "Renewable items" come in first place with 69.5%, followed by "supplementary equipment for use by skilled health professionals" with 66.4%, finally "capital outlays" by 60%.The most important study recommendations were the need to raise the level of knowledge about disasters by placing disaster management in the educational programs in nursing colleges. In addition to increasing the attention to training and simulations of potential disasters, and also to involve emergency nurses in the preparation of disaster

plans and to keep them updated, finally, Ministry of Health should work to improve the availability of medical equipment and tools within emergency departments at the governmental hospitals in Gaza Strip.

2. Regional studies

Nofal et al. (2018) investigated a study to assess Knowledge, attitudes, and practices of emergency department staff towards disaster and emergency preparedness at tertiary health care hospital in central Saudi Arabia. A cross-sectional study was conducted at Tertiary health care hospital in central Riyadh, Kingdom of Saudi Arabia, and a self-administered survey was utilized to collect data from emergency department (ED) physicians and nurses. He concluded that the level of knowledge was satisfactory among healthcare providers with neutral level of attitude, practice, and familiarity regarding disaster preparedness. Follow-up research is necessary for maximizing ED preparedness.

A study done by Alzahrani and Kyratsis (2017) to assess hospital emergency nurses' self-reported knowledge, role awareness and skills in disaster response with respect to the Hajj mass gathering in Mecca. Although emergency nurses' clinical role awareness in disaster response was reported to be high, nurses reported limited knowledge and awareness of the wider emergency and disaster preparedness plans, including key elements of their hospital strategies for managing a mass gathering disaster. Over half of the emergency nurses in Mecca's public hospitals had not thoroughly read the plan, and almost 1 in 10 were not even aware of its existence. Emergency nurses reported seeing their main role as providing timely general clinical assessment and care; however, fewer emergency nurses saw their role as providing surveillance, prevention, leadership or psychological care in a mass gathering disaster, despite all these broader roles being described in the hospitals' emergency disaster response plans. Emergency nurses' responses to topics where there are often misconceptions on appropriate disaster management indicated a significant

knowledge deficit with only 1 in 3 nurses at best or 1 in 6 at worst giving correct answers. Respondents identified three key training initiatives as opportunities to further develop their professional skills in this area: (1) hospital education sessions, (2) the Emergency Management Saudi Course, (3) bespoke short courses in disaster management. Finally, his Recommendations are suggested to help enhance clinical and educational efforts in disaster preparedness.

In Saudi Arabia a descriptive study done by Alshehri (2017) to assess emergency nurses' preparedness for disaster. The study revealed that most nurses understood their roles after reading the disaster plan. Although half of the respondents had completed training in the previous 12 months, only 60% answered the item related to confidence after training. There was a significant difference between the confidence of those who had participated in a disaster or mass casualties training program and that of those who had not. Only 26% answered the item related to confidence after being involved in a real disaster, and no significant difference was found between the confidence of those who had attended a real disaster or mass casualties' event and that of those who had not. The study found that respondents had minimal and limited disaster experience, as reflected in their low levels of confidence after being involved in real disaster events. This highlights the need for continued efforts to expand disaster training and ensure that nurses are appropriately prepared.

Alrazeeni (2015) investigated study to assess Saudi Emergency Medical Services (EMS) Students' Perception of and Attitudes toward their Preparedness for Disaster Management. A descriptive cross-sectional survey was used to examine the perception of Saudi EMS student' about their preparedness for disaster management, convenience sampling technique was adopted recruit study sample. He concluded EMS students expressed a need for integration of disaster knowledge in undergraduate curriculum. Furthermore, the

participants of this study reported that they were unprepared to respond to disastrous events, which make them unconfident in their abilities to response adequately in disastrous events.

Al Thobaity et al. (2015) conducted a descriptive study to assess perceptions of knowledge of disaster management among military and civilian nurses in Saudi Arabia. He found that Nurses in Saudi Arabia have moderate knowledge concerning disaster preparedness. However, nurses in military hospitals possess more knowledge than those who work in government hospitals. The majority of nurses gained their knowledge and skills from disaster drills. Finally, they recommended that the nurses need more education in all areas of disaster management, most importantly in their roles during response to disasters. Nurses perceive themselves as not well prepared but they are willing to improve their skills in disaster preparedness if educational opportunities are provided.

A study done by Al-Ali and Ibaid (2015) to assess health-care providers' perception of knowledge, skills and preparedness for disaster management in primary health-care centers in Jordan. A multistage random sample was used to recruit nurses and physicians from 57 health centers. A total of 207 participants completed the Arabic version of the Disaster Preparedness Evaluation Tool. Participants perceived themselves as having moderate preparation for disaster management [mean score 74.9], moderate knowledge [mean score 49.9] and moderate to weak skills in disaster management [mean score 35.3]. Significant differences were revealed in participants' perceptions of their disaster preparedness, knowledge and skills according to their sex, specialty and exposure to a real disaster situation. Further education and training courses are needed to enhance providers' preparedness for disaster management in Jordan.

Ebrahim (2015) conducted a descriptive study to assess the preparedness of the primary health care nurse's in terms of their knowledge, skills and the efficiency of their response during disasters in the kingdom of Bahrain. This descriptive correlation study used a self-determination questionnaire to assess the disaster preparedness among nurses. The study further elaborates on the importance of properly inducting and preparing nurses and the overall primary health care centers and how to increases their preparedness for disasters. The research finding indicated that most of the nurses responded (55.3%) reported low level of familiarity with disaster preparedness, and (38.3%) are familiar, while the remaining (6.3%) are strongly familiar. Fifty per cent of the participant are not prepared or did not attend any formal disaster education programs, and (46.3%) were not involved in any disaster mitigation drill during their work experience. A summary of recommendations also raised to the higher authorities in the ministry of health in Bahrain, which include the need for collaboration with world health organization (WHO) for a disaster preparedness program to prepare the primary health care nurses to manage real disaster effectively.

A study conducted by Ibrahim (2014) to investigate the nurses knowledge, attitudes, practices and familiarity regarding disaster and emergency preparedness – Saudi Arabia. The study results showed that lacking of knowledge and practices with acceptable level of attitude regarding disaster preparedness and neutral familiarity with emergency preparedness concluded. Thus, an integration of clearly titled theory and practice teaching courses about disaster and emergency preparedness into nursing curricula are crucially needed and provided in respect to their learning/training preferences. Further, follow up research are necessary for maximizing nursing education and nursing quality in these critical areas applied to healthcare and community setting.

Additionally, Abdalla (2012) conducted a descriptive study to assess the medical and paramedical awareness about disasters management at Assiut university hospital. The

design was descriptive and carried out at Assiut University Hospital. The study found that the highest men scores among study subjects for the precautions to prevent occurrence of fire in the hospital and lack of medical gases reserves (29.52 ± 17.72; 33.18 ± 19.96; 30.63 ± 11.63; and 24.06 ± 15.11) respectively. While, radiation leakage reserves were highest men scores among physicians and technicians (28.00 ± 11.10 and 24.09 ± 15.61) respectively. The Conclusions based on the study results there are highly statistically significant differences in all items of disaster management plan among study subjects in the studied hospital ($p \leq 0.05$ & $p \leq 0.001$).

In Jordan a descriptive study was conducted by Al Khalaileh et al. (2012) to assess nurses' perceptions of their preparedness for disaster management. A Cross-sectional survey where the Disaster Preparedness evaluation tool was distributed to Jordanian RNs who work in three randomly selected Ministry of Health hospitals and two university hospitals. The study found that four hundred and seventy-four participants completed the survey. Sixty-five per cent of respondents described their current disaster preparedness as weak: 18% medium: 12% good; and 5% felt their preparation was very good. Thirty-one per cent received disaster education in undergraduate programs; 8% in graduate nursing programs; 31% in facility drills, and 22% in continuing education courses. Eleven per cent had participated in a real disaster. Four hundred and thirty RNs wanted to learn more about RNs role in disasters, including knowledge and skills. At end, they concluded that Knowledge, skills, and disaster preparedness need continual reinforcement to improve self-efficacy for disaster management.

3. International studies

Taşkıran and Baykal (2019) conducted a study to assess nurses' perceptions of their own disaster preparedness and core competencies. A convenient sample of 406 nurses selected non randomly, who were working at an 1816-bed capacity university hospital was included

in this descriptive correlational study. They found that ‘Technical Skills’ scored highest across the subscales of the scale, and ‘Critical Thinking Skills’ scored lowest. When age group, professional experience, working position and prior disaster experience, compared the total and subscale scores there were statistically significant differences. They concluded that the Turkish nurses had different levels of disaster core competencies and considered themselves more competent in some areas of disaster preparedness than in others. There are clearly gaps to be filled in disaster preparedness and core competencies in Turkish nurses.

Martono M., et al. (2019) conducted a descriptive study to assess the Indonesian nurses’ perception of their knowledge, skills, and preparedness regarding disaster management. The research samples are Indonesian nurses working in medical services and educational institutions. The findings were showing that nurses surveyed in this study are less prepared for disaster management, and do not understand their roles either during the phase of disaster preparedness or in coping with a post-disaster situation. Finally they concluded nurses’ preparedness and understanding of their roles in coping with disasters are still low in Indonesia. Therefore, their capacity in preparedness, responses, recovery, and evaluation of disasters needs improvement through continuing education. The efforts needed are significant due to potential disasters in Indonesia.

Study done by Ozpulat and Kabasakal (2018) to investigate a Knowledge Levels of Nursing Students on Disaster Nursing and Their State of Disaster Preparedness. This study included fourth-year nursing students in two universities located in the Ankara and Konya provinces of Turkey. This was a descriptive study and aimed to determine nursing students’ knowledge levels on disaster nursing and their state of disaster preparedness. For data analysis, this study used frequency values, a chi-square test to assess students’ views

on disaster nursing courses by their universities, and an independent sample t-test. This study found significant differences between students in both universities in terms of their having received education about disasters, disaster nursing, and knowledge scores on disaster nursing.

Study done by Natareno (2018) to assess disaster knowledge and awareness of nurses related to triage in mass casualty incidents , This quality improvement project used David Kolb's Experiential Learning and the Kellogg Foundation's Logic as an organizational framework. With a global goal, the International Council of Nurses (ICN) proposed a framework for disaster nursing competencies for education of "general" nurses, now considered the "gold standard" of disaster nursing competencies. The program focused on the ICN core competencies of disaster nursing. The educational intervention consisted of a variety of educational opportunities, including a self-study packet, an interactive poster, and group discussions. A Retrospective, Pre-evaluation and Post-evaluation (RPPE) survey demonstrated that the program was effective in improving nurses' overall disaster awareness. Recommendations for advanced practice nurses revolve around designing and implementing disaster preparedness education that is geared toward nurses.

Labrague et al. (2018) conducted a descriptive study to explored a peer-reviewed publications that measure nurses' preparedness for disaster response. A systematic review of scientific articles conducted from 2006 to 2016 on nurses' preparedness for disasters. They found that factors that increase preparedness for disaster response include previous disaster response experience and disaster-related training. However, it is widely reported that nurses are insufficiently prepared and do not feel confident responding effectively to disasters. At the end, the findings of this review contribute to a growing body of knowledge regarding disaster preparedness in nurses and have implications for academia, hospital administration and nursing educators.

A study done by Taşkıran and Baykal (2017) to explored nurses' perception and core Competencies for Disaster Preparedness: A study from the Western region of Turkey. At the end of the study, they concluded that nurses generally perceive themselves as sufficient at a ‘medium level’ in terms of meeting the core competencies that are required for disaster preparedness. Nurses are not adequately prepared for disasters, but they are aware of the need for such preparation and disaster education, and they recommended that disaster management training should be given to all nurses in their basic education.

Gladston and Nayak (2017) conducted a descriptive study to assess the perception and knowledge among nurses on disaster preparedness. A convenience sampling technique were adopted. The tool was prepared by the investigator under the guidance of experts, which consisted of three parts, the demographic variables of the participants, scale on perception of nurses on disaster preparedness and a knowledge questionnaire on disaster preparedness. At end, they concluded that lack of in-service education and inadequate training on disaster preparedness makes the nurses to function ineffectively during the disaster. As nurses are the major work force in the health care settings they need to update their knowledge and skills in disaster preparedness to function efficiently in order to save lives at the time of any disaster within the hospital setting. As knowledge influences good practice and good practice saves lives, nursing curriculum should include disaster preparedness to equip nursing students to manage disaster in the hospital setting.

A descriptive correlational study was conducted to investigate the disaster-related experience, perception, and core competency of nurses in South Korea. Data were collected through a self-administered questionnaire given to 163 nurses working in tertiary hospitals in Seoul, Korea. International Council of Nurses (ICN) and Emergency Preparedness Information Questionnaire (EPIQ) developed the questionnaire based on the frame of Disaster Nursing Competencies. The results support that the level of awareness of

a disaster is a factor affecting the importance of education in disaster nursing. Thus, educational programs focusing on practical topics in disaster nursing should be developed for continuous training to increase the core competency and the understanding of disaster nursing (Noh, et al., 2017).

Moreover, Waller (2017) study identified to assess Emergency Preparedness Competencies among Nurses in Northwest Arkansas. Existing literature suggests that nurses lack basic knowledge and skills related to emergency and disaster preparedness. American nurses have reported low levels of understanding related to numerous facets of emergency and disaster knowledge and planning. The purpose of this research was to determine the self-reported level of emergency preparedness competencies of nurses in the Northwest Arkansas area and whether those competencies varied by level of nursing education. The Emergency Preparedness Information Questionnaire (EPIQ) was utilized to measure knowledge. The results suggest that nurses across the board are unprepared in the event of an emergency or disaster situation. Nurses are vastly underprepared for emergency and disaster situations and lack the basic knowledge and training to respond to such events. In the event of a disaster, the impact of nurse responders would be severely lacking and could possibly cause more harm to affected communities rather than help. These results, as well as previous research, prove that there is a great need for improvement of nursing education for future and existing nurses related to emergency and disaster preparedness.

In Irana descriptive study was conducted by Tabiee and Nakhaei (2017) investigate nurses' preparedness in response to disasters in South Khorasan Province. Nurses who were working in provincial hospitals, were chosen by systematic random sampling. The results showed that significant correlation between nurses' competency score and their gender and work experience. Finally, regarding the nurses' preparedness score, it was

recommended that they been provided with training courses on disaster preparedness through workshops and or training exercises.

Additionally, Grochtdreis et al. (2016) study investigated to assess the literature review that provided an overview of nurses‟ roles, knowledge and experience in national disaster preparedness and emergency response. They concluded that there is consensus in the literature that nurses are key players in emergency response. However, no clear mandate for nurses exists concerning their tasks during a disaster. For a nurse, to be able to respond to a disaster, personal and professional preparedness, in terms of education and training, are central. The Framework of Disaster Nursing Competencies of the WHO and ICN, broken down into national core competencies, will serve as a sufficient complement to the knowledge and skills of nurses already acquired through basic nursing curricula. During and after a disaster, attention should be applied to the work environment, feelings and stressors of nurses, not only to raise the willingness to respond to a disaster. Where non-existent, national directives and concepts for disaster nursing should be developed and nurses should be aware of their duties. Nursing educators should prepare nurses for disasters, by adjusting the curricula and by meeting the increased need for education and training in disaster nursing for all groups of nurses. The appropriateness of theoretical and practical preparation of disaster nursing competencies in undergraduate nursing courses and continuing education programs should be evaluated.

In Japan a descriptive study was conducted by Öztekin (2016) to assess nurses' perception of their preparedness for disasters. A descriptive cross-sectional survey using the Disaster Preparedness Evaluation Tool was distributed to nurses in six hospitals. The result showed that nurses felt they were not able to respond in a variety of disaster situations, were aware of their workplace emergency disaster plan, but did not think they could execute them, and

were not aware of the level of preparedness of the healthcare systems in their communities. Finally, he concluded that the amount of information nurses need to know on the knowledge, skills, and preparation of disasters are in great need. Such skills are understood, but lacking for various reasons. In-house programs for nurses to learn more about disaster nursing were needed. Furthermore, a curriculum for disaster preparedness for undergraduate and graduate nursing programs would also help these future nurses gain more information earlier on to better prepare them for possible disaster situations in their future careers.

In China a descriptive study was conducted by Xu and Zeng (2016) to assess the necessity for disaster-related nursing competency training of emergency nurses The results showed that the disaster preparedness of emergency nurses in China was at a medium level and must be improved. The impact factors include the educational degree, gender, disaster relief experience, training, and mechanisms for domestic disaster relief. He recommended that a direct response to disaster, emergency nurses should improve the comprehensive ability of disaster nursing by systematic disaster nursing education and professional training.

Moreover, Peoples, et al. (2016) conducted a descriptive study to explored perceptions of disaster nursing and disaster preparedness among Australian nursing undergraduates. They found that four main themes were identified; ‘ideology of disaster’, ‘what is disaster nursing’, ‘what is disaster preparedness’ and ‘do nursing undergraduates have a role to play in disaster response?’. Finally, three recommendations had made, the first is to increase nursing undergraduates’ knowledge of disaster nursing and disaster preparedness as part of their Bachelor of Nursing (BN) degree. The second is the establishment of agreements between schools of nursing and community organizations to facilitate nursing undergraduates’ engagement in the disaster response space. The third suggests ways to link

nursing undergraduates with volunteer opportunities in order to increase their understanding of disaster preparedness and planning. This study found that the nursing undergraduates were not prepared to respond in a disaster setting, which may compromise their ability to respond should the need arise.

A study done by Ismail et al., (2016), to determine the knowledge of emergency nurses (EN) and community health nurses (CHN) with respect to disaster management in Malaysia. This comparative cross-sectional study was conducted between October and November 2011. The 17-items of the self-developed questionnaire in assessing knowledge towards disaster management were distributed to randomly selected nurses from 10 emergency and trauma departments (132 respondents) and 8 health clinics (264 respondents) in one of the state in Malaysia , with approximately 59.1% having inadequate knowledge of disaster management. He concluded that emergency and community health nurses have inadequate knowledge with regard to disaster management, and it has been demonstrated statistically that adequacy of knowledge is driven by attending disaster-related education/training, which predicts knowledge level. Therefore, it is paramount for organizations to conduct disaster related education/training to improve nurses' knowledge.

Usher, et al., (2015) conducted a study to assess an Asia–Pacific nurses' perceptions about their level of disaster knowledge, skills, and preparedness. A cross-sectional survey was conducted with 757 hospital and community nurses in seven Asia–Pacific countries. Participants were found to have overall low-to-moderate levels of disaster knowledge, skills and preparedness, wherein important gaps were identified. A majority of the variance in disaster preparedness scores was located at the level of the individual respondent, not linked to countries or institutions. Multilevel random effects modelling identified disaster experience and education as significant factors of positive perceptions of disaster

knowledge, skills, and management. The first step toward disaster preparedness is to ensure frontline health workers are able to respond effectively to disaster events.

In Saudi Arabia study conducted by Shammah (2015) to explored the knowledge of hospital staff of Dhahran Al Janoub General Hospital regarding the disaster management during Hazm Storm Support. A quantitative research design has been incorporated to assess the disaster management of hospital staff. An observational study was conducted to examine the aim of the study. A quantitative research design has been incorporated to assess the disaster management of hospital staff. An observational study was conducted to examine the aim of the study. The study results clearly depicted that the hospital staff with fewer years of experience had lesser knowledge about the disaster assessment as compared to the experienced employees. There was no statistically significant relationship identified between different job categories in the hospital and the level of knowledge about presence or absence of the emergency response plan. However, there was a statistically significant association found between different job professions and level of awareness regarding presence or absence of hospital command centers. The study concluded that the knowledge of emergency preparedness among the hospital staff was moderate and the hospital staff should participate and seek opportunities to prepare assessment for disaster management.

A study done by Labrague, et al. (2015) to assess the perceived level of disaster preparedness in Philippine nurses. A descriptive, cross-sectional research design was used in this study, and two hundred nurses were invited to participate in the study, three fourths of the respondents indicated that they were not fully prepared to respond to disasters. At end, they concluded that Nurses in the study revealed that they were not sufficiently prepared for disasters nor were they aware of disaster management protocols in the workplace.

A cross-sectional study conducted by Seyedin, et al. (2015) to assess Emergency Nurses' Requirements for Disaster Preparedness among 110 emergency nurses working in teaching hospitals affiliated to Iran University of Medical Sciences, Tehran, Iran. In addition, at the end of the study, they concluded that Lack knowledge of nurses regarding response to disaster situations indicates inefficiencies in the current system. Therefore, it recommended organizing more workshops, annual training courses, and maneuvers based on staff needs and formulate continuous education courses for nurses.

In Hong Kong , a descriptive study conducted by Loke and Fung (2014) to explored nurses' perceptions of competencies required for disaster nursing. Focus group interviews and written inquiry adopted to solicit nurses' perceived required competencies for disaster care. He concluded that Nurses' perceived disaster nursing competencies reported by nurses were grossly inadequate, demonstrating the needs to develop a comprehensive curriculum for public health. The establishment of a set of tailor-made disaster nursing core competencies for the community they served is the first step in preparing nurses to deal with disastrous situations for the health of the public.

Additionally, Baack and Alfred (2013) conducted study to identified Nurses' Preparedness and Perceived Competence in Managing Disasters. This article is a descriptive analysis of rural nurses' perceived readiness to manage disaster situations. The 58-item Disaster Readiness Questionnaire was used to survey hospital-based nurses from rural communities in Texas during the summer of 2011. The data were collected by emailing a link through the various hospital intranet sites, resulting in a sample size of 620 nurses. Findings revealed that most nurses are not confident in their abilities to respond to major disaster events. The nurses who were confident were more likely to have had actual prior experience in disasters or shelters. Self-regulation of behavior (motivation) was a significant predictor of perceived nurse competence to manage disasters only about the

nurse's willingness to assume the risk of involvement in a disaster situation. Healthcare climate (job satisfaction) was not a determinant of disaster preparedness. They concluded that there should actively seek opportunities to participate the nurses in actual disaster events, mock drills, and further educational opportunities specific to disaster preparedness. Administrators must support and encourage disaster preparedness education of nurses to promote hospital readiness to provide community care delivery in the event of a disaster situation.

A study done by Baack (2011) to provide an accurate description and in-depth analysis of the factors that affect disaster preparedness of rural Texas nurses as a means of supplying a context for future disaster planning. Where this study lends support to the idea that actual participation in disaster events may improve nurses' perceived competence in disaster preparedness response, it will also focus on the challenges and barriers to nurse preparedness as well as strategies to improve the disaster response in the United States and around the globe. He concluded it is that nurse's apparent feel that hands-on education would make them feel better prepared, as expressed in the responses to the optional question.

Moreover, O'Sullivan, et al. (2008) conducted a study to assess perceptions of preparedness for disasters and access to support mechanisms, particularly for nurses in emergency and critical care units. Nurses from emergency departments and intensive care units across Canada were recruited via flyer mail outs and e-mail notices to complete a 30-minute online survey, and the results indicated that nurses feel unprepared to respond to largescale disasters/attacks. Finally, he concluded that the Canadian nurses have indicated that considerably more training and information needed to enhance preparedness for frontline healthcare workers as important members of the response community.

Chapter Three

Materials and Methods

This chapter presents study methodology which include the study design, study population, sample of the study, setting of the study, inclusion criteria, study instrument and data collection, validity and reliability, pilot study, ethical consideration and data entry and statistical analyses.

3.1 Study design

A descriptive analytical cross-sectional study design was used to assess the level of nurses' perception of their preparedness for disaster management**.** This method is appropriate for description of the status of phenomenon and its relationship and comparison between variables. The advantages of this type of study design are that it is straightforward, relatively inexpensive, and could be conducted quickly. Thus, this type of design facilitated the completion of this study (Omair, 2015).

3.2 Setting of the study

The study conducted at (Emergency departments, Operations Departments and Intensive Care Units) at seven governmental hospitals in each governorates in Gaza Strip.

3.3 Study population

The study population consisted of employed nurses who are working in (ICU departments, Operation departments and Emergency department) at governmental hospital in Gaza Strip. The total number of nurses who are working in ICU departments, Operation departments and Emergency department in these hospitals is 409.

3.4 Sample size and selection method

By using the sample size calculator program at 95% confidence level, the sample size was 320 nurses, distributed proportionally according to hospital size. A convenient sampling method was used to select subjective involved in the study.

3.5 Response rate

Three hundred and twenty questioners were delivered to seven hospitals in the Gaza Strip. 268 were returned. The response rate is 83.75%.

3.6 Study period

The study was conducted during the period from July to the end of November 2019 according to the timetable that has been prepared for this study. (Annex 13).

3.7 Eligibility criteria

3.7.1 Inclusion criteria

- Employed nurses in governmental hospital.
- Nurses who are working in the following departments: (ICU departments, Operation departments, Emergency departments).
- Nurses who agree to participate in this study during period of data collection.

3.7.2 Exclusion criteria

- Nurses who work in other remain departments at governmental hospitals in Gaza Strip.
- Nurses who have temporary contract (job creation).
- Nurses who work as volunteers at governmental hospitals in Gaza Strip.

3.8 Study instrument

The researcher used a self-administration questionnaire for assessment of the Nurses Perceptions of their preparedness for disaster management in governmental hospitals in Gaza Strip, which was designed by the researcher based on the review of the literature and under the guidance of the supervisors. The researcher used 5-points Likert scale to prepare structured questionnaires. The questionnaire was distributed to the study sample in the Arabic language (Annex 2).

The designed self-administered questionnaire consists of two parts (Annex, 3):

- Part One: Professional and demographic data consist of age, gender, marital status, education level, years of experience, hospital workplace, place of residency and department at hospital. And two researcher-generated questions regarding previous experiences training with disaster situations .

    1. Have you participated in maneuver inside the hospital?
    2. Have you received previous instructions and courses on disaster preparedness and how to manage and deal with them?

- Part two : Nurses perceptions information questions consist of five domains presented in 61 items distributed as following : Knowledge 13, Role 9 , Skill 13 , Preparedness 11 and Hospital Readiness 15 (table 3.1), based on Likert scale of 5-points , the researcher asked the nurses to express about their degree of response rating 5-points Likert scale (5= strongly agree, 4= agree, 3=uncertain, 2= disagree, 1= strongly disagree)

Table (3.1): Domains and items of structure questionnaire

No.	Domain	Item
1.	Knowledge	1-13
2.	Roles	14-22
3.	Skills	23-35
4.	Preparedness	36-46
5.	Hospital Readiness	47-61

3.9 Pilot study

A pilot study (N = 30) was conducted before starting the actual data collection as a pretest to determine the real time needed to fill the questionnaire and identify areas of vagueness, to point out weaknesses in wording, predict response rate, and to test the validity and suitability of the questionnaire. No modifications were made to the questionnaire and the pilot sample was added to the study sample.

3.10 Validity of the instrument

3.10.1 Face and content validity

The questionnaire was sent and reviewed by a panel of expert all are nursing educator to assess the relevance and clarity of the questionnaire to the objectives of the study (Annex, 4). All comments on the questionnaire were taken in consideration, as a result, some modification was done for some of the items.

3.10.2 Internal Validity (Construct Validity)

Internal validity of the questionnaire where calculated through the correlation coefficients between each items of the areas of the questionnaire and the total score of the domains.

3.10.3 The results of the internal validity

Annex 12 represent the correlation coefficient to total score of domains, which shows that the correlation coefficients of this domain are significant at a = 0.05, so it can be said that the items of this domain are consistent, acceptable and valid to be measure what it was set for.

3.11 Reliability for study tools

The researcher used Cronbach alpha coefficient to estimate the reliability coefficients for each dimension and the total score of the scale. The results are shown in table (3.2).

Table (3.2): Cronbach alpha for study domain questionnaires.

Domains	No. of items	Alpha coefficient
Nurses' knowledge of disasters	13	.734
The skills of nurses in dealing with disasters	9	.713
The role of nurses during disasters	13	.897
Nurses' preparedness for disasters	11	.897
Hospital Readiness to Manage Disaster	15	.791
Total score	**61**	**.796**

3.12 Data collection

The researcher himself collected data using a self-administered questionnaire. Consent form was obtained from the participants in the study after clarifying the purpose of the study and confirmed the anonymity and confidentiality of information.

3.13 Ethical considerations

Ethical and human rights were considered, the researcher was committed to all ethical consideration required; approval from Helsinki Committee (Annex, 5) and permission

from MOH (Annex, 6). Participants were informed that all survey information was stored confidentially and anonymity only be used for scientific purposes. Participation in this study was voluntary not obligators.

3.14 Data entry and Statistical analysis

Data analysis was conducted by using Statistical Package for Social Sciences (SPSS 24) for statistical analysis, The data was gathered and the instrument reviewed before data entry, missed data was treated, data cleaning done. Statistical tools were used the followings: (Percentages and frequencies, Cronbach's Alpha test , Pearson Correlation Coefficient, t- test, ANOVA test).

3.15 Limitation of the study

There are a number of limitations in this study :

- Unavailability of resources
- Small sample size
- Collection data needed time (Time consumer)

3.16 Chapter summary

The intent of this chapter was to introduce the research methodology applied in the process of data collection. There are two sources of data used in this research which become a dual of data for data validity and reliability. The first source of data was relevant literature. The second source of data was the filled questionnaire by nurses. The distributed questionnaire method used with nurses` was structured. The questions were multiple choices and the FIRTS question was a (Yes, No) question. The analysis of data was carried out by SPSS version 24.

This chapter presents the design of the research, the nature of the sample used and the method of collecting the necessary data, and then the results of measuring the reliability and validity of the empirical study, measurement tools and statistical techniques used to analyze the data were presented to the research objectives and the ethical approval submitted to the targeted hospitals', ethical considerations were addressed during the distribution of questionnaires with the presentation of answering guideline in order to make sure that all questions are understood.

Chapter Four

Results and Discussion

This chapter illustrates the results of statistical analysis of the data, including descriptive analysis that presents the socio -demographic characteristics of the study sample and the answers to the questions of the study. The researcher used statistical tests including frequencies, percentages and using one sample T- test and ANOVA test to analyze the paragraphs of questionnaire.

4.1 Descriptive Results

4.1.1 Socio-demographic characteristics of the study participants (n=268)

The study examines the demographic data of the participants in the survey questionnaire and includes the following data (age, gender, marital status, educational level, years of experience, hospital work place, place of residency and department work place).

Table (4.1): Professional and demographic characteristics of the study.

Variable	Group	Number	Percent
Age	20-25 years	16	5.97%
	26-35 years	178	66.42%
	36-50 years	63	23.51%
	more than 50 years	11	4.1%
	Total	268	100%
Gender	Male	208	77.61%
	Female	60	22.39%
	Total	268	100%
Marital Status	Single	65	24.25%
	Married	203	75.75%
	Total	268	100%
Educational Level	Diploma	41	15.30%
	Bachelor	213	79.48%
	Master	14	5.22%
	Total	268	100%
Years of experience	1-5 years	62	23.13%
	6-10 years	116	43.38%
	11-15 years	57	21.27%
	More than 15 years	33	12.32
	Total	268	100%
Hospital workplace	Indonesian Hospital	36	13.43%
	Beit Hanoun Hospital	18	6.72%
	Al- Shifa Hospital	62	23.13%
	Al- Aqsa Hospital	38	14.18%
	Nasser Hospital	48	17.91%
	European Hospital	40	14.93%
	Al- Najjar Hospital	26	9.70%
	Total	268	100%
Place of residency	North of Gaza	52	19.40%
	Gaza City	71	26.49%
	Middle Governorate	35	13.06%
	Khan Younes	59	22.01%
	Rafah	51	19.04%
	Total	268	100%
Departments at hospital	Operations departments	105	39.18%
	Emergency departments	103	38.43%
	Intensive Care Unit	60	22.39%
	Totals	268	100%

The table (4.1) shows that the distribution of the study participants based on their age, gender, marital status and educational level. It shows that the highest percentage of participants was 66.42% for nurses aged 26-35 years, while nurses aged 50 and more the last place with 4.10%. The researcher believes that the proportion of participants from

nurses is mostly from young, and that is very important in this departments that need youth strength and vitality, which may increase the ability of this departments to deal through speed in work and the ability to withstand stress, in addition to their ability to receive training programs and education in the field of disaster management, which would raise their preparedness level. Also, the table shows the distribution of male and female participants in the study by gender. It is clear that the percentage of male nurses working at governmental hospitals was 77.61%, while the percentage of females was 22.39%. This percentages is sustainable and proportional to the nature of this departments, but this departments still need for male and female nurses. This department is a common section dealing with patients of both genders.

Therefore, both genders must be present in these departments. As for the difference between male and female nurses who are estimated at 3-1 approximately , the researcher believes that this ratio is suitable for work in cases of disasters that require high effort and strength to withstand the pressure of work and the large number of injured in Gaza Strip, so it is good from the point of view of the researcher that most of the staff in this departments of males in partnership with an appropriate number of female nurses to ensure the provision of nursing service for all injuries. Moreover 75.75% of the participants married , while the percentage of unmarried participants was 24.25%. Additionally, 79.48% of the study participants have bachelor degree in nursing, 15.30% have diploma, and 5.22 % of them have master degree. It is clear that the participants have different degrees, the researcher believes that the decline in the percentage of those holding a master's degree is due to the high cost of higher education compared to the low monthly salary due to the poor economic situation experienced by the residents of the Gaza Strip due to the siege imposed more than 12 years.

And also it show that 43.29% of participants with experience ranging from 6-10 years, this is a good percentage, indicating that most nurses working in this departments have a good level of practical experience that may increase the level of preparedness for disaster management and 23.13% of them are the nurses who have 5 years of experience and 21.27% of them are the nurses with experience ranging from 11-15 years of experience with , at the final rank was the nurses who have years of experience of more than more than 15 years with 12.31%.

Moreover it show that Al-Shifa Hospital in Gaza City has the highest percentage of workers by 23.13% , this is due to its presence in Gaza City, the largest and most populated city in Gaza strip, therefore, the need for large departments capacity to absorb more than any other hospital, and comes at second place Nasser Hospital in Khan Younis with 17.91% of the sample size of the study, MOH considers that both Al-Shifa Hospital and Nasser Hospital are two medical complexes in the Gaza Strip, and comes at third place European Gaza Hospital in Khan Younis with 14.93% of the sample size of the study, and Al Aqsa Hospital at fourth place in Middle Governorate with 14.18% of the sample size of the study, Al-Najar hospital at sixth place in Rafah with 9.70% of the sample size of the study, while Beit Hanoun Hospital was ranked last in the ranking according to the ratio of nurses working for the size of the sample, it received 6.72% because the presence of another governmental hospital in the same governorate (northern Gaza), which is the Indonesian Hospital which comes at fifth place, which comprises 13.43% of the sample size of the study.

And also it show that the largest proportion of nurses participating in the study sample were from the population of Gaza City with 26.49% of the sample size, while the nurses who live in Khan Younes came second with 22.01% of the sample size, North of Gaza City came at third with 19.40% of the sample size, Rafah came at fourth with 19.04% of the

sample size, the central Governorate is ranked last in terms of the number of nurses with 13.06% of the sample size. The researcher believes that these percentages are distributed well according to the governorates of the Gaza Strip.

At end it show that the operations departments nurses has the highest percentage of workers by 39.18%, this is due to its presence large number of nurses in this ward and comes at second place reception and emergency departments with 38.43% of the sample size of the study, while departments of Intensive Care Unit was ranked last in the ranking with 38.43% of the sample size of the study.

Table (4.2): Experiences on previous training in disaster management.

Item	Yes	%	No	%	Total	%
Have you participated in Maneuver inside the hospital?	167	62.3	101	37.7	268	100%
Have you received previous instructions and courses on disaster preparedness and how to manage and deal with them?	149	55.6	119	44.4	268	100%

Through the two questions that addressed to respondents about participation in maneuver inside the hospital and about if they have previous instructions and courses on disaster preparedness and how to manage and deal with them. Through the respondents it turns out that they did not receive enough instructions and courses on disaster preparedness and a few nurses have been participated in maneuver inside the hospital, where the percent of first question was 62.3% and the second question was 55.6%. And this emphasizes the need for nurses to participate in maneuver inside the hospital and need for nurses to instructions and courses on disaster preparedness.

4.2 Analyzing dimensions of the questionnaire (N= 268).

Table (4.3): levels of nurses perceptions on their Knowledge, Roles, Skills and Preparedness and Hospital Readiness to Manage Disaster.

Hospital Readiness to Manage Disaster					
No.	Domains	Mean	SD	Mean %	Rank
1.	Nurses' perceptions of their knowledge about disaster management.	3.59	0.98	71.8	4
2.	Nurses' perceptions of their roles for disaster management	3.64	.973	72.8	2
3.	Nurses' perceptions of their skills for disaster management	3.75	.985	75	1
4.	Nurses' perceptions of their preparedness for disaster management	3.63	1.01	72.60	3
5.	Hospital Readiness to Manage Disaster	3.28	1.096	65.6	5
Total		**3.58**	**1.001**	**71.6**	

Table (4.3) show that the mean percentage of all domains was 71.6%, while the highest domain is (3): field of "Nurses' perceptions of their skills for disaster management" with weighted mean 75%, followed by domain (2): field of " Nurses' perceptions of their roles for disaster management " with weighted mean 72.8 %, followed by domain (4): field of " Nurses' perceptions of their preparedness for disaster management " with weighted mean 72.60%, followed by domain (1): field of "Nurses' perceptions of their knowledge for disaster management" with weighted mean 71.1%,while the last topics was domain (5): field of "Hospital Readiness to Manage Disaster" with weighted mean 65.6%.

According to the researcher, this arrangement is proportionate to the reality of the Gaza Strip, where continuous exposure to disasters, especially wars, that provide nurses new skills and practices in dealing with the large numbers of victims and casualties that put the domain of the nurses' perceptions of their skills for disaster management at the first ranked.

The domain of nurses' perceptions of their roles for disaster management in the second ranked is considered to be a natural reflection of the reality of the Gaza Strip, which affects nurses directly , and also the important role played by nurses in the face of disasters and the provision of health care to the injured increases the level of awareness of nurses of their importance and the importance of their role during the phases of disaster management that put the domain of the nurses' perceptions of their preparedness for disaster management at the third ranked. As for domain of Nurses' perceptions of their knowledge for disaster management, it ranked fourth in the order of study topics, this is due to the researcher's view of the insufficient amount of information on disasters and management received by nurses during their academic period, in addition to the lack of scientific conferences and educational and training courses held to raise the level of knowledge of nurses , and to the fact that nurses themselves do not care about research and learning about disasters and ways of dealing with them. The siege imposed on the Gaza Strip in all forms and difficult situation of the MOH in the Gaza Strip, that include lack of important resources and equipment, this fact affects the ability of the MOH to conduct training programs and simulation programs for potential disasters that raise the level of readiness of hospital for disaster management, all that may be the main reason for the low readiness of hospital comparing with other domain in this study, and put it at the last ranked.

Table (4.4): levels of nurses' perceptions of their knowledge about disaster management.

No.	Nurses' perceptions of their knowledge about disaster management	Mean	SD	Mean%	Rank
1.	During my undergraduate studies, I received sufficient information on disasters and their management.	3.46	1.07	69.2	11
2.	I have the necessary knowledge about disasters and their management	3.47	.988	69.4	10
3.	I am familiar with the terminology related to disasters and their management.	3.73	.902	74.6	3
4.	I am constantly directed towards knowledge of disasters through past experiences by the hospital management.	3.44	1.07	68.8	12
5.	I have knowledge of the potential disasters in my society (wars, earthquakes, etc.)	3.69	.902	73.81	5
6.	I am interested in teaching aids (articles, courses, programs) on disasters and their management.	3.75	.920	75	2
7.	I know the limits of my knowledge, skills, and authority as a nurse to act in disaster situations.	3.51	.970	70.2	9
8.	The initial knowledge of the nature of the disaster increases my ability to deal with it.	3.59	.973	71.8	7
9.	I participate in disaster courses, conferences or exercises at my workplace.	3.39	1.04	67.8	13
10.	I would be interested in educational classes on disaster preparedness that relate specifically to my community situation	3.69	.996	73.88	4
11.	I know where to find relevant researches or information related to disaster preparedness and management to fill in gaps in my knowledge and is easily accessible.	3.55	1.01	71	8
12.	There is a list of important contacts in the event of a disaster situation.	3.78	.944	75.60	1
13.	I can identify critical resources for disaster response in my department	3.65	.973	73	6
Total		**3.59**	**0.98**	**71.84**	

The table (4.4) shows that the weighted mean for domains of the field of Nurses' perceptions of their knowledge about disaster management was 71.84%. According to the results, the highest two items are item number (12) " There is a list of important contacts in the event of a disaster situation." with weighted mean 75.60%, followed by item number (6) " I am interested in teaching aids (articles, courses, programs) on disasters and their management." with weighted mean 75%. While the lowest two items are item number (9) "

I participate in disaster courses, conferences or exercises at my workplace." with weighted mean 67.8%, followed by item number (4)" I am constantly directed towards knowledge of disasters through past experiences by the hospital management." with weighted mean 68.8%.

The researcher explains that item number (12) ranked first and item number (6) obtained the second rank and at third rank item number (3) among the items that confirm that nurses who working at the governmental hospitals in the Gaza Strip have a good knowledge about the nature of the disasters that affect the Gaza Strip and how can deal with them, because the Gaza Strip has been exposed to many disasters last years , including the last three wars launched by the Israeli army , as a result, nurses have acquired a fairly good knowledge of the recurrence of these wars, they are therefore known for their nature of disasters and nature of work under their influence as well as the possibility of their management and this reinforces the concept that the initial knowledge of the disaster increases the ability to manage it and reduce the resulting losses. With regard to items number (9) and (4), the researcher finds that the bad situation in the Gaza Strip , which include the lack of hours of electricity, low salaries, lack of motivations, closure of crossings and the siege imposed on the Gaza Strip, made the nurses interested in other matters away from the preoccupation with scientific courses and conferences. All this play an important role in reducing the participation of emergency nurses in the Gaza Strip in the science courses and conferences held outside the Gaza Strip, this makes their paragraphs at the last in the order of paragraph items in the field of knowledge.

The result of this study agree with the result of study regarding the Nurses' perceptions of their knowledge about disaster management including the study of (Saidam, 2018) that recognized nurses knowledge, skills and preparedness for disaster at governmental hospitals , which it found that the field of " nurses knowledge of disasters" with 71.84%. ,

and with the (Omar, et al., 2017) study which showed a significantly higher level of awareness and knowledge among employees and teaching staff compared to students. And did not agree with the results of some previous study , including the study of (Taylor, 2017), that recognized that nurses are vastly underprepared for emergency and disaster situations and lack the basic knowledge and training to respond to such events. In the event of a disaster, the impact of nurse responders would be severely lacking and could possibly cause more harm to affected communities rather than help , this study is also not consistent with (Natareno, 2018) findings from this project identified that there was a general lack of basic disaster awareness amongst nurses in the emergency department. Participants indicated that not only were they unfamiliar with disasters and crisis standards of care, but knowledge was limited related to mass casualty triage and incident command, Finally this study is also not consistent with the (Alzahrani & Kyratsis , 2017) show that nurses reported limited knowledge and awareness of the wider emergency and disaster preparedness plans, including key elements of their hospital strategies for managing a mass gathering disaster. Over half of the emergency nurses in Mecca's public hospitals had not thoroughly read the plan, and almost 1 in 10 were not even aware of its existence.

Table (4.5): Level of nurses' perceptions of their role about disaster management.

No.	Nurses' perceptions of their role about disaster management	Mean	SD	Mean %	Rank
1.	Nurses are key players in a disaster and act as team leaders.	3.87	.947	77.46	1
2.	I have knowledge of the role and tasks assigned to me during disasters.	3.60	1.05	71.94	7
3.	I have a confident and knowledgeable in effectively responding to a disaster	3.66	.920	73.21	3
4.	I have the ability to participate in an emergency plan in my workplace.	3.66	.936	73.20	4
5.	I have the ability to balance passion and work professionally during a disaster.	3.60	.964	72.09	5
6.	Health care provided to patients regardless of age and gender and the type of infection	3.76	.947	75.15	2
7.	The main role of nurses during disasters is to provide general assessment with caring for patients.	3.52	1.01	70.37	8
8.	During a disaster, nurses are responsible for prevention, surveillance & clinical response.	3.60	.987	72.01	6
9.	Nurses can effectively communicate with patients, families and other clinicians to provide therapies during emergencies.	3.49	.996	69.78	9
Total		**3.64**	**.973**	**72.2**	

The results in table (4.5) shows that the weighted mean for field of the role of nurses during disasters was 72.2%. According to the results, the highest two items are item number (1) " Nurses are key players in a disaster and act as team leaders " with weighted mean 77.46%, followed by item number (6) " Health care provided to patients regardless of age and gender and the type of infection" with weighted mean 75.15 % . While the lowest two items are item number (9) " Nurses can effectively communicate with patients, families and other clinicians to provide therapies during emergencies " with weighted mean 69.78%, followed by item number (7)" The main role of nurses during disasters is to provide caring for patients with general assessment with weighted mean 70.37%.

In the first place item number (1) , regarding the outcome of this item; nurses are aware of the leadership role that a nurse can play during disaster management, that the nurse can be the leader of the team, and the researcher believes that this result is a good indicator of the extent to which nurses understand their role in disaster management. The researcher believes that getting item number (6) at the second place comes in line with the nature of the nursing profession, so that the nurse must provide health care regardless of age and gender without discriminate between the injured, especially in times of disaster, and this is what nurses at departments understand as a result of their response to this item. As for item number (9), which ranked last in the degree of approval of the sample of the study, perhaps because of the high work pressure and shortage of nursing within departments during emergencies, so that nurses do not have enough time to effectively communicate with patients, families and other clinicians to provide therapies during emergencies.

The result of this study agree with the result of study regarding the Nurses' perceptions of their roles for disaster management including the study of (Saidam, 2018) that recognized nurses knowledge, skills and preparedness for disaster at governmental hospitals , which it found that the field of " Nurses' perceptions of their roles for disaster management " with 81.5 %. And did not agree with the results of (Martono, 2019) study, which founded that, the nurses are less prepared for disaster management, and do not understand their roles either during the phase of disaster preparedness or in coping with a post-disaster situation , this study is also not consistent with the results of (Seroney, 2015) study, which showed that only 40% of nurses understand their role during a disaster. Finally, this study is also not consistent with the results of (Loke, Funge, 2014) study, which the findings of the study indicated that nurses were not aware of their roles in preparing the community or the vulnerable population for disaster.

Table (4.6): Levels of nurses' perceptions of their skills about disaster management.

No.	Nurses' perceptions of their skill about disaster management	Mean	SD	Mean %	Rank
1.	As a qualified nurse I can identify types of disasters	3.72	1.04	74.4	8
2.	I have good and sufficient skill to provide nursing care during disasters in the right time and form.	3.74	.912	74.7	6
3.	I have the ability to cope with large numbers of injured people in my workplace during disasters.	3.81	1.03	76.1	3
4.	I have good skill in sort cases during disasters.	3.79	.911	75.9	5
5.	I am familiar with the treatment principles disaster nursing	3.80	.905	76.0	4
6.	I have the skill to prevent transmission of infections among patients.	3.88	.938	77.5	2
7.	I can use personal protection equipment (puffs, muzzle, etc.) properly during injuries.	3.69	1.00	73.8	10
8.	Initial knowledge of the nature of the disaster increases my ability to deal with it	3.66	1.07	73.2	11
9.	I feel reasonably confident in my ability to take care of patients independently without the supervision of a disaster	3.73	1.00	74.5	7
10.	I have the ability to make optimal use of the resources available in my workplace.	3.62	1.00	72.3	13
11.	I would feel confident in providing health education in case of stress.	3.72	1.00	74.3	9
12.	I have the ability to acquire new skills to get my job done right.	3.66	1.03	73.2	12
13.	I participate in disaster courses and exercises at my workplace.	3.93	.938	78.6	1
Total		**3.75**	**.985**	**75**	

The result of table (4.6) shows that the weighted mean for domain of the field of the Nurses' perceptions of their skills for disaster management was 75% According to the results, the highest two items are item number (13) " I participate in disaster courses and exercises at my workplace " with weighted mean 78.6%, followed by item number (6) " I have the skill to prevent transmission of infections among patients" with weighted mean 77.5%. While the lowest two items are item number (10) " I have the ability to make optimal use of the resources available in my workplace " with weighted mean 72.3% ,

followed by item number (12)" I have the ability to acquire new skills to get my job done right " with weighted mean 73.2%.

The researcher found that item number (13), which includes participate in disaster courses and exercises at workplace, came on the first among the order of the items according to the response of the sample of the study, and because the Gaza Strip faces almost constant wars, there are always courses are held constantly for nurses within governmental hospitals to develop their skills and abilities to cope with these disasters and this is form an opportunity for nurses to participate in disaster exercises as a result of this events , while the item number (6), came on the second among the order of the paragraphs according to the response of the sample of the study because the nursing students are trained during the years of study to prevent transmission among patients and they learned that from drills and exercises at workplace. Regarding item number (10), which ranked last in the order of the items from the point of view of the study sample, this may be due to nurses lack of interest with high degree to make optimal use of the resources available in their workplace.

The result of this study agree with the result of study regarding the Nurses' perceptions of their skills for disaster management including the study of (Saidam, 2018) that recognized nurses knowledge, skills and preparedness for disaster at governmental hospitals , which it found that the field of " Nurses' perceptions of their skills for disaster management" with 83.9%, this study is also consistent with the (Ahmed, 2018) study that concluded that, there was a high level of nurses' perception regarding their role, preparedness, management and emergency nursing skills during disaster situations.

And did not agree with the results of study (Taskiran & Baykal, 2019), which the findings of the study indicated that there are clearly gaps to be filled in disaster preparedness and core competencies in Turkey. This study is also not consistent with the (Ibrahim F. , 2014) study which founded lack of knowledge and practices, Finally, the study results not

consistent with the (Al-Ali & Abu Ibaid, 2015) who show that the participants perceived themselves as having moderate preparation for disaster management, moderate knowledge and moderate to weak skills in disaster management. Significant differences were revealed in participants' perceptions of their disaster preparedness, knowledge and skills according to their sex, specialty and exposure to a real disaster situation. Further education and training courses are needed to enhance providers' preparedness for disaster management in Jordan.

Table (4.7): Levels of nurses' perceptions of their preparedness about disaster management.

No.	Nurses' perceptions of their preparedness about disaster management	Mean	SD	Mean %	Rank
1.	I consider myself prepared for the management of disasters.	3.69	.975	73.73	3
2.	I have full knowledge of the disaster plan for my workplace.	3.58	.975	71.42	8
3.	I have been trained to deal with injuries during disasters.	3.59	1.05	71.87	7
4.	I have a preparedness to act during unexpected events outside the emergency plan in my workplace	3.67	.947	73.36	4
5.	I regularly review exercises and training for disasters.	3.56	1.01	71.27	10
6.	I am constantly updated on emergency plan updates in my workplace.	3.57	.994	71.42	9
7.	I am fully prepared to deal properly with a large number of injuries and deaths in my workplace during disasters.	3.49	1.09	69.85	11
8.	I am participating in disaster simulations and coping mechanisms carried out in a workplace.	3.73	.981	74.55	2
9.	I would feel reasonably confident in my abilities to be a member of a disaster management team	3.60	1.08	71.94	6
10.	I feel reasonably confident that I can care for patients independently in a disaster situation	3.84	1.01	76.72	1
11.	I can manage the symptoms and common interactions of disaster survivors and know about psychological interventions for patients with trauma or physical trauma.	3.65	1.08	72.99	5
Total		**3.63**	**1.01**	**72.60**	

Result of the table (4.7) shows that the weighted mean for domain of the field of Nurses' perceptions of their preparedness for disaster management was 72.60%, which mean the participants agree about this topic. According to the results, the highest two items are item (10) " I feel reasonably confident that I can care for patients independently in a disaster situation " with weighted mean 76.72%, followed by item number (8) " I am participating in disaster simulations and coping mechanisms carried out in a workplace" with weighted mean 74.55%. While the lowest two paragraphs are item number (7) " I am fully prepared to deal properly with a large number of injuries and deaths in my workplace during disasters" with weighted mean 70.8%, followed by item number (5)" I regularly review exercises and training for disasters" with weighted mean 71.27%.

The researcher found that there is a somewhat acceptable level of preparedness for disaster response, this preparedness is one of the most important stages of disaster management, because it works to raise the level of disaster management capacity and thus reduce the loss of human and materials, so nurses should continue to pay attention to raising the level of preparedness through training and educational courses in addition through the modernization of contingency plans and understand their roles to ensure continuous work better. With regard to item number (5), which ranked last in the order of the paragraphs from the point of view of the study sample, this may be due to of the high work pressure and shortage of nursing within departments of the study during emergencies, so that nurses do not have enough time to deal properly with a large number of injuries and deaths in my workplace during disasters.

The result of this study agree with the result of study regarding the Nurses' perceptions of their skills for disaster management including the study of (Saidam M. , 2018) that recognized nurses knowledge, skills and preparedness for disaster at governmental hospitals,

which found that the field of "Nurses' perceptions of their preparedness for disaster management " with 78.2%.

And did not agree with the results of (Martono, et al. , 2019) study, which the findings of the study recognized that nurses were less prepared for disaster management, and do not understand their roles either during the phase of disaster preparedness or in coping with a post-disaster situation , this study is also not consistent with the (Waller, 2017) study which suggest that nurses across the board are unprepared in the event of an emergency or disaster situation. Nurses are vastly underprepared for emergency and disaster situations and lack the basic knowledge and training to respond to such events. Finally, the study results not consistent with the (Seroney, 2015) study which founded that 57.1% of emergency nurses at kapsabet district hospital understood what disaster preparedness involved.

Table (4.8): The level of hospitals readiness for disaster management, at governmental hospitals in Gaza Strip.

No.	Hospital Readiness to Manage Disaster	Mean	SD	Mean %	Rank
1.	There is an emergency plan within the hospital to manage all kinds of disasters.	3.17	1.17	63.4	15
2.	The hospital management is concerned with developing the skills and abilities of its staff in dealing with disasters.	3.55	1.05	70.97	7
3.	The hospital environment is always equipped and ready to manage disasters and face any disaster may occur.	3.86	.892	77.16	1
4.	Provision of first-aid kits and training of persons to provide first aid.	3.82	1.027	76.42	3
5.	Periodic exercises on evacuation and disaster management.	3.73	1.086	74.50	4
6.	The number of beds enough in emergency conditions until the end of the disaster.	3.54	1.146	70.80	8
7.	Enough appropriate wheelchairs used to transport patients in case of any disaster.	3.56	1.095	71.27	6
8.	The laboratories are equipped and ready for any emergency event within the hospitals and are able to provide the services to the fullest.	3.41	1.179	68.21	11
9.	Pharmacies are equipped and there is a list that includes medicines for use in case of any disaster.	3.29	1.306	65.90	13
10.	Inventory reviewed periodically to complete the deficiencies or replace the boat on the expiry.	3.49	1.150	69.70	10
11.	There is a plan for a system of wanted nurses to call for help when a disaster.	3.50	1.100	69.93	9
12.	Develop plans to continue laboratory work in the aftermath of emergencies / disasters.	3.23	1.157	64.55	14
13.	All ambulance cars are equipped with modern equipment and Suitable for treating patients appropriately.	3.39	1.118	67.76	12
14.	Can call the car of ambulance to and from the hospital easily	3.64	1.031	72.84	5
15.	There is Traffic system hospital plan used when emergency ambulance allowed to easily moving.	3.84	.931	76.87	2
Total		**3.28**	**1.096**	**65.6**	

Result of the table (4.8) shows that the weighted mean for topic of the field of “Hospital Readiness to Manage Disaster " was 65.6%, which mean the participants agree about this topic. According to the results, the highest two items are item (3) " The hospital

environment is always equipped and ready to manage disasters and face any disaster may occur " with weighted mean 77.16%, followed by item number (15) " There is Traffic system hospital plan used when emergency ambulance allowed to easily moving" with weighted mean 76.87%.

While the lowest two items are item number (12) " Develop plans to continue laboratory work in the aftermath of emergencies / disasters " with weighted mean 64.55%, followed by item number (1) " There is an emergency plan within the hospital to manage all kinds of disasters" with weighted mean 63.4%. With regard to item number (1), which ranked last in the order of the items from the point of view of the study sample, this may be perhaps because the hospital did not give guideline for emergency plan and lack of maneuvers inside the hospital so nurses did not participate in maneuvers inside the hospital, so that nurses do not have enough knowledge about emergency plan within the hospital.

The results of this study did not agree with the results of any study regarding the Hospital Readiness to Manage Disaster, including the study of (Saidam, 2018) that believes that emergency departments at the governmental hospitals in the Gaza Strip is not properly prepared for the reality of the Gaza Strip. The main reason for the lack of medical supplies and equipment in the emergency departments is the siege imposed on the Gaza Strip and its negative impact on the health sector and hospitals in particular. The researcher found that these results do not fit the required format with a region prone to war disasters repeatedly, and need to provide all the requirements and medical tools that will raise the level of success in disaster management and deal with the large numbers of victims during the occurrence, the low level of availability of health equipment is due to the large amount of consumption due to the large number of casualties that coincided with the time of the study during the Great Return March.

The results of this study did not agree with the results of any previous literature review studies regarding the Hospital Readiness to Manage Disaster, including the study of (Saidam M. , 2018) that believes that emergency departments at the governmental hospitals in the Gaza Strip is not properly prepared for the reality of the Gaza Strip. The main reason for the lack of medical supplies and equipment in the emergency departments is the siege imposed on the Gaza Strip and its negative impact on the health sector and hospitals in particular. The researcher found that these results do not fit the required format with a region prone to war disasters repeatedly, and need to provide all the requirements and medical tools that will raise the level of success in disaster management and deal with the large numbers of victims during the occurrence, the low level of availability of health equipment is due to the large amount of consumption due to the large number of casualties that coincided with the time of the study during the Great Return March.

4.3 Independent t-test and One-way ANOVA test

The relationship between the nurse's perception regarding their knowledge, skills and preparedness for disaster management with their demographic variables.

Table (4.9): Differences in nurse's perceptions domains about disaster management with regard to age group.

Variable	N	Mean (SD)	DF	F	P value*
knowledge about disaster management					
20 -25	16	3.70 (6.31)	3, 264	.773	.510
26 – 35	178	3.59 (6.48)			
36 – 50	63	3.56 (6.82)			
More than 50	11	3.41 (8.51)			
Roles for disaster management					
20 -25	16	4.28 (3.20)	3, 264	8.844	.000*
26 – 35	178	3.62 (4.87)			
36 – 50	63	3.50 (5.01)			
More than 50	11	3.75 (6.83)			
Skills for disaster management					
20 -25	16	4.15 (6.47)	3, 264	7.412	.000*
26 – 35	178	3.79 (6.22)			
36 – 50	63	3.55 (7.40)			
More than 50	11	3.61 (7.00)			
Preparedness for disaster management					
20 -25	16	4.91 (6.52)	3, 264	2.383	.070
26 – 35	178	4.48 (6.42)			
36 – 50	63	4.19 (5.33)			
More than 50	11	4.27 (7.75)			
Hospital Readiness to Manage Disaster					
20 -25	16	3.14 (11.66)	3, 264	5.358	.001*
26 – 35	178	3.52 (9.95)			
36 – 50	63	3.73 (7.95)			
More than 50	11	3.11 (13.98)			

(One-way ANOVA) *significant at 0.05

Table (4.9) shows the following: There are statistically significant differences between the mean of the study sample responses on the field (Nurses' perceptions of their roles and their skills for disaster management and Hospital Readiness to Manage Disaster) relate to age, where the value of (Sig < 0.05) at the level of significance $\alpha = 0.05$. There are no statistically significant differences between the mean of the study sample responses on the other fields relate to age, where the value of (Sig >0.05) at the level of significance $\alpha = 0.05$.

Annex (14) shows that there are statistical differences between the mean scores of the study sample to the reality of the perceptions of nurses on the readiness of disaster management in government hospitals in the Gaza Strip in the field of (Nurses' perceptions of their roles for disaster management) between the ages (20-25) years and the age (26-35) years, and in favor of ages (20-25) years , and between ages (20-25) years and the ages (36-50) years, and in favor of ages (20-25) years. And the field of (Nurses' perceptions of their skills for disaster management) between the ages (20-25) years and the age (36-50) years, and in favor of ages (20-25) years, and between ages (26-35) years and the ages (36-50) years, and in favor of ages (26-35) years. And the field of (Hospital Readiness to Manage Disaster) between the ages (20-25) years and the age (36-50) years, and in favor of ages (36-50) years, and between ages (36-50) years and the more than 50 years, and in favor of ages (36-50) years.

The result of O'Sullivan et al. (2008) asserted that there was varied significantly by age group $F(2,1539) = 12.78$, $p < 0.0001$ with nurses <46 years of age, Taşkıran and Baykal (2017) reported similar results of there is a significant difference ($p \leq 0.05$) between age group and working years with Nurses' Perception of Core Competencies for Disaster Preparedness Scale. Öztek'n et al. (2016) study result indicate that age showed significant differences in knowledge, skills, and evaluation, but Martono et al. (2019) study which

indicate that age and length of employment did not result in different perceptions of nurses in Indonesia when coping with disasters, particularly in the categories of knowledge, skills, and evaluation. Najafi et al. (2015) who reported age did not relate to disaster preparedness. Gladston and Nayak (2017) reported similar results of no association between age group on knowledge and perception of preparedness in managing disasters. Seyedin, Dolatabadi and Rajabifard (2015) study that found there was no relationship between nurses' demographic data (age, gender and their experience in ED) and their level of knowledge. Ebrahim (2015) study which found the result of this study showed no significant differences in knowledge, skills and preparedness scores with respect to demographic character like age, gender and level of education.

Table (4.10): Differences in nurse's perceptions domains about disaster management with regard to gender.

Domains	Gender	N	Mean	SD	T	P- value
Knowledge about disaster management	Male	208	3.58	6.592	.606	.545
	Female	60	3.63	6.811		
Roles for disaster management	Male	208	3.63	4.979	.945	.346
	Female	60	3.71	5.632		
Skills for disaster management	Male	208	3.72	6.345	1.50	.133
	Female	60	3.84	8.130		
Preparedness for disaster management	Male	208	3.69	6.065	3.17	.002*
	Female	60	3.43	6.624		
Hospital Readiness to Manage Disaster	Male	208	3.61	9.451	3.51	.001*
	Female	60	3.27	11.133		

(Independent sample *t* test) *significant at 0.05

Table (4.10) shows that there are statistically significant differences between the mean of the study sample responses on the field (Nurses' perceptions of their preparedness for disaster management and Hospital Readiness to Manage Disaster) relate to gender, where the value of (Sig < 0.05) at the level of significance α= 0.05.

Also, there are no statistically significant differences between the mean of the study sample responses on the other fields relate to gender, where the value of (Sig >0.05) at the level of significance α= 0.05

The result of O'Sullivan et al. (2008) asserted that there was varied significantly by gender(7,1526) = 8.22, p <0.0001. The result of Al-Ali and Abu Ibaid (2015) study found significant differences between the sexes and their perceptions of preparedness in the 3 subscales (preparedness, skills and knowledge). There were significant differences between males and females in their perceptions of preparedness for disaster management (U = 3526, P = 0.014); male participants (mean rank 192.63) were more likely than female participants (mean rank 97.32) to perceive themselves as being prepared for disaster management. Male and female participants also varied in their perception of their skills (U = 3696, P = 0.043) and knowledge of disaster management (U = 3543, P = 0.016). Males were more likely than females to perceive themselves as having adequate skills and knowledge about disaster management. Xu & Zeng (2016) reported that the knowledge reserve of male nurses was higher than that of the female nurses. Disaster relief is usually faced with harsh field conditions, heavy load, and intensive and long-term work. Male nurses exhibit improved physical fitness, endurance, and other physiological advantages, especially in moving, lifting, transporting, and other physical work. When faced with emergency incidents, male nurses are highly resilient against pressure and are willing to accept challenges and difficult work to confront negative events in the disaster site. These advantages could explain the higher interest of male nurses on knowledge in disaster nursing. Tabiee & Nakhaei (2017) show that with regard to competency, and also the component of clinical competency, the men's score (3.46 ± 0.55) was higher than women's (P = 0.008), but there were no significant relationships between gender and general preparedness or attitude (P > 0.05). Al Khalaileh et al. (2012) study indicate that there no

significant differences in RNs preparedness for disaster management based on age, gender, or educational level ($p > 0.05$). Seyedin, Dolatabadi and Rajabifard (2015) found that there was no relationship between nurses' demographic data (age, gender and their experience in ED) and their level of knowledge. Ebrahim (2015) found that the result of this study showed no significant differences in knowledge, skills and preparedness scores with respect to demographic character like age, gender and level of education.

Table (4.11): Differences in nurse's perceptions domains about disaster management with regard to marital status.

Domains	Marital status	N	mean	SD	T	P- value
Knowledge about disaster management	Single	65	3.60	7.06	.857	.392
	Married	203	3.79	6.49		
Roles for disaster management	Single	65	3.59	5.32	2.41	.016*
	Married	203	3.82	5.00		
Skills for disaster management	Single	65	3.72	6.61	1.28	.202
	Married	203	3.55	6.84		
Preparedness for disaster management	Single	65	3.65	7.37	1.07	.282
	Married	203	3.37	5.91		
Hospital Readiness to Manage Disaster	Single	65	3.58	11.59	-2.19-	.029*
	Married	203	3.54	9.41		

(Independent sample t test) *significant at 0.05

Table (4.11) shows the following:

There are statistically significant differences between the mean of the study sample responses on the field (Nurses' perceptions of their roles for disaster management and Hospital Readiness to Manage Disaster) relate to marital status, where the value of (Sig < 0.05) at the level of significance $\alpha = 0.05$.

There are no statistically significant differences between the mean of the study sample responses on the other fields relate to marital status, where the value of (Sig >0.05) at the level of significance $\alpha = 0.05$.

The result of O'Sullivan et al. (2008) asserted that there was a tendency for single nurses to report slightly higher levels of preparedness than married nurses across all types of disasters, which may reflect the need for the protection of family or difficulties associated with dual-role conflict. But, Aluko et al. asserted that there was no significant association between knowledge and perception with other demographic variables(marital status, education and sex). And Taşkıran and Baykal (2017) reported similar results of no significant difference ($p > 0.05$); between marital status, sex and education level with Nurses' Perception of Core Competencies for Disaster Preparedness Scale.

Table (4.12): Differences in nurse's perceptions domains about disaster management with regard to education level.

Variable	N	Mean (SD)	Df	F	P value*
knowledge about disaster management					
Diploma	41	3.59 (5.31)	2, 265	.011	.989
Bachelor	213	3.59 (6.95)			
Master	14	3.61 (5.38)			
Roles for disaster management					
Diploma	41	3.73 (3.93)	2, 265	.608	.545
Bachelor	213	3.63 (5.32)			
Master	14	3.64 (5.32)			
Skills for disaster management					
Diploma	41	3.77 (6.43)	2, 265	.181	.835
Bachelor	213	3.74 (6.96)			
Master	14	3.82 (5.48)			
Preparedness for disaster management					
Diploma	41	3.73 (5.35)	2, 265	1.75	.176
Bachelor	213	3.60 (6.38)			
Master	14	3.81 (7.16)			
Hospital 3.81Readiness to Manage Disaster					
Diploma	41	3.82 (9.04)	2, 265	5.25	.006*
Bachelor	213	3.47 (10.07)			
Master	14	3.69 (9.42)			

(One-way ANOVA) *significant at 0.05

Table (4.12) shows the following:

There are statistically significant differences between the mean of the study sample responses on the field (Hospital Readiness to Manage Disaster) relate to education level, where the value of (Sig < 0.05) at the level of significance α= 0.05.

There are no statistically significant differences between the mean of the study sample responses on the other fields relate to education level, where the value of (Sig >0.05) at the level of significance α= 0.05.

Annex (15) shows that there are statistical differences between the mean scores of the study sample to the reality of the perceptions of nurses on the readiness of disaster management in government hospitals in the Gaza Strip in the field of (Hospital Readiness to Manage Disaster) between those with a diploma and a Bachelor degree, and in favor of those with a diploma.

Annex (16) shows that participants who have more experienced were the most favor and had more perceptions about readiness for disaster management at government hospitals in the Gaza Strip, as we know the majority of old nurses have diploma degree. The researcher believes that explain why diploma nurses favor on bachelor nurses.

The result of Martono et al. (2019) study indicate that levels of education and experience coupled with training on disaster response and preparedness showed significant differences in “skills” but did not have any effect on knowledge and evaluation in dealing with disasters. Xu & Zeng (2016) reported that effective disaster responsiveness is influenced by high education degree, long educational duration, great content of learning, and abundant disaster knowledge and skills of emergency nurses. In China, the educational degree of nursing staff is relatively low. The “Chinese health statistics yearbook data in 2013” released by the Chinese National Health and Family Planning Commission reported that the percentage of Chinese nurses with college degrees or higher was 56% in 2012, and those with undergraduate and higher education was only 10.6%. But result of Waller (2017) study show that there was no significant difference noted in the preparedness level of nurses with different educational backgrounds. Öztek'n et al. (2016) study result indicate that education showed no significant differences in knowledge, skills, and evaluation. Ebrahim (2015) found that the result of this study showed no significant

differences in knowledge, skills and preparedness scores with respect to demographic character like age, gender and level of education. And the result of Al Khalaileh et al. (2012) study indicate that there no significant differences in RNs preparedness for disaster management based on age, gender, or educational level ($p > 0.05$).

Table (4.13): Differences in nurse's perceptions domains about disaster management with regard to years of experience.

Variable	N	Mean (SD)	Df	F	P value*
knowledge about disaster management					
1-5 years	62	3.51 (6.20)	3, 264	1.85	.138
6-10 years	116	3.55 (6.76)			
11-15 years	57	3.68 (5.62)			
More than 15 years	33	3.70 (8.15)			
Roles for disaster management					
1-5 years	62	3.73 (4.30)	3, 264	6.45	.000*
6-10 years	116	3.49 (5.10)			
11-15 years	57	3.72 (4.27)			
More than 15 years	33	3.91 (6.59)			
Skills for disaster management					
1-5 years	62	3.68 (6.15)	3, 264	2.43	.065
6-10 years	116	3.69 (6.73)			
11-15 years	57	3.87 (5.82)			
More than 15 years	33	3.86 (8.97)			
Preparedness for disaster management					
1-5 years	62	3.53 (6.96)	3, 264	2.76	.042*
6-10 years	116	3.58 (5.67)			
11-15 years	57	3.81 (5.57)			
More than 15 years	33	3.67 (7.65)			
Hospital Readiness to Manage Disaster					
1-5 years	62	3.34 (10.82)	3, 264	6.43	.000*
6-10 years	116	3.56 (9.59)			
11-15 years	57	3.81 (7.73)			
More than 15 years	33	3.33 (11.27)			

(One-way ANOVA) *significant at 0.05

Table (4.13) shows the following: There are statistically significant differences between the mean of the study sample responses on the field (Nurses' perceptions of their roles and preparedness for disaster management and Hospital Readiness to Manage Disaster) relate to years of experience , where the value of (Sig < 0.05) at the level of significance α= 0.05. There are no statistically significant differences between the mean of the study sample responses on the other fields relate to years of experience, where the value of (Sig >0.05) at the level of significance α= 0.05.

Annex (16) shows that there are statistical differences between the mean scores of the study sample to the reality of the perceptions of nurses on the readiness of disaster management in government hospitals in the Gaza Strip in the field of (Nurses' perceptions of their roles for disaster management) between those who have experience (6-10) years and those who have experienced more than 15 years and in favor of those who have experienced more than 15 years. And the field of (Hospital Readiness to Manage Disaster) between those who have experience (1-5) years and those who have experienced (11-15) years and in favor of those who have experienced (11-15) years, and between those who have experience (11-15) years and those who have experienced more than 15 years and in favor of those who have experienced (11-15) years. And in the total between those who have experience (1-5) years and those who have experienced (11-15) years and in favor of those who have experienced (11-15) years, and between those who have experienced (6-10) years and those who have experienced (11-15) years and in favor of those who have experienced (11-15) years.

The result of Öztek'n et al. (2016) study indicate that years of experience showed significant differences between knowledge and skills but none between evaluations. Ebrahim (2015) study indicate significant differences in knowledge, skills and preparedness scores with the years of experience. And result of Taşkıran and Baykal

(2017) study reported similar results of there is a significant difference ($p \leq 0.05$) between age group and working years with Nurses' Perception of Core Competencies for Disaster Preparedness Scale. The result of Al Khalaileh et al. (2012) study showed significant differences in the perception of nurses to their level of preparation for disaster response in terms of skills ($p = 0.028$) and overall score ($p = 0.045$)according to experience. The post hoc test revealed that RNs with more experience reported higher levels of knowledge, skills, and preparedness than less experienced RNs. Tabiee & Nakhaei (2017) show that the average score of clinical competency showed significant relationship to age, education, and job experience in Japanese nurses ($P < 0.05$) and show that the average score of those having job experience for more than 10 years (3.47 ± 0.54) was higher than those with shorter job experience ($P = 0.000$). General preparedness score was also higher for nurses with more than 10 years job experience (3.5 ± 0.42) ($P = 0.009$). But, Noh et al. (2017) reported that the increased work experience and previous disaster experience did not show statistically significant result when compared to core competencies. This means that experience alone cannot fulfil nursing competencies in disaster management. Alshehri (2017) found that no significant difference was found between the confidence level of respondents who had experienced a disaster event and that of those who had not ($Z = -.395$, $p = .693$). And also Seyedin, Dolatabadi and Rajabifard (2015) study found that there was no relationship between nurses' demographic data (age, gender and their experience in ED) and their level of knowledge.

Table (4.14): Differences in nurse's perceptions domains about disaster management with regard to hospital workplace.

Variable	N	Mean (SD)	Df	F	P value*
knowledge about disaster management					
Indonesian Hospital	36	3.56 (6.99)	6, 261	.816	.558
Beit Hanoun Hospital	18	3.45 (6.13)			
Al- Shifa Hospital	62	3.59 (6.30)			
Al- Aqsa Hospital	38	3.58 (6.75)			
Nasser Hospital	48	3.55 (7.38)			
European Hospital	40	3.73 (5.65)			
Al- Najjar Hospital	26	3.56 (7.08)			
Roles for disaster management					
Indonesian Hospital	36	3.55 (2.88)	6, 261	3.02	.007*
Beit Hanoun Hospital	18	3.59 (5.17)			
Al- Shifa Hospital	62	3.48 (5.05)			
Al- Aqsa Hospital	38	3.61 (4.94)			
Nasser Hospital	48	3.67 (5.59)			
European Hospital	40	3.91 (5.74)			
Al- Najjar Hospital	26	3.55 (4.88)			
Skills for disaster management					
Indonesian Hospital	36	3.72 (6.62)	6, 261	1.04	.397
Beit Hanoun Hospital	18	3.73 (5.76)			
Al- Shifa Hospital	62	3.64 (7.22)			
Al- Aqsa Hospital	38	3.77 (5.14)			
Nasser Hospital	48	3.73 (5.87)			
European Hospital	40	3.88 (7.46)			
Al- Najjar Hospital	26	3.86 (8.91)			
Preparedness for disaster management					
Indonesian Hospital	36	3.67 (6.32)	6, 261	.852	.531
Beit Hanoun Hospital	18	3.37 (7.23)			
Al- Shifa Hospital	62	3.63 (5.38)			
Al- Aqsa Hospital	38	3.63 (6.14)			
Nasser Hospital	48	3.60 (7.00)			
European Hospital	40	3.65 (6.25)			
Al- Najjar Hospital	26	3.75 (6.63)			
Hospital Readiness to Manage Disaster					
Indonesian Hospital	36	3.62 (7.85)	6, 261	1.65	.133
Beit Hanoun Hospital	18	3.16 (12.11)			
Al- Shifa Hospital	62	3.65 (9.22)			
Al- Aqsa Hospital	38	3.41 (8.84)			
Nasser Hospital	48	3.50 (9.97)			
European Hospital	40	3.58 (11.68)			
Al- Najjar Hospital	26	3.56 (11.44)			

(One-way ANOVA) *significant at 0.05

Table (4.14) shows that there are statistically significant differences between the mean of the study sample responses on the field (Nurses' perceptions of their roles for disaster management) relate to workplace (Hospital), where the value of (Sig < 0.05) at the level of significance α= 0.05. There are no statistically significant differences between the mean of the study sample responses on the other fields relate to workplace (Hospital), where the value of (Sig >0.05) at the level of significance α= 0.05.

Annex (17) shows that there are statistical differences between the mean scores of the study sample to the reality of the perceptions of nurses on the readiness of disaster management in government hospitals in the Gaza Strip in the field of (Nurses' perceptions of their roles for disaster management) between Al-Shifa Hospital and European Gaza Hospital and in favor of European Gaza Hospital.

The result of Al Khalaileh et al. (2012) study showed that there are statistically significant differences in the perception of RNs of their level of preparedness due to the type of hospital. but, Tabiee & Nakhaei (2017) show that there were no significant relationships between the ward working or the hospital (educational or non-educational) and the preparedness and its dimensions (P > 0.05). Öztek'n et al. (2016) study result indicate that workplace (public vs private hospitals) showed no significant difference in knowledge, but did in skills and evaluation.

Table (4.15): Differences in nurse's perceptions domains about disaster management with regard to place of residency.

Variable	N	Mean (SD)	Df	F	P value*
knowledge about disaster management					
North of Gaza	52	3.52 (6.46)	4,263	.578	.679
Gaza City	71	3.56 (5.85)			
Middle Governorate	35	3.64 (8.15)			
Khan Younes	59	3.63 (6.93)			
Rafah	51	3.63 (6.44)			
Roles for disaster management					
North of Gaza	52	3.69 (4.59)	4,263	1.580	.180
Gaza City	71	3.64 (4.76)			
Middle Governorate	35	3.81 (6.23)			
Khan Younes	59	3.52 (5.17)			
Rafah	51	3.64 (5.15)			
Skills for disaster management					
North of Gaza	52	3.79 (6.39)	4,263	2.398	.051
Gaza City	71	3.76 (5.74)			
Middle Governorate	35	3.87 (8.95)			
Khan Younes	59	3.58 (7.31)			
Rafah	51	3.82 (5.78)			
Preparedness for disaster management					
North of Gaza	52	3.62 (7.04)	4, 263	1.436	.222
Gaza City	71	3.56 (5.33)			
Middle Governorate	35	3.76 (7.52)			
Khan Younes	59	3.55 (6.65)			
Rafah	51	3.73 (5.19)			
Hospital Readiness to Manage Disaster					
North of Gaza	52	3.59 (9.25)	4, 263	1.207	.308
Gaza City	71	3.46 (10.38)			
Middle Governorate	35	3.37 (12.68)			
Khan Younes	59	3.59 (10.28)			
Rafah	51	3.63 (7.71)			

(One-way ANOVA) *significant at 0.05

Table (4.15) shows the following: There are no statistically significant differences between the mean of the study sample responses on the all fields relate to place of residence, where the value of (Sig >0.05) at the level of significance α= 0.05.

The result of sedum (2018) study showed that the largest proportion of nurses participating in the study sample were from the population of Rafah, with 22.8% of the sample size, while the nurses who live in Gaza City came second with 22.2% of the sample size. The Central Governorate is ranked last in terms of the number of nurses working in emergency departments with 17.3% of the sample size.

Table (4.16): Differences in nurse's perceptions domains about disaster management with regard to department at hospital.

Variable	N	Mean (SD)	df	F	P value*
knowledge about disaster management					
Operations Departments	105	3.65 (6.35)	3, 264	1.66	.192
Emergency departments	103	3.58 (6.55)			
Intensive Care Unit	60	3.50 (7.15)			
Roles for disaster management					
Operations Departments	105	3.62 (5.15)	3, 264	1.63	.197
Emergency departments	103	3.72 (5.16)			
Intensive Care Unit	60	3.56 (4.97)			
Skills for disaster management					
Operations Departments	105	3.80 (6.42)	3, 264	1.07	.342
Emergency departments	103	3.73 (7.34)			
Intensive Care Unit	60	3.69 (6.42)			
Preparedness for disaster management					
Operations Departments	105	3.69 (6.59)	3, 264	1.58	.207
Emergency departments	103	3.55 (6.21)			
Intensive Care Unit	60	3.65 (5.82)			
Hospital Readiness to Manage Disaster					
Operations Departments	105	3.61 (9.89)	3, 264	1.46	.233
Emergency departments	103	3.45 (10.22)			
Intensive Care Unit	60	3.54 (9.62)			

(One-way ANOVA) *significant at 0.05

Table (4.16) shows the following: There are no statistically significant differences between the mean of the study sample responses on the all fields relate to workplace (Department), where the value of (Sig >0.05) at the level of significance α= 0.05.

The result of O'Sullivan et al. (2008) indicate that more than 97% of respondents were registered nurses and more than 90% worked in an emergency department or intensive care unit. And the result of Ibrahim et al. (2014) study indicate that Nearly half of them (49.2%) were working in the critical care units and medical surgical departments (25.8 and 23.4% respectively) But, Tabiee & Nakhaei (2017) show that There were no significant relationships between the ward working or the hospital (educational or non-educational) and the preparedness and its dimensions ($P > 0.05$).

Chapter Five

Conclusion and Recommendations

5.1 Conclusion:

Disaster is considered as an unpredicted event occurs every day somewhere in the world, and it poses unique challenge for every medical care facility in terms of infrastructure, capacity, and preparedness. Nurses are important members of the disaster team, therefore, they need to be able to use their skills and equipped with the necessary knowledge and abilities to work in a disaster and to meet the needs of the respective serving community. This study aims to assess nurses' perception of their knowledge, skills, roles and preparedness for disaster management and the hospitals readiness for disaster management at governmental hospitals in Gaza Strip.

A descriptive-analytical cross-sectional study was used. Different statistical procedures were used for data analysis including percentages, mean, independent t-test, and One-Way ANOVA test. The findings showed that most of the study samples were between 26-35 years old (66.42%), most of them are male and married. and most have a bachelor's degree (79.48%), and most of them have experience between 6-10 years (43.38%). A highest percentage of nursing staff work at Al- Shifa Hospital with percent (23.13%). And also the largest proportions of nurses participating in the study sample were from the population of Gaza City with (26.49%) of the sample size. At end it shows that the operations department's nurses have the highest percentage of participants by (39.18%).

With regard to study domains, the results revealed that field of "Nurses' perceptions of their skills for disaster management" got the highest score (75%) followed by field of "Nurses' perceptions of their preparedness for disaster management" (72.6%), field of "Nurses' perceptions of their roles for disaster management" (72.2%), field of "Nurses'

perceptions of their knowledge for disaster management" (71.1%), while field of "Hospital Readiness to Manage Disaster" the last (65.6%). There were statistically significant differences between nurses' responses regarding their age group and (Role) and (Skill), statistically significant differences between nurses' responses regarding their education level and (Hospital Readiness), statistically significant differences between nurses' responses regarding their years of experience and (Role) and (Hospital Readiness), statistically significant differences between nurses' responses regarding hospital workplace and (Role).

5.2 Recommendations

In the light of study findings and results, the followings recommendations are:

1. Develop a guideline and instructions for nurses about knowledge of disasters management provides by those with experience and responsibilities through workshops, conferences and seminars dealing with the issue of disasters.
2. Availability of guided booklet regarding disaster management in each hospital department for all nurses.
3. Hospitals should be supported with the required materials and equipment for health care services.
4. Providing different capacities and supplies for hospitals to remain highly prepared for the various disasters.
5. Improving the working environment in terms of building and infrastructure, security, and supplies for patient care.
6. Enhances good communications to b effectively communicate with patients, families and other clinicians to provide therapies during emergencies.

7. Develop plans to continue laboratory work in the aftermath of emergencies / disasters.
8. Constantly updated of emergency plan at hospitals and inform the medical staff of the update.
9. Support and give guidelines to enhance the staff ability to make optimal use of the resources available in my workplace
10. Increase of the rate of training, in addition to simulation processes that simulate the occurrence of certain disasters, through which nurses are upgraded to manage potential disasters by involving them in training and in hospital simulations.

References

Abdalla, M. S. (2012). Medical and Para-medical staff awareness about disaster management at assiut university hospital. AAMJ, Vol. 10, N. 3, 67-93.

Ahmed, R. (2018). Perception of Nurses' Regarding Role, Preparedness and Management Skills during Hospital Disasters. DOI:10.13140/RG.2.2.31584.58886.

Al Khalaileh, Murad & Bond, Elaine & Alasad Alshraideh, Jafar. (2012). Jordanian nurses' perceptions of their preparedness for disaster management. International emergency nursing. 20. pp. do14-23. DOI:10.1016/j.ienj.2011.01.001.

Al Taher, M. (2011). *Strategies for post-war reconstruction and disasters in Palestine.* nablus- palestine: Al-Najah National University.

Al Thobaity, A, et al. (2015). Perceptions of knowledge of disaster management among military and civilian nurses in Saudi Arabia. Australasian Emergency Nursing Journal, Volume 18, Issue 3, 156 - 164

Al Wehaidy, R. (2013). United Nations Seminar on Assistance to the Palestinian people. *Palestinian National Development Plan 2011-2013 –current priorities, challenges and opportunities*, (pp. 1-9). FAO Headquarters, Rome.

Al Zaytouna Center for Studies and Consultations. (2015). Palestinian Strategic Report. Beirut.

Al-Ali, M. N. (2015). Health-care providers' perception of knowledge,skills and preparedness for disaster management in primary health-care centres in Jordan. Eastern Med. H. Jornul , 2015 Dec 13; 21(10):713-21.

Alrazeeni, D. (2015). Saudi EMS Students' Perception of and Attitudes toward their Preparedness for Disaster Management. *Journal of Education and Practice*, Vol.6, No.35, p110-116.

Alshehri, B. (2016). Emergency nurses' preparedness for disaster in the Kingdom of Saudi Arabia. Journal of Nursing Education and Practice, 7(3), p101-114. [3]. DOI: https://doi.org/10.5430/jnep.v7n3p101

Aluko, O.O., Adebayo, A. W., Adebisi, T. F., Ewegbemi, M. K., Abidoye, A. T., & Popoola, B. F. (2016). Knowledge, Attitudes And Perceptions Of Occupational Hazards Ad Safety Practices In Nigerian Healthcare Workers. Biomed Central Research Notes, 9(71).

Alzahrani F, Kyratsis Y (2017). Emergency nurse disaster preparedness during mass gatherings: a cross-sectional survey of emergency nurses' perceptions in hospitals in Mecca, Saudi Arabia *BMJ Open* 7(4):e013563.

DOI: 10.1136/bmjopen-2016-013563

Asian Disaster Reduction Center (2013). "Glossary on natural disasters", available at: www.adrc.or.jp/ (accessed December 2015).

Awhonn (2012), The Role of the Nurse in Emergency Preparedness. Journal of Obstetric, Gynecologic, & Neonatal Nursing, 41: 322-324.

DOI:10.1111/j.1552-6909.2011.01338.x

Baack, S. and Alfred, D. (2013), Nurses' Preparedness and Perceived Competence in Managing Disasters. Journal of Nursing Scholarship, 45: 281-287. DOI:10.1111/jnu.12029

Baack, T. S. (2011). Analysis of Texas Nurses' Preparedness and Perceived Competence in Managing Disasters. Nursing Theses and Dissertations, pp 1-99.

DOI: http://hdl.handle.net/10950/50

Bajow NA, Alkhalil SM. Evaluation and analysis of hospital disaster preparedness in Jeddah. Health 2014; 6: 2668.

Bunting, S. M. (1988). The Concept of Perception in Selected Nursing Theories. Nursing Science Quarterly, 1(4), 168–174. https://doi.org/10.1177/089431848800100410

Diab, G. M., & Mabrouk, S. M. (2015). The effect of guidance booklet on knowledge and attitudes of nurses regarding disaster preparedness at hospitals. *Journal of Nursing Education and Practice , 5* (9), p. 17.

C. A. Brebbia, Wessex Institute, (2018). Disaster Management. Southampton, Boston: WIT PRESS.

Ebrahim, A. N. (2015). Preparedness Of Primary Health Care Nurses For Disaster Management In Bahrain. International Journal of Advances in Science Engineering and Technology, ISSN: 2321-9009, (p 1-4).

Eshghi, K., & Larson, R. C. (2008). Disasters: Lessons from the past 105 years. Disaster Prevention and Management. *An International Journal* , pp. 62-82.

EURO- MED. (2012). Report of the Cloud and the assassination of the child. Retrieved April 25, 2018, from Euro-Mediterranean Observatory for Human Rights: https://euromedmonitor.org/ar/article.

Gladston, S, Nayak, R (2017). Disaster Preparedness Among Nurses working in A Paediatric Acute Care Setting of A Tertiary Hospital, South India. IOSR Journal of Nursing and Health Science, Volume 6, Issue 2 Ver. I (Mar. - Apr. 2017), PP 55-59.

Grochtdreis, T., Jong, N.D., Harenberg, N., Görres, S., & Schröder-Bäck, P. (2016). Nurses' roles, knowledge and experience in national disaster preparedness and emergency response: A literature review. South Eastern European Journal of Public Health. 7 (pp. 1-19) DOI:10.4119/UNIBI/SEEJPH-2016-133

Hall A.(2005).Defining nursing knowledge; VOL: 101, ISSUE: 48, PAGE NO: 34

Halpern, J., Vermeulen, K. (2017). Disaster Mental Health Interventions. New York: Routledge, DOI: https://doi.org/10.4324/9781315623825

Hawajri, O. (2016). Natura disasters and complex humanitarian emergencies in the occupied Palestinian territories. Emergency and Disaster Reports 2016; 3 (1): 4-51

Ibrahim, A. F. (2014). Nurses knowledge, attitudes, practices and familiarity regarding disaster and emergency preparedness –Saudi Arabia. American Journal of Nursing Science, Volume 3, Issue 2, (pp. 18-25). DOI:10.11648/j.ajns.20140302.12

ICN framework of disaster nursing competencies. Geneva: World Health Organization and International Council of Nurses; 2009

IFRC. (2014). Disaster and crisis management. Retrieved January 30, 2018, from http://www.ifrc.org/en/what-we-do/disaster-management/

IFRC. (2017): IFRC Annual Report 2017. International Federaion of Red Croos and Red Crescent

International Federation of Red Cross and Red crescent, (IFRC) (2000). Introduction to disaster preparedness: disaster preparedness training programme, available at: http://www.ifrc.org/Global/Publications/disasters/all.pdf, [Retrieved on 2-11-2014].

IPS. (2009). *Diary of the war on Gaza.* Retrieved April 25, 2018, from Institute for Palestine Studies: http://www.palestine-studies.org/ar/resources/special-focus.

Ismail, A., Ghazi, H. F., Mohd. Saiboon, I., & Nurul'Ain, A. (2016). Disaster management: Identifying knowledge of emergency nurses and community health nurses and its predictors in Malaysia. Malaysian Journal of Public Health Medicine, 16(3), 66-74.

Labrague, L. J., Yboa, B. C., McEnroe–Petitte, D. M., Lobrino, L. R. and Brennan, M. G. (2016), Disaster Preparedness in Philippine Nurses. Journal of Nursing Scholarship, 48: 98-105. DOI:10.1111/jnu.12186

Labrague, L.J., Hammad, K., Gloe, D.S., McEnroe-Petitte, D.M., Fronda, D.C., Obeidat, A.A., Leocadio, M.C.,Cayaban, A.R. & Mirafuentes, E.C. (2018) Disaster preparedness among nurses: a systematic review of literature. *International Nursing Review* 65, 41– 53. https://doi.org/10.1111/inr.12369

Loke A, Fung O (2014). Nurses' Competencies in Disaster Nursing: Implications for Curriculum Development and Public Health. International Journal of Environmental Research and Public Health, 11(3), (pp. 3289-3303) . https://doi.org/10.3390/ijerph110303289.

Martono, M. (2019). Indonesian nurses' perception of disaster management preparedness. Chinese Journal of Traumatology 22 (2019) 41-46 https://doi.org/10.1016/j.cjtee.2018.09.002

Matlock, Taylor A., "Emergency Preparedness Competencies Among Nurses in Northwest Arkansas" (2017). The Eleanor Mann School of Nursing Undergraduate Honors Theses. 55. http://scholarworks.uark.edu/nursuht/55

McDonald, S. M. (2011), Perception: A Concept Analysis. International Journal of Nursing Terminologies and Classifications. DOI:10.1111/j.1744-618X.2011.01198.x

Mismanagement Reasons of the Projects Execution Phase - Scientific Figure on ResearchGate. Available from: https://www.researchgate.net/figure/Likert-scale-quintet-weights-Abdel-Fattah-2008_tbl4_332672041 [accessed 24 Nov, 2019]

MOH. (2018, August 12). *Israeli attacks on participants in peaceful return marches*. Retrieved August 15, 2018, from Ministry of Health :

http://www. moh.gov.ps/portal/

Moqat, M. (2013). *Shelter Damage Assessment Process and UNRWA's Preparedness for Response to Potential Disaster at Gaza Strip, Unpublished Master Thesis*. Palestine: The Islamic University - Gaza.

Najafi M, Ardalan A, Akbarisari A, et al. Demographic determinants of disaster

preparedness behaviors amongst Tehran inhabitants, Iran. PLoS Curr. 2015;7 (pii: ecurrents).

Nasrallah, R. M. (2017). The Reality of Overcrowding in Emergency Departments in the Ministry of Health In Gaza Strip: from Viewpoint of Healthcare Providers, published Master Thesis. Palestine: The Islamic University in Gaza

Natareno, Kathleen, "Disaster Knowledge and Awareness of Nurses Related to Triage in Mass Casualty Incidents" (2018). Master's Theses, Dissertations, Graduate Research and Major Papers Overview. 268.(pp. 1-68) https://digitalcommons.ric.edu/etd/268

Nofal, A. (2018). Knowledge, attitudes, and practices of emergency department staff towards disaster and emergency preparedness at tertiary health care hospital in central Saudi Arabia. Saudi Med J 2018; Vol. 39 (11): 1123-1129.

Noh, Y. J. (2017). Perception and Core Competencies of Disaster Nursing in South Korea. Journal of Nursing and Care, Vol.6(1) : pp. 1-6.

DOI: 10.4172/216711681000383

Okasha, A. (2004). *Post-war architecture.* Egypt: Cairo University. Omar, Ibraheem & Soltan, Esraa & El-Hosany, Wafaa. (2017). Emergency Nurses' Knowledge and Attitude towards Forensic Nursing at Suez Canal University Hospitals and Ismailia General Hospital. DOI: 10.13140/RG.2.2.18364.28806.

Omair, A. (2015): Selecting the appropriate study design for your research: Descriptive study designs. Journal of Health Specialties, 153-156

O'Sullivan, T.L., Dow, D., Turner, M.C., Lemyre, L., Corneil, W., Krewski, D., Phillips, K.P., & Amaratunga, C.A. (2008). Disaster and emergency management: Canadian nurses' perceptions of preparedness on hospital front lines. *Prehospital and disaster medicine, 23 3,* (pp.11-8) .

DOI: 10.1017/s1049023x00024043

Ozpulat, F., & Kabasakal, E. (2018). Knowledge Levels of Nursing Students on Disaster Nursing and Their State of Disaster Preparedness. International Journal of Medical Research & Health Sciences, 7(8): 165-174.

Öztekin, S. D., Larson, E. E., Akahoshi, M. and Öztekin, İ. (2016), Nurses' perceptions on disasters. Japan Journal of Nursing Science, 13: 391-401. DOI:10.1111/jjns.12121

Palestinian Central Bureau of Statistics, 2018. *Palestine in Figures 2017.* Ramallah – Palestine.

Palestinian Central Bureau of Statistics, 2019. Labour Force Survey: (October- December, 2018) Round, (Q4/2018). Press Report on the Labour Force Survey Results. Ramallah - Palestine.

Palestinian Civil Defense. (2010). *Annual report of the Directorate General of Civil Defense for the period 1-2009 till 31/12/2009.* palestine.

Peoples, K., Gebbie, K. , Hutton, A. (2016). An exploration of perceptions of disaster nursing and disaster preparedness among Australian nursing undergraduates. Health Emergency and Disaster Nursing, Volume 3 Issue 1 (pp.28–35). DOI https://doi.org/10.24298/hedn.2014-0013

Phakdeechanuan, K., Songwathana, P., and Sae-Sia, W., "Thai Nurses' Learning Needs Regarding Disaster Nursing: High Needs?," *Nurse Media Journal of Nursing*, vol. 5, no. 2, pp. 56 - 66, Dec. 2015. https://doi.org/10.14710/nmjn.v5i2.10529

PHIC. (2017). *Annual Health Report Palestine 2016.* palestine: Ministry of Health.

Pourvakhshoori, Negar & Khankeh, Hamid Reza & Mohammadi, Farahnaz. (2017). Emergency and Disaster Preparedness in Nurses: A Concept Analysis. Journal of Holistic Nursing and Midwifery. vol.27. pp.35-43.

DOI: 10.18869/acadpub.hnmj.27.1.35

Powers R, Daily E. International disaster nursing. New York, NY: Cambridge University Press. 2010.

Saidam, M. N. (2018). *The Role Perception and Preparedness of Emergency Nurses for Disaster Management at the Governmental Hospitals in Gaza Strip* : The Islamic University of Gaza. (pp. 1-147).

Seroney, G. C. (2015). The role of a nurse in disaster management at kapsabet district hospital: a global health concern. Baraton Interdisciplinary Research Journal, pp. 91-101.

Seyedin, H. (2015). Emergency Nurses' Requirements for Disaster Preparedness. Trauma Mon. , 20(4): e29033. doi: 10.5812/traumamon.29033

Shakalaih, S. (2016). Practice in disaster management through non-Governmental Organizations (NGOs) in Gaza Strip. Palestine: The Islamic University of Gaza.

Shammah A.A. (2018) Preparedness Assessment for Disaster Management Among Dhahran Al Janoub General Hospital Staff During Hazm Storm Support 1436/2015. Global journal of health science 10(7):87. https://doi. org/10.15344/2456-3498/2018/138.

Slepski L.A. (2005) Emergency preparedness: Concept development for nursing practice. Nursing Clinics 40: 419-430.

Tabiee Sh, Nakhaei M. Nurses' Preparedness for Disaster in South Khorasan Province, Iran. Health in Emergencies & Disasters Quarterly. 2016; 2(1):13-18. https://doi.org/10.18869/nrip.hdq.2.1.13

Taskiran, G. & Baykal, U. (2019) Nurses' disaster preparedness and core competencies in Turkey: a descriptive correlational design. International Nursing Review 66, 165–175. https://doi.org/10.1111/inr.12501

Taşkıran, G., & Baykal, T. Ü. (2017). Nurses' Perception and Core Competencies for Disaster Preparedness: A Study from the Western Region of Turkey. International Journal of Nursing and Health Sciences, Vol:11, No:7. 246.

The International Federation of Red Cross and Red Crescent Societie. Resilience: saving lives today, investing for tomorrow [Internet]. Geneva: International Federation of Red Cross and Red Crescent Societies; 2016 [Accessed 2016]. Available from: http://www.ifrc.org/Global/Documents/Secretariat/201610/

UN/ISDR.(2019). 2018: Extreme Weather Events Affected 60 Million people. Geneva: Center For Research on the Epidemiology of Disaster. Retrieved Jan 24, 2019, from International Strategy for Disaster Reduction: **خطأ! مرجع الارتباط التشعبي غير صحيح.**

Usher, K. , Mills, J. , West, C. , Casella, E. , Dorji, P. , Guo, A. , Koy, V. , Pego, G. , Phanpaseuth, S. , Phouthavong, O. , Sayami, J. , Lak, M. S., Sio, A. , Ullah, M. M., Sheng, Y. , Zang, Y. , Buettner, P. and Woods, C. (2015), Disaster preparedness of Asia–Pacific nurses. Nurs Health Sci, 17: 434-443.doi:10.1111/nhs.12211

Veenema, T. G. (Ed.). (2007). *Disaster nursing and emergency preparedness*. (2nd ed.). Springer Publishing Company. WDR%202016-FINAL_web.pdf

Warfield, C. (2008). The Disaster Management Cycle, available at:

http://www.gdrc.org/uem/disasters/1-dm_cycle.html, [Retrieved on 2-11-2014].

WHO and ICN. (2009). ICN Framework of Disaster Nursing Competencies.

WHO. (2007). Risk reduction and emergency preparedness: WHO six-year strategy for the health sector and community capacity development. Retrieved Feb 20, 2018, from World Health Organization:(http://www.who.int/hac/techguidance/ preparedness/emergency_ preparedness_eng.pdf.

Xu, Y., & Zeng, X. (2016). Necessity for disaster-related nursing competency training of emergency nurses in China. international journal of nursing sciences 3, 198-201. https://doi.org/10.1016/j.ijnss.2016.04.009

Annexes

Annex (1): Palestine map

Annexes (2): Nurses perceptions Questionnaire (Arabic version)

بداية أهديكم أطيب التحيات، ويطيب لي أن أضع بين أيديكم الاستبانة المرفقة التي تم تصميمها بهدف دراسة " **إدراك الممرضين عن مدي استعدادهم لإدارة الكوارث في المستشفيات الحكومية في قطاع غزة** " وذلك استكمالاً لمتطلبات الحصول على درجة الماجستير في إدارة التمريض من جامعة القدس أبو ديس –غزة.

لذا نأمل منكم التكرم بتعبئة الاستبانة بالإجابة على فقراتها بكل صراحة وموضوعية، علماً بأن آراءكم والمعلومات التي ستدلون بها ستكون محل اهتمام وعناية وستُستخدم لأغراض الدراسة والبحث العلمي فقط، وسيتم التعامل معها بكل سرية وعناية للتوصل إلى نتائج تهدف إلى تطوير الخدمات الصحية المقدمة في المستشفيات الحكومة في قطاع غزة".

ملاحظة/ يُدرج تحت مسمى الكوارث في الدراسة كل ما يُوقع خسائر وإصابات بشرية ومادية كبيرة، ومنها الحروب الإسرائيلية وإصابات مسيرات العودة.

الباحث / بيان إبراهيم شيخ العيد

جوال/0598975596

بسم الله الرحمن الرحيم

استبانة للممرضين العاملين في أقسام المستشفيات الحكومية في قطاع غزة

أولاً: البيانات الشخصية: من فضلك ضع علامة (✓) في المربع المناسب لك:

1. العمر: _____ سنة	2. الجنس: ☐ ذكر ☐أنثى	3.الحالة الاجتماعية: ☐ أعزب/ آنسة ☐ متزوج/ة ☐ أرمل/ة ☐ مطلق/ة	4.المستوى التعليمي: ☐ دبلوم ☐ بكالوريوس ☐ ماجستير ☐ دكتوراه
5. سنوات الخبرة: _____ سنة	6. مكان العمل (المستشفى): ☐ مستشفى الإندونيسي ☐مستشفى بيت حانون ☐ مستشفى الشفاء ☐ مستشفى الأقصى ☐ مستشفى ناصر ☐ مستشفى الأوروبي ☐ مستشفى النجار	7. مكان العمل (القسم): ☐اقسام العمليات ☐قسم الاستقبال والطواري ☐قسم العناية المركزة	8. مكان السكن: ☐شمال غزة ☐غزة ☐ المحافظة الوسطى ☐خانيونس ☐رفح

هل شاركت في مناورات خاصة بالكوارث داخل المستشفى؟

نعم ☐ لا ☐

هل تلقيت تعليمات سابقة ودورات بخصوص التأهب والاستعداد للكوارث وكيفية اداراتها والتعامل معها؟

نعم ☐ لا ☐

ثانيا: محاور الدراسة: يرجى التفضل بوضع إشارة (✓) أمام العبارة التي ترونها مناسبة وتمثل رأيكم وقناعتكم الشخصية لكل سؤال مما يأتي:

م	الفقرة	موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة
تصورات الممرضين حول معرفتهم عن إدارة الكوارث						
1	تلقيت خلال دراستي الجامعية معلومات كافية حول إدارة الكوارث .					
2	أنا امتلك المعرفة اللازمة حول إدارة الكوارث.					
3	أنا على دراية بالمصطلحات المتعلقة بالكوارث وإدارتها.					
4	يتم توجيهي باستمرار نحو المعرفة بالكوارث من خلال التجارب السابقة من قبل إدارة المستشفى.					
5	انا امتلك المعرفة بالكوارث المحتملة في مجتمعي (كالحروب).					
6	أهتم بالوسائل التعليمية (المقالات، الدورات، البرامج) حول إدارة الكوارث .					
7	أعرف حدود معرفتي ومهاراتي وسلطتي كممرض/ة للتصرف في حالات الكوارث.					
8	المعرفة الأولية لطبيعة الكارثة تزيد من قدرتي على التعامل معها.					
9	أشارك في الأنشطة التعليمية (مؤتمرات ، دورات ، ورشات عمل ، محاضرات .... إلخ) التي تتعلق بادارة الكوارث في مكان عملي.					
10	أهتم بالدروس التعليمية حول التأهب للكوارث التي تتعلق بشكل خاص بوضع مجتمعي .					
11	أعرف مكان الأبحاث و المعلومات ذات الصلة والمتعلقة بالتأهب لإدارة الكوارث ويمكنني الوصول إليها بسهولة، لسد النقص في معرفتي حولها.					
12	يوجد قائمة لجهات الاتصال المهمة في حالة حدوث كارثة					
13	يمكنني تحديد الموارد الهامة للاستجابة للكوارث في القسم الخاص بي.					
تصورات الممرضين حول أدوارهم في إدارة الكوارث						
14	الممرضون يلعبون دوراً رئيسياً في حالات الكوارث.					
15	لدي معرفة بالدور والمهام الموكلة إلى أثناء الكوارث					
16	لدي ثقة ودراية في الاستجابة الفعالة لإدارة الكوارث .					
17	لدي القدرة على المشاركة في خطة الطوارئ في مكان عملي.					
18	لدي القدرة على الموازنة بين العاطفة والعمل بمهنية أثناء وقوع الكارثة.					
19	يتم تقديم الرعاية الصحية المناسبة للمرضى بغض النظر عن العمر والجنس ونوع الإصابة.					
20	الدور الرئيسي للممرضين أثناء الكوارث هو توفير التقييم العام، ورعاية المرضى، والفرز ، والاستشارة الأولية، والرعاية النفسية، والعمل كقادة للفريق.					
21	أثناء وقوع الكوارث، يكون الممرضين مسؤولين عن الوقاية والمراقبة والاستجابة السريرية.					

22	يمكن للممرضين التواصل بفعالية مع المرضى وأسرهم لتوفير العلاجات في حالات الطوارئ.					
مهارات الممرضين في التعامل مع الكوارث						
23	يمكنني كممرض مؤهل تحديد أنواع الكوارث.					
24	لديّ مهارة مناسبة وكافية لتوفير الرعاية التمريضية أثناء الكوارث في الوقت المناسب والشكل الصحيح					
25	لدي القدرة على التعامل مع أعداد كبيرة من المصابين في مكان عملي أثناء الكوارث.					
26	امتلك مهارة جيدة في فرز الحالات أثناء الكوارث					
27	أنا على دراية بمبادئ الرعاية التمريضية في حالات الكوارث					
28	امتلك المهارة المناسبة لمنع انتقال العدوى بين المصابين أثناء التعامل معهم وقت الكوارث.					
29	يمكنني استخدام معدات الحماية الشخصية (واقي عينين، كمامة، وما إلى ذلك) بشكل صحيح أثناء الإصابات وقت الكوارث.					
30	المعرفة الأولية لطبيعة الكارثة تزيد من قدرتي علي التعامل معها.					
31	أشعر بالثقة بشكل معقول في قدرتي علي رعاية المرضي بشكل مستقل دون إشراف الطبيب في حالات الكوارث					
32	لدي القدرة على الاستخدام الأمثل للموارد المتاحة في مكان عملي وقت الكوارث.					
33	أستطيع وأشعر بالثقة في توفير التثقيف الصحي في حالة التوتر والقلق الشديد لدى المرضي.					
34	لدي القدرة على اكتساب مهارات جديدة لإنجاز عملي بشكل صحيح وقت الكوارث.					
35	أشارك في الدورات التدريبية للكوارث في مكان عملي.					
مدى استعداد الممرضين للكوارث						
36	أعتبر نفسي مستعدًا لإدارة الكوارث.					
37	أمتلك المعرفة الكاملة بخطة الكوارث لمكان عملي.					
38	لقد تدربت على التعامل مع الإصابات أثناء الكوارث.					
39	لدي استعداد للعمل خلال الأحداث الغير متوقعة خارج خطة الطوارئ في مكان عملي أثناء الكوارث					
40	أتدرب بانتظام (التحق بالدورات التدريبية) للتعامل مع الكوارث.					
41	نحن على دراية باستمرار بالتحديثات علي خطة الطوارئ في مكان عملي ويتم إعلامنا بخصوص هذه التحديثات.					
42	أنا مستعد تمامًا للتعامل مع عدد كبير من الإصابات والوفيات في مكان عملي أثناء الكوارث.					
43	يتم محاكاة الكوارث وآليات المواجهة المنفذة في مكان عملي.					
44	أشعر بالثقة بشكل معقول بقدراتي على أن أكون عضواً في فريق إدارة الكوارث					
45	أشعر بثقة معقولة بأنني قادر على رعاية المرضى بشكل مستقل في حالات الكوارث.					

46	يمكنني إدارة الأعراض وردة الفعل الشائعة للناجين من الكوارث ومعرفة التدخلات النفسية للمرضى الذين يعانون من الصدمة النفسية أو الجسدية.					
استعداد المستشفى لإدارة الكوارث						
47	هناك خطة طوارئ داخل المستشفى لإدارة جميع أنواع الكوارث.					
48	تهتم إدارة المستشفى بتطوير مهارات وقدرات موظفيها على التعامل مع الكوارث.					
49	المستشفى مجهز دائما وعلى استعداد لإدارة الكوارث في حالة حدوثها.					
50	توفير مجموعة من لوازم الإسعافات الأولية وتدريب الأشخاص على تقديم الإسعافات الأولية.					
51	التدريبات الدورية على الإخلاء و إدارة الكوارث .					
52	عدد الأسرة يكفي لسد الاحتياجات في حالات الطوارئ حتى نهاية الكارثة.					
53	هناك ما يكفي من الكراسي المتحركة المناسبة لنقل المرضى. في حالة حدوث أي كارثة.					
54	المختبرات مجهزة ومستعدة دائمة لأي حدث طارئ داخل المستشفيات وقادرة على تقديم الخدمات على أكمل وجه.					
55	الصيدليات مجهزة وهناك قائمة تشمل الأدوية اللازمة للاستخدام في حالة حدوث أي كارثة.					
56	يتم مراجعة المخزون (الادوية ، المستلزمات ، المستهلكات ،...الخ) بشكل دوري لإكمال أوجه القصور أو استبدال المستلزمات عند انتهاء الصلاحية.					
57	هناك خطة لنظام الممرضين المطلوبين لطلب المساعدة عند وقوع كارثة.					
58	وضع الخطط المناسبة ليستمر عمل المختبرات في أعقاب حدوث الطوارئ/ الكوارث .					
59	جميع سيارات الإسعاف مجهزة بمعدات حديثة ومناسبة لعلاج المرضي بشكل مناسب.					
60	يمكن استدعاء سيارة الإسعاف (من / إلى) المستشفى بسهولة.					
61	هناك خطة داخل المستشفى لنظام المرور تستخدم للسماح لسيارة الإسعاف بسهولة التحرك في حالات الطوارئ.					

Annex (3): Nurses perceptions Questionnaire (English Version)

Title of research

Nurses' Perceptions of their Preparedness for Disaster Management at Governmental Hospitals in Gaza Strip.

General goal

The purpose of the study is to assess nurses' perception of their knowledge, skills, roles and preparedness for disaster management and the effect of hospital factors on preparedness at governmental hospitals in Gaza Strip.

Specific Objectives

1. To assess the nurses' perceptions of their preparedness for disaster management at governmental hospitals in Gaza Strip.
2. To assess nurses' knowledge, skills and roles for disaster preparedness at governmental hospitals in Gaza Strip.
3. To identify the hospitals factors that effect on preparedness for disaster management among nurses.
4. To associate the nurses' perceptions regarding their knowledge, skills and preparedness for disaster management with their demographic variables such as age, qualification, and years of experience etc.
5. To suggest recommendations that may contribute in improving of nurses' preparedness for disaster.

A questionnaire for nurses in the departments

First: Personal data: Please tick (✓) in the box that is right for you:

1. Age: _____ Year	**2. Gender:** □ Male □ Female	**3. Social status:** Marital status: □ Single □ Engaged □ Married □ Divorce □ Widowed	4. **Education level:** □ Diploma □ Bachelor's degree □ Master □ Ph.D. □ Other (specify)…….
5. Years of experience: _____ Year	**6. Place of work:** □ Indonesian Hospital □ Beit Hanoun Hospital □ Shifa Hospital □ Al-Aqsa Hospital □ Nasser Hospital □ European Hospital □ Najjar Hospital	**7. Place of residence:** □ North Gaza □ Gaza □ Central Governorate □ Khan Yunis □ Rafah	**Workplace**: □ Operations Departments □ Reception and Emergency Section □ Department of intensive care □ Department of Surgery

Have you participated in maneuver inside the hospital?

□ **Yes** □ **No**

Have you received previous instructions and courses on disaster preparedness and how to manage and deal with them?

□ **Yes** □ **No**

Second: Study Points: Please put a reference (✓) in front of the statement that you think is appropriate and represent your opinion.

No.	Paragraph	Strongly agree	agree	Un-certain	Dis-agree	Strong disagree
Nurses' perceptions of their knowledge about disaster management						
1	During my undergraduate studies, I received sufficient information on disasters and their management.					
2	I have the necessary knowledge about disasters and their management.					
3	I am familiar with the terminology related to disasters and their management.					
4	I am constantly directed towards knowledge of disasters through past experiences by the hospital management.					
5	I have knowledge of the potential disasters in my society (wars, earthquakes, etc.)					
6	I am interested in teaching aids (articles, courses, programs) on disasters and their management.					
7	I know the limits of my knowledge, skills, and authority as a nurse to act in disaster situations.					
8	The initial knowledge of the nature of the disaster increases my ability to deal with it.					
9	I participate in disaster courses, conferences or exercises at my workplace.					
10	I would be interested in educational classes on disaster preparedness that relate specifically to my community situation.					
11	I know where to find relevant researches or information related to disaster preparedness and management to fill in gaps in my knowledge and is easily accessible.					
12	There is a list of important contacts in the event of a disaster situation.					
13	I can identify critical resources for disaster response in my department					
Nurses' perceptions of their roles for disaster management						
14	Nurses are key players in a disaster.					
15	I have knowledge of the role and tasks assigned to me during disasters.					
16	I have a confident and knowledgeable in effectively responding to a disaster					
17	I have the ability to participate in an					

	emergency plan in my workplace.					
18	I have the ability to balance passion and work professionally during a disaster.					
19	Health care provided to patients regardless of age and gender and the type of infection					
20	The main role of nurses during disasters is to provide general assessment, caring for patients, triage, initial consultation, psychological care, and act as team leaders.					
21	During a disaster, nurses are responsible for prevention, surveillance & clinical response.					
22	Nurses can effectively communicate with patients, families and other clinicians to provide therapies during emergencies					
Nurses' perceptions of their skills for disaster management						
23	As a qualified nurse I can identify types of disasters.					
24	I have good and sufficient skill to provide nursing care during disasters in the right time and form.					
25	I have the ability to cope with large numbers of injured people in my workplace during disasters.					
26	I have good skill in sort cases during disasters.					
27	I am familiar with the treatment principles disaster nursing					
28	I have the skill to prevent transmission among patients.					
29	I can use personal protection equipment (puffs, muzzle, etc.) properly during injuries.					
30	Initial knowledge of the nature of the disaster increases my ability to deal with it					
31	I feel reasonably confident in my ability to take care of patients independently without the supervision of a disaster					
32	I have the ability to make optimal use of the resources available in my workplace.					
33	I would feel confident in providing health education in case of stress.					
34	I have the ability to acquire new skills to get my job done right.					
35	I participate in disaster drills and exercises at my workplace.					
Nurses' perceptions of their preparedness for disaster management						
36	I consider myself prepared for the management of disasters.					

37	I have full knowledge of the disaster plan for my workplace.					
38	I have been trained to deal with injuries during disasters.					
39	I have a preparedness to act during unexpected events outside the emergency plan in my workplace					
40	I regularly review exercises and training for disasters.					
41	I am constantly updated on emergency plan updates in my workplace.					
42	I am fully prepared to deal properly with a large number of injuries and deaths in my workplace during disasters.					
43	Simulated disaster simulations and coping mechanisms carried out in a workplace.					
44	I would feel reasonably confident in my abilities to be a member of a disaster management team					
45	I feel reasonably confident that I can care for patients independently in a disaster situation					
46	I can manage the symptoms and common interactions of disaster survivors and know about psychological interventions for patients with trauma or physical trauma.					
Hospital Readiness to Manage Disaster						
47	There is an emergency plan within the hospital to manage all kinds of disasters.					
48	The hospital management is concerned with developing the skills and abilities of its staff in dealing with disasters.					
49	The hospital environment is always equipped and ready to manage disasters and face any disaster may occur.					
50	Provision of first-aid kits and training of persons to provide first aid.					
51	Periodic exercises on evacuation and disaster management.					
52	The number of beds enough in emergency conditions until the end of the disaster.					
53	Enough appropriate wheelchairs used to transport patients in case of any disaster.					
54	The laboratories are equipped and ready for any emergency event within the hospitals and are able to provide the services to the fullest.					
55	Pharmacies are equipped and there is a list that includes medicines for use in case of any disaster.					

56	Inventory reviewed periodically to complete the deficiencies or replace the boat on the expiry.					
57	There is a plan for a system of wanted nurses to call for help when a disaster.					
58	Develop plans to continue laboratory work in the aftermath of emergencies / disasters.					
59	All ambulance cars are equipped with modern equipment and Suitable for treating patients appropriately.					
60	Can call the car of ambulance to and from the hospital easily					
61	There is Traffic system hospital plan used when emergency ambulance allowed to easily moving.					

Annex (4): List of panel expert Names

No.	Name	Place of work
1.	Dr. Hamza Abdel Jawad	Palestine College of Nursing
2.	Dr. Wael Mekkawy	Al-Amal Hospital, PRCS
3.	Dr. Hatem Al-Dbbabkeh	University college of ability development, PRCS
4.	Dr. Abed Alrahaman AL-Hames	Palestine College of Nursing
5.	Dr. Yousef Awad	University of Palestine
6.	Dr. Mohammed Al-Jerjawy	Palestine College of Nursing
7.	Dr. Abedel Majed Thabet	Palestine College of Nursing

Annex (5): Helsinki Committee

المجلس الفلسطيني للبحث الصحي

Palestinian Health Research Council

تعزيز النظام الصحي الفلسطيني من خلال مأسسة استخدام المعلومات البحثية في صنع القرار

Developing the Palestinian health system through institutionalizing the use of information in decision making

Helsinki Committee

For Ethical Approval

Date: 2019/10/7 **Number:** PHRC/HC/625/19

Name: Bayan I. Shikh Aleid الاسم:

We would like to inform you that the committee had discussed the proposal of your study about:

نفيدكم علماً بأن اللجنة قد ناقشت مقترح دراستكم حول:

Nurses Perceptions of their Preparedness for Disaster Management at Governmental Hospitals in Gaza Strip

The committee has decided to approve the above mentioned research. Approval number PHRC/HC/625/19 in its meeting on 2019/10/7

و قد قررت الموافقة على البحث المذكور عاليه بالرقم والتاريخ المذكوران عاليه

Signature

Member 7/10/2019

Chairman

Member Dr. Amal

Dr. Yahia Abed

Genral Conditions:-

1. Valid for 2 years from the date of approval.
2. It is necessary to notify the committee of any change in the approved study protocol.
3. The committee appreciates receiving a copy of your final research when completed.

Specific Conditions:-

E-Mail:pal.phrc@gmail.com

Gaza - Palestine غزة - فلسطين

شارع النصر - مفترق العيون

Annex (6): Permission from MOH

State of Palestine
Ministry of health

دولة فلسطين
وزارة الصحة

السيد : رامي عيد سليمان العبادله المحترم

التاريخ:18/11/2019
رقم المراسلة 395695

مدير عام بالوزارة /الإدارة العامة لتنمية القوى البشرية ـ /وزارة الصحة

السلام عليكم ,,,

الموضوع/ تسهيل مهمة الباحث// بيان شيخ العيد

التفاصيل //
بخصوص الموضوع أعلاه، يرجى تسهيل مهمة الباحث/ بيان ابراهيم شيخ العيد
الملتحق ببرنامج ماجستير التمريض – تخصص إدارة التمريض – جامعة القدس أبوديس في إجراء بحث بعنوان:ـ
"Nurses Perceptions of their Preparedness for Disaster Management at Governmental Hospitals in Gaza Strip"
حيث الباحث بحاجة لتعبئة استبانة من عدد من الممرضين في أقسام الطوارئ والعناية المركزة والعمليات العاملين في مستشفيات قطاع غزة (مجمع الشفاء الطبي، مستشفى غزة الأوربي، مجمع ناصر الطبي، مستشفى شهداء الأقصى، مستشفى الأندونيسي، مستشفى بيت حانون، مستشفى النجار)، بما لا يتعارض مع مصلحة العمل وضمن أخلاقيات البحث العلمي، ودون تحمل الوزارة أي أعباء أو مسئولية.
وتفضلوا بقبول التحية والتقدير،،،
ملاحظة /
1. تسهيل المهمة الخاص بالدراسة أعلاه صالح لمدة 3 أشهر من تاريخه.
2. البحث المذكور حصل على موافقة لجنه اخلاقيات البحث الصحي (لجنة هلسنكي)

محمد ابراهيم محمد السرساوي
مدير دائرة/الإدارة العامة لتنمية القوى البشرية ـ

التحويلات

Annexes (7): The correlation coefficient between each items of "Nurses' perceptions of their knowledge about disaster management" domain and the total score of the domain.

No.	Nurses' perceptions of their knowledge about disaster management	Pearson Correlation Coefficient
1.	During my undergraduate studies, I received sufficient information on disasters and their management.	.739**
2.	I have the necessary knowledge about disasters and their management.	.657**
3.	I am familiar with the terminology related to disasters and their management.	.616**
4.	I am constantly directed towards knowledge of disasters through past experiences by the hospital management.	.733**
5.	I have knowledge of the potential disasters in my society (wars, earthquakes, etc.)	.542**
6.	I am interested in teaching aids (articles, courses, programs) on disasters and their management.	.599**
7.	I know the limits of my knowledge, skills, and authority as a nurse to act in disaster situations.	.672**
8.	The initial knowledge of the nature of the disaster increases my ability to deal with it.	.400*
9.	I participate in disaster courses, conferences or exercises at my workplace.	.515**
10.	I would be interested in educational classes on disaster preparedness that relate specifically to my community situation	.565**
11.	I know where to find relevant researches or information related to disaster preparedness and management to fill in gaps in my knowledge and is easily accessible.	.375*
12.	There is a list of important contacts in the event of a disaster situation.	.683**
13.	I can identify critical resources for disaster response in my department	.667**

(**)Correlation is significant at the(0.01) level
(*) Correlation is significant at the (0.05) level

Annexes (8): The correlation coefficient between each items of "Nurses' perceptions of their roles for disaster management" domain and the total score of the domain.

No.	Nurses' perceptions of their roles for disaster management	Pearson Correlation Coefficient
1.	Nurses are key players in a disaster.	.448**
2.	I have knowledge of the role and tasks assigned to me during disasters.	.721**
3.	I have a confident and knowledgeable in effectively responding to a disaster	.748**
4.	I have the ability to participate in an emergency plan in my workplace.	.767**
5.	I have the ability to balance passion and work professionally during a disaster.	.677**
6.	Health care provided to patients regardless of age and gender and the type of infection	.477**
7.	The main role of nurses during disasters is to provide general assessment, caring for patients, triage, initial consultation, psychological care, and act as team leaders.	.593**
8.	During a disaster, nurses are responsible for prevention, surveillance & clinical response.	.743**
9.	Nurses can effectively communicate with patients, families and other clinicians to provide therapies during emergencies	.541**

(**)Correlation is significant at the(0.01) level

(*) Correlation is significant at the (0.05) level

Annexes (9): The correlation coefficient between each items of "The Nurses' perceptions of their skills for disaster management" domain and the total score of the domain.

No.	Nurses' perceptions of their skills for disaster management	Pearson Correlation Coefficient
1.	As a qualified nurse I can identify types of disasters	.499**
2.	I have good and sufficient skill to provide nursing care during disasters in the right time and form.	.575**
3.	I have the ability to cope with large numbers of injured people in my workplace during disasters.	.664**
4.	I have good skill in sort cases during disasters.	.725**
5.	I am familiar with the treatment principles disaster nursing	.639**
6.	I have the skill to prevent transmission among patients.	.708**
7.	I can use personal protection equipment (puffs, muzzle, etc.) properly during injuries.	.391*
8.	Initial knowledge of the nature of the disaster increases my ability to deal with it	.467**
9.	I feel reasonably confident in my ability to take care of patients independently without the supervision of a disaster	.370*
10.	I have the ability to make optimal use of the resources available in my workplace.	.577**
11.	I would feel confident in providing health education in case of stress.	.773**
12.	I have the ability to acquire new skills to get my job done right.	.563**
13.	I participate in disaster drills and exercises at my workplace.	.698**

(**)Correlation is significant at the(0.01) level

(*) Correlation is significant at the (0.05) level

Annexes (10): The correlation coefficient between each items of "Nurses' perceptions of their preparedness for disaster management" domain and the total score of the domain

No.	Nurses' perceptions of their preparedness for disaster management	Pearson Correlation Coefficient
1.	I consider myself prepared for the management of disasters.	.767**
2.	I have full knowledge of the disaster plan for my workplace.	.532**
3.	I have been trained to deal with injuries during disasters.	.735**
4.	I have a preparedness to act during unexpected events outside the emergency plan in my workplace	.747**
5.	I regularly review exercises and training for disasters.	.557**
6.	I am constantly updated on emergency plan updates in my workplace.	.721**
7.	I am fully prepared to deal properly with a large number of injuries and deaths in my workplace during disasters.	.621**
8.	Simulated disaster simulations and coping mechanisms carried out in a workplace.	.766**
9.	I would feel reasonably confident in my abilities to be a member of a disaster management team	.839**
10.	I feel reasonably confident that I can care for patients independently in a disaster situation	.698**
11.	I can manage the symptoms and common interactions of disaster survivors and know about psychological interventions for patients with trauma or physical trauma.	.590**

(**)Correlation is significant at the(0.01) level

(*) Correlation is significant at the (0.05) level

Annexes (11): The correlation coefficient between each items of "Hospital Readiness to Manage Disaster" domain and the total score of the domain.

No.	Hospital Readiness to Manage Disaster	Pearson Correlation Coefficient
1.	There is an emergency plan within the hospital to manage all kinds of disasters.	.314*
2.	The hospital management is concerned with developing the skills and abilities of its staff in dealing with disasters.	.709**
3.	The hospital environment is always equipped and ready to manage disasters and face any disaster may occur.	.694**
4.	Provision of first-aid kits and training of persons to provide first aid.	.852**
5.	Periodic exercises on evacuation and disaster management.	.527**
6.	The number of beds enough in emergency conditions until the end of the disaster.	.698**
7.	Enough appropriate wheelchairs used to transport patients in case of any disaster.	.797**
8.	The laboratories are equipped and ready for any emergency event within the hospitals and are able to provide the services to the fullest.	.811**
9.	Pharmacies are equipped and there is a list that includes medicines for use in case of any disaster.	.807**
10.	Inventory reviewed periodically to complete the deficiencies or replace the boat on the expiry.	.783**
11.	There is a plan for a system of wanted nurses to call for help when a disaster.	.618**
12.	Develop plans to continue laboratory work in the aftermath of emergencies / disasters.	.496**
13.	All ambulance cars are equipped with modern equipment and Suitable for treating patients appropriately.	.584**
14.	Can call the car of ambulance to and from the hospital easily	.694**
15.	There is Traffic system hospital plan used when emergency ambulance allowed to easily moving.	.852**

(**)Correlation is significant at the(0.01) level

(*) Correlation is significant at the (0.05) level

Annex (12): The correlation coefficient to total score of domains.

No.	Domains	Pearson Correlation Coefficient
1.	Nurses' knowledge of disasters	.846**
2.	The skills of nurses in dealing with disasters	.653**
3.	The role of nurses during disasters	.734**
4.	Nurses' preparedness for disasters1	.897**
5.	Hospital Readiness to Manage Disaster	.791**

(**)Correlation is significant at the(0.01) level

(*) Correlation is significant at the (0.05) level

Annex (13): Time table

Year	**2019**				
Month / **Activity**	Jul.	Aug.	Sep.	Oct.	Nov.
Preparation and submission of the research proposal.	X				
Design and arbitration of the questionnaire.		X			
Obtaining ethical approval from MOH and Helsinki.			X		
Piloting, entry, and analysis of the pilot sample.				X	
Data collection and Distribution of questionnaire.				X	
Entry and statistical analysis of the full sample.				X	
Data interpretation and discussion of the study results.				X	
Entry and statistical analysis of the full sample.					X
Data interpretation and discussion of the study results.					X
Research and abstract writing.					X

Annex (14): Differences in nurses perceptions domains about disaster management with regard to and age group.

Topics	Age	(J) Age	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Nurses' perceptions of their roles for disaster management	20-25	26-35	5.911*	1.284	.000	2.30	9.52
		36-50	6.991*	1.377	.000	3.12	10.86
		more than 50 years	4.744	1.926	.111	-.68-	10.16
	26-35	20-25	-5.911-*	1.284	.000	-9.52-	-2.30-
		36-50	1.080	.721	.524	-.95-	3.11
		more than 50 years	-1.166-	1.528	.900	-5.47-	3.13
	36-50	20-25	-6.991-*	1.377	.000	-10.86-	-3.12-
		26-35	-1.080-	.721	.524	-3.11-	.95
		more than 50 years	-2.247-	1.607	.583	-6.77-	2.27
	more than 50 years	20-25	-4.744-	1.926	.111	-10.16-	.68
		26-35	1.166	1.528	.900	-3.13-	5.47
		36-50	2.247	1.607	.583	-2.27-	6.77
Nurses' perceptions of their skills for disaster management	20-25	26-35	4.782	1.714	.053	-.04-	9.60
		36-50	7.904*	1.838	.000	2.73	13.08
		more than 50 years	7.063	2.571	.059	-.17-	14.30
	26-35	20-25	-4.782-	1.714	.053	-9.60-	.04
		36-50	3.122*	.962	.016	.41	5.83
		more than 50 years	2.281	2.040	.741	-3.46-	8.02
	36-50	20-25	-7.904-*	1.838	.000	-13.08-	-2.73-
		26-35	-3.122-*	.962	.016	-5.83-	-.41-
		more than 50 years	-.841-	2.145	.985	-6.88-	5.19
	more than 50 years	20-25	-7.063-	2.571	.059	-14.30-	.17
		26-35	-2.281-	2.040	.741	-8.02-	3.46
		36-50	.841	2.145	.985	-5.19-	6.88

* Means differences are significant at $\alpha = 0.05$

Annex (15): Differences in nurses perceptions domains about disaster management with regard to education level.

Domain	Education level		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Lower Bound
Hospital Readiness to Manage Disaster	Diploma	Bachelor	**5.255***	1.688	.009	1.10	9.41
		Master	1.936	3.064	.819	-5.61-	9.48
	Bachelor	Diploma	**-5.255-***	1.688	.009	-9.41-	-1.10-
		Master	-3.320-	2.731	.479	-10.04-	3.40
	Master	Diploma	-1.936-	3.064	.819	-9.48-	5.61
		Bachelor	3.320	2.731	.479	-3.40-	10.04

* Means differences are significant at $\alpha = 0.05$

Annex (16): Differences in nurses perceptions domains about disaster management with regard to years of experience.

Domains	Years of experience		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Lower Bound
Nurses' perceptions of their roles for disaster management	1-5 YEAR	6-10 YEAR	2.201	.783	.050	.00	4.41
		11-15 YEAR	.107	.914	1.00	-2.46-	2.68
		more than 15 years	-1.571-	1.073	.544	-4.59-	1.45
	6-10 YEAR	1-5 YEAR	-2.201-	.783	.050	-4.41-	.00
		11-15 YEAR	-2.094-	.806	.083	-4.36-	.17
		more than 15 years	**-3.772-***	.982	.002	-6.54-	-1.01-
	11-15 YEAR	1-5 YEAR	-.107-	.914	1.00	-2.68-	2.46
		6-10 YEAR	2.094	.806	.083	-.17-	4.36
		more than 15 years	-1.678-	1.089	.500	-4.74-	1.39
	more than 15 years	1-5 YEAR	1.571	1.073	.544	-1.45-	4.59
		6-10 YEAR	**3.772***	.982	.002	1.01	6.54
		11-15 YEAR	1.678	1.089	.500	-1.39-	4.74
Hospital Readiness to Manage Disaster	1-5 YEAR	6-10 YEAR	-3.217-	1.536	.225	-7.54-	1.10
		11-15 YEAR	**-7.065-***	1.791	.002	-12.11-	-2.03-
		more than 15 years	.206	2.103	1.000	-5.71-	6.12
	6-10 YEAR	1-5 YEAR	3.217	1.536	.225	-1.10-	7.54
		11-15 YEAR	-3.848-	1.579	.117	-8.29-	.59
		more than 15 years	3.423	1.926	.370	-2.00-	8.84
	11-15 YEAR	1-5 YEAR	**7.065***	1.791	.002	2.03	12.11
		6-10 YEAR	3.848	1.579	.117	-.59-	8.29
		more than 15 years	**7.271***	2.135	.010	1.26	13.28
	more than 15 years	1-5 YEAR	-.206-	2.103	1.000	-6.12-	5.71
		6-10 YEAR	-3.423-	1.926	.370	-8.84-	2.00
		11-15 YEAR	**-7.271-***	2.135	.010	-13.28-	-1.26-
Total	1-5 YEAR	6-10 YEAR	-2.340-	3.249	.915	-11.48-	6.80
		11-15 YEAR	**-14.724-***	3.790	.002	-25.39-	-4.06-
		more than 15 years	-7.739-	4.450	.390	-20.26-	4.78
	6-10 YEAR	1-5 YEAR	2.340	3.249	.915	-6.80-	11.48
		11-15 YEAR	**-12.384-***	3.341	.004	-21.78-	-2.98-
		more than 15 years	-5.400-	4.075	.625	-16.86-	6.06
	11-15 YEAR	1-5 YEAR	**14.724***	3.790	.002	4.06	25.39
		6-10 YEAR	**12.384***	3.341	.004	2.98	21.78
		more than 15 years	6.984	4.518	.497	-5.73-	19.70
	more than 15 years	1-5 YEAR	7.739	4.450	.390	-4.78-	20.26
		6-10 YEAR	5.400	4.075	.625	-6.06-	16.86
		11-15 YEAR	-6.984-	4.518	.497	-19.70-	5.73

* Means differences are significant at $\alpha = 0.05$

Annex (17): Differences in nurses perceptions domains about disaster management with regard to hospital workplace.

Domain	Workplace (Hospital)		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Lower Bound
Nurses' perceptions of their roles for disaster management	Al-Shifa Hospital	Indonesian Hospital	-.654-	1.051	.999	-4.42-	3.11
		Beit Hanoun Hospital	-1.043-	1.343	.996	-5.85-	3.76
		Al Aqsa Hospital	-1.210-	1.034	.967	-4.91-	2.49
		Nasser Hospital	-1.772-	.965	.760	-5.22-	1.68
		European Gaza Hospital	**-3.910-***	1.018	.025	-7.55-	-.27-
		Al-Najjar Hospital	-2.864-	1.172	.429	-7.06-	1.33
	European Gaza Hospital	Indonesian Hospital	3.256	1.153	.244	-.87-	7.38
		Beit Hanoun Hospital	2.867	1.424	.670	-2.23-	7.96
		Al-Shifa Hospital	**3.910***	1.018	.025	.27	7.55
		Al Aqsa Hospital	2.700	1.137	.466	-1.37-	6.77
		Nasser Hospital	2.138	1.074	.682	-1.71-	5.98
		Al- Najjar Hospital	1.046	1.264	.995	-3.48-	5.57

* Means differences are significant at $\alpha = 0.05$

العنوان: إدراك الممرضين عن مدي استعدادهم لإدارة الكوارث في المستشفيات الحكومية في قطاع غزة.

إعداد الباحث: بيان شيخ العيد

إشراف: د. معتصم سعيد صلاح

الملخص:

تعتبر الكوارث حدثًا غير متوقع يحدث في أي مكان في العالم حيث لها تأثير كبير على الأفراد والأسر والمجتمعات، ويشكل هذا تحديًا فريدًا لكل مرفق الرعاية الطبية من حيث البنية التحتية والقدرة والاستعداد. الممرضون أعضاء مهمون في فريق الكوارث ؛ أنهم يلعبون دورا محوريا في التأهب للكوارث وإدارتها. تهدف هذه الدراسة إلى تقييم مدى إدراك الممرضين لمعرفتهم ومهاراتهم وأدوارهم واستعدادهم لإدارة الكوارث ومدى استعداد المستشفيات لإدارة الكوارث في المستشفيات الحكومية في قطاع غزة. تم استخدام تصميم مستعرض وصفي تحليلي. استخدم الباحث المنهج الوصفي التحليلي للوصول إلى النتائج من خلال تصميم استبيان للدراسة. يتكون مجتمع الدراسة من 320 ممرضة يعملون في الأقسام التالية: (أقسام وحدات العناية المركزة ، أقسام العمليات ، أقسام الطوارئ والاستقبال) في المستشفيات الحكومية في قطاع غزة. حيث أظهرت النتائج أن معظم الدراسة كانت تتراوح بين 26 و 35 عامًا (66.42٪) ،و أن معظمهم من الذكور ومتزوجين. ومعظمهم حاصلون على درجة البكالوريوس بنسبة(79.48 ٪) ، وأكثرهم لديهم خبرة بين 6–10 سنوات بنسبة (43.38 ٪). بالإضافة إلى ذلك ، كانت أكبر نسبة من الممرضات المشاركين في عينة الدراسة من سكان مدينة غزة بنسبة (26.49 ٪) من حجم العينة. في النهاية ، تبين أن الممرضون في قسم العمليات لديهم أعلى نسبة من المشاركين بنسبة (39.18 ٪). فيما يتعلق بمجالات الدراسة ، أظهرت النتائج أن مجال " إدراك الممرضون عن مهاراتهم في إدارة الكوارث "حصل على أعلى الدرجات (75 ٪) يليه مجال "إدراك الممرضون عن استعدادهم لإدارة الكوارث" (72.6 ٪) ، "مجال إدراك الممرضون عن

أدوارهـم فـي إدارة الكـوارث" (72.2٪) ، " مجـال إدراك الممرضـون عـن معـرفتهم لإدارة الكـوارث " (71.1 ٪) ، في حين أن مجال" استعداد المستشفى لإدارة الكوارث "الأخير (65.6٪). كانت هناك فـروق ذات دلالـة إحصـائية بـين اسـتجابات الممرضـون فيمـا يتعلـق فـي(فئـتهم العمريـة) و (الـدور) و (المهارة) ، والفروق ذات دلالة إحصائية بين استجابات الممرضون فيما يتعلق في (مستوى تعليمهم) و (اسـتعداد المستشـفى) ، فـروق ذات دلالـة إحصـائية بـين اسـتجابات الممرضـون فيمـا يتعلـق فـي (سنواتهم من الخبرة) و (الدور) و (استعداد للمستشفى) ، فروق ذات دلالـة إحصـائية بين استجابات الممرضون فيما يتعلق في (أماكن العمل بالمستشفى) و (الدور). كشفت الدراسة أن هناك مستوى عال من إدراك الممرضـون لمعرفتهم ومهاراتهم وأدوارهم والاستعداد للكوارث الإدارة والاستعداد للمستشفيات لإدارة الكوارث في المستشفيات الحكومية في قطاع غزة. وفقًا لنتائج الدراسة ، فقد أوصت الدراسة بعدة توصـيات منهـا تقديم إرشـادات وتعليمـات للممرضـين والممرضـات حـول المعرفـة بـإدارة الكـوارث التـي يقدمها أولئك الذين لديهم الخبرة والمسؤوليات من خـلال عقد ورش العمل والمؤتمرات والندوات التـي تتناول مسألة الكوارث وينبغي دعم المستشفيات مع المواد والمعدات اللازمة لخدمات الرعاية الصحية.