Deanship of Graduate Studies
Al-Quds University

Nurses' Perception about Impact of Nurse/Physician Collaboration on the Quality of Health Services in Medical Departments at Governmental Hospitals in Gaza Strip

Emad Jamal Ahmed AlAsaly

M. Sc. Thesis

Jerusalem – Palestine

1444 / 2022

Nurses' Perception about Impact of Nurse/Physician Collaboration on the Quality of Health Services in Medical Departments at Governmental Hospitals in Gaza Strip

Prepared by:
Emad Jamal Ahmed AlAsaly

BSc. Nursing, Palestine College of Nursing - Palestine

Supervisor: Dr. Yousif M. Awad
Assistant Professor of Nursing Management
University of Palestine

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

1444 / 2022

Al – Quds University
Deanship of Graduate Studies
Faculty of Health Professions / Nursing Management

Thesis Approval

Nurses' Perception about Impact of Nurse/Physician Collaboration on the Quality of Health Services in Medical Departments at Governmental Hospitals in Gaza Strip

Prepared By: Emad Jamal Ahmed AlAsaly
Registration No.: 22011465

Supervisor**:** Dr. Yousif M. Awad

Master thesis submitted and accepted. Date: 30/07/2022
The names and signatures of the examining committee members are as follows:

1. Head of committee: Dr. Yousif M. Awad — Signature……
2. Internal examiner: Dr. Motasem S. Salah — Signature……
3. External examiner: Dr. Wael Mekki — Signature……

Jerusalem – Palestine

1444 / 2022

Dedication

*To the greatest man I have in my life, the light of my life... my lovely **Father**.*

*To the biggest heart with the most loving care, who sacrificed a lot for me to become what I am now, my **Mother***

*To my **Wife** who supported me through each step of the way and for being for me the greatest source of inspiration...*

*To the light of my eyes... my **Sons***

To all those who encouraged, supported, and helped me all the way.

I dedicate this research for all of them …

Emad Jamal Ahmed AlAsaly

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 part of the same) has not been submitted for a higher degree to any other university or institution.

Signed:

Emad Jamal Ahmed AlAsaly

30/07/2022

Acknowledgments

I express my praise and gratitude to Allah who granted me the strength, patience and capability to complete this research.

I owe heartfelt thanks and gratitude to my academic supervisor Dr. Yousif M. Awad, who exerted a lot of his time, knowledge, efforts and patience in supervising this research and encouraging me to do the best.

Sincere thanks and recognition are extended to Dr. Hamza Abedelgwad for his immense contribution, guidance and support.

I would like to thank all academic and administrative staff of the Faculty of Health Professions, Al-Quds University for their guidance and collaboration.

I would like to thank my colleagues and my friend Mohammed Omar Al Kahlout for their special and valuable support.

I would like to thanks all health professionals who participated in this study for their cooperation and participation in this study.

Emad Jamal Ahmed AlAsaly

Abstract

This study aims to assess the perception of nurses toward Nurse/Physician Collbortion in medical departments at governmental hospitals in Gaza Strip (GS) to determine their effect on quality health services. The study design was descriptive, analytical and cross-sectional study. Study sample used census sampling which means selected all nurses who are working in internal medical departments at governmental hospitals in GS. The study population were 209 nurses with response rate of 92.3%; (193 nurses). Data were collected by the self-administered questionnaire of Jefferson Scale of Attitudes toward NPC. And another developed questionnaire by the researcher to reflect nurses' perceptions of quality of health Services. Analysis of the data was undertaken using IBM SPSS Ver. 22 Statistics and the study finding as following:

The study results indicate that most of the participants were female, representing 52.3% and 74.1% of the participant is married, according to age group 51.8% of participants were between 30 to 40 years. According to academic qualifications, 74.1% of participants have a bachelor's degree. Most of the participants have experience in nursing less than 10 years about 65.3%. but experience in the medical department 62.7% have less than 5 years.

This study found high level of NPC with a RW of (74.14%) from point of view of nurses. This means a positive perception towards of NPC from the nurse point of view. The Nurse autonomy dimension ranked first with a RW of (82.20%), followed by the Shared education & collaboration dimension (80.14%), however, the responsibility and role dimension in 3ed ranked with a RW of (77.20%), while physician authority ranked last with a RW of (57.0%). While about the level of quality health care there is a high level of quality health care with a RW of (75.20%) in medical departments at governmental hospitals in GS from point of view of nurses. the dimension of "Timely" was ordered in the 1st rank with RW ”80.31%”; "Integrated" was ordered in the 2nd rank with RW ”79.03%”; "People-centred" was ordered in the 3ed rank with RW ”78.55%”; "Efficient" was ordered in the 4th rank with RW ”77.94%”; "Safety" was ordered in the 5th rank with RW ”70.94%” and "Effective" was ordered in the 6th rank with RW ”65.81%”. According to relationship between perception of nurses toward NPC and level of quality health services study found a positive relationship, which means the increased perception of nurses toward NPC can increased quality health services. While the relationship between the perception of nurses toward nurse/physician collaboration and socio- demographic variables that no relationship between perception of nurses toward NPC and Gender, Age, Experience and Education level. The study concluded the relationship between perception of nurses toward NPC and level of quality health care is positive correlation. It is imperative for physicians, nurses, healthcare executives, and organizational leaders who are responsible for NPC to become actively involved in creating structures that promote effective nurse-physician communication and collaboration. The researcher has recommended initiating and developing mutually respectful inter-professional relationships between nurses and physicians to increase the quality of health services in government hospitals.

Key words: Nurse-physician collaboration; quality health services; nurses.

Table of Content

List of Tables

List of Figures

List of Annexes

List of Abbreviations

AACN	American Association of Critical Nursing
AMDA	American Medical Directors Association
CBR	Crude Birth Rate
CDR	Crude Death Rate
CINAHL	Cumulative Index to Nursing and Allied Health Literature
EGH	European Gaza hospital
GDP	Gross Domestic Product
GS	Gaza Strip
HWE	Healthy Work Environments
ICU	Intensive Care Unit
JSAPNC	Jefferson Scale of Attitude toward NPC
MoH	Ministry of Health
NGOs	Non-Governmental Organization
NPC	Nurse/Physician Collaboration
PCBS	Palestinian Central Bureau of Statistics
PHCC	Primary Health Care Centers
RW	Relative Wight
UNRWA	United Nations Relief and Works Agency for Refugees
WB	West Bank
WHO	World Health Organization

Chapter One
Introduction

1.1 Background

Health services are that part of the health system, which focuses specifically on the provision of health care services in society. A health system includes a complex set of structural relationships between populations and institutions that have an impact on health. The successful delivery of health services is largely a function of the knowledge, skills, motivation, and development of employees who are responsible for the organization and delivery of health services (Kourkouta et al., 2021).

Hospitalized patients are cared for by many professionals in medical departments, with registered nurses and physicians being the most predominant. Physicians order diagnostic tests, therapies, medications, and other interventions to diagnose and treat patients. Nurses are responsible for ensuring all prescribed interventions are performed, providing around-the-clock assessment and monitoring of patients' conditions, as well as providing care and tending to the general needs of patients and families. Consequently, nurses and physicians hold the most responsibility and accountability for the clinical outcomes of care and the overall well-being of the patients (Cabibbo, 2018).

Nurse-physician collaboration (NPC) is defined as an interpersonal and interprofessional relationship in which nurses and physicians share work-related goals and responsibilities for outcomes. Open communication, respect for different perspectives, equal decision-making capacity and responsibility for problem-solving and patient care management are the hallmarks of successful collaboration (Zhang et al., 2016).

NPC is a major key for patient's safety and improving patient's outcomes. All health care providers in particular nurses and physicians are working together to maintain and enhance

patient's safety as a first priority in clinical practice (Boev & Xia, 2015). However, the collaboration between all health care providers is challenging in each healthcare delivery system. Collaboration is complicated in terms of sharing knowledge and accountability in delivering ultimate patient care (Alsallum et al. 2020). Nevertheless, having good collaborative skills is essential for all health care providers. Thus, when there is a weakness in communication and collaboration it shows in by being a reason for poor patient outcomes (Ghadery, 2019).

Individuals are hoping to get a better quality of care. One of human rights is to acquire high quality of health care services. This can lead to satisfaction for patient, staff, suppliers, and better action for the organization (Al- Khafajy, 2016). When the quality of healthcare services increase, then expenses reduced, production enhancement, and best service can be offered to patients and supply longstanding functional interactions for the staff.

Therefore, health care professionals should continually modify their collaborative processes to make the quality care more efficient and improve patient outcomes. Effective inter professional collaboration is important to enhance and support the quality health care (Pakpour et al., 2019). Quality health care encompasses the processes and systems that protect patients from injury caused by medical and nursing mismanagement. quality health care aims to prevent harm and negative outcomes of care. Ensuring quality health care requires operational processes and systems that will maximize the likelihood of preventing adverse medical events. The health care has embraced the various models and approaches to human error in order to analyze and evaluate risk and safety. The framework for evaluating patient safety within health care delivery process consisted of system components that work together to bring about improved practices and safer health care for patients (Missi, 2016).

1.2 Problem Statement

The interprofessional collaboration between nurses and physicians is crucial and has been highlighted in different contexts. Collaboration between physicians and nurses, means cooperation in work, sharing responsibilities for solving problems, and making decisions to formulate and carry out plans for patient care. Although the provision of healthcare is becoming more complex, collaboration among healthcare workers can be a path to improve the quality of healthcare services especially in hospitals in which environment is characterized by ongoing interaction among professionals (Hussein et al., 2018). NPC and teamwork can improve patient outcomes and lower healthcare cost, increase job satisfaction, and maintain patients' safety. The communication between nurses and physicians is considered a principal part of the information flow in healthcare; meanwhile the growing evidences show that improper or poor communication can create a chronic state of conflict between nurses and physician leading to increase in the medical errors and poor outcomes.

Nurses and physicians extremely contribute to the patient care but often do not appreciate the role of each other. In previous studies, physicians and nurses viewed collaboration differently; physicians view collaboration as following the instructions and the orders, while nurses view it as a complementary role more significantly than physicians do (Elsous et al., 2017).

Through the researcher's work as a nursing supervisor for years, he found patients complained lack of understanding or not being informed of their plan of care/diagnosis and not involved in decisions related to their care and/or discharge plans, this is due to the lack of cooperation of nurses with doctors, which is reflected on patients .

Nurses complained of physicians ignoring or belittling their suggestions for patient care and physicians complained that nurses lack understanding of the plan of care. Both the nurse and physician experience an increase in phone calls, frustration, and ultimately a lack of communication that impacts on quality care.

From the important reasons that prompted the researcher to choose this title, is the importance of the internal medical departments that provide health care to patients around the clock, in addition to the researchers' neglect of this department to conduct their research.

Therefore, the researcher seeks to assess nurses' perception about impact of NPC on the quality of health services provided at governmental hospitals.

1.3 Justification of the Study

Collaboration and communication between different health providers in different sectors of health is a hallmark of health care quality. Successful NPC is associated with positive attitudes of nurses and physicians towards patients and consequently –quality of health care (Ghadery, 2019). Conversely, breakdown of coordinated and positive interaction between these two groups of professionals lead to unhealthy work environments and poor patient outcomes (Mahmoud, 2018). Collaboration communication between nurses and physician lead to better patient and organizational outcomes such as decrease length of stay and reduction in treatment costs without decrease satisfaction among patients. High quality nurse-physician communication increase satisfaction among nurses and physicians also increase autonomy for nurses (Franco and Cordero, 2017).

NPC must be well-practiced in order to enhance and facilitate the interaction among health care team to achieve high level of satisfaction. However, ineffective collaboration can influence the interaction between nurses and physicians which has an impact on patient

safety. Moreover, ineffective work environment can participate in the effectiveness of care which can put patients at risk (Lancaster et al., 2015). Heath care team must direct their priority to the patient to maximize the context of care. Hence, many medical errors and complications occurred due to ineffective collaboration between nurses and physicians and lack of interpersonal relationship among health care team members, as it is essential to improve patient outcome, lessen the length of stay and decrease hospital-acquired infections (Alsallum et al., 2020).

Because NPC affects in patient outcomes significantly, the healthcare profession needs to get to work on increasing collaboration among physicians and nurses. Without doing so, a vision of quality in healthcare cannot and not be realized. Now that problems with NPC are evident, there must first be an attempt to understand each of the disciplines' perceptions about the issue. This study attempts to delve into the perspectives of nurses in the governmental hospitals setting on this issue.

1.4 Aim of the study

The overall aim of this study is to assess the perception of nurses toward nurse/ physician collaboration to determine their impact on quality health service in medical departments at governmental hospitals in GS.

1.5 Objectives of the study

- To assess the perception of nurses toward nurse/physician collaboration in medical departments at governmental hospitals in GS.
- To determine the level of quality health services in governmental hospitals in medical departments at governmental hospitals in GS.

- To determine the relationship between the perception of nurses toward nurse/physician collaboration and level of quality health care in medical departments at governmental hospitals in GS.
- To assess the relationship between perception of nurses toward nurse/physician collaboration and socio- demographic variables (age, gender, experience, and education level).
- To provide suggestions and recommendations that might increase nurse/physician collaboration and that's effects to increased quality health care in medical departments at governmental hospitals in GS.

1.6 Questions of the Study

- What is the perception of nurses toward nurse/physician collaboration in medical departments at governmental hospitals in GS?
- What is the level of quality health care in medical departments at governmental hospitals in GS from point of view of nurses?
- Is there a relationship between perception of nurses toward nurse/physician collaboration and level of quality health services?
- Is there a relationship between perception of nurses toward nurse/physician collaboration and socio- demographic variables (Age, Gender, Experience and education level)?

1.7 Definition of terms

This part contains the definition of terms included in this study

- **Perception:**

Perception is defined as “the processes that organize information in the sensory image and interpret it as having been produced by properties of events in the external, three-dimensional world” (Robbins, et al., 2009).

The Oxford English Dictionary (2010) defined perception as one’s awareness and understanding of sensory information attained through interplay between past experiences, one’s own culture and the interpretation of the perceived (Stevenson, 2010).

The researcher defines perception operationally as the degree to which the sample gets the scale used in the study.

- **Collaboration:**

The word "collaborate" is derived from the Latin collaborare, which means, "to labor together". The Webster's Third New International Dictionary (1986) notes three uses of the term: (a) "to work jointly, especially with one or a limited number of others in a project involving composition or research to be jointly accredited", (b) "to cooperate with or assist, usually willingly, an enemy of one's country", and (c) "to cooperate willingly or instrumentally with an agency with which one is not immediately connected often in some political or economic effort". The American Heritage Dictionary (1983) describes collaboration as a process, which stresses joint involvement in intellectual activities.

Interprofessional collaboration, within the context of health care is the process in which members of two or more different health care professions coordinate efforts and share

decision-making and responsibility in the provision of patient care (Haddara & Lingard, 2013).

- **Nurse/physician collaboration (NPC)**

NPC is defined as “the joint communicating and decision-making process with the expressed goal of satisfying the patient’s wellness and illness needs while respecting the unique qualities and abilities of each professional” (Coluccio & Maguire, 1983).

Or, Is the process in which members of two or more different health care professions coordinate efforts and share decision-making and responsibility in the provision of patient care (Haddara & Lingard, 2013).

- **Nursing**:

Nursing is the protection, promotion, and optimization of health and abilities, prevention of illness and injury, alleviation of suffering through the diagnosis and treatment of human response, and advocacy in the care of individuals, families, communities, and populations (American Nurses Association, 2004).

Nursing is autonomous and collaborative care of persons of all ages, families, groups, and communities, ill or well and in all settings. Nursing includes the promote health, prevented illness and the care of sick's and disabled individuals. Advocacy, promote a safe environment, participation in shaping health policy, research, health systems management, and education are also key nursing roles (Finkelman & Kenner, 2013).

- **Quality health care**

Quality health care is described as the care that fits ones' needs and preferences, does not cause harm, is right for one's illness, and is given without unnecessary delays. Quality healthcare is also the kind of care which includes only the medical tests and procedures one needs, its fair and is not affected by such factors as gender, language, color, age and income (Ndambuki, 2013).

- **Medical Department**

Is one in which the primary objective is to improve health through interventions that are frequent, time-sensitive, and rapidly administered (World Health Organization, 2013). Emergent or unexpected illnesses that may result in disability or death are treated in acute care settings such as hospitals or medical centers.

1.8 Context of the study

1.8.1 Demographic Context

Palestine is a relatively small country; the total area of the historical Palestine is about 27.027 Km^2, it has been occupied in 1948 by Israel and the two remaining parts West Bank (WB) and GS (GS) is separated geographically after the war in 1967. The total area of the WB is 5842 Km^2 with population living in is about 3,053,183 individuals, about 60% of the total Palestinian population. In other side in Palestine GS, total area of GS is about 365 Km^2 with population living in is about 2,047,969 individuals, about 40% of the total Palestinian population. GS is overcrowded area with population density of 5.610 capita/Km^2. (PCBS, 2020; MoH, 2020).

Palestine is divided into (16) governorates, divided into 11 governorates in the West Bank, and (5) in the GS (PCBC, 2020). According to the annual report of MoH in 2020, the Crude Birth Rate (CBR) in the Palestinian territory estimated about 29.9/1000 of population, distributed as 27.5/1000 in the WB and 33.4/1000 in GS, in the other hand the Crude Death Rate (CDR) was about 3.7/1000 of population, distributed as 3.4/1000 of population in GS and 3.9/1000 in WB (MoH, 2020).

1.8.2 Socio-economical context

Preliminary estimates indicated a decrease in Gross Domestic Product (GDP) in Palestine by 4.6% during 2020. Unemployment is a critical problem in the Palestinian situation, since it has a rate of 25% in the year 2020, unemployment rates in GS is higher than WB, 46% and 14% respectively; this situation resulted from restrictions on Palestinian movement due to corona virus, and unilateral activities from Israeli occupation, and the siege on the GS (PCBC, 2020).

1.8.3 Palestinian Health Care system

The Palestinian health system consists of four main sectors: the government health sector (Palestinian MoH and Military Medical Services), the United Nations Relief and Works Agency for Refugees (UNRWA), Non-governmental organization NGOs, and the private sector. These different sectors participate in providing health care services to citizens of all levels: primary health care, secondary and tertiary health care. The Palestinian Health Ministry pays great attention to preserving the continuity of the Palestinian health system and providing comprehensive health services of high quality to all citizens (MoH, 2020)

The main roles and responsibilities of the MoH according to the Palestinian Public Health Law are: providing, regulating and supervising the provision of health care in Palestine.

Also, MoH is responsible about planning the health care services in coordination with different stakeholders, enhancing health promotion to improve the health status, developing human resources in health sector, managing and disseminating health information, and others (MoH, 2020).

1.8.4 Primary Health Care Centers

Primary Health Care Centers (PHCC) is a major part of Palestinian health care system. PHC provides preventive, promotional, curative and rehabilitative health care to all Palestinian citizen especially for vulnerable groups through MoH, UNRWA, non-governmental and private centers. At the end of 2019, the total number of PHCC was 749 centers guided by MoH represent the ratio 63.4%, 65 centers guided by UNRWA Represent the ratio 8.7%, 192 centers guided by NGOs Represent the ratio 25.6% and Military medical services 17 Represent the ratio 2.3% (MoH, 2020).

1.8.5 Governmental Hospital Services

MoH is the main provider of secondary care. It is responsible for 84 hospitals and the number of hospital beds about 6,435 bed and at a rate of 12.9 beds per 100,000 citizens. The MoH owns and manages 54.9% of hospital beds in Palestine. There are 28 hospitals in the MoH, with a bed capacity of 4709 beds. There are 15 hospitals in the WB, with a bed capacity of 1,749 beds, which is equivalent to 49.5% of the total hospital beds of the MoH, while there are 13 hospitals in the GS and the number of hospital beds in GS is about 2960 bed and percent of hospital bed /1000 capita is about 1.2 (MoH, 2020). The average occupancy rate at hospitals in the GS is about 90.2%. The unstable Palestinian political situation increases the load on the health care services in GS and WB.

In the north of Gaza Governorate, in the city of Beit Hanoun, the Beit Hanoun Hospital was operated in an emergency operation on the days of the invasions on 15/7/2006. The hospital was opened with two operating rooms and about 42 beds, where the hospital includes several specialties (internal, pediatric surgery, general surgery, ear, ear and throat, operations, laboratory, public reception, external clinic, radiology, pharmacy)

In north GS established in 2015 Indonesian hospital, locating in Bait Lahia, providing medical, surgical, vascular, urology, nephrology, orthopedic and intensive cardio care unit, intensive care unit services, and emergency services, the number of hospital beds is 110 beds, 10 of which are for the intensive care unit (MoH, 2020).

In Gaza city, Al-Shifa medical complex is the biggest medical institution in Palestine, it is provided secondary health care in addition to some tertiary care services. . The hospital was established in 1946 on an area of over 42.000 m2.it was initially a small kiosk that gradually developed into major buildings specialized in all fields, includes three hospitals: Surgery Hospital, Al Batinah Hospital and Women and Gynecology Hospital, Al -Shifa Medical Complex provides medical services in various fields through doctors, nurses, administrators and technicians that number more than (1914) employees. The number of hospital beds (466) beds. The number of daily care beds is (229) beds (MoH, 2020).

In Mid-Zone governorate, Shohadaa Al-Aqsa hospital established in 2001, the only hospital in the mid zone region that provided secondary care health services. The hospital has 163 beds and the number of physicians (108) and nursing (190) and total hospital staff (474) employees (MoH, 2020).

In Khan Younis Governorate European Gaza hospital (EGH) is considered as one of the advanced medical centers in Palestine. The hospital project contains facilities for a full range of secondary, primary and planned tertiary patient care services for both inpatients and outpatients. The hospital has 261 beds and the number of physicians (160) and nursing (274) and total hospital staff (691) employees (MoH, 2020).

In 1960 established Nasser hospital in Khan-Younis Governorate. The hospital has 330 beds and the number of physicians (169) and nursing (323) and total hospital staff (880) employees (MoH, 2020).

In Rafah Governorate, the martyr/Mohamed Youssef Al -Najjar, which was in the year 2000, was a primary care clinic, and because of the conditions of the uprising, it was transferred to an emergency hospital on 10/25/2000 AD. The hospital was opened with two operating rooms and about 36 beds (children, Female, male). The number of employees is 292 employees, the number of beds, 49 beds, including daily care, reception of 28 beds (MoH, 2020).

Chapter Two
Literature Review

In this chapter, the researcher discussed deeply the concept of collaboration, and NPC, the benefits of NPC and impacts of good collaboration on quality of health services. As well as, the researcher reviews relevant previous studies and experience of other researchers in this subject.

2.1 Search Strategy

The search strategy employed for the literature review included utilizing databases available through the Al Quds University/ abo Des and the Saudi Digital Library including Academic Search Complete, CINAHL (Cumulative Index to Nursing and Allied Health Literature), Gale Academic OneFile, PubMed/MEDLINE, and ProQuest, for relevant information in peer reviewed journals and other scholarly sources. The Google Scholar search engine was also employed to help assure the comprehensiveness of the literature review. An exhaustive search of themes and concepts related to this study included the terms autonomy, collaboration, interprofessional collaboration, motivation, NPC, well-being, Quality health care and work relationships. The search process targeted articles published in peer reviewed journals in English language between 2005 and 2021 related the nurses-physician collaboration and quality of health services.

2.2 Conceptual framework

This conceptual framework was developed by the researcher to illustrate the Nurses' Perception about NPC in medical departments and illustrate quality of health Services provided. after that illustrate impact of NPC on quality of health services at governmental hospital as following:

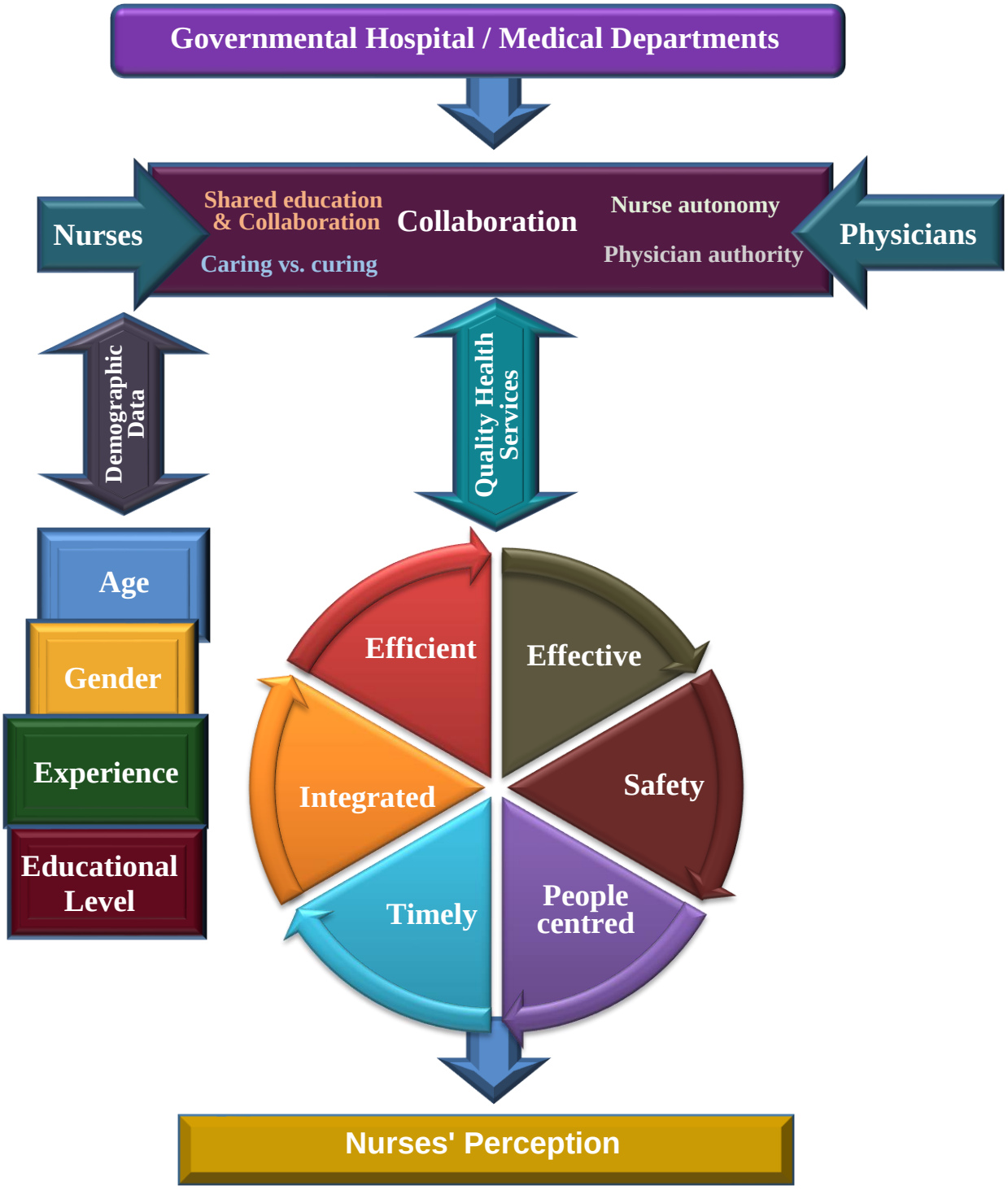


Figure (2.1): Conceptual framework diagram "self-developed"

2.2.1 Governmental Hospital / Medical Departments:

Governmental hospitals provide health services in various fields and specialties. medical departments in government hospitals are importance to patients and health service providers. It provides its services to a large and different category of specialties, and it deals with many

mysterious diseases that require speedy diagnosis and cooperation between health care providers. This is related to the ability of nurses and physician to cooperate effectively in order to monitor the quality of services provided.

2.2.2 Nurses-Physician Collaboration

A good working relationship is essential for nurses and physicians to build an effective, safe and conducive environment. These relationships are indeed in teamwork followed by collaboration, communication, respectful and honesty to strengthen the relationship between them. It was produced beneficial towards the patient and their relative in delivering a high quality of care by both of these professions. In fact, maintaining successful nurse-physician relationships have been shown to be associated with higher satisfaction and better outcomes among hospitalized patients (Hussein, 2018). As a result, a breakdown in this area is a major root cause of sentinel events. In contrast, several studies recorded the nurse-physician relationship negatively influences the nurse's job satisfaction, stress, empowerment, retention, and productivity and the outcomes of health care services to patients (Siedlecki & Hixson, 2015).

2.2.3 Quality Health Services:

Providing health services is the main goal for which government hospitals were established, as the level of health services is a major focus around which the efforts of researchers are focused, and the quality of health services is the most important goals of the MoH, in which the personnel working in it are expected to perform their jobs effectively and efficiently in line with what Ministry goals. The level of quality of health services provided by government hospitals is closely related to the nature of the business planned by the administration and among the goals it pursues, which make the working individuals fully aware of the processes

that the work goes through in order to achieve the work required to be completed quickly, accurately and with high quality.

2.2.4 Nurses' Perception:

The nurses have their own perception of the nurse-physician relationship. With the occurrence of negative thinking or bad behavior, it can affect the nurse-physician relationship. Recent studies found three-quarter of nurses were unsatisfied with their role as a profession of health care. Nurses claimed that physicians did not treat them well, but it differs from the physicians. In contrast, the physicians claim that the problem comes from nurses. The results of the previous qualitative study conducted in South Africa found there was a conflicted relationship between the nurses and physicians which it was described as a destructive force.

2.3 Literature Review

2.3.1 Background:

This chapter will provide the literature review for this research study and will accomplish three key objectives. The first objective will be a comprehensive review of the current literature related to NPC. The literature for NPC can be organized in three topic groups, 1) NPC foundational concepts, 2) impacts to clinical outcomes (safety and quality), and 3) impacts to operational outcomes (nurse turnover/retention). The second objective will be an analysis of the gaps within the current literature. Objective three will review and discuss the theory that will serve as the theoretical framework for this research study.

Studies of collaborative relationships between nurses and physicians have demonstrated that when the nurses perceive that physician support their empowerment and self-efficacy by inviting them to participate in problem solving and decision making, they have a higher level of job satisfaction. The higher level of satisfaction correlates with a stronger patient safety

culture, which in turn correlates with better patient outcomes and increased quality of health services (Spitulnik, 2019).

NPC has been extensively qualitatively studied within the context of examining the reported perceptions and or attitudes related to this collaboration by the nurse and or physician (Bowles et al., 2016; House & Havens, 2017; Johnson & King, 2012; Lancaster et al., 2015; Pritts & Hiller, 2014; Sollami et al, 2015). Some research simply examines whether NPC occurs in a binary approach, yes it does occur or no it does not occur (Lee et al., 2014). One could deduce that if NPC perception has been examined then the phenomena exists but there is variation in the perceptions of both the nurse and physician. Multiple systematic reviews of the current research literature find only normative articles declaring NPC important and the need to foster and improve the phenomenon (House & Havens, 2017). Overall, this stream of literature offers the confirmation that NPC exists, is not consistently positively perceived, and is important (Bowles et al., 2016; Fewster-Thuente, 2015; House & Havens, 2017; Lancaster et al., 2015; Sollami et al., 2015).

Therefore, the researcher believes that collaboration between the nurse and the physicians is the key to the success of the health institution, and raising the quality of the health services provided, and good cooperation is represented in fewer problems, better care, which is reflected on quality of health care, and patients' satisfaction with the health services provided.

2.3.2 Nurse-Physician Collaboration Foundational Concepts

The concept of NPC goes beyond just working together in a common environment. It requires a shared goal, reciprocal duty to provide high-quality care to resolve patient problems. Establishing effective professional collaboration between nurses and physicians is necessary because of their key roles in patient care and treatment. Evidence suggests that

the NPC is a major factor in improving disease outcomes including the mortality rate, readmission, and complications of the disease (Aghamohammadi et al., 2019).

Collaboration is defined as the process of joint decision-making among independent parties, involving joint ownership of decisions and collective responsibility for outcomes (Boev & Xia, 2015). It is a process whereby two or more people come together to discuss a common problem. Each participant has the self-confidence to share knowledge and information on an equal basis, and mutual respect is given to each opinion. The focus remains on the needs of the patient, and negotiations result in a plan of care (Cypress, 2011). So that collaboration and teamwork between physicians and nurses is crucial for patient care and morale (Pakpour et al., 2019). Each team member has his or her own perspective regarding assessment and plan of care for a patient, and only through collaboration and an exchange of information can appropriate treatment plans be made.

Collaboration is a complex process that requires intentional knowledge sharing and joint responsibility for patient care. Sometimes it occurs within long-term relationships between health professionals. Collaboration has a developmental trajectory that evolves over time as team members leave or join the group and/or organization structures change (Nikandish et al., 2020). Each health care profession has information the other needs to process in order to practice successfully. In the interest of safe patient care, neither profession can stand alone, making good collaboration skills essential (EL Sayed and Sleem, 2011).

2.3.3 Importance of Nurse-Physician Collaboration

Communication is one form of collaborative behavior. Collaborative relationships occur when two or more people work together in order to accomplish common goals (Chan 2013). Collaboration and communication between nurses and physicians are essential in facilitating improved patient care outcomes, nurse and physician satisfaction, and patient satisfaction.

The patient recovery process may be impaired when collaborative behaviors are not optimally practiced by the healthcare team in the acute care setting (Missi, 2016).

The critical importance of nurse-physician communication is evidenced by the fact that one of the 2006 national patient safety goals of the Joint Commission on Accreditation of Healthcare Organizations (2009) is related to improving the effectiveness of communication among providers. Poor communication among the inter-professional healthcare team represents a major etiology of preventable adverse events in hospitals. The Joint Commission (2010) found that communication issues were among the top reasons for death related to a delay in treatment, and identified communication issues as the third highest root cause of sentinel events.

Communication between nurses and physicians is a major part of information flow in healthcare. Optimal patient flow in the acute care environment requires interprofessional coordination, communication, and collaboration to provide safe and effective patient outcomes (Riggall & Smith, 2015). Kupperschmidt et al. (2010) reviewed components and outcomes of healthy work environments (HWE) among interprofessional healthcare teams. Components comprising HWEs included respectful and trusting relationships, clear and candid communication, collaboration, and interprofessional team member awareness of communication strengths and opportunities for improvement. When these components exist among the interprofessional team, less medical errors occur, patient satisfaction improves, communication among team members improves, and team member satisfaction improves.

Cheng et al. (2021) show NPC is a critical element of truth disclosure, which can facilitate information exchange and help them know what has been communicated to patients or families. In addition, collaboration between physicians and nurses can not only reduce staff distress and improve staff satisfaction but also improve patient outcomes and satisfaction.

Collaboration between healthcare professionals needs a joint goal and frank dialogue to render great quality care to patients to solve patient's problems (Sharifiyana & Zohari, 2016). Communication is an essential part for flow of information between nurse and physician in healthcare system. Collaboration is one of the essences not only for the benefit of the patients but also for the happiness of all healthcare professionals involved in the collaboration. The cooperation among nurses and physicians has the benefit when the liability for the patients' care and wellness is mutual (Green et al., 2015).

NPC is a major key for patient's safety and improving patient's outcomes. All health care providers in particular nurses and physicians are working together to maintain and enhance patient's safety as a first priority in clinical practice (Boev & Xia, 2015). However, the collaboration between all health care providers is challenging in each healthcare delivery system (Basavanthappa & Principal, 2010).

Collaboration is complicated in terms of sharing knowledge and accountability in delivering ultimate patient care. Nevertheless, having good collaborative skills is essential for all health care providers (Daniel & Rosenstein, 2008). Thus, when there is a weakness in communication and collaboration it shows in by being a reason for poor patient outcomes (McCaffrey et al., 2011). Several barriers were reported in the literature concerning NPC to its full potential (Vegesnaa et al., 2016). According to Garber et al. (2009), nurses' awareness regarding the importance and the impact of the NPC is higher than physicians. Moreover, physicians were unclear about nurses' roles in providing patient's care which resulted in misconception between nurses and physician's roles. Furthermore, physicians' rating regarding the quality of collaboration is higher than nurses (Vegesna et al., 2016).

2.3.4 Nurses-Physicians Attitudes toward Collaboration

Collaboration was described as a process composed of interaction and a desire to cooperate on the fundamentals of sharing power, authority, and communication (Kramer & Schmalenberg, 2009). According to the AMDA, collaboration was defined as "a joint and cooperative enterprise that integrates the individual perspectives and expertise of various team members". Additionally, common themes of collaborative relationship were collegiality, teamwork, open communication, recognition of other person's expertise, and a strong level of trust and respect (American Medical Directors Association, 2011). Collaboration was also described, by the American Association of Critical Nursing (AACN, 2015)، as working together and sharing communication. Moreover, collaboration was described as working with each other to achieve common objectives through communication and consultation with colleagues (Bor et al, 2009). NPC was considered an essential element to achieve a healthy working environment (Kramer & Schmalenberg, 2009). Respect for, and recognition of, each group member's knowledge and judgment were identified as a prerequisite to collaboration. The respect required members to have a basic level of understanding and acceptance of the other's expertise and roles. A study conducted in 2013 reported that the nurses had feelings of physician's disrespect for them and lack of appreciation for their unique knowledge and skills, which had negative effects on their relationship (AlSowi, 2013).

Collaboration and working together as a team in the health care system was reported to cause increase effectiveness, time efficiency, staff morale, and patient satisfaction, as well as lower stress for staff and patients (Missi, 2016). Collaboration was also found to improve nurses' job satisfaction (Pakpour et al., 2019). It was pointed out that nurses have participated in medications ordering process during patients' rounds, and they were able to control the administration process, which has supported sharing knowledge and enhanced satisfaction

(Zephir, et al., 2017). Kilner and Sheppard (2009) systematic review described the role of teamwork and communication, and concluded that the presence of high staff satisfaction level was related to effective collaborative teamwork.

It has been addressed in the literature that nurses and physicians have different perceptions about their collaboration. In a descriptive study, that surveyed 2135 nurses and physicians using a self-administered questionnaire, conducted to evaluate nurses' and physicians' collaboration and teamwork, the results indicated that nurses had the highest rate of teamwork, while physicians had the lowest rate. Physicians rated the collaboration with nurses as moderate, and the nurses rated their collaboration with physician as low. Results of this study also revealed that there was weak collaboration between nurses and physicians, and that nurses and physicians had different perceptions regarding collaboration, although they were working in the same settings (Makary, et al., 2016).

Similar results were reported in another study, a cross sectional survey for 90 physicians and 230 nurses using self-administered questionnaire, in which nurses and physicians at the intensive care units were found not sharing the same perception about collaboration and teamwork level (Thomas et al., 2013). Another cross-sectional survey using self administered questionnaire at six different ICUs showed that the participated 94 physicians perceived team work with nurses as a collaborative work more than the 46 nurses who participated in the study (Milstein et al, 2011). However, nurses perceived physicians as non-collaborative colleagues, and recommended that physicians should be skilled in how to use their experience and knowledge for enhancing collaboration with nurses (Elsous et al., 2017).

2.3.5 Nurses-Physicians Collaboration Measured

Hojat, et al., reported that studying attitudes toward collaboration is one way to study collaboration. The Jefferson Scale of Attitude toward NPC (JSAPNC) was invented in 1999, and consists of many subscales. Those subscales are: physicians' authority, nurses' autonomy, shared education and collaboration, caring as opposite to curing (Hojat, et al., 1999). Researchers considered role misunderstanding, perception of autonomy, power, and who makes the decision as major barriers to collaboration between nurses and physicians (Hossny and Sabra, 2020). Physicians' dominance was reported to cause imbalance between the power of nurses and physicians, which resulted in physicians' inability to respect and recognize the nurses' role (Storch & Kenny, 2013). On the other hand, it was believed that education enhances the collaborative relationship, based on the reported perception that training and education provide nurses with the needed information and skills to practice their career (Lewis, 2010). Furthermore, it was explained that nursing and medical training and education form the latter attitudes of nurses and physicians toward each other. Therefore, when the participants score high for shared education, it indicates positive attitude toward collaboration (Hojat, et al., 1999).

Nurses' autonomy was defined as the ability of a nurse to freely make decisions, and be accountable (Pakpour et al., 2019). Nurses' accountability was defined as the ability to explain the personal responsibility of an action, and provide an explanation based on principles and standards of professional nursing conduct and ethics (Fry & Johnstone, 2015). It was stated in the definitions that the physician is the one who treat or cure patients, and the nurse is the one who care for or nurture patients (Oxford English Dictionary). Hence, the acknowledgement of these items is considered as understanding each other's main role (Fry & Johnstone, 2015).

There are many studies that focused on nurses' and physicians' attitudes toward collaboration. Chadwick (2010) surveyed 62 physicians and 75 nurses using the (JSANPC). Results revealed that nurses had more positive attitudes toward collaboration than physicians. Results also reported that both nurses and physicians believed that nurses affect the psychosocial and educational needs of patients positively. Nurses were looking forward to have a collaborative practice environment with physicians, while physicians did not. Furthermore, nurses believed strongly that they should be involved in patient's and policy decisions, and the physicians did not. Nurses' attitudes toward collaboration were also found to be higher than physicians' attitudes significantly when studied among 97 female nurses and 38 male physicians at different ICUs using the JSAPNC (El Sayed & Sleem, 2011).

In an interventional study by Dillon and his colleagues (2009)، pre-post design was used to study 68 nurses (78% females) and 14 physicians (27% females). The results showed that nursing students felt subordinates to physicians, but desired collaborative nursing-physician relationship (Dillon, et al., 2009). On the other hand, medical students expressed perceptions of nurses as sub servants or assistants to physicians, with no desire to collaborate. This was explained by lack of students' recognition of nurses' works and responsibilities. Dillon, et al., applied an interdisciplinary simulation program for both medical and nursing students regarding their work, and involved them into interdisciplinary work experiences. Post program test using JSAPNC showed that both medical and nursing students showed positive attitude toward collaboration with higher scores for nursing students.

In order to explain the difference between nurses' and physicians' attitudes toward collaboration, a suggestion was made estimating that it could result from differences in gender, training, experience, physician characteristics, and culture. It was reported that nurses perceived physicians who use clear, humorous, immediate, and empathetic messages

as collaborative colleague and communicate positively (Wanzer et al, 2009). In fact, poor physicians' attitudes were stated as one of the barriers to effective NPC (Clarin, 2017).

2.3.6 Nurses-Physicians Collaboration and Sociodemographic Characteristics

Some studies investigated the relationship between attitude toward collaboration, age, experience and gender. For example, Yildirim et al., (2015) surveyed 853 physicians (32% females) and 98 female nurses using the JSAPNC and indicated that male physicians expressed more positive attitude toward collaboration than female physicians (Yildirim et al., 2015). Hojat et al., (2003) compared the results of nurses' and physicians' scores on the JSAPNC before and after controlling for gender and age of the participants using ANCOVA test, and found that there is no difference. On the other hand, El Sayed and Sleem (2011), reported that nurses and physicians age was negatively related to attitudes toward collaboration, while experience was positively related to the attitudes toward collaboration.

Jones and Fitzpatrick (2009) studied 270 nurses and physicians attitudes toward collaboration and teamwork using the JSAPNC. Results showed that there are no significant differences according to age or between male and female participants. However, nurses had higher scores than physicians on the total scores of the scale and on the subscales indicating more positive attitudes toward collaboration (Jones & Fitzpatrick, 2009). Additionally, when the JSAPNC was administered to 333 nursing students (85% females); female nurses showed significantly more positive attitudes toward collaboration with physicians than their male counterparts, also revealed that those who have more clinical experience, scored more positively toward collaboration (Ward et al, 2008).

Compared to Ward et al., (2008) study, when the JSAPNC was administered to 261 medical students (53.64% females) the results showed negative attitudes toward collaboration with nurses (Hansson et al., 2010). Gender was a significant variable when females showed

significantly more positive attitudes than males toward collaboration. Unlike the nursing student study (Ward, et al., 2008); medical student scores showed no relationship to clinical experience (Hansson, et al., 2010). In another descriptive study, 501 nurses (66% females) and 353 physicians (76% males), with similar age and experience, were surveyed by email using the JSAPNC, nurses also showed significantly higher scores on the JSANPC, indicating more positive attitudes than physicians toward collaboration. But convergent with previous studies results, there were no significant differences based on gender (Taylor, 2009).

Similarly, another study found that nurses have more positive attitudes toward collaboration than physicians with no differences based on gender or age (Hansson et al., 2010). Another descriptive comparative study was conducted using the JSAPNC in the medical-surgical patient care setting to study 65 nurses (91% females) and 37 physicians (86% males) attitude toward collaboration (Thompson, 2007). The study results showed a more positive attitude of nurses than physicians, with no significant difference between them (Thompson, 2007). Jones and Fitzpatrick (2009) surveyed 62 physicians (73% males) and 208 nurses (54% females) to study their attitudes toward collaborating with each other using the JSAPNC. The results indicated more positive attitudes of nurses with significant difference from physicians, but with no significant difference based on demographics. Similar results were reported in another study that was conducted and surveyed 497 nurses and physicians (Garber et al., 2009).

In regards to the effect of age and gender on collaboration, when 125 nurses were surveyed, results showed that nurses reported favorable and collaborative physicians based on physicians' recognition of, and respect for nurses' capabilities and responsibilities rather than gender. Nevertheless, nurses exhibited preference to work with female physicians who are younger than fifty rather than those who are older than fifty (Rothstein & Hannum, 2017).

Matziou et al. (2014) found that age, gender, education, and years of experience significantly affected nurse-physician communication and collaboration. Nurses educated at the baccalaureate level or higher were more likely to initiate communication and more likely to perceive that physician were receptive to their opinions and suggestions. Nurses with 10 or fewer years of work experience were less likely to perceive that physician had trust in the patient care that they provided and that the physicians appreciated the nurses' abilities to organize and coordinate care. Less experienced nurses were also less likely to associate a good relationship with better collaboration and were more likely to feel that they were not treated as an equal team member. Less experienced, younger physicians were more likely to acknowledge the nurses' abilities to organize and coordinate care and were also more likely to accept the nurses' opinions and suggestions. Male physicians tended to be more sensitive to nurses' personal needs than were female physicians. Physicians perceived that a positive interpersonal relationship with a nurse predicted that the physician and nurse would collaborate well in the provision of patient care. Additionally, the quality of relationship between physicians and nurses was associated with the level of the physicians' understanding of the nurses' professional role.

2.3.7 Nurses-Physicians Collaboration and Quality Outcomes

Quality in healthcare is categorized by patient care delivery that is safe, effective, patient-centered, timely, efficient, and equitable. NPC is often implemented in the form of interdisciplinary patient rounds to promote quality patient care (Bowles et al., 2016; House & Havens, 2017). NPC via interdisciplinary rounds has been shown to have a relationship with decreased length of stay which decreases cost due to appropriate progression of evidence-based care delivery (Cabibbo, 2018). NPC via interdisciplinary patient rounds resulted in a mean length of stay reduction of over a day as well as decreases in health care costs.

Furthermore, provider satisfaction improved and proper utilization of aerosol respiratory treatments and adoption of dietary recommendations occurred more frequently with this interdisciplinary collaboration (nurse-physician) as well as decreased hospitalization, increased patient satisfaction, and improved involvement in their plan of care (O'Mahony et al., 2007).

High levels of NPC were a positive predictor of patients' actual hospital length of stay (Estabrooks et al., 2011). This is a significant empirical finding demonstrating a positive relationship between NPC and patient quality clinical outcomes. Quality healthcare delivery that is safe, effective, patient-centered, timely, efficient, and equitable is essential for receivers and those delivering care (IOM, 2011). NPC is shown to have an association with safety and quality clinical outcomes in patient health care delivery.

Collaboration and communication between different health providers in different sectors of health is a hallmark of health care quality (Kaileliolou et al., 2012). Successful NPC is associated with positive attitudes of nurses and physicians towards. Patients and consequently –quality of health care. Conversely, breakdown of coordinated and positive interaction between these two groups of professional's lead to unhealthy work environments and poor patient outcomes (Engard, 2016). Collaboration communication between nurses and physician lead to better patient and organizational outcomes such as decrease length of stay and reduction in treatment costs without decrease satisfaction among patients. High quality nurses-physician communication increase satisfaction among nurses and physicians also increase autonomy for nurses (Ghadery, 2019).

2.3.8 Health Services:

Health services are the way in which services are obtained in accordance with regulations and legislation based on specific professional or organizational bases, without detracting

from the needs, desires, aspirations and hopes of auditors for health services. Which should be the first step in treatment to know the complaints and needs of the auditors, the aim of which is to review the request to receive treatment, and the best way to know the achievement of quality in this aspect lies in measuring the extent of the auditors' satisfaction with health services (Ben Aishi, 2017).

So, over the past decades, health services issues have received great attention. Countries started increasing government spending on it. Modern technologies and technological means have been used to expand health coverage; Which led to the emergence of the so-called measuring the quality of health services in terms of efficiency, competence and professionalism to improve and develop health systems (Pantouvakis, 2013).

Add, many hospitals and government health units have sought to find modern strategies can help facilitate the smooth running of their services. One of the most important of these strategies is the quality strategy in the health services. As hospitals seek to update their strategies to meet the needs and desires of citizens. It also seeks to create an organizational culture for work, and works to develop its facilities, devices and medical equipment that it uses (Al-Assaad, 2017).

So, researcher emphasized that it is necessary for hospitals to take care of setting qualitative standards for the medical service provided, and this obliges their medical, technical and service staff to implement them and who are in direct contact with patients, therefore, hospitals managers must provide appropriate procedures and methods to ensure the implementation of these quality standards and adhere to them to reach the required level of service.

2.3.9 Quality of Health Services:

Quality has become an increasingly predominant part of our lives. People are constantly looking for quality products and services. Quality healthcare is a human right. Higher healthcare quality results in satisfaction for the clients (patients and the community in general), employees, suppliers and better performance for the organization. If quality of healthcare services improves, costs decrease, productivity increases and a better service would be available for clients, which in turn enhances organizational performance and provides long-term working relationships for employees and suppliers (Al-Khafaji, 2016).

Quality because of its subjective nature and intangible characteristics, is difficult to define. Healthcare service quality is even more difficult to define and measure than in other sectors. Distinct healthcare industry characteristics such as intangibility, heterogeneity and simultaneity make it difficult to define and measure quality. The complex nature of healthcare practices, the existence of many participants with different interests in the healthcare delivery and ethical considerations add to the difficulty.

Donabedian (1980) defined healthcare quality as 'the application of medical science and technology in a manner that maximises its benefit to health without correspondingly increasing the risk'. Øvretveit (2009) defines quality care as the 'provision of care that exceeds patient expectations and achieves the highest possible clinical outcomes with the resources available.'

According to Schuster et al. (1998), good healthcare quality means "providing patients with appropriate services in a technically competent manner, with good communication, shared decision making and cultural sensitivity". Leebov and colleagues (2003) believe that quality in healthcare means "doing the right things right and making continuous improvements, obtaining the best possible clinical outcome, satisfying all customers, retaining talented staff

and maintaining sound financial performance". For Mosadeghrad (2012), quality is "the degree to which healthcare services for individuals and population increases the likelihood of desired healthcare outcomes and is consistent.

Hurst and Guo (2008) define quality of care is "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.

Sultan (2012) indicated that raising the level of health service has become a major goal in achieving economic development in any country. The objective of the quality of the health service in order to achieve the satisfaction of the auditors.

2.3.10 Classification of health services

The quality of health services is one of the dynamic strategies that enable hospitals to obtain many advantages, and it is necessary that the health service be provided in a manner commensurate with the expectations of the auditors (Shabbir & Shujah, 2016) Health services were classified based on their qualitative division into several sections. Duhailan, (2019) indicated that health services can be classified into three main sections, which are as follows:

- **Therapeutic Services:** These are services related to diagnosis and treatment. These services are provided through medical departments, surgical departments, pediatric departments, physiotherapy departments, emergency and accident departments, in addition to operating departments, outpatient clinics, radiology departments, and others.
- **Supportive Medical Services:** It includes health care for the beneficiary of the service while he is on the hospital bed, and it is all about clinical care inside the hospital, including nursing and pharmacy services.

- **Primary health care:** which aims to enhance the health level of individuals and groups, and is linked to all physical, psychological, mental and social aspects.

Bawana (2014) also divided the health services provided by hospitals into three basic types, as follows:

- **Medical services;** These are the services that are responsible for preventing infection, diagnosing and treating adult diseases, and internal medicine physicians are also responsible for caring for inpatients in the hospital, and in a clearer sense, they are preventive or curative medical services such as general medicine and pediatrics.

- **Surgical services;** These services are concerned with the care of patients with general surgery, orthopedics, plastic surgery, kidney surgery, and urology, as well as caring for patients who are under anesthesia and need pre- and post-operative care.

- **Nursing services:** These are caring for the patient and the surrounding environment and psychological support through the provision of health care that includes assessing his health condition, setting priorities for health care, giving intravenous solutions and medicines, taking and monitoring the patient's vital signs, and taking laboratory tests from blood samples and body fluids, and others.

2.3.11 The Health Services Characteristics

Al-Ahmadi (2010) considers that the most important thing of interest in health services is that they are services with two ways; The first based on meeting the human needs of the patient. Like receiving good treatment and providing him with the necessary information. As for the second, it is a technical axis based on the application of knowledge, medical and technical sciences during the treatment process. This axis is based on the efficiency of medical staff, devices and equipment used for diagnosis

The characteristics of the health services provided by the hospital are reflected in the privacy of these services, and this is reflected in the method and administrative work that the service can provide to the public. The characteristics can be determined by - (Al Bakri, 2010)

- The services of the hospital shall be public to the people and shall endeavor to provide them with a public benefit and to the various parties benefiting from them, whether they are individuals, organizations or bodies.
- The health service offered is characterized by a high degree of quality because it is related to human life and curing.
- Government laws and regulations affect the work of public health institutions and private hospitals, specifically those of the country or the private sector, with regard to the determination of their working methods and the medical services they provide.
- In business organizations in general, the decision-making power is the responsibility of one person or a group of persons representing the top of the administration. While the health organizations (hospital) are the power of decision is distributed to some extent between the administration team and the group of physicians.
- The need for direct contact between the hospital and the beneficiary of the health service since the health service cannot be provided mostly in the presence of the patient himself for examination, diagnosis, laboratory test and treatment.
- Because the health service is linked to the human being and is the most expensive thing, it is often difficult for hospital administrations to adopt the same standards and economic concepts applied in other services on their work.
- Due to the fluctuation of demand for health service in the hours of day, week or season, it is necessary to provide health service to its applicants, because they cannot apologize for not providing it to those who need it. with the current professional knowledge.

Health Services should be

- **Safe:** Avoiding causing injuries to patients who are **who are** intended to get help t by the services provided.
- **Effective:** Providing services based on scientific knowledge to all who could benefit and refraining from providing services to those not likely to benefit (avoiding underuse and overuse, respectively).
- **Patient Centered Providing** services **that** are respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions.
- **Timely**: Reducing waits and harmful delays for both those who receive and those who give services**.**
- **Efficient**: Avoiding waste, including waste of equipment, supplies, ideas, and energy.
- **Equitable:** Providing services that do not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status (WHO, 2021, Philip, and Robert and Jennifer, 2007).

2.3.12 Dimensions of the quality of health services

Quality healthcare is a multi-dimensional concept. Donabedian (1980) distinguished three components of quality healthcare: technical quality, interpersonal quality, and amenities. Technical quality relates to the effectiveness of care in producing achievable health gain. Interpersonal quality refers to the extent of accommodation of the patient needs and preferences. The amenities include features such as comfort of physical surroundings and attributes of the organization of service provision (Jordan, 2021).

Øvretveit (2009) developed a system for improving the quality of healthcare based on three dimensions of quality professional, client and management quality. Professional quality is based on professionals' views of whether professionally assessed consumer needs have been

met using correct techniques and procedures. Client quality is whether or not direct beneficiaries feel they get what they want from the services. Management quality is ensuring that services are delivered in a resource-efficient way (Mercado, 2011)

Grönroos (2014) distinguished two types of service quality: technical and functional quality. Technical quality refers to the delivery of the core service or outcome of the service (i.e., what is offered and received), while functional quality refers to the service delivery process, or the way in which the customer receives the service (i.e., how the service is offered and received).

Maxwell (2012) identified six dimensions of quality: effectiveness, acceptability, efficiency, access, equity and relevance. Hulka and colleagues (1970) used three dimensions for assessing quality healthcare: personal relationship, convenience and professional competence. Thompson (1995) considered seven dimensions for evaluating healthcare service quality: tangible, communications, relationships between staff and patients, waiting time, admission and discharge procedures, visiting procedures and religious needs (Limosnero, 2013). Camilleri and O'Callaghan (1998) considered seven attributes for measuring quality of hospital services: professional and technical care, service personalization, price, environment, patient amenities, accessibility and catering. Andaleeb (2003) used five dimensions for healthcare quality measurement: communication, cost, facility, competence and demeanor (Mosadeghrad, 2012).

Walters and Jones (2001) considered security, performance, aesthetics, convenience, economy and reliability for measuring hospital service quality. John (1989)found four dimensions of health care service quality: curing, caring, access and physical environment. Jabnoun and Chaker (2003) used ten dimensions for evaluating service quality of hospitals. These include: tangibles, accessibility, understanding, courtesy, reliability, security, credibility, responsiveness, communication and competence (Philip Kotler et al.2012).

2.3.13 Summary:

NPC is defined as a dynamic interdisciplinary relationship, based on effective communication that promotes shared decision making and influence among nurses and physicians to ensure the highest clinical outcomes "increased quality health services" for patients and operational outcomes for hospitals. The current literature documents a wide range of perceptions among nurses and physicians of the existing degrees of collaboration between the two disciplines. While the degree of collaboration between nurses and physicians is well-documented as a major contributing factor to the clinical outcomes of patient care and operational outcomes of hospitals.

Chapter Three
Methodology

In this chapter different items were explained: study design, place of the study, study population, period of the study, sampling process, sample size , inclusion and exclusion criteria, study tools, reliability, validity, pilot study, data collection, data management, ethical and administrative consideration and limitation of the study.

3.1 Study Design

This design was implemented through a descriptive, analytical, cross-sectional study as it assesses the perception of nurses toward NPC at governmental hospitals in GS to determine their effect on quality health services.

Cross-sectional study was chosen because it is appropriate for describing the status of phenomena or for describing relationships among phenomena at a fixed point in time (Polit & Beck, 2012).

3.2 Study Setting

This study was conducted at all governmental hospitals in GS. The total number of governmental hospitals in GS is 13 hospitals. The researcher selected all adult hospital have medical departments. The hospitals were European Gaza hospital, Nasser hospital, Abu Yousef Al-Najjar Hospital, Shohadaa Al-Aqsa hospital, Al-Shifa Medical complex, Indonesian Hospital and Beit Hanoun Hospital.

3.3 Study Population

This study included all male and female nurses working at all internal medical departments at the hospitals of the current study, in the academic year (2021-2022). The study population was 209 nurses approximately.

3.4 Study Period

- The study conducted at the beginning of year 2022, after obtaining approval for the study proposal from the college of health profession.
- Data collected started from first –May. to first. Jun 2022.
- Plan data analysis and discussion were finished at end of Jun. 2022.
- The study took approximately 9 months in total from its beginning.

3.5 Sample and Sampling method

The researcher has used census sampling method was used in this study. The researcher has selected all nurses those meet the eligible criteria for the study, the sample size is about (193) nurses.

3.6 Eligibility Criteria

3.6.1 Inclusion criteria

- All formally male and female employed nurses.
- Nurses working in adult internal medical departments at least six months and more.

3.6.2 Exclusion criteria

- Nurses under these categories (volunteers, internships or on job creation program).
- Nurses work in other departments.
- Newley employed nurses with less than 6 months of experience.

3.7 Study instruments

A structured questionnaire (Annex 7-8 shows the English and Arabic versions) was developed by the researcher himself after reviewing relevant previous studies. The questionnaire was also approved by distributing this questionnaire to a panel of experts.

A self-developed questionnaire designed in the Arabic language. The questionnaire is made up of three parts to perform the purpose of the research. The following is a detailed description of the questionnaire content:

Section 1: Included socio-demographic data about nurses working in all hospital at governmental hospitals of MoH in Palestine. such as (gender, age, marital status, place of residence, educational level, years of experience).

Section 2: The researcher adopted the Jefferson Scale of Attitudes toward Physician-Nurse Collaboration. The Jefferson Scale of Attitude toward Physician-Nurse Collaboration (JSAPNC) was developed by Mohammadreza Hojat at the Jefferson Medical College .

The scale consists of four subscales. Items 1, 3, 6, 9, 12, 14 and 15 refer to shared education & collaboration, and items 2, 4, 7 sets for caring in opposite to curing (responsibility and role). While items 5, 11 and 13 measure nurse autonomy, items 8 and 10 physician authority. Responses were rated from 1 to 5, and then all responses for the participant were summed together. Items 8 and 10 are reverse scored items .

After preparing the instrument, the researcher presented the instrument to a group of experts, some language modifications were made to suit the culture of Palestinian society, but the number of paragraphs and subscales of the instrument remained unchanged.

Section 3: Quality of health Services. The Questionnaire contain Six-domains:

1. Effective.
2. Safety.
3. People-centred.
4. Timely.
5. Integrated.
6. Efficient.

3.8 Reliability of study instruments

The questionnaire reliability was measured by applying Cronbach's Alpha test on the questionnaire dimensions. This test is used to measure the reliability of the questionnaire

dimensions and the mean of the whole dimensions of the questionnaire. The value of Cronbach's Alpha coefficient lies between (0-1), the higher the value of Cronbach's Alpha coefficient the higher the reliability of the measured items. The resultant value of Cronbach's Alpha coefficient of each dimension is as shown in Table (3.1): Cronbach's Alpha for each dimension of the questionnaire and the entire. The values of Cronbach's Alpha coefficient range from 0.717 to 0.817, which is considered relatively high values reflecting high reliability of questionnaire paragraphs. This indicates excellent reliability value for the entire questionnaire.

Table (3.1): Cronbach's Alpha for each dimension of the questionnaire and the entire field

Dimension	Cronbach's Alpha
Effective	0.724
Safety	0.717
People-centred	0.764
Timely	0.718
Integrated	0.749
Efficient	0.801
Quality of health services	0.817
Nurses' Perception about Impact of Nurse/Physician Collaboration	0.799
All items	0.809

3.9 Validity of study instruments

3.9.1 Content Validity

The questionnaire was evaluated by experts to validate the questions and their relation to the domains that reflect the study and their comments were taken into consideration and modification was performed accordingly **Annex (6)** shows the list of arbitrators. A pilot study was also conducted before collecting actual data to examine nurses' responses to the questionnaire and how they understood it. This improved the validity of the questionnaire after it was modified to better understand it.

3.9.2 Statistical Validity

To ensure the validity of the questionnaire, two statistical tests were applied. The first test is internal validity (Pearson test) which measure the correlation coefficient between each item in the dimension and the whole dimension. The second test is structure validity (Pearson test) that used to test the validity of the questionnaire structure by testing the validity of each dimension and the validity of the whole questionnaire. It measures the correlation coefficient between one dimension and all the dimensions of the questionnaire that have the same level of similar scale.

3.9.2.1 Internal validity

The validity of the questionnaire was calculated in two ways. The first was the internal consistency validity to measure the correlation coefficient between the paragraph and the total degree of the dimension to which this paragraph belongs. The second type is known as structural validity, and it measures the correlation coefficient between the dimension and the total score of the questionnaire.

Table (3.2): The correlation coefficient between each paragraph in the dimension and the total degree of the dimension (Nurses' Perception about Impact of Nurse/Physician Collaboration)

No.	Paragraphs	Correlation Coefficient	p-value
1.	A nurse should be viewed as a collaborator and colleague with a physician rather than his/her assistant.	0.714	0.000*
2.	Physician is qualified to assess and respond to psychological aspects of patients' needs.	0.625	0.000*
3.	During their education, medical and nursing students be involved in teamwork in order to understand their respective roles.	0.724	0.000*
4.	Nurses be involved in making policy decisions affecting their working conditions.	0.666	0.000*
5.	Nurses be accountable to patients for the nursing care they provide.	0.685	0.000*
6.	The responsibilities of nurses and physician are clear and there is no overlap between them.	0.634	0.000*
7.	Nurses have special expertise in patient education and psychological counseling.	0.725	0.000*
8.	Physicians be the dominant authority in all health care matters.	0.700	0.000*
9.	Physicians and nurses contribute to decisions regarding the hospital discharge of patients.	0.718	0.000*
10.	The primary function of the nurse is to carry out the physician's orders.	0.655	0.000*

Table (3.2): Continued

No.	Paragraphs	Correlation Coefficient	p-value
11	Nurses be involved in making policy decisions concerning the hospital support services upon which their work depends.	0.634	0.000*
12	Nurses also have responsibility for monitoring the effects of medical treatment.	0.672	0.000*
13	Nurses clarify a physician's order when they feel that it might have the potential effects on the patient.	0.634	0.000*
14	Physicians be educated to establish collaborative relationships with nurses.	0.661	0.000*
15	Interprofessional relationships between physicians and nurses should be included in their educational programs.	0.735	0.000*

*Correlation is significant at the 0.05 level

It was found through the results in the following table (3.2) and (3.3) that the probability value of each paragraph of the dimension is less than the level of significance 0.05, and this confirms the statistical relationship between the paragraph and the total score of the dimension, and this means that these paragraphs have measured the goal for which they were set.

Table (3.3): The correlation coefficient between each paragraph in the dimension and the total degree of the dimension (Quality of health services)

No.	Paragraphs	Correlation Coefficient	p-value
First domain: Effective			
1.	The number of physicians in medical department is proportional to the number of patients staying in the department, so that the physician can provide the service and give the patient adequate care.	0.685	0.000*
2.	The number of nursing staff is proportional to the number of patients staying in medical department	0.666	0.000*
3.	The medical department has a sufficient number of physicians with various specialties.	0.725	0.000*
4.	Physician strive to provide medical care to their patients to the fullest.	0.710	0.000*
5.	Nurses provide nursing services within protocols.	0.635	0.000*
6.	There are nurses specialized in medical nursing in the department	0.672	0.000*
7.	The medical department has the necessary nursing staff to provide the service in the best way.	0.635	0.000*
Second domain: Safety			
1.	The nurses are keen to preserve the privacy of the patient and not to disclose his health condition.	0.711	0.000*
2.	Nurses are keen to handle medical records with honesty and trust	0.724	0.000*
3.	The department has toilets suitable for patients	0.738	0.000*
4.	The department has suitable shower areas for patients	0.777	0.000*

Table (3.3): Continued

5.	The necessary ventilation, cooling and heating are available in the internal medicine department.	0.687	0.000*
6.	The beds in the department are safe to prevent patients from falling	0.627	0.000*
7.	Maintaining the patient's unit tidy, clean, and equipped with the tools the patient needs	0.637	0.000*
8.	Sufficient and clean sheets are provided during working hours	0.788	0.000*
9.	The department has sufficient and appropriate lighting.	0.715	0.000*
Third domain: People-centred			
1.	Commitment to effective connection and communication with the patient and his family, and a commitment to good treatment of patients and their families	0.588	0.000*
2.	The nurses understand the special circumstances of the patients	0.658	0.000*
3.	Patients and auditors in the department are treated well by the nurses.	0.725	0.000*
4.	The process of receiving and delivering is done beside to the patient and the presence of all nurses at all times	0.628	0.000*
5.	The nursing staff possesses sufficient skills in dealing with patients and auditors	0.574	0.000*
6.	Physician are present in their workplaces, which facilitates access to them when needed	0.596	0.000*
Fourth domain: Timely			
1.	Critical and important information about patients' condition is communicated upon receipt and delivery.	0.667	0.000*
2.	Nurses are characterized by prompt response to patients' complaints, no matter how busy they are	0.635	0.000*
3.	Nurses provide nursing services on time	0.684	0.000*
4.	The nurses in the medical department are reliable in their appointments.	0.615	0.000*
5.	Nurses ensure speed and ease in providing nursing and health services	0.600	0.000*
6.	Nurses complete their tasks in a specified time and with high efficiency	0.582	0.000*
7.	The medical department has the necessary medical consumables to perform the medical and nursing procedures on time.	0.573	0.000*
8.	When any of the devices is lacking, it is provided as quickly as possible so that the health of patients does not deteriorate.	0.627	0.000*
Fifth domain: Integrated			
1.	There is effective communication between the nurses in the department and health team.	0.685	0.000*
2.	The hospital has a laboratory that performs all necessary tests to provide the best service.	0.635	0.000*
3.	The emergency trolley readiness is checked and documented in the form as per the policy text.	0.669	0.000*
4.	Periodic maintenance of medical devices and equipment is carried out in the department	0.574	0.000*
5.	There is cooperation between the Nursing Department from the supervisors in dealing with the shortage or increase of the nursing staff in medical Department	0.588	0.000*
6.	Head nurse participate with all nurses in planning activities that contribute to raising and improving the quality of work in the department.	0.591	0.000*

Table (3.3): Continued

Sixth domain: Efficient			
1.	The procedures and policies followed in the department facilitate the provision of nursing service to patients	0.624	0.000*
2.	Introducing the patient or his escort to the nursing station, visiting times and physician rounded	0.748	0.000*
3.	The appropriate directional signs are used in the corridors.	0.768	0.000*
4.	In medical department, there are suitable medical consumables that facilitate service provision.	0.699	0.000*
5.	In medical department, there are suitable medical devices that facilitate service provision, such as an ECG machine, a blood sugar test, a blood monitor, and others.	0.684	0.000*
6.	Available medical, nursing and administrative forms that necessary for the work of department	0.644	0.000*
7.	Medical devices operate in a safe and effective manner around the time.	0.659	0.000*

*Correlation is significant at the 0.05 level

3.9.2.2 Structure Validity

Structure validity is the second statistical test that used to test the validity of the questionnaire structure by testing the validity of each dimension and the validity of the whole questionnaire. It measures the correlation coefficient between one dimension and all the dimensions of the questionnaire that have the same level of liker scale.

As shown in table (3.4), the significance values are less than 0.05, so the correlation coefficients of all the dimensions are significant at $\alpha = 0.05$, so it can be said that the dimensions are valid to be measured what it was set for to achieve the main aim of the study.

Table (3.4): Correlation coefficient of each field and the whole of questionnaire

No.	Dimensions	Correlation Coefficient	p-value
1.	Effective	0.784	0.000*
2.	Safety	0.683	0.000*
3.	People-centred	0.734	0.000*
4.	Timely	0.709	0.000*
5.	Integrated	0.776	0.000*
6.	Efficient	0.741	0.000*
7.	**Quality of health services**	0.784	0.000*
8.	**Nurses' Perception**	0.739	0.000*

3.10 Data Collection

Data collected by using self-administer questionnaire. The researcher distributed the questionnaires to the participants at the working hours in the morning, evening and night work shifts and then receiving them after completion of the questionnaires. The average time for filling the questionnaire about 10 minutes. The covering letter of the questionnaire outline the title and the purpose of the study and the identity of the researcher.

3.11 Response Rate

The total number of the target population was 209 nurses. 193 of them are positively responded with an average of 92.3%. These response rates are considered satisfactory.

3.12 Response Value

The researcher has used a questionnaire to measure the responses of questionnaire's items as in the following: 5 represented "the lowest scale" and 1 represented "the highest scale", as the case might be. Table (3.5) shows the response value.

Table (3.5): Response Value

Response	Very Low Degree (VLD)	Low Degree (LD)	Medium Degree (MD)	High Degree (HD)	Very High Degree (VHD)
Degree	1	2	3	4	5
Mean	1<1.80	1.80<2.60	2.60<3.40	3.40<4.20	4.20-5
Relative weight (%)	20<36%	36<52%	52<68%	68<84%	84-100%

3.13 Data Management

3.13.1 Data Entry:

The collected data entered into the computer software "Statistical Package for Social Sciences" (SPSS) program Version 22 (IBM). by the researcher after coding of the questions and then cleaning of the entered data.

3.13.2 Data Analysis:

Analysis of the data was undertaken using IBM SPSS Statistics; the following quantitative measures were used for the data analysis:

- Reviewing the filled questionnaire.
- Coding the questionnaire
- Data entry model.
- Defining and recoding the continuous variable.
- Data cleaning.
- Frequency tables of all variables.
- Frequencies and Relative frequency
- Measures of central tendency (mean), and measurement of dispersion (standard deviation).
- Relative weight (RW)
- Pearson's correlation coefficient “product moment correlation coefficient.”
- One sample t test
- Independent sample t test.
- One-way Analysis of Variance (ANOVA).

3.14 Ethical and Administrative Considerations

The researcher maintained all ethical and administrative requirements to conduct this study. An academic approval obtained from college of health professions at Al-Quds University (Annex 3), and General of the Health Information Unit in the MoH (Annex.4). Other ethical approval obtained from Helsinki committee to carry out the study (Annex 5) .

Every participant provided with full explanatory form attached with the questionnaire. This form includes the purpose of the study, assurance about the confidentiality of their information, and instruction to respond the questionnaire. In addition, it included statement indicating to their participation is voluntary.

Chapter Four

Results of the Study

4.1 Introduction

This chapter illustrates the results of a statistical analysis of the data, including descriptive analysis that presents the socio-demographic characteristics of the study sample and answers to the study questions. The researcher used simple statistics including frequencies, means, and percentages, also independent sample t-test, One-way ANOVA, as well as Pearson correlation test were used.

4.2 Characteristics of participants

4.2.1 Socio-demographic characteristics of participants

Through the questionnaire, the researcher observed certain demographic characteristics of respondents that included 5 variables as shown in Table 4.1, which contains the frequency and percentage for each variable listed according to the survey categories.

Table (4.1): Socio-demographic Characteristics of Nurses (N=193)

Variable	Categories	Frequency	Percentage %
Gender	Male	92	47.7
	Female	101	52.3
Age	less than 30 years	75	38.9
	30 to 40 years	100	51.8
	More than 40 years	18	9.3
Marital Status	Married	143	74.1
	Not married	50	25.9
Place of Residence	North Gaza	62	32.1
	Gaza	29	15.0
	Mid-Zone	21	10.9
	Khanyounis	52	26.9
	Rafah	29	15.0
Monthly income (NIS)	less than 2000	163	84.5
	2000 to 3000 NIS	20	10.4
	More than 3000 NIS	10	5.1
Total		**193**	**100%**

According the Table 4.1. Result found 193 nurses completed the questionnaire, 92 (47.7%) were males, and 101 (52.3%) were females. About age categories, the majority of nurses (N=100, 51.8%) aged between 30 and 40 years. However, about three quarters of the nurses (N=143, 74.1%) were married. According place of residence, shown in figure 4.1, most of participant living in north Gaza (N= 62, 32.1%) and Khanyounis (N=52, 26.9%), while the lowest percentage of participants was from the Mid-Zone governorate (N= 21, 10.9%). According monthly income, the monthly income of most of the participants was less than 2000 NIS (N= 163, 84.5%).

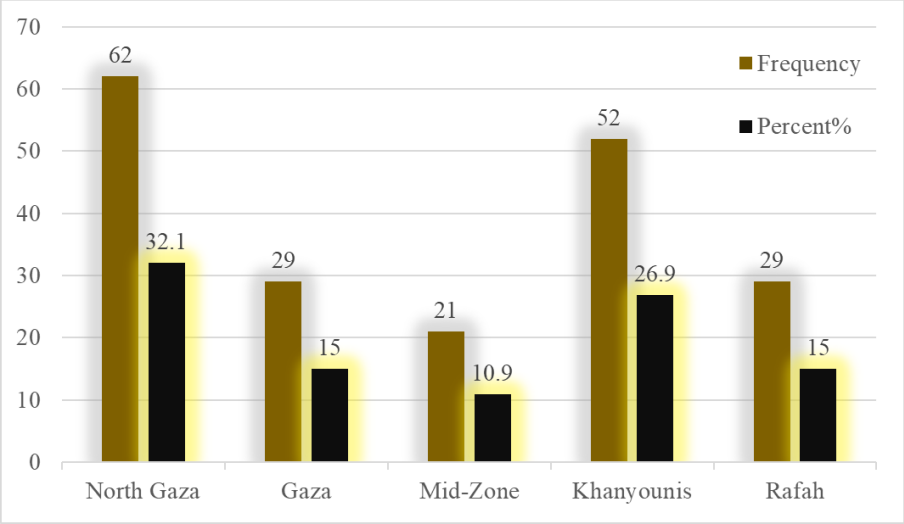


Figure (4.1): Distribution of participants according to place of residence

4.2.2 Working Characteristics of participants

Table (4.2): Working Characteristics of Nurses (N=193)

Variable	Options	Frequency	Valid Percentage %
Job title	Nursing Supervisor	12	6.2
	Head Nurse	15	7.8
	Register Nurse	122	63.2
	Practical Nurse	44	22.8
Education Degree	2 years diploma	44	22.8
	Bachelor	143	74.1
	Master	6	3.1
Total Experience in Medical Departments	From 1 to 5 years	121	62.7
	5 to 10 years	33	17.1
	10 to 15 years	33	17.1
	More than 15 years	6	3.1

Table 4.2 illustrates working characteristics, according job title, considered register Nurse most nurse worked in medical departments 63.2% (N=122), while practical nurse represented about 22.8% (N= 44), whilst nursing supervisor and head nurse represented 14% (N= 27). According education degree, the highest percentage of nurses had Bachelor degree 74.1%(N=143), followed by 2 years diploma 22.8% (N= 44), while 3.1% (N= 6) % of them had Master Degree.

According experience in nursing figure 4.2 illustrates that 65.3% (N= 126) of nurses had an experience between one to 10 years, 29.5% (N= 57) their experience between 10 to 20 years, 5.2% (N= 10) of the participant had more than 20 years of experience. Whilst table 4.2 demonstrated the experience in the medical departments 62.7% (N= 121) from nurses have experience in medical departments less than 5 years, 17.1 (N= 33) between 5 to less than 10 years and same percentage between 10 to less than 15 and lowest percentage experience in group more than 15 years about 3.1% (N= 6).

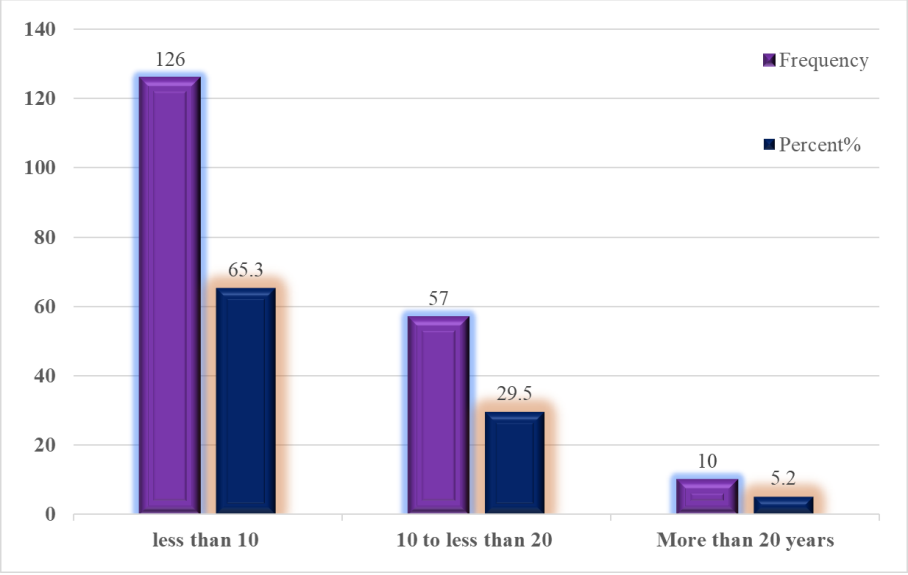


Figure (4.2): Distribution of participants according to experience in nursing

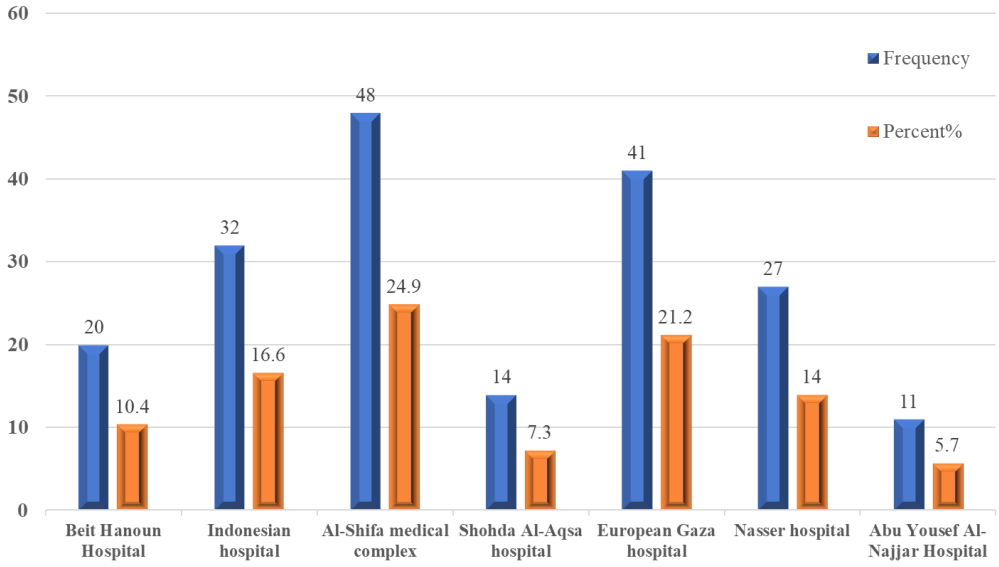


Figure (4.3): Distribution of participants according to place of work (Hospital)

Figure 4.3 demonstrated Place of work according hospital, where represented Al-Shifa medical complex highest participation rate in the study 24.9% (N= 48), followed by EGH with percentage 21.2% (N= 41), but Indonesian hospital represented 16.6% (N= 32), while Nasser hospital 14% (N= 27). But the lowest percentage of nurses was in Beit Hanoun Hospital 10.4% (N=20); Shohda Al Aqsa hospital 7.3% (14) and Abu Yousef Al-Najjar Hospital 5.7% (N= 11).

4.3 Research questions:

4.3.1 What is the perception of nurses toward nurse/physician collaboration in medical departments at governmental hospitals in Gaza Strip?

This section consists of fifteen paragraphs related to the perception of nurses toward nurse/physician collaboration in medical departments at governmental hospitals in GS.

Table (4.3) shows the mean score, relative weight and rankings to the four subscales of nurse/physician collaboration. The Nurse autonomy dimension ranked first with a relative weight of (82.20%), followed by the Shared education & collaboration dimension (80.14%), however, responsibility and role dimension in third ranked with a relative weight of (77.20%), while physician authority ranked last with a relative weight of (57.0%). The

finding shows that there is a high level of nurse/physician collaboration in medical departments at governmental hospitals in GS from point of view nurses. This means a positive perception towards of nurse/physician collaboration from the nurses' point of view.

Table (4.3): Result of perception of nurses toward nurse/physician collaboration in medical departments at governmental hospitals.

No.	Dimensions	Mean	SD	Relative weight	P value	Rank
1.	**Shared education & collaboration**	4.01	0.41	80.14	0.000	2
2.	**Caring vs. curing (responsibility and role)**	3.86	0.65	77.20	0.000	3
3.	**Nurse autonomy**	4.11	0.52	82.20	0.000	1
4.	**Physician authority**	2.85	1.01	57.00	0.000	4
Overall perception		**3.71**	**0.78**	**74.14**	**0.000**	

4.3.1.1 Shared education & collaboration

This dimension consists of seven paragraphs (1, 3, 6, 9, 12, 14 & 15) related to shared education & collaboration. These paragraphs were subjected to the views of respondents. The researcher calculated the descriptive statistics, i.e., Means, SD, RW, and P- values.

Table (4.4): Results related to dimension of (Shared education & collaboration)

No.	Domains	Mean	SD	Relative weight	P value	Rank
1.	A nurse should be viewed as a collaborator and colleague with a physician rather than his/her assistant.	4.41	0.66	88.20	0.000	1
2.	During their education, medical & nursing students be involved in teamwork in order to understand their respective roles.	3.82	0.90	76.34	0.000	5
3.	The responsibilities of nurses and physician are clear and there is no overlap between them.	3.81	0.96	76.13	0.000	6
4.	Physicians & nurses contribute to decisions regarding the hospital discharge of patients.	3.59	0.92	71.83	0.000	7
5.	Nurses also have responsibility for monitoring the effects of medical treatment.	4.03	0.72	80.65	0.000	4
6.	Physicians be educated to establish collaborative relationships with nurses.	4.22	0.73	84.49	0.000	2
7.	Interprofessional relationships between physicians & nurses should be included in their educational programs.	4.17	0.69	83.46	0.000	3
All domains		**4.01**	**0.41**	**80.14**	**0.000**	

Above in table 4.4 show the first paragraph ***"A nurse should be viewed as a collaborator and colleague with a physician rather than his/her assistant***" was ordered in the 1st rank with a mean equal "4.41" and RW "88.20%" and P-value equals 0.000 which is smaller than the level of significance α= 0.05. It can be concluded that the respondents very agreed to this item. ***"Physicians be educated to establish collaborative relationships with nurses***" was ordered in the 2nd rank with a mean equal "4.22" and RW "84.49%" and P-value equals 0.000 which is smaller than the level of significance α= 0.05. It can be concluded that the respondents very agreed to this item. "***Physicians and nurses contribute to decisions regarding the hospital discharge of patients***" was ordered in the last rank with a mean equal "3.59" and RW"71.83%" and P-value equals 0.000 which is smaller than the level of significance α= 0.05. It can be concluded that the respondents agree to this item. The finding shows that there is a high level of shared education & collaboration in medical departments at governmental hospitals in GS from point of view nurses. This means a positive perception towards of shared education & collaboration from the nurses' point of view.

4.3.1.2 Caring vs. curing (responsibility and role)

This dimension consists of 3 paragraphs (2, 4 and 7) related to caring vs. curing (responsibility and role).

Table (4.5): Results related to dimension of caring vs. curing (responsibility and role).

No.	Domains	Mean	SD	Relative weight	P value	Rank
1.	Physician is qualified to assess and respond to psychological aspects of patients' needs.	3.83	0.91	76.56	0.000	2
2.	Nurses be involved in making policy decisions affecting their working conditions.	3.66	1.01	73.26	0.000	3
3.	Nurses have special expertise in patient education and psychological counseling.	4.10	0.72	82.00	0.000	1
All domains		**3.86**	**0.65**	**77.20**	**0.000**	

Table 4.5 clarify nurse perception of responsibility and role, the third paragraph came in 1st rank ***"Nurses have special expertise in patient education and psychological counseling***" with a mean equal "4.10" and RW "82.00%" and P-value equals 0.000 which is smaller than the level of significance α= 0.05. It can be concluded that the respondents agreed to this item. ***"Physician is qualified to assess and respond to psychological aspects of patients' needs***" was ordered in the 2nd rank with a mean equal "3.83" and RW "76.56%" and P-value equals 0.000 which is smaller than the level of significance α= 0.05. It can be concluded that the respondents agreed to this item. "***Nurses be involved in making policy decisions affecting their working conditions***" was ordered in the last rank with a mean equal "3.66" and RW"73.26%" and P-value equals 0.000 which is smaller than the level of significance α= 0.05. It can be concluded that the respondents agreed to this item. The finding shows that there is a high level of responsibility and role in medical departments at governmental hospitals in GS from point of view nurses. This means a positive perception towards of responsibility and role from the nurses' point of view.

4.3.1.3 Nurse autonomy

This dimension consists of 3 paragraphs (5, 11 and 13) related to nurse autonomy.

Table (4.6): Results related to dimension of nurse autonomy.

No.	Domains	Mean	SD	Relative weight	P value	Rank
1.	Nurses be accountable to patients for the nursing care they provide.	4.40	0.65	88.04	0.000	1
2.	Nurses be involved in making policy decisions concerning the hospital support services upon which their work depends.	3.66	1.02	73.20	0.000	3
3.	Nurses clarify a physician's order when they feel that it might have the potential effects on the patient.	4.26	0.69	85.16	0.000	2
All domains		**4.11**	**0.52**	**82.20**	**0.000**	

Table 4.6 show nurse perception of nurse autonomy. The first paragraph came in the 1st rank ***"Nurses be accountable to patients for the nursing care they provide***" with a mean equal "4.40" and RW "88.04%" and P-value equals 0.000 which is smaller than the level of significance α= 0.05. It can be concluded that the respondents very agreed to this item. ***"Nurses clarify a physician's order when they feel that it might have the potential effects on the patient***" was ordered in the 2nd rank with a mean equal "4.26" and RW "85.16%" and P-value equals 0.000 which is smaller than the level of significance α= 0.05. It can be concluded that the respondents very agreed to this item. "***Nurses be involved in making policy decisions concerning the hospital support services upon which their work depends.***" was ordered in the last rank with a mean equal "3.66" and RW "73.20%" and P-value equals 0.000 which is smaller than the level of significance α= 0.05. It can be concluded that the respondents agreed to this item. The finding shows that there is a high level of nurse autonomy. in medical departments at governmental hospitals in GS from point of view nurses. This means a positive perception towards of nurse from the nurses' point of view.

4.3.1.4 Physician authority

This dimension consists of 2 paragraphs (8 and 10) related to physician authority.

Table (4.7): Results related to dimension of physician authority

No.	Domains	Mean	SD	Relative weight	P value	Rank
1.	Physicians be the dominant authority in all health care matters.	2.50	1.14	50.00	0.000	2
2.	The primary function of the nurse is to carry out the physician's orders.	3.19	1.29	63.80	0.045	1
All domains		**2.85**	**1.01**	**57.00**	**0.030**	

- Reverse Scored Items

Table 4.7 illustrate nurse perception of physician authority. The second paragraph came in the 1st rank ***"The primary function of the nurse is to carry out the physician's orders***" with a mean equal "3.19" and RW "63.80%" and P-value equals 0.045 which is smaller than the level of significance α= 0.05. It can be concluded that the respondents agree to this item. But

first paragraph "***Physicians be the dominant authority in all health care matters***" was ordered in the 2nd rank with a mean equal "2.50" and RW "50.00%" and P-value equals 0.000 which is smaller than the level of significance α= 0.05. It can be concluded that the respondents disagreed to this item. The finding shows that there is a low level of physician authority in medical departments at governmental hospitals in GS from point of view nurses. This means a positive perception towards of physician authority from the nurses' point of view.

4.3.2 What is the level of quality health care in medical departments at governmental hospitals in Gaza Strip from point of view of nurses

This part shows the results of the 193 respondents of the questionnaire was divided into six dimensions (Effective, Safety, People-centered, Timely, Integrated, and Efficient).

Table (4.8): Results related to dimensions of quality health care

No.	Dimensions	Mean	SD	Relative weight (%)	P value	Rank
1.	Effective	3.30	0.65	65.81	0.000	6
2.	Safety	3.55	0.68	70.94	0.000	5
3.	People-centered	3.93	0.52	78.55	0.000	3
4.	Timely	4.02	0.50	80.31	0.000	1
5.	Integrated	3.95	0.54	79.03	0.000	2
6.	Efficient	3.90	0.60	77.94	0.000	4
All dimensions of quality health care		**3.76**	**0.44**	**75.20**	**0.000**	

Results in table 4.8 showed that the dimension of "***Timely***" was ordered in the 1st rank with a mean equal "4.02" and RW "80.31%" and P-value equals 0.000 which is smaller than the level of significance α= 0.05. It can be concluded that the respondents agreed to this dimension. "***Effective***" was ordered in the last rank with a mean equal "3.30" and RW "65.81%" and P-value equals 0.000 which is smaller than the level of significance α= 0.05. It can be concluded that the respondents agreed to this dimension.

The finding shows that there is a high level of quality health care in medical departments at governmental hospitals in GS from the nurses' point of view.

4.3.2.1 Effective

This section consists of seven paragraphs related to Effective. These paragraphs were subjected to the views of respondents. The researcher calculated the descriptive statistics, i.e., Means, SD, RW, and P- values.

In table 4.9 clarify that the dimension of Effective quality health care services. Came paragraph ***"Nurses provide nursing services within protocols***" was ordered in the 1st rank with a mean equal "4.09" and RW "81.72%" and P-value equals 0.000 which is smaller than the level of significance α= 0.05. It can be concluded that the respondents agreed to this item. ***"Physician strive to provide medical care to their patients to the fullest***" was ordered in the 2nd rank with a mean equal "3.87" and RW "77.34%" and P-value equals 0.000 which is smaller than the level of significance α= 0.05. It can be concluded that the respondents agreed to this item. "***The number of nursing staff is proportional to the number of patients staying in medical department***" was ordered in the last rank with a mean equal "2.27" and RW "45.45%" and P-value equals 0.000 which is smaller than the level of significance α= 0.05. It can be concluded that the respondents disagree to this item.

Table (4.9): Results related to dimension of (Effective)

No.	Domains	Mean	SD	Relative weight	P value	Rank
1.	The number of physicians in medical department is proportional to the number of patients staying in the department, so that the physician can provide the service and give the patient adequate care.	3.04	1.17	60.84	0.622	6
2.	The number of nursing staff is proportional to the number of patients staying in medical department	2.27	1.31	45.45	0.000	7
3.	The medical department has a sufficient number of physicians with various specialties.	3.19	1.13	63.87	0.019	4
4.	Physician strive to provide medical care to their patients to the fullest.	3.87	0.68	77.34	0.000	2
5.	Nurses provide nursing services within protocols.	4.09	0.64	81.72	0.000	1
6.	There are nurses specialized in medical nursing in the department	3.12	1.21	62.46	0.165	5
7.	The medical department has the necessary nursing staff to provide the service in the best way.	3.53	1.17	70.59	0.000	3
All domains		**3.30**	**0.65**	**65.81**	**0.000**	

The finding shows that there is a moderate level of effective quality health care services in medical departments at governmental hospitals in GS from the nurses' point of view.

4.3.2.2 Safety

This section consists of nine items related to safety. In table 4.10 illustrate that the dimension of safety in quality health care services. Came paragraph ***"Nurses are keen to handle medical records with honesty and trust***" was ordered in the 1st rank with a mean equal "4.28" and RW "85.51%" and P-value equals 0.000 which is smaller than the level of significance α= 0.05. It can be concluded that the respondents very agreed to this item. ***"The nurses are keen to preserve the privacy of the patient and not to disclose his health condition***" was ordered in the 2nd rank with a mean equal "4.18" and RW "83.62%" and P-value equals 0.000 which is smaller than the level of significance α= 0.05. It can be concluded that the respondents agreed to this item. "***The department has suitable shower areas for patients***" was ordered in the last rank with a mean equal "2.92" and RW "58.38%" and P-value equals 0.408 which is greater than the level of significance α= 0.05. It can be concluded that the respondents neutral to this item.

Table (4.10): Results related to dimension of (Safety)

No.	Domains	Mean	SD	Relative weight	P value	Rank
1.	The nurses are keen to preserve the privacy of the patient and not to disclose his health condition.	4.18	0.86	83.62	0.000	2
2.	Nurses are keen to handle medical records with honesty and trust	4.28	0.70	85.51	0.000	1
3.	The department has toilets suitable for patients	3.53	1.21	70.54	0.000	4
4.	The department has suitable shower areas for patients	2.92	1.33	58.38	0.408	9
5.	The necessary ventilation, cooling and heating are available in the internal medicine department.	3.00	1.23	60.00	0.964	8
6.	The beds in the department are safe to prevent patients from falling	3.29	1.32	65.87	0.003	7
7.	Maintaining the patient's unit tidy, clean, and equipped with the tools the patient needs	3.74	0.94	74.87	0.000	3
8.	Sufficient and clean sheets are provided during working hours	3.44	1.09	68.83	0.000	6
9.	The department has sufficient and appropriate lighting.	3.53	1.09	70.53	0.000	5
All domains		**3.55**	**0.68**	**70.94**	**0.000**	

The finding shows that there is a high level of safety in quality health care services in medical departments at governmental hospitals in GS from the nurses' point of view.

4.3.2.3 People-centered

This section consists of six items related to people-centered. In table 4.11 show that the dimension of people-centered in quality health care services. Came paragraph ***"The process of receiving and delivering is done beside to the patient and the presence of all nurses at all times***" was ordered in the 1st rank with a mean equal "4.23" and RW "84.68%" and P-value equals 0.000 which is smaller than the level of significance α= 0.05. It can be concluded that the respondents very agreed to this item. ***"Patients and visitors in the department are treated well by the nurses***" was ordered in the 2nd rank with a mean equal "4.05" and RW "80.96%" and P-value equals 0.000 which is smaller than the level of significance α= 0.05. It can be concluded that the respondents agreed to this item. "***Physician are present in their workplaces, which facilitates access to them when needed***" was ordered in the last rank with a mean equal "3.32" and RW "66.38%" and P-value equals 0.000 which is smaller than the level of significance α= 0.05. It can be concluded that the respondents agreed to this item.

Table (4.11): Results related to dimension of people-centered.

No.	Domains	Mean	SD	Relative weight	P value	Rank
1.	Commitment to effective connection and communication with the patient and his family, and a commitment to good treatment of patients and their families	3.99	0.81	79.79	0.000	4
2.	The nurses understand the special circumstances of the patients	3.93	0.71	78.62	0.000	5
3.	Patients and visitors in the department are treated well by the nurses.	4.05	0.60	80.96	0.000	2
4.	The process of receiving and delivering is done beside to the patient and the presence of all nurses at all times	4.23	0.79	84.68	0.000	1
5.	The nursing staff possesses sufficient skills in dealing with patients and visitors	4.04	0.81	80.85	0.000	3
6.	Physician are present in their workplaces, which facilitates access to them when needed	3.32	1.14	66.38	0.000	6
All domains		**3.93**	**0.52**	**78.55**	**0.000**	

The finding shows that there is a high level of people-centered in quality health care services in medical departments at governmental hospitals in GS from the nurses' point of view.

4.3.2.4 Timely

This section consists of eight items related to Timely. In table 4.12 show that the dimension of timely in quality health care services. Came paragraph ***"Critical and important information about patients' condition is communicated upon receipt and delivery***" was ordered in the 1st rank with a mean equal "4.26" and RW "85.21%" and P-value equals 0.000 which is smaller than the level of significance α= 0.05. It can be concluded that the respondents very agreed to this item. ***"Nurses provide nursing services on time***" was ordered in the 2nd rank with a mean equal "4.16" and RW "83.24%" and P-value equals 0.000 which is smaller than the level of significance α= 0.05. It can be concluded that the respondents agreed to this item. "***When any of the devices is lacking, it is provided as quickly as possible so that the health of patients does not deteriorate***" was ordered in the last rank with a mean equal "3.69" and RW "73.86%" and P-value equals 0.000 which is smaller than the level of significance α= 0.05. It can be concluded that the respondents agreed to this item.

Table (4.12): Results related to dimension of (Timely)

No.	Domains	Mean	SD	Relative weight	P value	Rank
1.	Critical and important information about patients' condition is communicated upon receipt and delivery.	4.26	0.83	85.21	0.000	1
2.	Nurses are characterized by prompt response to patients' complaints, no matter how busy they are	3.97	0.74	79.47	0.000	6
3.	Nurses provide nursing services on time	4.16	0.61	83.24	0.000	2
4.	The nurses in the medical department are reliable in their appointments.	4.01	0.77	80.22	0.000	5
5.	Nurses ensure speed and ease in providing nursing and health services	4.11	0.73	82.25	0.000	3
6.	Nurses complete their tasks in a specified time and with high efficiency	4.05	0.73	80.97	0.000	4
7.	The medical department has the necessary medical consumables to perform the medical and nursing procedures on time.	3.87	0.87	77.38	0.000	7
8.	When any of the devices is lacking, it is provided as quickly as possible so that the health of patients does not deteriorate.	3.69	1.03	73.86	0.000	8
All domains		**4.02**	**0.50**	**80.31**	**0.000**	

The finding shows that there is a high level of timely quality health care services in medical departments at governmental hospitals in GS from the nurses' point of view.

4.3.2.5 Integrated

This section consists of six items related to integrated. In table 4.13 clarify that the integrated in quality health care services. Came paragraph ***"The emergency trolley readiness is checked and documented in the form as per the policy text***" was ordered in the 1st rank with a mean equal "4.32" and RW "86.39%" and P-value equals 0.000 which is smaller than the level of significance α= 0.05. It can be concluded that the respondents very agreed to this item. ***"Periodic maintenance of medical devices and equipment is carried out in the department***" was ordered in the 2nd rank with a mean equal "4.19" and RW "83.87%" and P-value equals 0.000 which is smaller than the level of significance α= 0.05. It can be concluded that the respondents agreed to this item. "***There is cooperation between the Nursing Department from the supervisors in dealing with the shortage or increase of the nursing staff in medical Department***" was ordered in the last rank with a mean equal "3.49" and RW "69.74%" and P-value equals 0.000 which is smaller than the level of significance α= 0.05. It can be concluded that the respondents agreed to this item

Table (4.13): Results related to dimension of (Integrated)

No.	Domains	Mean	SD	Relative weight	P value	Rank
1.	There is effective communication between the nurses in the department and health team.	4.03	0.77	80.63	0.000	3
2.	The hospital has a laboratory that performs all necessary tests to provide the best service.	3.81	0.98	76.13	0.000	5
3.	The emergency trolley readiness is checked and documented in the form as per the policy text.	4.32	0.66	86.39	0.000	1
4.	Periodic maintenance of medical devices and equipment is carried out in the department	4.19	0.68	83.87	0.000	2
5.	There is cooperation between the Nursing Department from the supervisors in dealing with the shortage or increase of the nursing staff in medical Department	3.49	1.11	69.74	0.000	6
6.	Head nurse participate with all nurses in planning activities that contribute to raising and improving the quality of work in the department.	3.87	0.98	77.49	0.000	4
All domains		**3.95**	**0.54**	**79.03**	**0.000**	

The finding shows that there is a high level of integrated in quality health care services in medical departments at governmental hospitals in GS from the nurses' point of view.

4.3.2.6 Efficient

This section consists of seven items related to efficient. In table 4.14 clarify that the efficient in quality health care services. Came paragraph ***"The procedures and policies followed in the department facilitate the provision of nursing service to patients***" was ordered in the 1st rank with a mean equal "4.05" and RW "81.00%" and P-value equals 0.000 which is smaller than the level of significance α= 0.05. It can be concluded that the respondents agreed to this item. ***"Available medical, nursing and administrative forms that necessary for the work of department***" was ordered in the 2nd rank with a mean equal "4.04" and RW "80.84%" and P-value equals 0.000 which is smaller than the level of significance α= 0.05. It can be concluded that the respondents agreed to this item. "***The appropriate directional signs are used in the corridors***" was ordered in the last rank with a mean equal "3.49" and RW "69.78%" and P-value equals 0.000 which is smaller than the level of significance α= 0.05. It can be concluded that the respondents agreed to this item.

Table (4.14): Results related to dimension of efficient.

No.	Domains	Mean	SD	Relative weight	P value	Rank
1.	The procedures and policies followed in the department facilitate the provision of nursing service to patients	4.05	0.74	81.00	0.000	1
2.	Introducing the patient or his escort to the nursing station, visiting times and physician rounded	3.93	0.85	78.63	0.000	5
3.	The appropriate directional signs are used in the corridors.	3.49	1.07	69.78	0.000	7
4.	In medical department, there are suitable medical consumables that facilitate service provision.	4.02	0.72	80.32	0.000	3
5.	In medical department, there are suitable medical devices that facilitate service provision, such as an ECG machine, a blood sugar test, a blood monitor, and others.	4.00	0.90	80.00	0.000	4
6.	Available medical, nursing and administrative forms that necessary for the work of department	4.04	0.78	80.84	0.000	2
7.	Medical devices operate in a safe and effective manner around the time.	3.76	0.92	75.26	0.000	6
All domains		**3.90**	**0.60**	**77.94**	**0.000**	

The finding shows that there is a high level of efficient in quality health care services in medical departments at governmental hospitals in GS from the nurses' point of view.

4.3.3 Is there a relationship between perception of nurses toward nurse-physician collaboration and level of quality health services

To test the relationship between perception of nurses toward nurse- physician collaboration and level of quality health services, Pearson's correlation coefficient was used to measure the strength and direction of the relationship (linear association/ correlation). According to the results of the test that shown in table (4.15), significance value is less than 0.05 (P-value < 0.05), and thus the relationship is statistically significant at $\alpha \leq 0.05$.

This means the increased perception of nurses toward nurse-physician collaboration that can increased quality health services.

Table (4.15): Correlation coefficient between perception of nurses toward nurse-physician collaboration and level of quality health services

	Statistic	**Perception of nurses toward nurse-physician collaboration**
Level of quality health services	Correlation coefficient *(r)*	0.643*
	P-value	0.000
	N	193

* Correlation is significant at 0.05

4.3.4 Is there a relationship between perception of nurses toward nurse/physician collaboration and socio- demographic variables (Gender, Age, Experience and Education level)?

To test the relationship between perception of nurses toward nurse/physician collaboration and socio- demographic variables (Gender, Age, Experience and education level) independent sample t test and One Way ANOVA test was used.

4.3.4.1 The relationship between perception of nurses toward nurse/physician collaboration and Gender

To test the relationship between perception of nurses toward nurse/physician collaboration and Gender, independent sample t test was used, as shown in table 4.16.

Table (4.16): Independent sample t test - Perception of nurses according to gender

Perception of nurses toward nurse/physician collaboration	Mean (SD)		T test	P-value
	Male	Female		
	3.83 (0.42)	3.92 (0.34)	1.551	0.123

The results in table 4.16 showed that the probability value is more than 0.05, and this is evidence that no relationship between perception of nurses toward nurse/physician collaboration and gender.

4.3.4.2 The relationship between perception of nurses toward nurse/physician collaboration and age

To test the relationship between perception of nurses toward nurse/physician collaboration and age, One Way ANOVA test was used, as shown in table 4.17.

Table (4.17): One Way ANOVA - Perception of nurses according to age

Perception of nurses toward nurse/physician collaboration	Mean (SD)			F test	P-value
	less than 30 years	30 to 40	More than 40 years		
	3.84 (0.42)	3.87 (0.38)	4.07 (0.45)	2.576	0.079

The results in table 4.17 showed that the probability value is more than 0.05, and this is evidence that no relationship between perception of nurses toward nurse/physician collaboration and age.

4.3.4.3 The relationship between perception of nurses toward nurse/physician collaboration and experience in the nursing

To test the relationship between perception of nurses toward nurse/physician collaboration and experience in the nursing, One Way ANOVA test was used, as shown in table 4.18

Table (4.18): One Way ANOVA - Perception of nurses according to experience in the nursing

Perception of nurses toward nurse/physician collaboration	Mean (SD)			F test	P-value
	less than 10 years	10 to 20	More than 20 years		
	3.86 (0.37)	3.90 (0.43)	4.08 (0.41)	1.778	0.172

The results in table 4.18 showed that the probability value is more than 0.05, and this is evidence that no relationship between perception of nurses toward nurse/physician collaboration and experience in the nursing.

4.3.4.4 The relationship between perception of nurses toward nurse/physician collaboration and experience in medical departments

To test the relationship between perception of nurses toward nurse/physician collaboration and experience in the medical Departments, One Way ANOVA test was used, as shown in table 4.19.

Table (4.19): One Way ANOVA - Perception of nurses according to experience in the medical departments

Perception of nurses toward nurse/physician collaboration	Mean (SD)				F test	P-value
	1 to 5 years	6 to 10 years	10 to 15 years	More than 15 years		
	3.86 (0.34)	3.84 (0.42)	3.95 (0.49)	3.95 (0.47)	0.631	0.596

The results in table 4.19 showed that the probability value is more than 0.05, and this is evidence that no relationship between perception of nurses toward nurse/physician collaboration and experience in the medical departments.

4.3.4.5 The relationship between perception of nurses toward nurse/physician collaboration and experience in education level

To test the relationship between perception of nurses toward nurse/physician collaboration and education level, One Way ANOVA test was used, as shown in table 4.20.

Table (4.20): One Way ANOVA - Perception of nurses according to education level

Perception of nurses toward nurse/physician collaboration	Mean (SD)			F test	P-value
	2 years diploma	**Bachelor**	**Master**		
	3.81 (0.55)	3.89 (0.37)	3.88 (0.49)	0.521	0.674

The results in table 4.20 showed that the probability value is more than 0.05, and this is evidence that no relationship between perception of nurses toward nurse/physician collaboration and education level.

Chapter Five
Discussion of Results

5.1 Introduction

This chapter summarizes the study and conclusions drawn from the data analysis in chapter four. It also provides a discussion of the implications for actions and recommendations for further research. The focus of this research is to assess the perception of nurses toward nurse/ physician collaboration in medical departments at governmental hospitals in GS to determine their impact on quality health services.

First discussed are the sample characteristics and the influence of demographic characteristics and working characteristics. Second discussed of the result of the study from answer of research questions, the current study results are compared to the previous studies, also the personal opinion of the researcher is illustrated based on experience in this field.

5.2 Characteristics of participants

5.2.1 Socio-demographic characteristics of participants

Table 4.1. Result found 193 nurses completed the questionnaire, 92 (47.7%) were males, and 101 (52.3%) were females. About age categories, the majority of nurses (N=100, 51.8%) aged between 30 and 40 years. However, about three quarters of the nurses (N=143, 74.1%) were married. According place of residence, most of participant living in north Gaza (N= 62, 32.1%) and Khanyounis (N=52, 26.9). According monthly income, the monthly income of most of the participants was less than 2000 NIS (N= 163, 84.5%).

Previous studies varied in describing social demographic variables according to the purpose and location of each study. According to gender, the current study had a higher percentage of females than males. The reason is that the female medical departments contain more beds than males due to the physiological nature of females, the policy of the MoH is that no males

work in female medical departments due to the nature of Palestinian culture. In study by Kim et al. (2022) aimed to verify the impact of nurse–physician collaboration, A total of 108 respondents were female, from all the participants (130), from them 47.7% were between 20 and 29 years, with a mean age of 31.38 years (SD = 5.58). and over half did not have any religion (60.8%). Other study by El-Hanafy (2018) in Egypt was to explore the nurse–physician relation, the nurse female participates in study 224 female and 26 male nurses, the nurses' mean age (29.6). Other study by Aghamohammadi et al. (2019). The results showed that among 126 participants, female nurse 125 (99.2%). Most participants (60.3%) were in the age range of 30–40 years. Most of the samples (67.5%) were also married (96.8%). In study by Hussein (2018). Aimed to determine the nurses' perception and attitude toward nurse-physician relationship, the majority of respondents were female and the age ranged from 20 to 40 years. In study by Missi (2016) aimed to improve communication and collaboration between nurses and physicians in an acute care hospital participants ranged in age between 22 and 68 years with a mean age of 41. Most were female (84%).

5.2.2 Working Characteristics of participants

Table 4.2 illustrates working characteristics, according to the job title, considered register Nurse most nurse worked in medical departments 63.2% (N=122), while practical nurse represented about 22.8% (N= 44). According education degree, the highest percentage of nurses had Bachelor degree 74.1%(N=143), followed by 2 years diploma 22.8% (N= 44). According experience in nursing 65.3% (N= 126) of nurses had an experience between one to 10 years, 29.5% (N= 57) their experience between 10 to 20 years, 5.2% (N= 10) of the participant had more than 20 years of experience, whilst experience in the medical departments 62.7% (N= 121) from nurses have experience in medical departments less than 5 years, 17.1 (N= 33) between 5 to less than 10 years and same percentage between 10 to less than 15.

In study by Kim et al. (2022) found 77.7% had bachelor or graduate degrees. The mean years of nursing experience was 7.72 years (SD = 5.98). but in El-Hanafy (2018) found majority (79.2%) of nurses had a diploma, and 16.4% had a bachelor's degree. Other study by Aghamohammadi et al. (2019). had a bachelor's degree in nursing (96.8%), and many had less than 5 years of experience in the critical care units. In study by Hussein (2018). found 127 (87%) out of 146 respondents have the diploma as the highest education rather and the degree contributes only 13%. Moreover, in term of working experiences, 71.9% of the respondents have less than 10 years and the remaining have more than 10 years experiences. In study by Missi (2016) The majority of participants had been in their current profession for 10 years, and on their current unit for 3 years. There were slightly more nurses with associate degrees (45%) than Baccalaureate degrees (39%).

5.3 The perception of nurses toward nurse/physician collaboration in medical departments at governmental hospitals in Gaza Strip.

Table (4.3) shows a high level of nurse/physician collaboration with a relative weight of (74.14%) from point of view nurses. This means a positive perception towards nurse/physician collaboration from nurse point of view. The Nurse autonomy dimension ranked first with a relative weight of (82.20%), followed by the Shared education & collaboration dimension (80.14%), however, responsibility and role dimension in third ranked with a relative weight of (77.20%), while physician authority ranked last with a relative weight of (57.0%).

The findings of this study indicated that nurses' attitude toward physician-nurse collaboration was positive. The findings are similar with other studies in Korea (Kim et al., 2022); Iran (Aghamohammadi et al., 2019); Egypt (El-Hanafy, 2018) and Malaysia (Hussein et al., 2018) which indicate the worldwide significance of the subject of physician-nurse collaboration. Over the past few years there has been ongoing interest in physician -nurse

collaborative practice as this type of working relationship is viewed as a potential solution to problems existing in health care organizations. Moreover, Physician-nurse collaboration is an essential factor for increased quality health care services.

In a study on the nurses of Johannesburg ICUs, Le Roux and colleagues (2013) concluded that the nurses had a positive attitude toward nurse–physician collaboration. Several other studies that were conducted using JSAPNC scale reported that the nurses had good attitudes toward their collaboration with physicians (Adebayo and Ilesanmi, 2016: Wang et al., 2015). However, Giorgio et al. (2017) in a study in Cyprus showed that the nurses' attitude toward collaborating with physicians was at a moderate level. And Nikandish et al (2020) showed that the nurses' attitude toward collaborating with physicians was at a moderate level. It seems that the nurses' workplace is one of the influential factors of the nurses' attitude toward collaboration with the physicians; so that in the ICUs where the interaction between colleagues is high, the nurses' attitude toward collaboration with the physicians is reported to be desirable.

5.3.1 Shared education & collaboration

Table 4.4 show paragraph "A nurse should be viewed as a collaborator and colleague with a physician rather than his/her assistant" was ordered in the 1st rank with RW "88.20%; "Physicians be educated to establish collaborative relationships with nurses" was ordered in the 2nd rank with RW "84.49%"; "Physicians and nurses contribute to decisions regarding the hospital discharge of patients" was ordered in the last rank with RW"71.83%". In general, we conclude that there is a high level of shared education & collaboration in medical departments at governmental hospitals in GS from point of view nurses. This means a positive perception towards of shared education & collaboration from nurse point of view.

In study by Pakpour et al. (2019) found the higher scores in "shared education" as the most important aspect of physician-nurse collaboration indicate that shared education. So, should

be included in the curricula of both medical and nursing disciplines. It helps these professionals to become more familiar with each professional role. In this regard, previous studies have emphasized the importance of education in improving collaborations between health care professionals. Moreover, In the study by Ghadery (2019) found more positive attitudes and orientation toward factor of shared education from nurses. This result can attribute that nurse had knowledgeable and the principle of collaboration and they had shared responsibility of patient's care. This result consistent with Thompson (2009) and Strechi (2007).

In study by Alsallum et al (2020) the nurses' attitudes towards all items of shared education were more positive than physicians. This result is in line with previous studies such as El sayed and Sleem (2011), which revealed that nurses scores were significantly higher than physicians in the shared education and team work. This result is further supported by Vegesna et al (2016) who showed that nurses scored higher in the shared education factor than physicians. This result can be explained by the fact that nurses working at the current hospital are viewed as assistant to all physicians rather that a colleague working in one team.

5.3.2 Caring vs. curing (responsibility and role)

Table 4.5 clarify nurse perception of responsibility and role, the third paragraph came in 1st rank "Nurses have special expertise in patient education and psychological counseling" with a mean equal "4.10" and RW "82.00%". It can be concluded that the respondents agreed to this item. "Physician is qualified to assess and respond to psychological aspects of patients' needs" was ordered in the 2nd rank with a mean equal "3.83" and RW "76.56%". It can be concluded that the respondents agreed to this item. "Nurses be involved in making policy decisions affecting their working conditions" was ordered in the last rank with a mean equal "3.66" and RW"73.26%".

In study by Franco and Cordero (2017); EL Sayed and Sleem (2011) founds the "caring versus curing" factor (i.e., higher score indicates a more positive view of nurse's contributions to the psychosocial and educational aspects of patient care) indicates a more positive view of nurses. These results are in agreed with the current study.

Other study by Ghadery (2019) show as regards to the "caring versus curing" factor related to nursing role of patient care it was found that disagreement is obvious about nursing role in the patient care. Physicians scored low level of agree 44-67% while nurses scored high level of agree 87%. This result attributed that the lack of organizational support for nurses' contribution in holistic model of patient care. Also, this result supported by Strechi (2007). Barrere and Ellis (2010) supported this result who mentioned that, as knowledge about important of the nurse's role increased, the positive changes took place in the nurse's attitudes toward collaboration. Also, limited knowledge about the nurse practitioner's role in patient care adversely affect.

5.3.3 Nurse autonomy:

Table 4.6 show nurse perception of nurse autonomy. Came in the 1st rank "Nurses be accountable to patients for the nursing care they provide" with RW ”88.04%”. "Nurses clarify a physician's order when they feel that it might have the potential effects on the patient" was ordered in the 2nd rank with RW ”85.16%. “Nurses be involved in making policy decisions concerning the hospital support services upon which their work depends” was ordered in the last rank with a mean equal “3.66” and RW ”73.20%”. In general, there is a high level of nurse autonomy in medical departments at governmental hospitals in GS from point of view nurses. This means a positive perception towards of nurse autonomy from nurse point of view.

In study by Aghamohammadi et al (2019) showed that most nurses assessed their professional autonomy at a moderate level. Cotter (2013) also reported that the professional autonomy score of the Irish emergency nurses which is consistent with the Aghamohammadi study. Kramer and Schmalenberg (2008) confirmed that little changes have been made over the past 20 years in nurses' autonomy. Other studies reported higher levels of professional autonomy in nurses (Maylone et al., 2011). However, Amini et al. (2015) showed that the mean and standard deviation of the professional autonomy score of the nurses was 90.7 ± 13.3. comparing the results of the various studies shows that most of the studies in which the nurses' autonomy scores have been reported to be high relate to the United States, where the nurses have a higher authority (Negarandeh et al., 2016). In addition, the difference between the nurses' level of professional autonomy can be due to the hierarchical relationship between the physicians and the nurses, and the high work load on the healthcare systems (Farsi et al., 2010). In Gagnon et al. (2010) showed that nurse–physician collaboration has a positive impact on the clinical autonomy of nurses, but Stewart and colleagues (2004) considered collaboration as an obstacle to the professional autonomy of the nurses.

5.3.4 Physician authority

Table 4.7 illustrate nurse perception of physician authority. Came in the 1st rank "The primary function of the nurse is to carry out the physician's orders" with RW"63.80%". But first paragraph "Physicians be the dominant authority in all health care matters" was ordered in the 2nd rank with RW "50.00%". It can be concluded that the respondents disagreed to this item. In general, we conclude that there is a low level of physician authority in medical departments at governmental hospitals in GS from point of view nurses.

In study by Hussein et al. (2018) found about 50 to 52% respondent disagreed with the statement of 'A nurse should be viewed as a collaborator and colleague with a physician rather than his/her assistant. In particular, 72 (49.3%) respondents disagreed in the item

‘physicians should be the dominant authority in all health care matters. Meanwhile, the lowest mean item scores are physicians’ authority. This analysis implies that the higher the score indicates the more positive attitude toward the nurse-physician relationship. This is consistent with a study done in northwest Ethiopia (Amsalu et al., 2014) and in the United States of America (Ward et al., 2008).

Study of Aghamohammadi et al (2019) show the lowest score related to the authority or domination of physicians (4.8 ± 1.23). The statements of “The nurse should be considered as a physician’s colleague, not a physician’s assistant” and “physicians should be responsible and competent at all healthcare topics” received the highest and lowest scores, respectively . In study by Elsous et al (2017) found in the factor “physician’s authority” (a higher factor score indicates a rejection of a totally dominant role by the physician in aspects of patient care), the nurses’ mean score of 3.35 (SD = 1.38) was higher than the physicians (2.25, SD = 1.51) on the four-point scale. All of these facts reflect the physician’s authority to control the nurse and maintain their superiority. Fatma (2008) supported the fact mentioned above that, the majority of nurses, 127 (52.5%), were dissatisfied with administrative support in nurse/physician relationships.

5.4 The level of quality health care in medical departments at governmental hospitals in Gaza Strip from point of view of nurses.

Results in table 4.8 showed that the dimension of "Timely" was ordered in the 1st rank with RW ”80.31%”. “Effective” was ordered in the last rank with RW ”65.81%”. In general, we conclude that there is a high level of quality health care in medical departments at governmental hospitals in GS from point of view nurses.

In light of the continuous endeavor by the General Administration of Hospital Nursing to reach the highest levels of quality through the application of the policies of the Joint Commission International (JCI) accreditation and certification is recognized as a global

leader for health care quality of care and patient safety. As started implementing these protocols in all departments of government hospitals in the GS at the beginning of 2022.

The researcher believes that nurses always strive to reach the highest levels of quality in providing health services, despite the presence of many obstacles such as work stress, lack of capabilities and other matters that affect the quality of health services but nurses believe that they provide a high level of quality health services.

It agreed with the results of the current study at the general level, the Al Jedy Study (2018), which found a high level of quality of health services provided in private hospitals. And the Al-Duhailan study (2019), which found that the quality of health services in the Northern Badia Hospital in Jordan is good, and the hospital needs to improve health services better.

This result differs with the result of the Al-Hunaiti study (2017), which aimed to evaluate health services in government hospitals in the Capital Governorate in Jordan. The results of which showed the presence of many weaknesses in the studied hospitals, the most important of which is the limited medical and nursing staff.

5.4.1 Effective:

In table 4.9 clarify that the dimension of Effective quality health care services. Came paragraph "Nurses provide nursing services within protocols" was ordered in the 1st rank with RW ”81.72%” "Physician strive to provide medical care to their patients to the fullest" was ordered in the 2nd rank with RW ”77.34%”. “The number of nursing staff is proportional to the number of patients staying in medical department” was ordered in the last rank with RW ”45.45%”. In general, we conclude that there is a moderate level of effective quality health care services.

Therefore, the researcher believes that the efforts made by the General Administration of Nursing to improve the nursing work have been reflected in the performance of nursing, as the application of policies and protocols to obtain the best care and quality of health services,

in light of the shortage of nursing numbers and the increase in workloads and the presence of work pressure that affects the quality of health services, but the presence of Nursing protocols and policies that contributed to the advancement of the nursing process, in addition to the presence of nurses seeking to develop themselves and prove their competence. add, most of nurses how work in medical departments from institutes graduate with good knowledge and experience to caring, answer patient questions in understanding way and solving patient problem.

The results of the study differed with the study of Al-Duhailan (2019), which found that the number of nursing staff meets the needs of patients and auditors, and that the number of nursing staff in the hospital in question is sufficient to provide the best services with the highest quality. However, the Al- Khafajy study (2016); Baernholdt, et al., (2014) found that the limited number of nursing staff affects the quality of nursing services.

5.4.2 Safety

In table 4.10 illustrate that the dimension of safety in quality health care services. Came paragraph "Nurses are keen to handle medical records with honesty and trust" was ordered in the 1st rank with RW ”85.51%”. "The nurses are keen to preserve the privacy of the patient and not to disclose his health condition" was ordered in the 2nd rank with RW ”83.62%”. “The department has suitable shower areas for patients” was ordered in the last rank with RW ”58.38%”. In general, we conclude that there is a high level of safety in quality health care services.

The researcher believes that the nurses' awareness and honesty and their high appreciation in maintaining the confidentiality of patients' information, and the nurses' quest to maintain patients' files enhances patients' trust in the nurses, and this increases patients' sense of the security of the health service provided.

Where all the results of the study agreed with Obeid's study (2021); Khan et al. (2021), where the safety dimension came at a high level. It differed with the results of Abu Rahma study (2021); And the study of Ghannawi (2020), where the safety dimension received a medium degree.

5.4.3 People-centered

In table 4.11 show that the dimension of people-centered in quality health care services. Came paragraph "The process of receiving and delivering is done beside to the patient and the presence of all nurses at all times" was ordered in the 1st rank with RW ”84.68%”. "Patients and auditors in the department are treated well by the nurses" was ordered in the 2nd rank with RW ”80.96%”. “Physician are present in their workplaces, which facilitates access to them when needed” was ordered in the last rank with RW ”66.38%”. In general, we conclude that there is a high level of people-centered in quality health care services.

This confirms the nurses' commitment to the policies and protocols that will give patients attention and care, and the nurses have ethics, which makes them treat patients with respect and appreciation, which reflects the importance of patients to the health system. It is worth noting that nurses are the largest category in government hospitals and the most common category that deals with patients. Therefore, quality health services begin with them and this study confirmed that.

Aman and Abbas, (2016) found in their study that the mean value of People-centered domain indicating that trust in public hospitals is high. Baernholdt, et al., (2014) are in agrees with the present study results, pointed in their study that the factors influencing quality health services are not varying in the majority. Punnakitikashem, et al. (2012) are in agreement with the present study results, they pointed in their study that overall service quality score is positive with health care services.

5.4.4 Timely

In table 4.12 show that the dimension of timely in quality health care services. Came paragraph "Critical and important information about patients' condition is communicated upon receipt and delivery" was ordered in the 1st rank with RW ”85.21%”. "Nurses provide nursing services on time" was ordered in the 2nd rank with RW ”83.24%”. “When any of the devices is lacking, it is provided as quickly as possible so that the health of patients does not deteriorate” was ordered in the last rank with RW ”73.86%”. In general, we conclude that there is a high level of timely quality health care services.

Here, the nurses' commitment to the ethics of the nursing profession appears, as well as the nurses' awareness of the importance of the role they play towards patients. They value time. Add, the nursing profession is characterized by time, and time for nurses represents a lifetime for patients.

It is also clear that nurses respect the complaints of all their patients, and accomplish their tasks quickly, efficiently and easily, and the researcher attributes this to the nurses' quest to improve health care in terms of caring for patients and facilitating procedures for patients in a manner that suits them and helps them to obtain health services in an easy and fast manner. Timeliness plays a critical role in accessing health services, especially when a patient desperately needs it. As noted by Davy et al. (2016), Levesque et al. (2013), Richard et al. (2016), and Yakob and Ncama (2016), access to care is a process of understanding, seeking, entering, passing through, and obtaining satisfaction from available and timely care that offers patients the needed or desired outcomes. At this point, the timeliness of access comes into play about the health care system’s ability to provide good quality and appropriate health care service or treatment immediately after the patients identify their health care needs. The length of time an individual patient spends waiting for a service provider and the availability

of consultations and care for sickness or pain when it is needed is a key element in the decision to seek services.

5.4.5 Integrated

In table 4.13 clarify that the integrated in quality health care services. Came paragraph "The emergency trolley readiness is checked and documented in the form as per the policy text" was ordered in the 1st rank with RW ”86.39%”. "Periodic maintenance of medical devices and equipment is carried out in the department" was ordered in the 2nd rank with RW ”83.87%”. “There is cooperation between the Nursing Department from the supervisors in dealing with the shortage or increase of the nursing staff in medical Department” was ordered in the last rank with RW ”69.74%”. In general, we conclude that there is a high level of integrated in quality health care service.

The nursing profession is one of the most integrated professions in the provision of service, and any lack in work may affects all aspects affecting the quality of health services, confirmed by the results of the study attention to the emergency trolly, and this confirms the readiness of nurses for any emergency event, integration in the nursing profession means cooperation to be the service provided at the highest level of quality.

This result is consistent with the study of Al-Jadi (2018), which indicated the importance of the integration of health services and that the nurses are the ones who lead the integration of the services provided, as the Abu Akar study (2017) and Al-Ballasi study (2015), and the Musleh study (2016) found that the quality of health services is integrated if the nurses were fulfilling their roles perfectly, providing his services in cooperation with all health care providers.

5.4.6 Efficient

In table 4.14 clarify that the efficient in quality health care services. Came paragraph "The procedures and policies followed in the department facilitate the provision of nursing service to patients" was ordered in the 1st rank with RW ”81.00%”. "Available medical, nursing and administrative forms that necessary for the work of department" was ordered in the 2nd rank with RW ”80.84%”. “The appropriate directional signs are used in the corridors” was ordered in the last rank with RW ”69.78%”. In general, we conclude that there is a high level of efficient in quality health care services.

The researcher believes that the protocols and policies applied in the medical departments aimed at bringing nursing services to the highest levels of quality. Nursing was able to prove that these policies improved the nursing process, which was reflected in the quality of health services provided. The success of any health services provided is that nurses are the ones who lead this success, and that nursing in hospitals is the first shield in facing any problem that occurs and may affect the quality of health services.

The results of the study agreed with the study of Obeid (2021), Khan et al. (2021), and Abdul Qadir (2020), which emphasized the leading role of nursing in raising the efficiency of the quality of health services, and that the excellence of health services begins with nursing.

5.5 The relationship between perception of nurses toward nurse-physician collaboration and level of quality health services.

According to the results of the test that shown in table (4.15), significance value is less than 0.05 (P-value < 0.05), and thus the relationship is statistically significant at $\alpha \leq 0.05$. That means the increased perception of nurses toward nurse-physician collaboration that can increased quality health services.

Therefore, the researcher believes that the association of cooperation between nursing and physicians improves the quality of health services, and this shows that good communication

has many positive results and the more we seek to improve communication the more this reflects on all aspects of health care.

This is confirmed by many studies the NPC has a strong correlation with quality health services and patient care quality. In a study conducted by Kramer and Schmalenber (2009), in 14 hospitals that are characterized by having Magnet recognition indicated that healthy collaboration between nurses and physicians is linked directly to optimum patients' outcomes. Moreover, a positive correlation was found between NPC and the quality of patient care outcomes.

Other studies by Boev & Xia (2015); Gotlib Conn et al. (2014); Havyer et al. (2014) found the higher NPC is related to better quality of care and patient health outcomes and decreased patient mortality. Alternatively, less effective NPC is related to poor patient outcomes (Boev & Xia, 2015).

5.6 The relationship between perception of nurses toward nurse/physician collaboration and socio- demographic variables (Gender, Age, Experience and Education level).

The results about relationship between perception of nurses toward nurse/physician collaboration and socio- demographic variables (Gender, Age, Experience and Education level) that the probability value is more than 0.05, and this is evidence that no relationship between perception of nurses toward nurse/physician collaboration and Gender, Age, Experience and Education level.

This result corresponds with results study by Hussein et al (2018) the results showed that the socio-demographic data of the respondents did not affect the nurse-physician relationship. However, there was a significant difference between the nurse-physician relationship and the level of education of the respondents. This could be nurses that pursue a high level of

education perceived the better relationship with the physicians. Besides, increased knowledge could lead to a better relationship.

In study by Franco and Cordero (2017) Analyses showed a significant relationship between nurses' age with their attitudes toward collaboration. The positive relationship between the two variables implies that as the nurses become older, they tend to agree on collaboration. Results failed to demonstrate significant relationship between nurses' gender, and years in practice with their attitudes toward collaboration. Findings of this study show that nurses desire collaborative physician-nurse relationship.

Matziou et al. (2014) found that age, gender, education, and years of experience significantly affected nurse-physician communication and collaboration. Nurses educated at the baccalaureate level or higher were more likely to initiate communication and more likely to perceive those physicians were receptive to their opinions and suggestions. Nurses with 10 or fewer years of work experience were less likely to perceive that physician had trust in the patient care that they provided and that the physicians appreciated the nurses' abilities to organize and coordinate care. Less experienced nurses were also less likely to associate a good relationship with better collaboration and were more likely to feel that they were not treated as an equal team member. Less experienced, younger physicians were more likely to acknowledge the nurses' abilities to organize and coordinate care and were also more likely to accept the nurses' opinions and suggestions.

Chapter Six:
Conclusion and Recommendations

6.1 Conclusion

The overall of NPC in medical department is perceived by nurses to be high. Effective NPC positively impacts patient and clinician outcomes, decrease the cost of care delivery, and contributes to the evolving nursing shortage. Accordingly, the improvement of NPC should improve quality health services.

The purpose of this study was to assess the perception of nurses toward nurse/ physician collaboration in medical departments at governmental hospitals in GS to determine their effect on quality health services.

Most of the nurses in this study responded positively to physician–nurse collaboration, especially the nurse autonomy dimension ranked first with a relative weight of (82.20%), followed by the Shared education & collaboration dimension (80.14%), however, the responsibility and role dimension in third ranked with a relative weight of (77.20%), while physician authority ranked last with a relative weight of (57.0%). While the level of quality health care there is a high level of quality health care in medical departments. And about quality health care dimension the "Timely" was ordered in the 1st rank and “Effective” was ordered in the last rank .

The relationship between perception of nurses toward nurse- physician collaboration and level of quality health services is positive correlation. It is imperative for physicians, nurses, nurse leaders, healthcare executives, and organizational leaders who are responsible for nurse-physician communication and collaboration to become actively involved in creating structures that promote effective nurse-physician communication and collaboration. As evidenced by the literature, communication among healthcare providers is a major part of information flow in healthcare, and a major determinant of expected outcomes. Effectiveness of communication is the cornerstone of quality health services.

6.2 Recommendation

Based on the study finding, the researcher would provide recommendations as outlined below. Decision makers, health managers, nursing supervisors, nursing leaders, professionals and researchers need to consider these recommendations and intensively work to address them.

- Continuous work by Head Nurses and Head of Physicians to enhance collaboration and improved of shared education & collaboration, nurse autonomy and physician authority as positively reflects this cooperation on the quality of the health services provided
- Initiating and developing mutually respectful inter-professional relationships between nurses and physicians. This can be done through interprofessional education in their curriculum to increase understanding of complementary roles of nurses and physician, and encourage establishment of an interdependent relationship between them.
- The necessity of setting standards to measure the performance of health services in government hospitals, and constantly evaluating the perception of the expectations of patients, which puts the needs and desires of beneficiaries at the forefront of the hospital management’s concerns.
- Encourage programs that promote interaction between medical and nursing students help these future professionals understand each other's roles and responsibility.
- Providing cross-disciplinary shadowing opportunities for nurses and physicians to provide mutual understanding of roles, and enable both groups to better envision collaborative practice.
- Shared continuing educational, in-service programs and workshop especially these with a focus on teamwork and communication.

- Forums to disseminate the result of research on collaboration can provide opportunities for open discussion and problem solving, thus creating an ongoing awareness of the need for improved collaboration, especially in the physician group.
- Recommendations for the future include the need for further research to explore other departments, different clinical environments, and sociodemographic variables that may impact quality health services.

References

Abdel Qader, Asma (2020). *The impact of information systems on the quality of health services, from the point of view of medical personnel,* unpublished master's thesis, Zawiya University, Libya.

Abu Akar, Amira. (2017) *Evaluation of the quality of health services in emergency departments in private hospitals from the perspectives of beneficiaries and service providers*, Bethlehem Governorate, an analytical study, a master's thesis, Al-Quds University, Jerusalem.

Abu Rahma, Abdul Basit (2021). The quality of health services provided in government hospitals in the southern governorates, *Journal of Economic, Administrative and Legal Sciences,* 19-36.

Adebayo AM, Ilesanmi OS. (2016). Collaboration between Physicians and Nurses in a Tertiary Health Facility in South West Nigeria: Implication for Effective Healthcare Delivery. *IJCS*; 9(1):165.

Aghamohammadi, D., Dadkhah, B. and Aghamohammadi. B. (2019). Nurse–Physician Collaboration and the Professional Autonomy of Intensive Care Units Nurses, *Indian Journal of Critical Care Medicine,* 23(4):178–181.

Al Duhailan, Heba Owaid Fayyad (2019). *The Adequacy level of Quality Health Services Provided by Northern Badia Hospital in Al- Mafraq Governorate,* unpublished Master Thesis Al al-Bayt University, Jordan.

Al Jedy, Bilal Jamal (2018). *Impact of Health Services Quality on Patients' Satisfaction in Non-Governmental Hospitals of Gaza Governorates,* Unpublished master thesis, Islamic university, Gaza.

Al- Khafajy. Zahraa and Hameed. Dergham. (2016). Quality of Health Care Services Provided for Patients with Burn in AL-Sadder Medical City at Burn Unit in AL-Najaf AL-Ashraf City, *International Journal of Scientific and Research Publications*, Volume 6, Issue 12.

Al-Ahmadi, Hizam (2010). *Hospitals and Health Services Administration*, House of Growth for Publishing and Distribution, Riyadh.

Al-Assaad, Khaled (2017). *The effect of health services quality on the adequacy of health services in Jordanian government hospitals*, unpublished master's thesis, Al al-Bayt University, Mafraq, Jordan.

Al-Ballasi, Abeer Ali Hassan. (2015). *Evaluating the quality of health services in UNRWA centers from the point of view of patients and service providers in the Hebron and Bethlehem governorates*, unpublished master's thesis, Al-Quds University, Jerusalem.

Al-Hunaiti, Muhammad Khaled (2017). *Health Services in Governmental Hospitals in the Capital Governorate / Jordan*, unpublished master's thesis, University of Jordan, Amman.

Alsallum. F., Banakhar. M., Gattan. S., Alwalani. S., Alsuhaim. R. & Samarkandi. R. (2020). Nurses' and Physicians' Attitudes Towards Nurse-Physician Collaboration in Critical Care, *Global Journal of Health Science*; Vol. 12, No. 1.

AlSowi, Asma' Yahya (2013). *Exploring Collaboration and Communication Between Nurses and Physicians in Critical Care Settings in Jordan*, unpublished master thesis, the University of Jordan.

Aman, B. and Abbas, F. (2016). Patient's perceptions about the service quality of public hospitals located at District Kohat, *Journal of the Pakistan Medical Association*, 66(1), PP.:72-74.

American Association of Critical Care Nurses, (2015). *AACN scope and standards For acute and critical care Nursing practice*, AACN Critical Care Publication, Columbia Aliso Viejo, CA 92656, ISBN 1-929209-22-3, USA.

American Medical Directors Association Ad Hoc Work Group on the Role of the Attending Physician and Advanced Practice Nurse, (2011). Collaborative and Supervisory Relationships between Attending Physicians and Advanced Practice Nurses in Long-Term Care Facilities. *Geriatric Nursing journal*, 32(1), 7-17.

American Nurses Association. (2004). Nursing scope and standards of practice. Silver Spring, MD: Author; *International Council of Nursing (n.d.).* Retrieved from http://www.icn.ch/

Amini K, Negarandeh R, et al. (2015). Nurses' autonomy level in teaching hospitals and its relationship with the underlying factors. *Int J Nurs Pract;* 21(1):52–59.

Amsalu E, Boru B, et al. (2014). Attitudes of nurses and physicians towards nurse physician collaboration in northwest Ethiopia: a hospital based cross-sectional study. *BMC Nurs* ;13(1):37.

Andaleeb SS. (2003). Determinants of customer satisfaction with hospitals: a managerial model. *International Journal of Health Care Quality Assurance*. 6(11): 181-187.

Asif, Muhammad; Searcy, Cory (2014). Determining the key capabilities required for performance excellence in higher education. *total quality management*, 25(1), 22-35

Baernholdt, M.; Keim-Malpass, J.; Hinton, I.; Yan, G. and Bratt, M.: (2014). A comparison of quality of care in critical access hospitals and other rural hospitals. *Online Journal of Rural Nursing and Health Care*, 14(2), P.:4.

Bakri, Thamer (2010). *Marketing and Social Responsibility*, Dar Wael for printing, publishing and distribution, Amman.

Barrere and EllisP., (2010). Changing attitudes among nurses and physicians: a step toward collaboration" Journal of Health quality. Vol.24, no,pp.9-15.

Basavanthappa, B., & Principal, R. (2010). *Nursing research* (2nd ed.). New Delhi: JAYPEE. Crossing the quality chasm (2010): *A New Health System for the 21st century*. Institute of Medicine. Washington, DC: National Academy press.

Bawana, Abdul-Mahdi (2014), *Management of Health Services and Institutions - Concepts, Theories and Basics in Health Administration*, Dar Al-Hamid for Publishing and Distribution, Amman.

Benaichi, Ammar (2017). Dimensions of the quality of health services and their role in achieving customer satisfaction (case study - hospitals in the Wilayat of Biskra), *Journal of Business Administration and Economic Studies*, No. 6, pp. 7-25.

Boev. C. and Y. Xia, (2015). Nurse-physician collaboration and hospital-acquired infections in critical care," *Critical Care Nurse*, vol. 35, no. 2, pp. 66–72.

Bor, R., Gill, S., Miller, R., & Evans, A., (2009). *Counseling in Health Care Settings*. United Kingdom: Palgrave Macmillan.

Bowles, D., McIntosh, G., Hemrajani, R., Yen, M. S., Phillips, A., Schwartz, N., . . . Dow, A. W. (2016). Nurse-physician collaboration in an academic medical centre: The influence of organisational and individual factors. *J Interpr of Care*, 30(5), 655-660.

Bowles, Darci (2018). *A Quantitative Study of Locus of Control and Perception of Nurse-Physician Collaboration among Nurses Working in the Acute Care Setting*, Physician of Philosophy, Northcentral University, San Diego, California.

Brewton, Fatima (2017). *Nurse-Physician Collaboration and Satisfaction*, Unpublish Master of Science in Nursing Degree, Gardner-Webb University, North Carolina.

Cabibbo, Tiffany Lebano (2018). *The relationship among nurse-physician collaboration and Outcomes: influence of nursing leadership*, degree of Physician of Science in Healthcare Leadership, University of Alabama at Birmingham, Birmingham, Alabama.

Caluccio, M., & Maguire, P. (1983). Collaborative practice: Becoming a reality through primary care. *Nursing Administration Quarterly*, 7, 59-63.

Camilleri D, O'Callaghan M. Comparing public and private hospital care service quality. *International Journal of Health Care Quality Assurance*. 1998; 4(11): 127-133.

Chadwick, M. (2010). Creating Order out of Chaos: A Leadership Approach. *Association of perioperative Registered Nurses Journal*, 91, 154-170.

Chan, C., Cheung, S. F., Chio, J. H.-m., & Cheng, M.-P. S. (2013). Cultural meaning of clinical leadership job satisfaction An application to public hospitals, Benchmarking: An International Journal Vol. 20 No. 3, pp. 305- 321.

Cheng, Q., Duan. Y., Wang, Y., Zhang, Q. and Chen, Y (2021). The physician-nurse collaboration in truth disclosure: from nurses' perspective, *BMC Nursing*, 20:38.

Christensen, C., and Larson, J.R., (2013): Collaborative medical decision making. *Journal of Medical Decision Making*, 1 (3): 339-346.

Clarin,O., (2017). Strategies to Overcome Barriers to Effective Nurse Practitioner and Physician Collaboration. *The Journal for Nurse Practitioners*, 10, 538-548.

Cotter PT (2013). Clinical autonomy and NPC in emergency nurses. Ireland: DN Thesis, University College Cork.

Cypress, B. S. E. R. N. C. (2011). Exploring the Concept of Nurse-Physician Communication Within the Context of Health Care Outcomes Using the Evolutionary Method of Concept Analysis. [Miscellaneous]. *Dimesnsions of Critical Care Nursing* 30(1), 28-38.

Daniel, Rosenstein, M. A. H. (2008). Chapter 33 *Professional Communication and Team Collaboration.* In R. G. Hughes (Ed.), Patient Safety and Quality: An Evidence-Based Handbook for Nurses (pp. 271-284). AHRQ Publication.

Davy, C., Harfield, S., McArthur, A., Munn, Z., & Brown, A. (2016). Access to primary health care services for indigenous peoples: A framework synthesis. *International Journal for Equity in Health*, *15*(163), 1–9.

Dillon, P., Noble, N., & Kaplan, L., (2009). Simulation as a Means to Foster Collaborative Interdisciplinary Education. *Nursing education perspectives journal*, 30(2), 87-90.

Doan, H.; From Husserl to van Manen. (2011). A review of different phenomenological approaches, *international Journal of Nursing Studies*, 44(1), P.: 131.

Donabedian A. (1980) *The definition of quality and approaches to its assessment*. Ann Arbor: Michigan Health Administration Press.

EL Sayed, K. A. and Sleem, W. F., (2011) "Nurse—physician collaboration: a comparative study of the attitudes of nurses and physicians at Mansoura University Hospital," *Life Science Journal*, vol. 8, no. 2, pp. 140–146, 2011.

El-Hanafy, Elham Y. (2018). Nurse physician work-related relationship as perceived by both of them, *Egypt Nurs J,* 15:188–195.

Elsous, A., Radwan, M., & Mohsen, S. (2017). Nurses and Physicians Attitudes toward Nurse-Physician Collaboration: A Survey from GS, Palestine. *Nurs Res Pract.*

Engard,B. (2016). *Improving Nurse-Physician communication*. Rivier University Online. posted November

Estabrooks, C. A., Midodzi, W. K., Cummings, G. G., Ricker, K. L., & Giovannetti, P. (2011). The impact of hospital nursing characteristics on 30-day mortality. *J Nurs Adm*, 41(7-8 Suppl), S58-68.

Falana, T. D.; Afolabi, T. O.; Adebayo, M. A. and Ilesanmi, S. (2016): Collaboration between physicians and nurses in a tertiary health facility in south west Nigeria: implication for effective healthcare delivery. *International Journal of Caring Sciences*, 9 (1): 165-172.

Farsi Z, Dehghan-Nayeri N, et al. Nursing profession in Iran: an overview of opportunities and challenges. Jpn J Nurs Sci. 7(1): 9–18.

Fatma H (2008). *Work empowerment as perceived by nurses & physicians working at National Heart Institute*. Ain Shams University 22:9–27.

Fewster-Thuente, L. (2015). Working Together Toward a Common Goal: A Grounded Theory of Nurse-Physician Collaboration. *Medsurg Nurs*, 24(5), 356-362.

Finkelman, A. and Kenner, C. (2013). *Professional Nursing Concepts*, Second Edition, Jones & Bartlett Learning, LLC.

Franco, Nanette and Cordero, Mary (2017). Collaboration Effort between Physicians and Nurses: A Feedback Tool for the Review of the Hospitals, *International Journal of Nursing*, Vol. 4, No. 1, pp. 19-26.

Fry, S.T. & Johnstone, M., (2015). *Ethics in Nursing Practice: A Guide to Ethical Decision Making* (3rd Edition). Oxford: Blackwell Publishing.

Gagnon L, Bakker D, et al. (2010). Nurse autonomy in cancer care. *Cancer, Nurs.* 33(3):E21–28

Garber, J., Madigan, E., Click, E., & Fitzpatrick, J. (2009). Attitudes towards collaboration and servant leadership among nurses, physicians and residents. *J Interprof Care*, 23(4), 331-340.

Garber, J., Madigan, E., Click, E., & Fitzpatrick, J., (2009). Attitudes towards collaboration and servant leadership among nurses, physicians and residents. *Journal of Interprofessional Care*, 23(4), 331–340.

Genç, Kurtuluş (2014). Environmental factors affecting human resources management activities of Turkish large firms. *International Journal of Business and management*; 9 (11), 102-123.

Georgiou E, Papathanassoglou E, et al. (2017) Nurse-physician collaboration and associations with perceived autonomy in Cypriot critical care nurses. *Nurs Crit Care*; 22(1):29–39.

Ghadery, Samar H.A (2019). Inter professional nurses-physicians collaboration and its effects on nurse's team activities, *International Journal of Nursing Didactics,* 9: (03).

Ghannawi, Imad (2020). Measuring the quality of health services according to the SERVQUAL model. *International Journal of Human and Social Sciences*, 303-326.

Gotlib-Conn, L., Kenaszchuk, C., Dainty, K., Zwarenstein, M., & Reeves, S. (2014). Nurse–physician collaboration in general internal medicine: A synthesis of survey and ethnographic techniques. *Health and Interprofessional Practice, 2*(2), 1-14.

Green, B., & Johnson, C. (2015). Inter-professional collaboration in research, education and clinical practice: Working together for a better future. *Journal of Chiropractic Education*, 29(1), 1–10.

Gronroos C. (2014). A service quality model and its marketing implications. *European Journal of Marketing*. 18(4): 36-44.

Haddara, W., & Lingard, L. (2013). Are we all on the same page? A discourse analysis of interprofessional collaboration. *Academy of Medicine, 88,* 1509-1515.

Hansson, A., Arvemo, T., Marklund, B., Gedda, B., &Mattsson, B. (2010). Working together-primary care physicians' and nurses' attitudes to collaboration. *Scandinavian Journal of Public Health*, 38(1), 78-85.

Havyer, R. D., Wingo, M. T., Comfere, N. I., Nelson, D. R., Halvorsen, A. J., McDonald, F. S., & Reed, D. A. (2014). Teamwork assessment in internal medicine: A systematic review of validity evidence and outcomes. *Journal of General Internal Medicine, 29*, 894-910.

Hojat, M., Fields, S. K., Veloski, J. J., Griffiths, M., Cohen, M. J. M., & Plumb, J. D. (1999). Psychometric properties of an attitude scale measuring physician-nurse collaboration. *Evaluation & the Health Professions*, 22(2), 208-220.

Hojat, M., Gonnella, J. S., Nasca, T. J. et al. (2003). Comparisons of American, Israeli, Italian and Mexican physicians and nurses on the total and factor scores of the Jefferson scale of attitudes toward physician-nurse collaborative relationships. *Int J Nurs Stud*., 40(4), 427-435.

Hossny EK, Sabra HE. (2021). The attitudes of healthcare professionals towards nurse–physician collaboration. *Nurs Open*. 8:1406–1416

House, S., & Havens, D. (2017). Nurses' and Physicians' Perceptions of Nurse-Physician Collaboration. *Journal of Nursing Administration*, 47(3), 165-171.

House, S., & Havens, D. (2017). Nurses and Physicians Perceptions of Nurse-Physician Collaboration. *The Journal of Nursing Administration*, 47(3).

Hulka BS, Zyzanski SJ, Cassel JC, Thompson SJ. Scale for the measurement of satisfaction with medical care: modifications in content, format and scoring. *Medical Care*, 1970; 12: 611.

Hurst, K. and K. L. Guo (2008). Quality of health care in the US managed care system: comparing and highlighting successful states. *International journal of health care quality assurance*21(3), 236-248.

Hussein SZ, Fatin Amira Ahmad and S.Hawa M.Noh (2018). Nurses' Perceptions and Attitude Toward Nurse-Physician Relationship at the Tertiary Hospital in Kuala Lumpur, *Open Access Journal of Nursing*, (1)2, PP: 1-12.

IOM. (2011). The Future of Nursing Report: Leading Change, Advancing Health Johnson, S., & King, D. (2012). Nurses' Perceptions of Nurse-Physician Relationships: Medical-Surgical vs. *Intensive Care. MEDSURG Nursing*, 21(6), 343-347.

Jabnoun N, Chaker M. Comparing the quality of private and public hospitals, *international journals*, 13 (4), 290-299.

John J. (1989). Quality in health care service consumption: what are the structural dimensions. In: Hawes JM, Thanopoulos J. Eds. Developments in Marketing Science. Orlando, FL: *Academy of Marketing Science*; 518-521.

Johnson, S., & King, D. (2012). Nurses' Perceptions of Nurse-Physician Relationships: Medical-Surgical vs. Intensive Care. *MEDSURG Nursing*, 21(6), 343-347

Jones, T. and Fitzpatrick, J. (2009) CRNA-Physician Collaboration in Anesthesia, *AANA Journal*, Vol. 77, No. 6, 431-436.

Jordan, Keely (2021). *Assessing the quality of health systems providing care for venerable populations: evidence from humanitarian settings*, Unpublished PhD thesis, College of Global Public Healt New York University, USA.

KaileliolouD.,GalanisP., SiskouO., .Conflict management and Job satisfaction in pediatric hospitals in Greece. *J Nurse manages*. 20(4) : 571-578 .

Khan, Ahlam, and Khairuddin, Juma'a; Mubaraki, Mallah (2021). The impact of the use of information technology on the quality of health services in the hospital institution, an exploratory study of the opinions of physicians and exhibitors at the hospital institution specialized in ophthalmology in Biskra, *Algerian Journal of Economic Development*, 77-92.

Kilner, E., & Sheppard, L., (2009). The role of teamwork and communication in the emergency department: A systematic review. *International Emergency Nursing*, 18, 127– 137.

Kim, Y.; Oh, Y.; Lee, E.; Kim, S.-J. (2022). Impact of Nurse–Physician Collaboration, Moral Distress, and Professional Autonomy on Job Satisfaction among Nurses Acting as Physician Assistants. *Int. J. Environ. Res. Public Health*, 19, 661.

Kourkouta. L., Iliadis. C., Sialakis. C., Adamakidou T., Ouzounakis. P. and Kleisiaris. C. (2021). Quality of health services, *World Journal of Advanced Research and Reviews*, 12(01), 498–502

Kramer M, Schmalenberg M(2008). Nurse-physician relationships in hospitals: 20000 nurses tell their story C. *J Clin Nurse* 17:3324–3329.

Kramer, M., & Schmalenber, C. (2009). Securing "good" nurse physician relationships. *Nursing Management*, 34(7), 34-38.

Kupperschmidt, B., Kient, E., Ward, J., & Reinholz, B. (2010). A healthy work environment: It begins with you. OJIN: *Online Journal of Issues in Nursing*, 15(1).

Lancaster, G., Kolakowsky-Hayner, S., Kovacich, J., & Greer-Williams, N. (2015). Interdisciplinary communication and collaboration among physicians, nurses, and unlicensed assistive personnel. *J Nurs Scholarsh*, 47(3), 275-284.

Le Roux L. (2013). *Nurses' and physicians' attitudes toward physician-nurse collaboration in private hospital critical care units*. A Thesis for the degree of Master of Science in Nursing. Johannesburg: Faculty of Health Sciences, University of the Witwatersrand.

Leebov W, Jean C, Ersoz C (2003) The healthcare manager's guide to continuous quality improvement., Chicago: American Hospital Association.

Levesque, J-F., Harris, M. F., & Russell, G. (2013). Patient-Centered access to health care: conceptualizing access at the interface of health systems and population. *International Journal for Equity in Health*, 12(18), 1 – 9.

Lewis, F.M., (2010). Autonomy in Nursing. Ishikawa. *Journal of Nursing*, 3(2), 1-6.

Mahmoud. Z., Aboserea. M., El-sayed. K. and Mohamed. W. (2018). Nurse- physician collaboration and its relation with patient safety, *Zagazig Nursing Journal*, Vol.14, No.2.

Makary, M., Sexton, B., Freischlag, J., Holzmueller, C., Millman, A., Rowen, L., & Pronovost, P., (2016). Operating Room Teamwork among Physicians and Nurses: Teamwork in the Eye of the Beholder. *American College of Surgeons Journal*, 202(5), 746-752.

Matziou, V., Vlahioti, E., Perdikaris, P., Matziou, T., Megapanou, E., & Petsios, K. (2014). Physician and nursing perceptions concerning interprofessional communication and collaboration. *Journal of Interprofessional Care. 28,* 526- 533.

Maxwell JA. (2012). *Qualitative research design:* An interactive approach. 2nd Ed. Sage. Limosnero, Maria Jamintesa Bagtazo (2013). *Patient satisfaction quality of health care system delivery*, unpolished master thesis, California State University, USA.

Maylone MM, Ranieri L, et al. (2011). Collaboration and autonomy: Perceptions among nurse practitioners. *J Am Assoc Nurse Pract*; 23(1):51–57.

McCaffrey, R. G., Hayes, R., Stuart, W. et al. (2011). An educational program to promote positive communication and collaboration between nurses and medical staff. *J Nurses Staff Dev*., 27(3), 121-127.

Mercado, Charisse Mae P. (2011). *Barriers to accessing quality health care in older adulthood,* Unpublished Master of Social thesis. California State University, USA.

Milstein, J., Neal,K., & Howel,M., (2011). Residents' and nurses' perceptions of team function in the medical intensive care unit. *Journal of Critical Care*, 26, 104–115.

Missi, Pamela. (2016). *Enhancing Nurse-Physician Communication and Collaboration*, Graduate Theses, Dissertations, and Capstones. 27, Bellarmine University.

MOH (2020): *Health Status in Palestine.* Annual Report. Palestinian National Authority, Ramallah, Palestine.

Mosadeghrad, A. (2012). A conceptual framework for quality of care, *Journal Materia socio-medica*, 24(4), P.:251-2.

Mosleh, Attia (2015). *Measuring the quality of services from the point of view of employees and auditors in hospitals in the city of Qalqilya*, Al-Quds Open University, Palestine.

Musleh, Attia. (2016). Measuring the quality of services from the point of view of workers and patients in operating hospitals in the city of Qalqilya, Al-Quds Open *University Journal for Research and Studies* - Issue 27.

Ndambuki, J (2013). The level of patients' satisfaction and perception on quality of nursing services in the Renal unit, Kenyatta National Hospital Nairobi, Kenya, *Open Journal of Nursing*, 3, 186-194.

Negarandeh R, Oskouie F, et al. (2016). Patient advocacy: barriers and facilitators. BMC Nurs, 5(1):3.

Nikandish R, Karajizadeh M, Rasekh R, Soleimanijafarbiglo MB, Golafshan L, Roozrokh Arshadi Montazer M. (2020). The Nurses' Perception of Nurse-Physician Professional Relationship in Abu- Ali-Sina Organ Transplantation in Shiraz: A Descriptive Study in Iran. *J Health Man & Info*; 7(4): 206-212.

Nikandish R, Karajizadeh M,Rasekh R, Soleimanijafarbiglo MB, Golafshan L, Roozrokh Arshadi Montazer M. (2020). The Nurses' Perception of Nurse-Physician Professional Relationship in Abu- Ali-Sina Organ Transplantation in Shiraz: A Descriptive Study in Iran. *J Health Man & Info*, 7(4): 206-212.

O'Hagan S, Manias E, Elder C, Pill J, Woodward-Kron R, McNamara T, Webb G, McColl G. What counts as effective communication in nursing? Evidence from nurse educators' and clinicians' feedback on nurse interactions with simulated patients. *Journal of Advanced Nursing*. 1344-1355

O'Mahony, S., Mazur, E., Charney, P., Wang, Y., & Fine, J. (2007). Use of multidisciplinary rounds to simultaneously improve quality outcomes, enhance resident education, and shorten length of stay. *Journal of general internal medicine*, 22(8), 1073-1079.

Obeid, Mustafa (2021). *The role of electronic administration in improving the quality of* services *provided in the Palestinian retirement authority*, unpublished master's thesis, Al-Azhar University, Gaza.

Ovretveit J. (2009). Health service quality: An introduction to quality methods for health services. Oxford: Blackwell.

Pakpour V, Ghafourifard M, Salimi S. (2019). Iranian nurses' attitude about nurse-physician collaboration and its relationship with job satisfaction. *J Caring Sci*; 8 (2):111-116.

Palestinian Central Bureau of Statistics (2020). *Results of the general census of population*, housing and establishments, Ramallah, Palestine.

Pantouvakis, Angelos (2013) Measuring clinical department efficiency – the impact of perceived control: A meta-analysis of locus of control and psychological symptoms across 18 cultural regions. *American Psychological Association*, 139, 152-188.

Philip Kotler et al, (2012). *Marketing management*, Library of Congress Cataloging. United States of America: New Jersey 07458.

Philip, B. Robert, H. & Jennifer D. (2007). Quality in Healthcare: Concepts and Practice (CHAPTER 3) (p68)611-394-V3-003.

Polit, D. and Beck, C. (2012) *Data Collection in Quantitative Research*. In: Polit, D. and Beck, C., Eds. Nursing Research, Generating and Assessing Evidence for Nursing Practice, 9th Edition, Wolters Kluwer Health/Lippincott Williams & Wilkins, Philadelphia, 293-327.

Pritts, K. E., & Hiller, L. G. (2014). Implementation of Physician and Nurse Patient Rounding on a 42-Bed Medical Unit. *MEDSURG Nursing*, 23(6), 408-413.

Punnakitikashem, P.; Buavaraporn, N.; Maluesri, P. and Leelartapin, K. (2012). *Healthcare Service Quality: Case Example of a Hospital with Lean Implementation*, POMS 23rd Annual Conference, Chicago, Illinois, USA. P.P.: 3-4

Richard, L., Furler, J., Densley, K., Haggerty, J., Russell, G., Levesque, J-F., & Gunn, J. (2016). Equity of access to primary health care for vulnerable populations: the impact international online survey of innovations. *International Journal for Equity in Health*, *15*(64), 1–20.

Riggall, V. K., & Smith, C. M. (2015). Creating a sustainable, interprofessional-team training program: Initial results. *Clinical Nurse Specialist*, 147-155.

Robbins, SP., Judge, TA, Odendaal, A., &Roodt, G. (2009). Organizational behavior. Global and Southern Africa perspectives. South Africa, *Pearson Education*: Prentice-Hall.

Rothstein,W., & Hannum,S., (2007). Profession and gender in relationships between advanced practice nurses and physicians. *Journal of Professional Nursing*, 23(4), 235–240.

Schiavo, Renata (2007). *Health communication from theory to practice*, Published by Jossey-Bass A Wiley Imprint, 989 Market Street, San Francisco, CA 94103-1741, USA.

Schuster MA, McGlynn EA, Brook RH. How good is the quality of health care in the United States? *The Milbank Quarterly*. 1998. 76(4): 517-564.

Shabbir, Asma & Shabbir, Shujah (2016). Measuring patients' healthcare service quality perceptions, satisfaction, and loyalty in public and private sector hospitals in Pakistan, *International Journal of Quality & Reliability Management*, Vol. 33 No. 5.

Sharifiyana M, Zohari S, et al. (2016). Evaluation of Participation in Clinical Decision Making by Nurses in Selected Hospitals of Shahid Beheshti University of Medical Sciences. *J Urmia Nurs Midwifery Fac*. 13(11):928–934.

Sibiya, Maureen Nokuthula (2018). *Effective Communication in Nursing*. In (Ed.), Nursing. Intech Open.

Siedlecki S.L. & Hixson E.D. Relationship between [2] Nurses and Physicians Matter. *Online Journal of Issues in Nursing.* 2015. 20(3).

Smith, P. C. (2009). *Performance measurement for health system improvement: experiences*, challenges and prospects, London: Cambridge University Press.

Sollami, A., Caricati, L., & Sarli, L. (2015). Nurse-physician collaboration: a metanalytical investigation of survey scores. *J Interprof Care*, 29(3), 223-229.

Spitulnik, Jay J., (2019). *Physician Collaboration and Improving Health Care Team Patient Safety Culture: A Quantitative Approach"*. Walden Dissertations and Physicianal Studies. 6486. https://scholarworks.waldenu.edu/dissertations/6486

Sterchi (2007). Perceptions that affect physician-nurse collaboration in the preoperative setting, *AORN Journal,*86 (1):341-350..

Stevenson, A. (2010). *The Oxford English Dictionary*, 3rd ed New York, NA: Oxford University.

Stewart J, Stansfield K, et al. (2004) Clinical nurses' understanding of autonomy: Accomplishing patient goals through interdependent practice. J Nurs Adm.;34(10):443–450.

Storch, J.L., & Kenny, N., (2013). Shared Moral work of Nurses and Physicians. *Nursing Ethics Journal,* 14(4), 478-491.

Sultan, Ali, (2012), Dimensions of the quality of health services from the point of view of the beneficiaries (applied study in a group of private hospitals in Basra Governorate, *Journal of Administrative Studies*, Volume 5, Number 10, College of Administration and Economics, University of Basra, Iraq.

Taylor, C. (2009). Attitudes toward physician-nurse collaboration in anesthesia. *AANA Journal*, 77(5), 343-348.

The American Heritage Dictionary (1983). New York: Dell Pub. Co.

Thomas, EJ., Sexton, JB., & Helmreich, RL., (2013). Discrepant attitudes about teamwork among critical care nurses and physicians. *Critical Care Medicine Journal*, 31, 956–959.

Thompson AGH. (1995). The measurement of patients' perceptions of the quality of hospital care. Unpublished physicianal thesis, UMIST, University of Manchester, Manchester.

Thompson B., Levine R., Kennedy F., et al (2009). Evaluating the quality of learning-Team Processes in Medical Education: Development and Validation of a New Measure. *Acad Med;* 84(10): S124-S127.

Thompson, S., (2007). Nurse-Physician Collaboration: A Comparison of the Attitudes of Nurses and Physicians in The Medical-Surgical Patient Care Setting. *MEDSURG Nursing Journal*, 16 (2), 87-104.

Vegesna A, Coschignano C, Hegarty SE, Karagiannis T, Polenzani L, Messina E, Zoli R, Maio V. (2016). Attitudes towards physician-nurse collaboration in a primary care team-based setting: Survey-based research conducted in the chronic care units of the Tuscany region of Italy. *J Interprof Care*. 30(1):65-70. PMID.

Walters D, Jones P. (2001). Value and value chains in health-care: a quality management perspective. *The TQM Magazine*. 13(5): 319-35.

Wang Y, Liu YF, et al. (2015). Attitudes toward physician-nurse collaboration in pediatric workers and undergraduate medical/nursing students. *Behav Neurol*; 846498.

Wanzer, M., Wojtaszcyk,A., & Kelly,J.(2009). Nurses' perception of physicians' communication: The relationship among communication practices, satisfaction, and collaboration. *Health Communication Journal*, 24, 683-691.

Ward, J., Schaal, M., Sullivan, J., Bowen, M. E., Erdmann, J. B. & Hojat, M. (2008). The Jefferson Scale of Attitudes toward Physician-Nurse Collaboration: a study with undergraduate nursing students. *Journal of interprofessional care*, *22*(4), 375–386.

Webster's Third New International Dictionary (1986). Springfield, Mass: Merriam-Webster.

World Health Organization (2013). *Health systems and services*: The role of acute care. Retrieved from http://www.who.int/bulletin/volumes/91/5/12-112664/en/

Yakob, B., & Ncama, B.P. (2016). A socio-ecological perspective of access to and acceptability of HIV/AIDS treatment and care services: A qualitative case study research. *BMC Public Health*, *16*(155), 1–15.

Yildirim A, Ates M, Akinci F, Ross T, Selimen D, Issever H, Erdim A, Akgün M. (2015). Physician-nurse attitudes toward collaboration in Istanbul's public hospitals. *Int J Nurs Stud*. 42(4):429-37.

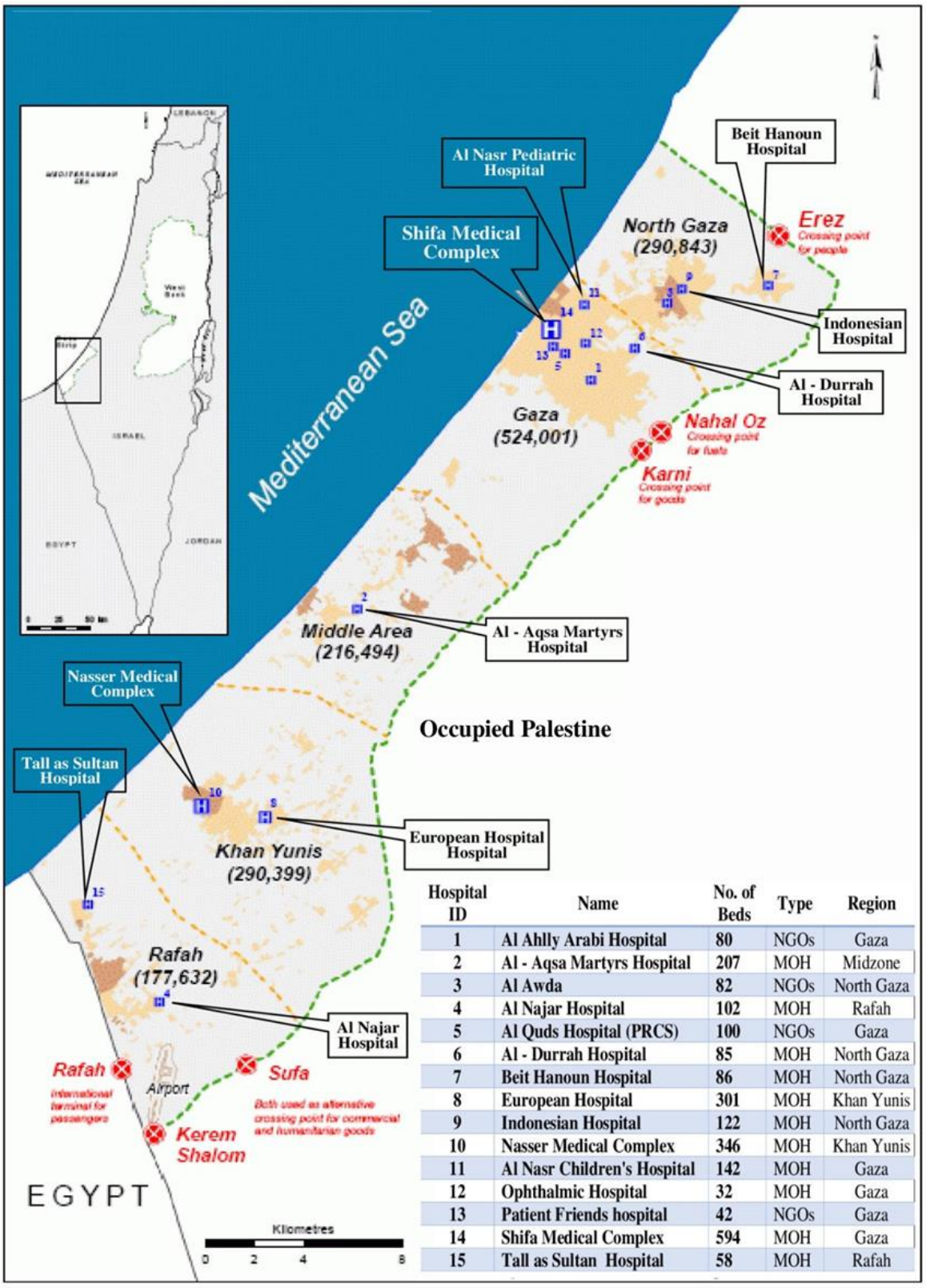
Zephir , CB. M., Pelayo, S., Anceaux, O.F., Maxwell, D., & Guerlinger, S., (2017). Cognitive analysis of physicians and nurses' cooperation in the medication ordering and administration process. *International Journal of Medical Informatics,* 7(6), 65–S77.

Zhang L, Huang L, Liu M, Yan H and Li X. (2016). Nurse–physician collaboration impacts job satisfaction and turnover among nurses: A hospital based cross-sectional study in Beijing, *International Journal of Nursing Practice*; 22: 284–290.

Annexes

Annex (1) Map of Palestine

Annex (2) Distribution of Hospital in Gaza Strip



Hospital ID	Name	No. of Beds	Type	Region
1	Al Ahlly Arabi Hospital	80	NGOs	Gaza
2	Al - Aqsa Martyrs Hospital	207	MOH	Midzone
3	Al Awda	82	NGOs	North Gaza
4	Al Najar Hospital	102	MOH	Rafah
5	Al Quds Hospital (PRCS)	100	NGOs	Gaza
6	Al - Durrah Hospital	85	MOH	North Gaza
7	Beit Hanoun Hospital	86	MOH	North Gaza
8	European Hospital	301	MOH	Khan Yunis
9	Indonesian Hospital	122	MOH	North Gaza
10	Nasser Medical Complex	346	MOH	Khan Yunis
11	Al Nasr Children's Hospital	142	MOH	Gaza
12	Ophthalmic Hospital	32	MOH	Gaza
13	Patient Friends hospital	42	NGOs	Gaza
14	Shifa Medical Complex	594	MOH	Gaza
15	Tall as Sultan Hospital	58	MOH	Rafah

Annex (3) Al-Quds University Approval Latter

Al Quds University
Faculty of Health Professions
Nursing Dept. –Gaza

جامعة القدس
كلية المهن الصحية
دائرة التمريض– غزة

التاريخ:2022/4/7

حضرة الأخ/ أ. هاني سلطان الوحيدي حفظه الله
مدير عام وحدة المعلومات الصحية بوزارة الصحة
السلام عليكم ورحمة الله وبركاته

الموضوع: تسهيل مهمة الطالب الباحث عماد جمال العسلي

تهديكم كلية المهن الصحية بجامعة القدس أطيب التحيات، ونرجو من حضرتكم مساعدة الطالب المذكور بتسهيل مهمته في توزيع وتعبئة استبانة الدراسة الخاصة بموضوع دراسته البحثية بعنوان:

"تصور الممرضين حول تأثير تعاون الممرضين والأطباء على جودة الخدمات الصحية في أقسام الباطنة في المستشفيات الحكومية في قطاع غزة"

حيث هذه الدراسة من متطلبات الحصول على درجة الماجستير في إدارة التمريض وستكون عينة الدراسة من الممرضين والممرضات العاملين في أقسام الباطنة الداخلية بمستشفيات وزارة الصحة (مستشفى بيت حانون– الأندونيسي– الشفاء– الأقصى – ناصر – الأوروبي – أبو يوسف النجار).

وتفضلوا بقبول وافر الاحترام والتقدير

د. حمزة محمد عبد الجواد
أستاذ مساعد في علوم التمريض
منسق برامج ماجستير التمريض بغزة
كلية المهن الصحية - جامعة القدس
hamjawad1@gmail.com
تلفاكس: 2644220 8 972+
خلوي: 852755 599 972+

دائرة التمريض
Nursing Department

Tel: 08 2644210+08 2644220
Tel. Fax: 08 2644220

ت: 08 2644210+08 2644220
س: 082644220

Annex (4) MoH Approval Latter

State of Palestine
Ministry of health

دولة فلسطين
وزارة الصحة

السيد : جهاد عبدالقادر عكاشه المحترم

التاريخ:24/04/2022

رقم المراسلة 945407

مدير دائرة الإدارة العامة للوحدات الإدارية المساعدة /وزارة الصحة

السلام عليكم ...

الموضوع/ تسهيل مهمة الباحثة عماد جمال العسلي

التفاصيل //
السلام عليكم
تحديكم أطيب التحيات ونود منكم تسهيل مهمة الباحثة/ عماد جمال أحمد العسلي الملتحقة/ ببرنامج ماجستير إدارة التمريض– جامعة القدس أبو ديس في إجراء بحث بعنوان
تصور الممرضين والممرضات حول تأثير تعاون الممرضين والأطباء على جودة الخدمات الصحية في اقسام الباطنة الداخلية في المستشفيات الحكومية بقطاع غزة
حيث الباحثة/ بحاجة لتعبئة استبانة من عدد من العاملين في مرافق وزارة الصحة (المستشفيات) ، بما لا يتعارض مع مصلحة العمل وبضمن أخلاقيات البحث العلمي، ودون تحمل الوزارة أي أعباء أو مسئولية

وتفضلوا بقبول التحية والتقدير،

ملاحظات /
تسهيل المهمة الخاص بالدراسة أعلاه صالح لمدة 3 أشهر من تاريخه.
يرجى التأكد من نواقل الاستبانة المرفقة والتي يتم تعبئتها ميدانيا على ان لا يتم أي اضافة او تعديل على الاستبانة المرفقة

علي حسن البلويسي
حكيم جامعي

المرفقات
■ استبانة عماد جمال العسلي.pdf

Gaza Tel. (+970) 8-2846949 Fax. (+970) 8-2826295
غزة تلفون (+970) 8-2846949 فاكس (+970) 8-2826295

Annex (5) Helsinki Committee Approval Latter

المجلس الفلسطيني للبحث الصحي
Palestinian Health Research Council

تعزيز النظم 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: 07/02/2022

Number: PHRC/HC/1046/22

Name: Emad Jamal Al-Asaly

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' Perception about Impact of Nurses/Physician Collaboration on the Quality of Health Services in Medical Departments at Governmental Hospitals in Gaza Strip

The committee has decided to approve the above mentioned research. Approval number PHRC/HC/1046/22 in its meeting on 07/02/2022

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

Signature

Member

Chairman

Member

07 2 2022

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

Annex (6) List of expert's names who reviewed the study questionnaire:

No.	Name	Scientific Degree	Workplace
1.	**Abdalkarim S. Radwan**	Assistant Professor in Psychology	Islamic University-Gaza
2.	**Ahmed Ali El-shair**	Assistant Prof. in Community Health Nursing	Islamic University-Gaza
3.	**Atif Jaber Ismaail**	Assistant Prof. in Medical Surgical Nursing	Islamic University-Gaza
4.	**Esam Sadie Nabhan**	Master of in Public Heath	MoH - Indonesian hospital
5.	**Hamza Abdeljawad**	Assistant Prof. in Community Health Nursing	Al-Quds University
6.	**Mohammed Fathi Al-Jerjawi**	Assistant Prof. in pediatric Nursing	MoH
7.	**Mohammed Omar Al-Kahlout**	Master in Public Heath	MoH - Indonesian hospital
8.	**Motasem Said Salah**	Assistant Prof. in Nursing Management	MoH
9.	**Rabea Ahmed Awad**	Master in Biostatistical	Islamic University-Gaza
10.	**Yousef Ibrahim Aljeesh**	Professor in Public Health	Islamic University-Gaza

Annex (7) The final form of questionnaire (Arabic Version)

الموافقة على إجراء دراسة علمية

"تصور الممرضين حول تأثير تعاون الممرضين والأطباء على جودة الخدمات الصحية في أقسام الباطنة في المستشفيات الحكومية في قطاع غزة"

الإخوة والأخوات الحكماء الأفاضل.....

تحية طيبة وبعد:

هذه الدراسة تهدف إلى تقييم تصور الممرضين حول تأثير تعاون الممرضين والأطباء على جودة الخدمات الصحية في أقسام الباطنة في المستشفيات الحكومية في قطاع غزة، وذلك كمتطلب للحصول على درجة الماجستير في إدارة التمريض من جامعة القدس/ أبو ديس.

تم اختياركم للمشاركة في الدراسة لأهمية رأيكم، ولكم كل الحق بقبول أو رفض المشاركة في هذه الدراسة، والاستجابة في هذا الاستبيان هو موافقة للمشاركة في الدراسة.

الباحث يشكر لكم حسن تعاونكم وتكرمكم بالمشاركة في هذه الدراسة التي نأمل أن تأتي بالفائدة لتحسين الخدمات التمريضية المقدمة في مستشفيات محافظات غزة الحكومية. ونعلمكم انه لا داعي لكتابة الاسم ونؤكد على ضمان سرية المعلومات واستخدامها لأغراض البحث العلمي.

شكراً لكم حسن المشاركة

الباحث

عماد جمال العسلي

emad.asaly@students.alquds.edu

0593360043

استبانة تصور الممرضين حول تأثير تعاون الممرضين والأطباء على جودة الخدمات الصحية في أقسام الباطنة في المستشفيات الحكومية في قطاع غزة

الرقم التسلسلي: (.....) لاستخدام الباحث

أولاً: المعلومات الشخصية:

1- الجنس: ذكر ☐ أنثى ☐ 2- العمر: ☐ سنة

3- الحالة الاجتماعية: أعزب/ة ☐ متزوج/ة ☐ مطلق/ة ☐ أرمل/ة ☐

4- السكن حسب المحافظة: ☐

5- المؤهل العلمي: دبلوم سنتان ☐ دبلوم 3 سنوات ☐ بكالوريوس ☐

ماجستير ☐ دكتوراه ☐ أخرى ☐

6- المسمى الوظيفي: مشرف تمريض ☐ رئيس قسم ☐ حكيم جامعي ☐ ممرض عملي ☐

7- الدخل الشهري: ..... شيكل. نسبته: .....%

8- مكان العمل: المستشفى ☐

9- سنوات الخبرة في مهنة التمريض: ☐ سنة

10- سنوات الخبرة في قسم الباطنة: ☐ سنة

ثانياً: مقياس تصور الممرضين حول تأثير تعاون الممرضين والأطباء:

ضع إشارة (√) أمام العبارة التي تتناسب مع وجهة نظرك.

الرقم	الفقرات	موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة
.1	ينبغي النظر للطبيب كزميل للممرض بدلا من مساعده.					
.2	الطبيب مؤهل لتقيم احتياجات المرضى النفسية والاستجابة لها.					
.3	يشارك طلاب الطب والتمريض في العمل معا كفريق خلال فترة دراستهما من أجل أن يفهم كل منهما دور الاخر.					
.4	يشارك الممرضين في اتخاذ القرارات ووضع السياسات التي تؤثر على ظروف عملهم.					
.5	الممرض مسؤول أمام المريض عن الرعاية التمريضية التي يقدمها.					
.6	مسؤوليات التمريض والأطباء واضحة ولا يوجد تداخل بينهما.					
.7	لدى الممرض خبرة خاصة في تثقيف المرضى وتقديم المشورة النفسية لهم.					
.8	الأطباء هم السلطة المهيمنة في جميع مسائل الرعاية الصحية.					
.9	يساهم الممرضين والأطباء في قرارات المشفى المتعلقة بخروج المريض.					
.10	وظيفة الممرض الأساسية هي تنفيذ أوامر الطبيب.					
.11	يشارك الممرضين في صنع القرارات ووضع السياسات التي تعني بخدمات دعم المستشفى والتي يعتمد عليها عملهم.					
.12	الممرض مسؤول عن مراقبة أثار العلاج الطبي.					
.13	يقوم الممرض باستيضاح أمر الطبيب عندما يشعر بأنه قد يكون هنالك احتمالية حدوث أثار ضارة بالمريض.					
.14	يجب تثقيف الأطباء على إقامة علاقة تعاونية مع الممرضين.					
.15	ينبغي ادراج العلاقة المهنية بين الأطباء والممرضين في البرامج التعليمية لكل منهما.					

ثالثاً: مقياس جودة الخدمات الصحية

الرقم	الفقرات	موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة
البعد الأول: الفعالية (Effective)						
.1	عدد الأطباء في قسم الباطنة يتناسب مع عدد المرضى المبيتين في القسم، بحيث يستطيع الاطباء تقديم الخدمة واعطاء المريض الرعاية الكافية.					
.2	يتناسب عدد الكادر التمريضي مع أعداد المرضى المبيتين في قسم الباطنة.					
.3	يتوفر في قسم الباطنة عدد كافي من الأطباء ذوي الاختصاصات المتنوعة.					
.4	يسعى الأطباء بتقديم الرعاية الطبية لمرضاهم على أكمل وجه.					
.5	يقوم الممرضون بتقديم الخدمات التمريضية ضمن البروتوكولات.					
.6	يوجد في القسم ممرضين متخصصين في التمريض الباطني					
.7	تتوافر في قسم الباطنة الكوادر التمريضية اللازمة لتقديم الخدمة على أفضل وجه.					
البعد الثاني: المأمونية (Safe)						
.8	يحرص الممرضين على المحافظة على خصوصية المريض وعدم الإفشاء عن حالته الصحية.					
.9	يحرص الممرضين على التعامل مع السجلات الطبية بأمانة وثقة					
.10	يوجد في القسم دورات مياه ملائمة للمرضى					
.11	يوجد في القسم أماكن استحمام ملائمة للمرضى					
.12	يتوفر في قسم الباطنة التهوية والتبريد والتدفئة اللازمة.					
.13	الاسرة الموجودة في القسم أمنة لمنع سقوط المرضى					
.14	المحافظة على وحدة المريض مرتبة ونظيفة ومجهزة بالأدوات التي يحتاجها المريض.					
.15	يتم توفير شراشف كافية ونظيفة طوال فترات الدوام					
.16	يتوفر في القسم إضاءة كافية ومناسبة.					
البعد الثالث: التركيز على الأشخاص (People-centered)						
.17	الالتزام بالاتصال والتواصل الفعال مع المريض وذويه والالتزام بحسن التعامل مع المرضى وذويهم.					
.18	يتفهم الممرضين ظروف المرضى والمراجعين الخاصة					
.19	يعامل المرضى والمراجعين في القسم بمعاملة حسنة وجيدة من قبل الممرضين.					
.20	تم عملية الاستلام والتسليم يجانب المرضى وحضور جميع الممرضين في كل فترة.					

الرقم	الفقرات	موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة
.21	يمتلك الكادر التمريضي مهارات كافية في التعامل مع المرضى والمراجعين					
.22	يتواجد الأطباء في أماكن عملهم مما يسهل الوصول لهم عند الحاجة.					
البعد الرابع: التوقيت المناسب (Timely)						
.23	يتم توصيل المعلومات الحرجة والمهمة عن حالة المرضى عند الاستلام والتسليم.					
.24	يتسم الممرضين بالرد الفوري على شكوى المرضى مهما كانت درجة انشغالهم					
.25	يقوم الممرضون بتقديم الخدمات التمريضية في وقتها المحدد.					
.26	يتحلى الممرضين في قسم الباطنة بالمصداقية في المواعيد.					
.27	يحافظ الممرضين على ضمان السرعة والسهولة في تقديم الخدمات التمريضية والصحية					
.28	ينجز الممرضين مهامهم في وقت محدد وبكفاءة عالية					
.29	يتوفر في قسم الباطنة المستهلكات الطبية اللازمة لإجراء الاجراءات الطبية والتمريضية في وقتها.					
.30	عند نقص أي من الأجهزة يتم توفيرها بالسرعة الممكنة بحيث لا تتدهور صحة المرضى.					
البعد الخامس: التكامل (Integrated)						
.31	يوجد اتصال فعال ما بين الممرضين في القسم والفريق الصحي.					
.32	يتوفر في المستشفى مختبر يقوم بجميع الفحوصات اللازمة لتقديم أفضل خدمة.					
.33	يتم التحقق من جاهزية ترولي الطوارئ من خلال وتوثيقه في النموذج حسب نص السياسة.					
.34	يتم عمل صيانة دورية للأجهزة والمعدات الطبية في القسم					
.35	هناك تعاون بين إدارة التمريض من المشرفين في التعامل مع نقص أو زيادة الكادر التمريضي في قسم الباطنة.					
.36	يقوم رئيس القسم بمشاركة جميع الممرضين في تخطيط النشاطات التي تساهم في رفع وتحسين جودة العمل في القسم.					
البعد السادس: الكفاءة (Efficient)						
.37	الإجراءات والسياسات المتبعة في القسم تسهل تقديم الخدمة التمريضية للمرضى					
.38	تعريف المريض أو مرافقه بمحطة التمريض وأوقات الزيارة ومرور الأطباء.					
.39	يستخدم في القسم اللوحات الإرشادية المناسبة في الممرات.					

الرقم	الفقرات	موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة
.40	يوجد في قسم الباطنة مستهلكات طبية مناسبة تسهل تقديم الخدمة.					
.41	يوجد في قسم الباطنة أجهزة طبية مناسبة تسهل تقديم الخدمة، مثل جهاز تخطيط القلب–فحص سكر– مونيتور قياس ضغط الدم وغيرها					
.42	توفر النماذج الطبية والتمريضية والادارية اللازمة لعمل القسم.					
.43	الأجهزة الطبية تعمل بطريقة سليمة وفعالة على مدار الساعة					

النهاية

Annex (8): The final form of questionnaire (English Version)

Nurses' Perception about Impact of Nurse/Physician Collaboration on the Quality of Health Services in Medical Departments at Governmental Hospitals in Gaza Strip

Dear participant:

This study aims to assess the perception of nurses toward nurse/ physician collaboration in medical departments at governmental hospitals in GS to determine their effect on quality health services as a requirement to obtain a master degree in nursing management – faculty of Health Professions at the Al-Quds University – Palestine.

The researcher ascertains that you are selected and you have the right to refuse participation in this study .Researcher thanks you for your participation and collaboration in this study that we hope to improve the nursing care at governmental hospital.

The researcher would like to emphasize that the information will remain confidential and for the purpose of scientific research that does not need to mention your name.

Thank you for your participation

Researcher
Emad Jamal Al-Asaly
emad.asaly@students.alquds.edu
0593360043

Questionnaire of Nurses' Perception about Impact of Nurse/Physician Collaboration on the Quality of Health Services in Medical Departments at Governmental Hospitals in Gaza Strip

Serial Number: (.....) For researcher use.

First: Personal Information:

1- Gender: Male ☐ Female ☐ **2- Age:** ☐ year

3- Marital status: Single ☐ Married ☐ Divorced ☐ Widowed ☐

4- Place of Residence: North Gaza ☐ Gaza city ☐ Mid-Zone ☐ Khan Younis ☐ Rafah ☐

5- Educational Level: 2 years Diploma ☐ 3 years Diploma ☐ Bachelor ☐ Master ☐ PhD ☐

6- Job title: Nursing Supervisor ☐ Head Nurse ☐ Register Nurse ☐ Practical Nurse ☐

7- Monthly income: ……. shekels. **Percentage:** ……%

8- Place of work: Hospital ☐

9- Total Experience in the nursing: ☐ Year

10- Total Experience in Medical Departments ☐ Year

Second: Scale of Nurses' Perception about Impact of Nurse/Physician Collaboration

Explain your agreement with the following items:

Very High Degree (VHD); **High Degree** (HD); **Medium Degree** (MD); **Low Degree** (LD); **Very Low Degree** (VLD)

No.	Items	VHD 5	HD 4	MD 3	LD 2	VLD 1
1.	A nurse should be viewed as a collaborator and colleague with a physician rather than his/her assistant.					
2.	Physician is qualified to assess and respond to psychological aspects of patients' needs.					
3.	During their education, medical and nursing students be involved in teamwork in order to understand their respective roles.					
4.	Nurses be involved in making policy decisions affecting their working conditions.					
5.	Nurses be accountable to patients for the nursing care they provide.					
6.	The responsibilities of nurses and physician are clear and there is no overlap between them.					
7.	Nurses have special expertise in patient education and psychological counseling.					
8.	Physicians be the dominant authority in all health care matters.					
9.	Physicians and nurses contribute to decisions regarding the hospital discharge of patients.					
10.	The primary function of the nurse is to carry out the physician's orders.					
11.	Nurses be involved in making policy decisions concerning the hospital support services upon which their work depends.					
12.	Nurses also have responsibility for monitoring the effects of medical treatment.					
13.	Nurses clarify a physician's order when they feel that it might have the potential effects on the patient.					
14.	Physicians be educated to establish collaborative relationships with nurses.					
15.	Interprofessional relationships between physicians and nurses should be included in their educational programs.					

Third: Scale of the quality of health services

Very High Degree (VHD); **High Degree** (HD); **Medium Degree** (MD); **Low Degree** (LD); **Very Low Degree** (VLD)

No.	Items	VHD 5	HD 4	MD 3	LD 2	VLD 1
First domain: Effective						
1.	The number of physicians in medical department is proportional to the number of patients staying in the department, so that the physician can provide the service and give the patient adequate care.					
2.	The number of nursing staff is proportional to the number of patients staying in medical department					
3.	The medical department has a sufficient number of physicians with various specialties.					
4.	Physician strive to provide medical care to their patients to the fullest.					
5.	Nurses provide nursing services within protocols.					
6.	There are nurses specialized in medical nursing in the department					
7.	The medical department has the necessary nursing staff to provide the service in the best way.					
Second domain: Safety:						
8.	The nurses are keen to preserve the privacy of the patient and not to disclose his health condition.					
9.	Nurses are keen to handle medical records with honesty and trust					
10.	The department has toilets suitable for patients					
11.	The department has suitable shower areas for patients					
12.	The necessary ventilation, cooling and heating are available in the internal medicine department.					
13.	The beds in the department are safe to prevent patients from falling					
14.	Maintaining the patient's unit tidy, clean, and equipped with the tools the patient needs					
15.	Sufficient and clean sheets are provided during working hours					
16.	The department has sufficient and appropriate lighting.					

No.	Items	VHD 5	HD 4	MD 3	LD 2	VLD 1
Third domain: People-centred:						
17.	Commitment to effective connection and communication with the patient and his family, and a commitment to good treatment of patients and their families					
18.	The nurses understand the special circumstances of the patients					
19.	Patients and visitors in the department are treated well by the nurses.					
20.	The process of receiving and delivering is done beside to the patient and the presence of all nurses at all times					
21.	The nursing staff possesses sufficient skills in dealing with patients and visitors					
22.	Physician are present in their workplaces, which facilitates access to them when needed					
Fourth domain: Timely						
23.	Critical and important information about patients' condition is communicated upon receipt and delivery.					
24.	Nurses are characterized by prompt response to patients' complaints, no matter how busy they are					
25.	Nurses provide nursing services on time					
26.	The nurses in the medical department are reliable in their appointments.					
27.	Nurses ensure speed and ease in providing nursing and health services					
28.	Nurses complete their tasks in a specified time and with high efficiency					
29.	The medical department has the necessary medical consumables to perform the medical and nursing procedures on time.					
30.	When any of the devices is lacking, it is provided as quickly as possible so that the health of patients does not deteriorate.					
Fifth domain: Integrated						
31.	There is effective communication between the nurses in the department and health team.					
32.	The hospital has a laboratory that performs all necessary tests to provide the best service.					
33.	The emergency trolley readiness is checked and documented in the form as per the policy text.					

No.	Items	VHD 5	HD 4	MD 3	LD 2	VLD 1
34.	Periodic maintenance of medical devices and equipment is carried out in the department					
35.	There is cooperation between the Nursing Department from the supervisors in dealing with the shortage or increase of the nursing staff in medical Department					
36.	Head nurse participate with all nurses in planning activities that contribute to raising and improving the quality of work in the department.					
Sixth domain: Efficient						
37.	The procedures and policies followed in the department facilitate the provision of nursing service to patients					
38.	Introducing the patient or his escort to the nursing station, visiting times and physician rounded					
39.	The appropriate directional signs are used in the corridors.					
40.	In medical department, there are suitable medical consumables that facilitate service provision.					
41.	In medical department, there are suitable medical devices that facilitate service provision, such as an ECG machine, a blood sugar test, monitor blood pressure and others					
42.	Available medical, nursing and administrative forms that necessary for the work of department					
43.	Medical devices operate in a safe and effective manner around the time.					

The End

Annex (9) Arabic abstract

عنوان الدراسة: تصور الممرضين حول تأثير تعاون الممرضين/الأطباء على جودة الخدمات الصحية في أقسام الباطنة في المستشفيات الحكومية في قطاع غزة.

إعداد: عماد جمال العسلي

إشراف: د. يوسف محمود عوض

ملخص الدراسة:

تهدف هذه الدراسة إلى تقييم تصور الممرضين تجاه تعاون الممرضين والأطباء في أقسام الباطنة في المستشفيات الحكومية في قطاع غزة لتحديد تأثيرها على جودة الخدمات الصحية. كان تصميم هذه الدراسة وصفية، تحليلية، مستعرضة. وتألفت عينة الدراسة من جميع الممرضين العاملين في أقسام الباطنة في المستشفيات الحكومية في قطاع غزة. حيث كان مجتمع الدراسة 209 ممرضًا بمعدل استجابة 92.3٪؛ (193 ممرضة). وتم جمع البيانات من خلال الاستبيان الذي تم إدارته ذاتيًا لمقياس جيفرسون للمواقف تجاه تعاون الممرض والطبيب، واستبيان آخر تم تطويره بواسطة الباحث ليعكس تصورات الممرضات حول جودة الخدمات الصحية. تم إجراء تحليل البيانات باستخدام برنامج الرزم الإحصائية للعلوم الاجتماعية (SPSS Ver. 22) وتوصلت الدراسة إلى ما يلي:

تشير نتائج الدراسة إلى أن معظم المشاركين كانوا من الإناث بنسبة 52.3٪ و74.1٪ من المشاركين متزوجين، ووفقا للفئة العمرية 51.8٪ من المشاركين بين 31 إلى 40 سنة. والدخل الشهري لـ84.5٪ من المشاركين أقل من 2000 شيكل. والمؤهلات العلمية لـ74.1٪ من المشاركين حاصلون على درجة البكالوريوس. ومعظم المشاركين لديهم خبرة في التمريض أقل من 10 سنوات حوالي 65.3٪. لكن الخبرة في قسم الباطنة 62.7٪ لديهم أقل من 5 سنوات.

وجدت هذه الدراسة أن مستوى تعاون الممرضين /الأطباء مرتفع مع وزن نسبي (74.14٪) من وجهة نظر الممرضين. وهذا يعني تصورًا إيجابيًا تجاه تعاون الممرض/الطبيب من وجهة نظر الممرضين. واحتل بُعد استقلالية الممرضين المرتبة الأولى بوزن نسبي (82.20٪)، يليه بُعد التعليم المشترك والتعاون (80.14٪) وجاء بعد المسؤولية والدور في المرتبة الثالثة بوزن نسبي (77.20٪) بينما جاءت سلطة الطبيب في المرتبة الأخيرة بوزن نسبي (57.0٪). فيما كان مستوى جودة الرعاية الصحية مرتفع وبوزن نسبي (75.20٪) في أقسام الباطنة بالمستشفيات الحكومية في قطاع غزة من وجهة نظر الممرضين. وتم ترتيب البعد "في الوقت المناسب" في المرتبة الأولى بوزن نسبي "80.31٪"؛ يليه بعد "التكامل" في

المرتبة الثانية بوزن نسبي "79.03٪"؛ ثم بعد "التركيز على الناس" في المرتبة الثالثة بوزن نسبي "78.55٪" ؛ وبعد "الكفاءة" في المرتبة الرابعة بوزن نسبي "77.94٪" ؛ ثم بعد "المأمونية" في المرتبة الخامسة بوزن نسبي "70.94٪" ثم بعد "الفعالية" في المرتبة السادسة بوزن نسبي "65.81٪". وفقًا للعلاقة بين تصور الممرضين تجاه التعاون بين الممرض والطبيب ومستوى جودة الخدمات الصحية وجدت الدراسة علاقة إيجابية، وهذا يعني أن زيادة إدراك الممرضين تجاه التعاون بين الممرض والطبيب يزيد من جودة الخدمات الصحية. والعلاقة بين تصور الممرضات تجاه تعاون الممرض/الطبيب والمتغيرات الاجتماعية والديموغرافية لم تجد الدراسة فروق ذات دلالة إحصائية بين تصور الممرضين تجاه تعاون الممرض/الطبيب تعزى لمتغير الجنس والعمر والخبرة ومستوى التعليم. وخلصت الدراسة إلى أن العلاقة بين تصور الممرضين تجاه التعاون بين الممرض والطبيب ومستوى الرعاية الصحية الجيدة هي علاقة ارتباط إيجابية، وهي ضرورية للأطباء والممرضين ومديري الرعاية الصحية والقادة التنظيميين الذين هم مسؤولون عن التواصل والتعاون بين الممرض والطبيب، وهم مسؤولون عن المشاركة بنشاط في إنشاء الهياكل التي تعزز التواصل والتعاون الفعال بين الممرض والطبيب. وأوصى الباحث بضرورة إقامة علاقات مهنية قائمة على الاحترام المتبادل بين الممرضين والأطباء من أجل زيادة جودة الخدمات الصحية في المستشفيات الحكومية.