Republic of Iraq
Ministry of Higher Education
& Scientific Research
University of Babylon
College of Nursing

Nurses and Physicians Perception toward their Collaborations in Pediatric Hospitals at Babylon Governorate

A Dissertation Submitted To

The Council of the College of Nursing, University of Babylon in Partial Fulfillment of the Requirements for the Degree of Doctorate of Philosophy in Nursing Science

By

Abbas Fadhel Jassim

Acadmic Supervisor

PhD. Khamees Bandar Obaid

March / 2022 A.D **Shaban/ 1443 A.H**

القرآن الكريم

بسم الله الرحمن الرحيم

وَقُلِ اعْمَلُوا فَسَيَرَى اللَّهُ عَمَلَكُمْ وَرَسُولُهُ وَالْمُؤْمِنُونَ ۖ وَسَتُرَدُّونَ إِلَىٰ عَالِمِ الْغَيْبِ وَالشَّهَادَةِ فَيُنَبِّئُكُم بِمَا كُنتُمْ تَعْمَلُونَ

صدق الله العلي العظيم

سورة التوبة

الآية (١٠٥)

Committee Certification

We, the members of the Dissertation Discussion committee, certify that we have reviewed the dissertation entitled **(Nurse's and Physician's Perception toward their Collaborations in Pediatric Hospitals at Babylon Governorate)** submitted by **Abbas Fadhel Jassim,** and examined the student in its content, and what is related to it in / / 2022.

We decided that the dissertation is accepted in a partial fulfillment of the requirements for the Degree of Doctorate of Philosophy in Nursing Sciences with an estimate of ( ).

Signature
Prof. Dr.Wissam Jabbar Qassem
Member
/ / 2022

Signature
Prof. Dr. Afifa Reda Aziz
Member
/ / 2022

Signature
Prof. Dr.Salma Kadhim Jihad
Member
/ / 2022

Signature
Prof. Dr. Mudher Hasan Noor
Member
/ / 2022

Signature
Prof. Dr. Amean A.Yasir
Chairman
/ / 2022

Approved by the council of the College of Nursing

Signature
Prof. Dr. Amean A. Yasir
Dean of the College of Nursing, University of Babylon
/ / 2022

Supervisor certification

This is to certify that this dissertation which is entitled **(Nurse's and Physician's Perception toward their Collaborations in Pediatric Hospitals at Babylon Governorate)**, submitted by ***Abbas Fadhel Jassim*** to the University of Babylon, College of Nursing in partial fulfillment of the requirement for the Degree of Doctorate of Philosophy in Nursing Science. The dissertation work is carried out by student under my supervision and guidance.

Signature

Supervisor

Prof. Dr. Khamees Bandar Obaid

College of Nursing / University of Babylon

/ / 2022

Signature

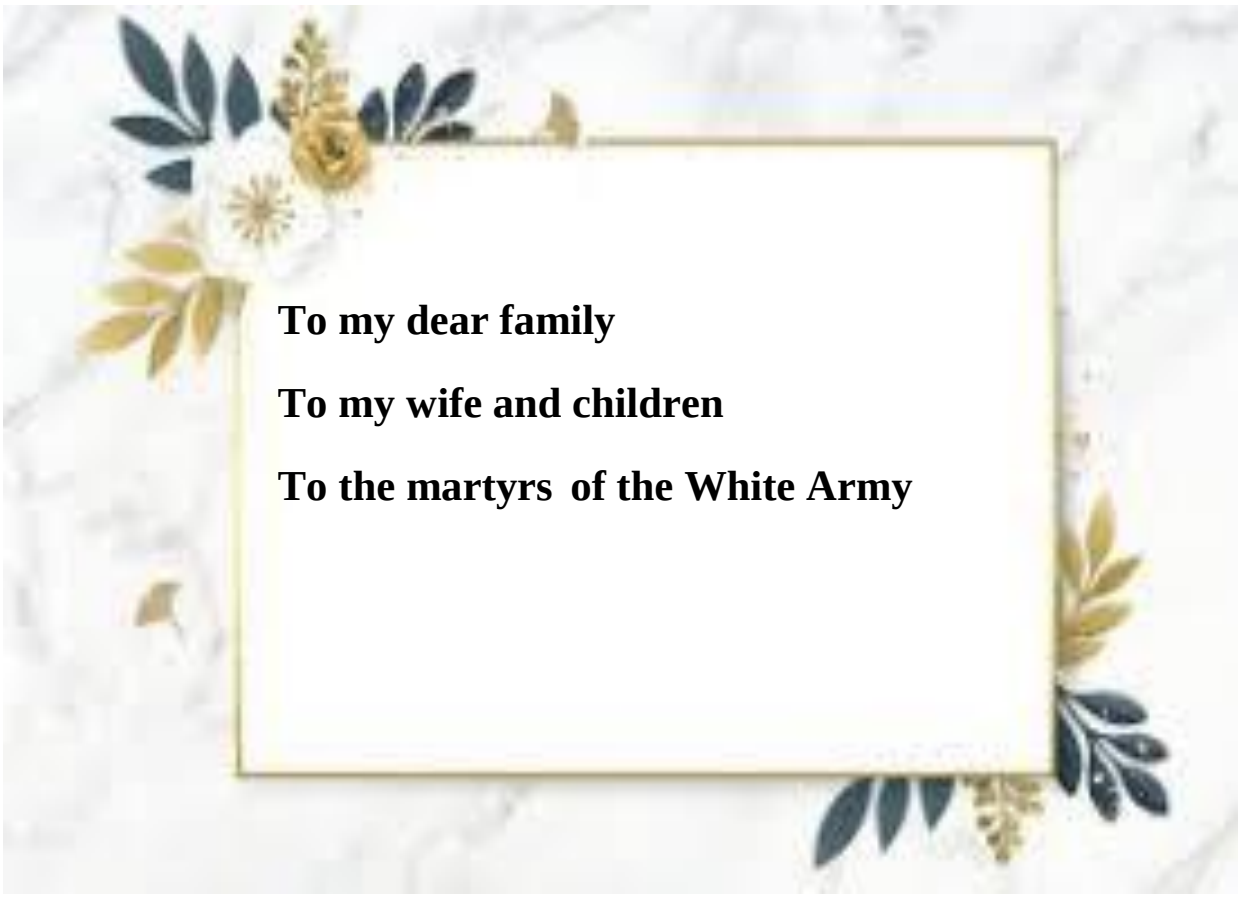
Instructor Dr. Wafaa Ahmed Ameen

Head of Maternal and Child Health Nursing Branch

College of Nursing / University of Babylon

/ / 2022

Dedication


To my dear family
To my wife and children
To the martyrs of the White Army

ACKNOWLEDGEMENTS

First of all, praise be to Allah Almighty for his blessings during my research work to complete the research successfully.

Many thanks to the Deanship of the College of Nursing / University of Babylon, represented by the Dean, Prof. Dr. Amean A.Yasir.

Thanks and gratitude to the Iraqi Ministry of Health and Environment, represented by the Babil Health Director, for the support and facilitation it provided to conduct and complete this work.

I would like to express my deep and sincere gratitude to the research supervisor Prof. Dr. Khamees Bandar Obaid.

I would like to express my deep gratitude to University of Babylon / College of Nursing represented by its professors and staff for what they have done for us to complete this project successfully.

Thanks to the library members and registration staff at the College of Nursing, University of Babylon.

Special thanks to the soul of my honorable professor Dr. Hussein Jassim Al Ibrahimi.

Abstract

Collaboration is one of the most effective strategies for healthcare systems to enhance outcome. Collaboration also enhances the practice's efficacy and efficiency, as well as patient outcome.

The study's objectives are to evaluate nurses' and doctors' views of collaboration; to examine the differences in nurses' and physicians' perceptions of collaboration; and to examine the differences in nurses' and physicians' perceptions of their sociodemographic features.

Descriptive study, a non-probability sampling strategy was used to choose a suitable sample of 390 nurses and 107 doctors. According to the Babel Health Directorate, this sample was dispersed across three hospitals, including (Babylon for Maternity and Pediatric, AL-Noor and Ibn-Saif Hospitals). The questionnaire's dependability was established via a pilot research, and it was subsequently given to experts for validation. The questionnaire had a total of 61 items. These items are divided into five sections: perceptions of the nurse-physician relationship, the effect of work stress on their relationship, the effect of job performance on their relationship, the effect of policies and administrative norms on their relationship, and their role and its effect on their relationship. It was examined using two approaches: Frequencies, percentages, mean scores, and standard deviation were used in descriptive statistical data analysis, while a t-test and ANOVA were used in inferential statistical data analysis.

According to the study's findings, 83.6 percent of nurses had a neutral view, while 75.7 percent of doctors had a negative perception. Cooperation was shown to be different between nurses (M=2.170.196) and doctors (M=1.570.1423). There are statistically significant disparities in how nurses perceive their years of experience, location of employment, and job title.

Additionally, there are statistically significant variations in doctors' perceptions of job titles (P0.05).

In conclusion, the research determined that nurses are more cooperative than doctors. The years of experience, workplace, and job title of nurses impacted their judgments; the job title of doctors influenced their perceptions. The study recommended that hospital administration implement programs to increase communication between nurses and physicians.

List of Content

List of Abbreviations

Term	Full term
ANOVA	Analysis of Variance
CIHC	Canadian Inter-professional Health Collaborative
CNA	Canadian Nurses Association
CSACD	Collaboration and Satisfaction about Care Decisions
CTS	Conference on Collaboration Technologies and Systems
HFO	Health Force Ontario
HCP	Healthcare Providers
HS	Highly Significant
IOM	Institute of Medicine
ICU	Intensive Care Unit
IDR	Interdisciplinary Rounds
ICN	International Council of Nurses
IPC	Inter-professional collaboration
IPCP	Inter-Professional Collaborative Practice
IPE	Interprofessional education
JSANPC	Jefferson Scale of Attitude towards Nurse–Physician Collaboration
JCAHO	Joint Commission on the Accreditation of Healthcare Organizations
LOS	Length of Stay
MS	Mean of Scores
MD	Medical Doctor
NHFPC	National Health and Family Planning Commission
NS	Non-significant
NPCS	Nurse-Physician Collaboration Scale
PPE	professional practice environment
RN	Registered Nurse
S	Significant
SD	Standard Deviation
TDCHI	The Doctors' Clinic and Hospital Incorporated
WHO	World Health Organization

List of Figures

List of Tables

List of Appendices

Chapter One

Introduction

1.1. Introduction

Collaboration is defined as doctors and nurses together to solve issues and make choices about the formulation and implementation of patient care plans. Nonetheless, the majority of studies indicate that doctors and nurses have divergent views on teamwork. Physicians rated cooperation higher than nurses, while nurses evaluated collaboration more positively than physicians. (Wang et al, 2015)

Interprofessional cooperation (IPC) is a procedure in which members of several health and social care professional groups collaborate to improve care. IPC entails ongoing negotiation and interaction among specialists, and it places a premium on the knowledge and contributions of multiple healthcare providers to patient care. However, IPC may be harmed by issues related to power imbalances, a lack of awareness of others' roles and duties, and professional boundary friction during patient care delivery. (Reeves et al., 2017).

Collaborative care refers to initiatives or activities that aim to strengthen the connections between diverse service providers by fostering a partnership characterized by shared goals, an appreciation and respect for individual strengths and differences, equitable and effective decision-making, a patient-centered approach, and openness. and dependable communication. (Falana et al, 2016)

Both parties should have equal decision-making ability, responsibility, and authority to manage patient care while collaborating. Mutual respect, trust, and excellent communication are required between the parties. Respect demands members to have fundamental knowledge and appreciation of the skills and responsibilities of others. Apart from communication, mutual respect, and trust, additional elements that

influence physician-nurse cooperation include an awareness of professional responsibilities, task prioritization, and equal authority. Both physicians and nurses understand and respect good teamwork as a critical component of providing high-quality patient care that results in better patient health outcomes. Indeed, teamwork and excellent relationships between physician and nurse have been recognized as critical determinants in achieving favorable patient outcomes and providing high-quality treatment. It assures patients' safety, contentment, and speed of recovery, resulting in decreased death rates. (Franco et al.2017)

While healthcare delivery is becoming more sophisticated, collaboration among healthcare personnel may assist improve service quality, especially in hospitals where professional interaction is frequent. Nurses and doctors working together may improve patient outcomes, reduce healthcare costs, increase job satisfaction, and safeguard patient safety. While communication between nurses and doctors is an important part of the healthcare information flow, accumulating research suggests that incorrect or inadequate communication may lead to a persistent state of tension between the two, leading to an increase in medical mistakes and negative consequences. (Elsous et al., 2017)

Inter-professional disputes pose a danger to the working relationships of doctors and nurses, as they do to any couple in the workplace. These disagreements may be traced back to variations in gender, educational attainment, and socioeconomic status, as well as miscommunication and incompatibility. Additionally, the recent choice by nurses to take on additional responsibility. (Baiyekusi et al., 2010)

Chinese medical institutions tried to catch up with the growing emphasis on nurse-physician collaboration in the global health care

industry. National Health and Family Planning Commission of China's (NHFPC) vision of medical-care integration is guiding hospital managers in their efforts to integrate the contributions of both sides during collaboration. Nurses and doctors must have a common objective and mutual obligations and responsibilities in order to create effective, safe, high-quality, and efficient treatment,' he said. (Zhang et al., 2016)

In order to prevent medical and nursing errors, good clinical practice must take into account both technological and human factors. In order to enhance clinical results, health care companies must conduct regular reviews of their staff for ineffective cooperation and give programs that encourage teamwork. (Kamel and Rashad. 2017)

According to the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), it is critical for optimal patient outcomes for doctors and nurses to develop collaborative partnerships. Additionally, there are other advantages, such as less fragmented care and less resource waste. Effective collaboration helps not just patients, but also the experts participating in the process. Additionally, productive teamwork has been associated with increased job satisfaction. (Pakpour et al., 2019).

A wide range of responsibilities have been placed on doctors, nurses, and other members of the medical team by advances in science and technology. This has resulted in a blurring of the boundaries between various disciplines and a growing desire for cooperation and collaboration. (Mahboube et al., 2019)

When it comes to providing high-quality care, nursing has become increasingly difficult. Cooperation is essential in healthcare organizations because the bulk of the work is done by a diverse group of professionals, including nurses, physicians, and interns. In this research, an intern nurse is

a graduate professional nurse who is doing an internship in the field of nursing as part of their education. The intern nurse is in charge of providing daily services to patients, including basic care and care for critically ill patients, under the guidance of a preceptor who functions as a role model, support person, and guide in clinical practice. (Hossny et al., 2020).

The nurse manager establishes an atmosphere conducive to nurse-physician cooperation. The nurse manager should communicate a clear vision for collaboration, serve as a role model for cooperation, and motivate others to do the same. Additionally, the nurse manager manipulates and supports the use of environmental resources. Thus, effective cooperation requires that all team members have a common understanding of what needs to be accomplished and that all team members strive toward the same goals or objectives for service users and patients. Each team member should be confident in their ability to communicate knowledge and information, and each perspective should be treated with mutual respect in order to offer efficient, effective, and safe patient care. (Kamel and Rashad. 2017)

Job satisfaction is more critical for nurses than it is for health care professionals and patients. Additionally, work happiness among nurses has been linked to increased patient satisfaction and perceived quality of treatment. Rather than that, nurse discontent contributes to nursing shortages, longer patient wait lists, and nurse burnout. (Pakpour et al., 2019).

Nearly 60% of medical errors are the result of poor communication within the medical team. Thus, earlier research has shown that inefficient doctor-nurse interactions are the greatest cause of mortality in critical care

units, whereas verbal communication between doctors and nurses is the source of 37% of medical errors. (Mahboube et al., 2019)

In order to give patients with high-quality care and address their problems, healthcare practitioners must work together with a shared goal and open lines of communication. Communication between the nurse and the physician is essential to the healthcare system's ability to exchange information. Healthcare personnel must work together if they want to gain from it, not only the patients. When nurses and physicians share the responsibility for a patient's care and well-being, it is beneficial to work together. (Hossny et al., 2020).

The nurses' practice environment and cooperation with physicians were significant determinants of work satisfaction. Additionally, successful cooperation is complicated by hurdles like as gender and class inequality, hierarchical organizational structures, and doctors' confidence in their role as the last arbiter of therapeutic choices. Hospitals worldwide are looking to other industries for lessons in communication and quality improvement in order to enhance patient safety. It is critical for us to have a deeper understanding of nurses' and doctors' views about teamwork. Otherwise, it's difficult to predict if education or training will be required to facilitate teamwork. (Amsalu et al., 2014).

Between nursing and medicine, a non-collegial hierarchical structure has developed a fundamental division based on a variety of criteria, including education, gender, and societal conventions. These distinctions have the potential to obstruct the proper sharing of critical patient information. Ineffective health information communication may result in significant delays in treatment plans, resulting in unwanted side consequences such as therapy delays due to misunderstanding. Delays in

care may have a detrimental impact on the patient's perception of the system and may encourage their distrust. (Blue, 2019)

Global health workforce management would be impossible without IPC, according to policy documents from the World Health Organization (WHO). Both meeting the needs of patients and professionals, as well as providing an opportunity to establish health systems and enhance health

outcomes, guided the development of collaborative processes in health care. (Lindh, 2016)

The absence of effective communication between nurses and doctors has been identified as a source of avoidable damage to patients. Communication breakdowns have been associated to increased lengths of stay, patient harm, resource use, increased turnover, and caregiver dissatisfaction in hospital settings. Numerous national organizations and commissions have made multidisciplinary cooperation mandatory as a strategy for improving healthcare. Despite this, organizations continue to tolerate an atmosphere in which nurse-physician communication is inadequate, as indicated by root cause investigations and fact finding. (Elsous et al., 2017)

The World Health Organization's (WHO) Framework for interprofessional education and cooperation recognizes that many health systems and health professionals worldwide are fragmented and harassed in their attempts to address unmet health needs. Though nursing and medicine are two fields that work diligently and share a commitment to patient well-being, a typical sort of conflict in health facilities occurs between nurses and doctors due to a lack of daily connection and collaboration. (Melkamu et al., 2019).

The Canadian Nurses Association's (CNA) policy statement on interprofessional cooperation does not define what collaboration is or comprises, it does give justification for its implementation: Nurses cooperate with other health professionals to foster a moral community and to optimize clients' health benefits, while acknowledging and respecting each individual's expertise, abilities, and viewpoints. Shared decision-making, creativity, and innovation enable health care workers to collaborate more effectively and learn from one another. (Leake, 2018)

Healthcare systems are made up of a lot of different people or groups. These people or groups are professionals (clinicians and non-clinicians), managers, patients, suppliers of healthcare goods, scientists, and governments/policymakers. The fact that healthcare systems are multi-stakeholder shows how important it is to work together. When making policies, strategies, and goals, it is important to make sure that everyone has the same goal in mind. Social sustainability progress gives people who care about these things a chance to work together. Collaboration between multi-stakeholder institutions increases the credibility, commitment, accountability, support, and legitimacy of each stakeholder. There is a lot of medical literature that shows that healthcare companies have a lack of trust and cooperation at both the professional and organizational level. (Maghsoudi et al., 2020)

In 2010, the Canadian Interprofessional Health Collaborative said that "the overarching goal of interprofessional education and collaborative practice is to improve health outcomes for health system consumers" (p. 6). Even though the benefits of interprofessional cooperation are well-known, making it happen is still a big deal. Many frameworks for interprofessional cooperation competence have been set up, each with a different set of

skills. The CIHC (2010) came up with a set of standards for all Canadian health professionals. They made these skills available for testing by the interprofessional community so that they could build a strong set of competencies that could be used to set the scope of practice and teach people how to do their jobs. Six skills are needed for interprofessional cooperation: interprofessional communication, patient/client/family/community-centered care, role clarification, teamwork, collaborative leadership, and interprofessional conflict resolution. These skills are needed to work together. (Kirkpatrick, 2017)

Historically, the interaction between doctors and nurses has been hierarchical, complicated by factors like as gender and age. Prior research on inter-professional cooperation (IPC) has shown that individuals subscribe to and are socialized into a specific professional position, making it difficult to adopt new roles or behaviors not associated with that job. Thus, doctors and nurses who have been socialized into hierarchical relationships rather than collaborative ones with shared power and accountability may struggle to operate in the collaborative work arrangements now suggested by the Institute of Medicine. (Edwards et al., 2017)

Interprofessional obstacles might include "discrimination on the basis of gender and class, hierarchical organizational systems in healthcare, and doctors' conviction that they are the last arbiter of therapeutic choices." The barriers evolve over time and are continually changing and evolving, and it is recognized that disparities in professional responsibilities have the "potential to undermine the monopoly of all healthcare professions." The medical profession of doctors long ago achieved control in healthcare. Among other considerations, university education established a strong

political voice for medicine, putting it in a strategic position. In recent years, nursing has established itself as a distinct discipline, and nurses have formed a far stronger and more defined professional identity as a result of their lengthy university study. Professionals, according to research, operate as defenders of their own profession while simultaneously attempting to increase the domain and influence of their own group. (Eriksson et al.2017)

Hospitals are multidisciplinary healthcare facilities that rely heavily on interprofessional teamwork between doctors and nurses to provide optimal patient care. Without cooperation, patients' results are harmed (especially in the clinical setting of patient care). Additionally, teamwork breaks down when nurses believe their perspectives and results are being overlooked. Nurses believe that their success is contingent upon their capacity to communicate their views and opinions. Nurses consider themselves effective when they share their thoughts and perspectives with team members. When doctors and nurses work closely together in the intensive care unit and nurses have a high degree of decision-making autonomy, patient outcomes improve. (Ergun. et al., 2017)

1.2. Important of The Study :

Globally, populations are progressively aging. Between 2015 and 2050, it is anticipated that the world's population of people over the age of 60 would almost double, from 12 to 22 percent. As individuals age, they are more prone to have many health problems concurrently. The need for health care is steadily increasing as the population ages and the number of individuals living with one or more chronic illnesses increases. (Matthys et al., 2017)

It's important for healthcare professionals who work together to work well together so that patients get better care for referrals and get out of the hospital on time, coordination and agreement on health care, a more comfortable work environment, and team members have a better sense of value.Negative elements of treatment may also reduce as a result of greater interprofessional cooperation, including duplications in medical testing, health care expenses, patient length of stay, medical problems and mistakes, morbidity and mortality rates, professional burnout, and team conflict. Negative professional connections have a significant effect on everyday interactions, including the quality of care provided to patients, nurse morale, stress, frustration, and difficulty in nurse-physician partnerships. (Eukubay et al., 2019).

Communication between nurses and doctors is seen as an important part of successful interprofessional cooperation and, therefore, of making sure that patients get good treatment. As a result, it is very important to accurately measure communication and cooperation in a clinical setting in order to improve and keep the quality of care. Another thing that is important is social interaction in a specific cultural context that is relevant to the microsystem in which the medical professional works in resource-constrained situations. (Busari et al, 2017)

Medical mistakes may occur as a consequence of breakdowns in communication between physicians or nurses. Nursing mistakes include giving too much medicine, giving the wrong medicine because it has a similar name or looks like the right one, not paying attention to the information on the box, and delaying drug delivery. Physician mistakes include illegible handwriting and incomplete drug orders. (i.e., drug dosage and method of administration), ordering the erroneous drug dose and

medicine, recording the medication order in the improper location, and failing to validate the patient identify or bed number. Any physician orders must be examined and verified for mistakes, all concerns about prescriptions must be explained, and if no complications are anticipated, the medication must be delivered at the right time and documented correctly to avoid medical or legal complications from a medical error. (Topcu et al., 2017)

Numerous studies have shown a high rate of medical mistakes during medication administration, which results in an increase in harmful pharmacological effects. These mistakes are largely the result of insufficient teamwork, ineffective communication, and poor interpersonal contact. A statewide study in the United States revealed that 72% of nurses collaborated with doctors. The tight atmosphere and verbally abusive behaviors result in a poorer working status, less authority at work, and bad working circumstances, all of which increase the chance of accidents and errors when providing care. Poor cooperation results in miscommunications, mistakes, and ongoing disagreement between nurses and doctors, which negatively impacts patient outcomes, nurse job satisfaction, and organizational costs. (Valiee et al,2014)

1.3. Statement of The Problem :

A study of the Nurses and Physicians Perception toward their Collaboration in Pediatric Hospitals at Babylon Governorate

1.4. Objectives of The Study Are To :

1. Identify the demographic characteristics of study sample.

2. To assess nurses perception toward collaboration with physician in pediatric hospitals

3. To assess physician perception toward collaboration with nurses in pediatric hospitals

4.To assess the differences in perception of nurses and physician regarding nurse-physician collaboration

5.Find out the correlation between nurses perception and their demographic characteristics

1.5. Definition of key term :

1.5.1. Nurses :

Theoretical definition :

A nurse is a person who has finished a basic, generalist nursing education program and has been granted permission to practice nursing in his or her nation by the competent regulatory authorities. (ICN , 2021)

Operational definition :

A person who cares for the sick people and provide health care for them.

1.5.2. Physicians:

Theoretical definition :

A physician who specializes in the study, diagnosis, prognosis, and treatment of illness, injury, and other physical and mental impairments with the goal of promoting, preserving, or restoring health. (WHO,2020)

Operational definition :

A person educated, clinically experienced, and licensed to practice medicine who is proficient in the art of healing. .

1.5.3. Perception :

Theoretical definition :

The process of organizing, identifying, and interpreting sensory data in order to represent and comprehend the information or environment that is provided. (Schacter, 2011)

Operational definition :

Interpretation of physical and emotional sensations in light of the experience.

1.5.4. Collaboration :

Theoretical definition :

Collaboration is a working practice whereby individuals work together for a common purpose to achieve business benefit. (https://www.aiim.org/what-is-collaboration)

Operational definition :

Working together with others or together especially in an intellectual endeavor.

Chapter Two

Review of Literature

Chapter Two Review of Literature 16

This chapter contains several paragraphs related to the topic of research, as follows:

2.1. Overview

2.2. Concept of Perception

2.3. Concept of Collaboration

2.4. Important of Collaboration

2.5. Interprofitional Team

2.6. Multidisciplinary Team

2.7. Health Care System

2.8. Physician-Nurse Relationship

2.9. Nurse Physician Collaboration

2.10. Job Satisfaction

2.11. Nurse – Patient Relationship

2.12. Health Environment

2.13. Patient's Benefit from Physician-Nurse Collaboration

2.14. Benefits of Collaboration

2.15. Potential Barriers to Collaboration

2.16. Previous Studies Related

2.1. Overview :

Collaboration between disparate groups of health care providers is often established in a lengthy and sometimes trying history. This past may have a significant impact on how professionals work, and historical conflicts can lead to current practice challenges. (Nadine, 2015)

Long before the profession of obstetrician was created, midwifery was a well-established independent practice. Until the late seventeenth century, midwives consulted another caregiver, a so-called barber surgeon, only when the kid died during birth and surgical assistance was necessary to preserve the woman's life. (Assen, 1987)

With the establishment of universities and associated medical schools in the early fourteenth century, the prestige of midwifery started to alter. Universities spawned a new profession, the physicians, whose education emphasized intellectual progress while also emphasizing a working understanding of the human body. The midwives expressed an interest in this academic progress, but were refused entrance owing to the institutions' rigid male-only admissions policy. (Drenth, 1998)

2.2. Concept of Perception:

Perception is the organization, identification, and interpretation of sensory information in order to represent and understand the presented information or environment. All perception involves signals that go through the nervous system, which in turn result from physical or chemical stimulation of the sensory system. (Arsalan, 2017)

The general policy in health care systems has recently changed and is continuing to evolve. Since health care professionals frequently have to deal with complex situations, a single discipline might not be

capable of responding to all the challenges efficiently. Medicine and nursing are two disciplines that have many overlapping roles with oft-confused responsibilities as well as the areas of functions. Also, they share the same type of interest in the promotion of individuals' well-being. (Pakpour,2019)

According to the past studies inter-professional collaboration between physicians and nurses is a crucial approach to providing quality in health care. Physician–nurse collaboration is described as ‘‘nurses and physicians cooperatively working together, sharing responsibilities for solving problems and making decisions to formulate and carry out plans for patient care’’. Indeed, physician–nurse collaboration should occur in open collaboration, veracity, and mutual respect formwork. Despite common goals between nurses and physicians for improving the quality of health care and relief to patients, there is the traditional economic and gender hierarchical relational gap between nurses and physicians whereby physicians have maintained dominance and the nurses have displayed deference. In a previous study, it was discovered that only 13.4% of nurses were satisfied with physician-nurse collaboration. (Elsous, 2017)

2.3.Concept of Collaboration:

In health care, collaboration refers to a coordinated team activity in which individuals with diverse degrees of knowledge, abilities, and capacities work together to complete a series of actions required to achieve a shared objective. Collaboration occurs when a collection of autonomous stakeholders in a problem domain engages in an interactive process based on shared rules, conventions, and structures to act or make choices

regarding domain-related issues, according to Wood and Gray. Collaborative healthcare is designed to generate and apply the best evidence for each patient and provider's collaborative healthcare choices; to accelerate the process of discovery as a natural outgrowth of patient care; and to ensure healthcare innovation, quality, safety, and value, according to the Institute of Medicine (IOM). (Patel et al, 2000)

Collaboration is defined as collaborative activity directed toward a single objective in an atmosphere of trust and harmony. Collaboration is defined in the context of healthcare as the way doctors and nurses engage while making clinical decisions. (Wood et al , 1991)

An interprofessional cooperation is a mutually beneficial engagement of independent professionals, in which each member of the health care team holds knowledge and abilities that contribute to the quality of treatment and their interactions are regulated by mutually agreed upon standards and vision. (Summary ,2016)

The World Health Organization (WHO) has said that IPC alone would not deliver the intended results, but rather needs a combination of enablers. Visionary leadership, institutional support, mentoring and learning, and pleasant practice settings are all examples of IPC enablers. (WHO,2010)

Additionally, research has found a variety of impediments to IPC, including professional cultures and stereotypes, which are often developed throughout the process of professional training and socialization. Other impediments to IPC include siloed practice in many health-care settings, curriculum and accreditation requirements of regulatory bodies for health professions, and insufficient awareness of the roles and scopes of various health professions. (Schmitz et al ,2017)

2.4. Important of Collaboration :

The World Health Organization (WHO) has emphasized in policy papers that IPC would be critical in managing the global health workforce issue (World Health Organization, 1988, 2010). Collaborative processes in health care were designed with two goals in mind: first, to meet the needs of clients and professionals alike; and second, to give a chance to build health care systems and improve health outcomes. (WHO,2020)

Effective health care delivery requires many contacts and partnerships between various healthcare workers with differing levels and degrees of education and certification. Nursing and midwifery partnership with doctors may make a significant impact in patient care, quality of service to the patient, and provider satisfaction. (Duty, 2016)

Developing a culture of safety is vital in today's healthcare institutions. Failures in communication between healthcare practitioners have been connected to 70% of yearly sentinel incidents. Seventy-six percent of those who encounter a sentinel event die. The absence of effective communication between nurses and doctors has been identified as a source of avoidable damage to patients. Inadequate and/or misunderstanding lengthens the hospital stay of patients, lowers patient and provider satisfaction, increases readmission rates, and raises healthcare expenditures. In addition to patient-related incidents, inadequate communication impairs nurses' decision-making abilities and adds to work unhappiness among healthcare professionals (HCPs), leading in higher HCP turnover. Inadequate communication between health care professionals raises the likelihood of medical mistakes, patient damage, and death. (Perry et al , 2016)

Due to HCP discontent and, more crucially, the effect on patient care, it is critical to enhance communication amongst HCP using an evidence-based strategy. Written (patient records), spoken (telephone), and electronic communication are the most often used ways of communication between HCP (patient medical record). Along with the style of communication, the kind of information given and the frequency of communication amongst HCP all have an influence on communication. (Foronda et al , 2015)

2.5. Interprofessional Team:

Because of HCP discontent and, more significantly, the effect on patient care, an evidence-based strategy is required to enhance HCP communication. Written (patient records), oral (telephone), and computer communication are the most common modalities of communication amongst HCPs (patient medical record). Communication is influenced by communication style, the kind of information conveyed, and the frequency with which HCP communicate. (Kaini, 2017)

2.6. Multidisciplinary Team:

Collaboration and interaction between health care professionals are critical. It is a collaborative process in which health care professionals collaborate to achieve mutually agreed-upon goals via the use of agreed-upon care plans, management, and procedures. Interprofessional care happens in reality when health care professionals pool their knowledge, abilities, and experience and make collective decisions based on their shared professional viewpoints. (Kane, 1983)

Interprofessional care refers to the processes that allow the delivery of the highest-quality health care to service users and contribute to the attainment of specified outcomes and service users' satisfaction.

Interprofessional care is defined by Health Force Ontario (2007) in its report 'Interprofessional Care: A Blueprint for Action in Ontario' as 'the provision of comprehensive health services to patients by diverse health caregivers who collaborate to provide high-quality care within and across settings'. (HFO,2007)

Clinical results and patient satisfaction are projected to improve as a result of multidisciplinary cooperation in healthcare, while institutional costs are expected to decrease. Similarly, it has been shown that physician-nurse collaboration improves clinical outcomes such as patient care and death rates. (Boev and Xia, 2015)

Insufficient physician-nurse cooperation is linked to physician and nurse job unhappiness and lowers patient care quality, according to a recent assessment of the literature. Positive physician-nurse collaboration was shown to improve medication quality and reduce behavioral difficulties in a substantial percentage of nursing home patients in another study. Physician-nurse collaboration connections have long been the topic of intense controversy in the medical and nursing literature due to their perceived importance. (Tang et al, 2013)

When doctors and nurses work together, the manner they interact may have an impact on the patient care they deliver. In an increasingly complicated healthcare system, collaboration among pediatric healthcare practitioners has been proposed as a strategy to enhance treatment delivery. Children's hospitals in China are perpetually congested due to a lack of healthcare resources and a range of unmet healthcare needs, putting the doctor and pediatric nurse under tremendous stress and entrusting them with a challenging role. In addition to the government's efforts to enhance the number and quality of primary care facilities, effective physician-nurse

teamwork is critical for pediatric hospitals to reduce medical errors and improve performance, ultimately improving healthcare quality .(Wang et al,2015)

Across health care, multidisciplinary teams comprising of personnel with a variety of disciplines (e.g., nursing, medical specialty, physical therapy, and social work) are increasingly depended upon to care for patients. Simultaneously, medical mistakes are thought to be the third biggest cause of death in the United States, and collaboration failures (e.g., breakdowns in communication) account for up to 70%–80% of serious medical errors. (Makary , 2016)

While the shift to team-based care is warranted in light of the potential for improved performance associated with collaboration, as these dismal statistics demonstrate, teamwork is not without its challenges. As a consequence, health care professionals, particularly those in leadership roles, must analyze immediate opportunities to strengthen team-based approaches to providing high-quality patient care. (Anna et al, 2016)

2.7. Health Care System :

Professionals (clinicians and non-clinicians), managers, patients, healthcare products providers, scientists, and governments/policymakers are among those who contribute to the identification of healthcare systems. The fact that healthcare systems are multi-stakeholder emphasizes the need of working together. While developing diverse policies, strategies, and objectives, it is vital to generate common interests among stakeholders. Advances in social sustainability provide an opportunity to bring these disparate interests together. Increased stakeholder credibility, dedication, responsibility, support, and legitimacy are all benefits of collaboration across multi-stakeholder institutions. The medical literature,

on the other hand, shows that the cultures of healthcare organizations suffer from a lack of trust and collaboration at both the professional and organizational levels. (Mitchell et al, 2010)

Collaboration, particularly in healthcare, is beneficial to long-term growth. Sustainability has been identified as a magnet for bringing healthcare stakeholders' interests together and dedicating them to a common goal of long-term growth. Although the triple bottom line includes the economic, social, and environmental (or ecological) elements, previous research in this vital area has mostly focused on the economic dimension, such as the financial success of collaborative healthcare models. (Boyer et al, 2016)

Communication, resource sharing, and information sharing, shared responsibility, cooperation, and trust are all social sustainability indicators that may be addressed through collaboration within the healthcare network. These collaborative features improve health and safety measures while also increasing the availability of a wide range of resources. Quality communication, as a form of collaboration, may enable stakeholders to share information, skills, experience, and resources, so increasing the quality and accessibility of patient care .(Burnap et al, 2012)

Vuong et al., for example, showed that good communication increases patient access to medical information, both in terms of quality and quantity, resulting in improved user welfare. Furthermore, by identifying customer needs, the healthcare system will be better prepared to address them. Stakeholder collaboration is essential for recognizing and addressing their various needs. Similarly, hospitals may collaborate to pool resources and accelerate patient referrals to avoid the negative consequences of delayed care, such as redundant transfers and added

pressure. As a consequence, collaboration is a vital component of improving the healthcare system's social performance (social sustainability). (Vuong et al, 2017)

2.8. Physician-Nurse Relationship:

A physician is a person who has been trained and qualified to practice medicine. He or she may be referred to as a Medical Doctor at times (MD). A registered nurse (RN) is a licensed nurse who has been accepted to an official nursing registry. A nurse who nourishes or cares for others is known as a nurse. A relationship is a link formed between two or more people or groups as a consequence of social contacts and common goals, interests, or feelings. (Oxford English Dictionary, 2010)

Described as professional involvement, cooperation, communication, and collaboration between physicians and nurses, the physician-nurse link is a relationship that exists between them. A collaborative effort is defined as the act of working together with peers toward a similar objective. Collaboration is encouraged via talks with patients and colleagues. (Bor et al, 2009)

The picture of the physician-nurse relationship is not straightforward due to the many disagreements. As with other professional partnerships, the doctor-nurse connection is not determined by a single cause but rather the outcome of a number of circumstances. These given elements will indicate whether a connection will have a favorable or negative consequence. As with every set of relationships between two people at work, inter-professional disputes endanger the connection between nurse and doctor in some way. These disputes may be sparked by disparities in education, competence, gender, and socioeconomic status, as well as by miscommunication, misunderstanding, and incompatibility. Additionally,

the recent choice of nurses to assume increased tasks is a source of contention. Therefore, it is critical to assess the relevance of both the medical and nursing professions in order to ascertain professional norms and reality. The history of medicine has been defined by a variety of scientific notions. However, this tradition is defined by the integration of practical science with moral conviction. The connection between the smart and prominent physician and the unprotected nurses remains below the average for any health organization's targeted outcomes. (Ameen , 2017)

2.8.1. Types of Physician-Nurse Relationship:

2.8.1.a. Collegial Relationship:

Professional interactions are regarded as the highest possible standard. These partnerships are characterized by different but equality in terms of authority and knowledge, which is the fundamental component of these interactions. " One nurse said that doctors at her institution regard nurses' ability to detect minute changes in patients as a result of their constant presence in the patient's environment "as an example. That physicians recognize and appreciate the fact that collaborative care planning with nurses results in the optimal treatment plan, which may assist doctors in deciding whether to release a patient or implant a central line, has been shown effectively. Nurses are often expected to provide clinical advice to patients during these meetings, which is contrary to nursing management practice. (Kramer and Schmalenberg, 2003)

Collegial relationships are characterized by an equitable distribution of trust, authority, and respect. When recounting these conversations, physicians and nurses often refer to themselves as peers or colleagues, as seen in the following excerpt: Physicians are among the best in the world.

They recognize the significance of our advice and actively seek it. When the doctor inquired as to whether this patient was ready to be discharged, The researcher informed him that he was not; he is difficult and requires round-the-clock home care, The researcher said. That transaction needs to be completed. When the patient was getting ready to go, we spoke about what sort of central line to put in. As a result of their knowledge of our abilities, physicians will seek us out on a frequent basis. (Kramer and Schmalenberg, 2003)

2.8.1.b. Collaborative Relationships:

Excellent or outstanding connections are occasionally used to describe collaborative collaborations. It is built on mutual trust, respect, and power, which leads to nurses and physicians wanting to work together. It also allows nurses and doctors to share their opinions on various subjects and reach an appropriate audience. The care plan is developed in collaboration with the physician and the nurse. The physician maintains supremacy since the motivating principle of this kind of cooperation is mutuality rather than equality. (Kramer and Schmalenberg, 2009)

2.8.1.c. Guidance Relationship:

In a mentoring partnership, the educator might be a doctor or a nurse. When a physician is seen to be knowledgeable and experienced, he or she will readily explain and teach the nurse. When a specialist physician or specialized physician is reacting to a medical condition that is not within his or her area of competence, a nurse teaching scenario may occur. As a consequence, they would seek direction and instruction from the nurse's knowledge and expertise in that field. (Kramer and Schmalenberg, 2009)

2.8.1.d. Neutral Relationship:

A third name for a neutral connection is a friendly-stranger relationship (fsr). Formal information sharing and neutral conservations are two ways to think about it. The following example illustrates how the nurse portrays this connection: There is a physician who comes in, assesses the patient, and departs. In the meanwhile, I'll keep a look out for him and inform him of my patient's condition. Until I read the patient's documented instructions, I'm not usually aware that a physician has entered the room. This physician has been a part of my life for 17 years, yet he still doesn't remember my name. " (Kramer and Schmalenberg, 2009)

2.8.1.e. Negative Relationships:

Anger, verbal abuse, actual or implied threats, and resignation are all characteristics of a negative romantic relationship. According to the following extract, Physicians are aggressive; they snap at you all the time, not just when they are fatigued. If the doctor has a complaint about anything, heads will start to roll. In the words of the narrator, "I maintain a close watch on myself". A dysfunctional physician-nurse relationship has a significant negative impact on the health-care system. The aggressive or disruptive behavior of doctors, according to studies, is a key contributing factor to nurse burnout, poor work satisfaction, and choices to quit the field. The majority of nurses have reported that they have trouble talking with doctors who are unfriendly, unwelcoming, dismissive, or intimidating. It is more prevalent among physicians over the age of 50 than among doctors under the age of 40. Gender difficulties, power imbalances, hierarchical traditions, and a perception of nurses as handmaidens rather than respected professional colleagues are all elements that contribute to this situation. (Kramer and Schmalenberg, 2009)

2.8.2. Factors affecting physician-nurse relationship:

Physician-nurse relations have been the subject of a number of recent debates. The goal of the study was to learn more about the changing nature of physician-nurse interactions and the factors that determine the kind of connection between the two. In reality, the majority of professional relationships, including physician-nurse relationships, are made up of a number of factors that determine whether the relationship is good or negative. (Pullon, 2008)

2.8.2.a. Nurse competency:

According to the Oxford English Dictionary (2010), competence is the capacity to accomplish and competent is defined as adequately qualified for a job. To be considered competent, one must be able to do a task in the future while also being able to do it now in accordance with care standards. Nurse competence refers to a nurse's capacity to put her or his knowledge into practice, while competencies relate to the consequences of those abilities being put into practice. The word competence incorporates a wide range of things. In addition to these elements, it encompasses a wide range of additional attributes such as aptitudes, informational and emotional intelligence, and other facets of human identity. (Cowan et al,2005)

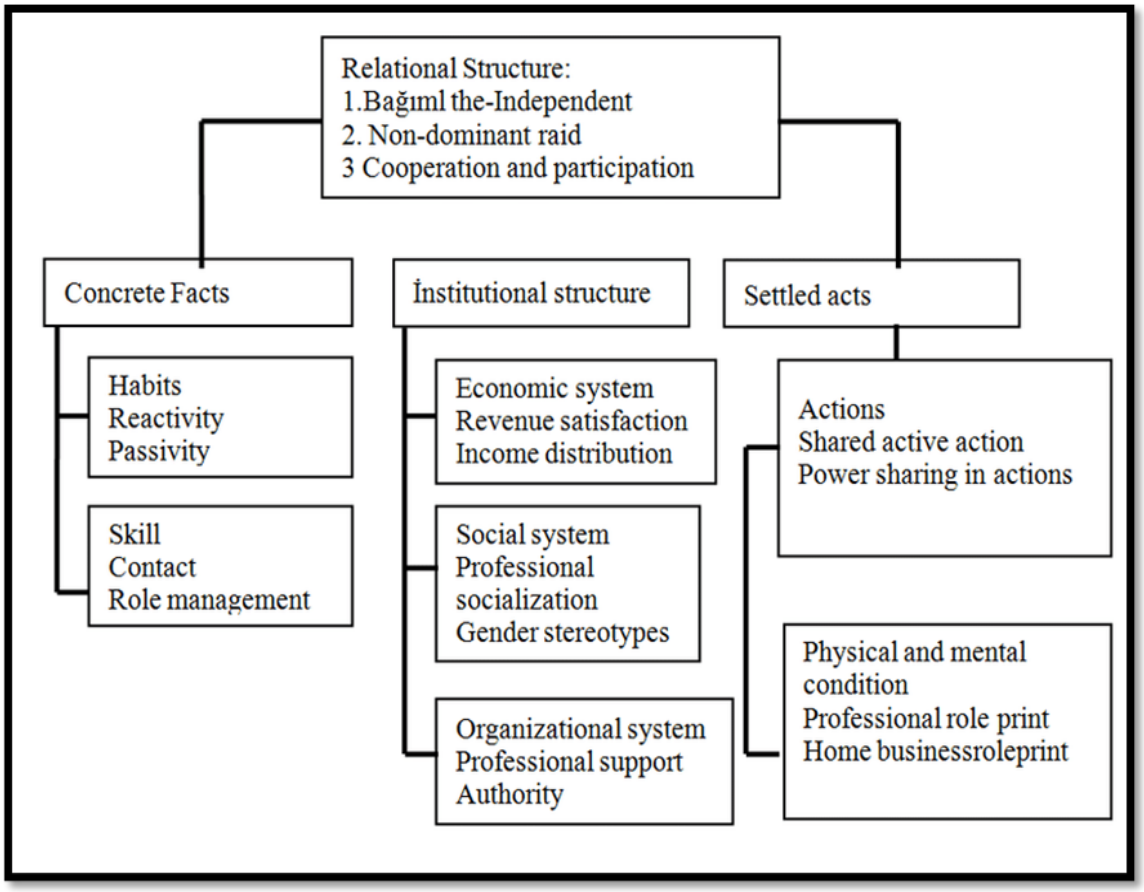


Figure 1 : Theoretical model of factors affecting physician-nurse relationship (https://www.researchgate.net/figure/Theoretical-model-of-factors-affecting-physician-nurse-relationship_fig1_332370780

2.8.2.b. Nurse autonomy:

Autonomy is defined as the ability to make autonomous and legally binding decisions that are within one's area of practice and to follow through on such decisions. Nurse autonomy is described as the ability of a nurse to make autonomous and legally enforced decisions. It is the nurse's responsibility to get the information needed to make choices. To make an educated decision in a particular scenario, a nurse must have the education and training required to do so. An important role for nurses is that of a team player and self-sufficient professional. It is fairly uncommon for nurses, physicians, and health care organizations to have similar experiences as

solo practitioners. In the end, patients, medicine, and the nursing profession all benefit from autonomy. Must never forget that nursing is a noble profession where your work is regarded an honor. (Lewis, 2006)

2.8.2.c. Nurse accountability and responsibility:

Answerability and responsibility are two important characteristics of accountability. To be held accountable for one's activities, one must be able to provide rational justifications and explanations for what one has done or how one has fulfilled one's duties. Responsibility encompasses not just one's own actions, but also the actions of others with whom one has a causal link. According to the 2006 International Council of Nurses (ICN) code of ethics for nurses, a nurse's duty is to promote health, prevent illness, restore health, and relieve suffering. In order to be held accountable, a nurse must be able to demonstrate that the decisions and acts that he or she took were in accordance with accepted principles and standards of professional nursing behavior and ethics. (Fry and Johnstone, 2008)

2.8.2.d. Common ground of physician and nurses:

While physicians and nurses have a long history of using expertise and knowledge to care for the sick, the two professions presently have a misunderstanding of their complementary roles. Hippocrates' teachings centered on nursing care for the most part. Nursing, on the other hand, has long been considered as a support function for physicians (Storch & Kenny 2007, 483). Doctors and nurses differ in that nurses prioritize building personal ties with patients, while physicians are more technically driven and emotionally emotionless. (Tabak and Koprak, 2007)

2.8.2.e. Nursing knowledge:

Knowledge, according to Merriam Webster Dictionary (2010), is acquaintance with or comprehension of a science, art, or method. In nursing, knowledge is an important aspect of the preparation for competence, which includes patient care and appraising the nurse's personal traits. It involves their moral integrity as well as how effectively they interact with both patients and coworkers. **(**Cowan et al, 2005)

2.8.2.f. Educational collaboration:

Pitting the medical school against the nursing school is akin to pitting the hour hand against the minute hand, since both hands are essential for telling time, Cook (1913) stated (Graham 2007, 1816). The majority of respondents, including nurses, physicians, and executives, preferred a physician-nurse educational cooperation, according to Rosenstein (2002, 31). They advocated for a system that prioritizes nurse and physician education and training in order to improve collaboration and working relationships. Workshops on sensitivity, assertiveness, conflict resolution, stress management, time management, and fundamental manners like respect, punctuality, and readiness were among the topics covered. (Rosenstein, 2002)

2.8.2.g. Physician’s dominance :

It is defined in the Merriam-Webster dictionary (2010) as having authority over others, particularly in a social hierarchy; and dominating as commanding or prevailing over others. Dominance and authority are strongly related in the medical field, particularly in the decision-making process. Since doctors dominate the medical field, there is a lack of

understanding and respect for nurses' roles, skillsets, and moral responsibilities. (Storch and Kenny, 2007)

2.8.2.h. Trust and respect:

The Merriam-Webster dictionary defines confident confidence as high or specific regard; the characteristic or state of being respected, while high or specific esteem is defined as high or particular regard; the characteristic or condition of being respected. Cambridge Dictionary defines belief or faith in a person's or an organization's honesty, compassion, competency, or safety as belief or trust in the ability, skill, or safety of a person, organization, or thing (2010). A person or object is considered noteworthy by the general public when decency, respect, and care are shown to it. (Baldwin, 2008)

In nursing, the concept of trust and respect is highly prized since it embraces all aspects of one's conduct toward another. This view emphasizes the significance of others' uniqueness and individuality while also acknowledging and respecting their inherent dignity. Prerequisites for physician-nurse collaboration include patient trust and respect, which fosters openness and improved patient outcomes. Clear professional duties based on professional competence must be established in order to build interprofessional trust and respect. (Pullon, 2008)

2.9. Nurse Physician Collaboration:

Collaboration amongst healthcare providers requires a common purpose and open communication in order to provide high-quality treatment to patients and resolve their challenges. (Sharifiyana and Zohari, 2016)

Medicine and nursing are two fields with several overlapping roles and sometimes misunderstood duties as well as functional domains. Additionally, they have a common concern in promoting persons' well-being. Interprofessional teamwork between doctors and nurses, according to previous research, is critical for delivering high-quality health care. (Johnson and Kring, 2012)

As a nurse and a physician work together in the healthcare system, communication is critical. The well-being of all healthcare workers participating in the patient care process depends on collaboration, not simply for the benefit of patients. Collaboration between doctors and nurses may be advantageous to both parties when the patient's care is shared. (Green and Johnson, 2015)

A process in which nurses and physicians work together, share responsibility for resolving challenges, and make choices on how to design and carry out patient care plans is how Elsous et al. (2017) describe collaboration between nurses and doctors. Physician dominance, characterized by nurse subservience and physician supremacy, has long been a hallmark of nurse–physician interactions. In the medical field, physicians take on a paternal and directive role, while nurses take on a supporting and directive one. Nursing's poor public image, along with the professional limitations of hospitals, creates an inherently unequal relationship between physicians and nurses, notably in the context of disciplinary procedures, resulting in a lack of total professional jurisdiction and autonomy for nurses. (Elsous et al, 2017)

Communication between nurses and doctors is seen as a critical component of successful interprofessional cooperation and, therefore, of ensuring the quality of treatment. Thus, accurate assessment of

communication and cooperation in a clinical work setting is critical for the improvement and maintenance of care quality. It is also contingent on social interaction within a particular (cultural) context that is relevant to the microsystem in which the medical professional operates in resource-constrained contexts. (Frenk et al; 2010)

Several methodologies have been utilized to date to investigate several areas of communication that need improvement in nurse-physician interactions. The majority of these research relied on lengthy questionnaires that experts were required to complete. Numerous results from these research indicate that attitudes of different professional groups about the quality of contemporary (interprofessional) communication vary. This has posed difficulties in recognizing areas that really need development and in designing the training programs necessary to accomplish them. (Hailu et al, 2016)

Despite shared aims of enhancing the quality of health care and providing comfort to patients, there is a conventional economic and gender hierarchical relationship divide between nurses and doctors, with physicians maintaining power and nurses displaying respect. (Pakpour et al, 2019)

According to the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), it is critical for optimal patient outcomes for doctors and nurses to develop collaborative partnerships. Additionally, there are other advantages, such as less fragmented care and fewer resource waste. Collaboration that is effective helps not just patients, but also the experts participating in the process. Additionally, productive teamwork has been associated with increased job satisfaction. (James, 2017)

Collaboration between nurses and physicians has unique challenges compared to other health care professionals owing to a range of issues such as inadequate communication, organizational regulations, discipline diversity, work environment, physician attitude and powers. Collaboration among health care professionals is critical for a positive patient result. However, several research demonstrate that there are consequences, including psychological, physical, patient safety, and health effects. Effective collaborations, communication, and conflict resolution skills, including an understanding of group norms, health professionals' roles, the ability to tolerate differences, a willingness to collaborate, and the ability to contribute to shared care plans and goal setting, can all help overcome persistent barriers to collaborative practice. Collaboration that is insufficient has an adverse effect on the quality of patient treatment. Ineffective communication, for example, or incorrect therapy place patients at increased risk. In the majority of hospitals in the United States, the emphasis is on effective communication, and teamwork is the exception, not the norm. (Eukubay and Abate ,2019)

Enhancing Nurse-Physician Collaboration: Establishing a Support Infrastructure Due to differing conceptions of professional practices in the clinical context, nurses and doctors sometimes struggle to create appropriate cooperation patterns. The link between the two professions is based on long-held societal conventions that have been reinforced through time. It is critical for nurses and doctors to communicate effectively in the workplace in order to guarantee the accurate and appropriate transmission of information for the purpose of providing high-quality, safe patient care. (Bowles et al, 2019)

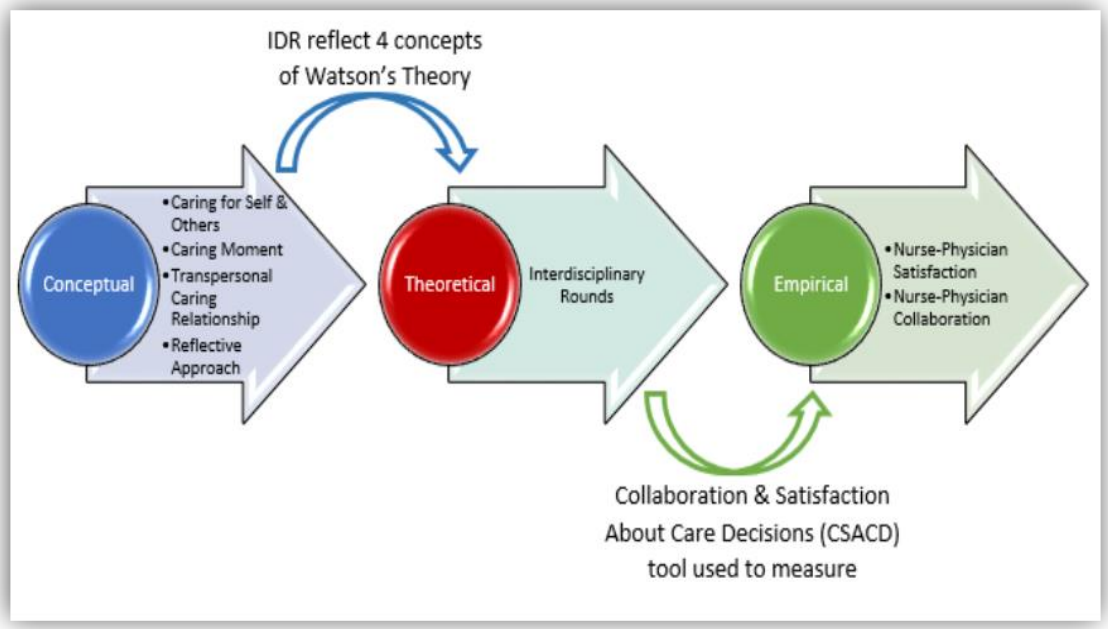


Figure 2. Conceptual-Theoretical-Empirical (CTE) Diagram

Between nursing and medicine, a noncollegial hierarchical structure has developed a fundamental division based on a variety of criteria, including education, gender, and societal conventions. These distinctions have the potential to obstruct the proper sharing of critical patient information. Ineffective health information communication may result in significant delays in treatment plans, resulting in unwanted side consequences such as therapy delays due to misunderstanding. Delays in care may have a detrimental impact on the patient's perception of the system and may encourage their distrust. (Blue,2019).

Improved patient outcomes have been proven in programs where nurse-physician communication has been improved. Collaboration between nurses and physicians has been a significant factor in increasing patient happiness, nurse satisfaction, nurse retention, physician satisfaction, reducing medical mistakes, and improving patient outcomes. It is vital to understand which tactics are most successful and the implementation

aspects that may affect efficacy if real progress is to be achieved. (Missi, 2016)

Numerous factors may contribute to the success of interprofessional collaborative practice, including institutional support (e.g. governance, structured protocols, space and time availability), working culture support (i.e. communication strategies), professional support (e.g. shared interest, willingness, and trust), policy support, interprofessional training, and long-term funding. Specific characteristics may vary by country, since no two health systems on the planet are identical. Thus, nations intending to adopt more collaborative forms of practice should begin by examining what is easily accessible and already available and expanding on what they already have. (Setiadi et al,2019)

2.10. Job Satisfaction:

Job satisfaction relates to an individual's attitude and sentiments about their employment. It is described by Stamps (1997) as the degree to which workers like their employment. Job happiness is a critical component in determining human resource efficiency and production. (Semachew et al,2017)

For the past three decades, nursing research has focused on measures of effectiveness, such as work satisfaction, job performance, and turnover. Such study has been mostly motivated by the desire for hospitals to become more competitive, often in reaction to resource constraints that create new workplace difficulties. With a global nurse shortage and high turnover rates, enhancing nursing effectiveness remains a critical objective. (Peter et al,2017)

Job satisfaction in the health care industry, as well as the outcomes of that satisfaction, are excellent markers of employees' well-being and quality of life. Job satisfaction research is especially pertinent in the realm of service management, since employee happiness has an effect on the services provided to health care consumers. Job satisfaction is also a critical factor in determining the quality of a health care organization. Currently, the people who work in these organizations play a critical role in achieving the institutions' aims. The presence of highly motivated employees who are content with their jobs and employers boosts productivity and service quality. (Carrillo-García et al,2013)

Nurses are the largest category of healthcare professionals. Providing a high-quality health care delivery system has become a key problem in recent years. To achieve that level of quality, an acceptable degree of work satisfaction among nurses must be achieved. (Olatunji and Mokuolu,2014)

Nurses' work satisfaction is a complex phenomenon that is influenced by a variety of elements. They may be classified according to their internal and extrinsic characteristics. Extrinsic elements include visible features of employment, such as perks and compensation, whereas internal factors include opportunities for personal and professional advancement and recognition. Currently, nurses seem to be dissatisfied for a variety of unknown reasons, creating a persistent danger of attrition. Additionally, the nursing profession struggles to recruit a sufficient number of workers owing to the shift pattern, pay, and societal view of nurses. (Elsherbeny And El-Masry,2018)

The healthcare system has seen several changes over the previous few decades, all of which have had an effect on nurses' work satisfaction, either favorably or adversely. New organizational structures and payment

techniques have produced incentives that may have an effect on care quality. (Aron,2015)

In today's health care climate, nurse supervisors' jobs have grown more demanding. Nurse supervisors have a significant impact on nurses' work happiness and patient safety, while motivated and engaged employees boost patient satisfaction. In general, nurse supervisors' job and conduct have a complicated effect on nursing outcomes. (Udod et al,2017)

Today, communication and cooperation comprise a significant portion of the job of nurse managers.) Cadmus and Wisniewska (2013) reported that nurse managers routinely do rounds on their units, provide clinical guidance to staff, and have daily brief meetings, or huddles, with staff. (Bjerregård et al,2016)

This is a problem, since nurse managers must be visible and accessible in addition to providing frequent feedback to their employees. As nurse managers, we are also responsible for promoting workplace safety, staff safety initiatives, and a healthy work environment. (Shirey , 2017)

Satisfaction with one's work environment is a critical predictor of a devoted, dedicated nurse. This is critical because it may result in the provision of higher-quality treatment (Backhaus et al., 2017). Unsatisfied nurses are more likely to be focused on completing their job than on the client, with little consideration for the quality of care offered. Unsatisfied nurses also tend to abandon their employment, lowering the quality of treatment as a result of the nursing shortage. (Backhaus et al., 2017)

Furthermore, hospital safety will deteriorate as a result of the rise in medical mistakes. On the other side, this increases the financial burden on

the hospital by compensating departing nurses and paying for the training of replacement nurses. (Suliman et al,2016)

Additionally, the literature reported on additional factors inherent in the medical profession that can exacerbate the situation for dissatisfied nurses, including complex caring procedures, increased morbidity and mortality rates, and other managerial requirements such as quality assurance procedures. (AbuAlRub et al,2012)

2.11. Nurse – Patient relationship:

The most often discussed themes in the literature review on nurse-patient relationships are (a) the patient's role, (b) the nurse's role, and (c) the nurse-patient relationship's kind.

2.11.1. Role of the Patient:

Many medical professionals believe that the patient is often seen as a passive subject. The as a consequence, it is often thought that a person who maintains a rigidly passive attitude, refrains from questioning or disputing, and follows all instructions is considered good in the traditional sense of the term good patient. This viewpoint lays an unwarranted focus on the professional's power over the patient, which is counterproductive. (Truglio-Londrigan, 2015)

According to certain scholars, paternalism is associated with the passive role, in which the patient is seen as a subject who must be restrained in order to comply with treatment recommendations. According to Kleiman, Frederickson, and Lundy, the passive stance is related with professionals' views that many, if not all, patients lack the educational and cultural background necessary to participate in an equal professional relationship. **(**Phillips, 2016)

According to the findings of the study, patients place a great importance on feeling confident in their connection with the nurse. Although the patient perceives himself or herself as being treated like a kid, he or she has faith in the nurse's abilities and defers to her judgment. Historically, the origins of this viewpoint may be traced back to Hippocrates' Oath, which lays a strong emphasis on the professional's authority, expertise, and virtues while completely disregarding or minimizing the autonomy of the patient. This dominion over the patient, according to Henderson, leads to depersonalization and, as a consequence, a worsening of the nurse-patient relationship. **(**Malaquin-Pavan, 2015)

2.11.2. Role of the Nurse:

The bibliography makes reference to two distinct nursing roles: that of an expert nurse and that of a mother nurse. The majority of writers characterize nursing practice as empirical, relegating cognitive, behavioral, and integration of skills, attitudes, and beliefs to a secondary level. (Price, 2013)

The expert function, according to some authors, is defined by a collection of pieces of information about the patient's biological features. Brown, on the other hand, considers a great professional to be one who uses his knowledge, experience, and therapeutic talents to each patient's specific objectives. As a consequence, opinions on the nurse's role as an expert vary widely. **(**Brown, 2013)

Concerning the maternal role, writers refer to a more personal position for the nurse than is ideal or to a position based on the notions of adherence, cooperation, concordance, and compliance. (Kolovos et al,2015)

It's worth noting how some studies characterize nurses as simple informants of treatment regimens on the idea that if patients comprehend, they would comply, underscoring the nurse's maternalistic function once again. (Fahlberg, 2015)

2.11.3. Types of Nurse-Patient Relationships:

The importance of concepts like compliance, empowerment, relationship quality, impotence, and power has been highlighted in studies looking at the nature of the nurse-patient relationship. The urge to develop and yield to another person's wants is known as compliance. In addition to compliance, other terms such as empowerment and affinity have been studied for possible inclusion. Based on the findings of these research, the nurse-patient relationship is characterized as a two-way interaction based on the patient's autonomy in making choices after receiving professional education. (Nunes et al,2019)

When it comes to the strength of a professional's relationships, it seems to be a decisive factor in his or her motivation to promote patient-centered care. In the opinion of Luker et al., the quality of the relationship has a direct influence on the quality of care delivered and is critical for the efficacy of nursing practice. Austin et al. As a result, the authors investigate the nurse-patient connection in terms of the difficulties that the nurse has in detecting the patient's true needs when there are no clinical practice standards or evidence-based practice support to help them. As a result of receiving the appropriate level of professional therapy, a patient may have impotence. (Meadow, 2015)

In conclusion, power is a term that is introduced in the literature. According to Cameron, the professional develops reference power in the patient, and the professional serves as a frame of reference for the patient

throughout the treatment process. In the mind of the patient, the professional's image will be formed as follows: specialist in charge of the decision-making process throughout the course of care. (DeWolf et al,2013)

The health-care system has put in place procedures aimed at humanizing and improving the quality of treatment. Current therapeutic procedures, on the other hand, do not provide for full patient decision-making autonomy. The nurse-patient contact is one of the aspects that affects a patient's autonomy. Analyzing different types of interactions allows us to get new insights into patients' decision-making skills in a healthcare setting. (Oudshoorn et al,2007)

A healthy nurse-patient relationship reduces hospital stays and improves the quality of life and satisfaction of both parties. In contrast, although having a greater voice in their decisions, the patient's subordinate position limits the patient's ability to have a constructive connection. (Lotfi et al,2019)

The quality of therapy is degraded and the patient's autonomy is eroded when the nurse-patient contact is dysfunctional or ineffective. A bad patient is one that wants a lot of information, likes to make their own decisions, frequently against physicians' recommendations, and does not establish a pleasant relationship with experts. (Karaca and Zehra, 2019)

2.12. Health Environment :

Nurses mingle with other healthcare personnel and engage with patients and families in a hospital setting. The word nurse safety has evolved in meaning and use throughout time. Two decades ago, occupational society did not place a premium on nursing safety. It has only

lately become a concern, since the risk of work-related injury among nursing professionals is much greater than that of other professions. Once wounded, nurses' happiness with their jobs and the quality of patient care decline, since nurses' safety is directly related to that of patients. (Park, 2016)

Numerous research have been conducted on patient safety and patient-friendly surroundings. Additionally, since patients and nurses share an environment, patient safety has been shown to be positively related with nurse safety. When nurses' safety was assured, satisfaction and retention rose, work-related stress dropped, and patient satisfaction increased. (Kramer and Schmalenberg ,2008)

Several health care organizations are focusing their efforts on building a quality strategy to increase patient safety. Developing an efficient system to reduce or eliminate adverse events and errors in health care delivery is made possible by gaining a thorough understanding of safety. The interaction of the system's components is what creates safety, not a single person, gadget, or department (individuals, equipment, and departments). As a consequence, the risk of an accident is decreased in a secure setting. In order to maintain a safe working environment, it is necessary to keep an eye on the care being provided in order to identify and rectify any problems that may arise. When it comes to keeping patients safe, making sure that the treatment they get is reliable is essential. As a consequence, in order to practice effectively, every healthcare practitioner should be aware of the other requirements. The ability of a doctor and a nurse to work together effectively is essential in providing high-quality patient care. In order to deliver high-quality patient care, no one profession can function effectively on its own. (Lin and Liang, 2013)

Nursing has a greater rate of work-related injury than other jobs, owing to the fact that nurses are professional professionals working on the front lines of a complex healthcare system. Healthcare workers' risk of disease and injury is anticipated to grow, since nurses work long hours, operate in constantly shifting shift patterns, and are subjected to stress from caring for critically ill patients. The complexity of patient care raises the risk of injury for nurses, which has negative repercussions such as absenteeism, fatigue, decreased retention, and high turnover on both an organizational and individual level. (Foley, 2004)

There are rules and procedures in place to prevent medical and nursing errors from occurring, which is known as patient safety. Avoiding harm and bad effects from medical treatment is the primary goal of patient safety measures. Patient safety necessitates the use of operational strategies and systems designed to minimize the risk of medical incidents. Various theories and tactics for coping with human error have been utilized to investigate and evaluate risk and safety in health care. Improved practices and safer patient care may be achieved via the integration of system components. Components of the healthcare delivery system provide the foundation for measuring patient safety. To ensure patient safety, companies must focus on identifying high-risk or error-prone procedures, systems, or situations. Detecting mistakes and near misses may be done by active monitoring, retrospective chart review, and regular self-assessment. (Bakhen et al,2013)

The notion of the professional practice environment (PPE) was proposed by Siedlecki and Hixson (figure 4). The year is 2011.Perceptions of interactions between nurses and doctors are a good predictor of the quality of a professional practice environment, according to this paradigm,

which is the setting in which nursing and medical care are delivered. The history of the nursing and medical professions, as well as social standards, have an influence on the professional practice environment and the people who work in it; thus, time and geographic location have an impact on the professional practice environment and the people who work in it. (Siedlecki and Hixson 2015)

2.13. Collaboration between physicians and nurses benefits patients.:

Patients in every culture may benefit from physician-nurse teamwork, which also contributes to improved communication and satisfaction across professionals. Physician-nurse teamwork has an effect on patients.

2.13.1 Patient education

Nurses have an important role to play in patient education, which is made easier by physician-nurse collaboration. Patient education is a two-way street in which teaching and learning are both involved. Learning is the intentional acquisition of new knowledge or skills, while teaching is a sequence of purposeful, conscious activities intended at assisting a person in obtaining new information or abilities. The nurse-patient contact is strengthened through collaboration between doctors and nurses. (Hall, 2001)

2.13.2 Professional collaboration

Patient education is a critical responsibility for nurses, and teamwork between physicians and nurses fosters this role. Patient education is a two-way street that requires both teaching and learning. Teaching is a series of purposeful, conscious acts intended to assist a person in acquiring new information or abilities, while learning is the deliberate acquisition of new

knowledge or skills. Collaboration between physicians and nurses strengthens the nurse-patient interaction via advice. (Boyle and Kochinda, 2004)

2.14. Benefits of Collaboration:

Companies, organizations, and professions often benefit from teamwork because they can do more than they could on their own. Health care providers and patients both benefit from more cooperation because of the widespread belief that it leads to better outcomes. (Brien et al, 2005)

2.14.1. Interprofessional Research Collaboration:

Research is a way to meet the scientific and knowledge criteria of a health care profession. Solving today's problems on one's own may be impossible due to the complexity of today's problems. According to the National Academies, multidisciplinary or interprofessional teamwork might be beneficial when trying to deal with challenging situations. This kind of collaboration occurs when scientists from various fields work together to advance scientific understanding across domains and professions. (Committee on Facilitating Interdisciplinary Research،2005)

As a researcher, the capacity to work with others in order to get access to resources that allow for more sophisticated, and maybe more essential, inquiry and discovery may be a key drive for advancement. Collaborative research makes it feasible to do research that would not be possible if just one profession did the investigation. Resnick explains that while multidisciplinary research brings disciplines together, interdisciplinary research transcends domains and facilitates idea integration. A multidisciplinary approach instead draws together several disciplines. (Resnick ,2011)

Collaborative research is linked to greater publishing success and citations in certain circumstances, according to study findings (ie, impact). Working with others improves the quality of research, according to Frenken and colleagues. Papers with an increased number of authors are more often referenced. In order to increase the likelihood that new results will be put into practice, it is best to make them available to a wide range of experts. This is particularly critical if the findings have direct therapeutic relevance. (Frenken ,2005)

Cooperative research requires a high level of trust between researchers. History shows that the scientific community has been one of secrecy from the beginnings of time. Fundable research might be stolen either intentionally or accidently as scientists fight for funding. Trust and respect for each other are essential in order to prevent withholding ideas and support from others in a joint endeavor Additionally, there may be financial rewards for participating in collaborative research. There has been an increase in financing for cross-disciplinary research. It may be necessary to provide more money to encourage collaboration if aiding humanity is not enough. (Nagarajan et al,2013)

If the research is successful, the value will be retained once it is done. After completing a cooperative research project, researchers typically stay in touch. The skills and techniques of thinking that were shared across disciplines by the group members may have a long-lasting impact. It is possible to get a fresh perspective on a problem or strategy by working with people from other backgrounds and occupations. According to Lee et al., multidisciplinary collaboration is crucial for tackling large-scale, difficult biological concerns. (Lee et al,2009)

2.14.2. Inter-professional Collaboration in Practice:

A health care profession cannot survive without science and knowledge, and research is one way to meet these criteria. In the present period, the issues that must be tackled are complicated, and answers may not be accessible if one works alone. Interprofessional or multidisciplinary cooperation, the National Academies advise, may be beneficial when attempting to resolve complex situations. Inter-professional/interdisciplinary research cooperation happens when researchers from many professions/disciplines collaborate to produce new scientific information. (Interprofessional Education Collaborative; 2011)

Having access to resources that allow for more sophisticated and presumably more important examination may be a key motivator for helpful research advancement. Research that would not be conceivable if only one profession was engaged may be made possible via collaborative research. According to Resnick, although diversified research brings together different areas, interdisciplinary research bridges domains and facilitates idea integration. (World Health Organization; 2010)

It has been proposed that collaborative research correlates with prominence, higher publishing success, and citability (ie, impact). As Frenken et al. explain, collaborative research improves the quality of research, resulting in more often cited articles with more authors. If study results are disseminated across several professions, they may have a greater chance of being adopted. This is particularly critical if the findings have direct therapeutic implications. (Bridges et al,2011)

Collaboration in research requires a high level of trust. Science has a long history of being a sectarian culture. Scientists must compete for money; discussing fresh ideas exposes them to the possibility of a

fundable research being taken, whether purposefully or accidentally. As a result, trust and respect for others in a collaborative effort are required to avoid ideas and help being withheld. Participating in joint research may also have a financial benefit. Major funding organizations have initiated a push to recognize and promote cross-disciplinary partnerships. Thus, if assisting mankind is insufficient to motivate cooperation, more financing may act as a stimulant. (United Nations.2014)

After the study is completed, value continues. Following the conclusion of a joint project, researchers often continue to communicate. Skills and modes of thought shared across disciplines by group members may have long-lasting consequences. By collaborating with different professions, one discipline's typical methodologies are enlarged; as a result, the issue or approach is reframed. As Lee et al. note, there is widespread agreement that multidisciplinary cooperation is critical for addressing large-scale, complicated biological problems. (Brown et al,2014)

2.14.3. Collaboration Among Professionals in Education:

According to the IPE definition, IPE is a circumstance in which students from two or more professions study about, from, and together. If an interprofessional education experience is really interprofessional, it must include intentional integration and cooperation across disciplines, whether in the classroom or at work. (Institute of Medicine (US). Global Forum on Innovation in Health Professional Education. Workshop. (2012: Washington DC). Cuff PA, Institute of Medicine (US), Board on Global Health, National ResearchCouncil (US); 2013.)

Interoperability is a must for both IPCP and IPE. IPCP advocates say that IPE should be included into the professional development of

health care practitioners in order to attain their goal. IPE and IPCP are defined by the WHO in its widely recognized Framework for Action on Interprofessional Education and Collaborative Practice. Health care workers of the future should be taught how to work together as part of a collaborative, practice ready workforce (IPE) that provides public health care. IPE training experiences have resulted in a workforce that is prepared for IPC. The goal of the IPC health-care system is to enhance the health of the people. (World Health Organization,2010)

Proper IPE training has several benefits. IPE has been demonstrated to develop members who display respect and wonderful attitudes toward one another and cooperate to enhance patient outcomes, despite the fact that certain IPCP participants may be able to function or thrive without this training. While health care systems have been more open to IPC, health-care schools have been slow to catch up. Both IPE and IPCP are social demands-related; with IPE, staff are trained to work more effectively in groups for improved health outcomes for the people they serve. (Bridges et al,2011)

Interregional and cross-political cooperation has existed between IPE and IPCP. In Canada, the United Kingdom, the United States, and Australia, IPE and IPCP research has been intensively studied. As a result, the WHO has made IPE an essential component of training for health care professionals. Rodger and colleagues found evidence of IPE in 41 different nations, with differing degrees of complexity shown in joint activities, during a worldwide study of the WHO's 193 member states. This makes sense in light of the worldwide scarcity of basic health-care services. (Rodger and Hoffman,2010)

2.15. Potential Barriers to Collaboration:

Given the fundamental components of cooperation (participants from diverse cultures, a high degree of engagement, reciprocal authority, and resource sharing), it has inherent risks. What may begin as a well-intentioned activity might devolve into strife. Indeed, conflict is a natural part of a collaborative workplace. yet, this presents a chance for greater comprehension. (Kumar and Dissel ,1996)

Each profession has its own history, culture, attitudes, values, norms, and beliefs, and IPC is no exception. The process through which experts in collaboration come to understand and respect these complexities may bring a variety of challenges. For example, one profession may see another as an outsider or enemy with whom it is unwilling to collaborate. (Hall ,2005)

Furthermore, many professional organizations may be apprehensive of connecting with other professional organizations for a number of reasons, including historical isolation or low social status. As Gaboury and colleagues point out, a culturally dominant profession may harbor prejudices toward other professions. It is plausible that practitioners who belong to occupational groups that have obtained or are pursuing legitimacy through licensing, certification, or registration may be viewed differently by their biomedical peers, they write. (Gaboury et al,2009)

Additionally, there are fears that IPC may result in the loss of a profession's or professional identity's distinctiveness. When members keep the team's aims and the people they serve in mind, professional differences may be seen as distinct chances to add a useful and unique perspective or skill set to the cooperation. While cooperation may result in some overlap of the work of each profession engaged, it should not duplicate the efforts of any one profession. (Medical Institute) (US). Global Forum on Health

Professional Education Innovation. Workshop. (Institute of Medicine (US). Global Forum on Innovation in Health Professional Education. Workshop . (2012 :Washington DC). Cuff PA, Institute of Medicine (US), Board on Global Health, National Research Council (US); 2013.)

Collaboration, in this case, will result in conflict. However, resolving any issue in a way that benefits the client is a critical step in establishing a productive relationship. It is advised that collaborative groups agree on a process for resolving conflict, beginning with resolution at the individual member level and progressing to the organization's bigger levels. (Weiss and Hughes , 2005)

2.16.Previous studies related :

First study: Siedlecki, S., Hixson, E., (August 31, 2015) "Relationships Between Nurses and Physicians Matter" *OJIN: The Online Journal of Issues in Nursing* Vol. 20 No. 3.

The aim of the study is to looked into how nurses and physicians define respectful behavior, the impact of nurse-physician relationships on nursing care decisions, and perceptions of the relationship between nurses and physicians in clinical settings where they work together. The Professional Practice Environment Assessment Scale, as well as single, forced-choice questions, were used to assess views of respectful conduct among physicians, as well as the impact of physician behavior on nursing practice. It has been suggested by the authors that doctors lay a greater focus on relationships than nurses. They also observed that negative physician behaviors had an effect on 55% of nurses, and that younger, less experienced nurses were more likely than older, more experienced nurses to report being affected by unfavorable physician behaviors. They examine how disparities in views of the same environment between nurses and

doctors are not unexpected, but they are instructive, and they recommend that understanding differences in values, reasons, and perceptions may aid in focusing development efforts.

Second study: Amsalu E, Boru B, Getahun F, Tulu B. Attitudes of nurses and physicians towards nurse-physician collaboration in northwest Ethiopia: a hospital based cross-sectional study. BMC nursing. 2014 Dec;13(1):1-6.

The primary purpose of this research, which took place from February 1 to April 30, 2013, was to determine what nurses and doctors felt about nurse-physician cooperation and how happy they were with the amount of collaboration between them at Northwest Ethiopian Referral Hospitals. It was decided to perform a cross-sectional research at Felegehiwot and Gondar University Referral Hospitals, which included 176 nurses and 53 doctors. The information was gathered via the use of self-administered questionnaires. The Jefferson scale of attitudes about nurse-physician collaboration was used to conduct the survey of nurses and doctors. The significance of the changes in means and proportions was determined using the student t test, with a p0.05 significance level being considered statistically significant. In all, 90.50 percent of those who were asked responded. Nurses showed higher positive attitudes than doctors, as measured by mean ratings of 49.63 and 47.49, respectively, and standard errors of mean of 0.474 and 0.931, respectively, with p = 0.043 separating the two groups. There are four subscales for attitudes toward nurse-physician collaboration on the Jefferson Scale: 1) shared education and collaboration, 2) caring versus curing, 3) nurses autonomy, and 4) physician domination. The Jefferson Scale has four subscales for attitudes toward nurse-physician cooperation. Nurses outscored physicians on three

subscales, including patient satisfaction (1, 2 and 4). Statistics showed that differences in subscales 2 and 4 ($p = 0.01$, respectively) were statistically significant, but not in subscales 1 and 3. According to the findings of this research, neither nurses nor doctors were content with their present cooperation, with nurses expressing lower levels of satisfaction with the current nurse-doctor collaboration than physicians did. More positive emotions about cooperation than doctors, particularly regarding their contributions to psychological and educational components of patient care, were expressed by nurses. Nurses also expressed a greater rejection of a medical viewpoint that was completely dominating.

Third study: Hossny EK, Sabra HE. The attitudes of healthcare professionals towards nurse–physician collaboration. Nursing Open. 2021 May;8(3):1406-16.

Nurse-physician collaboration is being studied to see how healthcare workers feel about it and if they are satisfied with it as a whole. 338 people who worked in critical care units, surgical departments, and medical departments were surveyed by the researchers using a method known as descriptive comparative study (158 intern nurses, 139 nurses, and 41 physicians). A 15-item questionnaire with four parts and a sociodemographic data sheet, dubbed the Jefferson scale of attitude toward nurse–physician collaboration (JSANPC), were used to gather information. Staff nurses showed a lower level of satisfaction with the level of collaboration between nurses and doctors (38.6 percent) than did interns. Physicians are quite happy with the amount of cooperation they have with nurses, and they say as much (61 percent). Staff nurses had a more positive view of nurse-physician cooperation than did doctors and intern nurses

(48.45 (4.003) points). There was a noticeable lack of collaboration between physicians and nurses throughout the internships of the interns. .

Fourth study: Ahmadieh H, Majzoub GH, Abou Radi FM, Abou Baraki AH. Inter-professional physician-nurse collaboration in Lebanon. International Journal of Health Governance. 2020 Feb 29.

Purpose when a physician and a nurse collaborate on a comprehensive, professional, and collaborative decision-making process, high-quality patient care is a significant predictor of the outcome. Specifically, the goal of this research is to examine the interactions between physicians and nurses at hospitals in Southern Lebanon. Design/methodology/approach It was decided to undertake descriptive institutional cross-sectional research across several departments of three hospitals in Southern Lebanon, utilizing a validated Jefferson Scale of Attitude as the basis for the study. Findings On the other hand, there were 89 doctors and 245 nurses who expressed an interest in participating in the research. The average age of the nurses was 32 years old, but the average age of the doctors was 44 years young. A total of 46 points was earned by all participants, with nurses scoring substantially more than doctors (48 points vs. 43 points) and females scoring significantly higher than men (48 vs 46, respectively). However, when it came to nursing degrees and years of experience, the research found no statistically significant differences. Almost unanimously, participants felt that a scarcity of nursing professionals made it harder to provide adequate patient care. According to one-quarter of doctors, nurses should be seen as partners and colleagues rather than as patients. Because of this, further effort will be necessary to enhance this relationship. Limitations and ramifications of the research Physicians and nurses are often involved in a complicated interaction that is

difficult to comprehend and assess on a clinical level. When filling out the questionnaire, it's possible that physicians and nurses provided comments that were socially acceptable. Furthermore, while this research was carried only in hospitals in southern Lebanon, it would be beneficial to broaden its scope to include hospitals in other parts of the country. The repercussions of practice In terms of teamwork, nurses outperformed men, with females scoring better than males. Overall, however, the outcomes are seen to be inferior to those obtained by other nations in the same situation. It is necessary to increase inter-professional undergraduate and postgraduate education courses that are geared toward strengthening communication as a consequence of these findings. Consequences for society It was determined by the study's findings that more effort should be put into developing physician-nurse teamwork, which was deemed crucial for improving the quality of patient care. Originality/value The collaboration and attitude of nurses and doctors in Lebanon about their link is a critical problem that has a study gap in its treatment and understanding. It is important to attempt to determine what sort of nurse–physician interaction exists in each local environment since this link has an influence on the overall quality of patient care provided.

Fifth study: Vatn L, Dahl BM. Interprofessional collaboration between nurses and doctors for treating patients in surgical wards. Journal of Interprofessional Care. 2021 May 15:1-9.

With this study, the researchers want to learn more about how nurses and physicians communicate on a surgical ward while keeping an eye on and tending to patients. The research was conducted in 2018 and consisted of four semi-structured focus group interviews as part of an exploratory qualitative design that included an exploratory qualitative design. Eleven

nurses and seven physicians with backgrounds in a variety of surgical specialities were called in to answer the questionnaire. They were stationed in three distinct surgical wards in a Norwegian medical facility. The data were examined with the application of systematic text condensing. There were three primary categories, each with two subcategories: education, health, and religion. 2) Communication: insufficient communication tools and space for professional discussion; 3) Trust and respect: a lack of dependence and recognition, as well as an ambiguous distribution of responsibility; and 4) Organization and culture: a lack of interprofessional meeting spaces and an experience-based hierarchy; Organizational limitations, such as a lack of interprofessional meeting spaces and time limits, made it difficult for nurses and physicians to interact more effectively during observation and treatment on the surgical ward, according to the study.

Sixth study: Lee YJ, Hwang JI. Relationships of nurse-nurse collaboration and nurse-physician collaboration with the occurrence of medical errors. Journal of Korean Academy of Nursing Administration. 2019 Mar 1;25(2):73-82.

The purpose of this research was to assess nurse-nurse and nurse-physician cooperation levels and their associations with the incidence of medical mistakes. A cross-sectional questionnaire study of 264 nurses at a university hospital was done. The questionnaire had five items measuring nurse-nurse cooperation and three scales measuring nurse-physician collaboration. Independent t-tests, ANOVA, two-tailed tests, and multiple logistic regression were used to examine the data. Nurse-nurse cooperation had a mean score of 2.8 out of 4.0, whereas nurse-physician collaboration received a mean score of 3.4 out of 5.0. The nurse-nurse and nurse-

physician cooperation ratings varied significantly according to the nurses' preferred workplace and work unit. The nurse-nurse cooperation ratings varied significantly by employment position. In the recent six months, 57 nurses (21.60 percent) reported experiencing a medical mistake. Logistic regression research found that cooperation between nurses and physicians was a major predictor of nurses' error experience. Nurses who scored higher on the nurse-physician connection component had a lower risk of medical mistakes. The findings of this research indicate that teamwork between nurses and physicians was modest. The negative correlation between nurse-physician cooperation and the likelihood of medical errors suggests that strengthening nurse-physician collaboration might help to patient safety improvement.

Seventh study: Ergun YA, Akinci F, Kaptanoglu AY, Wagner J. Collaboration among physicians and nurses in intensive care units: a qualitative study. InInternational Journal of Health Administration and Education Congress (Sanitas Magisterium) 2017 (No. 1, pp. 25-35).

The purpose of this research is to ascertain the elements that influence nurses' and doctors' collaborative experiences in critical care units (ICUs). The authors use a qualitative study technique to ascertain how Turkish intensive care unit nurses and doctors cooperate. The tools of focus groups, narrative analysis, and phenomenological approach are employed to develop a qualitative framework for nurse-physician partnerships. The data were evaluated using the content analysis approach on a purposive sample of twelve doctors and twelve nurses. The investigation was done in nine intensive care units of three hospitals connected with two Istanbul

universities. Collaboration was defined as having three sub-themes (high, medium, and low). The findings indicate a lack of cooperation between doctors and nurses. Collaboration was deemed inadequate except for nurses and doctors who knew one another prior. This connection remains complicated and unresolved, and ICU team leaders must understand and manage it.

Eighth study: Brewton F. Nurse-Physician Collaboration and Satisfaction. Gardner-Webb University; 2017.

The purpose of this study was to see how interdisciplinary rounds (IDR) affected patients in a neurology and medical-surgical inpatient unit. According to available evidence, IDR improves nurse-physician interactions and satisfaction, as well as patient outcomes. Baggs' Collaboration and Satisfaction about Care Decisions (CSACD) tool was used to measure nurse-physician collaboration and satisfaction before and after the adoption of multidisciplinary rounds. Twenty-one nurses and five physicians participated in the study, which included instructional sessions, a two-week trial of IDR, and a pre- and post-survey. The collaboration of nurses and physicians in this sample improved significantly after IDR implementation (X = 5.6563, P = 0.0174). (See Figure 2) In addition, subjective enjoyment rose (X = 3.3629, P= 0.0667), although not statistically substantially. Nurses scored significantly lower than doctors on collaboration (X = 4.8864, P = 0.0271) and contentment (X = 5.3332, P = 0.0209), indicating that nurses were dissatisfied with collaborative decision-making between nurses and physicians.

Ninth study: Eukubay T, Abate A. Interprofessional collaboration and associated factors among nurses and physicians working at public hospitals in Mekelle city tigray region, north Ethiopia, 2017. Nurse Care Open Acces J. 2019;6(6):185-92.

The purpose of this study was to examine interprofessional cooperation and the variables that influence it among nurses and doctors working in public hospitals in Mekelle, Tigray, Northern Ethiopia in 2017. A quantitative cross-sectional research design was used to recruit 409 study participants from all public hospitals in Mekelle city using simple random selection approaches. Text, frequency tables, tables, and figures were used to convey the data. To examine the relationship between dependent and independent variables, logistic regression was performed. All factors having a P-value of 0.25 were included in the multivariable analysis, and the size of the association was determined using odds ratios at the 95 percent confidence interval, and statistical significance was defined as a p-value less than 0.05. According to this survey, moreover half of the 222 (54.3 percent) respondents engaged in regular partnerships. The driver's variables revealed that a negative attitude toward shared education and teamwork is statistically significantly linked with infrequent cooperation 2.53 times more than a positive attitude toward shared education and teamwork (AOR 2.53, 95 percent CI) (1.44-4.45). Poor communication was shown to be related to infrequent cooperation at a rate of 3.73 times that of responders with excellent communication (AOR, 3.73, 95 percent CI) (2.30-6.05). Similarly, respondents who were unsatisfied with organizational support had a significant correlation of 2.94 times for infrequent cooperation when compared to respondents who were content with organizational support (AOR 2.94 at 95% CI) (1.83-4.73). The findings of this research were pretty excellent, owing to collaborative

professional actions, although they may be improved. Organizational support for professional development, motives and recognitions, ownership of one's actions, and early conflict resolution were all significant variables in increasing professional satisfaction, mutual understanding, and collaborative practice.

Tenth study: Schneider D. Informal Interactions, Gender, and Hierarchy: Barriers to Nurse-Physician Collaboration in a West Coast Hospital.

The nursing profession has achieved significant achievements in terms of professionalization, stature, and remuneration during the last half-century. Recent health care reform's ubiquitous emphasis on coordination and quality of treatment continues to emphasize the need of strong collaborations between nurses and doctors. Implicit and often gendered concepts of professional authority, on the other hand, continue to obstruct successful communication between nurses and doctors. This brief summarizes the results of an in-depth study of nurse-physician interactions at a California hospital, based on interviews and extensive observations. The findings have immediate consequences for nurses' work satisfaction and retention. Additionally, the data demonstrate how minor power dynamics constrain the possibility for promising organizational transformation attempts after healthcare reform.

Eleventh study: Franco NP, Cordero MA. Collaboration effort between physicians and nurses: a feedback tool for the review of the hospitals. Int J Nurs. 2017 Jun;4(1):19-26.

The purpose of this descriptive comparative research was to examine doctors' and nurses' views regarding teamwork. The data collection instrument was a survey questionnaire adapted from the Jefferson Scale of

Attitudes toward Physician-Nurse Collaboration (JSATPNC) that was sent to practicing doctors and registered nurses at The Doctors' Clinic and Hospital Incorporated (TDCHI) in the Philippines. The mean score on attitudes toward cooperation was 48.9 (SD 6.16) for doctors (n = 48) and 51.2 (SD 5.46) for nurses (n=94). Nurses consistently scored better on average than doctors. This difference is statistically significant (t = 2.272, P = 0.0246.05). Additional research revealed a strong correlation between doctors' years of practice and their views about cooperation, but not between gender, age, or tribe. The results indicated a strong association between nurses' age and their attitude toward cooperation, but not between gender, tribe, or years in practice. The results were examined and utilized to identify priority areas for physician-nurse cooperation improvement at TDCHI. The new TDCHI Training Manual incorporates the suggested plans and tactics.

Twelfth study: Jasemi M, Rahmani A, Aghakhani N, Hosseini FS, Eghtedar S. Nurses and Physicians' viewpoint toward interprofessional collaboration. Iran Journal of Nursing. 2013 Apr;26(81):1-0.

The purpose of this study is to identify present circumstances and increase collaboration between nurses and physicians by including their opinions on professional cooperation into the study. The viewpoints of 134 nurses and 66 physicians on interprofessional collaboration in Tabriz-based educational institutions were investigated in this cross-sectional study. In order to acquire the information, Jefferson questionnaires were used. This research found that a test-retest method had a reliability of 0.86, and the validity of the technique was verified by applying the concept of content validity to the procedure. In order to analyze the data, the SPSS-PC(v.13) application was used as a tool. In this research, the Pearson correlation

coefficient, one-way ANOVA, and independent T tests were all employed to analyze the data. According to the findings, physician attitudes toward professional collaboration were found to be negative on the subscales of physician dominance and nurse autonomy. On the following subscales, there were statistically significant differences in views between nurses and physicians: physician dominance (p0.001), nurses' autonomy (p0.001), cooperation (p=0.003), and caring vs curing (p=0.003) (p0.001). P=0.008, r-0.42 was shown to be a direct relationship between physicians' attitudes toward interprofessional collaboration and their experience, while a p=0.03, r-0.38 was found to be a direct relationship between nurses' attitudes toward interprofessional collaboration and their experience. When compared to those who worked on regular wards, nurses and physicians on intensive care unit and critical care unit wards were more supportive of interprofessional collaboration. To alleviate doctors' negative attitudes toward the physicians' dominance and nurses' autonomy subscales, it is recommended that nursing and medical students receive professional role training throughout their educational courses, with a particular emphasis on professional communication skills, throughout their educational careers.

Thirteenth study: Bell, M.L., 2018. Nurses’ attitudes towards nurse-physician collaboration, their collaborative behaviours and associated demographic, organisational and relational factors in nurses working in the acute care context in Ireland and the United States of America (Doctoral dissertation, University College Cork).

The purpose of this study was to find out what nurses in Ireland and the United States of America thought about nurse-physician collaboration, nurses' collaborative practices, and relevant demographic, organizational, and relational variables. The participants in this study were nurses in

Ireland and the United States of America (US). The researchers used a descriptive correlational and cross-sectional strategy for their investigation. Participants in the research were 191 nurses from Ireland and 161 nurses from the United States, for a total of 351 nurses. Nurses' attitudes regarding physician-nurse collaboration were assessed using the Jefferson Scale of Attitudes toward Physician-Nurse Collaboration (JSAPNC). The Nurse-Physician Collaboration Scale (NPCS) was created to evaluate the collaborative behaviors of nurses and physicians. Based on the work of D'Amour et al., a new scale was developed and applied to organizational and relational factors to better understand them (2008). Findings: Both groups of nurses have a high level of education and experience. Nursing and physician teamwork was seen favorably by both groups, and some collaborative behavior was observed in both groups. Attitudes (Ireland 3.58, standard deviation 0.29; US 3.67, standard deviation 0.24; $p = 0.001$) and behaviors (Ireland 2.58, standard deviation 0.53; US 2.41, standard deviation 0.73; $p=0.014$) were statistically substantially different between the two groups. There was no relationship found between nurses' views about cooperation and their collaborative behaviors in either set of participants (r 0.077, p 0.297 for the Irish sample; r 0.062, p 0.439 for the US sample). Organizational and relationship characteristics explained more than 20% of the variation in collaborative behavior between the two groups, a statistically significant fraction of the variance in collaborative behavior. Conclusion: The results of this research corroborate the findings of previous studies in this area. An interesting finding was the absence of a relationship between nurses' attitudes toward cooperation and collaborative behaviors in either group. More research is required into the processes of collaboration, especially the organizational and relational elements that influence cooperative efforts.

Fourteenth study: Mahboube L, Talebi E, Porouhan P, Orak RJ, Farahani MA. Comparing the attitude of doctors and nurses toward factor of collaborative relationships. Journal of family medicine and primary care. 2019 Oct;8(10):3263.

Physician-nurse cooperation is being examined for the goal of this research, which is looking into issues such as collaborative education and teamwork, caring vs. curing, physician dominance, and the autonomy of nurses. It was found that the Jefferson Scale of Attitudes toward Physician–Nurse Collaboration was used as a means of conducting this cross-sectional, descriptive–comparative research. Researchers looked at four different aspects of doctor–nurse collaboration: teaching and cooperation, caring versus curing, physician dominance, and nursing autonomy. Descriptive and inferential statistics, including the independent t test, Chi-square test, and variance analysis, were used to accomplish this goal, as well. Even while nurses had a more favorable attitude about shared education and cooperation, caring rather than curing, and physicians' dominance than doctors, there was no statistically significant difference in nurses' autonomy. Through their academic careers, physicians and nurses must become culturally adjusted so that they may work together effectively. Another strategy that may be beneficial in enhancing nurses' professional autonomy and reducing the frequency of disrupted professional interactions is changing the nature of professional relationships from hierarchical to complimentary.

Fifteenth study: Fewster-Thuente, L., 2011. Working together toward a common goal: A grounded theory of nurse-physician collaboration (Doctoral dissertation, Loyola University Chicago).

The goal of this research was to get an understanding of the social dynamics behind cooperation between nurses and doctors in order to create theories. Collaboration, or the absence of it, has been found to have an effect on both provider and patient satisfaction and results. Accreditation by the Joint Commission now demands confirmation of cooperation. Numerous organizations claim that their providers cooperate to improve patient care. However, a comprehensive review of the literature revealed that there has been no publication of a theory of nurse-physician cooperation in healthcare. Without theoretical backing, developing precise measuring tools to accurately assess the existing state of cooperation and propose plans for improvement is challenging.The goal of this grounded theory study was to develop a theory that would make nurse-physician collaboration easier. The information was obtained from 15 nurses and seven physicians with a variety of experience and training from various units, allowing the theory to be applicable to a wide spectrum of specialists. According to the findings, there are nine stages to the nurse physician collaboration process: determining who to contact, locating the appropriate person, convening, exchanging ideas and information, developing the plan, getting everyone on the same page, implementing the plan, and monitoring progress. The essential trait that determines how nurses and physicians interact to deliver patient care is their ability to work together toward a common goal. This concept is anticipated to contribute to the corpus of knowledge and assist understanding of collaboration between these two professions.

Chapter Three

Methodology

Scientific research methodology is a set of specific scientific standards, criterion and controls that are followed during the work of scientific research. Therefore, scientific research methodology is one of the important matters on which it builds and organizes good scientific research. One of the most important controls of scientific research is that it be organized and accurate, so that everyone who reads it and looks at its lines benefits from it, and therefore we should address the various scientific research methods that the researcher can use during the work of a well-structured scientific research. In this chapter, the study design and all other scientific steps that were followed by the researcher from the beginning of the study until its completion will be covered.

3.1. Design of the Study:

Quantitative research, descriptive (survey) study design, was used for gathering and analyzing the outcomes of a research problem and attempting to provide a solution for the research problem.

Since the problem of the study is related to the present, and that its study will be done through direct interrogation, as well as this study aims to stop at the limit of description and associate between study variables, and therefore the appropriate approach is the descriptive survey design, which depends on the study of the phenomenon and the statement of its characteristics and size, as well as the collection and interpretation of information.

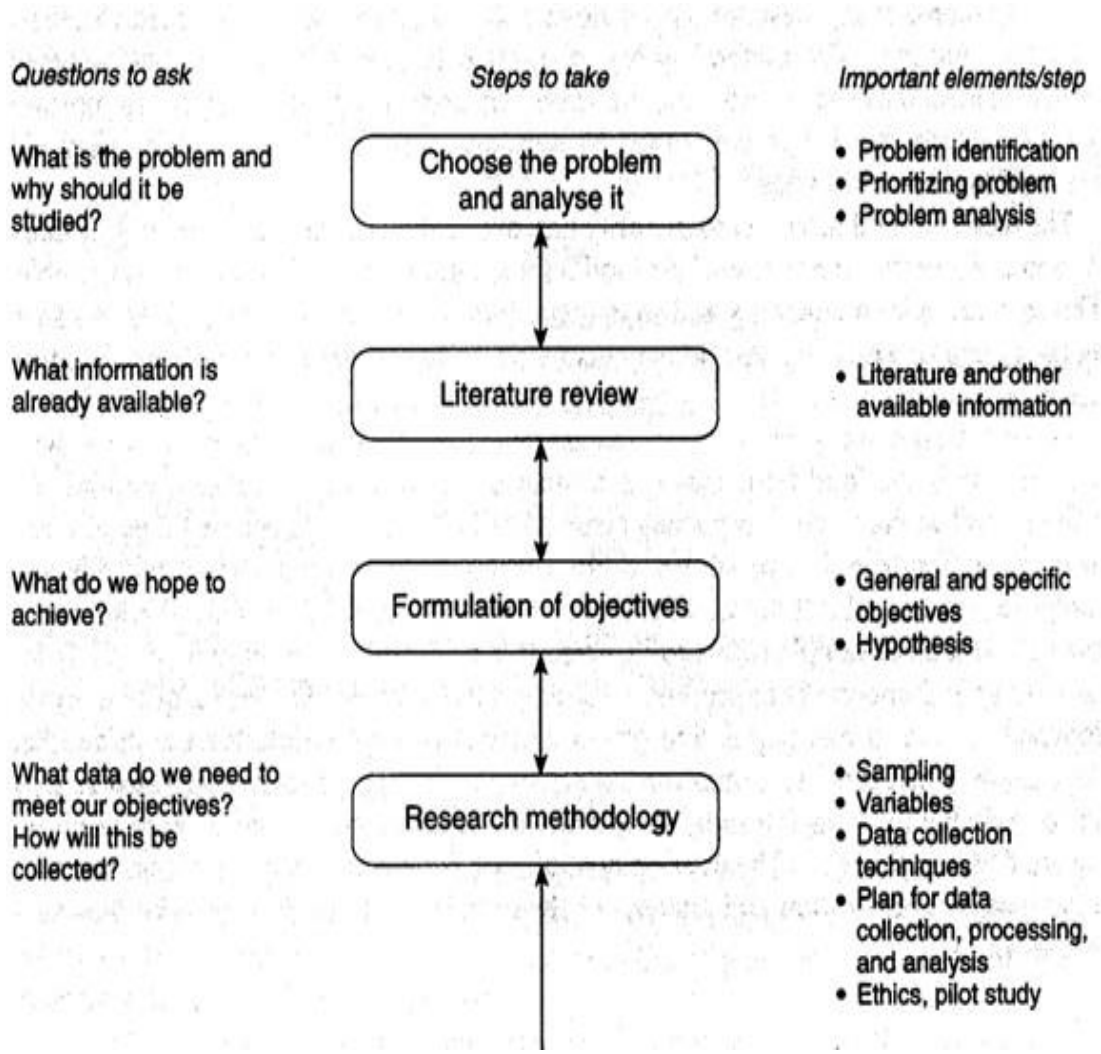


Figure 3-1:Steps of conducted cross-sectional study design (Elisabeth, 2021)

3.2.Administrative Arrangements

The official permissions were obtained from relevant authorities before collecting the study data as follow:

Approval from the University of Babylon/ College of Nursing for the initiation the study.(Appendix one)

Official permissions were also obtained from the Babylon Health Directorate (Training and Human Development Centre) in order to formally access the hospitals.(Appendix two)

The permission is presented to hospitals which include: (Babylon for Maternity and Pediatric Hospital, AL-Noor Hospital, Ibn Saif al-janabi Hospital). (Appendix three)

3.3.Ethical Considerations

Ethical obligations are one of the most important things that the researcher must follow and abide it when doing the study. Before the starting of collect the data from the community that has been identified for the study, the researcher should clarify the main purpose and desired goal of conducting this study for the sample to be including in the study, as well as adhere to the strict confidentiality of the data taken from the study sample and pledge to use it for scientific purposes related to the study only.

Before the starting of gathering the data from the sample who are participating in the study, the researcher given a brief explanation about the scientific background of the research and the purpose of conducting it and what is the role of the nurses and physician who participate in this study, to give them a complete and clear picture about the study to be carried out. On the other hand, the researcher emphasized that all nurses and physician who are participating in the study had the right to not complete their participation and withdraw from this study in the event that they felt uncomfortable or annoyed with some of the items in the questionnaire that was prepared as a research tool or the researcher's method of collecting data or anything else.(Appendix five)

3.4.Setting of the Study

This study was conducted in Babylon Governorate after obtaining the official approval for that from the Babil Health Department / Training and Human Development Centre in three hospitals distributed in different areas of the province. The hospitals that have been accredited as a place to

conduct the study are (Babylon for Maternity and Pediatric, AL-Noor, and Ibn Saif al-janabi Hospitals).

3.4.1.Babylon for Maternity and Pediatric Hospital

It is a hospital specialized in providing medical services for children and newborns, located in the city of Hilla in the Bab Al-Mashhad area within the AL-Fayhaa residential sector. The foundation stone was laid in 1979 and its construction was completed in 1985. The hospital provides medical care services for its patients from birth to 14 years of age, as well as for pregnant and non-pregnant women who have gynecological diseases. The hospital includes maternity and surgical rooms, as well as a pediatric intensive care unit.

3.4.2.AL-Noor Hospital

AL-Noor Children's Hospital is a hospital specialized in providing medical services for children and newborns, located in the city of Hilla in the Khusrawiya area within the residential sector of Paradise. It was established in 2012 and is the second hospital in Hilla to provide treatment for children and newborns after Babel Hospital for Women and Children.

3.4.3.Ibn Saif al-janabi Hospital

Ibn Saif al-janabi Hospital is a hospital specialized in providing medical services for children and newborns, located in the north of Bal in the Musayyib area in the Al-Shuhada neighborhood. It was established in 2014 and is the third hospital in Babil Governorate to provide treatment for children and newborns after Babel Hospital for Women and Children.

3.5.The Study's Sample

A simple random sample (probability sample) method used in this study to select subset of population, in this sampling method, each member of the population has exactly equal chance of being selected.

After obtaining the official approvals to conduct this study by the Babylon Directorate / Training and Human Development Centre in the pediatric hospitals of Babylon Governorate, only three hospitals were selected from them. The researcher collected the data from study sample (the nurses and physician who work in the pediatric hospitals) in the hospitals that were chosen as the place to do this study. The number of nurses who were selected to participate in the study is (390) out of (778), while the number of physician were selected to participate in the study is (107) out of (215). The number of study sample was chosen to participate in this study represent (50%) out total number of study population.

Table 3-1:Distribution of Study Sample according to Hospitals

Hospitals	Total number		50% selected
Babylon for Maternity and Pediatric	Physician	165	82
	Nurses	506	253
AL-Noor	Physician	27	13
	Nurses	183	92
Ibn Saif al-janabi	Physician	23	12
	Nurses	89	45
Total	Physician	215	**107**
	Nurses	778	**390**

3.6.Study Instrument

The questionnaire is one of the means to help collect data that contribute to achieving the results expected by the study, so the researcher

designed this questionnaire, which aims to clarify the study's objectives and significance by obtaining answers to the study's questions.

The following two tools were utilized by the researchers to obtain information from study participants:

- The first is based on socio-demographic data such as (age, gender, years of hospital experience, location of employment, and job title).

- The second one is the perception scale, which measures how people see things. Nurse–Physician Collaboration is a term that was coined by the researcher after doing a study of the literature, which included the following:

First aspect: perception of the nurse-physician regarding their relationship (consist of 18item).

Second aspect: perception of the nurse-physician regarding the effect of work stress on their relationship (consist of 6 item).

Third aspect: perception of the nurse-physician regarding the effect of job performance on their relationship (consist of 6 item).

Fourth aspect: perception of the nurse-physician regarding the influence of administrative policies and norms on their relationship (consist of 14 item)

Fifth aspect: perception of physicians and nurses about the nurses role and its effect on their relationship (consist of 17 item)

This tool was formulated based on a review of previous literature and many scientific sources, and it was adopted after verifying its validity after presenting it to the panle of experts and taking the proposed amendments to it, as well as testing its stability using the pilot study.(Appensix four)

3.7. The Questionnaire Validity

Ensure the questionnaire measures what it was designed to measure, which is what is meant by validity (the questionnaire including all aspects required for analysis and the clarity of its paragraphs and terminology so that everyone who uses it can comprehend).

The authenticity of the content was given to a panel of 10 arbitrators, which included academics who were experts in nursing sciences. Arbitrators were asked to provide feedback and suggestions on each item on the study questionnaire, taking into account their linguistic appropriateness, their relationship to the dimension of study variables to which they were assigned, and their suitability for the study population context to which they were submitted.

There was unanimous agreement among the experts that all of the questionnaire questions are straightforward and suitable for measuring the phenomena at hand. Using the arbitrators' advice, linguistic paraphrase was used on a few queries. (Appendix six)

3.8. Pilot Study

There were a number of reasons for doing a pilot research, including determining the validity and reliability of the study's tools, determining the standard time necessary to gather data for each participant, and overcoming any identifying challenges that may develop. .

3.9.Reliability of the Questionnaire:

There must be a high degree of repeatability in research equipment to ensure that the results are almost same when applied to the same individuals at various periods. The same participants were re-evaluated once the apparent validity of the research method had been established.

The researcher applied it to a random exploratory sample of 30 nurses and 10 physician, represent 10% of total sample of study. This sample were excluded from the study sample. Self administered technique were used to gather the data. The period was 20 day frome 1-12-2020 to 20 -12-2020. Results of pilot study, the questionnaire is reliable.

Table 3-2: Cronbach's Alpha test to measure the reliability of study tool.

Reliability test (Cronbach's Alpha)	Result	Normal value	Assessment
Nurses	0.813	0.7	Pass
Physicians	0.747		Pass

3.10.Methods of Data Collection

After getting clearance from the Babylon Health Directorate and evaluating the questionnaire's validity and reliability. The period of data collection was (from 19-4-2021 to 21-6-2021). The researcher use self-administered technique after distributed the questionnaire to the study population, explained the instructions, answered their questions regarding the form, urged them to participate and thanked them for the cooperation.

Questionnaire collection: Determining the method that the researcher will follow in collecting data after taking the important steps that must be included in the study design.

Since the researcher directly distributed the questionnaire on individual bases, and thus the researcher collected the data. This method of data collection assisted for:

Clarifying what needs to be clarified to the respondents. This method helps collect the largest number of participants in the study.

Not to leave a paragraph or an element of the questionnaire without the respondent answering it.

3.11.Statistical Analysis Approach

In order to statistically analyze the data collected from the study sample to arrive at the results, the researcher used the SPSS version (20) and Microsoft Excel (2010) program to analyze this data and deal with it statistically, to find the relationships between the variables, and obtain the final results of the research based on a set of statistical tests.

3.11.1.Descriptive approach

Descriptive statistics is a collection of mathematical and statistical techniques used to statistically characterize the major characteristics of data using tables and charts. Descriptive statistics always aim to present and describe the data which is required to be processed, organized, summarized and categorized, as well as presenting them in a simple and clear manner that makes it easier for the recipient to recognize and understand its content. The analysis performed through use:

Statistical tables "Frequencies and percent" which are:

$$\% = \frac{Frequency}{Sample\ Size}\ x100$$

Mean of scores "MS".

The average score can be calculated by using the following:

$$M.S = \frac{\sum ri = 1Fi\ x\ Si}{\sum ri = 1Fi}\ x100$$

Standard deviation (SD).

$$SD = \sqrt{\frac{1}{n-1}\sum_{i=1}^{n}(Xi - \tilde{\chi})^2}$$

It uses a correlational coefficient "Cronbach alpha" used in estimating the internal consistency of the study tool, which can be calculated by using the following:

$$\alpha = \frac{K}{K-1}\left[1 - \frac{\sum_{i=1}^{K} \sigma_{ii}}{\sum_{i=1}^{K}\sum_{j=1}^{K} \sigma_{ij}}\right]$$

K is the items number questions and σ_{ij} is the investigate covariance between the items i and j. Note the σ_{ii} is the variance not standard deviation of item I.

3.11.2.Inferential approach

One Way ANOVA

Analysis of variance (ANOVA) for equality of Means (testing for coincidence when the mean's parameter is different).

Source of variance	Sum of square	d.f	Mean square	F
Between Groups	$SS_B = \sum \frac{(\sum xP1)^2}{n} - \frac{(\sum xP)^2}{n}$	$df_B = K-1$	$\frac{MS\beta}{MS\beta}$	
Within Groups	$SS_W = \sum \frac{(\sum xP1)^2}{N} - \frac{(\sum xP)^2}{N}$	$df_w = N-k$	$\frac{SSw}{DFw}$	$\frac{MSB}{MSW}$
Total	$SS_T = \sum \frac{(\sum xP1)^2}{N} - \frac{(\sum xP)^2}{N}$	$df_1 = N-1$		

Sample Independent t-test

When two independent groups are compared, statistical evidence is sought to establish whether the related population means are substantially different from one another.

$$t = \frac{x\bar{}1 - x\bar{}2}{Sp\sqrt{n1-1)s21 + (n2-1)s2/n1+n2-2}}$$

3.12. Rating And Scoring :

The overall responses according to total mean of score which follow:

61-101 Negative Perception

102-142 Neutral Perception

143-183 Positive Perception

Dgree of significant according to the p-value:

NS : *Non significantly at probability-value>0.05*.

S : *Significantly at probability-value <0.05*.

HS : *Highly significantly at probability-value <0.01*.

3.13.Study Limitation

In the present investigation, the researchers were confronted with a range of issues, including the following: Some samples were overlooked as a result of a lack of attention from the nurses. The study phenomena is rooted in a scarcity of worldwide research. The perceptions of physicians and nurses about cooperation are complicated in nature and are influenced by a variety of circumstances. The questionnaire that was developed was based on the impressions of caregivers and may not accurately represent the true intricacy of this relationship. Therefore, care should be used while considering the interpretation of findings.

The research was limited to just three pediatric hospitals, despite the fact that they are the largest and most comprehensive, making the generalization assertion a little too risky.

We have no way of knowing if the perspectives of the nonresponders are consistent with those of the polled nurses and doctors.

Chapter Four

Results of the Study

Results of the Study

This chapter extensively introduces the outcomes of the research in tables and these refer to the objectives of this report, which are as follows:

Table 4-1:Descriptive Statistic of Socio-Demographic Characteristic of the Study Sample

Table4-1-1:Distribution of Study Sample by their Age Groups

	Classification	Nurses		Physician		*p-value*
		Freq.	%	Freq.	%	
Age /years	**20-29 years old**	**325**	**83.3**	39	36.4	*0.000*
	30-39 years old	49	12.6	**40**	**37.4**	
	40-49 years old	10	2.6	19	17.8	
	50 and older	6	1.5	9	8.4	
	Total	390	100.0	107	100.0	
	Mean± SD	*27 ± 6.181*		*34 ± 8.495*		

Results indicated that participants are averaging 27 years old, with the majority of nurses falling between the ages of 20 and 29 (n=325; 83.3 percent) as a result of the study's findings. While, the mean age among physician is 34, the age 30-39 years old were recorded the highest percentage among physician (*n=40*; 37.4%). There were highly significant differences in age groups for nurses and physician (*p<0.01*).

Table4-1-2:Distribution of Study Sample by their Gender

	Classification	Nurses		Physician		*p-value*
		Freq.	%	Freq.	%	
Gender	**Male**	78	20.0	**65**	**60.7**	*0.000*
	Female	**312**	**80.0**	42	39.3	
	Total	390	100.0	107	100.0	

According to gender, nurses (n=312; 80 percent) outnumbered physicians (n=56; 60.7 percent) by a margin of two-to-one. There were very significant differences in gender between nurses and physicians (p0.01), with nurses being much more female than physicians.

Table4-1-3:Distribution of Study Sample by their Years of Experience in Hospitals

	Classification	Nurses		Physician		*p-value*
		Freq.	%	Freq.	%	
Years of Experience	<5 years	0	0.0	3	2.8	*0.031*
	5-10 years	**273**	**70.0**	**49**	**45.8**	
	11-15 years	78	20.0	30	28.0	
	15-20 years	39	10.0	24	22.4	
	>20 years	0	0.0	1	0.9	
	Total	390	100.0	107	100.0	

Years of experience related findings, both nurses and physician had been 5 to 10 years of experience (*n=273*; 70%, *49*; 45.8%) respectively. There were significant differences in years of experience for nurses and physician ($p<0.05$).

Table4-1-4:Distribution of Study Sample by their Workplace

	Classification	Nurses		Physician		*p-value*
		Freq.	%	Freq.	%	
Workplace	**Emergency**	39	10.0	**57**	**53.3**	*0.000*
	Wards	**312**	**80.0**	25	23.4	
	Operating room	0	0.0	19	17.8	
	Intensive care unit	39	10.0	6	5.6	
	Total	390	100.0	107	100.0	

In regards with workplace, most of nurses work at words (*n=312*; 80%). While, most of physician work at emergency department (*n=57*; 53.3%). There were highly significant differences in workplace for nurses and physician (*p<0.01*).

Table4-1-5:Distribution of Nurses by their Job Title

Job Title	Classification	Freq.	%
Nurses	Practical Nurse	147	37.7
	Technician Nurse	**194**	**49.7**
	Academic Nurse	38	9.7
	Specialist Academic Nurse	11	2.8
	Total	390	100.0
Physician	**Rotator**	**77**	**72.0**
	Permanent	13	12.1
	Specialist	10	9.3
	Consultant	7	6.5
	Total	107	100.0

Concerning nurses job title, it is obvious that the technicians were predominated among nurses (*n=194*; 49.7%), and the rotator were predominated among physician (*n=77*; 72%).

4.2.Assessment Nurses-physician Perception towards their Cooperation

Table4-2-1:Perceptions of the Nurse–physician regarding their Relationship

Relationship Items		Nurses		Physician	
		M.s.± SD	Ass.	M.s.± SD	Ass.
1	The relationship between nurse and physician is a superior or subordinate in nature	1.21±0.498	P	1.50±0.678	P
2	The relationship between nurse and resident doctor is better than specialist physician?	2.16±0.825	M	1.49±0.502	P
3	Respect a nurse for a doctor at work is based on a fear?	1.38±0.743	P	2.33±0.857	M
4	Does the doctor intend to take an approach with nurses at the work that undermines their self-confidence?	2.08±0.835	M	1.03±0.190	P
5	The physician ignores valuable suggestions offered by nurses	2.08±0.555	M	1.29±0.460	P
6	The nurse exposure for a persecuted by the doctor through the work?	1.99±0.777	M	1.28±0.629	P
7	Behavior of Physician with nurse is negatively-influencing patient's respect to nurse	2.18±0.756	M	1.50±0.678	P
8	Increase in the number of male nurses contributes to strengthening the relationship between nurses and doctors	1.88±0.546	M	1.59±0.799	P
9	There is discussion between nurse and physician about a health care?	2.07±0.327	M	1.49±0.502	P
10	Is it true that a lack of understanding between nurses and physicians leads to a strained relationship?	2.08±0.551	M	1.69±0.905	M
11	The nurse-physician interaction has an impact on their work happiness.	1.98±0.639	M	1.80±0.757	M
12	Is the physician eager to see the nurse's note in the patient's chart?	2.12±0.640	M	1.20±0.406	P
13	Many errors are caused by physician neglect of nurse's notes?	2.22±0.694	M	1.40±0.492	P
14	Nurse negligence of physicians notes causes a lot of mistakes?	2.16±0.618	M	1.50±0.816	P
15	Is it true that a nurse always interacts with a physician in a formal manner?	2.28±0.622	M	2.41±0.628	G
16	There is human-relationship between physician and nurse?	2.24±0.638	M	2.39±0.669	G
17	The nurse–physician relationship is characterized by cooperation?	2.56±0.531	G	1.59±0.799	P
18	The nurse–physician relationship is an excellent one	1.94±0.458	M	1.48±0.663	P

"(M.s.= Mean of score, SD= ***Standard deviation, Level of Assessment (P: Poor [M.s.= 1-1.66], M: Moderate [M.s.=1.67-2.33], G: Good [M.s. ≥2.34])"***

In the light of statistical analysis of mean, this table illustrated that the nurses perception of relationship were moderate responses. While, the physician perception of relationship were poor responses.

Table 4-2-2:Overall Perceptions of the Nurse–physician regarding their Relationship

Weighted	Nurses			Physician		
	Freq.	%	M ± SD	Freq.	%	M ± SD
Negative	51	13.1	36.69 ± 5.135	**76**	**71.0**	29.05 ± 2.935
Neutral	**287**	**73.6**		31	29.0	
Positive	52	13.3		0	0.0	
Total	390	100.0		107	100.0	

M: Mean for total score, SD: Standard Deviation for total score

(Negative= 18-30, Neutral= 31-42, Positive= 43-54)

The analysis of nurse-physician perception related to relationship was demonstrate at mean ± SD= 36.69 ± 5.135 among nurses and mean ± SD=29.05 ± 2.935 among physician; and according to the study criteria, nurses express a neutral perception; and physician express a negative perception towards nurse-physician relationship.

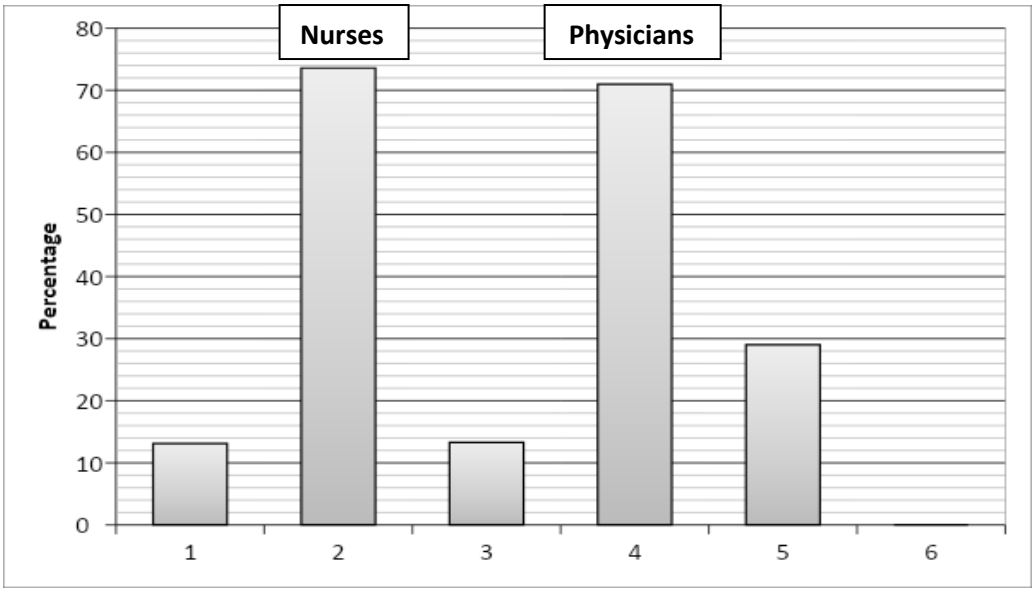


Figure 4-1:Nurses-physician Perception towards Relationship

Table4-2-3:Perceptions of the Nurse–physician regarding Effect of Work Stress on their Relationship

Effect of work stress Items		Nurses		Physician	
		M.s.± SD	Ass.	M.s.± SD	Ass.
1	How do you feel about the fact that patient care is a shared duty between nurses and doctors?	2.94±0.315	G	1.73±0.893	M
2	Nurses tolerate physicians during high workload	2.35±0.648	G	1.39±0.655	P
3	Physicians tolerate nurses during high workload	1.63±0.481	P	2.47±0.816	G
4	Nurses' workload has negative effect on their relationship with physicians	1.63±0.727	P	1.10±0.305	P
5	Nurses react negatively to physicians during high workload	1.92±0.717	M	1.55±0.729	P
6	During work overload, physician tolerates low nurses' performance	1.84±0.772	M	2.34±0.901	G

"M.s: Mean of score, SD: ***Standard deviation, Level of Assessment (P: Poor [M.s.= 1-1.66], M: Moderate [M.s.=1.67-2.33], G: Good [M.s. ≥2.34])"***

According to statistical analysis of mean, this table demonstrated that the nurses perception related to effect of work stress on their relationship were good responses at items number (1 & 2) and items number (3 & 4) the responses were poor perception, as well as, the items number (5 & 6) the responses were moderate perception. While, the physician perception related to effect of work stress on their relationship were poor responses at items number (2, 4 & 5) and the items number (3 & 6) the responses were good perception, as well, the item number (1) the responses were moderate.

Table 4-2-4:Overall Perceptions of the Nurse–physician regarding Effect of Work Stress on their Relationship

Weighted	Nurses			Physician		
	Freq.	%	M ± SD	Freq.	%	M ± SD
Negative	76	19.5	12.35 ± 1.904	**59**	**55.1**	9.60 ± 2.170
Neutral	**268**	**68.7**		45	42.1	
Positive	46	11.8		3	2.8	
Total	390	100.0		107	100.0	

"M.s: Mean of score, SD: Standard deviation for total score

(Negative= 6-10, Neutral= 11-14, Positive= 15-18)

The analysis of nurse-physician perception related to effect of work stress on their relationship was demonstrate at mean ± SD= 12.35 ± 1.904 among nurses and mean ± SD=9.60 ± 2.170 among physician; and according to the study criteria, nurses express a neutral perception; and physician express a negative perception towards effect of work stress on their nurse-physician relationship.

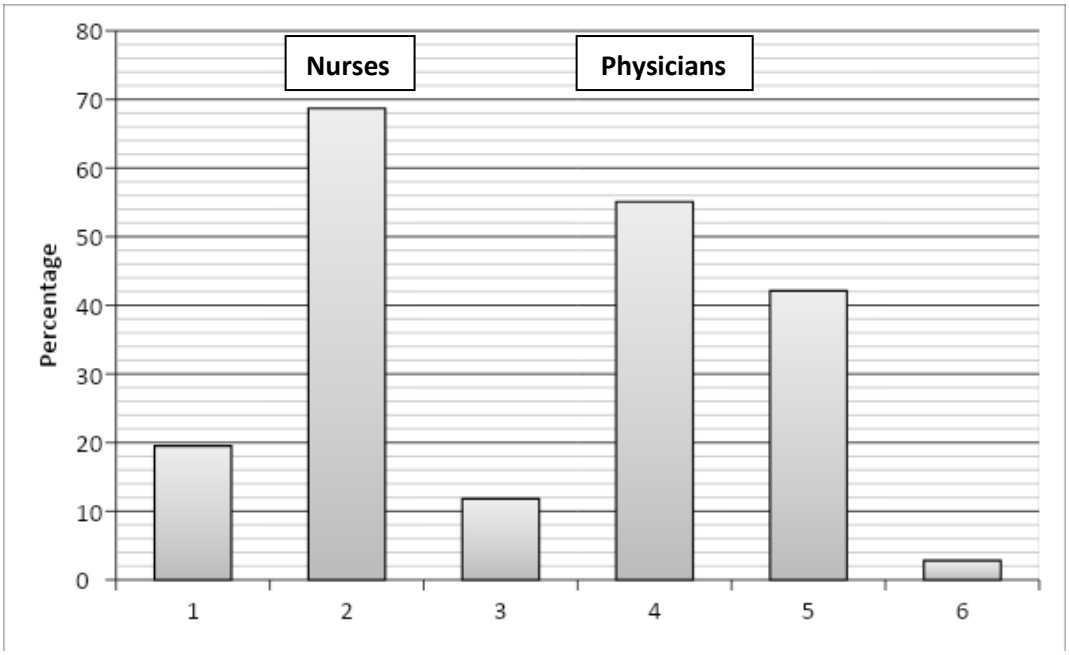


Figure 4-2:Nurses-physician Perception regarding Effect of Work Stress on their Relationship

Table4-2-5:Perceptions of the Nurse–physician regarding Effect of Job Performance on their Relationship

Job Performance Items		Nurses		Physician	
		M.s.± SD	Ass.	M.s.± SD	Ass.
1	The quality of nurse's performance level affects their relationship with physician	2.09±0.669	M	1.29±0.647	P
2	Physician's level of performance influences the relationship with nurse	1.69±0.617	M	1.49±0.678	P
3	Nurses' shortage lowers their performance level and negatively influences their relation with the physician	1.87±0.825	M	1.19±0.399	P
4	Most nurses perform their job effectively	2.47±0.525	G	1.20±0.406	P
5	Physicians trust nurse's performance	2.48±0.515	G	1.38±0.653	P
6	Nurses always work to comfort and protect patient	2.85±0.409	G	1.49±0.664	P

*"(M.s.: **Mean of score, SD: Standard deviation, Level of Assessment (P: Poor [M.s.= 1-1.66], M: Moderate [M.s.=1.67-2.33], G: Good [M.s. ≥2.34])"***

According to statistical analysis of mean, this table showed that the nurses perception related to effect of job performance on their relationship were moderate responses at items number (1, 2 & 3) and items number (4, 5 & 6) the responses were good perception. While, the physician perception related to effect of job performance on their relationship were poor responses at all items number of the scale.

Table 4-2-6:Overall Perceptions of the Nurse–physician regarding Effect of Job Performance on their Relationship

Weighted	Nurses			Physician		
	Freq.	%	M ± SD	Freq.	%	M ± SD
Negative	5	1.3	13.49 ± 1.767	**86**	**80.4**	8.07 ± 1.805
Neutral	**242**	**62.1**		21	19.6	
Positive	143	36.7		0	0.0	
Total	390	100.0		107	100.0	

M: Mean for total score, SD: Standard Deviation for total score

(Negative= 6-10, Neutral= 11-14, Positive= 15-18)

The analysis of nurse-physician perception related to effect of job performance on their relationship was demonstrate at mean ± SD= 13.49 ± 1.767 among nurses and mean ± SD=8.07 ± 1.805 among physician; and according to the study criteria, nurses express neutral perception; and physician express a negative perception towards effect of job performance on their nurse-physician relationship.

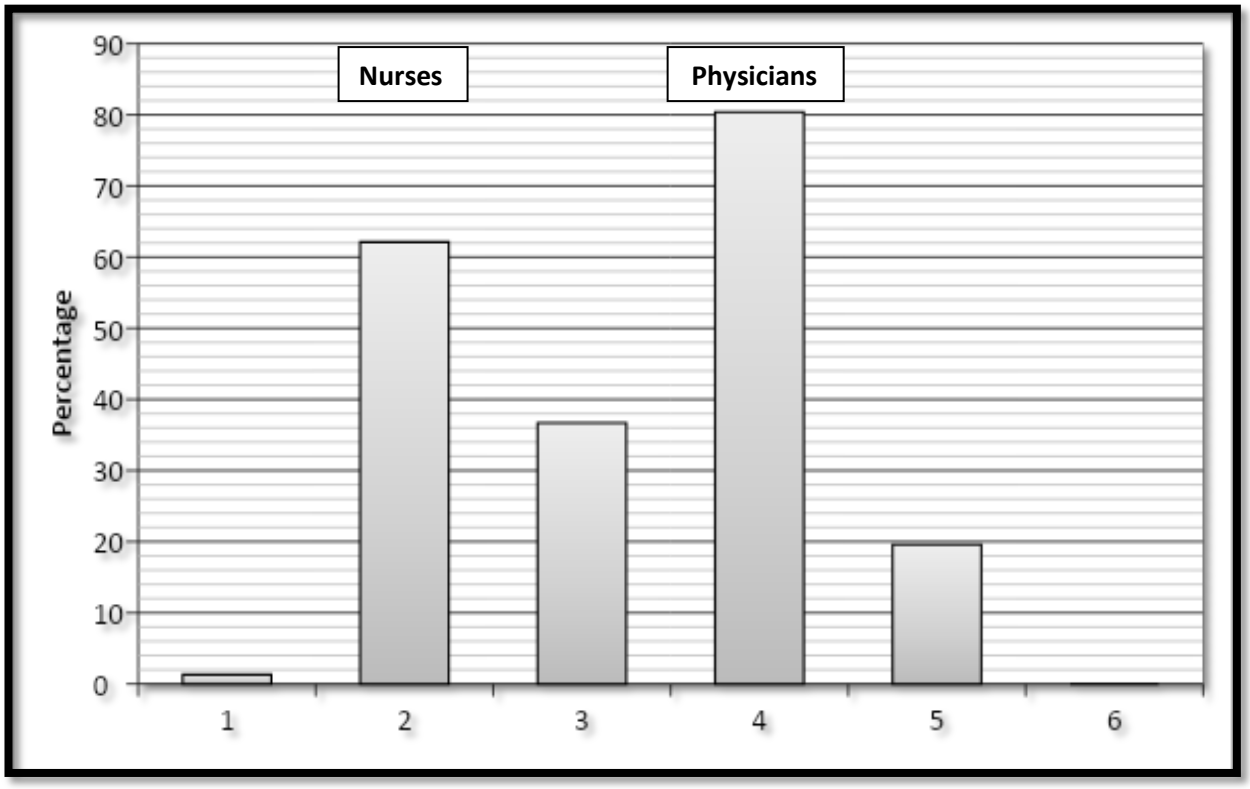


Figure 4-3:Nurses-physician Perception regarding Effect of Job Performance on their Relationship

Table4-2-7:Nursing and physician perceptions on the influence of administrative policies and societal norms on their professional relationship

Influence of Administrative Policies and Norms Items		Nurses		Physician	
		M.s.± SD	Ass.	M.s.± SD	Ass.
1	Nurse's role is vague and not clear	2.45±0.756	G	1.19±0.399	P
2	There is no equity in accountability between a nurse and a doctor by their administration personnel?	1.64±0.871	P	2.09±0.966	M
3	Nurse is obligated to share with the physician in arranging his administrative affairs?	1.69±0.642	M	1.20±0.610	P
4	Nurse's complaint against physician is ignored by the administration?	1.62±0.778	P	2.45±0.882	G
5	Physician and nurse's work are overlapped	2.9±0.300	M	1.40±0.670	P
6	The nurse performs the primary responsibility of performing nursing care and not acting on behalf of the physician in the performance of his duty	2.5±0.671	M	2.20±0.610	M
7	Lack of nurse's Job description leads to nurse–physician problems?	2.3±0.641	M	1.60±0.669	P
8	Physician has right to evaluate nurse's performance	2.3±0.458	M	1.67±0.774	M
9	Physician is blamed privately by their seniors when they commit any mistakes?	2.3±0.458	M	1.28±0.629	P
10	Nurse is insulted strongly and publicly	2.2±0.600	M	1.29±0.460	P
11	Physician control over nurse creates problems between them	2.26±0.711	M	1.40±0.670	P
12	Administration believes that physician is always right	2.22±0.726	M	1.39±0.798	P
13	Nurse can express their objection about the malpractice of physicians	2.44±0.673	G	1.20±0.406	P
14	The nurse is always a victim of physician mistake or negligence	2.5±0.500	M	1.19±0.399	P

""(M.s.: Mean of score, SD: Standard deviation,, ***Level of Assessment (P: Poor [M.s.= 1-1.66], M: Moderate [M.s.=1.67-2.33], G: Good [M.s. ≥2.34])"***

In light of statistical analysis of the mean, this table demonstrated that the nurses' perceptions of the effect of administrative policies and norms on their relationship were moderate in nature, according to the results. Physician perceptions of the effect of administrative rules and norms on the relationship, on the other hand, received negative replies.

Table 4-2-8:Nursing and physician perceptions of the influence of administrative policies and norms on their working relationship as a whole are explored in this study.

Weighted	Nurses			Physician		
	Freq.	%	M ± SD	Freq.	%	M ± SD
Negative	27	6.9	31.35 ± 4.283	**84**	**78.5**	21.62 ± 2.523
Neutral	**251**	**64.4**		23	21.5	
Positive	112	28.7		0	0.0	
Total	390	100.0		107	100.0	

M: Mean for total score, SD: Standard Deviation for total score

(Negative= 14-23, Neutral= 24-33, Positive= 34-42)

The analysis of nurse-physician perception related to the influence of administrative policies and norms on the relationship was demonstrated at a mean SD= 31.354.283 among nurses and a mean SD= 21.622.523 among physicians; and according to the study criteria, nurses express a neutral perception and physicians express a negative perception towards the nurse-physician relationship, respectively.

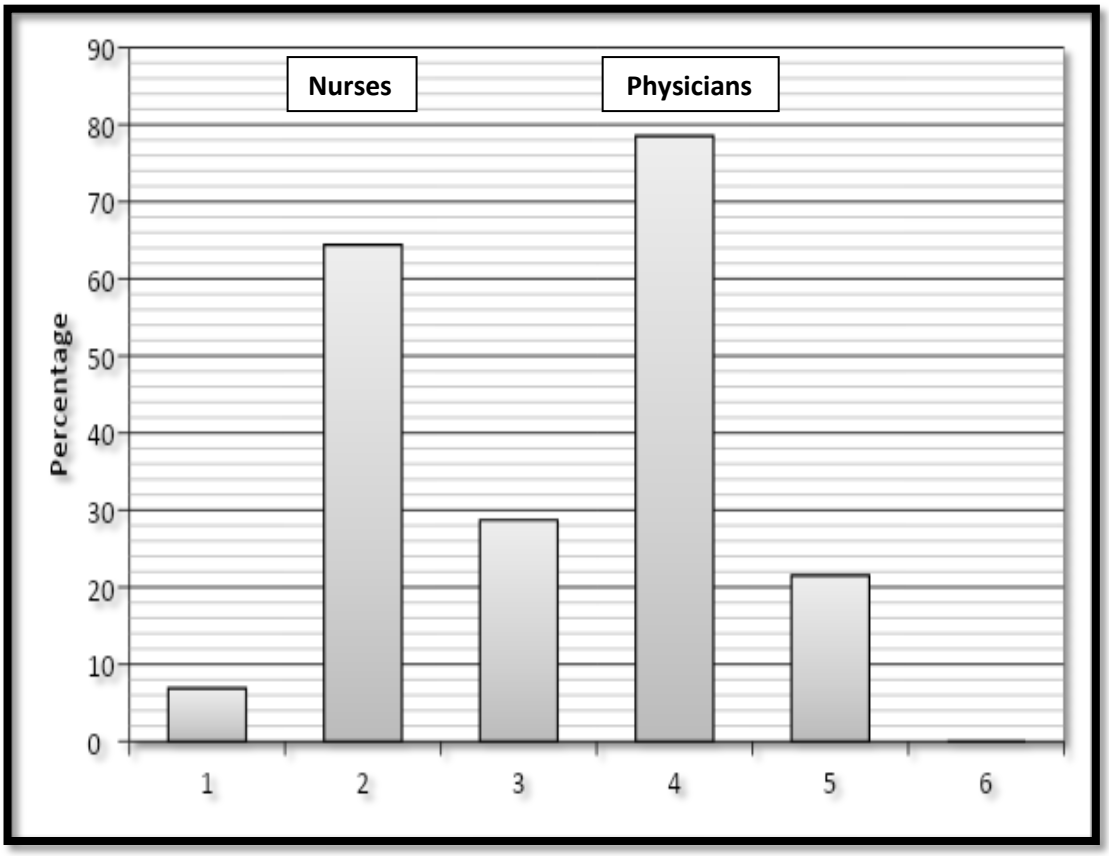


Figure 4-4: Perceptions of nurses and physicians on the influence of administrative policies and norms on their working relationship

Table4-2-9:Understanding the perceptions of the nurse–physician on the nurse's role and the impact of these perceptions on their partnership

Nurse's Role and its Effect on their Relationship Items		Nurses		Physician	
		M.s.± SD	Ass.	M.s.± SD	Ass.
1	Physician respects and understands nurse's role	2.19±0.743	M	2.59±0.656	G
2	Nurses are keen to protect and preserve the rights of the patient?	2.37±0.862	G	1.70±0.902	M
3	Nurse's role is not less important than the physician's role	2.44±0.805	G	1.60±0.809	P
4	Nurse can provide valuable information about patient condition for physician?	2.24±0.850	M	1.38±0.653	P
5	Nurse can make decisions about patient nursing care independently?	2.11±0.718	M	1.10±0.305	P
6	Nurse's role is doing paper work and accompanying patient outward	2.08±0.832	M	1.75±0.737	M
7	Nurse's role during the physician round is limited to holding patient's file and implementing physician orders	2.32±0.850	M	1.77±0.944	M
8	Nurse's role is limited to implementing physician instructions, as recorded in the patient file?	2.34±0.829	G	1.39±0.669	P
9	Health education for patient and his family is a component of nurse's role?	2.35±0.859	G	1.62±0.885	P
10	Nurse respects and maintains patient privacy	2.34±0.796	G	1.53±0.717	P
11	The nurses try to solve the patient's health and social problems as much as possible?	2.40±0.755	G	1.55±0.791	P
12	Nurses identify abnormal patient's symptoms and inform physician	2.24±0.877	M	1.29±0.647	P
13	Nurse observes the patient for medication's side effects, provides emergency care rapidly and then informs physician?	2.38±0.884	G	1.30±0.464	P
14	Nurse's role includes preparing emergency equipment and medication?	2.16±0.548	M	1.41±0.672	P
15	Physician believes his role is the most important one in the health team?	2.27±0.909	M	1.50±0.816	P
16	Nurse's role includes teaching new nurses in the unit and observes their performance	2.26±0.924	M	1.19±0.399	P
17	The most important component of the nurse's role is providing direct nursing patient care	2.20±0.891	M	1.89±0.930	M

"(M.s.: Mean of score, SD: Standard deviation,, ***Level of Assessment (P: Poor [M.s.= 1-1.66], M: Moderate [M.s.=1.67-2.33], G: Good [M.s. ≥2.34])"***

In light of statistical analysis of the mean, this table demonstrated that nurses' perceptions of the nurse's function and the impact of this impression on their relationship were moderate in nature. However, the physician's opinion of the nurse's position and the impact of this perspective on their relationship received low replies.

Table 4-2-10: Effective and behavioral perceptions of physicians and nurses about their respective roles and the impact of their interactions on one another

Weighted	Nurses			Physician		
	Freq.	%	M ± SD	Freq.	%	M ± SD
Negative	7	1.8	38.78 ± 6.192	**78**	**72.9**	26.64 ± 3.453
Neutral	**214**	**54.9**		29	27.1	
Positive	169	43.3		0	0.0	
Total	390	100.0		107	100.0	

M: Mean for total score, SD: Standard Deviation for total score

(Negative= 17-28, Neutral= 29-39, Positive= 40-51)

Among nurses, mean standard deviation (mean SD) was 38.78 6.192, while mean standard deviation (mean SD) was 26.64 3.453 for physicians. The analysis of nurse-physician perception related to nurse's role and its effect on their relationship was demonstrated at mean SD= 38.78 6.192 among nurses and mean SD= 26.64 3.453 among physicians.; and according to the study criteria, nurses express neutral perception; and physician express a negative perception towards nurse-physician relationship.

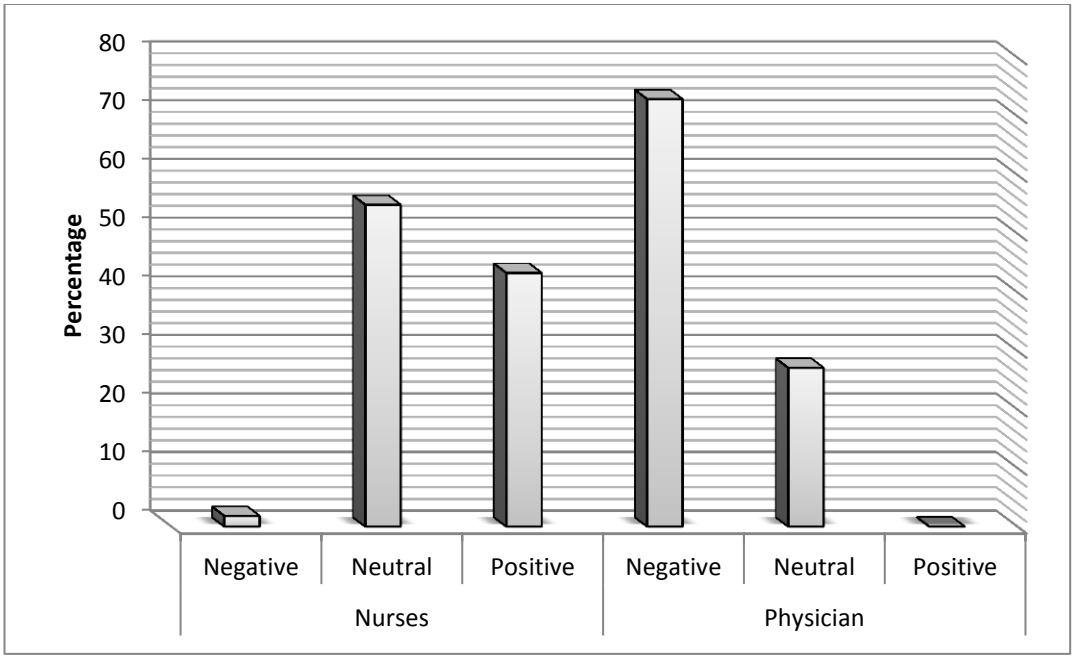


Figure 4-5: Nurses' and physicians' perceptions of the nurse's role, as well as the effect this has on their relationship

Table 4-2-11:Overall Assessment Nurses and Physician Perception towards their Cooperation

Weighted	Nurses			Physician		
	Freq.	%	M ± SD	Freq.	%	M ± SD
Negative	6	1.5	132.62 ± 12.004	**81**	**75.7**	96.00 ± 8.684
Neutral	**326**	**83.6**		26	24.3	
Positive	58	14.9		0	0.0	
Total	390	100.0		107	100.0	

M: Mean for total score, SD: Standard Deviation for total score

(Negative= 61-101, Neutral= 102-142, Positive= 143-183)

The analysis of nurse-physician perception towards their cooperation was demonstrate at mean ± SD= 132.62 ± 12.004 among nurses and mean ± SD=96.00 ± 8.684 among physician; and according to the study criteria, nurses express a neutral perception; and physician express a negative perception towards nurse-physician relationship.

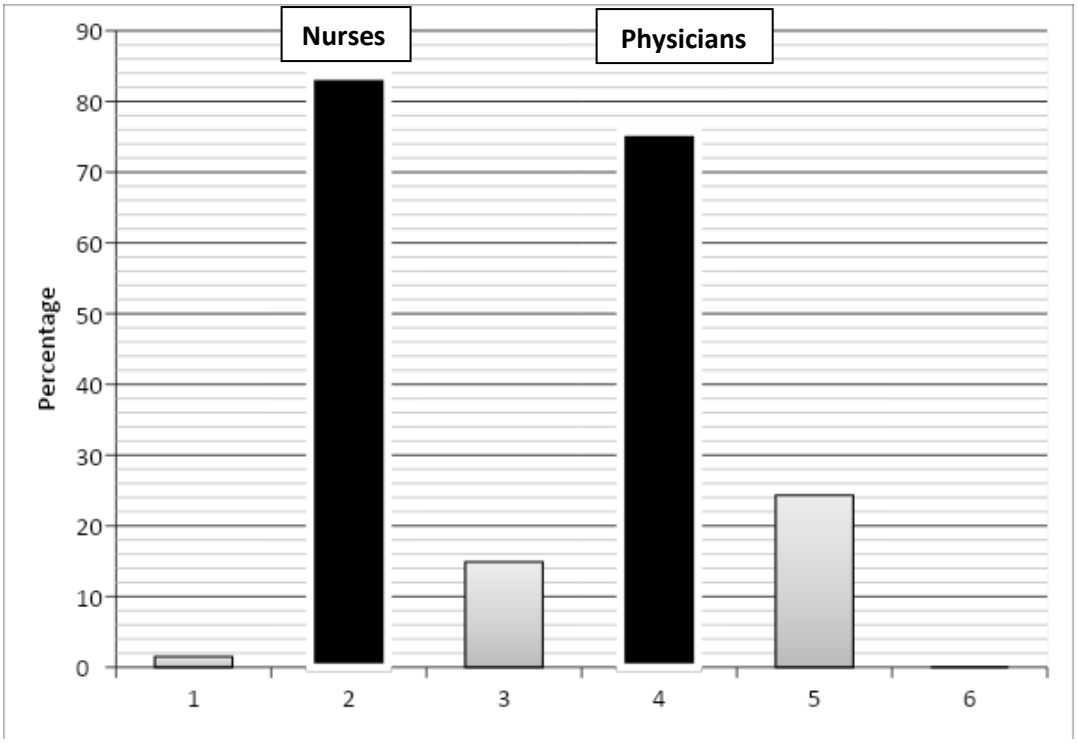


Figure 4-6:Nurses-physician Perception Levels

Table 4-3:Differences between Nurses and Physician Perception in regard their Cooperation

	Weighted	Mean	S.D	t-value	d.f	p≤ 0.05	Sig
Perception	Nurses	2.175	0.1968	28.544	495	0.024	S
	Physician	1.573	0.1423				

"M=Mean, SD= Standard deviation, t: t-test, d.= Degree of freedom, Sig= Significance, p: Probability value, S: significant"

The present research found a statistically significant difference in nurses' (M SD=2.1750.1968) and doctors' (M SD=1.5730.1423) perceptions of teamwork with a p-value less than 0.05.

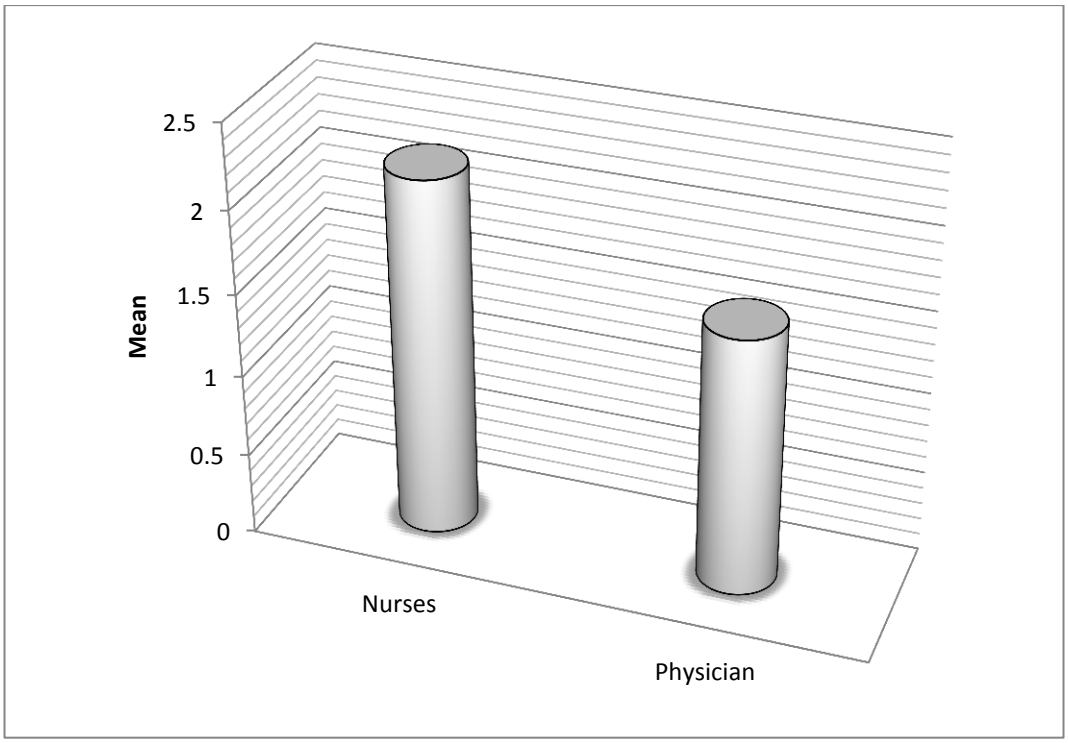


Figure 4-7:Nurses-physician Perception towards their Cooperation

4.4.Differences in Nurses Perception with regards their Socio-demographic Characteristics

Table 4-4-1: Differences between Perception and Nurses Age (*n=390*)

Age Variables	Source of variance	Sum of Squares	d.f	Mean Square	F	p≤ 0.05
Perception	Between Groups	.039	3	.013	.331	0.803 No-sig.
	Within Groups	15.028	386	.039		
	Total	15.066	389			

d.f: Degree of freedom, F: F-statistic, Sig: Significance

Findings are displayed that there is no-significant differences in perception with regard to nurses' age at (*P value >0.05)*.

Table 4-4-2: Differences between Perception and Nurses Gender (*n=390*)

	Gender	Mean	S.D	t-value	d.f	p≤ 0.05	Sig
Perception	Male	2.343	0.1874	9.327	388	0.118	No-sig.
	Female	2.133	0.1757				

"M=Mean, SD=Standard deviation, t= t-test, d.f= Degree of freedom, Sig= Significance, p= Probability value, S= significant"

Findings are demonstrated that there is no-significant differences in perception with regard to nurses' age at (*p value >0.05)*.

Table 4-4-3: Differences between Perception and Nurses Years of Working in Hospital (*n=390*)

Experience Variables	Source of variance	Sum of Squares	d.f	Mean Square	F	p≤ 0.05
Perception	Between Groups	.203	2	.102	2.648	0.052 Sig.
	Within Groups	14.863	387	.038		
	Total	15.066	389			

d.f: Degree of freedom, F: F-statistic, Sig: Significance

Findings are displayed that there is significant differences in perception with regard to nurses' years of experience in hospitals at (*p value < 0.05)*.

Table 4-4-4: Differences between Perception and Nurses Workplace (*n=390*)

Workplace Variables	Source of variance	Sum of Squares	d.f	Mean Square	F	p≤ 0.05
Perception	Between Groups	4.545	2	2.273	83.59	0.001 Sig.
	Within Groups	10.521	387	.027		
	Total	15.066	389			

d.f: Degree of freedom, F: F-statistic, Sig: Significance

Findings are displayed that there is significant differences in perception with regard to nurses' workplace at(*p value < 0.05)*.

Table 4-4-5: Differences between Perception and Nurses Job Title (*n=390*)

Job Title Variables	Source of variance	Sum of Squares	d.f	Mean Square	F	p≤ 0.05
Perception	Between Groups	.360	3	.120	3.147	0.025 Sig.
	Within Groups	14.707	386	.038		
	Total	15.066	389			

d.f: Degree of freedom, F: F-statistic, Sig: Significance

Findings are displayed that there is significant differences in perception with regard to nurses' job title at *p-value <0.05*

4.5.Differences in Physician Perception with regards their Socio-demographic Characteristics

Table 4-5-1: Differences between Perception and Physician Age (*n=107*)

Age Variables	Source of variance	Sum of Squares	d.f	Mean Square	F	p≤ 0.05
Perception	Between Groups	.066	3	.022	1.080	0.361 No-sig.
	Within Groups	2.083	103	.020		
	Total	2.149	106			

d.f: Degree of freedom, F: F-statistic, Sig: Significance

Findings are displayed that there is no-significant differences in perception with regard to physician age at *p-value >0.05*.

Table 4-5-2: Differences between Perception and Physician Gender (*n=107*)

	Gender	Mean	S.D	t-value	d.f	p≤ 0.05	Sig
Perception	Male	1.574	0.1433	0.077	105	0.953	No-sig.
	Female	1.572	0.1425				

M= Mean, SD= Standard deviation, t= t-test, d.f= Degree of freedom, Sig= Significance, p= Probability value, S= significant

Findings are demonstrated that there is no-significant differences in perception with regard to physician gender at(*p value >0.05)*.

Table 4-5-3: Differences between Perception and Physician Years of Working in Hospital (*n=107*)

Experience Variables	Source of variance	Sum of Squares	d.f	Mean Square	F	p≤ 0.05
Perception	Between Groups	.196	4	.049	2.553	0.043 Sig.
	Within Groups	1.953	102	.019		
	Total	2.149	106			

d.f: Degree of freedom, F: F-statistic, Sig: Significance

Findings are displayed that there is significant differences in perception with regard to physician years of experience in hospitals at (*p value <0.05)*.

Table 4-5-4: Differences between Perception and Physician Workplace (*n=107*)

Workplace Variables	Source of variance	Sum of Squares	d.f	Mean Square	F	p≤ 0.05
Perception	Between Groups	.110	3	.037	1.847	0.143 No-sig.
	Within Groups	2.039	103	.020		
	Total	2.149	106			

d.f: Degree of freedom, F: F-statistic, Sig: Significance

Findings are displayed that there is no-significant differences in perception with regard to physician workplace at *p-value >0.05*.

Table 4-5-5: Differences between Perception and Physician Job Title (*n=107*)

Job Title Variables	Source of variance	Sum of Squares	d.f	Mean Square	F	p≤ 0.05
Perception	Between Groups	.089	3	.030	1.483	0.224 No-sig.
	Within Groups	2.060	103	.020		
	Total	2.149	106			

d.f: Degree of freedom, F: F-statistic, Sig: Significance

Findings are displayed that there is no-significant differences in perception with regard to physician job title at *p-value <0.05*.

Chapter Five
Discussion of the Study Results

Discussion of the Study Results

Throughout the years, a growing number of diverse situations have emphasized the need of interprofessional cooperation between doctors and nurses. In the workplace, the phrase "collaboration" between physicians and nurses refers to the act of collaborating in the workplace, sharing responsibility for problem solving, and making decisions in order to establish and execute patient care plans. Although the provision of healthcare is getting more complicated, cooperation among healthcare personnel may be a useful tool for improving the overall quality of the services delivered. Especially at hospitals, where the environment is defined by constant contact between experts, this is true. Nurses and physicians working together to improve patient outcomes while simultaneously cutting healthcare costs, enhancing job satisfaction, and assuring the safety of patients is a promising strategy. However, emerging data shows that incorrect or inadequate communication may result in a continuous state of tension between nurses and doctors, which can lead to an increase in medical mistakes and bad results for the patient population (Cypress, 2011). Further research has shown that an inadequate interprofessional viewpoint on interactions between physicians and nurses had a part in the shortage of nurses and the forced exodus of nurses from their domains of expertise (Sasso et al., 2019).

5.1.Discussion the Socio-demographic Characteristics

5.1.1.Particpant's Age

The findings of the current research demonstrate that participants' ages are shown in (Table 4-1-1), and that the mean age for nurses is (M=27), with the biggest proportion of nurses between the ages of 20 and 29 years old.. While, the mean age among physicians is (M=34), the age

30-39 years old were recorded the highest percentage among physicians. There were highly significant differences in age groups for nurses and physicians ($p<0.01$). This findings come in line with Goda et al. (2018), who compared the perception among nurses and physicians. Their findings demonstrated that the mean age of nurses is less than the mean age of doctors (Mean ±SD= 29±8.41; 33±8.24) respectively.

Nurses and doctors, due to academic studies and career progression, there is a big difference. Where we find young nurses, because most of them are graduates of medical institutes, whose academic studies are two to four years, unlike a doctor, who has an academic study of at least six years.

5.1.2.Particpant's Gender

Among nurses, females predominated over males, but males predominated over females among doctors. There were very significant differences in gender between nurses and physicians (p0.01), with nurses being much more female than physicians (Table 4-1-2). The findings of the present research were comparable to those of Siedlecki and Hixson (2015), who investigated the connections between nurses and doctors and found that the majority of their physicians were men and the majority of their nurses were females. The study's finding that female nurses outnumbered male nurses might be explained by the fact that females continue to be the majority in the nursing profession. This conclusion is congruent with the findings of Weller et al. (2011), who conducted a study at Mansoura University on the attitudes of nurses and doctors toward cooperation and discovered that the majority of the nurses who participated in the study were female.

A ninety three percent female nurses and seventy-seven percent of male doctor in study of Krogstad et al. (2004), due to male doctor were

predominated in hospitals, and the opposite the female nurses predominated as required by the field work. Especially in children's hospitals, and for the sake of motherhood, it is preferable that the nursing staff be female. In addition, male nurses are often in specialized centers that require more workload, so we find their in less number.

5.1.3.Particpants Years of Experience

Years of experience related findings, both nurses and physicians had been 5 to 10 years of experience. There were significant differences in years of experience for nurses and physicians ($p<0.05$) ((Table 4-1-3). These findings come in line with Hossny and Sabra (2021), who investigated the attitudes towards cooperation among nurses and physicians. Their findings illustrated both nurses and physicians who have less than 10 years of experience, and justifying that those who had this experience are more cooperative to participate in the study. Also, in study of Hussein et al. (2018), recorded in their findings that one-third of study participants from nurses and physicians between 5 to 10 years of experience. From researcher point of view, by virtue of the nurses' ages, as well as the years of academic study, nurses have years of uneasy experience, unlike doctors, due to their ages, as well as the years of academic study.

5.1.4.Particpants Workplace

In regards with workplace, most of nurses work at words, while.. most of physicians work at emergency department. There were highly significant differences in workplace for nurses and physicians ($p<0.01$) (Table 4-1-4); this may be due to working in the emergency department which requires a large number of doctors, at the same time those doctors have obligations in other places. With the same regards, findings of Amsalu

et al. (2014), who reported in their study that most of the nurses work in medical wards and one third of physicians work in surgical wards and many departments in same time.

5.1.5.Particpants Job Title

It is obvious that the technicians were predominated among nurses, and the rotator were predominated among physicians (Table 4-1-5). The job title refers to the specialization and educational attainment in the category of doctors, and for nurses, the most common nurses who are hold diploma (technician) were totally depended on at the hospitals. At the same time, the institutions that graduate this category are multiple. This finding is in agreement with Zakerimoghadam et al. (2015), who found that most of nurses participating in the study were technical nurses, while rotator and permanent doctor were less participated in the study. In addition, the findings of Elsous et al. (2017), recorded that the nurses hold of diploma and medical bachelor work in many department of hospitals.

5.2.Nurses and Physicians Perception towards their Cooperation

By the overall nurse-physicians perception towards their cooperation was demonstrate at (M ± SD= 132.62 ± 12.004) among nurses and (M± SD=96.00 ± 8.684) among physicians; and according to the study criteria, nurses express a neutral perception; and physicians express a negative perception towards nurse-physicians relationship (Table 4-2-11). This findings come in line with Baggs et al. (1997), who mentioned that nurses and physicians reported similarly moderate amounts of collaboration, but nurses reported less satisfaction with roles than did physicians in all sites. Nurses and physicians express moderate perception, but more strongly for

nurses. The strength of the relationship for nurses was similar in all sites. Nurses' satisfaction with nursing roles did not predict their retention.

In an acute care community health facility, Hughes and Fitzpatrick (2010) conducted study on nurse-physician cooperation and found that both nurses and physicians regarded collaboration favorably. It was shown that both nurses and physicians had a favourable perspective of collaboration. Cultural and workplace differences may cause misunderstandings, yet teamwork in acute care institutions is essential for patients' well-being and treatment.

A meta-analysis of nurse/physician collaboration conducted by Sollami et al. (2015), however, who found that physicians scored higher on perception than nurses, while nurses had more positive attitudes toward collaboration than physicians. This study found that physicians scored higher on perception than nurses, as well as nurses having more positive attitudes toward collaboration than doctors. According to the findings of this survey, nurses are more receptive to the idea of cooperation than doctors are, even though physicians believe that collaboration is already in place. This antagonism might be in line with the findings of the present investigation. , which included nurses' perspectives, in that both groups had an unfavorable view of the nurse/physician collaboration.Furthermore, according to the results of a research done at Damanhur National Medical Institute (El-Hanafy, 2018), doctors are more content with their jobs than nurses, but nurses are less satisfied with their responsibilities. When it came to the nurse–doctor interaction, there was a lot of uncooperation. Nurses, on the other hand, felt that they were treated unfairly in comparison to doctors, particularly in disciplinary proceedings. Amsalur et al. (2014), on the other hand, demonstrate that neither nurses nor doctors are happy with their working relationship.

Comparing physician perceptions of their relationships with other doctors to nurses' perceptions of their relationships with other physicians In Ethiopia, a research done at the Hawassa Teaching Referral Hospital discovered the similar pattern of behavior (Yatasa & Cherie, 2011). On the other hand, according to Gebremedhin et al. (2014), nurses at their hospitals were happy with their positive working relationship with doctors in general. According to the findings of an in-depth interview, '... the nurse–physician connection is not poor at our institution...'but it is vital for the quality of service offered by our institution and for the work satisfaction of the two professionals.'The medical staff respondents saw the nurse–physician relationship as superior–subordinate, but nurses did not agree with this notion. The authors of Elsous et al. (2017) pointed out that, historically, doctors see nurses as subordinates, who are given instructions to carry out. According to this tradition, the physician-nurse interaction has the potential to influence health professionals' attitudes toward cooperation. Aside from that, nurses are seen as subordinates to doctors and maintain collegial connections with them. Additionally, the qualitative research '... if I accept the fact that I am hired here to save lives...' with auxiliary health staff was conducted in the same way. Auxiliary health staff are those who support doctors in their daily activities. Their role is to provide assistance to doctors and to work in line with this division of labor, despite the fact that '... nurses do not want to acknowledge that they are subordinates to physicians.' In a previous study, Schmalenberg and Kramer (2009) found that 46 percent of respondents claimed nurses are subordinates to doctors and 38 percent of respondents said nurses have a collegial relationship with physicians.

That there was a difference in knowledge of their duties in the clinical context, as well as cultural differences and individual traits that influence

performance outcome, might have contributed to the disparity. A mutual understanding between nurses and doctors that would improve the coordination and collaboration of the services offered to patients would be beneficial to both parties. Furthermore, according to Hamed et al. (2019), the majority of nurses and physicians had a moderate level of concern about the physicians nurse relationship and its impact on their perception of the nurse role; however, there were no significant differences across all domains, with the exception of the items related to the nurse role ($p>0.05$). Regarding the physician-nurse interaction, work performance, and administration policies, the majority of nurses and doctors expressed a moderate degree of satisfaction. The majority of nurses and doctors reported the greatest levels of stress at work and in their nursing roles. From the perspective of the researcher, nurses, and doctors make significant contributions to patient care, but they may not always recognize or appreciate the contributions of their colleagues. According to earlier research, doctors and nurses have distinct perspectives on cooperation; doctors see collaboration as just following orders and instructions, but nurses see collaboration as a complementary function that is more important than physicians'.

5.2.1.Perceptions of the Nurse and Physicians regarding their Relationship

Given the interdependence of the two professions and the major role they play in providing safe, high-quality patient care, the nurse–physician interaction is especially crucial. The analysis of nurse-physicians perception related to relationship was demonstrated at M SD=36.69 5.135 among nurses and M SD=29.05 2.935 among physicians; and according to the study criteria, nurses have a neutral perception and physicians have a

negative perception of nurse-physicians relationship (Table 4-2-2). According to these findings, Hamed and colleagues (2019) came to the same result, stating that doctors had a lower mean score when it came to the nurse-physician interaction than nurses. The majority of doctors and nurses had a modest degree of nurse-physician connection. According to Hamric and Blackhall (2007), one of the causes for the poor quality of health care and the high number of medical mistakes is the strained relationship between nurses and physicians, which stems from a lack of understanding of one another's jobs. Doctors, according to the conclusions of the study, do not understand the tasks of nurses at work, which leads to a negative attitude toward nurses. Understanding the roles and duties of nurses and physicians will aid in improving the two groups' joint interactions. Because medicine and nursing are two professions that contribute significantly to health-care leadership and the marketplace. Hospitals report a gain in reimbursement and market share when strong nurse-physician interprofessional collaborations are developed, which reflects favorably on the quality of care given.

5.2.2.Perceptions of the Nurse Physicians regarding Effect of Work Stress on their Relationship

According to the research criteria, nurses have a neutral opinion of job stress on their nurse-physician connection, whereas doctors have a negative perception of work stress on their nurse-physician relationship. Because the physician indicated confusion regarding the function of nursing in health facilities (due to a lack of nurse job definitions) (Table 4-2-4).

This finding is supported by a review of 1,200 responses from nurses and physicians who had a bad image of their romantic relationship as a consequence of work stress. Furthermore, hospital administrators feel that

daily interactions between nurses and physicians have a substantial influence on the morale of nurses. Everyone who responded to the poll was concerned about the importance of nurse–physician interactions and the environment they create. Although all respondents agreed that disruptive physicians' behavior had a direct impact on nurse satisfaction and retention, the groups disagreed on who was to blame, what hurdles stood in the way of progress, and what solutions might be discovered. The findings imply that hospitals should pay attention to the quality of nurse–physician interactions in their institutions in order to boost nurse recruitment and retention (Rosenstein, 2002).

There are other constraints relating to employment contracts, regulatory regulations, and inter-professional contacts, in addition to the problems associated with clinical workload and practice ownership (Reeves et al., 2011). Despite the challenges and apparent advantages of cooperation, it is doubtful that general practitioners and nurses will work to maximize on existing knowledge in this dynamic situation. Regulations enacted by the federal government that provide financial incentives to firms that hire practice nurses have spurred the rapid rise of the general practice nurse employment. As a consequence, despite the stress of their employment, nurses have been shown to be more cooperative than doctors (McInnes et al., 2015).

5.2.3.Perceptions of the Nurse–physicians regarding Effect of Job Performance on their Relationship

According to the study criteria, nurses have a neutral assessment of work performance on their nurse-physician relationship, but physicians have a negative image of job performance on their nurse-physician relationship (Table 4-2-6). In this nursing workforce, they cooperate more with nurse–doctors than with physicians. Nurses had a more positive

attitude about nurse–doctor teamwork than physicians, according to Zheng et al (2016).

Nurses outperformed doctors on all subscales, including work performance, according to an assessment of the Jefferson subscales. This indicates that nurses have a more positive attitude of their involvement in work performance and aspects of patient care. Furthermore, they showed a strong opposition to doctors' performance being dominated by them. Previous research from Sweden, America, and Egypt have shown similar results (Hojat et al., 2001; Hansson et al., 2010; El Sayed & Sleem, 2011). According to Bruce et al. (2015), patient advocacy and ethical decision-making are crucial nursing roles, and the public trusts nurses as advocates and communication mediators between patients, families, and doctors. Nurses' restricted autonomy and difficult nurse-physician interactions in critical care may be linked to their reduced ability to apply personal and professional moral reasoning and values to patient care. Individual nurses may experience heightened moral discontent as a result. Furthermore, moral discomfort is connected to burnout and professional exhaustion, resulting in a misunderstanding of the nurse-physician partnership's nature. Nurses often express dissatisfaction and report an increase in workplace discontent and conflict when responsibilities are unclear. Nurses' responsibilities are ambiguous due to a lack of clarity in their profession's scope, which is governed by various doctor practices depending on the business. While it has been suggested that having a clear knowledge of a nurse's job enables cooperation and enhances role and professional identification, it has also been stated that having a clear understanding of a nurse's job encourages collaboration and raises role and professional identity (Almost & Laschinger, 2016).

Nurses, who were formerly considered only assistants to doctors, today play an important role in treating chronic illness, advocating for the change of lifestyle risk factors, and supporting persons with acute health issues who do not understand nursing. However, little thought has been given to how this clinical position interacts with nurse-provided and observed care, or the influence of the growing nursing workforce in general practice on professional relationships in this environment. According to Longo (2010), disruptive medical team activities are not appropriate in the workplace. Many businesses attempt to improve their teams' behavior by teaching and training them on how to increase effective communication and cooperation skills while avoiding negative repercussions, since the behavior of healthcare staff is connected to patient outcomes. Despite these protections, physicians and nurses in hospitals sometimes engage in disruptive conduct as a result of poor performance. Nurses' performance in primary care has lately been under examination, according to Carthon et al. (2014), as demand for primary care has grown and nurse practitioners have gained public support. According to a research, nurse practitioners can deliver basic care services with the same level of safety and efficiency as doctors, including wellness and prevention, diagnosis and treatment of many common uncomplicated acute illnesses, and management of chronic disorders like diabetes. An Institute of Medicine (IOM) panel recently reaffirmed this decision after an examination, proposing that nurses' area of practice in primary care be expanded and physicians acknowledge their contributions.

5.2.4.Perceptions of the Nurse–physicians regarding Influence of Administrative Policies and Norms on their Relationship

Nurses have a neutral perception of nurse-physicians relationships, whereas physicians have a negative perception, according to the study, with M SD=31.354.283 for nurses and M SD=21.622.523 for physicians (Table 4-2-8). According to Hussein et al., nurses' perceptions of the overall importance of the nurse-doctor interaction in the hospital are 81.5 percent (2018). Nurses' perceptions of the nurse-doctor relationship were scored on a scale of 44.8+SD=4.3. These relationships are built on cooperation, collaboration, communication, respect, and honesty, all of which contribute to the growth of their relationship. Hospital policy is founded on norms and principles, according to the research, and there is no distinction between the responsibilities of nurses and physicians. This outcome is the polar opposite of ours.

The study's results confirmed nurses' feelings of injustice with doctors, notably in terms of disciplinary processes, as shown by the following facts. Nurses' concerns concerning doctors are ignored by the government; when errors occur, physicians are discreetly disciplined but the nurse is publicly maligned. Furthermore, the nurse is unable to convey her dissatisfaction with physicians' violations of norms and standards, and she is a victim of their errors or neglect. All of these facts demonstrate the doctor's capacity to retain power over the nurse. Hassan (2007) found that 127 (52.5 percent) of nurses were unsatisfied with administrative assistance in nurse–physician partnerships.

5.2.5.Perceptions of the Nurse–physicians regarding Nurse's Role and its Effect on their Relationship

The analysis of nurse-physicians perception related to nurse's role and its effect on their relationship was demonstrated at M SD=38.78 6.192 among nurses and M SD=26.64 3.453 among physicians; according to the study criteria, nurses have a neutral perception while physicians have a negative perception of nurse-physicians relationship (Table 4-2-10). According to Gebremedhin et al. (2014), doctors differ regarding the nurse's role being respected and understood. They believe that the function of the physician is the most crucial in the health team. This demonstrates the physician's regard for the nurse's duty by following his directions without question and interfering with her, demonstrating the physician's supremacy over nurses. However, roughly 31% of participants believe there is a disconnect between doctors' knowledge of nurses' duties and obligations as nurses, and they highlight persistent communication and cooperation issues.

Hassan (2007) did a qualitative research and concluded, "...I believe that some doctors do not always acknowledge the knowledge and experience base that nurses possess, and often ignore it as a resource." This figure was lower than that of a 2008 research in the United States, which found that 70% of doctors do not understand their duties and obligations as nurses. This might be due to the research participants' differing levels of expertise and culture.

According to the researcher, the explanation for this might be because doctors underestimated the importance of nurses and misunderstood their job. In fact, The majority of physicians disagree that nurses are critical members of the health-care team.. Furthermore, a nurse's

responsibilities are confined to carrying out doctors' orders as well as providing direct patient care.

Also, according to Robinson et al. (2012), doctors have a poor knowledge of nurses' tasks, and nurses are dissatisfied with their position in following out physicians' instructions and providing patient care. Furthermore, many doctors think that their function in the health-care team is the most vital.

5.3.Differences between Nurses and Physicians Perception in regard their Cooperation

At a p-value of 0.05, current data demonstrate a significant difference in perceptions of collaboration between nurses and doctors (Table 4-3). The study's results revealed that collaboration defined nurse and physician perceptions as (nurses-physicians) neutral to negative, with their perceptions of the nature of their connection matching with their perceptions of the cooperative relationship. This disparity may be related to doctors' authoritarian character in the healthcare sector, as well as the authority imposed by hospital management to always back physicians. In line with the current study, Weller et al. (2011) examined interprofessional cooperation between young doctors and nurses in a hospital context and observed many impediments to successful collaboration. Several hurdles were recognized, including organizational issues created by hospital management and restrictions on professional working interactions.Furthermore, a research by Papathanassoglou et al. (2012), which looked at cooperation between nurses and doctors in European intensive care units, found that there was no co-operation between nurses and physicians owing to a lack of autonomy, which caused moral discomfort among ICU nurses.

In the same vein, a study conducted in the Gaza Strip looked at the views of nurses and doctors about nurse-physician collaboration. The t-test analysis indicated substantial differences in doctors' and nurses' attitudes about teamwork (t-test: 10.391; p 0.001). Nurses had a mean total score of 3.40 (SD: 0.30) on a four-point scale, whereas doctors had a mean total score of 3.01 (SD: 0.35). Nurses outperformed doctors on four subscales of the questionnaire, with a statistically significant difference (p 0.001), showing that nurses had more favorable views on nurse-physician collaboration than physicians (Elsous et al., 2017). Doctors and nurses had very different attitudes regarding cooperation, with nurses having a neutral attitude and physicians having a negative attitude, which is consistent with Hojat et al. (2003)'s "principle of least interest." Previous comparable studies done in a hospital environment have also backed up the results (Thomson, 2007; Sterchi, 2007; Sollami et al., 2015).

Other research found that doctors in intensive care units had higher favorable views regarding teamwork than nurses (Miller, 2001; Hamric & Blackhall, 2007). According to the literature, the nurse-physician relationship is based on a hierarchical concept of patient care, in which nurses serve as doctors' assistants and are seen as second-class citizens. According to studies, American nurses have a more favorable attitude toward teamwork than their Italian and Mexican colleagues. This is because, unlike their counterparts, American nurses used a complimentary model of professional duties rather than a hierarchical model of practice (Hojat et al., 2003). According to Katz and MacDonald (2002) and Barrere and Ellis (2002), as nurses' awareness of their position improves, considerable positive improvements in their attitudes toward cooperation may occur. As a result, doctors' desire to collaborate is harmed by their lack of understanding of nursing duties.

It supports the concept that collaboration between doctors, nurses, and other healthcare professionals improves team members' knowledge and abilities, resulting in continuing decision-making development (O Daniel and Rosenstein, 2008).

Elsous et al. (2017), on the other hand, discovered that physician and nurse perceptions of cooperation are considerably different, with nurses having a more positive opinion than doctors. Other research found that doctors in intensive care units had higher favorable views regarding teamwork than nurses (Hamric and Blackhall, 2007).

According to Masson (2007), cooperation and collaboration between physicians and nurses are critical to patient care, and there should be no distinction between them. Physicians and nurses who work together and have a clear understanding of their individual and professional strengths and limits have the capacity to heal the full person in a way that neither healer could do alone. Doctors and nurses may learn from each other and exchange vital knowledge, according to Mackay (2010), which fosters effective patient care and a productive work atmosphere. Furthermore, among the conflict resolution approaches, collaboration is the most desired technique; it needs both cooperation and assertiveness, and it entails completely acknowledging others' concerns while neither surrendering or denying one's own (Mikanowicz & Gmeiner, 2014).

The substantial differences in perception of collaboration between them, as shown by independent sample t-test, reveal a negative impression of cooperation between them, implying that nurses (M=2.17) are more cooperative than doctors (M=1.57). Because how effectively these two groups work together influences the quality of treatment that patients get, the relationship between nurses and doctors reveals unfavorable

consequences between the two parties in the research. More research is needed to determine the influence of collaboration between nurses and doctors on patient care quality. A collaborative nurse-physician partnership also leads to improved patient and organizational results, such as shorter hospital stays and lower treatment costs without a drop in functional levels or patient satisfaction. High-quality nurse-physician partnerships result in enhanced satisfaction among nurses and doctors, as well as more autonomy for nurses, in addition to improved patient outcomes (Schmalenberg & Kramer, 2009). Collaboration, clear communication, teamwork, respect, and good attitudes, according to the researcher, are key aspects in every relationship. A team's success will be driven by a shared good attitude and conduct. Physicians and nurses must be emotionally sophisticated in order to do their jobs.

5.4.Differences in Nurses Perception with regards their Socio-demographic Characteristics (Tables 4-4 and 4-5)

5.4.1.Significant Differences between Perception with regard Nurses and Physicians Age

The results show that there are no significant variations in perceptions between nurses and doctors ($p>0.05$). This research agrees with Hansson et al., (2010), who found no differences in nurse-physician cooperation between younger and older, male and female doctors and nurses. There was also a negative association between attitudes toward collaboration and nurse and physician age groups (Hossny & Sabra, 2021). One probable reason is that as people become older, their attitude, thinking, and acceptance of others' roles within the complementary model of care practice grow.

5.4.2.Significant Differences between Perception with regard Nurses and Physicians Gender

There are no significant variations in perception between nurses and doctors ($p>0.05$), according to the findings. The findings were consistent with Hussein (2014), who found no significant differences in nurses' and doctors' perceptions of male and female respondents when using an independent sample t-test with a p-value greater than 0.05. In terms of gender, there was no significant association between physician and nurse perceptions of teamwork (Goda et al., 2018).Additionally, Asghari et al. (2015) discovered no significant relationship between gender and perceptions of collaboration in their investigation.Similarly, out of 146 respondents, 14 men and 132 women, there were 14 males and 14 females. According to the findings of this research, men respondents had a higher mean score on nurses' impression than female respondents. When it comes to nurses' perspective, men respondents had a higher mean score than female respondents (Amsalu et al., 2014).

5.4.3.Significant Differences between Perception with regard Nurses and Physicians Years of Working in Hospital

The results show that there are substantial variations in perception between nurses and doctors with relation to years of experience in hospitals (p0.05). We may deduce from this that the longer one works, the less one expresses collaboration, and this is related to hospital regulations, since it might lead to dissatisfaction with one's employment and a desire to quit or seek work elsewhere. According to the findings, there is a significantly substantial association between nurses' degrees of collaborative perception and their years of experience.

Falana et al. (2016) discovered a substantial link between nurses' experiences and their perceptions of nurse/physician teamwork.

Hussein's (2014) findings revealed that nurses' years of experience and perspectives on the nurse-doctor interaction differed significantly; there was no significant difference between working experience of less than 10 years and working experience of more than 10 years; and there was no significant difference between working experience and physicians' perceptions of the nurse-doctor relationship. There is no significant difference in working experience and doctors' perceptions of the nurse-doctor interaction between those who have worked for less than 10 years and those who have worked for more than 10 years (Ward et al., 2008). A similar finding was reported in the previous research, in which no significant variation in perception was identified in the respondents' term of service (Averlid & Axelsson, 2012). Furthermore, the results of studies done in Texas, Egypt, and Aurora revealed a considerable difference. According to a prior research, nurses with less years of experience or who have just graduated had a greater degree of collaboration stress as a result of having to deal with the expectations of other healthcare workers, particularly doctors (Olatunji & Mokuolu, 2014). As a result, individuals believe they need aid and support at all times throughout the working day (Roseline & Clement, 2006).

5.4.4.Significant Differences between Perception with regard Nurses and Physicians Workplace

The results show that there are substantial disparities in perceptions of nurses' workplaces (p0.05). There were no significant variations in their perceptions at the doctors' workplace (p>0.05). This conclusion is corroborated by Elsous et al. (2017), who found no variations in doctors' perceptions of cooperation depending on hospital workplace, but

substantial disparities in nurses' perceptions. Medical ward doctors and nurses rated lower than their peers, indicating a negative attitude toward nurse-physician teamwork. As a result, nurses are unable to coordinate their treatment with that of other health-care professionals, which may hinder cooperation and collaboration.

In addition, the workplace was shown to be significantly linked with nurses and doctors cooperating (p0.05), as satisfaction with inter-professional collaboration was influenced by workplace characteristics. Some of these have varying degrees of impact on doctor and nurse satisfaction (Krogstad et al., 2004).

The perception of nurses was shown to be substantially connected with their job department in a research by Chaboyer and Patterson (2001). Nurses in specialty wards had a more positive perception of physician-nurse teamwork than general nurses.

In addition, When Asghari et al. (2015) conducted a research on how nurses and doctors collaborate in Neyshabur, they observed a substantial correlation between the various departments investigated and the cooperation among the studied subjects, which is congruent to the present study findings It's possible that this is due to the fact that different healthcare facilities have various operating standards. This may be due to the fact that different departments have different working styles; some need greater involvement and close ties among healthcare workers than others.

5.4.5.Significant Differences between Perception with regard Nurses and Physicians Job Title

At a p-value of 0.05, the findings show that there are substantial disparities in perception of nurses' work titles. There were no significant changes in their perceptions based on the doctors' job title (p>0.05).

Moreno et al., (2013) found that nurses with an academic title in nursing had a more favorable impression of the overall perception of nurse-physician relationships. Johnson and Kring (2012) found that more than half of ICU and Medical-Surgical nurses were happy with their nurse-doctor interactions.

In a recent research, nurses with higher job titles were more likely to perceive collaborative relationships, according to the Medical-Surgical unit (Nelson et al., 2008). Nurses with a work title and an advanced certificate with advanced clinical practice will be more collaborative. Nurses have grown more specialized and confident in their expertise in recent years, and as a consequence, they are more likely to compete with physicians in certain areas of medicine (Gebremedhin et al., 2014).

Chapter Six

Conclusion and Recommendations

Conclusion and Recommendations

6.1. Conclusion:

In view of the findings and their discussion, this quantitative review used an assessment approach to perception towards collaboration with questionnaire objects, and concludes that:

6.1.1. Physician expressed a negative perception towards nurses-physician collaboration due to their in ability to understand the roles of nurses at work.

6.1.2. Nurses expressed neutral perception due to a negative perception of physicians towards their relationship.

6.1.3. Nurses and doctors have differing perspectives on nurse-physician teamwork in general. Impact of work stress's on their relationship, effect of job performance on their relationship, influence of administrative rules and norms on their relationship, and role effect on their relationship were all recurring topics in reports on nurse-physician collaboration beliefs.

6.1.4. There were differences in perception among nurses and physicians: nurses are more cooperative than the physicians due to hospital administration and limitations imposed over professional workplace relationships.

6.1.5. Years of experience, workplace and job title been influenced nurses perception towards nurses/physicians collaboration.

6.1.6. Years of experience have been affected physicians perception towards nurses/physicians collaboration.

6.2. Recommendations:

According to the findings and stated conclusions, the following could be recommended for future work:

6.2.1. Hospital Administrations need to be establishing programs to enhance the communication between nurses and physicians through these programs they understand and improving collaborative relationship between nurses and physicians through understand each other's roles.

6.2.2. Giving rewards for well established inter-professional collaboration between nurses and physicians.

6.2.3. Establishing a base for inter-professional collaboration between all healthcare team members in nursing and medical college.

6.2.4. Clearing job description for all categories of nurses and physicians in work environment, and role clarity to nurses and physician is facilitate collaboration and improve role and professional identity.

6.2.5. Emphasizing that the role of nurses is no less important than that of doctors and other workers in health institutions.

6.2.6. More studies need to be conducted involve a national level and investigating the impact of nurses and physician cooperation upon patients quality of care.

References

المصادر باللغة العربية

القرأن الكريم ، سورة التوبة ، الاية (١٠٥)

-A-

AbuAlRub, R. F., Gharaibeh, H. F., & Bashayreh, A. E. I. (2012). The relationships between safety climate, teamwork, and intent to stay at work among Jordanian hospital nurses. Nursing Forum, 47(1), 65–75.

Ahmadieh H, Majzoub GH, Abou Radi FM, Abou Baraki AH. Inter-professional physician-nurse collaboration in Lebanon. International Journal of Health Governance. 2020 Feb 29.

Almost J, & Laschinger HKS.(2016) Workplace empowerment, collaborative work relationships, and job strain in nurse practitioners. *J Am Acad Nurse Pract.* ;14(9):408–420.

Ameen F. Nurse-physician conflict and power dynamic. JOJ Nursing & Health Care. 2017;5(3):448-52.

Amsalu E, Boru B, Getahun F, Tulu B. Attitudes of nurses and physicians towards nurse-physician collaboration in northwest Ethiopia: a hospital based cross-sectional study. BMC nursing. 2014 Dec;13(1):1-6.

Anna T. Mayo, MS, and Anita Williams Woolley, Teamwork in Health Care: Maximizing Collective Intelligence via Inclusive Collaboration and Open Communication, AMA Journal of Ethics, September 2016, Volume 18, Number 9: 933-940.

Aron S. Relationship between nurses' job satisfaction and quality of healthcare they deliver. Minnesota State University, Mankato; 2015.

Arsalan Soltani, A., Huang, H., Wu, J., Kulkarni, T. D., & Tenenbaum, J. B. (2017). Synthesizing 3d shapes via modeling multi-view depth maps and silhouettes with deep generative networks. In Proceedings of the IEEE conference on computer vision and pattern recognition (pp. 1511-1519).

Asghari, A., Saadati, M. S., Ahmadpour, S., Ghodsi, A., & Vaezi, A. (2015). Communication and collaboration's nurse with physician from the perspective of hospitals nurse in Neyshabur City. *Scholars Journal of Applied Medical Sciences*, 3335-3341.

Assen, F.J. (1987). Een eeuw vrouwenarts (A century obstetrician). Amsterdam: Rodopi.

Averlid, G., & Axelsson, S. B. (2012). Health-promoting collaboration in anesthesia nursing: a qualitative study of nurse anesthetists in Norway. *AANA journal*, *80*(4).

-B-

Backhaus, R., van Rossum, E., Verbeek, H., Halfens, R. J., Tan, F. E., Capezuti‹ E., & Hamers, J. P. (2017). Work environment characteristics associated with quality of care in Dutch nursing homes: a cross-sectional study. International Journal of Nursing Studies, 66, 15–22.

Baggs, J. G., Schmitt, M. H., Mushlin, A. I., Eldredge, D. H., Oakes, D., & Hutson, A. D. (1997). Nurse-physician collaboration and satisfaction with the

decision-making process in three critical care units. *American Journal of Critical Care*, *6*(5), 393-399.

Baiyekusi, I., 2010. Physician-Nurse Relationship: Nurses' perception in internal medicine and surgical units.

Bakhen, D.,Mcdonald, E., Monaghan, E., Orlicki, C., & Waugh, H., (2113): The climate of patient safety in a Canadian intensive care unit. Journal of Critical Care; 24 (3): 463-462.

Baldwin, M.A. 2008. Respect. In Mason-Whitehead, E. Mcintosh, A. & Mason, T (eds.) Key Concepts in Nursing. London: Sage Publishers, 278-284.

Barrere, C., & Ellis, P. (2002). Changing attitudes among nurses and physicians: a step toward collaboration. *Journal for healthcare quality: official publication of the National Association for Healthcare Quality*, *24*(3), 9-15.

Bell, M.L., 2018. Nurses' attitudes towards nurse-physician collaboration, their collaborative behaviours and associated demographic, organisational and relational factors in nurses working.

Bjerregård Madsen J, Kaila A, Vehviläinen-Julkunen K, Miettinen M. Time allocation and temporal focus in nursing management: an integrative review. J Nurs Manag. 2016;24(8):983–93.

Blue, M. (2019). Improving Nurse-Physician Collaboration: Building an Infrastructure of Support.

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

Bowles, D., McIntosh, G., Hemrajani, R., Yen, M., Phillips, A., Schwartz, N., & ... Dow, A. W .(2016). Nurse–physician collaboration in an academic medical center: The influence of organizational and individual factors. Journal of Interprofessional Care, 30(5), 655-660. doi:10.1080/13561820.2016.1201464.

Boyer, R.H.W.; Peterson, N.D.; Arora, P.; Caldwell, K. Five Approaches to Social Sustainability and an Integrated Way Forward. Sustainability 2016, 8, 878.

Boyle, D.K. & Kochinda, C. 2004. Enhancing Collaborative Communication of Nurse and Physician Leadership in Two Intensive Care Units. Journal of Nursing Administration, 34(2), 60-70.

Brewton F. Nurse-Physician Collaboration and Satisfaction. Gardner-Webb University; 2017.

Bridges DR, Davidson RA, Odegard PS, Maki IV، Tomkowiak J. Interprofessional collaboration: three best practice models of interprofessional education. Med Educ Online. 2011;16.

Brown SS, Garber JS, Lash J, Schnurman-Crook A. A proposed interprofessional oath. J Interprof Care. 2014; 28(5):471–472.

Brown, A. Implications of patient shared decision-making on wound care. Br. J. Community Nurs. 2013, 18، S26–S32.

Bruce, H. R., Maiden, J., Fedullo, P. F., & Kim, S. C. (2015). Impact of nurse-initiated ED sepsis protocol on compliance with sepsis bundles, time to initial antibiotic administration, and in-hospital mortality. *Journal of Emergency Nursing*, *41*(2), 130-137.

Buchmann, W.F. Adherence: A matter of self-efficacy and power. JAN 1997, 26, 132–137.

Burnap, P.R.; Spasic, I.; Gray,W.A.; Hilton, J.C.; Rana, O.F.; Elwyn, G. Protecting patient privacy in distributed collaborative healthcare environments by retaining access control of shared information. In Proceedings of the 2012 International Conference on Collaboration Technologies and Systems (CTS), Denver, CO, USA, 21–25 May 2012; pp. 490–497.)

Busari JO, Moll FM, Duits AJ. Understanding the impact of interprofessional collaboration on the quality of care: a case report from a small-scale resource limited health care environment. Journal of multidisciplinary healthcare. 2017;10:227.

-C-

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

C. J. Tang, S.W.Chan,W. T. Zhou, andS. Y. Liaw, "Collaboration between hospital physicians and nurses: an integrated literature review," InternationalNursing Review, vol. 60,no. 3, pp.291–302، 2013.

Cameron, C. Patient compliance: Recognition of factors involved and suggestions for promoting compliance with therapeutic regimens. JAN 1996, 24, 244–250.

Capolongo, S.; Gola, M.; Di Noia, M.; Nickolova, M.; Nachiero, D.; Rebecchi, A.; Settimo, G.; Vittori, G.; Bu_oli, M. Social sustainability in healthcare facilities: a rating tool for analysing and improving social aspects in environments of care. Ann Ist Super Sanit*à* 2016, 52, 15–23.

Carrillo-García C, Solano-Ruíz MD, Martínez-Roche ME, Gómez-García CI. Job satisfaction among health care workers: the role of gender and age 1. Revista latino-americana de enfermagem. 2013 Nov;21:1314-20.

Carthon, J. M. B., Wiltse Nicely, K., Altares Sarik, D., & Fairman, J. (2016). Effective strategies for achieving scope of practice reform in Pennsylvania. *Policy, Politics, & Nursing Practice*, *17*(2), 99-109.

Chaboyer, W. P., & Patterson, E. (2001). Australian hospital generalist and critical care nurses' perceptions of doctor–nurse collaboration. *Nursing & health sciences*, *3*(2), 73-79.

Chen W, Rn JC, Rn JH, Junqiang A, Rn Z, Zhang J, et al. The professional activities of nurse managers in Chinese hospitals : a cross-sectional survey in Hunan province. J Nurs Manag. 2020;00(March):1–9.

Collaboration: A cross-cultural study of male and female physicians and nurses in the United States and Mexico. *Nursing research*, *50*(2), 123-128.

Collaborative relationships. Journal of family medicine and primary care. 2019 Oct;8(10):3263.

Committee on Facilitating Interdisciplinary Research، Committee on Science, Engineering and Public Policy (US), National Academy of Sciences (US), National Academy of Engineering, Institute of Medicine (US). Facilitating Interdisciplinary Research. Washington، DC: The National Academies Press; 2005:xxv, 306.

Cowan, D.T. Norman, I. & Coopamah, V.P. 2005. Competence in Nursing Practice: A Controversial Concept – A Focused Review of Literature. Nurse Education Today 25, 355-362.

Cypress, B. S. (2011). Exploring the concept of nurse-physician communication within the context of health care outcomes using the evolutionary method of concept analysis. *Dimensions of Critical Care Nursing*, *30*(1), 28-38.

-D-

DeWolf Bosek, M.S.; Jannette, J.; Rambur, B. Attitudes of nurses toward patient-directed dying: A pilot study. JONA's Healthc. Law Ethics Regul. 2013, 15, 135–139.)

Drenth, P. (1998). 1898–1998, 100 jaar vroedvrouwen verenigd (A hundred years of united midwives). Bilthoven: Nederlandse Organisatie van Verloskundigen.

Duty PLS, Williams D. Interprofessional collaboration: a healthcare professional's duty: 2016;(February).

-E-

Edwards PB, Rea JB, Oermann MH, Hegarty EJ, Prewitt JR, Rudd M, Silva S, Nagler A, Turner DA, DeMeo SD. Effect of peer-to-peer nurse–physician collaboration on attitudes toward the nurse–physician relationship. Journal for nurses in professional development. 2017 Jan 1;33(1):13-8.

El Sayed, K. A., & Sleem, W. F. (2011). Nurse–physician collaboration: a comparative study of the attitudes of nurses and physicians at Mansoura University Hospital. *Life Science Journal*, *8*(2), 140-146.

Elham, Y., & El-Hanafy, Y. (2018). Nurse physician work-related relationship as perceived by both of them. Egyptian Nursing Journal, 15، 188–195.

El-Hanafy, E. Y. (2018). Nurse physician work-related relationship as perceived by both of them. *Egyptian Nursing Journal*, *15*(2), 188.

Elsherbeny Ee And El-Masry R, Job Satisfaction Among Nurses Working In Mansoura University Hospital: Effect Of Socio-Demographic And Work Characteristics , *Egyptian Journal Of Occupational Medicine, 2018; 42 (2) : 227-240*)

Elsous A, Radwan M, Mohsen S. Nurses and physicians attitudes toward nurse-physician collaboration: a survey from Gaza Strip, Palestine. Nursing research and practice. 2017 Feb 23;2017.

Ergun YA, Akinci F, Kaptanoglu AY, Wagner J. Collaboration among physicians and nurses in intensive care units: a qualitative study. InInternational Journal of Health Administration and Education Congress (Sanitas Magisterium) 2017 (No. 1, pp. 25-35).

Ericsson U, Augustinsson S. The role of first line managers in healthcare organisations – a qualitative study on the work life experience of ward managers. J Res Nurs. 2015;20(4):280–95.

Eriksson N, Müllern T. Interprofessional barriers: A study of quality improvement work among nurses and physicians. Quality Management in Healthcare. 2017 Apr 1;26(2):63-9.

Ethiopia: a hospital based cross-sectional study. BMC nursing. 2014 Dec;13(1):1-6.

Eukubay T, Abate A. Interprofessional collaboration and associated factors among nurses and physicians working at public hospitals in Mekelle city tigray region, north Ethiopia, 2017. Nurse Care Open Acces J. 2019;6(6):185-92.

-F-

Fahlberg, B. "No education about me without me": A shared decision-making approach to patient education. Nursing 2015, 45, 15–16.

Fahlberg, B.; Foronda, C.; Baptiste, D. Cultural humility: The key to patient/family partnerships for making difficult decisions. Nursing 2016, 46, 14–16.

Falana, T. D., Afolabi, O. T., Adebayo, A. M., & Ilesanmi, O. S. (2016). Collaboration between Doctors and Nurses in a Tertiary Health Facility in South West Nigeria: Implication for Effective Healthcare Delivery. *International Journal of Caring Sciences*, *9*(1).

Fewster-Thuente, L., 2011. Working together toward a common goal: A grounded theory of nurse-physician collaboration (Doctoral dissertation, Loyola University Chicago).

Foley M. Caring for those who care: A tribute to nurses and their safety. Online Journal of Issues in Nursing. 2004;9(3):2.

Foronda, C. L., Alhusen, J., Budhathoki, C., Lamb, M., Tinsley, K., MacWilliams, B., ... Bauman, E. (2015). A mixed-methods, international, multisite study to develop and validate a measure of

nurse-to-physician communication in simulation. Nursing Education Perspectives, 36(6), 383-388.

Franco NP, Cordero MA. Collaboration effort between physicians and nurses: a feedback tool for the review of the hospitals. Int J Nurs. 2017 Jun;4(1):19-26.

Frenk J, Chen L, Bhutta ZA, et al. Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. *Lancet*. 2010;376(9756):1923-1958.

Frenken K, Ho¨ lzl W, deVor F. The citation impact of research collaborations: the case of European biotechnology and applied microbiology (1988–2002). J Eng Technol Manage. 2005;22:9–30.

Fry, S.T. & Johnstone, M. 2008. Ethics in Nursing Practice: A Guide to Ethical Decision Making. 3rd Edition. Oxford: Blackwell Publishing.

-G-

Gaboury I, Bujold M, Boon H, Moher D. Interprofessional collaboration within Canadian integrative healthcare clinics: key components. Soc Sci Med. 2009; 69(5):707–715.

Gebremedhin, G., BirhanTema, T., Wudneh, H., Gerezgiher, B., & Haftu, B. (2014). Nurse-Physician Work Relationships and Associated Factors in Public Hospitals in Tigray Region. *Northern Ethiopia, a Cross Sectional Study Greener Journal of Biomedical and Health Sciences, 1*(1), 001-013.

Goda, L. R., Aref, S. M., & Abdel-Razek, A. M. (2018). Perception of Nurses and Physicians about Importance of Their Collaboration in the Work. *Minia Scientific Nursing Journal*, *3*(1), 9-15.

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. https://doi. org/10.7899/JCE-14-36.

Grffith, R.; Tengnah, C. Shared decision-making: Nurses must respect autonomy over paternalism. Br. J. Community Nurs. 2013, 18, 303–306.

-H-

Hailu FB, Kassahun CW, Kerie MW. Perceived nurse-physician communication in patient care and associated factors in public hospitals of Jimma Zone, South West Ethiopia: cross sectional study. PLoS One. 2016;11(9):e0162264.

Hall P. Interprofessional teamwork: professional cultures as barriers. J Interprof Care. 2005;19(suppl1):188–196.

Hall, A. 2001. Client Education. In Potter, P.A. & Perry, A.G. Fundamentals of Nursing. 5th Edition. London: Mosby, 470-499.

Hallet, C.E.; Austin, L.; Caress, A.; Luker, K.A. Community nurses' perceptions of patient "compliance" in wound care: A discourse analysis. JAN 2000, 32, 115–123.

Hamed, D., Elsayed, K., & Soliman, W. (2019). EVALUATE NURSE PHYSICIAN RELATIONSHIP AND ITS IMPACT ON THEIR PERCEPTION OF NURSE ROLE. *Mansoura Nursing Journal*, *6*(2), 127-137.

Hamric, A. B., & Blackhall, L. J. (2007). Nurse-physician perspectives on the care of dying patients in intensive care units: collaboration, moral distress, and ethical climate. *Critical care medicine*, *35*(2), 422-429.

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

Hassan, F. (2007). Work Empowerment as Perceived by Nurses and Physicians Working at National Heart Institute. *Retrieved on*, *24*.

Health Force Ontario (HFO), (2007). Interprofessional Care: A Blueprint for Action in Ontario, Interprofessional Care Project. Ontario: Health Force Ontario.

Health workers in a Nigerian federal health institution. *African Research Review*, *8*(1), 126-133.

Henderson, S. Power imbalance between nurses and patients: A potential inhibitor of partnership in care. J. Clin. Nurs. 2003, 12, 501–508.

Hojat, M., Gonnella, J. S., Nasca, T. J., Fields, S. K., Cicchetti, A., Scalzo, A. L.,... & Torres-Ruiz, A. (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. *International journal of nursing studies*, *40*(4), 427-435.

Hojat, M., Nasca, T. J., Cohen, M. J., Fields, S. K., Rattner, S. L., Griffiths, M., ... & Garcia, A. (2001). Attitudes toward physician-nurse Hossny EK, Sabra HE. The attitudes of healthcare professionals towards nurse–physician collaboration. Nursing Open. 2021 May;8(3):1406-16.

Hughes, B., & Fitzpatrick, J. J. (2010). Nurse-physician collaboration in an acute care community hospital. *Journal of interprofessional care*, *24*(6), 625-632.

Hussein, A. H. M. (2014). Relationship between nurses' and physicians' perceptions of organizational health and quality of patient care/Relation entre la perception du personnel infirmier et des médecins à l'égard de la santé organisationnelle et la qualité des soins aux patients. *Eastern Mediterranean Health Journal*, *20*(10), 634.

Hussein, S. Z., Ahmad, F. A., & Noh, S. H. M. (2018). Nurses' perceptions and attitude toward nurse-doctor relationship at the tertiary hospital in Kuala Lumpur. *Open Access J Nurs*, *1*(2), 1-12.

-I-

Institute of Medicine (US). Global Forum on Innovation in Health Professional Education. Workshop. (2012: Washington DC). Cuff PA, Institute of Medicine (US), Board on Global Health, National Research Council (US); 2013.

Interprofessional Education Collaborative Expert Panel. Core Competencies for Interprofessional Collaborative Practice: Report of an Expert Panel. Washington, DC: Interprofessional Education Collaborative; 2011.

-J-

James L. Improving Leadership Communication in Nurse-Physician Dyad Teams. Doctoral dissertation, University of South Carolina; 2017.

Jasemi M, Rahmani A, Aghakhani N, Hosseini FS, Eghtedar S. Nurses and Physicians' viewpoint toward interprofessional collaboration. Iran Journal of Nursing. 2013 Apr;26(81):1-0.

Johnson, S., & King, D. (2012). Nurses' perceptions of nurse-physician relationships: medical-surgical vs. intensive care. *Medsurg Nursing*, *21*(6).

-K-

Kaini, B. K. (2017). Interprofessional team collaboration in health care. *Global Journal of Medical Research*, *17*(2).

Kamel FF, Rashad RM. Nurse-physician collaboration and its relation to patients' safety climate in critical care units.

Kane, R.A. (1983). Interprofessional teamwork. New York: Syracuse.

Karaca, A.; Zehra, D. Patient satisfaction with the quality of nursing care. Nurs. Open 2019, 6, 535–545.

Katz, A., & MacDonald, J. (2002). Physicians' perceptions of nurse practitioners: the nurse practitioner role has been met with mixed reviews. a qualitative study from Manitoba reveals the perceptions of some physicians regarding this relatively new relationship on the health care team. *The Canadian Nurse*, *98*(7), 28.

Kirkpatrick, M., 2017. Nurse Managers and Interprofessional Collaboration: A Grounded Theory Study (Master's thesis, Graduate Studies.

Kleiman, S.; Frederickson, K.; Lundy, T. Using an electric model to educate students about cultural influences on the nurse-patient relationship. Nurs. Educ. Perspect. 2004, 25, 249–253.

Kolovos, P.; Kaitelidou, D.; Lemonidou, C.; Sachlas, A.; Sourtzi, P. Patient Participation in Decision Making During Nursing Care in Greece—A Comparative Study. Nurs. Forum 2015, 50, 147–157.

Kramer M, Schmalenberg C. Confirmation of a healthy work environment. Critical Care Nurse. 2008;28(2):56-63.

Kramer, M. & Schmalenberg, C. 2003. Securing Good Nurse-Physician Relationships: Explore the Link between Collaboration and Quality Patient Care. Nursing Management 7, 34-38.

Kramer, M. & Schmalenberg, C. 2009. Nurse-Physician Relationships in Hospitals: 20 000 Nurses Tell Their Story. Critical Care Nurse 29 (1), 74-83.

Krogstad, U., Hofoss, D. A. G., & Hjortdahl, P. E. R. (2004). Doctor and nurse perception of inter-professional co-operation in hospitals. *International Journal for Quality in Health Care*, *16*(6), 491-497.

Kumar K, vanDissel HG. Sustainable collaboration: managing conflict in interorganizational systems. Manag Inf Syst Q. 1996;20(3):279–300.
Leake, P., 2018. Nursing, Power, and Gender in Interprofessional Collaboration (Doctoral dissertation).

-L-

Lee ES, McDonald DW, Anderson N, Tarczy-Hornoch P. Incorporating collaboratory concepts into informatics in support of translational interdisciplinary biomedical research. Int J Med Inform. 2009;78(1):10–21.

Lee YJ, Hwang JI. Relationships of nurse-nurse collaboration and nurse-physician collaboration with the occurrence of medical errors. Journal of Korean Academy of Nursing Administration. 2019 Mar 1;25(2):73-82.

Lewis, F.M. 2006. Autonomy in Nursing. Ishikawa Journal of Nursing 3(2), 1-6.

Lin, S., and Liang, M., (2113): Effect of multidisciplinary intervention in communication and collaboration among physicians and nurses American Journal of Critical Care. 14(1):31-33.

Lindh Falk, A., 2016. Interprofessional collaboration in health care: Education and practice (Doctoral dissertation, Linköping University Electronic Press**.**

Longo, J. (2010). Combating disruptive behaviors: Strategies to promote a healthy work environment. *The Online Journal of Issues in Nursing*, *15*(1).

Lotfi, M.; Zamanzadeh, V.; Valizadeh, L.; Khajehgoodari, M. Assessment of nurse-patient communication and patient satisfaction from nursing care. Nurs. Open 2019, 6, 1189–1196.

Luker, K.A.; Austin, L.; Caress, A.; Hallet, C.E. The importance od "Knowing the patient nurses" construction of quality in providing palliative care. JAN 2000, 31, 775–782.

-M-

Mac Donell R, Woods O, O'Shaughnessy A. COPD Collaborative 2018/19 Final Report.

Mackay L (2010). Conflicts in care: medicine and nursing. London: Chapman, Hall Company. pp. 74–90.

Maghsoudi T, Cascon-Pereira R, Beatriz Hernández Lara A. The Role of Collaborative Healthcare in Improving Social Sustainability: A Conceptual Framework. Sustainability. 2020 Jan;12(8):3195.

Mahboube L, Talebi E, Porouhan P, Orak RJ, Farahani MA. Comparing the attitude of doctors and nurses toward factor of collaborative relationships. Journal of family medicine and primary care. 2019 Oct;8(10):3263.

Mahboube L, Talebi E, Porouhan P, Orak RJ, Farahani MA. Comparing the attitude of doctors and nurses toward factor of Makary MA, Daniel M. Medical error—the third leading cause of death in the US. BMJ. 2016;353:i2139. http://www.bmj.com/content/353/bmj.i2139.long. Accessed June 8, 2016.

Malaquin-Pavan, É. Is nursing care an intrusion? Soins 2015, 794, 21.

Masson, V. (2007). Nurses and doctors as healers. *Nursing outlook*, *33*(2), 70-73.

Matthys E, Remmen R, Van Bogaert P. An overview of systematic reviews on the collaboration between physicians and nurses and the impact on patient outcomes: what can we learn in primary care?. BMC family practice. 2017 Dec;18(1):1-22.

McInnes, S., Peters, K., Bonney, A., & Halcomb, E. (2015). An integrative review of facilitators and barriers influencing collaboration and teamwork between general practitioners and nurses working in general practice. *Journal of advanced nursing*, *71*(9), 1973-1985.

Meadow, S.L. Defining the doula's role: Fostering relational autonomy. Health Expect 2015, 18, 3057–3068.

Melkamu E, Woldemariam S, Haftu A. Inter-professional collaboration of nurses and midwives with physicians and associated factors in Jimma University specialized teaching hospital, Jimma, south West Ethiopia, 2019: cross sectional study. BMC nursing. 2020 Dec;19:1-9.

Mikanowicz, C. K., & Gmeiner, A. (2014). Communication strategies.
Miller, P. A. (2001). Nurse-physician collaboration in an intensive care unit. *American Journal of Critical Care*, *10*(5), 341.

Missi, P. D. (2016). Enhancing nurse-physician communication and collaboration.

Mitchell, R.; Parker, V.; Giles, M.; White, N. Review: Toward realizing the potential of diversity in composition of interprofessional health care teams: an examination of the cognitive and psychosocial dynamics of interprofessional collaboration. Med. Care Res. Rev. 2010, 67, 3–26.

Moreno, A. P., Gallardo, P. S., Arnedo, C. F., Molina, L. S., de la Puerta Calatayud, M. L., Martín, A. B., ... & de Pedro Gómez, J. (2013). Influence of socio-demographic, labour and professional factors on

nursing perception concerning practice environment in Primary Health Care. *Atencion primaria*, *45*(9), 476-485.

-N-

Nadine van der Lee, 2015, An examination of the historical context of interprofessional collaboration in Dutch obstetrical care .

Nagarajan R, Kalinka AT, Hogan WR. Evidence of community structure in biomedical research grant collaborations. J Biomed Inform. 2013;46(1):40–46.

Nelson, G. A., King, M. L., & Brodine, S. (2008). Nurse-physician collaboration on medical-surgical units. *Medsurg Nursing*, *17*(1), 35.
Nunes, S.R.; Rego, G.; Nunes, R. Right or duty of information: A Habermasian perspective. Nurs. Ethics 2016, 23, 36–47.

-O-

O.Brien, L. Hiroz, J. Cook, A. & Mildon, B. 2005. Nurse-Physician Relationships: Solutions and Recommendation for Change. Canada.

O'Daniel, M., & Rosenstein, A. H. (2008). Professional communication and team collaboration. *Patient safety and quality: An evidence-based handbook for nurses*.

Olatunji SO and Mokuolu BO (2014): The influence of sex, marital status, and tenure of service on job stress, and job satisfaction of health workers in a Nigerian federal health institution. African Research Review; 8(1:(126- 33).

Olatunji, S. O., & Mokuolu, B. O. (2014). The influence of sex, marital status, and tenure of service on job stress, and job satisfaction of Oudshoorn, A.;Ward-Griffin, C.; McWilliam, C. Client-nurse relationship in home-abased palliative care: A critical analysis of power relations. J. Clin. Nurs. 2007, 16, 1435–1443.

-P-

Pakpour V, Ghafourifard M, Salimi S. Iranian nurses' attitudes toward nurse-physician collaboration and its relationship with job satisfaction. Journal of caring sciences. 2019 Jun;8(2):111.

Papathanassoglou, E. D., Karanikola, M. N., Kalafati, M., Giannakopoulou, M., Lemonidou, C., & Albarran, J. W. (2012).

Professional autonomy, collaboration with physicians, and moral distress among European intensive care nurses. *American Journal of Critical Care*, *21*(2), e41-e52.

Park JH, Lee EN. Nurses' safety in the hospital environment: evolutionary concept analysis. Journal of Korean Academy of Nursing Administration. 2016 Sep 1;22(4):406-14.

Patel, V.L.; Cytryn, K.N.; Shortlie, E.H.; Safran, C. The Collaborative Health Care Team: The Role of Individual and Group Expertise. Teach. Learn. Med. 2000, 12, 117–132.

Peleman1,2، Rik Verhaeghe1,2, Bart Cambré4, and Dirk Vogelaers1,2. Job Satisfaction in Relation to Communication in Health Care Among Nurses: A Narrative Review and Practical Recommendations.

Perry, V., Christiansen, M., & Simmons, A. (2016). A daily goals tool to facilitate indirect nurse-physician communication during morning rounds on a medicalsurgical unit. MEDSURG Nursing, 25(2), 83-87.

Peter Vermeir1,2, Sophie Degroote1, Dominique Vandijck1,2,3، An Mariman1,2, Myriam Deveugele2, Renaat

Phillips, G. Nurses are best placed to ensure the ethical application of DNRs. Nurs. Etand 2016, 30, 31.

Price, B. Countering the stereotype of the unpopular patient. Nurs. Older People 2013, 25, 27–34.

Pullon, S. 2008. Competence, Respect and Trust: Key Features of Successful Interprofessional Nurse-Doctor Relationships. Journal of Interprofessional Care 22(2), 133-147.

-R-

Rankin J, Mcguire C, Matthews L, Russell M, Ray D. On behalf of the leading better Care research. Facilitators and barriers to the increased supervisory role of senior charge nurses: a qualitative study. J Nurs Manag. 2016;24(3:(366–75.)

Reeves S, Pelone F, Harrison R, Goldman J, Zwarenstein M. Interprofessional collaboration to improve professional practice and healthcare outcomes. Cochrane Database of Systematic Reviews. 2017(6).

Reeves, S., Lewin, S., Espin, S., & Zwarenstein, M. (2011). *Interprofessional teamwork for health and social care* (Vol. 8). John Wiley & Sons.

Resnick JC. Increasing opportunity through interdisciplinary research: climbing down and shattering a tower of babel. Front Psychiatry. 2011;2:20.

Robinson, L., Segal, J., & Segal, R. (2014). Effective communication: Improving communication skills in business and relationships. *Retrieved February*, *20*, 2014.

Rodger S, Hoffman SJ, World Health Organization Study Group on Interprofessional Educational and Collaborative Practice. Where in the world is interprofessional education? A global environmental scan. J Interprof Care. 2010;24(5):479–491.

Roseline, I., & Clement, A. (2006). Questionnaire on nurses and doctors in University Teaching Hospitals in Southern Western Nigeria. *BMC Nursing*, *5*(2).

Rosenstein, A. H. (2002). Nurse-physician relationships: impact on nurse satisfaction and retention. *The American journal of nursing*, 26-34.

-S-

Sasso, L., Bagnasco, A., Catania, G., Zanini, M., Aleo, G., Watson, R., & RN4CAST@ IT Working Group. (2019). Push and pull factors of nurses' intention to leave. *Journal of Nursing Management*, *27*(5), 946-954.

Schacter, Daniel (2011). Psychology. Worth Publishers.

Schmalenberg, C., & Kramer, M. (2009). Nurse-physician relationships in hospitals: 20 000 nurses tell their story. *Critical Care Nurse*, *29*(1), 74-83.

Schmitz C, Atzeni G, Berchtold P. Challenges in interprofessionalism in Swiss health care: The practice of successful interprofessional collaboration as experienced by professionals. Swiss Medical Weekly. 2017;147:w14525.

Schneider, D. Informal Interactions, Gender, and Hierarchy: Barriers to Nurse-Physician Collaboration in a West Coast Hospital.

Semachew A, Belachew T, Tesfaye T, Adinew YM. Predictors of job satisfaction among nurses working in Ethiopian public hospitals, 2014: institution-based cross-sectional study. Human resources for health. 2017 Dec;15(1):1-8.

Setiadi AP, Wibowo Y, Herawati F, Irawati S, Setiawan E, Presley B, Zaidi MA, Sunderland B. Factors contributing to interprofessional collaboration in Indonesian health centres: A focus group study. Journal of Interprofessional Education & Practice. 2017 Sep 1;8:69-74.

Sharifiyana, M., & Zohari, S. (2016). Evaluation of participation in clinical decision making by staff nurses in selected hospitals of Shahid Beheshti University of medical sciences. Journal of Urmia Nursing and Midwifery Faculty, 13(11), 928–934.

Shirey MR. Leadership practices for healthy work environments. Nurs Manag. 2017;4:9–15.

Siedlecki, S., Hixson, E., (August 31, 2015) "Relationships Between Nurses and Physicians Matter" *OJIN: The Online Journal of Issues in Nursing* Vol. 20 No. 3.

Siedlecki, S., Hixson, E., (August 31, 2015) "Relationships Between Nurses and Physicians Matter" OJIN: The Online Journal of Issues in Nursing Vol. 20 No. 3.

Sirota, T. 2007. Nurse/Physician Relationships: Improving or Not? Issues in Nursing 37(1), 52-56.

Smith, M.; Saunders, R.; Stuckhardt, L.; Mcginnis, J.M.; Care, H. Best Care at Lower Costo: The Path to Continuously Learning; National Academies Press: Washington, DC, USA. p. 436.

Sollami, A., Caricati, L., & Sarli, L. (2015). Nurse–physician collaboration: A meta-analytical investigation of survey scores. *Journal of interprofessional care*, *29*(3), 223-229.

Sterchi, L. S. (2007). Perceptions that affect physician-nurse collaboration in the perioperative setting. *AORN journal*, *86*(1), 45-57.

Storch, J.L. & Kenny, N. 2007. Shared Moral work of Nurses and Physicians. Nursing Ethics 14 (4), 478-491.

Suliman, M., Aljezawi, M., Albashtawy, M., Fitzpatrick, J., Aloush, S., & Al-Awamreh, K. (2016). Exploring Safety Culture in Jordanian Hospitals. Journal of Nursing Care Quality, 32(3), 1–7.

Summary E. Collaboration in Practice : Implementing Team-Based Care. Am Coll Obstet Gynecol. 2016;127(3):612–7.

-T-

Tabak, N. & Koprak, O. 2007. Relationship between how Nurses resolve their Conflicts with Doctors, their Stress and Job Satisfaction. Journal of Nursing Management 15, 321-331.

The Oxford English Dictionary. 2010. Available: http://www.dictionary.oed.com Accessed 3 July 2010.)

Thomson, S. (2007). Nurse-physician collaboration: a comparison of the attitudes of nurses and physicians in the medical-surgical patient care setting. *Medsurg Nursing*, *16*(2).

Topcu I, Türkmen AS, Sahiner NC, Savaser S, Sen H. Physicians' and nurses' medical errors associated with communication failures. J Pak Med Assoc. 2017 Apr 1;67(4):600-4.

Truglio-Londrigan, M. The Patient Experience with Shared Decision Making: A Qualitative Descriptive Study. J. Infus. Nurs. 2015, 38, 407–418.

-U-

Udod SA, Cummings G, Care WD, Jenkins M. Impact of role stressors on the health of nurse managers. JONA J Nurs Adm. 2017;47(3):159–64. Available from: http://insights.ovid.com/crossref?an=00005110-201703000-00007. https://doi.org/10.1097/NNA.0000000000000459.

United Nations. The Millennium Development Goals Report 2014. New York, NY: United Nations; 2014.

-V-

Valiee S, Peyrovi H, Nikbakht Nasrabadi A. Critical care nurses' perception of nursing error and its causes: A qualitative study. Contemporary Nurse. 2014;46(2):206–213.

Vatn L, Dahl BM. Interprofessional collaboration between nurses and doctors for treating patients in surgical wards. Journal of Interprofessional Care. 2021 May 15:1-9.

Vuong, Q.H.; Vuong, T.T.; Ho, T.M.; Nguyen, H.V. Psychological and socio-economic factors affecting social sustainability through impacts on perceived health care quality and public health: The case of Vietnam. Sustainability 2017, 9, 1456.

-W-

Wang Y, Liu YF, Li H, Li T. Attitudes toward physician-nurse collaboration in pediatric workers and undergraduate medical/nursing students. Behavioral Neurology. 2015 Jan 1;2015.

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.

Weiss J, Hughes J. Want collaboration? Accept—and actively manage—conflict. Harv Bus Rev. 2005;83(3:(92–101, 49.

Weller, J. M., Barrow, M., & Gasquoine, S. (2011). Interprofessional collaboration among junior doctors and nurses in the hospital setting. *Medical education*, *45*(5), 478-487.

Wood, D.J.; Gray, B. Toward a Comprehensive Theory of Collaboration. J. Appl. Behav. Sci. 1991, 27, 139–162. p. 146.

World Health Organization, 1988, 2010

World Health Organization, Framework for Action on Interprofessional Education and Collaborative Practice; 2010: 9, figure 1.

World Health Organization. Framework for action on interprofessional education and collaborative practice. Geneva: World Health Organization؛ 2010.

World Health Organization: Classifying health workers. Source: Adapted from International Labour Organization, International Standard Classification of Occupations: ISCO-08 www.ilo.org/public/english/bureau/stat/isco/isco08/index.htm

-Y-

Yatasa YN, Cherie A (2011). Perception of nurses and physicians towards barriers to nurse-physician communication and its impact on patientstsand ethical Hawassa Referral and Teaching Hospital, SNNPRS, Ethiopia. E-Library Addis Ababa University.

-Z-

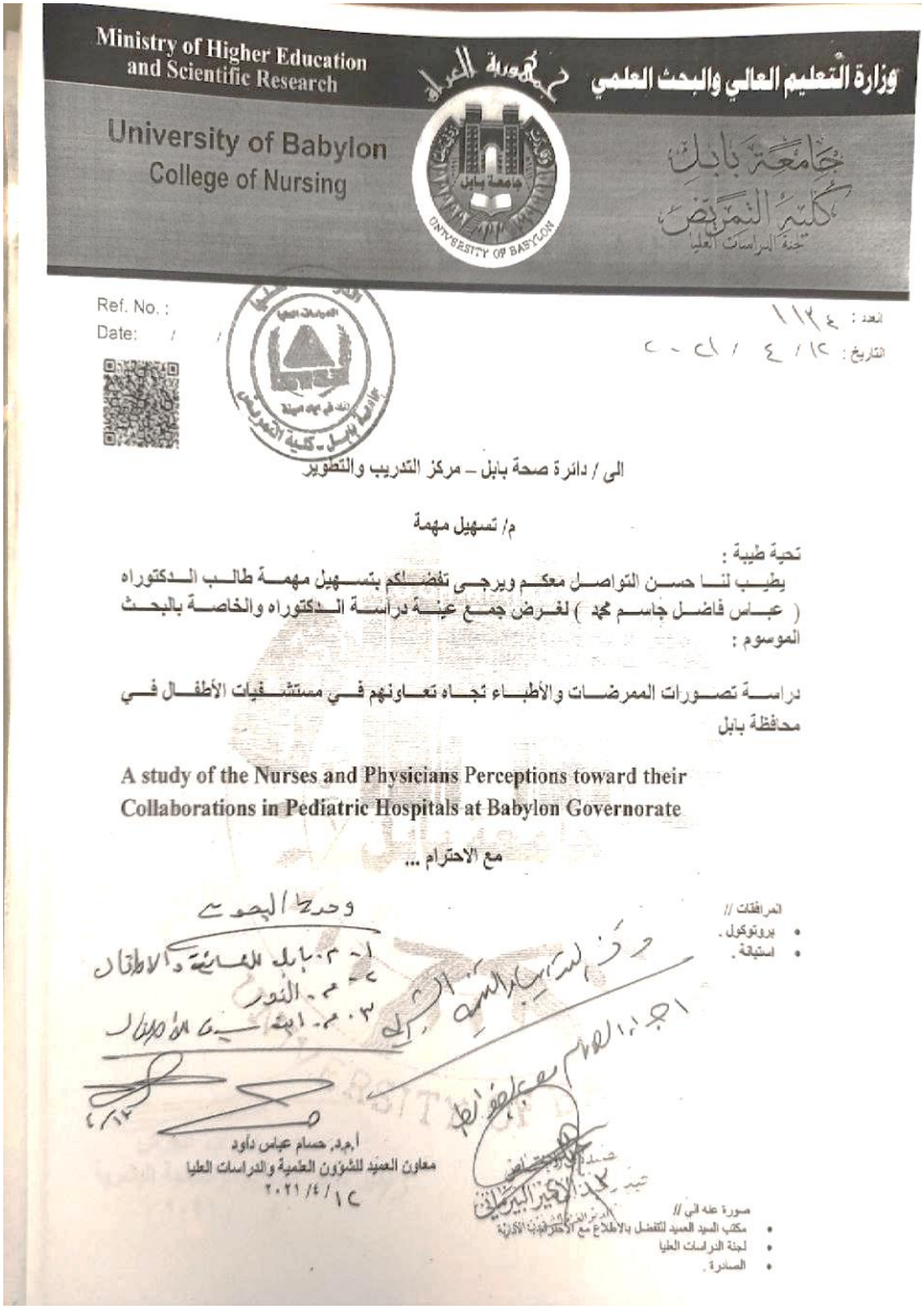
Zakerimoghadam, M., Ghiyasvandian, S., & Leili, A. K. (2015). Nurse–physician collaboration: The attitudes of baccalaureate nursing students at Tehran University of Medical Sciences. *Iranian Red Crescent Medical Journal*, *17*(4).

Zhang L, Huang L, Liu M, Yan H, Li X. Nurse–physician collaboration impacts job satisfaction and turnover among nurses: A hospital-based cross-sectional study in Beijing. International journal of nursing practice. 2016 Jun; 22(3): 284-90.

Zheng, R. M., Sim, Y. F., & Koh, G. C. H. (2016). Attitudes towards interprofessional collaboration among primary care physicians and nurses in Singapore. *Journal of interprofessional care*, *30*(4), 505-511.

Appendices

Appendix 1



Ministry of Higher Education and Scientific Research

وزارة التعليم العالي والبحث العلمي

University of Babylon
College of Nursing

جامعة بابل
كلية التمريض
لجنة الدراسات العليا

Ref. No. :
Date: /

العدد : ٤ / ١١٢
التاريخ : ١٤ / ٤ / ٢٠٢١

الى / دائرة صحة بابل – مركز التدريب والتطوير

م/ تسهيل مهمة

تحية طيبة :

يطيب لنا حسن التواصل معكم ويرجى تفضلكم بتسهيل مهمة طالب الدكتوراه (عباس فاضل جاسم محمد) لغرض جمع عينة دراسة الدكتوراه والخاصة بالبحث الموسوم :

دراسة تصورات الممرضات والأطباء تجاه تعاونهم في مستشفيات الأطفال في محافظة بابل

A study of the Nurses and Physicians Perceptions toward their Collaborations in Pediatric Hospitals at Babylon Governorate

مع الاحترام ...

وحدة البحوث

أ.م.د. حسام عباس داود
معاون العميد للشؤون العلمية والدراسات العليا
١٤ / ٤ / ٢٠٢١

المرافقات //
- بروتوكول .
- استبانة .

صورة عنه الى //
- مكتب السيد العميد للتفضل بالاطلاع مع الاحترام
- لجنة الدراسات العليا
- الصادرة .

Appendix 2,3

جمهورية العراق

Ministry Of Health Babylon Health Directorate Email:- Babel_Healthmoh@yahoo.com Tel:282628 or 282621		وزارة الصحة والبيئة دائرة صحة محافظة بابـــل المديـــر العـــام مركـــز التدريب والتنمية البشرية وحدة أدارة البحوث العدد : ٢٦٦ التاريخ: ١٢/ ٤/ ٢٠٢١

إلى / مستشفى بابل للنسائية والأطفال
مستشفى النور للأطفال
مستشفى ابن سيف للأطفال

وزارة الصحة
دائرة صحة بابل
مركز التدريب والتنمية البشرية

وزارة الصحة
دائرة صحة بابل
مركز التدريب والتنمية البشرية

/ تسهيل مهمة

تحية طيبة ...

أشارة إلى كتاب جامعة بابل / كلية التمريض / لجنة الدراسات العليا ذي العدد ١١٣٤ في ٢٠٢١/٤/١٢

نرفق لكم ربطا استمارات الموافقة المبدئية لمشروع البحث العائد للباحث طالب الدراسات العليا الدكتوراه (عباس فاضل جاسم محمد) .

للتفضل بالاطلاع وتسهيل مهمة الموما أليها من خلال توقيع وختم استمارات اجراء البحث المرفقة في مؤسساتكم وحسب الضوابط والإمكانات لاستحصال الموافقة المبدئية ليتسنى لنا أجراء اللازم على أن لا تتحمل مؤسساتكم أية تبعات مادية وقانونية .... مع الاحترام

المرفقات :
استمارة عدد /٢

الدكتور
محمد عبدالله عجرش
مدير مركز التدريب والتنمية البشرية
/ /٢٠٢١

Appendix 4

Questionnaire

Part I: Demographical Characteristics of Study Sample

1- Gender

Male ☐ Female ☐

2- Age …… years

3- Residency

Urban ☐ Rural ☐

4- Profession

Physician ☐ Nurse ☐

5- Years of working in hospital

Less than one year ☐ 1- 5 years ☐ 6- 10 years ☐

11- 15 year ☐ more than 15 year ☐

6- Place of working

Emergency ☐ Wards ☐ Operating room ☐ Intensive ☐ care unit

7- The job title of the physician

Rotator ☐ Permanent ☐ Specialist ☐ Consultant ☐

8- The job title of the nurse

Practical Nurse ☐ Technician Nurse ☐ Academic Nurse ☐

Specialist Academic Nurse ☐

Part II: Perceptions of the nurse–physician regarding their relationship

First aspect: Perceptions of the nurse–physician regarding their relationship as general

Items	Always	Sometime	Never
1- The relationship between nurse and physician is a superior or subordinate in nature			
2- The relationship between nurse and resident doctor is better than specialist physician?			
3- Respect a nurse for a doctor at work is based on a fear?			
4- Does the doctor intend to take an approach with nurses at the work that undermines their self-confidence?			
5- The physician ignores valuable suggestions offered by nurses			
6- The nurse exposure for a persecuted by the doctor through the work?			
7- Physician's behavior with nurse is negatively influencing patient's respect to nurse			
8- Increase in the number of male nurses contributes to strengthening the relationship between nurses and doctors			
9- There is discussion between nurse and physician about a health care?			
10- Not understanding between nurse's and physician's leads to bad relationship among them?			
11- The relationship between nurse and physician affects their job satisfaction			
12- Physician is keen to read nurse's note in patient record?			
13- Physician negligence of nurse's notes causes a lot of mistakes?			
14- Nurse negligence of physicians notes causes a lot of mistakes?			
15- Nurse always deals with physician formally?			
16- There is human relationship between nurse and physician?			
17- The nurse–physician relationship is characterized by cooperation?			
18- The nurse–physician relationship is an excellent one			

Second aspect: Perception of nurses and physicians regarding the effect of work stress on their relationship

Items	Always	Sometime	Never
1- Patient care is a shared responsibility between nurses and physicians?			
2- Nurses tolerate physicians during high workload			
3- Physicians tolerate nurses during high workload			
4- Nurses' workload has negative effect on their relationship with physicians			
5- Nurses react negatively to physicians during high workload			
6- During work overload, physician tolerates low nurses' performance			

Third aspect: Perceptions of nurses and physician regarding the effect of job performance on their relationship

Items	Always	Sometime	Never
1- The quality of nurse's performance level affects their relationship with physician			
2- Physician's level of performance influences the relationship with nurse			
3- Nurses' shortage lowers their performance level and negatively influences their relation with the physician			
4- Most nurses perform their job effectively			
5- Physicians trust nurse's performance			
6- Nurses always work to comfort and protect patient			

Fourth aspect: Perceptions of nurses and physician regarding the influence of administrative policies and norms on their relationship

Items	Always	Sometime	Never
1- Nurse's role is vague and not clear			
2- There is no equity in accountability between a nurse and a doctor by their administration personnel?			
3- Nurse is obligated to share with the physician in arranging his administrative affairs?			
4- Nurse's complaint against physician is ignored by the administration?			
5- Physician and nurse's work are overlapped			
6- The nurse performs the primary responsibility of performing nursing care and not acting on behalf of the physician in the performance of his duty			

7- Lack of nurse's Job description leads to nurse–physician problems?			
8- Physician has right to evaluate nurse's performance			
9- Physician is blamed privately by their seniors when they commit any mistakes?			
10- Nurse is insulted strongly and publicly			
11- Physician control over nurse creates problems between them			
12- Administration believes that physician is always right			
13- Nurse can express their objection about the malpractice of physicians			
14- The nurse is always a victim of physician mistake or negligence			

Fifth aspect: Perceptions of physicians and nurses about the nurse's role and its effect on their relationship

Items	**Always**	**Sometime**	**Never**
1- Physician respects and understands nurse's role			
2- Nurses are keen to protect and preserve the rights of the patient?			
3- Nurse's role is not less important than the physician's role			
4- Nurse can provide valuable information about patient condition for physician?			
5- Nurse can make decisions about patient nursing care independently?			
6- Nurse's role is doing paper work and accompanying patient outward			
7- Nurse's role during the physician round is limited to holding patient's file and implementing physician orders			
8- Nurse's role is limited to implementing physician instructions, as recorded in the patient file?			
9- Health education for patient and his family is a component of nurse's role?			
10- Nurse respects and maintains patient privacy			
11- The nurses try to solve the patient's health and social problems as much as possible?			
12- Nurses identify abnormal patient's symptoms and inform physician			
13- Nurse observes the patient for medication's side effects, provides emergency care rapidly and then informs physician?			
14- Nurse's role includes preparing emergency equipment and medication?			

15- Physician believes his role is the most important one in the health team?			
16- Nurse's role includes teaching new nurses in the unit and observes their performance			
17- The most important component of the nurse's role is providing direct nursing patient care			

المقياس النسخة العربية

تصورات الممرضين – الاطباء فيما يتعلق بعلاقتهما

السؤال	دائما	بعض الاحيان	ابدا
١- العلاقة بين الممرض/ة والطبيب/ة في طبيعتها هي علاقة بين الموظف ورئيسه؟			
٢- العلاقة بين الممرض/ة والطبيب/ة المقيم أفضل من العلاقة مع الطبيب الاختصاص؟			
٣- احترام الممرض للطبيب اثناء العمل مبني على الخوف؟			
٤- يتعمد الطبيب اتباع نهج مع الممرضين اثناء العمل ينطوي على اضعاف ثقتهم بأنفسهم؟			
٥- يتجاهل الطبيب الاقتراحات القيمة التي تقدمها الممرضات؟			
٦- يتعرض الممرض الى الاضطهاد من قبل الطبيب اثناء العمل؟			
٧- يؤثر سلوك الطبيب مع الممرض/ة سلبًا على احترام المريض للممرض/ة			
٨- الزيادة في عدد الممرضين الذكور تساهم في تقوية العلاقة بين الممرضين والأطباء؟			
٩- هناك نقاش بين الممرض/ة والطبيب حول الرعاية الصحية؟			
١٠- عدم التفاهم بين الممرض/ة والطبيب يؤدي إلى علاقة سيئة بينهما			
١١- تؤثر العلاقة بين الممرضة والطبيب على رضاهم الوظيفي؟			
١٢- يحرص الطبيب على قراءة ملاحظة الممرضة في سجل المريض؟			
١٣- إهمال الطبيب لملاحظات الممرضة يسبب الكثير من الأخطاء؟			
١٤- إهمال الممرض لملاحظات الطبيب يسبب الكثير من الأخطاء؟			

١٥- الممرض/ة دائما ما يتعامل مع الطبيب بطريقة رسمية			
١٦- هناك علاقة إنسانية بين الممرضة والطبيب؟			
١٧- تتميز العلاقة بين الممرضة والطبيب بالتعاون؟			
١٨- العلاقة بين الممرضة والطبيب هي علاقة ممتازة			

تصورات الممرضين والأطباء فيما يتعلق بتأثير ضغوط العمل على علاقتهم

السؤال	دائما	بعض الاحيان	ابدا
١- رعاية المرضى هي مسؤولية مشتركة بين الممرضات والأطباء			
٢- الممرضات يتحملون الأطباء أثناء ما يكون عبء العمل الثقيل؟			
٣- عبء عمل الممرضات له تأثير سلبي على علاقتهم بالأطباء			
٤- يتفاعل الممرضين بشكل سلبي مع الأطباء أثناء عبء العمل الكبير			
٥- أثناء حمل العمل الزائد ، يتحمل الطبيب أداء الممرضات المنخفض؟			

تصورات الممرضين والاطباء فيما يتعلق بتأثير الأداء الوظيفي على علاقتهم

السؤال	دائما	بعض الاحيان	ابدا
١- تؤثر جودة أداء الممرض/ة على علاقته بالطبيب؟			
٢- يؤثر مستوى أداء الطبيب على علاقته بالممرض؟			
٣- نقص الممرضين يقلل من مستوى أدائهم ويؤثر سلبًا على علاقتهم بالطبيب			
٤- يؤدي معظم الممرضين واجبهم بشكل فعال			
٥- يثق الأطباء في أداء الممرضين			
٦- يعمل الممرضين دائمًا على راحة المريض وحمايته			

تصورات الممرضين والاطباء فيما يتعلق بتأثير السياسات والمعايير الإدارية على علاقتهم

السؤال	دائما	بعض الاحيان	ابدا
١- دور الممرضين غامض وغير واضح			
٢- لا يوجد إنصاف في المساءلة بين الممرضة والطبيب من قبل ادارتهم؟			
٣- الممرض/ة ملزم بالمشاركة مع الطبيب في ترتيب شؤونه الإدارية؟			
٤- تتجاهل الإدارة شكوى الممرضة ضد الطبيب؟			
٥- عمل الطبيب والممرضة متداخلان			
٦- يؤدي الممرض مسؤوليته الرئيسية هي أداء الرعاية التمريضية وعدم النيابة عن الطبيب في اداء واجبه			

٧- عدم وجود التوصيف الوظيفي للممرضين يؤدي إلى مشاكل بين الطبيب والممرض			
٨- للطبيب الحق في تقييم أداء الممرضين			
٩- يتم إلقاء اللوم على الطبيب بشكل خاص من قبل المختصين عندما يرتكب أي خطأ			
١٠- الممرض معرض للاضطهاد والتنكيل بصورة علنية			
١١- سيطرة الاطباء على الممرضين تخلق مشاكل بينهما			
١٢- تعتقد الإدارة أن الطبيب دائمًا على حق			
١٣- يمكن للممرضين التعبير عن اعتراضهم على سوء تصرف الأطباء؟			
١٤- الممرضين دائما يكونون ضحية لخطأ الطبيب أو إهماله			

تصورات الأطباء والممرضين حول دور الممرضين وتأثيره على علاقتهم

السؤال	دائما	بعض الاحيان	ابدا
١- الطبيب ويفهم دور الممرضين ويحترم ذلك؟			
٢- يحرص الممرضين على حماية حقوق المريض والمحافظة عليها؟			
٣- دور الممرض لا يقل أهمية عن دور الطبيب؟			
٤- يمكن للممرض تقديم معلومات قيمة عن حالة المريض للطبيب			
٥- يمكن للممرض اتخاذ قرارات بشأن رعاية المرضى بشكل مستقل			
٦- يمكن للممرض اتخاذ قرارات بشأن رعاية المرضى بشكل مستقل؟			
٧- يقتصر دور الممرضين أثناء جولة الطبيب على الاحتفاظ بملف المريض وتنفيذ أوامر الطبيب؟			
٨- يقتصر دور الممرضة على تنفيذ تعليمات الطبيب كما هو مسجل في ملف المريض؟			
٩- التثقيف الصحي للمريض وعائلته هو جزء من دور الممرض			
١٠- الممرض يحترم ويحافظ على خصوصية المريض؟			
١١- يحاول الممرضين حل مشاكل المريض الصحية والاجتماعية بقدر الإمكان؟			
١٢- يقوم الممرضات بتحديد الأعراض غير الطبيعية للمريض وإبلاغ الطبيب			
١٣- يراقب الممرض المريض لمعرفة الآثار الجانبية للأدوية ، ويقدم رعاية الطارئة بسرعة ثم يخبر الطبيب بذلك			
١٤- يشمل دور الممرض إعداد معدات الطوارئ الرئيسية والأدوية			
١٥- يعتقد الطبيب أن دوره هو الأهم في الفريق الصحي؟			
١٦- يشمل دور الممرض تعليم الممرضين الجدد في الوحدة ومراقبة أدائهم؟			
١٧- يتمثل أهم عنصر في دور الممرضين في تقديم رعاية مباشرة للمرضى؟			

Appendix 5

University of Babylon
College of Nursing
Research Ethics Committee

جـامـعة بـابـل
كـلـية التمريـض
لجنة اخلاقيات البحث العلمي

Issue No: 52
Date: 6 /04 /2021

Approval Letter

To,
Abbas Fadhil Jassim

The Research Ethics committee at the **University of Babylon, College of Nursing** has reviewed and discussed your application to conduct the research study entitled " **A Study of the Nurses and Physicians Perception toward their Collaboration in Pediatric Hospitals at Babylon Governorate.**"

The Following documents have been reviewed and approved:

1. Research protocol
2. Research instrument/s
3. Participant informed consent

Committee Decision.

The committee approves the study to be conducted in the presented form. The Research Ethics committee expects to be informed about any changes occurring during the study, any revision in the protocol and participant informed consent.

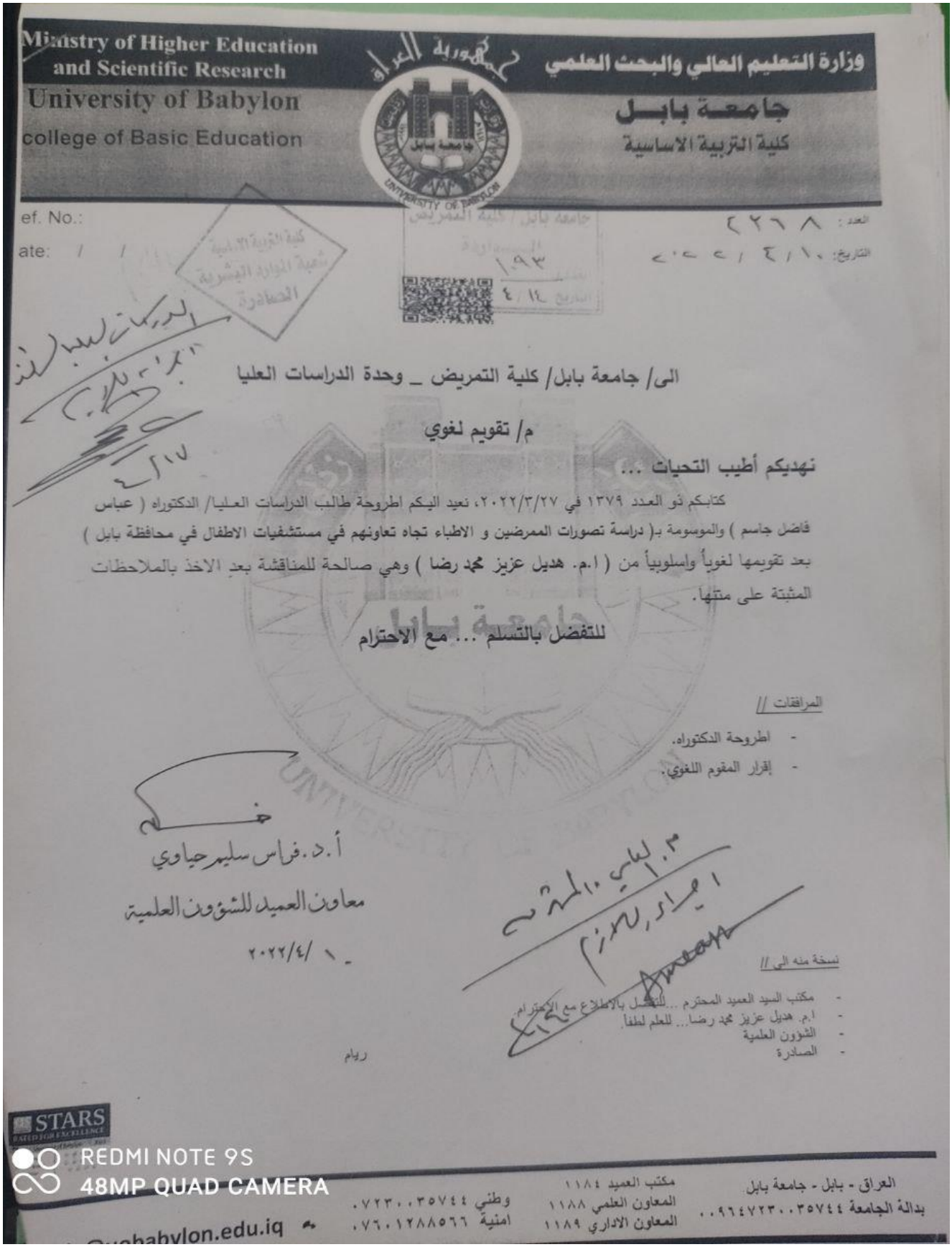
Prof. Dr. Salma K. Jehad
Chair Committee
College of Nursing
Research Ethical Committee
5 / 4 /2021

Appendix 6

قائمة الخبراء

الاسم	الشهادة	مكان العمل	سنوات الخدمة
عفيفة رضا عزيز	دكتوراه تمريض الاطفال/استاذ	جامعة بغداد /كلية التمريض	٤٠ سنة
عبد المهدي عبد الرضا حسن	دكتوراه تمريض الصحة النفسية والعقلية/ استاذ	جامعة بابل / كلية التمريض	٣٩ سنة
امين عجيل الياسري	دكتوراه تمريض صحة المجتمع/ استاذ	جامعة بابل / كلية التمريض	٣٥ سنة
نهاد محمد قاسم	دكتوراه تمريض الاطفال/ استاذ مساعد	جامعة بابل/ كلية التمريض	٣٥ سنة
راجحة عبد الحسن حمزة	دكتوراه تمريض البالغين استاذ	جامعة الكوفة / كلية التمريض	٣٨ سنة
عدنان حنظل طارش	دكتوراه طب الاطفال/ استاذ	جامعة بابل /كلية الطب	٢٣سنة
وسام جبار قاسم	دكتوراه تمريض صحة المجتمع/استاذ	جامعة بغداد /كلية التمريض	٢٧ سنة
حيدر حمزه الحدراوي	دكتوراه تمريض الصحة النفسية والعقلية/ استاذ مساعد	جامعة الكوفة / كلية التمريض	٢٢سنة
فاطمة وناس راضي	دكتوراه تمريض صحة المجتمع/استاذ	جامعة الكوفة / كلية التمريض	٣٠ سنه
منى عبد الوهاب خليل	دكتوراه تمريض صحة المجتمع/استاذ	جامعة البيان الاهلية /بغداد	٤٣سنة

Appendix 7



Ministry of Higher Education and Scientific Research
University of Babylon
college of Basic Education

وزارة التعليم العالي والبحث العلمي
جامعة بابل
كلية التربية الاساسية

ef. No.:
ate: / /

العدد: ٢٦٢٨
التاريخ: ٢٠٢٢/٤/١٠

١٩٣
٤/١٤

الى/ جامعة بابل/ كلية التمريض _ وحدة الدراسات العليا

م/ تقويم لغوي

نهديكم أطيب التحيات ...

كتابكم ذو العدد ١٣٧٩ في ٢٠٢٢/٣/٢٧، نعيد اليكم اطروحة طالب الدراسات العليا/ الدكتوراه (عباس فاضل جاسم) والموسومة بـ(دراسة تصورات الممرضين و الاطباء تجاه تعاونهم في مستشفيات الاطفال في محافظة بابل) بعد تقويمها لغوياً واسلوبياً من (ا.م. هديل عزيز محمد رضا) وهي صالحة للمناقشة بعد الاخذ بالملاحظات المثبتة على متنها.

للتفضل بالتسلم ... مع الاحترام

المرفقات //
- اطروحة الدكتوراه.
- إقرار المقوم اللغوي.

أ.د. فراس سليم حياوي
معاون العميد للشؤون العلمية
٢٠٢٢/٤/ ١٠

نسخة منه الى //
- مكتب السيد العميد المحترم ...للتفضل بالاطلاع مع الاحترام
- ا.م. هديل عزيز محمد رضا... للعلم لطفاً.
- الشؤون العلمية
- الصادرة

ريام

العراق - بابل - جامعة بابل
بدالة الجامعة ٠٠٩٦٤٧٢٣٠٠٣٥٧٤٤
مكتب العميد ١١٨٤
المعاون العلمي ١١٨٨
المعاون الاداري ١١٨٩
وطني ٠٧٢٣٠٠٣٥٧٤٤
امنية ٠٧٦٠١٢٨٨٥٦٦
uobabylon.edu.iq

الخلاصة

التعاون هو أحد أكثر الاستراتيجيات فعالية لأنظمة الرعاية الصحية لتعزيز المخرجات. يعزز التعاون أيضًا فعالية وكفاءة العناية الطبية ، وكذلك نتائج المرضى. بمعنى آخر ، يعد التعاون الفعال للفريق ضروريًا لمناقشة وفهم واجبات كل عضو في الفريق ومواهبه ومعرفته وثقته وأدواره عندما يتعلق الأمر بخيارات العلاج ونتائج المريض.

أهداف الدراسة هي تقييم آراء الممرضات والأطباء حول التعاون. لفحص الاختلافات في ادراك الممرضات والأطباء حول التعاون ؛ ودراسة الاختلافات في ادراك الممرضات والأطباء لسماتهم الاجتماعية والديموغرافية.

تم استخدام استراتيجية أخذ العينات غير الاحتمالية لاختيار عينة مناسبة من ٣٩٠ ممرضًا و ١٠٧ طبيبًا. وبحسب مديرية صحة بابل فقد توزعت هذه العينة على ثلاثة مستشفيات منها (مستشفى بابل للولادة والأطفال ومستشفى النور وابن سيف).

تم إنشاء موثوقية الاستبيان من خلال بحث تجريبي ، وتم منحه لاحقًا للخبراء للتحقق من صحته. احتوى الاستبيان على ما مجموعه ٦١ بندا. تنقسم هذه البنود إلى خمسة أقسام: ادراك العلاقة بين الممرض والطبيب ، وتأثير ضغوط العمل على علاقتهما ، وتأثير الأداء الوظيفي على علاقتهما ، وتأثير السياسات والأعراف الإدارية على علاقتهما .. تم فحص الاستجابات احصائيا باستخدام نهجين: تم استخدام التكرارات والنسب المئوية ومتوسط الدرجات والانحراف المعياري في تحليل البيانات الإحصائية الوصفية ، بينما تم استخدام اختبار t و ANOVA في تحليل البيانات الإحصائية الاستنتاجية.

وفقًا لنتائج الدراسة ، كان لدى ٨٣.٦٪ من الممرضين وجهة نظر محايدة ، بينما كان لدى ٧٥.٧٪ من الأطباء نظرة سلبية. تبين أن التعاون كان مختلفًا بين الممرضين(م = ٢.١٧٠.١٩٦) والأطباء (م = ١.٥٧٠.١٤٢٣). هناك تفاوتات ذات دلالة إحصائية في كيفية إدراك الممرضين لسنوات خبرتهم ، وموقع العمل ، والمسمى الوظيفي. بالإضافة إلى ذلك ، هناك اختلافات ذات دلالة إحصائية في ادراك الأطباء للمسميات الوظيفية.(P0.05)

استنتجت الدراسة أن الممرضين أكثر تعاونًا من الأطباء. أثرت سنوات الخبرة ومكان العمل والمسمى الوظيفي للممرضات على أحكامهم ؛ أثر المسمى الوظيفي للأطباء على ادراكهم. وأوصى البحث بأن تنفذ إدارة المستشفى برامج لزيادة التواصل بين الممرضين والأطباء. من خلال هذه البرامج ، سيكتسب الممرضون والأطباء معرفة أفضل بوظائف بعضهم البعض وسيكونون قادرين على التعاون بشكل أكثر فعالية.

جمهورية العراق

وزارة التعليم العالي والبحث العلمي

جامعة بابل

كلية التمريض

ادراك الممرضين والأطباء اتجاه تعاونهم في مستشفيات الأطفال في محافظة بابل

أطروحة مقدمة إلى

مجلس كلية التمريض /جامعة بابل وهي جزء من متطلبات نيل درجة الدكتوراه فلسفة علوم في التمريض

تقدم بها

عباس فاضل جاسم

بإشراف

أ.د. خميس بندرعبيد

مارس / ٢٠٢٢ م

شعبان / ١٤٤٣ هـ