

Arab American University Faculty of Graduate Studies

Nurses' Perception on the Presence of Patients' Families during Cardiopulmonary Resuscitation (CPR) in Intensive Care Departments in Palestinian Hospitals, Mixed method study

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This thesis was submitted in partial fulfillment of the requirements for

the Master's degree in

Intensive Care Nursing

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Thesis Approval

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Declaration

This thesis was submitted in partial fulfillment of the requirement for Master's degree in Intensive Care Nursing

I declare that the content of this thesis (or any part of the same) has not been submitted for a

higher degree to any other university or institution.

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Dedication

"I want to thank Allah for helping me and send my prayers to the Prophet Muhammad. I dedicate this little achievement to my dear Palestine and to those who taught me generosity without expecting anything in return. Thanks to my strong and supportive parents who helped me in my studies until I reached this great accomplishment today, Also, a big thank you to those who celebrated with me and showed patience.

To the brave martyrs of Palestine, who resist injustice. To everyone who sacrificed for this holy land. And to all my colleagues, thank you for your support. I wouldn't have achieved this without your encouragement and help at every step."

Acknowledgment

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Finally, I'd like to express my heartfelt gratitude to everyone involved in this research, whether directly or indirectly. Your support was critical in shaping the trajectory and success of this thesis.

Abstract

Background: Resuscitation is a critical intervention to restore vital functions in emergencies like cardiac arrest using techniques from basic (CPR) to advanced measures like intubation and defibrillation. Prompt and effective treatment is essential for saving lives in these situations. This study focused on the Palestinian intensive care nurses' perceptions of family presence during (CPR).

Objective: The primary objective of this study is to assess the Perception of Palestinian intensive care nurses regarding the presence of patients' families during cardiopulmonary resuscitation (CPR).

Method: The study employed a mixed methods research design to examine nurses' perceptions of family presence during (CPR) in ICU in the northern of the West Bank. Utilizing a structured questionnaire and in-depth interviews, the study collected quantitative and qualitative data from a stratified random sample of 232 nurses, ensuring ethical considerations and robust validity and reliability measures.

Results: A study involving 232 participants analyzed the reliability and demographic data regarding family presence during (CPR). Key findings include 67.2% never inviting family members during CPR and 73.3% opposing protocols for family presence.

Conclusion: The study has highlighted the importance of addressing negative experiences like increased stress by implementing clear policies and supporting healthcare professionals.

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List of Abbreviations

Abbreviation	Description
AHA	American Heart Association
ANOVA	Analysis of variance
CCNAP	Cardiovascular Nursing and Allied Professions
CCU	Cardiac Care Unit
CPR	Cardiopulmonary Resuscitation
ECC	International Emergency Cardiovascular Care
	the European Federation of Critical Care Nursing
EFCCNA	Association
ENA	Emergency Nurses Association
ESPNIC	the European Society of Pediatric and Neonatal
	Intensive Care
FP	Family Presence
FPDR	Family Presence During Resuscitation
FPSC	Family Presence Self-Confidence scale
ICU	Intensive Care Unit
IHCA	In-hospital cardiac arrest
OHCA	out-of-hospital cardiac arrest
SPSS	Social Science Statistical Package

Chapter One Introduction

1. Introduction

1.1. Background

In the past, moments of birth and death used to take place in homes with the presence of family members. However, with the progression of life and advancements in healthcare, these natural phenomena now occur behind the walls of hospitals, away from families, especially during critical moments faced by patients such as cardiac arrest, which the occurrence of cardiopulmonary arrest is a highly distressing and crucial incident for both families and healthcare providers(Toy 2023).

Cardiovascular diseases remain a significant global health concern, affecting over 500 million people and resulting in approximately 20.5 million deaths in 2021. This represents nearly a third of all global deaths and marks a substantial increase from previous estimates. Alarmingly, about 80% of these deaths occur in low- and middle-income countries, highlighting a stark disparity in cardiovascular health outcomes. Progress in addressing cardiovascular diseases is predominantly seen in high-income countries, underscoring the urgent need to address this health inequity. (World-Heart Federation, 2023).

Resuscitation is a critical medical intervention aimed at saving lives in emergency situations where breathing has stopped, there is no pulse, or the individual is in shock. It involves restoring vital functions and preventing further harm through rapid and effective treatment. Basic life support techniques like CPR and oxygen administration are common, while more advanced measures such as intubation, defibrillation, and medication may also be necessary. Resuscitation is not limited to cardiac arrests but also applies to patients in shock, with severe trauma, or experiencing severe allergic reactions. Prompt and effective resuscitation can be life-saving in these scenarios. (Almli et al., 2014).

Sudden cardiac arrest (SCA) is a significant global health issue, contributing to a substantial proportion of deaths in Western countries, with out-of-hospital cardiac arrest (OHCA) and in-hospital cardiac arrest (IHCA) being the two main categories. IHCA refers to cardiac arrests that occur within hospital settings, primarily in patient wards, in the United States, IHCA is a frequent event, with an estimated annual incidence exceeding 290,000 cases(Wong, Brown et al. 2019). (Perkins, Nolan et al. 2021).

Perception differed about the presence of families during resuscitation. Some studies confirm that the matter is positive, while others see that their presence is negative. Research has indicated that the presence of family members during resuscitation efforts has a beneficial impact on the psychological well-being of family members. It has been associated with a reduced occurrence of posttraumatic stress disorder (PTSD) and a decrease in symptoms related to anxiety and depression following the witnessing of an out-of-hospital cardiac arrest (OHCA) (Considine, Eastwood et al. 2022). In the presence of family members, they are able to witness the exhaustive efforts made during resuscitation, providing them with reassurance that everything possible was done. Consequently, the family is more likely to perceive their role in supporting the patient during the transition from life to death, even if the patient does not survive. This experience has been demonstrated to facilitate the grieving process for the family (Vardanjani, Golitaleb et al. 2021).

There is a concern that allowing family presence during resuscitation may result in adverse outcomes for the individuals involved, as discussed in studies (Waldemar&Thylen, 2019).

One common objection is the potential for family members to experience excessive trauma when present during resuscitation efforts. There is also a concern that they may interfere with the process of resuscitation. Healthcare professionals may feel uneasy or uncomfortable when performing CPR while being observed by family members (Barreto et al., 2019). Overall, the topic of family presence during resuscitation remains a subject of controversy among numerous healthcare professionals, including intensive care nurses(Waldemar, Strömberg et al. 2023).

1.2. Problem Statement

In Palestinian hospital settings, the inclusion of patients' families during cardiopulmonary resuscitation (CPR) is a subject of substantial interest and debate among healthcare professionals(Waldemar, Strömberg et al. 2023). While existing evidence points towards potential benefits, such as emotional support for both families and patients, there are equally significant concerns, including potential distress to family members, possible interference with CPR procedures, heightened stress levels among CPR team members, dilemmas in discontinuing futile CPR efforts. legal ramifications. and potential Comparatively, in countries like the USA, Canada, Jordan, Spain, Turkey, and others, the practice of family presence during resuscitation has gained varying degrees of acceptance, driven by recognized benefits such as improved communication, enhanced coping mechanisms, and strengthened trust between healthcare professionals and families. However, in these settings, as well as in Palestine, there is an acknowledgement of potential physical threats to staff, underscoring the complexity of this issue (Gutysz-Wojnicka et al., 2018)

Notably, the perspectives of nurses, who play a pivotal role in patient care, CPR execution,

and decisions regarding family presence, have not been comprehensively explored in this context. Therefore, this research aims to address this crucial gap in knowledge by delving into the opinions and perspectives of nurses in Palestinian intensive care departments regarding the presence of patients' families during CPR.

Through an in-depth exploration of the factors influencing their views on this practice, this study seeks to provide a nuanced understanding of the complexities surrounding family involvement in resuscitation scenarios. By shedding light on the perspectives of key healthcare practitioners across diverse healthcare systems, this research aspires to contribute to more informed and effective decision-making in the realm of CPR protocol and family inclusion in Palestinian hospitals among nurses who play a pivotal role in patient care, eventually leading to the potential creation of policies or criteria regarding the presence of family during CPR.

1.3. Objectives of the study

Main objective

To assess the Perception of Palestinian intensive care nurses regarding the presence of patients' families during cardiopulmonary resuscitation (CPR).

Specific Objectives

- Objective 1: To identify the reasons and factors influencing Palestinian nurses' preference for the presence of the patient's family during CPR.
- Objective 2: To explore the perspectives and experiences of Palestinian intensive care nurses regarding the benefits and potential challenges associated with the presence of patients' families during CPR.

- Objective 3: To investigate the reasons why Palestinian nurses do not prefer the absence of the patient's family during CPR and examine any concerns or reservations they may have.
- Objective 4: To examine the relationship between demographic variables (such as age, gender, years of experience, and educational background) of Palestinian intensive care nurses and their Perception regarding the presence of patients' families during CPR.
- Objective 5:to examine and determine if there is a significant difference in the Perception of intensive care unit (ICU) nurses working in the public and private sectors in Palestine regarding the presence of family during resuscitation.

1.4. Research question

- 1. What are the Perception of Palestinian intensive care nurses regarding Presence of Patients' Families during Cardiopulmonary Resuscitation (CPR)?
- "Why do Palestinian nurses prefer the presence of the patient's family during cardiopulmonary resuscitation (CPR)?"
- "Why do Palestinian nurses not prefer the absence of the patient's family during cardiopulmonary resuscitation (CPR)?"
- 4. "Is there a relationship between the demographic variables of Palestinian intensive care nurses and their Perception regarding the presence of the patient's family during cardiopulmonary resuscitation (CPR)?"

5. Is there a significant difference in the Perception of intensive care unit (ICU) nurses working in the public and private sectors in Palestine regarding the presence of family during resuscitation?

1.5. Hypothesis

Null Hypothesis for Statement 1: (H0) Palestinian intensive care nurses' preference for the absence of the patient's family during cardiopulmonary resuscitation (CPR) is not significantly influenced by their recognition of potential benefits, including emotional comfort for the family, improved communication, and family members' participation in decision-making.

Null Hypothesis for Statement 2: (H0)There is no significant relationship between the demographic variables of Palestinian intensive care nurses (such as years of experience, educational level, and age) and their Perception regarding the presence of the patient's family during cardiopulmonary resuscitation (CPR).

Null Hypothesis for Statement 3: (H))There is no significant difference in the Perception of intensive care unit (ICU) nurses working in the public and private sectors in Palestine regarding the presence of family during resuscitation. The level of support for family presence is the same between private and public sector nurses.

HypothesisforQuestion3:

(H0) Palestinian intensive care nurses' preference for the presence of the patient's family during cardiopulmonary resuscitation (CPR) is not significantly influenced by factors such as emotional comfort for the family, improved communication, and family members' participationindecision-making.

Hypothesis for Question 4: (H0) There is no significant relationship between the demographic variables of Palestinian intensive care nurses (such as years of experience, educational level, and age) and their Perception regarding the presence of the patient's family during cardiopulmonary resuscitation (CPR).

Hypothesis for Question 5: (H0) There is no significant difference in the Perception of intensive care unit (ICU) nurses working in the public and private sectors in Palestine regarding the presence of family during resuscitation. The level of support for family presence is the same between private and public sector nurses

1.6. Significance of the Study

Having worked as a nurse in both the public and private sectors within the intensive care department for several years, I have gained first-hand experience in handling cardiopulmonary resuscitation (CPR) situations. These experiences particularly involved interacting with families who anxiously wait outside the hospital walls, hoping for positive outcomes and witnessing the efforts made to save their loved ones. Despite the absence of specific guidelines or protocols prohibiting family presence during resuscitation, it is generally understood that families are not permitted to be present. In light of this, our current study aims to investigate the Perception of ICU nurses working in both government and private sectors regarding the inclusion of families during CPR procedures, so understanding

nurses' perspectives on the presence of patients' families during CPR in intensive care departments of Palestinian hospitals holds significant implications for clinical practice, policy development, and patient-centered care. By conducting this research, several key contributions can be made:

1. Informing Policy and Guidelines: The findings of this study can inform the development of evidence-based policies and guidelines regarding family presence during CPR in Palestinian hospitals. By understanding nurses' Perception and concerns, policymakers and healthcare leaders can create guidelines that ensure safe and effective implementation of family presence, taking into account the cultural context and specific challenges faced in Palestinian hospitals.

2. Enhancing Patient-Centered Care: The study can contribute to the advancement of patientcentered care in Palestinian hospitals by recognizing the importance of involving families in the resuscitation process. By understanding nurses' perspectives and addressing their concerns, strategies can be developed to promote family-centered care, fostering a sense of collaboration and support between healthcare providers and patients' families.

3. Improving Family Coping and Satisfaction: Research has shown that family presence during resuscitation can positively impact families' coping mechanisms and overall satisfaction with healthcare services. By exploring nurses' perspectives, this study can identify factors that may influence family coping and satisfaction, leading to the development of interventions and support systems that address their emotional and psychological needs.

4. Enhancing Nurse-Patient-Family Relationships: Understanding nurses' attitudes towards family presence during CPR can help foster stronger relationships between healthcare providers, patients, and families. By recognizing the value of involving families in critical moments, nurses can build trust and open lines of communication with patients' families, leading to improved collaboration and shared decision-making.

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5. Bridging the Gap in Knowledge: This study will contribute to the existing body of literature on family presence during resuscitation, specifically within the Palestinian context. By providing insights into nurses' perspectives, it will address the limited research available on this topic in Palestinian hospitals, bridging the gap in knowledge and paving the way for future studies and interventions.

In conclusion, conducting research on nurses' perspectives regarding the presence of patients' families during CPR in intensive care departments of Palestinian hospitals carries significant research significance. The findings will inform policy development, promote patient-centered care, enhance family coping and satisfaction, improve nurse-patient-family relationships, and contribute to the existing knowledge on this topic in the Palestinian.

1.7. Variables of the study

"Nurses' Perception on the Presence of Patients' Families during Cardiopulmonary Resuscitation (CPR) in Intensive Care Departments in Palestinian Hospitals" include:

1.7.1. Dependent Variable

Nurses' Perception on Family Presence during CPR: This variable will measure the nurses' perspectives, attitudes, and beliefs regarding the involvement of patients' families during cardiopulmonary resuscitation procedures.

1.7.2. Independent Variables

Hospital Type (Governmental or Private): This variable will categorize the hospitals where the nurses work, helping to identify any potential differences in Perception between nurses from different hospital types. ICU Setting (Medical ICU, Surgical ICU, Medical CCU, or Surgical CCU): This variable will categorize the specific Intensive Care Units where the nurses are employed, enabling the examination of potential variations in Perception across different ICU settings.

Years of Experience: This variable will record the number of years that the nurses have been working in the ICU, considering its possible impact on their Perception towards family presence during CPR.

Demographic Data:

- Age: This variable will capture the age of the participating nurses, which may influence their perspectives on family presence during CPR.
- Gender: This variable will identify the gender of the nurses, enabling the exploration of potential gender-related differences in opinions.
- Level of Education: This variable will record the educational background of the nurses, which could potentially affect their attitudes towards family presence during CPR.
- Years of Experience: The number of years the nurse has worked in the profession.

1.8.Conceptual Framework

Terms Definition

(**CPR**):

Cardiopulmonary resuscitation (CPR) is an emergency procedure aimed at restoring and maintaining a person's vital signs, including heart function and breathing, through the use of mechanical techniques, physiological interventions, and pharmacological measures. It is performed when a person experiences cardiac arrest, a condition in which the heart suddenly stops functioning effectively(Mohammed 2019).

(**ICU**):

An intensive care unit (ICU) is an organized care system located within a specific area of a hospital that is designed to provide specialized and intensive medical and nursing care to critically ill patients. It offers enhanced monitoring capabilities and a range of physiological support methods to sustain life during periods of acute organ failure. The ICU's operations extend beyond its physical boundaries and often involve collaboration with the emergency room, hospital wards, and follow-up clinics(Marshall, Bosco et al. 2017).

Family Member:

"Those people who are most important to the patient. This definition includes the patient's family, loved ones and close friends. For newborns and children this is defined as the parents or significant others" (Fulbrook, Latour et al. 2007).

When family members: family-witnessed resuscitation siblings, parents, spouses, children or close friends of the patient are present during cardiopulmonary resuscitation.

Family Presence during CPR:

Family presence during resuscitation refers to the inclusion of family members in the process of witnessing and being present during medical efforts made by healthcare professionals, such as critical care nurses and physicians, to revive and stabilize a critically ill patient. This practice acknowledges the importance of allowing family members to be actively involved in the resuscitation team, granting them the privilege of participating in decision-making regarding the treatment of their loved ones(Mohammed 2019)

ICU Nurse:

A critical care nurse is an individual who possesses specialized knowledge in nursing and focuses on providing care to patients who are in critical condition, facing severe health issues, and requiring intensive monitoring and treatment(Mohammed 2019).

Critical patient:

Or critical illness is, "a state of ill health with vital organ dysfunction, a high risk of imminent death if care is not provided and the potential for reversibility"(Kayambankadzanja, Schell et al. 2022).

1.9.Operational Definition

(**CPR**):

In the context of this study, the presence of patients' families during cardiopulmonary resuscitation (CPR) refers to the active involvement and proximity of family members or significant others to the patient's bedside during the resuscitation efforts in the intensive care departments of Palestinian hospitals. This includes allowing family members to be present in the resuscitation room or nearby, witnessing the procedures and interventions performed by healthcare professionals, and providing emotional support and comfort to the patient. The operational definition clarifies the specific context in which the presence of patients' families during CPR is being examined in Palestinian hospitals, highlighting the active participation and role of family members during the resuscitation process.

The intensive care unit (ICU) in public and private hospitals in Palestine refers to a specialized care setting within the hospital that provides intensive medical and nursing care to critically ill patients. It is designed to offer enhanced monitoring capabilities, specialized equipment, and a range of physiological organ support modalities to sustain life during episodes of acute organ system insufficiency. The ICU is staffed by a multidisciplinary team of healthcare professionals, including physicians, nurses, and support staff, who work collaboratively to provide comprehensive and specialized care to patients. In the context of this study, both public and private hospitals' ICUs serve as the primary locations where cardiopulmonary resuscitation (CPR) is performed on patients requiring immediate life-saving interventions. The study aims to explore the Perception of nurses working in these ICUs regarding the presence of patients' families during CPR procedures.

Family Member:

In the context of our study "Nurses' Perception on the Presence of Patients' Families during Cardiopulmonary Resuscitation (CPR) in Intensive Care Departments in Palestinian Hospitals," the operational definition of family presence during resuscitation can be defined as follows: Family presence during resuscitation refers to the active involvement and inclusion of patients' family members in the immediate vicinity of the resuscitation efforts conducted by healthcare professionals, including nurses, during CPR procedures in intensive care departments within Palestinian hospitals.

ICU Nurse:

For the purpose of this study an ICU nurse is defined as a nurse who is working in ICU unit at Palestinian hospitals public or private, and with specialized training and experience in providing care within the intensive care unit (ICU) setting. The ICU nurse is responsible for closely monitoring and providing comprehensive nursing care to critically ill patients requiring advanced life support, including but not limited to patients undergoing cardiopulmonary resuscitation (CPR). The study will focus on gathering the perspectives, opinions, and experiences of these ICU nurses regarding the presence of patients' families during CPR interventions in the intensive care departments of Palestinian hospitals.

Critical patient:

In the context of our study titled "Nurses' Perception on the Presence of Patients' Families during Cardiopulmonary Resuscitation (CPR) in Intensive Care Departments in Palestinian Hospitals," an ICU patient refers to an individual who is admitted to the intensive care unit (ICU)) due to a critical illness or condition requiring specialized, close monitoring, and advanced medical interventions. ICU patients often have severe physiological instability, life-threatening conditions, or are in a high-dependency state. They receive intensive medical care and support from a multidisciplinary team, including critical care nurses, to stabilize their condition and promote recovery. The study aims to explore the perspectives of nurses on the involvement of patients' families in the resuscitation process for these ICU patients during CPR interventions.

1.10. Theoretical Framework

The conceptual model presented here provides a framework for both objective and subjective assessments of patient family care. As we strive to improve the quality of healthcare, patient-centered care is emerging as a critical component of this transformation. However, achieving patient-centered care requires systemic changes within our health care system to improve resource utilization and improve overall quality of care. By incorporating these changes, we

can reduce unnecessary consumption of healthcare resources and promote more efficient and effective delivery of patient-centered care. The conceptual framework provides a holistic perspective on patient-centered care and family presence during CPR. It recognizes the significance of involving patients' families in critical moments and emphasizes the need for systemic changes to align healthcare practices with patient-centered principles. By adopting this framework, healthcare organizations can enhance the quality of care, improve patient and family experiences, and promote a collaborative and compassionate approach to resuscitation procedures (Jayadevappa and Chhatre 2011).

1.11Summary

This study investigates the Perception of Palestinian intensive care nurses regarding the presence of patients' families during cardiopulmonary resuscitation (CPR) in intensive care departments. With the shift from home births and deaths to hospital settings, critical moments like cardiac arrest occur away from families, leading to distress for both families and healthcare providers. The presence of families during resuscitation remains controversial, with conflicting views and concerns. While some studies suggest positive effects such as reduced posttraumatic stress disorder symptoms and facilitated grieving, concerns include potential trauma and interference with resuscitation efforts. This research aims to understand nurses' perspectives, reasons, and factors influencing their views on family presence during CPR, contributing to patient-centered care, effective communication, and evidence-based guidelines in Palestinian hospitals(Toy 2023).

Chapter Two

Literature Review

2. Literature Review

2.1. Introduction

The presence of patients' families during cardiopulmonary resuscitation (CPR) in intensive care departments is a topic of interest and debate among healthcare professionals. While research suggests that family presence can have positive emotional and supportive effects on both families and patients, concerns have been raised regarding its implementation. This study aims to explore nurses' opinions on the presence of patients' families during CPR in intensive care departments in Palestinian hospitals. By examining the perspectives, reasons, and factors influencing nurses' views on this topic, this research seeks to provide valuable insights that can inform evidence-based guidelines and protocols for family presence during CPR in Palestinian hospitals.

2.2. Literature Review Search Strategy

To conduct the literature review for this study, a comprehensive research strategy will be employed to identify relevant studies and articles. The search will include electronic databases such as PubMed, Goofle Scholar, CINAHL, and Scopus, utilizing a combination of keywords and controlled vocabulary (MeSH terms) related to the following concepts: "nurses," "presence," "patients' families, "cardiopulmonary resuscitation," and "intensive care departments." Boolean operators (AND, OR) will be used to combine the search terms appropriately. In addition to database searches, hand-searching of relevant journals, reference lists of identified articles, and gray literature sources will be conducted to ensure a thorough literature review. The research will focus on English-language studies published within the last ten years to capture recent research and insights on the topic. Relevant studies will be selected based on their alignment with the research objectives, and data extraction will be performed to gather key findings, methodologies, and conclusions from the selected studies. The literature review will provide a critical analysis and synthesis of the existing knowledge, identifying gaps and guiding the direction of the current study on nurses' opinions on the presence of patients' families during CPR in Palestinian hospitals.

2.3. Association Guidelines

The practice of permitting patients' family members to be present during cardiopulmonary resuscitation (CPR) and invasive procedures, commonly known as "family presence," is a topic of global controversy. The discussion regarding the inclusion of family members in resuscitation areas has been ongoing since the 1980s. In 1993, the Emergency Nurses Association (ENA) made a decision in favor of providing the option for patients' families to be present during CPR and invasive procedures. In the following years, in 1995, the ENA took further steps by creating an educational program to facilitate the implementation of family presence in institutions(Güneş and Zaybak 2009). The ENA has further contributed to the topic of Family Presence during invasive procedures and resuscitation by publishing a position statement in 1994 titled "Family Presence at the Bedside during Invasive Procedures and/or Resuscitation." This position statement has undergone several revisions, with the most recent update in 2010. Additionally, the ENA has developed a Clinical Practice Guideline on Family Presence during invasive procedures and resuscitation, last revised in

2012. These resources aim to provide nurses with evidence-based support for their evolving practices in this area(Emergency Nurses Association, 2012).

Additionally, during the same year, the Royal College of Nursing, in collaboration with the British Association for Accident and Emergency Medicine, recommended the consideration and support for witnessed resuscitation. The American Heart Association's guidelines for CPR and emergency cardiovascular care also endorse the practice of offering patients' family members the choice to stay with the patients during resuscitative efforts (Güneş and Zaybak 2009).

The American College of Emergency Physicians (ACEP) also supports Family Presence during resuscitation efforts, as indicated in their Family Presence Fact Sheet published in 2012. The fact sheet advocates that the op8tion of family member presence should be encouraged for all aspects of emergency care. Additionally, the International Emergency Cardiovascular Care (ECC) and Cardiopulmonary Resuscitation (CPR) Guidelines were developed through a comprehensive review of the international literature by an expert panel, emphasizing the importance of evidence-based practices in this field(Toronto and LaRocco 2019).

2.4. Family Perspectives

Many studies have examined via systematic review that conducted by(Bévillard-Charrière, Gagné et al. 2021). Indicated the advantages associated with patients and their families. Numerous perceived benefits have been identified for both the medical team and the patients/families themselves. These benefits include increased comfort, emotional support, better understanding of the care being provided and assistance during resuscitation efforts, facilitation of the grieving process, potential reduction in post-traumatic stress, and the potential for a more humane approach to discontinuing resuscitation. In the scientific literature, this study identified several perceived benefits reported by nurses and physicians. Perceived benefits refer to individuals' assessments of adopting a particular behavior. The benefits identified in this study mainly fall into two categories: those related to patients and their families, and those related to nurses and physicians(Bévillard-Charrière, Gagné et al. 2021).

According to family members' perceptions and their experiences when they witnessed the resuscitation of a close family member(Toronto and LaRocco 2019)pointed in the systematic review that the prominent theme highlights the benefits of family presence for the patient, encompassing two sub-themes: sharing information and providing physical, emotional, and spiritual comfort. Family members perceived that their presence allowed them to share valuable information with the healthcare team, contributing to the patient's care. Furthermore, despite the patient being unconscious, several demonstrated studies showed that family members believed their presence provided physical, emotional, and spiritual comfort to the patient. This finding underscores the significant role family member's play in offering support and reassurance to the patient, even during times of unconsciousness. Overall, these family perspectives underscore the importance of family presence in enhancing patient care and well-being during critical healthcare moments.

There is a growing expectation of active involvement of patients and their relatives in treatment decisions. However, concerns have been raised regarding the potential negative

effects of family presence during resuscitation (FPDR). These concerns include the possibility of relatives experiencing symptoms related to post-traumatic stress disorder (PTSD) and potential detrimental effects on healthcare professionals' performance, which could compromise the quality of critical care. Moreover, there are concerns regarding the potential violation of patient confidentiality as their thoughts and preferences in such situations may remain unexpressed. It is crucial to find a balance that addresses the needs of all individuals involved, recognizing that the interactions among patients, relatives, and healthcare professionals form a triangular relationship that can mutually impact one another(Bévillard-Charrière, Gagné et al. 2021).

Healthcare providers, including nurses, often express reluctance towards having patients' families present during CPR for various reasons. The most significant concerns cited include the fear of causing psychological distress to family members, potential interference with patient care and decision-making processes, and the perception of an increased burden of stress on the medical staff. These reasons contribute to healthcare professionals' reservations about allowing family presence during resuscitation efforts(Kianmehr, Mofidi et al. 2010).

Conducted a qualitative study that aimed to explore the experiences of in-hospital cardiac arrest and its impact on the patients who suffered the arrest and the family members who witnessed the resuscitation (Waldemar, Strömberg et al. 2023). The findings revealed that surviving patients and their family members felt excluded, abandoned, and affected in various aspects of their lives following the cardiac arrest. The study emphasized the importance of recognizing the vulnerability of patients and family members in this situation and the need for compassionate care and support from healthcare staff. The results highlighted the significance of structured follow-up care for comprehensive cardiac arrest survivors and their families, as well as the need for interprofessional training to support

family members during resuscitation and provide resources for the challenges faced by both survivors and their families. Patient and public involvement was incorporated in the design of the study to ensure its relevance and patient-centeredness.

The integrative review aimed to explore family members' perspectives on the presence of family during resuscitation (FPDR), a topic of interest internationally for over 25 years; findings revealed family members view FPDR as a fundamental right and report positive benefits for patients and healthcare teams, expressing a strong desire to have the option to be present during their loved one's resuscitation, while healthcare professionals may not always fully embrace this practice, necessitating enhanced education and training to support FPDR and the formulation of policies allowing family presence during the resuscitation of a family member.

Carried out a study to explore the possibility of allowing family members to be present during cardiopulmonary resuscitation (CPR), a concept unfamiliar in Turkey(Aribogan, Enes et al. 2019). The research involved 36 family members of ICU patients who were invited to be present during CPR procedures. The CPRs were overseen by the ICU director, while another consultant prepared the relatives for the situation. Inclusion criteria for relatives included being parents, siblings, or children above 24 years old. The study observed their reactions, emotional state, satisfaction, and educational status during the CPR. The causes of patients' conditions varied, including trauma, cerebral aneurysm, sepsis, intoxication, surgery, and terminal cancer. The age range of the patients was from under 10 to over 60 years old. The majority of relatives were either parents, siblings, or children, and a significant number had graduated from university. Overall, the presence of family members during CPR was well-received, except for a few cases with exaggerated reactions. The study concludes that selected family members should be allowed to be present during CPR, and any exaggerated reactions may be influenced by factors such as gender, education, and residence. The researchers emphasize that with proper and confident CPR administration, the presence of family can be beneficial for everyone involved.

2.5. Nurses Perception regarding family presence during CPR

A Polish cross-sectional study that conducted among 240 intensive care nurses used a questionnaire to find out what Polish nurses views about FP- CPR. The finding reveled that among the surveyed participants, 113 nurses (constituting 47% of the sample) were employed in adult intensive care units (ICUs), while 127 nurses (accounting for 53% of the sample) worked in other acute clinical settings. Among ICU nurses, 66 individuals (54%) reported having experiences of family presence during resuscitation (FPDR), with 12 of them (10%) describing positive encounters and 46 (38%) sharing negative experiences. ICU nurses' perceptions regarding the benefits and potential negative effects of FPDR were not clearly determined. ICU nurses' perspectives on the negative effects of family presence during resuscitation (FPDR) were influenced by their positive experiences with FPDR (p < 0.03). In conclusion, having a positive encounter with FPDR can shape a nurse's views and attitudes in this developing field of practice. (Gutysz-Wojnicka, Ozga et al. 2018).

In another European study conducted in Sweden, which aimed to examine the perspectives and encounters of nurses and doctors in Sweden(of those who work in the cardiology department) FPDR(Waldemar and Thylen 2018).relied on cross- sectional design among 189 physicians and nurses with electronic questionnaire, In this sub-analysis, qualitative data from 32 participants was collected through free-text responses at the end of the questionnaire. The data was analyzed using an inductive content analysis approach. The analysis showed that, the participants had mixed feelings about FPDR as they weighed its strengths and weaknesses. Although FPDR was considered positive for families, concerns were also expressed that CPR could be difficult to observe. Simultaneously, the significance of family presence was acknowledged, allowing them to bid a final farewell and witness that everything possible was done for their loved one. Challenging factors in the workplace that made family presence during difficult resuscitation included staff shortages, limited space in small rooms, concerns about compromising confidentiality and disrupting routines. The CPR situation itself could be stressful for the staff, especially when dealing with disruptive family members. However, it was also acknowledged that the family presence could facilitate communication and dialogue with the family during and after the resuscitation process.

Carried out a qualitative study at 2020 among 10 Indonesian ICU nurses depended on a depth interview for elucidating the perceptions and encounters of nurses regarding the presence of family members during cardiopulmonary resuscitation (CPR) in the ICU setting. The study reveals six themes related to family presence during CPR in the ICU: family decisionmaking, transformation from burdened to self-confident, families contributing to teamwork, the impact of bereaved families on the CPR process, feelings of neglecting patients' families, and the expectation for family accommodation by staff nurses. According to a nurse's perspective, the ICU nurse team, patients, and families all benefit from the application of FDPR. But this also has a negative effect on ICU nurses, particularly if the nurse is not prepared for the work(Ariani, Trisyani et al. 2021).

Omran et al. (2015) conducted a study in the Kingdom of Saudi Arabia (KSA) to examine acute care nurses' attitudes toward family presence during cardiopulmonary resuscitation (CPR) and to understand the potential implications of implementing such policies. The study recruited 192 acute care nurses using convenient sampling and employed the Demographic Data Form and the Family Presence Support Staff Assessment tool (FPSSAT) as instruments. Results showed that nurses generally held a positive attitude toward family presence during CPR. However, their responses also revealed concerns about patient and family safety, performance anxiety, emotional impact on families, and potential compromise in patient care. The study suggests the need for further research in Saudi Arabia on this topic, including the perspectives of patients and families in addition to healthcare providers.

The study by SakDankosky et al. (2017) aimed to explore healthcare professionals' perspectives on implementing in-hospital, family-witnessed adult resuscitation in Finland and Poland. Using an inductive qualitative approach, the researchers collected written responses from 93 Finnish and 75 Polish emergency and intensive care nurses and physicians. These responses were analyzed thematically, revealing five main themes: family's distress, disruption of workflow, lack of family support, staff readiness, and decision-making based on the situation. This study provides valuable insights into healthcare professionals' concerns regarding family-witnessed resuscitation practices.

Bader et al. (2023) conducted an integrative review to explore critical care nurses' attitudes, perceptions, and behaviors regarding family presence during resuscitation. The review followed the method of Whittemore and Knafl and searched databases including CINAHL, PubMed, and Scopus for English-language studies published between 2008 and 2022. Twenty-two articles were included, with a total sample size of 4780 healthcare professionals, including 3808 critical and acute care nurses. Themes identified from the review included attitudes, benefits, barriers, demographic and cultural influences, and facilitators. Barriers and facilitators were found to be associated with factors such as nursing practice location, age, years of experience, and unit-based differences. The review suggests that interventions addressing these factors could enhance the practice of family presence during resuscitation in critical care settings, and nurse leaders should consider these factors when planning interventions.

Alhofaian et al. (2023) conducted a descriptive correlation study to assess nurses' perceptions and self-confidence regarding family presence during CPR in Saudi Arabia. The study, conducted at King Abdul Aziz University Hospital in Jeddah between March and April 2022, surveyed 147 nurses. The survey collected sociodemographic data and used the Family Presence Risk-Benefit Scale (FPS-BS) and the Family Presence Self-Confidence Scale (FPS-CS). The results showed that nurses had a moderately positive perception and level of confidence regarding family presence during resuscitation. Self-confidence varied significantly by age group and years of experience. The study found a significant association between FPS-CS and FPS-BS, indicating that nurses who perceived more benefits from family presence were more confident. The findings suggest that including patients' families in resuscitation efforts can have positive effects, and nursing leaders should develop policies and provide training to healthcare professionals to enhance family presence during CPR. Simulation and role-playing are recommended to familiarize healthcare teams with family involvement in resuscitation.

Marznaki et al. (2022) conducted a cross-sectional study to examine the attitudes of Iranian emergency nurses and patients' family members regarding family presence during CPR. The study included 350 emergency nurses and 254 family members of patients from an educational hospital in Iran, with data collected from May to November 2020. Participants completed a 27-item questionnaire assessing their attitudes toward family presence during CPR. The results showed that the mean attitude scores were 86.79 ± 7.50 for nurses and 92.48 ± 6.77 for family members, indicating a significant difference (p < 0.001). Nurses had concerns about the potential negative impact on CPR performance, while family members emphasized their right to be present and the benefits for their grieving process. Overall, both groups showed positive attitudes, with family members scoring higher.

In their 2021 study, WahyuAriani et al. employed a phenomenological approach to explore nurses' experiences with Family Presence During Resuscitation (FPDR) in the ICU. Conducted in 2020, the research involved ten ICU nurses who participated in in-depth interviews for data collection, analyzed using Colaizzi's method. The study identified six themes describing nurses' experiences: (1) Decisions on family; (2) From burdened to self-confident; (3) Families enhancing teamwork; (4) The bereaved family disrupts the CPR process; (5) Feels of ignoring patients' family; and (6) Expecting the family to be accompanied by staff nurse. Nurses perceived FPDR as beneficial for patients, families, and the ICU nurse team, but also recognized potential challenges, particularly if they were unprepared. The study emphasizes the importance of policy support and training for nurses to effectively implement FPDR.

In their 2024 study, Koželj et al. explored the effects of nurses' participation in resuscitation procedures, known for being highly stressful in emergency medicine. Conducted using a qualitative approach with semi-structured interviews, the research focused on 11 male registered nurses with an average of 18.5 years of experience in prehospital settings. Analysis of 404 minutes of recorded interviews revealed 789 codes, which were grouped into 36 patterns and 11 themes. The most stressful situations identified by the interviewees included resuscitating children or familiar individuals, conflicts within the resuscitation team or environment, equipment malfunctions, and training-related resuscitations. Despite the challenges, nurses also reported positive effects, such as the satisfaction of successful resuscitations or the awareness of giving their best effort even in unsuccessful cases. The study concluded that while nurses believed they could effectively manage the stress of

resuscitation, they acknowledged the potential subconscious influences of these experiences on themselves.

At Saudi Arabia, at Prince Sultan Military Medical City (Mohammed 2019)conducted a qualitative descriptive research with questionnaire among 150 ICU nurses to assess the viewpoints of critical care nurses working in an adult intensive care unit at Prince Sultan Military Medical City regarding the guidelines concerning family presence during resuscitation. The study results show that respondents had a moderate level of agreement regarding family-witness resuscitation. They believe family members should be present if they wish to (x=3.43), but also thought it could increase legal risks (x=3.69) and require a designated staff member for family support (x=4.00). They were aware of potential space constraints (x=3.73). Additionally, those valuing individual rights strongly supported family presence (x=4.58). Furthermore, 39% of nurses believed family presence communication improved, allowed patient advocacy, and offered emotional support, concluding that it is a right, not an option.

Conducted systematic reviewwith identified qualitative data ("A pendular perspective: different views on family presence during car- diopulmonary resuscitation and invasive procedures".)that aimed to consolidate the most reliable qualitative evidence concerning the perspectives of family members, patients, and healthcare professionals regarding family presence during cardiopulmonary resuscitation and invasive procedures. In this review, the authors used 24 studies after reviewing 2391 previous studies between 2010 and 2017and pointed in the finding post analysis that, the evidence suggests that family presence during cardiopulmonary resuscitation and invasive procedures has both positive and negative aspects, with benefits such as creating a supportive environment and promoting family participation, but also concerns about potential discomfort and challenges for healthcare

providers when delivering patient-focused care. Some studies highlight limited support for families during emergency care, leading them to seek additional social, psychological, and financial support from other sources(Barreto, Peruzzo et al. 2019).

In an Iranian systematic review conducted by (Considine, Eastwood et al. 2022)

It included six studies previously conducted in Iran between the years 1990-2020, where these studies dealt with the issue of the position and opinion of Iranian nurses on the issue of FPDR. This review aimed to review and analyze previous studies on the issue of FPDR. Results from six studies varying perspectives among nurses revealed regarding family presence during CPR procedures. Approximately 62.5% of nurses held the belief that family presence during CPR is harmful, while 57% expressed similar concerns. On the other hand, the remaining nurses reported having a neutral view on the presence of family members during CPR procedures. The data highlights the diverse Perception among nurses on this matter. Overall, the findings from the studies indicate that Iranian nurses' perspectives on the presence of family members during cardiopulmonary resuscitation are divided. Approximately half of the studies revealed a neutral viewpoint, while the other half showed a lack of positive perception. Given these mixed results, it is highly advisable to conduct further research in this area within Iran.

Via paper and electronic survey (Belzunegui-Eraso and Jiménez-Herrera 2020)conducted descriptive study among 237 health workers to modify and authenticate the Family Presence Risk-Benefit scale and Family Presence Self-Confidence scale (FPRB-FPSC) instrument in Spanish. The findings indicated that 69% of the respondents were female, 167 of whom were nurses, 51% of the participants are experienced health professionals with more than 16 years

of experience, while 24% have less than 5 years of experience. Additionally, 51% of the sample had specialized in their respective professions. When it comes to deciding on Family Presence During Resuscitation (FPDR), 67% of respondents indicated that the doctor should make the decision, while 46% believed it should be the patient. Additionally, 42% considered the nurse as the appropriate decision-maker, and 33% mentioned the family. However, when asked to choose the most suitable decision-maker, the majority (46%) favored the doctor, with only 26% supporting the patient's role in making this decision. According to FPDR 66% of healthcare professionals support the inclusion of family attendance during CPR in the guidance. Out of all the survey participants, 76% provided responses to an open question regarding the primary reasons for not inviting Family Presence During Resuscitation (FPDR). Three main reasons were identified: emotional impact (42%), fear of disruptive reactions from families (25%), and distrust of the resuscitation team's ability to work comfortably and effectively under pressure (22%). These factors were found to influence the outcomes of the procedures. Out of all the survey participants, 76% provided responses to an open question regarding the primary reasons for not inviting Family Presence During Resuscitation (FPDR). Three main reasons were identified: emotional impact (42%), fear of disruptive reactions from families (25%), and distrust of the resuscitation team's ability to work comfortably and effectively under pressure (22%). These factors were found to influence the outcomes of the procedures.

Carried out an integrative literature review that aimed to explore the perception of interprofessional team members regarding the presence of family members during emergency room cardiopulmonary resuscitation (CPR) procedures(Bévillard-Charrière, Gagné et al. 2021). The researchers conducted a comprehensive review of scientific papers from various

databases and organized the data into three themes: the benefits perceived by healthcare professionals, the perceived risks, and the level of confidence in professional practice. Out of 1,910 papers, 23 were selected for analysis, with most of the literature focusing on the perspectives of nurses and physicians, and limited attention given to other team members. Despite concerns expressed by nurses and physicians, the presence of family members during CPR is considered beneficial for families. The findings provide valuable insights for enhancing the inclusion of families during CPR procedures, emphasizing the importance of training for healthcare professionals and promoting a collaborative, patient-centered approach within healthcare settings.

To review existing studies that investigates nurses' perceptions and self-confidence regarding FPDR, (Pratiwi, Herlianita et al. 2023) conducted a literature review study with 7 articles from January 2020 to November 2020. During the article search, 4 inclusion criteria were applied: the target population consisted of nurses or physicians working in ED and ICU, caring for both adult and pediatric patients; the studies had to be primary research; the research objectives focused on the perceptions and confidence of the nurses or doctors; and only articles written in English were considered.

According to the findings from various studies, one study indicated that approximately onethird of respondents reported never bringing their family members during resuscitation . Notably, positive perceptions and higher self-confidence were strongly linked to clinical experience with family witness resuscitation. Moreover, knowledge about family witness resuscitation and the presence of written policies were identified as crucial predictors of perception in this context. Overall this review concluded that the results indicating a correlation between nurses' increased self-confidence and their positive perceptions of family presence during the resuscitation process can serve as a basis for further investigation.

2.6. Gap Review

The study titled "Nurses' Perception on the Presence of Patients' Families during Cardiopulmonary Resuscitation (CPR) in Intensive Care Departments in Palestinian Hospitals" aims to investigate nurses' perspectives on family presence during CPR in Palestinian healthcare settings. However, it is crucial to acknowledge the scarcity of research in the Palestinian context regarding this subject. Despite the importance of the topic, there is currently a lack of existing studies on family presence during CPR specifically in Palestinian hospitals. Furthermore, the absence of previous guidelines addressing family presence during resuscitation in this region further accentuates the research gap. Therefore, conducting this study will help fill the gap in knowledge and provide valuable insights into the attitudes and opinions of nurses regarding family presence during CPR in Palestinian intensive care departments.

In addition to the existing gap in the literature, this study aims to encompass a comprehensive perspective by including both public and private health sectors. Moreover, efforts will be made to ensure representation from all geographical areas in the West Bank and the Palestinian territories, spanning from north to south. This approach will provide a more inclusive and holistic understanding of nurses' Opinions on the Presence of Patients' Families during Cardiopulmonary Resuscitation (CPR) in Intensive Care Departments in Palestinian Hospitals, addressing the unique context and variations within the healthcare system across different regions.

2.7. Summary

The nurse's experience of family presence during the CPR process in the ICU room can vary. Some nurses may perceive it as a valuable and supportive practice, where the presence of family members provides comfort and emotional support to both the patient and the healthcare team. They may feel that allowing families to be present during CPR allows them to be actively involved in their loved one's care and decision-making. It may also facilitate communication and collaboration between the healthcare team and the family, enabling a better understanding of the patient's condition and treatment.

On the other hand, some nurses may have concerns and challenges related to family presence during CPR. They may worry about potential interference with the resuscitation process, as family members may be emotionally distressed or overwhelmed by the situation. Nurses may also feel increased pressure and stress due to the presence of family members, as they strive to provide effective and efficient care while managing the emotional dynamics in the room. There may be logistical challenges in accommodating family members in the limited space of the ICU room, and concerns about maintaining patient confidentiality and privacy.

Overall, the nurse's experience of family presence during the CPR process in the ICU room can be complex and multifaceted, influenced by individual perspectives, cultural factors, and the specific circumstances of each situation. It requires careful consideration of the benefits and challenges, effective communication, and collaboration between the healthcare team and the family to ensure the best possible outcomes for the patient and the family.

Chapter Three

Methodology

3. Methodology

3.1. Introduction

This chapter outlines the methodology employed in the study, including the study design, setting, target population, sample selection, data collection instruments, validity and reliability measures, data entry, and statistical analysis. Ethical considerations, limitations of the study, and a summary of the pilot study are also discussed.

3.2. Study Design

A mixed methods research design was utilized, incorporating both cross-sectional survey and qualitative data collection methods.

- The quantitative data collection involved administering a structured questionnaire to nurses working in various Intensive Care Units (ICUs) in governments and private hospitals across all governorates of the West Bank. The questionnaire was designed based on the FP-CPR (A European perspective) questionnaire, translated into Arabic for data collection. It comprised three sections: demographic data of participating nurses, experiences related to family presence during CPR, and attitudes towards family presence during CPR. Nurses provided quantitative responses using Likert scales, multiple-choice questions, or rating scales to express their opinions, experiences, and attitudes.
- Qualitative data collection involved conducting in-depth interviews with a subset of nurses to explore their perceptions and experiences related to family presence during

CPR. Researchers utilized semi-structured or unstructured interview formats to allow nurses to freely share their thoughts.

3.3. Study Setting

The study was conducted among intensive care units (ICUs) in the North of the West Bank, encompassing government and private hospitals. In the governmental hospital sector, the study included Rafidia Hospital, Al-Watani Hospital, Qalqylia Hospital, Tulkarem Hospital, Jenin Hospital, and Tubas Hospital. In the private sector, the study involved Ithad Hospital, Al-Arabi Hospital, Najah Hospital, Nablus Hospital, Al-Isra Hospital, IbnSina Hospital, and Al-Razi Hospital. These hospitals were selected to provide a comprehensive representation of the healthcare facilities in the region and ensure a diverse sample of nurses for the study.

3.4. Study Population

The study population consisted of nurses who had been working in adult Intensive Care Units (ICU) and Coronary Care Units (CCU) at Palestinian governments and private hospitals, including those in the north of the West Bank.

3.4.1. Sample method

A stratified random sampling method was employed to select participants for this study. Hospitals were divided into two strata: governmental and private. From each stratum, a random sample of hospitals was selected. Within each selected hospital, a proportionate number of nurses from the ICU and CCU units were chosen to participate in the study. The sample size was determined based on the estimated number of nurses needed from each stratum to achieve the desired sample size.

3.4.2. Inclusion Criteria

- Nurses working in adult Intensive Care Departments, including Medical ICU, Surgical ICU, Medical CCU, and Surgical CCU.
- 2. Nurses working in both governmental and private Palestinian hospitals across all governorates of the West Bank.
- 3. Nurses with at least six months of experience in the specified units.
- 4. Nurses who agreed to participate in the study.

3.4.3. Exclusion Criteria

- 1. Nurses who do not meet the inclusion criteria mentioned above.
- 2. Nurses working in non-intensive care departments.
- 3. Nurses with less than six months of experience in the specified units.
- 4. Nurses working in pediatric ICU.

3.5. Sample Size

The sample size was calculated using the RASOFT calculator, assuming a margin of error of 5%, a confidence level of 95%, a 50% response rate. The calculated sample size was 244 participants. However, 10 participants were excluded due to missing data, and an additional 2 participants refused to be part of the study. Therefore, the data analysis was conducted on a total of 232 participants.

3.6. Data collection

Data collection for the study wascommencing after obtaining permission from the Ministry of Health. Researchers visited the selected Intensive Care Units (ICUs) in the included hospitals and contact the ICU nurses. The purpose of the study was be explained, and the nurses will be invited to participate. The participants will then complete the questionnaire in Arabic, providing valuable data for the study on Nurses' Perception on the Presence of Patients' Families during Cardiopulmonary Resuscitation (CPR) in Intensive Care Departments in Palestinian Hospitals.

3.7. Ethical Consideration

Ethical considerations for the study were strictly adhered to. Prior to data collection, official approval was sought from the AAUP, Palestinian Ministry of Health, and private hospital administrations. The purpose of the study was thoroughly explained to the ICU nurses, and participation was entirely voluntary. Data collection was anonymous, and all information was stored securely on a password-protected computer. Nurses who agreed to participate were required to provide informed consent before completing the questionnaire, ensuring the protection of their rights and privacy throughout the research process.

3.8. Study Instrument

For the study on nurses' perception of the presence of patients' families during CPR in intensive care departments in Palestinian hospitals, the following study instruments were used:

Quantitative Phase:

Structured Questionnaire: A structured questionnaire was developed to collect quantitative data on nurses' perceptions, attitudes, and self-confidence regarding family presence during CPR. The questionnaire was adapted from the FP-CPR (A European perspective)

questionnaire, which is a validated instrument used to assess healthcare professionals' attitudes towards family presence during resuscitation.

The questionnaire included Likert scale questions to nurse's assessor' agreement with statements related to family presence during CPR, such as the perceived benefits and challenges of family presence, their level of comfort with family presence, and their perceived impact on patient outcomes.

The questionnaire also included demographic questions to gather information about the participants' age, gender, years of experience, and type of ICU they work in.

Qualitative Phase:

Semi-Structured Interviews: Semi-structured interviews were conducted with a subset of nurses who participated in the quantitative phase. The interviews explored nurses' experiences, perceptions, and in-depth views regarding family presence during resuscitation procedures.

The interviews included open-ended questions to encourage nurses to share their thoughts, feelings, and experiences related to family presence during CPR. Topics covered in the interviews included the perceived benefits and challenges of family presence, cultural considerations, and the impact on patient care and family members.

Interviews were audio-recorded and transcribed verbatim for analysis.

3.9. Validity and Reliability

The validity of the questionnaire was ensured through a double translation process. The questionnaire was initially designed in English and then translated into Arabic by two experts in the field. It was then back-translated into English to ensure the questionnaire carried the

same meaning in both languages. Additionally, pilot testing was conducted to assess the clarity of the questions to the target population.

Regarding reliability, the internal consistency of the questionnaire was evaluated using Cronbach's alpha coefficient. The reliability coefficient for all variables of the questionnaire was found to be 0.711, indicating very good reliability. The data were also tested for normality, and the results showed that they were normally distributed. Parametric analysis was used to test the research hypothesis and answer the research questions, with a significance level set at $\alpha = 0.05$.

3.10. Pilot Study

A pilot study was conducted with a small subset of nurses (around 5-20% of participants) using the translated FP-CPR questionnaire to assess its clarity, identify potential issues, and refine the questionnaire before proceeding with the main research on "Nurses' Perception on the Presence of Patients' Families during Cardiopulmonary Resuscitation (CPR) in Intensive Care Departments in Palestinian Hospitals." The participants involved in the pilot study were then excluded from the main study.

3.11. Summary

The methodology chapter of this study focuses on exploring nurses' Perception on the presence of patients' families during cardiopulmonary resuscitation (CPR) in Intensive Care Departments in Palestinian Hospitals. A descriptive cross-sectional study design will be employed, enabling data collection at a single point in time to capture the nurses' perspectives

and attitudes towards family presence during CPR. The study will be conducted in both governmental and private hospitals, encompassing various intensive care units in all governorates of the West Bank to ensure representation from diverse healthcare settings. A stratified random sampling method will be used to select the participants, and the sample size will be determined using G Power software. Data will be collected using a validated questionnaire, translated into Arabic, comprising sections on demographic data, experiences related to family presence, and attitudes towards family presence during CPR. The questionnaire's validity and reliability will be ensured through double translation and a pilot study. Ethical considerations will be strictly followed, obtaining official approval and informed consent from participants to protect their rights and privacy during data collection. The study aims to shed light on nurses' perspectives, contributing to the enhancement of patient-centered care and family involvement during CPR in Palestinian hospitals.

Chapter Four

Results

4. **Results**

4.1. introduction

A total of 244 participant filled the used data collection tool, 10 were excluded due to missing data information's and another 2 participant refused to be part of this study, the data analysis was done on a total of 232 participant, reliability and internal consistency of the used tool showed very good reliability with a Cronbach alpha of 0.711 in the all 27 variable of the used tool, data were tested for normality and results showed that the data were normally distributed, parametric analysis was used in analysis to test the research hypothesis and answer our research questions (alpha = 0.05).

Table 4.1. Scale reliability

Reliability Statistics				
Cronbach's				
Alpha	N of Items			
.711	27			

The Table 4.1, below shows that the majority of respondent fall within the 20-29 age range (54.3%), followed by 30-39 (36.2%) and 40-50 (9.5%). Gender distribution shows 56.0% male and 44.0% female respondents. The hospitals where participants work include Rafidia, Al-Watani, Ithad, Al-Arabi, Najah, Nablus, Qalqilya, Tulkarem, and Jenin, with varying percentages. The majority of respondents are from the governmental sector (60.3%), while 39.7% belong to the private sector. In the current ward, the majority are in the ICU (82.8%), with the remaining 17.2% in CCU, the mean number of beds in wards of the taken sample was found to be 8.

Table 4.2. Demographics

		Count	Column N %
Section One:	20-29	126	54.3%
Demographic	30-39	84	36.2%
Information	40-50	22	9.5%
• Age:			
· Gender:	Male	130	56.0%
	Female	102	44.0%
\cdot The hospital where	Rafidia Hospital	57	24.7%
you work	Al-Watani Hospital	22	9.5%
	Ithad Hospital	4	1.7%
	Al-Arabi Hospital	32	13.9%
	Najah Hospital	26	11.3%
	Nablus Hospital	8	3.5%
	Qalqilya Hospital	4	1.7%
	Tulkarem Hospital	14	6.1%
	Jenin Hospital	50	21.6%
	IbnSina	4	1.7%
	Razi Hospital	2	0.9%
	Tubas Hospital	4	1.7%
	Al-Israa' Hospital	4	1.7%
• Hospital type:	Governmental	140	60.3%
	sector		
	Private sector	92	39.7%
Current Ward	ICU	192	82.8%
	CCU	40	17.2%
• Experience in	< 6 Month	18	7.8%
Nursing:	1-5 years	96	41.4%
	6-10 years	66	28.4%
	11-15 years	32	13.8%
	16-20 years	14	6.0%
	>20 years	6	2.6%
• Experience in	< 6 Month	38	16.5%
Current Ward:	1-5 years	104	45.2%
	6-10 years	64	27.8%
	11-15 years	16	7.0%
	16-20 years	6	2.6%
	>20 years	2	0.9%
• Educational Level:	•	40	17.2%
	Bachelor	134	57.8%
	Postgraduate	58	25.0%

Table 4.2, shows the first section of answers, A majority of participants, accounting for 67.2%, have not invited family members to be present during CPR, while 32.8% have done so. Regarding the existence of a protocol or policy document on family presence during CPR in their unit/ward, 53.4% responded negatively, while 46.6% indicated the presence of such guidelines. A significant majority, comprising 62.1%, have experienced situations where family members were present during CPR, while 37.9% have not. Interestingly, when asked about the nature of these experiences, 44.8% reported positive encounters with family members present during CPR, while 55.2% had negative ones. Furthermore, 69.8% of respondents have had one or more negative experiences with family members being present during CPR, contrasting with the 30.2% who have not encountered such situations.

Table 4.3. Section 1 response

		Count	Column N %
Have you ever invited a family	No	156	67.2%
member to be present during CPR?	Yes	76	32.8%
Does your unit/ward have a protocol	No	124	53.4%
or policy document on family presence during CPR?	Yes	108	46.6%
Have you experienced a situation in	No	88	37.9%
which family members were present during CPR?	Yes	144	62.1%
Have you had one or more positive	No	128	55.2%
experiences of family members being present during CPR?	Yes	104	44.8%
Have you had one or more negative	No	70	30.2%
experiences of family members being present during CPR?	Yes	162	69.8%

Table 4.3, shows that A big portion, comprising 54.3%, either strongly disagree (24.1%) or disagree (30.2%) with the belief that family members should be present during resuscitation if they wish to be. Similarly, views on whether family presence encourages increased professional behavior from registered nurses (RNs) are varied, with 64.7% expressing disagreement (27.6%) or strong disagreement (37.1%). Concerns about increased anxiety and stress among the resuscitation team are evident, with 73.3% agreeing (43.1%) or strongly agreeing (30.2%) with this notion. Additionally, a substantial majority, accounting

for 70.7%, agree (50.0%) or strongly agree (20.7%) that family members may misinterpret activities during resuscitation as harmful. The belief in family presence facilitating closure for the family is split, with 64.7% disagreeing (32.8%) or strongly disagreeing (5.2%). Opinions on welcoming families in the resuscitation room and their potential to better understand the patient's condition are also varied. Concerns about increased litigation risk due to family presence are expressed by 57.1%, either agreeing (50.0%) or strongly agreeing (7.8%), while opinions on potential disruption of resuscitation efforts and limited verbal communication with family presence are divided among respondents.

		Count	Column N %
I believe that in general family			
members should be present	Disagree	70	30.2%
during Resuscitation if they	Neutral	46	19.8%
wish to be.	Agree	40	17.2%
I believe that family presence			
encourages	Disagree	86	37.1%
increased professional	Neutral	44	19.0%
Behavior from RN's	Agree	30	12.9%
I believe that family presence in			
the resuscitation room causes	Disagree	16	6.9%
increased anxiety and/or stress	Neutral	30	12.9%
of the resuscitation team	Agree	100	43.1%
I believe that family may			
misinterpret activities of the	Disagree	14	6.0%
healthcare team that occur during resuscitation as harmful.	Neutral	44	19.0%
	Agree	116	50.0%
I believe that family			
Presence during resuscitation	Disagree	76	32.8%
can facilitate closure for the	Neutral	60	25.9%
Family.	Agree	74	31.9%
I believe that families in general			
should be welcomed in the	Disagree	96	41.4%
resuscitation room.	Neutral	44	19.0%
	Agree	44	19.0%

Table 4.4. section 2 responses

I believe that family			
members who are present	Disagree	54	23.3%
during resuscitation will better	Neutral	68	29.3%
understand the patient's condition	Agree	78	33.6%
I believe that family presence			
during resuscitation potentially	Disagree	30	12.9%
increases risk for litigation.	Neutral	58	25.0%
	Agree	116	50.0%
I believe that family			
members could potentially	Disagree	20	8.7%
disrupt resuscitation effort.	Neutral	40	17.4%
	Agree	136	59.1%
Verbal communication to team			
members may be limited with	Disagree	18	7.8%
family presence	Neutral	42	18.1%
	Agree	112	48.3%

The Table 4.4, below indicates that a majority of respondents, accounting for 73.3%, do not agree to establish a protocol allowing the presence of family members during CPR, while 26.7% are in favor of such a protocol.

Table 4.5. protocol responses

		Count	Column N %
Do you agree to establish a protocol	No	170	73.3%
that allows the presence of family members during CPR?	Yes	62	26.7%

Table 4.5, shows that within age groups, a notable generational trend is observed, with the highest agreement in the 20-29 age range (58.8%) and the lowest in the 40-50 age group (9.7%). Gender differences are subtle, with males leaning slightly more towards agreement (58.1%) compared to females (41.9%). Hospitals exhibit diverse perspectives,

with Rafidia and Jenin Hospitals displaying higher agreement percentages of 35.5% and 29.0%, respectively. Governmental sector employees are notably more receptive (74.2%) than those in the private sector (25.8%). ICU staff express greater agreement (80.6%) than CCU staff (19.4%), emphasizing the impact of the specific medical setting. Experience in nursing and the current ward further contribute to nuanced viewpoints, with professionals in the early years of their career and current ward tenure displaying higher agreement rates. Educational levels also play a role, with postgraduate professionals showing the highest agreement (35.5%) and those with a diploma the lowest (12.9%)

			presence	blish a protoc of family mer	
		No)	Ye	S
		Count	N %	Count	N %
• Age:	20-29	100	58.8%	26	41.9%
	30-39	54	31.8%	30	48.4%
	40-50	16	9.4%	6	9.7%
· Gender:	Male	94	55.3%	36	58.1%
	Female	76	44.7%	26	41.9%
• The hospital where	Rafidia Hospital	39	23.1%	18	29.0%
you work	Al-Watani Hospital	18	10.7%	4	6.5%
	Ithad Hospital	4	2.4%	0	0.0%
	Al-Arabi Hospital	24	14.2%	8	12.9%
	Najah Hospital	20	11.8%	6	9.7%
	Nablus Hospital	8	4.7%	0	0.0%
	Qalqylia Hospital	2	1.2%	2	3.2%
	Tulkarim Hospital	12	7.1%	2	3.2%
	Jenin Hospital	32	18.9%	18	29.0%
	IbnSina	3	1.8%	1	1.6%
	Razi Hospital	1	0.6%	1	1.6%
	Tubas Hospital	3	1.8%	1	1.6%
	Al-Israa' Hospital	3	1.8%	1	1.6%
3	Governmental sector	94	55.3%	46	74.2%
	Private sector	76	44.7%	16	25.8%
Work Ward	ICU	142	83.5%	50	80.6%
	CCU	28	16.5%	12	19.4%
• Experience in	< 6 Month	10	5.9%	8	12.9%

Table 4.6. demographics with protocol.

Nursing:	1-5 years	84	49.4%	12	19.4%
	6-10 years	44	25.9%	22	35.5%
	11-15 years	18	10.6%	14	22.6%
	16-20 years	8	4.7%	6	9.7%
	>20 years	6	3.5%	0	0.0%
• Experience in	< 6 Month	30	17.9%	8	12.9%
Current Ward:	1-5 years	84	50.0%	20	32.3%
	6-10 years	40	23.8%	24	38.7%
	11-15 years	10	6.0%	6	9.7%
	16-20 years	2	1.2%	4	6.5%
	>20 years	2	1.2%	0	0.0%
• Educational Level:	Diploma	32	18.8%	8	12.9%
	Bachelor	102	60.0%	32	51.6%
	Postgraduate	36	21.2%	22	35.5%

Based on the previous 10 questions, a scoring system was developed, a maximum score of 40 and minimum 0, it was considered that "strongly disagree" zero while "strongly agree" a mark of 4, the following figure shows the participants believes on allowing the family to stay during CPR, higher scores means that the participant tend to encourage the presence of the family during CPR, while lower scores don't.

The table below shows that the mean score was 22 with a standard deviation of 4.6 points.

Table 4.7. believe score

Statistics Believes				
Ν	Valid	232		
	Missing	0		
Mean	n	22.0991		
Med	ian	22.0000		
Std.	Deviation	4.66391		
Rang	ge	33.00		
Mini	mum	.00		
Max	imum	33.00		

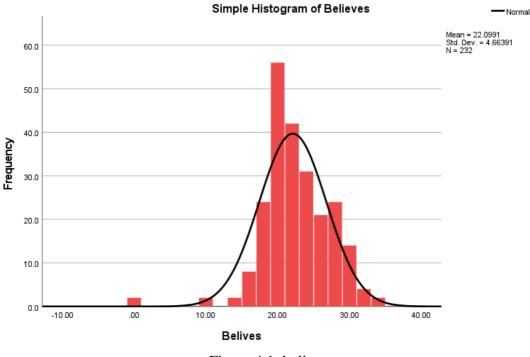


Figure 4.1. believes score

The provided correlations display below in Table 4.7, shows associations between various factors and the willingness to establish a protocol allowing family members' presence during CPR. Notable correlations include a positive relationship between the agreement to establish such a protocol and having invited a family member during CPR (Pearson Correlation = 0.335, Sig. = 0.000), indicating that those who have invited family members are more likely to support the establishment of protocols. Additionally, a positive correlation is observed with the presence of a protocol or policy document on family presence during CPR in the unit/ward (Pearson Correlation = 0.294, Sig. = 0.000). Conversely, a negative correlation exists between the willingness to establish a protocol and having had one or more negative experiences with family members present during CPR (Pearson Correlation = -0.400, Sig. = 0.002), suggesting that negative experiences may influence reluctance to endorse such protocols. Other correlations with demographic and professional factors, such as age, gender, hospital affiliation, experience in nursing and the current ward, educational

level, and the number of beds in the ward, are generally weak or non-significant, indicating that these factors may not strongly influence attitudes toward establishing protocols for family presence during CPR.

		Believes
• Age:	Pearson Correlation	046
	Sig. (2-tailed)	.488
· Gender:	Pearson Correlation	080
	Sig. (2-tailed)	.222
• The hospital where you work	Pearson Correlation	017
	Sig. (2-tailed)	.796
• Hospital type:	Pearson Correlation	.100
	Sig. (2-tailed)	.128
Current Ward	Pearson Correlation	.206
	Sig. (2-tailed)	.422
• Experience in Nursing:	Pearson Correlation	044
	Sig. (2-tailed)	.506
• Experience in Current Ward:	Pearson Correlation	015
	Sig. (2-tailed)	.817
· Educational Level:	Pearson Correlation	046
	Sig. (2-tailed)	.489
Number of Beds in Ward	Pearson Correlation	025
	Sig. (2-tailed)	.712
Have you ever invited a family member to be	Pearson Correlation	.299
present during CPR?	Sig. (2-tailed)	.000
Does your unit/ward have a protocol or policy	Pearson Correlation	.294
document on family presence during CPR?	Sig. (2-tailed)	.000
Have you experienced a situation in which	Pearson Correlation	.089
family members were present during CPR?	Sig. (2-tailed)	.176
Have you had one or more positive experiences	Pearson Correlation	.214
of family members being present during CPR?	Sig. (2-tailed)	.001
Have you had one or more negative experiences	Pearson Correlation	400
of family members being present during CPR?	Sig. (2-tailed)	.002
Do you agree to establish a protocol that allows	Pearson Correlation	.335
the presence of family members during CPR?	Sig. (2-tailed)	.000

Correlations

The provided ANOVA test results for demographics in relation to beliefs about the establishment of a protocol allowing the presence of family members during CPR in table 8 below reveal varying levels of significance. The p-values associated with age (0.351), gender (0.597), the hospital where professionals work (0.421), hospital type (0.128), current ward (0.199), experience in nursing (0.521), experience in the current ward (0.236), and educational level (0.147) are all above the conventional significance level of 0.05. This suggests that, based on this ANOVA test, these demographic factors do not significantly impact beliefs about the protocol for family presence during CPR. However, several other variables demonstrate statistically significant results. Notably, the p-values for having ever invited a family member during CPR (0.021), the presence of a protocol in the unit/ward (0.001), positive experiences with family presence during CPR (0.001), and agreement to establish a protocol (0.001) are all below 0.05, indicating a significant association between these factors and beliefs about the protocol for family presence during CPR.

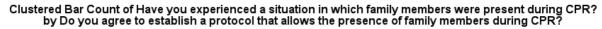
Table 4.9. Anova test of demographics with believes about protocol

• Age:	0.351
· Gender:	0.597
• The hospital where you work	0.421
• Hospital type:	0.128
Current Ward	0.199
• Experience in Nursing:	0.521
• Experience in Current Ward:	0.236
· Educational Level:	0.147
Number of Beds in Ward	0.328
Have you ever invited a family member to be present during CPR?	0.021
Does your unit/ward have a protocol or policy document on family presence during CPR?	0.001
Have you experienced a situation in which family members were present during CPR?	0.113
Have you had one or more positive experiences of family members being present during CPR?	0.001

ANOVA

P value

Have you had one or more negative experiences of family members	0.513
being present during CPR?	
Do you agree to establish a protocol that allows the presence of family	0.001
members during CPR?	



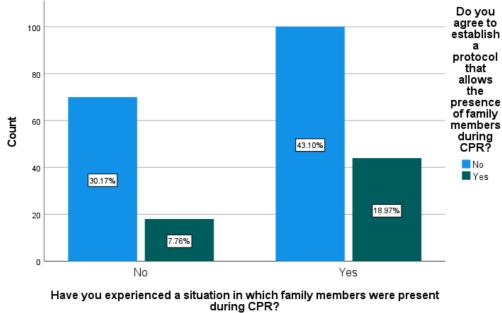


Figure 4.2. Cluster bar

The last two questions in the used data collection tools were narrative questions, the first one was about the positive point if a protocols was developed allowing the family to be present during CPR, all the participants answers were summarized to the following four reasons in the participants point of view, the first positive point was that the presence of the family can keep each other calm and supportive during CPR, keeping with family also can provide cooperation to the team during CPR, help in coping and understanding what is going on, and finally the presence of the family help in expressing gratitude and acceptance of the outcomes.

However, there is also negative points in the presence of the family during CPR from the participants point of view which also were summarized to five points, increase the violence or aggression from some health care team procedure, increased stress and disruption on the health care team responsible on the patient care, negative impact on patients care if some logistics were found to be unavailable or not prepared, and Emotional and Psychological Impact on Medical Professionals.

Chapter Five Discussion

5. Discussion

5.1. Discussion

The findings of our study, which explored the attitudes of healthcare professionals in adult ICU and CCU towards the presence of family members during CPR, revealed several key insights. A total of 232 participants were included, with the majority (54.3%) falling within the 20-29 age range and 56.0% being male. They were employed across various hospitals, with the participants majority (60.3%) from the political sector and working in the ICU (82.8%).

Importantly, the majority of respondents (73.3%) disagreed with establishing a protocol allowing the presence of family members during CPR. The mean score for beliefs regarding family presence during CPR was 22, with a standard deviation of 4.6 points. Specific beliefs showed that 54.3% either strongly disagreed or disagreed with the idea that family members should be present during resuscitation if they wish to be. Moreover, 73.3% agreed or strongly agreed that family presence in the resuscitation room causes increased anxiety and/or stress for the resuscitation team.

Moreover, the study found that 67.2% of participants had not invited family members to be present during CPR, and 53.4% did not have a protocol or policy document regarding family presence during CPR in their unit/ward. The demographics and responses varied based on age, gender, hospital, sector, current, nursing experience, and educational level.

Our study on nurses' perceptions of patients' families' presence during CPR in Palestinian hospitals aligns with and contradicts various previous findings. In agreement with Gutysz-Wojnicka et al. (2018), our study found that 32.8% (n=82) of nurses have invited family members to be present during CPR, reflecting a similar trend. However, our findings differ from Belzunegui-Eraso and Jiménez-Herrera (2020), as 53.4% (n=134) of our participants indicated the absence of a protocol on family presence during CPR, contrasting with their reported presence.

Regarding negative experiences, our study resonates with Alhofaian et al. (2023), with 55.2% (n=138) of nurses reporting negative encounters with family presence during CPR. Likewise, our findings on beliefs about family presence during CPR align with Barreto et al. (2019), as 54.3% (n=136) of nurses either strongly disagreed or disagreed that family members should be present during resuscitation if they wish to be.

Contrary to Belzunegui-Eraso and Jiménez-Herrera (2020), our study found that 64.7% (n=162) of nurses disagreed or strongly disagreed that family presence encourages increased professional behavior from RNs. Likewise, our findings on the facilitation of closure for families contradict Bévillard-Charrière et al. (2021), as opinions on this matter were split in our study.

In comparison with Ariani et al. (2021), our study found that 44.8% (n=112) of nurses reported positive encounters with family presence during CPR, indicating a potential benefit. However, our agreement rate on establishing a protocol (26.7%) (n=67) contrasts with Pratiwi et al. (2023), which suggested a correlation between nurses' increased self-confidence and positive perceptions of family presence during resuscitation.

Our study's findings underscore the complexity of attitudes towards family presence during CPR, influenced by various factors such as cultural context, hospital policies, and individual experiences. The absence of clear protocols in Palestinian hospitals, as indicated by over half of our participants, highlights the need for standardized guidelines to ensure consistency and patient-centered care. The substantial number of negative experiences reported by nurses emphasizes the importance of addressing concerns such as increased stress and disruption in healthcare teams.

While our study provides valuable insights into the perceptions of Palestinian nurses, further research is needed to explore the perspectives of patients and families, as well as to assess the impact of family presence on patient outcomes. Clear policies, adequate training, and ongoing support for healthcare professionals are essential in fostering a supportive environment for families while maintaining the highest standards of care during CPR.

5.2. **Recommendations**

- Development of Clear Protocols: Hospitals should develop clear protocols on family presence during CPR, outlining the roles and responsibilities of healthcare professionals and family members.
- 2. Education and Training: Provide education and training programs for nurses and other healthcare professionals on the importance of family presence during CPR and strategies for managing family interactions during resuscitation efforts.
- 3. Communication Skills: Emphasize the importance of effective communication skills among healthcare professionals to facilitate discussions with families about their preferences and involvement in CPR.

- Support Services: Offer support services, such as counseling and debriefing sessions, for healthcare professionals who have had negative experiences with family presence during CPR.
- 5. Patient-Centered Care: Promote a patient-centered approach in healthcare settings, ensuring that decisions regarding family presence during CPR are made based on the patient's best interests and preferences.
- Research and Evaluation: Conduct further research to explore the impact of family presence during CPR on patient outcomes and healthcare provider well-being in all Palestinian hospitals.

5.3. Nursing Implications

- Enhanced Collaboration: Collaboration among healthcare team members is crucial to ensure coordinated and effective care, particularly when family members are present during CPR.
- 2. Cultural Sensitivity: Nurses should be culturally sensitive and respectful of the beliefs and practices of patients and families regarding death and dying.
- Emotional Support: Nurses play a vital role in providing emotional support to both patients and families during CPR and should be prepared to address their emotional needs.
- 4. Advocacy: Nurses should advocate for policies and practices that support family presence during CPR, recognizing its potential benefits for patients and families.
- 5. Continuing Education: Continuing education and training programs should be provided to nurses to enhance their knowledge and skills in managing family presence during CPR.

References

- Ariani, N. P. W., et al. (2021). "An Exploration of Nurses' Experience of Family Presence During Resuscitation in Intensive Care Setting." <u>Jurnal Keperawatan Padjadjaran</u>9(1): 41-51
- Aribogan, A., et al. (2019). "Presence of family during CPR of intensive care unit patients." <u>Resuscitation</u>142: e57.
- Barreto, M. d. S., et al. (2019). "Family presence during cardiopulmonary resuscitation and invasive procedures: a meta-synthesis." <u>Revista da Escola de Enfermagem da USP</u>53.
- Belzunegui-Eraso, Á. and M. Jiménez-Herrera (2020). "Family Witnessed Resuscitation: Staff Opinion."
- Bévillard-Charrière, Q., et al. (2021). "Perceptions of healthcare professionals about the presence of family members during cardiopulmonary resuscitation: An integrative literature review." <u>Canadian Journal of Emergency Nursing</u>44(1): 11-19.
- Considine, J., et al. (2022). "Family presence during adult resuscitation from cardiac arrest: A systematic review." <u>Resuscitation</u>.

- Fulbrook, P., et al. (2007). "The presence of family members during cardiopulmonary resuscitation: European federation of critical care nursing associations, European society of paediatric and neonatal intensive care and European society of cardiology council on cardiovascular nursing and allied professions joint position statement." <u>European Journal of</u> Cardiovascular Nursing6(4): 255-258.
- Güneş, Ü. Y. and A. Zaybak (2009). "A study of Turkish critical care nurses' perspectives regarding family-witnessed resuscitation." Journal of Clinical Nursing18(20): 2907-2915.
- Gutysz-Wojnicka, A., et al. (2018). "Family presence during resuscitation–The experiences and views of Polish nurses." Intensive and Critical Care Nursing46: 44-50.
- Jayadevappa, R. and S. Chhatre (2011). "Patient centered care-a conceptual model and review of the state of the art." <u>The Open Health Services and Policy Journal</u>4(1).
- Kayambankadzanja, R. K., et al. (2022). "Towards definitions of critical illness and critical care using concept analysis." <u>BMJ open12(9)</u>: e060972.
- Kianmehr, N., et al. (2010). "The attitudes of team members towards family presence during hospital-based CPR: a study based in the Muslim setting of four Iranian teaching hospitals." Journal of the Royal College of Physicians of Edinburgh40(1): 4-8.

- Marshall, J. C., et al. (2017). "What is an intensive care unit? A report of the task force of the World Federation of Societies of Intensive and Critical Care Medicine." Journal of critical care **37**: 270-276.
- Mohammed, A. A. (2019). "Critical care nurses' perspectives towards family presence during resuscitation." Journal of Clinical Case Studies, Reviews & Reports. SRC/JMHC-102. DOI: doi. org/10.47363/JMHC/2019 (1)101: 2-29.
- Perkins, G. D., et al. (2021). "Epidemiology of cardiac arrest Guidelines." <u>Resuscitation Council</u> <u>UK. https://www. resus. org. uk/libra ry/2021-resus citat ion-guide lines/epide miolo gy-cardiac-arres t-guide lines.</u>
- Pratiwi, I. D., et al. (2023). "Nurses' Perceptions About Family Presence During Resuscitation: A Literature Review." <u>KnE Medicine</u>: 295–303-295–303.
- Toronto, C. E. and S. A. LaRocco (2019). "Family perception of and experience with family presence during cardiopulmonary resuscitation: an integrative review." Journal of Clinical <u>Nursing</u>**28**(1-2): 32-46.
- Toy, J. (2023). "Family-Witnessed Cardiopulmonary Resuscitation during Emergency Department Cardiac Arrest Care: A Resident Perspective." <u>Annals of Emergency Medicine</u>.

- Vardanjani, A. E., et al. (2021). "The effect of family presence during resuscitation and invasive procedures on patients and families: an umbrella review." Journal of emergency <u>nursing</u>47(5): 752-760.
- Waldemar, A., et al. (2023). "Experiences of family-witnessed cardiopulmonary resuscitation in hospital and its impact on life: An interview study with cardiac arrest survivors and their family members." Journal of Clinical Nursing.
- Waldemar, A. and I. Thylen (2018). "Attitudes and experiences of Family Presence During Resuscitation (FPDR) among Swedish nurses and physicians in cardiac care units." <u>Resuscitation</u>130: e63.
- Wong, C. X., et al. (2019). "Epidemiology of sudden cardiac death: global and regional perspectives." <u>Heart, Lung and Circulation</u>**28**(1): 6-14.
- WORLD HEART REPORT 2023 CONFRONTING THE WORLD'S NUMBER ONE KILLER.(2023). <u>https://world-heart-federation.org/wp-content/uploads/World-Heart-Report-2023.pdf</u>.
- Almli, L. M., Fani, N., Smith, A. K., &Ressler, K. J. (2014). Genetic approaches to understanding post-traumatic stress disorder. *International Journal of Neuropsychopharmacology*, 17(2), 355-370.

- Sak-Dankosky, N., Andruszkiewicz, P., Sherwood, P. R., &Kvist, T. (2017, April 9). Health care professionals' concerns regarding in-hospital family-witnessed cardiopulmonary resuscitation implementation into clinical practice. *Nursing in Critical Care*, 23(3), 134– 140.https://doi.org/10.1111/nicc.12294.
- Omran, S., AL Ali, N., &Alshahrani, H. (2015, April 27). Acute care nurses' attitudes toward family presence during cardio-pulmonary resuscitation in the Kingdom of Saudi Arabia. *Clinical Nursing Studies*, 3(3).<u>https://doi.org/10.5430/cns.v3n3p69</u>.
- Bader, K. W., Smith, C. R., & Gillespie, G. L. (2023, October 1). Critical Care Nurses' Attitudes About Family Presence During Resuscitation: An Integrative Review. *Critical Care Nurse*, 43(5), 17–31. <u>https://doi.org/10.4037/ccn2023850</u>.
- Alhofaian, A., Almuntashiri, S., Bamufleh, M., Al-Faraj, S., Alharbi, S., Tunsi, A., &Alaamri, M. (2023).Nurses' perception and self-confidence of family presence during cardiopulmonary resuscitation in Saudi Arabia.*Journal of Education and Health Promotion*, 12(1), 320.<u>https://doi.org/10.4103/jehp.jehp_1845_22</u>.
- Marznaki, Z. H., Karkhah, S., Amiri, M. M., Källmen, H., Moradi, A., &Najjarboura, M. (2022). Attitudes of Emergency Nurses and Patients' Family Members Towards the Presence of Family Members During Cardiopulmonary Resuscitation; a Cross-sectional Study. Archives of Academic Emergency Medicine, 10(1).

WahyuAriani, N. P., Trisyani, Y., &Mulyati, T. (2021). An Exploration of Nurses' Experience of Family Presence During Resuscitation in Intensive Care Setting.

Koželj, A., Strauss, M., Poštuvan, V., Strauss Koželj, A., &Strnad, M. (2024). Perception of Personal Participation of the Nurses in Resuscitation Procedures: A Qualitative Study. *Medicina*, 60(2), 196.

الملخص

الخلفية: الإنعاش هو تدخل حاسم لاستعادة الوظائف الحيوية في حالات الطوارئ مثل السكتة القلبية باستخدام التقنيات الأساسية (الإنعاش القلبي الرئوي) إلى التدابير المتقدمة مثل التنبيب وإزالة الرجفان. العلاج الفوري والفعال ضروري لإنقاذ الأرواح في هذه الحالات. ركزت هذه الدراسة على تصورات ممرضات العناية المركزة الفلسطينيات عن التواجد العائلي أثناء عملية الإنعاش القلبي الرئوي.

الهدف: الهدف الأساسي من هذه الدراسة هو تقييم تصور ممرضات العناية المركزة الفلسطينية فيما يتعلق بوجود عائلات المرضى أثناء الإنعاش القلبي الرئوي.

الطريقة: استخدمت الدراسة تصميم بحثي مختلط لفحص تصورات الممرضات حول وجود الأسرة أثناء الإنعاش القلبي الرئوي في وحدة العناية المركزة في شمال الضفة الغربية. باستخدام استبيان منظم ومقابلات متعمقة، جمعت الدراسة بيانات كمية ونوعية من عينة عشوائية طبقية مكونة من 232 ممرضة، مما يضمن الاعتبارات الأخلاقية ومقاييس الصلاحية والموثوقية القوية.

النتيجة: قامت دراسة شملت 232 مشاركاً بتحليل الموثوقية والبيانات الديمو غرافية فيما يتعلق بالتواجد العائلي أثناء (الإنعاش القلبي الرئوي). تشمل النتائج الرئيسية أن 67.2% لم يدعوا أفراد الأسرة مطلقًا أثناء الإنعاش القلبي الرئوي و73.3% يعارضون بروتوكولات التواجد العائلي.

الاستنتاج: سلطت الدراسة الضوء على أهمية معالجة التجارب السلبية مثل زيادة التوتر من خلال تنفيذ سياسات واضحة ودعم المتخصصين في الرعاية الصحية