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College of Nursing**



**Families' Needs of Critically Ill Patients in
Intensive Care Units at Al-Hilla Teaching
Hospitals**

A Thesis Submitted

By

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in Partial Fulfillment of the Requirements for the Degree of
Master in Nursing Sciences

Supervised by

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

وَأَيُّوبَ إِذْ نَادَى رَبَّهُ أَنِّي مَسَّنِيَ الضُّرُّ وَأَنْتَ أَرْحَمُ الرَّاحِمِينَ *

فَاسْتَجَبْنَا لَهُ فَكَشَفْنَا مَا بِهِ مِنْ ضُرٍّ وَأَتَيْنَاهُ أَهْلَهُ وَمِثْلَهُمْ

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Dedication

With great love and respect, I dedicate my thesis to: My parents, who have always loved me unconditionally and whose good examples have taught me to work hard for the things that I aspire to achieve. I am truly thankful to having them in my life.

My brothers and sisters, with all my love.

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Abstract

The family frequently views a relative's admission to the intensive care unit as a crisis. An admission of family members denotes a highly stressful situation, regardless of whether the admission was planned or unforeseen. This study aims to explore families' needs of critically ill patients in intensive care units.

A descriptive cross-sectional study that included a purposive sample of 120 family members of critically ill patients was conducted in the period between 1st September 2022 to 25th May 2023 in three teaching hospitals in Al-Hilla City. The tool which used for the study consisting of two parts: the first represented the sociodemographic variables of the participants and the second part critical care family needs inventory included 45 items describing the needs of the patients' families, divided into five subscales. The face validity obtained by (11) experts and internal consistency ($r: 0.81$). Data was collected from the participants by interview.

The results of the study showed that the most important needs are assurance (3.46) and information (3.38). Followed by comfort (3.09), proximity (3.06), and support (2.53). There were statistically significant relationships between the sociodemographic variables (educational level, relationship with the patient, the patient's stay in ICU, and previous admission to the intensive care unit) and needs subscales.

Assurance and information are the most important needs of families. There is a statistically significant relationship between some sociodemographic characteristics of family members and needs subscales, the study recommended applying the patient and family-centered care guide, making the family an important partner in decision-making, providing care, and cooperating with it to develop the quality of health services.

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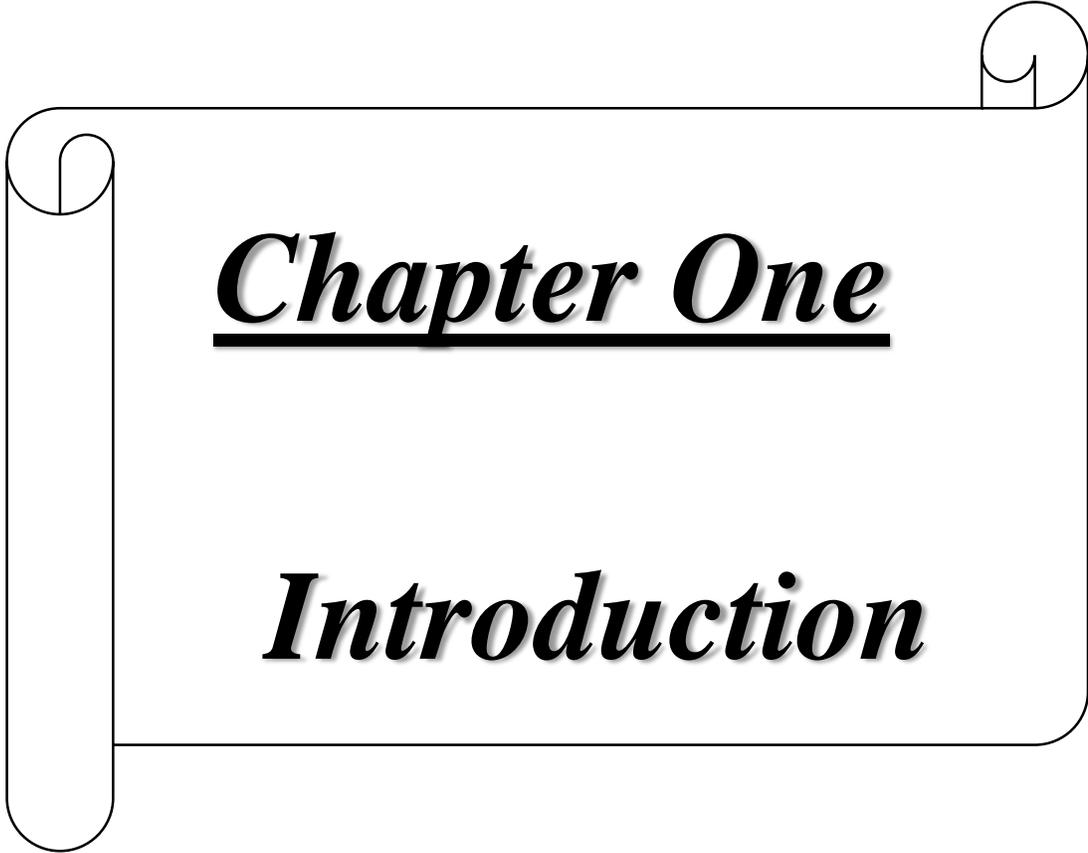
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A	Approval of the Research Ethical Committee of the University of Babylon's College of Nursing
B	Official letter issued and submitted to the Health director
C	Approvals of the Babylon Health Directorate, development and training center
D	Approval to formally visit the hospitals
E	Author permission to use Arabic version of CCFNI
F	List of experts and Questionnaire Validity
G	Questionnaire (English, Arabic)
H	Ethical consideration

List of Abbreviations

Item	Meaning
CCFNI	Critical Care Family Need Inventory
FFC	Family Centered Care
ICUs	Intensive Care Units
MICU	Medical Intensive Care Unit
NICU	Neonatal Intensive Care Unit
PFACs	Patient Family Advisory Councils
PFCC	Principles of Family Centered Care
PICU	Pediatric Intensive Care Unit
PSTD	Post-Traumatic Stress Disorder
RRTs	Rapid Response Teams
SCCM	Society of Critical Care Medicine
SICU	Surgical Intensive Care Unit
SPSS	Statistical Package for the Social Sciences

List of Statistical Symbol

Item	Meaning
<	Less than
>	More than
≥	More than or equal
%	Percentage
F	Frequency
SD	Standard Deviation
NS	Not Significant
S	Significant
HS	Highly Significant
ANOVA	Analysis of Variance
<i>P-value</i>	Probability Value



Chapter One

Introduction

Chapter One

1.1. Introduction

One of the most unexpected events that cause anxiety and fear is the admission of a family member or loved one to the intensive care unit. It is not only the patient who suffers from the impact of the crisis but also his family members (Dharmalingam *et al.*, 2016).

Due to the severity of disease conditions and the focus of healthcare providers' efforts on saving the patient's life, this often leads to neglecting the role of the family as a primary partner in decision-making and providing care to the patient, therefore, the need began to change the direction of importance from patient-centered care to family-centered care (FCC). Family-centered care is a participatory approach that allows the family to play many roles and participate in decision-making (Saeid *et al.*, 2020).

Negative feelings like stress, anxiety, depression, concern, guilt, wrath, insecurity, pain, acute stress disorder, and Post-Traumatic Stress Disorder (PTSD) are frequently experienced by patients' intensive care unit (ICU) relatives. Poor sleep quality results in high levels of physical and emotional exhaustion in addition to these issues. The difficulty of fully committing to being with a loved one, the unfamiliar surroundings, advanced technology used in critical care facilities, the severity of the patient's conditions, the lack of answers to questions, and poor communication are some of the factors that contribute to these feelings (Coelho *et al.*, 2022).

Furthermore, because the majority of these patients are unable to communicate due to sedation, mechanical ventilation, confusion, or coma, their families are expected to make medical decisions on their behalf. When the patient's family has complete control over medical decisions, processes such as tracheotomies, operation consent, and transfer to the other service can become sources of conflict with the health care providers (Büyükçoban *et al.*, 2021).

Nurses and other healthcare providers must provide family members with clear and relevant information and appropriate care. Families always adapt to difficult circumstances; thus, they require emotional, informational, and practical assistance. Addressing the needs of their patient's family members is a major aspect of and obligation of critical care nurses and physicians committed to alleviating their patients' relatives' or close friends' misery and suffering, nurses and physicians are responsible for providing family members with accurate, clear, and compassionate information so that they can contribute to choices concerning patients who cannot speak for themselves (Khatri Chhetri and Thulung, 2018).

Accurately identifying and promptly attending to the requirements of the patient's immediate family is beneficial to therapy, medical personnel needs to be better informed of the needs that family members perceive. Meeting to the needs of family members is one of the ICU staff's core roles, and doing so is essential for defining the degree of care offered there. Insufficient attention to the needs of the patient's family results in improper support and patient treatment and can exacerbate family unhappiness. When nurses know the importance and urgency of

requirements, they can provide the necessary information and aid to family members. As a result, nurses are the first to spot issues and offer coping mechanisms to family members. Pandey *et al.*, (2020)

Correctly assessing the needs of ICU patients and their families is one of the first steps in providing them with sufficient medical care. The first study was released in 1976, the same year that American nurse Nancy Molter started examining the particulars of these requirements and their importance to families. After that, Molter carried out a crucial study on the requirements of families of patients receiving critical care in 1979, leading to the development of the Critical Care Family Needs Inventory (CCFNI) (Felipe and Fortunatti, 2014).

The Intensive Care Bed Needs Inventory Questionnaire is one of the most widely used tools in academic studies to identify and arrange the needs of patients' families. In 1986, Jane Lesk divided needs into five sub-dimensions that included comfort, proximity, information, reassurance, and support (Van Den Broek *et al.*, 2015).

Study was conducted about these requirements, whether with the patient's family members or assessing the nurses' perceptions of those needs. The results of the studies varied, as the families' requirements were proximity, assurance, and information, found that intensive care nurses lack sufficient awareness of these requirements (Scott *et al.*, 2019).

In a phenomenological study, the critical care families highlighted aspects like informing, enhancing, touching, and spiring as the perceived caring nurse behaviors, ICU nurses tend to underestimate the demands of family members in specific situations, such as receiving

information, feeling accepted by workers, and being notified of changes in the patient's status (Björk *et al.*, 2019).

Additional research has revealed that the worst scenario for immediate family members in the intensive care unit is when they are not adequately informed about the critically ill patient's health condition and prognosis (Gaeeni *et al.*, 2015).

There are several factors that affect the needs of the patient's family, their experience in the intensive care unit, the quality of communication with the health care staff, and their participation in decision-making. Among these factors are the education and cultural background, religious beliefs, and social habits. Where health care providers make efforts to provide high-quality health care to the patient and her family and increase their satisfaction (Hirshberg *et al.*, 2020).

1.2. Importance of Study

The family of patient frequently views a relative's admission to the critical care unit as a crisis. An ICU admission denotes a highly stressful situation, regardless of whether the admission was planned, such as after a scheduled surgery, or unforeseen, such as after a terrible accident or an urgent illness. Patients and their families are placed in an unfamiliar environment (Karale *et al.*, 2016).

Initially, the efforts of the health care staff focus on treating the patient while the role of the family is neglected, and they are relied upon as the alternative decision-maker for the patient, who is often unable to make decisions due to her health condition, while decision-making is a vital role for the family, the family's ability to act in the best interest of

their loved one may be affected by their reaction to the patient's admission to the hospital (De Beer *et al.*, 2017).

There is broad consensus that Principles of Family-Centered Care (PFCC) concepts and increased family involvement must be applied in intensive care settings. Only some studies have examined interdisciplinary family care through direct observation and fieldwork, even though there is a wealth of research on interprofessional respect and teamwork in the ICU, how families are involved and how/to what extent PFCC principles are applied in clinical practice need to be better understood empirically. Identifying the needs of the patients' families and understanding the professional and personal approaches ICU nurses and other healthcare providers use to care for families will advance awareness about current ICU procedures and increase family and patient care (Davidson *et al.*, 2017).

In the Middle East, the family size is generally large and characterized by strong bonds between its members who visit the patient, crowd the waiting rooms, and want to participate in caring for the ill patient in the Intensive Care Unit. The personal obligations and responsibilities of the extended family towards relatives are highly valued. Therefore, providing support to families is encouraged when a family member is ill. Visiting relatives in the hospital are seen as a positive social action. However, it is encouraged socially and religiously and thus becomes a family necessity and obligation, especially with acute and sudden/unexpected acceptance, there is limited research describing families' experiences in intensive care units. Nurses may need to consider what patients' family members consider important (Al-Akash *et al.*, 2021).

Thus, the main objective of this research is to clarify the needs and perceptions of family members' care and update knowledge in this regard.

1.3. Problem Statement

The current study is concerned with identifying important family needs of patients admitted to intensive care units, as well as the impotent dimension of these needs, and identifying sociodemographic characteristics that influence differences in the needs of patients' family members. Understanding the characteristics and needs of families of critically ill patients can assist the healthcare team in providing quality care responsive to the unique characteristics and addresses the phenomena underlying the study.

1.4. Research Questions

1. What are the important needs subscales of the family of critically ill patients?
2. Do the sociodemographic characteristics have influence the needs of family members?

1.5. Objectives

1. Identify sociodemographic characteristics of family members of critically ill patients.
2. Explore the most important needs of family members of critically ill patients in Intensive care units.

3. Find out the relationship between the needs of family members and their sociodemographic characteristics.

1.6. Definitions of Terms

Family:

1.6.1.a. Theoretical

A family comprises at least two people or more who share a home or live close by, have a shared emotional connection, participate in related social duties, tasks, and positions, and have cultural attachments and a sense of love and belonging (Ann Allender *et al.*, 2022).

1.6.1.b. Operational

Family members of patients admitted to Intensive Care Units include parents, sons, brothers, sisters, sons, daughters and second-degree relatives.

Family Needs:

1.6.2.a. Theoretical

The requirements of family members which, if fulfilled, relieve or diminish family distress and, if unmet, may produce distress include, assurance (a necessity for hope in the favorable results), information (a necessity for prompt information on patients' illness condition), proximity (necessity to remain close with the ill family member), comfort (individual well-being and comfort), and support. (Liew *et al.*, 2018)

1.6.2.a. Operational

Requirements of families of patients in intensive care units were divided into five categories according to their requirements: support, information, comfort, proximity, and comfort. Support refers to the family's need for resources and specialized help; comfort refers to the family's desire to be physically comfortable to reduce suffering and anguish; and information refers to the family's wish to understand the patient's health condition.

Critically ill patients:**1.6.3.a. Theoretical**

Patients who at a high risk of having current or future fatal health problems. The risk of a patient being exceedingly vulnerable, unpredictable, and complex increases with the severity of their illness, demanding urgent and attentive nursing care (Burns and Delgado, 2019).

1.6.3.b. Operational

Patients hospitalized in Intensive Care Units have serious health conditions that call for high-quality, specialized medical and nursing care and facilities.

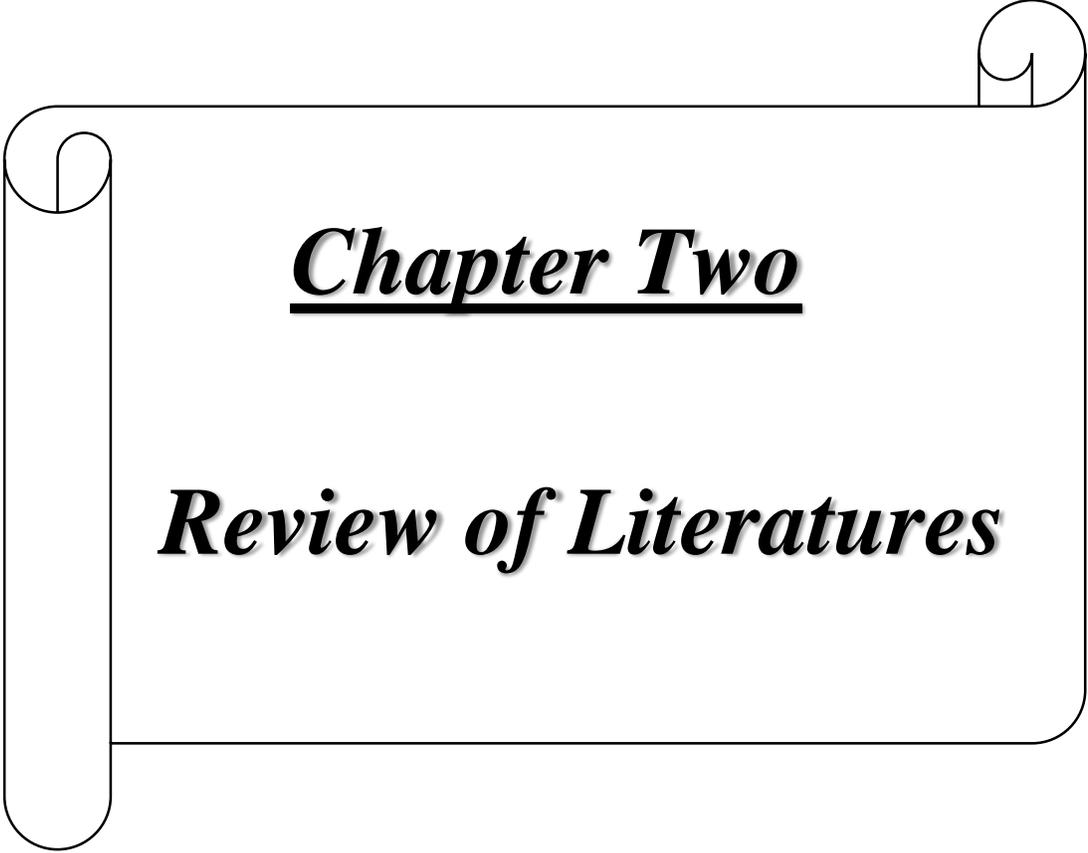
Intensive care units:**1.6.4.a. Theoretical**

A term used to describe the type of care given in a distinct hospital unit that is particularly staffed and equipped and devoted to

monitoring, treating, and caring for patients with life-threatening conditions. (Naef *et al.*, 2021).

1.6.4.b. Operational

A Unit in the hospital with special staff and devices provides care for patients with serious health conditions. The most common cases admitted to this unit include traumatic brain injury, spinal cord injury, chest trauma, cerebral vascular accident, myocardial infarction, and other life-threatening conditions.



Chapter Two

Review of Literatures

Chapter Two

Review of Literatures

2.1. General View

The intensive care unit is a harsh and stressful environment that houses the most critical patients in a hospital. Therefore, it is usual to see patients surrounded by intravenous lines, medical equipment, monitors, and unfamiliar sounds to the general public, in addition to the fragile emotional state, feelings of anxiety, fear, and powerlessness in the family and relatives for the lives of their loved ones. These stimuli often lead to one of the most unpleasant experiences they live (Khatri Chhetri and Thulung, 2018) .

The staff's main concern is the patients in intensive care units (ICU), some of whom require nearly constant care. The requirements of family and friends, as a result, frequently go unmet. This is believed to be due to family members being irritating, disruptive, and a distraction from the patient's care. This phenomenon is also influenced by factors like high patient acuity or staffing shortages (Ganz, 2019).

It is often a lack of attention to the role of the patient's family in the healthcare environment, as it needs to be given priority. However, it is expected to make crucial decisions regarding the patient's health condition and some medical procedures and provide continuous support and love. Emotional turmoil hampers the family's ability to provide support and make decisions in some situations (Pandey *et al.*, 2020).

With little preparation from the nursing staff, family members and friends who are visiting the unit for the first time are exposed to a

high-acuity setting as well as situations that are unfamiliar to them. It is simple for nurses who are exposed to this setting regularly to lose their sensitivity. Desensitization leads to a lack of empathy for patients and their families, raising anxiety levels because people fear the unknown. Families and friends could expect the worse if the unit needs to be correctly orientated. A better experience for the family can encourage them to be present and supportive of the patient, previous research, which has demonstrated that family engagement and awareness of patients' treatments leads to better patient outcomes (Nolen and Warren, 2014).

2.2. Intensive care unit

It is a department in the hospital that provides advanced care for patients with life-threatening health conditions with a specialized, qualified, and trained medical and nursing staff at a high level of efficiency, as well as it contains advanced medical equipment for continuous monitoring and life support (Woodruff, 2020).

2.2.1. Historical view about ICU

References differ about the origin of the Intensive Care Unit. In 1863, Florence Nightingale wrote about a small room beside the operating room in country hospitals, where patients were present to recover from the immediate effects of the operation or to stay there until their recovery, this may be the file's closest description of what will become the intensive care unit. (McDonald, 2020).

Recovery rooms were developed At Johns Hopkins Hospital in the 1920s. In Germany in the 1930s, the first was well organized. The postoperative care unit was developed in the 1940s of the last century in

America and was more specialized in the Mayo Clinic. In the 1950s, the first shock unit was established in Los Angeles, and in 1962 a patient monitoring unit was established after the onset of acute myocardial infarction in Kansas City. The development continued, so the intensive care unit became one of the essential hospital departments by developing specialized study programs in critical care nursing and medicine (Bersten and Handy, 2013).

2.2.2. Classification of ICU

The classification of intensive care varies according to the health conditions it receives (burns, neurologic, respiratory, trauma, and cardiology) or according to the age groups of patients (adults, pediatric, neonatal).

Medical intensive care unit (MICU), provides medical care for patients with life-threatening conditions such as respiratory failure, diabetic ketoacidosis, coronary artery disease, cancer, and stroke. Provides diagnostic, therapeutic, and rehabilitation services (NSH, 2023).

Surgical intensive care unit (SICU), treats patients after major surgeries such as thoracotomy, laparotomy, craniotomy, and unstable multiple trauma patients who require close monitoring and life support (Rohrig *et al.*, 2020).

Pediatric intensive care unit (PICU), manages and treats children with actual or potentially severe health conditions. It is equipped with medical instruments and devices suitable for children (Slusher *et al.*, 2018).

Neonatal intensive care unit (NICU), is responsible for providing care for high-risk and critically ill newborns. It also receives and manages newborns with congenital defects or birth complications (Williams *et al.*, 2018).

2.3. The Multidisciplinary Team Approach in the ICU

To provide high-quality health care in intensive care units, the medical team includes several specializations, including (physicians, nurses, pharmacists, physiotherapists, psychotherapists dieticians, rehabilitation specialists, social care workers, and religious service providers, see the (Figure 2.1).

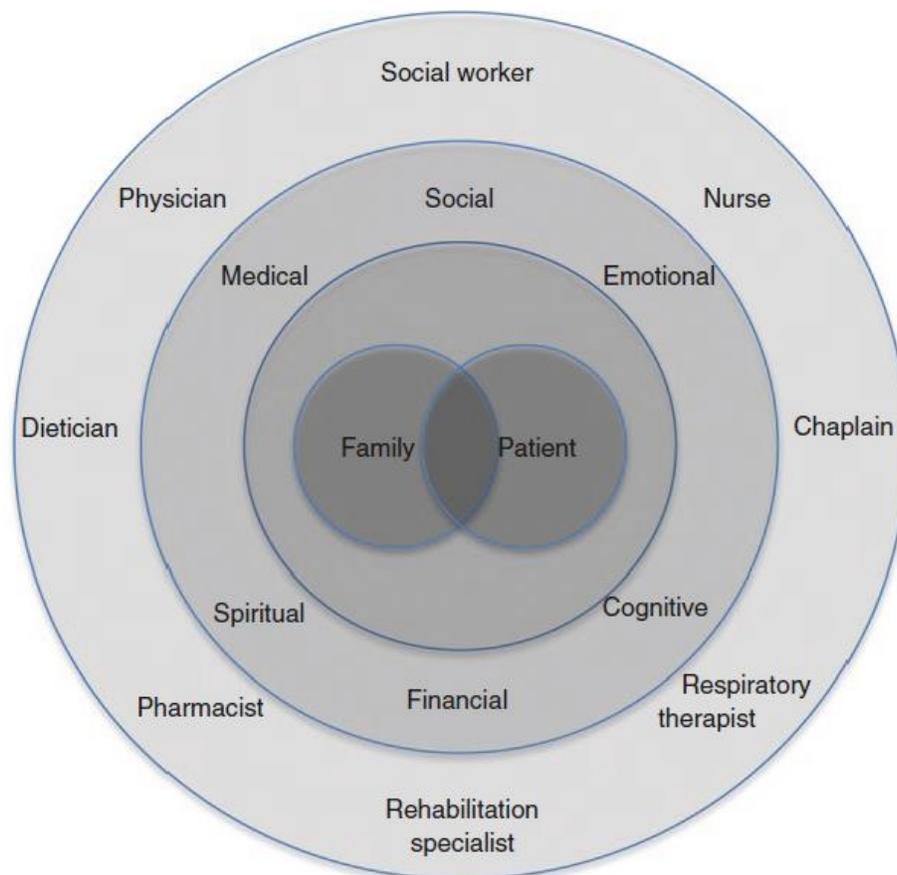


Figure (2.1): The multidisciplinary team working together to meet the various needs of the ICU patients and his or her family (Ervin *et al.*, 2018).

The multidisciplinary team continuously present to provide physical, psychological, social, spiritual, emotional care and financial assistance to the patient and his family. Interdisciplinary care can contribute to providing optimal services in intensive care. However, the multiplicity of specializations leads to different clinical presentations, confusion, and overlapping in the information needed by the family to reassure and make the right decision regarding patients' health. Coordination and communication between the staff and the distribution of tasks and responsibilities to health care providers, each according to his specialization, helps to reduce errors and confusion in work (Cagle and Bunting, 2018).

2.4. Family-Centered Care

The Family-centered care (FCC) views the patient's family as the unit around which caregiving should be organized. This approach considers the patient as part of a larger social unit, the family, which is an important determinant of mental and physical health (Spooner *et al.*, 2018).

The family-centered care represents a comprehensive approach to delivering healthcare that respects and attends to the needs and values of families (Burns *et al.*, 2018).

In the 1990s, the FCC first became popular in the fields of neonatal and pediatric nursing, where family integration was viewed as essential to the treatment of ill newborns and young children. Later, regardless of age or care level, the FCC was made available to all patients (Mitchell *et al.*, 2016).

Over the past decade, the concept of patient- and family-centered care has expanded. It is seen as a participatory approach that considers the family an essential part of patient care and relies on mutual benefit between health care providers and the patient's family. The family-centered philosophy of care is based on four fundamental concepts: respect, exchange of information, participation and collaboration, as family members are considered essential allies in improving the quality and safety of health care (Clay and Parsh, 2016).

Patient- and family-centered care has many advantages: It increases job satisfaction for health professionals. It leads to better use of healthcare resources, improving treatment outcomes and care experiences for patients and their families. PFCC interventions can shorten the length of stay in the intensive care unit, increase patient and family satisfaction and improve mental health outcomes. PFCC is particularly stressed in the intensive care unit because of the severity of the condition and the patient's inability to protect their interests (Van Mol *et al.*, 2017).

ICU nurses and physicians are responsible for delivering patient care as well as meeting to families' needs, easing their stress during a severe illness, and preparing them for decisions and care requirements both during and after the ICU stay (Goldfarb *et al.*, 2017).

Evidence-based guidelines for family-centered care in the neonatal, pediatric, and adult ICUs have been developed by, with five key recommendations: family presence in the ICU, family support, communication with family members, use of specific consultations and ICU team members, and operational and environmental issues, the

suggestions are based on an overview of the best methods for assisting families in the ICU (Davidson *et al.*, 2017).

All personnel working in the ICU should review these recommendations and evaluate those most relevant to their unit, family-centered care practices, interests, and resources available to them. It has proven difficult to implement PFCC in intensive care units because of a lack of common understanding of teamwork, a lack of support from nurses, a visitation policy, excessive workload, provider attitudes, and inadequate communication between doctors and nurses, which are examples of barriers identified to the implementation of PFCC (Kiwanuka *et al.*, 2019).

The implementation of PFCC necessitates a concerted effort and a shared understanding in the ICU. PFCC practice is associated with one or more specific procedures, but the PFCC concept is also a holistic strategy that must permeate the ICU. For example, having flexible visiting hours is useless if the staff does not look after and include the families who visit. ICUs that have successfully implemented PFCC have strong leaders, compassionate staff, and the backing of a dedicated multidisciplinary team. The importance of nurses in providing family care has additionally been emphasized (McAndrew *et al.*, 2020).

Because of their ongoing presence, they are in a special position to guide and assist the multidisciplinary ICU team and guarantee family-centered care. Nurses' efforts to encourage family interaction are, however, impacted by a complex and dynamic interplay of facilitators and disruptors. Organizational responsiveness, unit support, family

adaptation, and ICU nurses' facilitation have all been identified as crucial facilitators (Nygaard, 2022).

2.5. The Needs of Families of Critically Ill Patients

US Nurse Nancy Molter was the first to conduct a study of the needs of patients' families in critical care, which led to the creation of the Critical Care Family Needs Inventory (CCFNI) (Wantiyah *et al.*, 2018). Based on the results of her work, the needs of the families of critically ill patients were identified, including:

1. Feel there is hope
2. Feel hospital personnel care about the patient
3. Have a waiting room near the patient
4. Be called at home about changes in the patient's condition
5. Know the prognosis
6. Have questions answered honestly
7. Know specific facts about the patient's prognosis
8. Receive information about the patient at least once a day
9. Have explanations given in understandable terms
10. Be allowed to see the patient frequently

One of the researchers who validated Molter's findings was Jean Leschi (1991), who grouped families' needs into the following five areas: Support, proximity, information, assurance, and comfort. Also, since that time, her work has been validated by numerous other researchers (Büyükçoban *et al.*, 2015).

Although there are a number of quantitative studies conducted after Molter that list the needs of families of critically ill patients, the

importance of qualitative studies conducted by a number of nurses describing the family's experience in intensive care, identifying their feelings of anxiety and confusion, obtaining information, staying close to the patient, or being in the waiting room (Björk *et al.*, 2019).

Frivold *et al.*, (2015) has been described family experience in ICU as maintaining a waking phase during which the family feels the need to watch over the patient because they cannot forgive themselves if anything happens while they are away. During this stage, the patient takes precedence, and family members want to be with the patient, care for him, touch him, talk to him, or even just sit quietly near him. They want to provide and give priority to the comfort and reassurance of the patient.

The patient's serious condition worsens and the patient's family starts aggressively looking for information. According to (Kourti *et al.*, 2015), not knowing is the worst part, and intense worry can last until the family feels they have gathered enough information. The family could next move into a tracking phase, where they monitor, examine, and evaluate the patient's care. Family members want to see how the patient is being treated at this time to ensure that he is receiving proper care. Family members experience negative feelings and many pressures that could influence family relationships, roles, and communication.

2.5.1. Families' Need for Information

Information is one of the basic needs identified by the families of critically ill patients. When patient updates are not provided promptly, families panic and are afraid to make caregiving decisions when they do

not have up-to-date information. However, not all family members and relatives of the patient desire the exact amount and type of information.

Gaeni *et al.*, (2015) find that some family members, described as observers, need for more information than other family members. The observers were on constant alert as they scouted the environment and searched for information. They can only relax when they receive adequate and consistent information. Gaeni hypothesizes that especially detailed information about what a negative progression in a patient's condition may be harmful to them. Thus, the nurse must carefully assess the amount of information that family members are willing and able to absorb.

Most families expect the physician to initially explain the patient's condition, diagnosis, and treatment. However, they expect the nurse to elaborate, providing information about the patient's daily care and treatment, what the family's role is, and whether the patient is ready for transfer. To encourage the family to adapt to the experience, he recommends that the nurse begins during the family visit by explaining what is happening to the patient and, at the end of the visit, ask the family to explain their understanding of the patient's condition (Schwartz *et al.*, 2022).

2.5.1.1. Essential for Collaboration

Families seek information from multiple sources, so it is essential to standardize the message from all team members. When selecting a physician for information, families prefer to communicate with physicians who speak to them in understandable terms, spend sufficient time with them explaining and clarifying the information, and are

sensitive, honest, and helpful. They remember the physicians they spoke to directly and keep their word more than the physicians with the most information. (Farahani *et al.*, 2014) summarizes strategies that can be used with families:

1. Regular family conferences to discuss the patient's goals and progress toward goals are helpful. Since 50% of families do not understand the patient's diagnosis, treatment, or prognosis, the conference should begin with the physician presenting a clear language summary of the patient's condition and giving families enough time to ask questions.
2. Provide written instructions explaining information about the intensive care unit, equipment, family guidance for the location of waiting areas, phone numbers for the unit, and available services.
3. A method of contact must be provided between the patient's family members, the nurse, and the physician. The personal phone of the patient's family members or a pager can be used.
4. If possible, provide consistency in patient care. Some families indicate that it is not only important to receive updates on the patient's health status but also that they want to receive them from the same nurse every time.
5. Some hospitals provide verbal or written instructions for the patient's family to communicate with the nurse and ask questions they want answered.

2.5.2. Families' Need for Proximity

Through the experiences of families in the intensive care unit, they constantly mention that they prefer open visiting hours. Patient and

family satisfaction increase when the unit's visiting hours are not limited and flexible. He stated that there is ample evidence that the visit is not stressful for patients and does not interfere with providing nursing care. *Dragoi et al.*, (2022) They described the following advantages of an open visit:

1. The patient's family members are more satisfied, and they can arrange visiting times whenever they need and commensurate with the patient's comfort, so they prefer open visits.
2. Communication becomes easier between the patient, family, and staff. Families believe they receive more information about their patient's health issues because they see the nurse frequently and can ask questions.
3. Open family visiting gives families more significant opportunities to give emotional support and reassurance to patients, helping their recovery.
4. There is some evidence of the physiological benefits of the open visit and the presence of relatives with the patient, as it was found to reduce blood pressure, heartbeat, and intracranial pressure(*Rahmani et al.*, 2013).
5. Flexible visiting hours give more opportunities for interaction between nurses and the patient's family and family education.

Hart et al., (2013) are recommended to develop a plan and schedules for visits at the time of admission of the patient to the intensive care unit so that the family can reach the patient when they are available. However, the critical care nurses are the gatekeepers and advocates of the patient and are responsible for organizing the visit. The responsibility becomes when the patient benefits from the visitor and when the patient

improves without the presence of a visitor. Some critical care nurses ask family members to leave while the nurses are doing the procedure.

However, there is evidence of the importance of having a family member besides the patient and participating in physical care such as moisturizing lips, combing hair, or feeding the patient. However, differences were found in nurses' willingness to allow family members to care for the patient and to be present during interventional procedures. Reassurance and satisfaction increase and family fears decrease when nurses show competence and commitment while providing care to the patient and when they explain what care they provide to the patient and how and what benefits accrue to the patient's health (McKenna, 2019).

2.5.3. Families' Need for Support

Providing support for the family and the patient is one of the essential responsibilities of the staff in the intensive care unit and includes psychological, emotional, social and spiritual support. This contributes to the patient's family adapting to the difficult situation they are experiencing and participating in decision-making (Adams *et al.*, 2014).

One of the most important responsibilities of family members is to promote psychological well-being and reduce anxiety for a critically ill patient through their familiar and caring presence, meaningful interaction with the patient, and collaboration with the treating team in care planning. The family's ability to support the patient may be compromised by their own psychological distress. Anxiety, depression, and even signs and symptoms of PTSD have been documented in this population. Thus, to promote optimal outcomes for both the patient and

the family, it is the nurse's vital responsibility to attend to the needs and concerns of family members during treatment in the ICU (Babaei and Abolhasani, 2020).

The sudden admission of a family member or loved one and a state of anxiety, fear, and sadness increases the spiritual and religious needs of individuals, as individuals resort to spiritual and religious beliefs to relieve grief and help them adapt to overcome the crisis (El Nawawi *et al.*, 2012).

Spirituality refers to communication with a higher power. It represents a stage of self-transcendence and the search for meaning in life. It is expressed through a set of beliefs and practices. These practices vary in different religions and cultures (Turan and Yavuz Karamanoğlu, 2013).

Spirituality is like a shield against any negative psychological and emotional consequences of critical situations. That family members with loved ones in the intensive care unit may find solace and strength in their spiritual beliefs. In intensive care units, family members may turn to intensive care nurses for answers and guidance to their spiritual concerns. Positive health care outcomes of improved decision-making, increased patient and family satisfaction with care, and increased family adjustment have been linked to the provision of spiritual care to family members of critically ill patients (Ho *et al.*, 2018).

According to Balboni *et al.*, (2014) intensive care nurses face a challenge in providing spiritual care and religious services with the discrepancy in families' spiritual values and beliefs. Central to these challenges is the need for sufficient awareness towards those beliefs.

As a result of the crisis, the stability and balance of the role of family members are disturbed. The importance of social support arises as a buffer and an essential resource for stressed families. Social support, which refers to the resources or assistance provided by individuals or groups, has different types and functions, and the sources of social support may vary across an individual's lifespan. In addition, culture can influence the coping strategies individuals prefer and cause individuals to use different forms of social support to deal with stress (Chang *et al.*, 2018).

2.5.4. Families' Need for Comfort

Comfort is a comprehensive, subjective and multidimensional concept affected by physical, environmental, social, and psycho-spiritual factors, which change in time and space. It results from individuals' interactions with themselves, the people around them, and the situations they encounter in the course of illness and the healthcare process (Gibaut *et al.*, 2013).

One way to help relieve some of the stress is to provide comfort and support to the patient's family, as family members feel helpless, anxious, and fearful about their loved one's condition, exploring the importance of family comfort for ICU patients and a number of strategies for providing it. Latour *et al.*, (2022)

1. First and foremost, recognize the emotional impact that ICU hospitalization can have on family members. Because ICU visitation restrictions might be rigorous and limit the number of visitors allowed at any given time, they may feel isolated and alone. Furthermore, they may be concerned about their loved one's status and future, which can cause

anxiety and tension. Healthcare personnel can assist by providing regular updates on the patient's status, explaining the plan of care, and addressing any concerns expressed by the family. Clear communication can help reduce the tension and anxiety that comes with uncertainty.

2. Creating a friendly and inviting environment is another approach to bringing comfort to families. Simple gestures such as providing blankets, pillows, and beverages can help achieve this. Comfortable waiting room chairs or couches can also help families feel more at ease during extended stays. Books and television available to families can help them pass the time and distract them from their anxieties. Furthermore, healthcare personnel can provide emotional support by listening to families' concerns, encouraging them, and being there and ready to answer questions.

3. Finally, it is essential to understand the importance of cultural and religious beliefs in offering solace to families. Healthcare practitioners should be aware of and respectful of cultural and religious customs and beliefs that may influence a family's treatment preferences. This could involve accommodating prayer or ritual practices, allowing access to the clergy or spiritual leaders, or catering to food issues. Healthcare practitioners can assist in creating a more pleasant and encouraging environment for families by acknowledging and honoring these views.

2.5.5. Families' Need for Assurance

Assurance of the patient's condition in the intensive care unit is associated with decreased anxiety and fear among family members. It also promotes confidence that the patient will receive the best care. The need

for assurance is essential for the ICU patient's family as it contributes to their recovery and well-being. It has been shown that family involvement in the care of critically ill patients can reduce the risk of delirium, shorten the length of stay in the intensive care unit, and reduce mortality rates (Khoshnodi *et al.*, 2017).

Family members also play an essential role in advocating for loved ones' needs, providing emotional support, and communicating with the medical team. Thus, ensuring family assurance in the ICU enhances patient-centered care, patient outcomes, and overall ICU experience (White and Parotto, 2019).

1. Communication: The key component of family assurance in the ICU is effective communication. The medical staff should establish open lines of contact with the patient's family and keep them updated on the patient's health, course of treatment, and progress. It is important to encourage family members to share their concerns, ask questions, and contribute to care planning. The use of interpreters should be taken into consideration when necessary, and communication should be adapted to the family's needs and cultural background.

2. Family-centered care: ICU staff members ought to offer family-centered care, which emphasizes the important role of including families in patient care. This includes involving family members in decision-making, providing emotional support, and addressing their practical needs such as transportation, accommodation, and financial assistance. Family members should also be allowed to visit the patient regularly and participate in care activities, such as bathing and feeding.

3. Education: Educating the family about the patient's condition, progress with treatment, and prognosis can help decrease anxiety and unease. Education should be provided in a manner that is understandable and culturally appropriate. Family members should also be informed about the ICU environment, including visiting hours, infection control measures, and the roles of the medical team.

4. Psychosocial support: ICU patients and their families often experience psychological distress such as anxiety, depression, and post-traumatic stress disorder (PTSD). Therefore, providing psychosocial support to the family is crucial. This may include counseling, peer support groups, and referral to mental health professionals. ICU staff should also be trained to recognize and address psychological distress in patients and their families.

5. Follow-up care: After discharge from the ICU, patients and their families may require ongoing support and follow-up care. This may include rehabilitation, home care, and medical follow-up appointments. ICU staff should provide information and referrals to appropriate resources and services to ensure continuity of care and prevent readmission.

2.6. Satisfaction Family of Patient

In recent years, the perceptions and satisfaction of patients and their families is one among the many international indicators of the quality of health services provided in health facilities (Peña *et al.*, 2017).

Patient and family satisfaction are a very important measure that provides information about whether health workers have successfully responded to client values and expectations. However, due to their illness and treatment, it can be difficult for patients to assess an ICU stay. Study

show that the patient's and family's perception of an ICU stay can be the same. In recent years, identification of the patient's and family's experiences during an ICU stay has led to an increase in research on family satisfaction. Family satisfaction with the care a patient receives during an ICU stay can be an important piece of information used to improve the quality of overall ICU health services, ensuring that the care provided meets the needs of the patient and family (Haave *et al.*, 2021).

Family satisfaction has become an important area of research in critical care. It focused on patient and family-centred care. Family satisfaction was used as a proxy measure for the quality of care received by the patient (Scott *et al.*, 2019).

In addition, family satisfaction plays a role in enhancing the patient's experience later in the patient's journey and supporting the patient as the primary source of care after hospital discharge. It is essential to prevent adverse psychological outcomes for patients and families by improving family satisfaction with communication and care (Mosleh *et al.*, 2015).

It is well known that the admission of a relative to the intensive care unit and the associated uncertainty is a very stressful experience for family members, leading to increased anxiety, depression and even physiological deterioration, especially in the elderly and spouses. The distance between the family residence and the hospital to visit a critically ill family member adds more stress and anxiety due to problems associated with travel time, financial cost, the difficulty of accommodation, distance from family and lack of social support, which leads to feelings of confusion and increased vulnerability. Because of the difficulty of returning, especially when the patient is unstable and at times

when they are vulnerable, it requires family members to sleep close to the intensive care unit, which significantly increases the general sleep disturbance of the family. This leads to a situation where family members may become more anxious and sleep-deprived, which has implications for the person's decision-making, attention, and satisfaction with ICU care (Frivold *et al.*, 2015).

Several factors influence the satisfaction levels of the people most invested in the patient's care, such as spouses and parents. Confidence in the care provided by staff and perceived nursing and medical competence. To increase satisfaction and improve the therapeutic relationship between families and ICU physicians, Clear open communication and allows flexible visiting hours. In general, research indicates that it is helpful to measure family satisfaction with ICU care and to provide tools that measure various dimensions of the quality of that care. (McLennan and Aggar, 2020)

2.7. Family Participation in Care

2.7.1. Introduction to Family Involvement in the ICU

Family and relatives want to care for, serve, and protect their loved ones, especially when a family member has a life-threatening health condition. Caregiver family members often provide physical, psychological and emotional care in the hospital, especially for the many unable patients with chronic illnesses. Many will take up this primary role again after returning home. Family members are often sidelined or neglected in intensive care settings. They may not understand the language doctors use, the planning or daily work of the ICU, or the

progress of their loved one's illness, judging it in physiological terms (Bell *et al.*, 2018).

Notably, while the physician's concern about the patient's health is often related to the physiological severity of the disease, family anxiety or fear and the risk of developing post-intensive care syndrome are not necessarily associated with the severity of the disease only but with other factors such as the age of a family member, social support, previous experiences or feelings take control of the situation (Beesley *et al.*, 2018).

Family involvement is a broad term that can include all family approaches in an ICU. This includes the participation of families in events, such as allowing participation in caregiving, decision-making, rounds, discontent with resuscitation or procedures, and advocating for patient safety. Family participation also includes caring for family members, such as providing physical care such as body hygiene, feeding, and emotional support. While they are in the ICU, they make sure they understand what is happening and for their loved ones. Family members can continue to be involved after their loved one has recovered and leaves the ICU to influence the organization and development of ICU policies by participating in Patient Family Advisory Councils (PFACs) (Olding *et al.*, 2016).

The concept of family is not limited to legal or genetic relatives but also includes people whom patients wish to participate in their medical care. Despite this, sociocultural differences around relationships have sometimes led to the exclusion of some family members from their loved one's bedside during serious illnesses (Brown *et al.*, 2015).

Healthcare providers should respect relationships that are important to patients whenever possible. In addition, because the legal requirements for medical decisions making for patients differ in different communities and countries, it is essential to encourage community members to find out who will be the default decision-maker and to designate a different healthcare representative if desired, while they can do so (DeMartino *et al.*, 2017).

Family relationships can be complex, and while many ways of involving the family are described, it is impossible to fully address the nuances of family relationships that may influence certain situations. In addition, not all family members have the same desire to be included in the same way and display different coping patterns in the ICU setting (Butler *et al.*, 2015).

Common sense is imperative, as the accidental removal of family members threatens the safety of others or causes abuse from the ICU environment. However, it is no longer acceptable to exclude families from participation in the intensive care unit solely based on convenience or the desire of the health care team (Netzer and Iwashyna, 2017).

Family participation in clinical rounds Inviting families to rounds is believed to increase relationship trust, satisfaction, and communication without decreasing the quality of the rounds. While family participation in daily rounds has been described primarily in observational and descriptive studies, the guidance now focuses on families being offered to participate in rounds as standard practice. One common concern is that the participation of family members during

rounds will lengthen rounding or reduce teaching time. However, data on this needs to be more consistent (LaRosa *et al.*, 2019).

Two observational studies conducted by (Au *et al.*, 2018; Gupta *et al.*, 2017) in recent years found a slight increase in the time of clinical rounds when the family was present. However, while trainees may ask questions differently with the family present, with less focus on diagnosis in some studies, general teaching is not thought to be affected. While the time of the intensive care team is valuable, if relatives of the patient lengthen rounds slightly, this potential negative factor may be offset by benefits to families through improved satisfaction and understanding.

In addition, having family members participate during clinical rounds may reduce the amount of time both nurses and physicians need to update information for families throughout the day. Collaboration in joint decision-making may also occur when the family is present on clinical rounds, as they may contribute to the plan by adding information about medical history or insight into the patient's condition or goals since the family is the primary source of information among unconscious or disoriented patients (Cody *et al.*, 2018).

If there is a need for more collaboration and decision-making with family members, a scheduled family meeting is likely to be a more appropriate venue for such discussions. These discussions are progressing more smoothly on the basis of a trusting relationship based on joint tours. Extensive studies are needed to determine more about how to engage family members most effectively during this time while meeting the goals of the intensive care team, being efficient in-patient care, and making medical decisions (Gupta *et al.*, 2017).

2.7.2. Family Involvement at the Bedside

In addition to participating in rounds, family members can participate directly in the care of their loved one and be present during bedside procedures, including resuscitation efforts. Family members can help the patient with daily activities such as walking, brushing teeth, bathing, combing, and feeding when appropriate. Having family around the patient for psychological support may also help reorient a confused or delirious patient (Wyskiel *et al.*, 2015).

A study conducted on family members who were formal participants in the care of patients in the acute care ward showed that participation in this program was associated with a reduced readmission rate in 30 days (Van De Graaff *et al.*, 2018). A similar study in pediatric wards showed a reduced length of stay when the family was involved in caring for their child or infant (Segers *et al.*, 2019).

In some circumstances, when family members cannot be present during procedures or resuscitation, they may still be able to participate by sitting in the room or actively resting the patient after the procedure. Experiments found that family presence during procedures had positive psychological effects, in the short and long term, for the family members who were involved (Jabre *et al.*, 2013).

The patient's family or relatives feel that they have the right to be present during CPR if they wish, and the majority of nurses support the implementation of policies that allow the patient's family to be present during the resuscitation process. Family presence in the resuscitation effort is now an important standard of care emphasized by organizations

and institutions such as the American Heart Association (Neumar *et al.*, 2020).

Evidence regarding families of patients in intensive care procedures is preliminary. Family members experience the levels of stress and anxiety they feel in the waiting room while waiting to hear the outcome of the procedure. However, when the family is present bedside to the patient during the procedure, this information reaches them directly. Allowing family members to attend may also address concerns and beliefs that patients' families were not always treated respectfully. Direct viewing procedures reassure family members and encourage better medical service. Attendance during procedures may be important to the family of patients who pass away (Oczkowski *et al.*, 2015).

The presence of the family at the patient's bedside relieves feelings of fear and anxiety in patients associated with intensive care unit procedures to depict the presence of the family during the insertion of the central venous line. Although there is no evidence of increased distress for family members due to the presence of procedures, a study of the bedside family experience in adult ICU patients is needed to see if any factors might harm patients or families to be included (Kamali *et al.*, 2020).

However, while this evidence is imminent, current studies suggest that bedside family of patient sharing, including during resuscitation and procedures under the supervision of the medical team, can be a positive experience for all parties. However, the medical team must maintain the privacy and dignity of a patient who cannot speak for himself. If the patient does not want to attend family, the family should

not be invited to stay. At all times, whether or not a family is present, patients must be treated in a manner that preserves their humanity and dignity. In addition, not all family members will have the desire to be present during resuscitation(Beesley *et al.*, 2016) .

2.7.3. Family Impact on Patient Safety

The family plays the role of protecting the patient from risks and events that could harm the patient throughout the period of stay in the intensive care unit, including injury and death. Family members are often at the bedside. In one study, family members participated in semi-structured interviews to determine what went wrong during hospitalization. Family members reported 16% more errors identified and 10% more adverse events than hospital accident reported by staff (Khan *et al.*, 2017).

By involving families in safety monitoring, unrecognized errors and consequences are identified and ideally prevented. Many hospitals have established teams that will provide rapid assessment, stabilization, and triage of patients with clinical deterioration in the hospital ward, often called Rapid Response Teams (RRTs). Family members, who are often present and closely aware of their family member's condition, can help by alerting staff if there is a change in the patient's condition. One hospital expanded its RRT system to allow activation directly by family members. Family members received instructions about the program and how to work it and were given a number to activate the RRT. While family involvement in activating RRTs did not significantly affect the primary outcome in this study, there was also no increase in inappropriate calls by the family (Bucknall *et al.*, 2021).

The patient's family can be an important partner in improving health care in recognizing early changes in the patient that healthcare providers must take seriously. Family members can also work with the ICU team to maintain good hand hygiene and thus reduce the spread of infection. In one study, patients or their family members were made aware of the importance of reminding medical staff to wash their hands. This education program has been shown to increase hand hygiene by staff by an average of 34% and was found to be a viable and cost-effective way to reduce the spread of infection (Alzyood *et al.*, 2018).

In many circumstances, family members feel uncomfortable in this role and may fear retaliation. In addition, family members can be marginalized due to a combination of factors, including language, culture, or educational background, and they often feel that they are not given enough opportunities to speak up or advocate for their loved ones. Even if they have the ability and willingness to speak up, family members often feel that their needs and concerns are not adequately taken care (Fisher *et al.*, 2016).

Encouragement by health care providers for the patient's family to participate, such as encouraging hand hygiene, increases the likelihood of effective communication and mutual benefit. Some health organizations are even beginning to include patient and family assessment and feedback as part of their safety policy since family members, because they have been around for a long time, are often able to identify contributing factors and make recommendations to improve the quality of care (Clay and Misak, 2016).

2.8. Coping Family of Patient

When a patient is admitted to the hospital, it is often a stressful time for their family member, with increased negative emotions, including symptoms of anxiety, depression, and symptoms of post-traumatic stress during and after the hospitalization experience, especially after sudden admission to the intensive care unit. These feelings likely contribute to the increased health risks of cardiovascular disease among the patient's family members (Frota *et al.*, 2021).

It is possible that the experience of psychological stress experienced by family members may not be entirely related to the environmental stressors they encounter in the hospital but may also be mediated by individual perceptions and coping with the patient's admission to the hospital. A comprehensive view of the mechanisms of psychological responses among family members and possible preventive approaches to their psychological illness and increased risk of cardiovascular disease can thus be gained through a broad understanding of coping mechanisms following an unexpected admission of a loved one to the intensive care unit (Chang *et al.*, 2018).

Coping is defined as the cognitive efforts and behavioral patterns that a person exhibits in response to factors that threaten the stability and determine how these stresses will affect physical and emotional well-being. They are mechanisms of change that entail intentional efforts to mitigate the effects of stressors and not just a variety of responses that occur (Algorani and Gupta, 2022).

There are many coping systems in the literature, including those that focus on how the family copes with the illness of a loved one or the role of physician in mitigating stress and helping the family cope, but the system devised by Lazarus and Folkman, in 1984 is the most common and has been widely discussed as it focuses on strategies To face the problem and manage it, and not just the emotional and behavioral response (Harlan *et al.*, 2020). it includes four mechanisms and fundamental concepts for coping

1. Coping is an operation or interaction between persons and their surroundings.
2. The purpose of coping is to manage stressful situations rather than regulate or dominate them.
3. Coping is predicated on the concept of evaluation (how an occurrence is observed and cognitively evaluated in an individual's mind).
4. Coping entails mobilizing cognitive and behavioral strategies to deal with internal or external demands arising from the interaction of persons and their surrounding circumstances.

Problem-focused approaches include resolving interpersonal problems, active planning and decision-making, obtaining resources and information, and being more educated about stressors. Emotion-focused coping, on the other hand, entails cognitive and behavioral efforts to regulate and overcome anxious reactions to stressors. Emotion-focused coping can be divided into two types: active processes, including coping methods aimed at changing a negative emotional response and avoidance processes involving efforts to lessen the consequences of negative

feelings. Religion, positive reframing, and acceptance are active processes; avoidant actions include denial, self-distraction, and drug use. Problem- and emotion-focused coping can coexist, with various strategies dominating at different periods depending on the source of stress, the individual, and the context. (Rückholdt *et al.*, 2019)

2.9. Theoretical Framework

The Neumann systems model was the framework chosen for this study. In the Newman systems model, the client may be an individual, a family, a community, or a group. In this study, the client was a patient's family in the intensive care unit. The Newman systems model looks at the client holistically concerning their environment and how various stressors affect their health and well-being. It defines stability, or health, as "a state of equilibrium that requires entry into an exchange. A stressor can be defined as an environmental factor that has the "potential to disrupt the stability of a system"(Johnson and Webber, 2015) .

Admission of a family member to the Intensive Care Unit was assumed to be stressful for the family members participating in this study. Newman looks at the client as a basic structure "consisting of basic survival factors common to species". The basic structure is surrounded by concentric circles called lines of defense and resistance (**see Figure 2.2**).

Resistance lines surround the core structure. In turn, they are surrounded by a normal defense line and a flexible defense line. There are similarities between all lines of defense and resistance. Together, they are an interconnected set of protective and coping mechanisms that attempt to maintain the stability or wellness of the client. The Newman Systems

model considers five client variables when evaluating infrastructure and lines of defense and resistance. There are physiological, psychological, sociocultural, developmental, and spiritual variables (Smith, 2019).

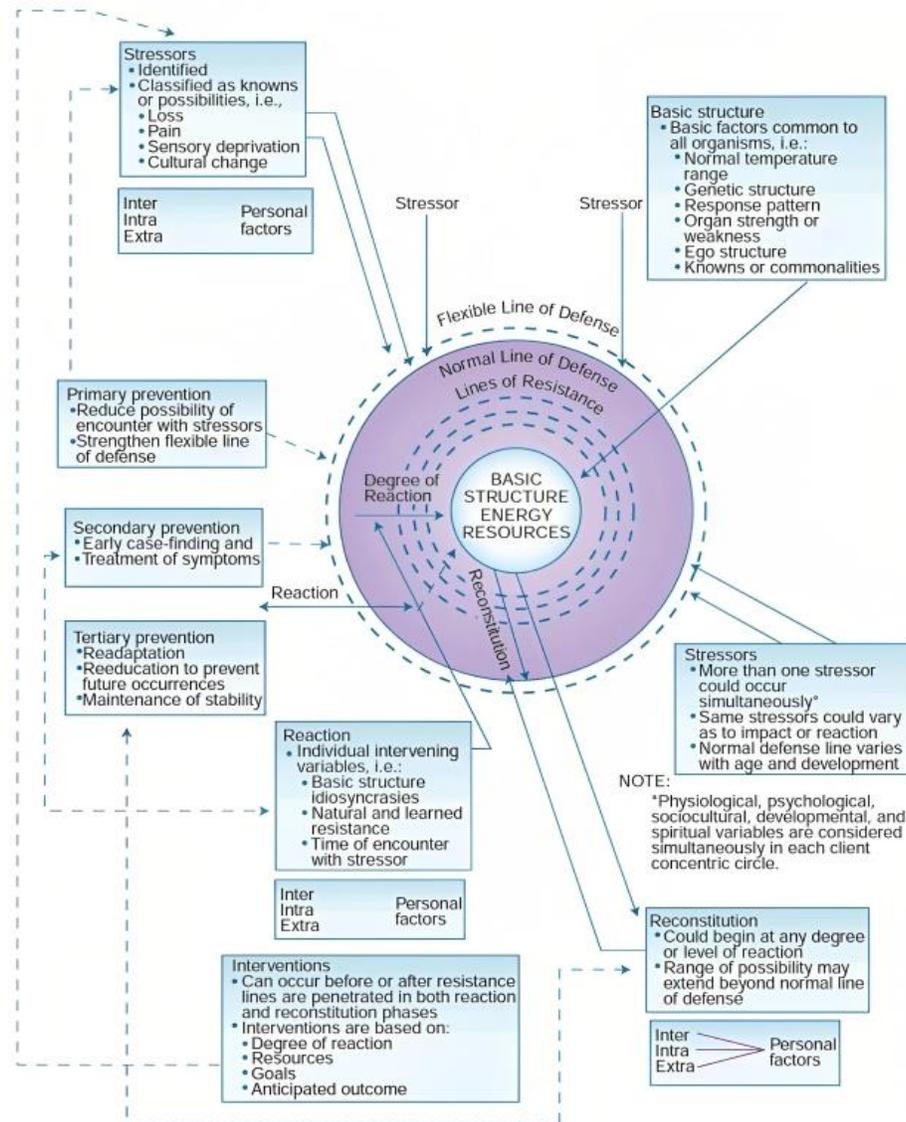


Figure (2.2): The Neuman systems model. A holistic view of a dynamic open client–client system interacting with environmental stressors, along with client and caregiver collaborative participation in promoting an optimum state of wellness. Original diagram copyright by (Neuman and Fawcett, 2011).

Signs and symptoms of an illness appear when a stressor is able to break through the flexible barrier to defense. Nursing interventions should ideally focus on enhancing the flexible line of defense and averting disease. The flexible line of defense encircles and guards the normal line of defense. It is a dynamic combination of different protection mechanisms. The normal line of defense, also known as the usual wellness or stability state, serves as "a standard against which deviancy from the usual wellness state can be determined" since it stops stresses from invading the basic structure of the client (Alligood, 2017).

The basic structure and normal line of defense are protected and supported by resources inside and outside the resistance lines. Neuman views nursing as the conduit between the client, their health, and their surroundings. Nursing interventions are classified as primary, secondary, and tertiary prevention depending on where a client is on the health continuum. (Kaylor and Turner, 2015)

The levels of prevention work depend on the reaction caused by the stress in the client. Primary prevention reinforces flexible lines of defense and maintains the client's basic structure. Secondary prevention occurs when stress crosses the lines of defense, and symptoms begin to appear in the client. It aims to protect the lines of defense and restore the client's condition to a level of stability and wellness. Tertiary prevention is concerned with maintaining wellness once the client achieves wellness or stability (Hannoodee and Dhamoon, 2020).

Lines of defense and coping mechanisms correspond to the normal levels of family functions. Physiological variables are represented by basic needs such as food, comfort and shelter, and psychological

variables are represented by the mental and emotional health of the family and support factors. Spiritual variables are the values and beliefs of the family. Developmental variables include individuals' experiences, ages, and cognitive abilities. SocioP-cultural variables include family members' relationships with friends and society, as well as socio-cultural and economic backgrounds. The role of the nursing intervention is to enhance the flexible lines of defense by supporting and meeting the physiological, psychological, spiritual and social requirements to maintain the stability and well-being of the patient's family and to reduce the impact of pressures on the stability of the family system (Khatiban *et al.*, 2016).

This corresponds to the forty-five family needs that were used in this study, which were divided into five dimensions that included assurance (a necessity for hope in the favorable results), information (a necessity for prompt information on patients' illness condition), proximity (necessity to remain close with the ill family member), comfort (individual well-being and comfort), and support (includes resources, support systems or structures).

2.10. Summary

In this summary review five studies to determine the most important needs of patients' families in intensive care units, conducted in regions around the world, in Europe including Spain, in East Asia, including Malaysia, in the Middle East, including Iran, and Jordan, and in North Africa, including Egypt.

First Study

Study carried out by Sánchez-Vallejo *et al.*, (2016). Aim at to describe the needs of the families of patients admitted to the Intensive Care Unit (ICU) and the opinion of ICU professionals on aspects related to the presence of patient relatives in the unit. Two samples of volunteers were studied: one comprising the relatives emotionally closest to the primarily non-surgical patients admitted to the Unit for over 48 hours, and the other composed of ICU professionals with over three months of experience in the ICU. A total of 59% of the relatives (35/61) answered the questionnaire. Of these subjects, 91.4% understood the information received, though 49.6% received no information on nursing care. A total of 82.9% agreed with the visiting policy applied (95.2% were patient offspring; $P < .05$). Participation on the part of the professionals in turn reached 76.3% (61/80). A total of 59.3% would flexible the visiting policy, and 78.3% considered that the family afforded emotional support for the patient, with no destabilizing effect. On the other hand, 62.3% routinely informed the family, and 88% considered training in communication skills to be needed.

Second Study

Study carried out by Mohamed, Z. (2016). Aim at to identify the needs of family members of critically ill patients in a Critical Care Unit in Malaysia medical center. The study was conducted on 109 family members of patient hospitalized at the Intensive Care Unit and Coronary Care Units of University Kebangsaan Malaysia Medical Centre (UKMMC), showed that assurance and information needs were the highest with (3.77); (3.62), proximity need (3.60), support need (3.57),

and comfort need (3.55), respectively. There was significant relationship between respondent's relationship with family needs of proximity. This study indicated that there were significant association between respondent's monthly income and family needs of comfort and support. There was also significant association between the sex with comfort need.

Third Study

Study carried out by Hasandoost et al., (2018). The study aimed at evaluating the needs of families of the patients admitted to ICUs in teaching hospitals of Iran. The study population included 235 family members of the patients. Total score of CCFNI was 132.32 ± 18.46 . Needs of family members of ICU patients decreased 0.428 times following the increase of length of stay in ICU ($P < 0.001$). Moreover, the need for supportive cares was significantly 9.273 times lower among illiterate families, compared with the ones with higher education level ($P < 0.018$).

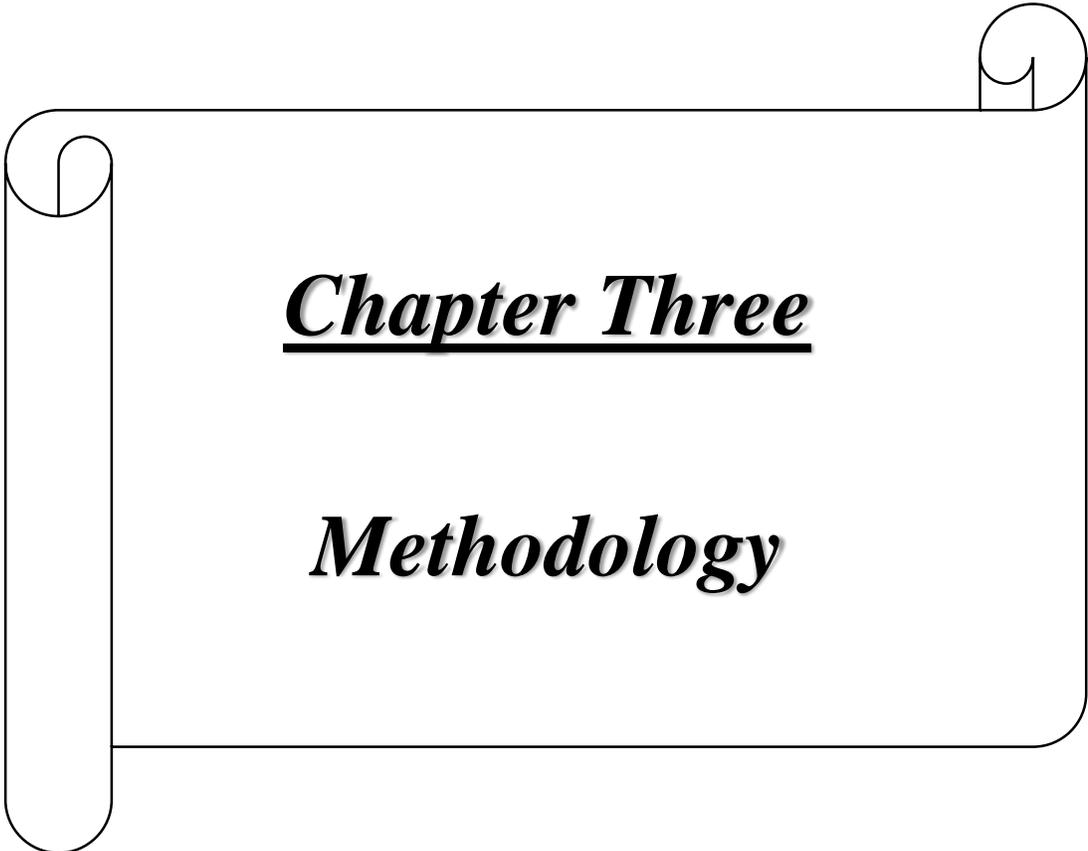
Fourth Study

Study performed by Almagharbeh w.t. (2019). Aim at to describe family members' perceptions of their needs during the hospitalization of their critically ill relative. Two questionnaires were used; socio-demographic data sheet and the Critical Care Family Needs Inventory (CCFNI) questionnaire, a descriptive comparative design was utilized to describe family members' perceptions of their needs during hospitalization of their critically ill relative. A convenience sample of 227 family members participated in the study. The sample included 57.3% family members from public hospitals and 42.7% from private hospitals. Family members perceived 27 out of 44 needs as important or very

important. The family members perceived assurance, information, and proximity higher than comfort and support needs.

Fifth study

Study performed by Elsayed *et al.*, (2022). This study aimed to assess needs of critically ill patients and their families at intensive care unit at General Bulaq Dakror hospital. A purposive sample of sixty patients and sixty family members were included in the study. Four tools were used in this study: structured interview questionnaire, barthel index scale, intensive care unit environmental stressor scale and critical care family needs inventory. The study demonstrated that less than half of the studied patients were minimally dependent. The highest mean score of intensive care unit stressors of the studied patients was for environmental stressors. While, the highest mean score of studied family members' needs was for assurance and anxiety reduction needs. There was a statistically significant relation between physical needs and educational level of the studied patients, as well, there was a statistically significant relation between the total mean scores of information needs and educational level of the studied family members and between the total mean scores of support needs and number of family member's visits to patient.



Chapter Three

Methodology

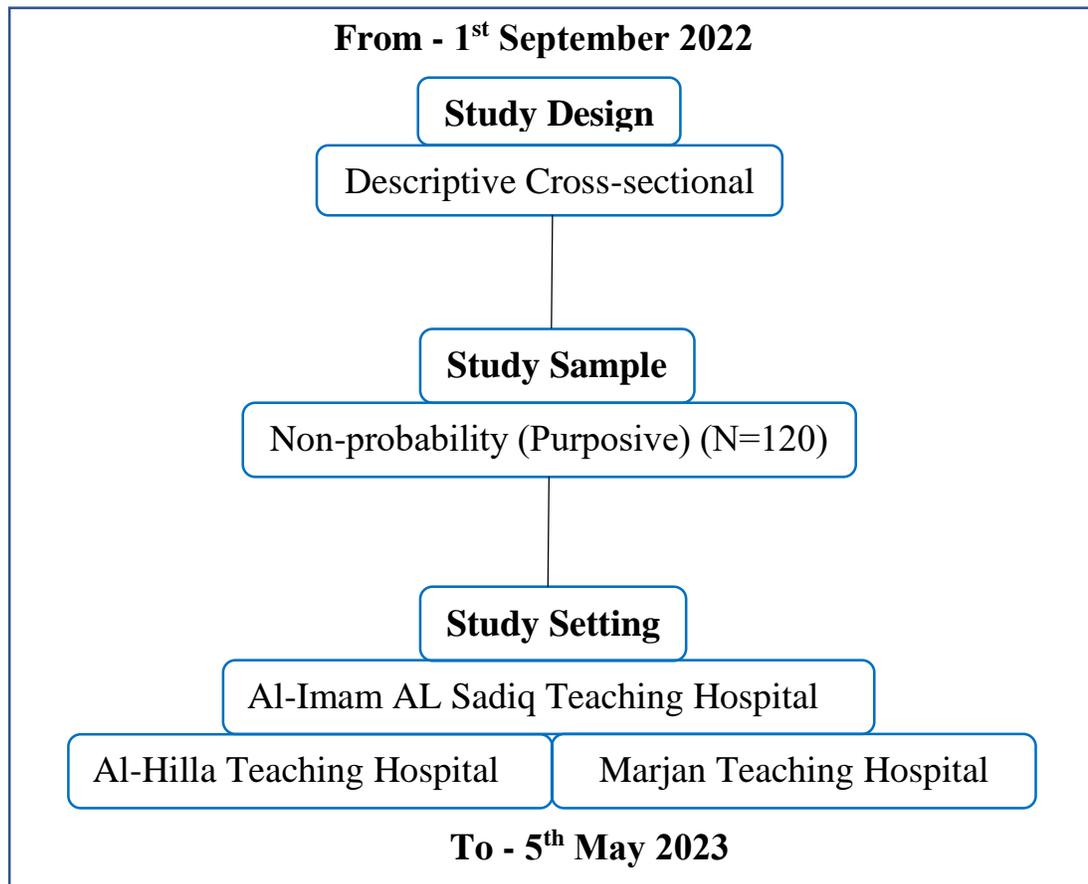
Chapter Three

3. Methodology

This chapter demonstrates the research design, administrative arrangements, tools and procedures used to explore the families' needs of patients admitted to the intensive care unit. Also includes validity, reliability, data collection, and statistical analysis of the data.

3.1. Study Design

To explore the important needs of families of patients in intensive care units, a quantitative descriptive cross-sectional study was carried out utilizing questionnaire questions for the periods of 1st September 2022 to 5th May 2023.



3.2. Administrative Arrangements

Before gathering the study data, the following official clearances were obtained from appropriate authorities:

1. Approval of the Research Ethical Committee of the University of Babylon's College of Nursing. (Appendix A)
2. Official letter issued and submitted to the Health director.(Appendix B)
3. Approvals were also obtained from the Babylon Health Directorate, development and training center to conduct the study in the hospitals formally. (Appendix C)
4. Approval to formally visit the hospitals, which includes.
 - A. Al-Imam AL Sadiq teaching hospital. (Appendix D1)
 - B. Al-Hilla teaching hospital. (Appendix D2)
 - C. Marjan teaching hospital. (Appendix D3)

3.3. Study Setting

The study is conducted in intensive care units at the three teaching hospitals in Al-Hilla City. The hospitals are Al-Imam Al-Sadiq Teaching Hospital, Al-Hilla Teaching Hospital and Marjan Teaching Hospital.

3.3.1. Al-Imam Al-Sadiq Teaching Hospital

The hospital opened in 2017 and is considered the largest hospital in Babylon province. It has 492 inpatient beds, many clinics and specialized centers, and 18 operating rooms. The hospital's intensive care unit has 36 beds.

3.3.2. Al-Hilla Teaching Hospital

Established to provide health services in (1972), the hospital has a capacity of 447 beds. The Intensive Care Unit consists of (18) beds.

3.3.3. Marjan Teaching Hospital

The hospital opened in 1957 to provide health services. The hospital has a total bed capacity of 316, while the coronary care unit has a bed capacity of 16.

3.4. Study sample

A non-probability (purposive) sample of 120 family members. The study sample was divided among three teaching hospitals in Al-Hilla City (Al-Imam Al-Sadiq, Marjan, and Al-Hilla Teaching Hospital). The following criteria were used to select the study sample:

3.4.1. Inclusion Criteria:

1. Adult (aged above 18 years) family members of the patient.
2. The patients must have been admitted to the ICU for at least 48 hours.
3. The participants should have visited the patient at least once during their stay in the ICU.
4. A first-degree relatives are parents, spouses, children, and siblings, while second-degree relatives are grandparents, grandchildren, aunts, uncles, nephews, and nieces.

3.4.2. Exclusion Criteria:

1. Family members who were selected for the pilot study.

2. Family members may be emotionally distressed and unwilling to participate in the study.

3.5. Study Instrument

In order to explore the important needs of family members of patients admitted to intensive care units, the research data were collected using a questionnaire form that included two parts.

Part I: Sociodemographic characteristics of family members of patients include: age, sex, level of education, occupation, residency, relation to the patient, length of patient stays in the ICU, number of visits per day, and previous admission to the intensive care unit.

Part II: Critical Care Family Need Inventory (CCFNI), the original version developed by Jane Stover Leske in cooperation with Nancy C. Molter. The CCFNI consisted of forty-five items scored based on the Likert scale of four levels, ranging from not important (1 point), slightly important (2 points), important (3 points), and very important (4 points). The items of the tool are divided into five subscales, including support (15 items), proximity (9 items), information (8 items), assurance (7 items), and comfort (6 items). The Arabic version of the tool was back-to-back translated and adopted in a previous study by (Alsharari, 2019). Permission to use the CCFNI was obtained from the original translating authors (Appendix E).

3.6. Questionnaire Validity

The study tools English and Arabic versions were tested for face validity. Face validity aimed to determine whether the tool measured what it was supposed to measure. It was measured by a jury of 11 experts, five

professors, and six assistant professors of medical-surgical nursing at the nursing faculties at Babylon, Baghdad, AL-Kufa, and Karbala universities (Appendix F1,2). The experts reviewed the tool for clarity, relevance, accuracy, comprehensiveness, simplicity, and applicability and made minor modifications.

3.7. Pilot Study

A pilot study was conducted on a purposive sample of 12 family members of patients in the intensive care unit at Al-Hilla Teaching Hospital; the pilot study sample is excluded from the study's original sample. The pilot study is conducted from 1st to 7th February 2023.

The purpose of the pilot study:

- 1-** To assess the stability and credibility of the questionnaire questions.
- 2-** To enhance the questionnaire's reliability.
- 3-** To determine the average time required to collect participant data.

The pilot study results indicated that the questions are clear and understandable. Furthermore, the questionnaire can be completed in appropriately time, and the study instrument's reliability has determined that all of these objectives have been met.

3.8. Reliability of the Questionnaire

To assess the internal consistency of the adapted tool, Cronbach's alpha was used. The tool's reliability was evaluated in order to determine how closely the questionnaire items are related to one another. Cronbach's alpha reliability coefficients typically vary between 0 and 1, with higher values (greater than 0.7) indicating acceptable reliability.

Table 3-1: Determine reliability of tool using Alpha Cronbach coefficients

No. of items	Alpha Cronbach	Acceptable value	Assessment
45 items	0.81	0.70	Acceptable

The questionnaire's items were reliable. The time required to interview participants for answering the questionnaire ranged from (15 - 20) minutes. In addition, the instrument items were clarified and understood by the family members of patients in intensive care units.

3.9. Ethical Considerations

The family members were told their voluntary involvement in the study did not interfere with the participants' visitation time. At the end of the visit, on-site interviews were done outside the ICU area. The researcher explained the purpose and benefits of the study. After they were approved to participate in the study for this reason, formal consent form applied for each participant (Appendix H), an unnamed questionnaire was used to ensure complete confidentiality.

3.10. Data Collection Method

After getting all the required permissions and conducting a pilot study, data were collected from the beginning of February 12th 2023 to March 13th 2023. The investigator visited the intensive care units twice weekly during morning shifts (11:00 a.m. to 2:00 p.m.). The family members were chosen based on inclusion criteria. Gathered data by interviewing family members and filling out a data collection tool. The study's purpose was explained to family members, and oral consent was obtained at the interview's start after introducing researcher. Completed and filled out the study tool in an average of 15 to 20 minutes, as follows:

structured interview using the Arabic version of the questionnaire for gathering data on family members' sociodemographics and critical care family needs inventory (CCFNI).

3.11. Approach of Statistic

After completing the data collection procedures, the statistical software Statistical Package for the Social Sciences (SPSS, version 26), was used to analyze the data and present the results for nominal and ordinal qualitative data; frequency and percentages were calculated. In quantitative data, percentages and frequencies were found after dividing them into categories, and the mean and standard deviation were also calculated. In order to find significant relationships and differences between the mean needs of the participants, inferential statistics were used parametric tests including (t-test and one-way ANOVA). Furthermore, the level of significance was chosen. If $p\text{-value} \geq 0.05$ is consider no significant relationship and $p\text{-value} < 0.05$ is considered significant.

A. Descriptive approach

$$1\text{- Percentage } \% = \frac{\text{Frequency}}{\text{Sample size}} \times 100$$

$$2\text{- Mean} = \frac{\sum xi}{n}$$

$\sum xi$ = sum of sample size

n = sample size

$$3\text{- Standard deviation } \sigma = \sqrt{\frac{\sum (xi - \mu)^2}{N}}$$

σ = standard deviation

x_i = each value from the sample

μ = mean of sample

N = sample size

$$4\text{- Rating and Scoring} = \frac{\text{Max-Min}}{\text{Rating}} = \frac{4-1}{4} = 0.75$$

(1) average = 1- 1.74 not important

(2) average = 1.75 - 2.49 slightly important

(3) average = 2.50- 3.24 important

(4) average = 3.25 – 4 very important

B. Inferential statistic

1- Independent t-test formula:

$$t_c = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}}$$

t_c : t calculated

X_1 : mean of first group

X_2 : mean of second group

S_1 : standard deviation of first group

n_1 : size first group

S_2 : standard deviation of second group

n_2 : size of second group

2- Formula of one-way ANOVA table

Source of Variance	Degree of Freedom (d.f.)	Sum of Square (S.S)	Mean of Square (M.S.)	F
Between Group	k-1	SSR	MSR=SSR/(k-1)	$F = \frac{MSR}{MSE}$
Within Group (Error)	k(n-1)	SSE	MSE=SSE/(k(n-1))	
Total	nk-1			

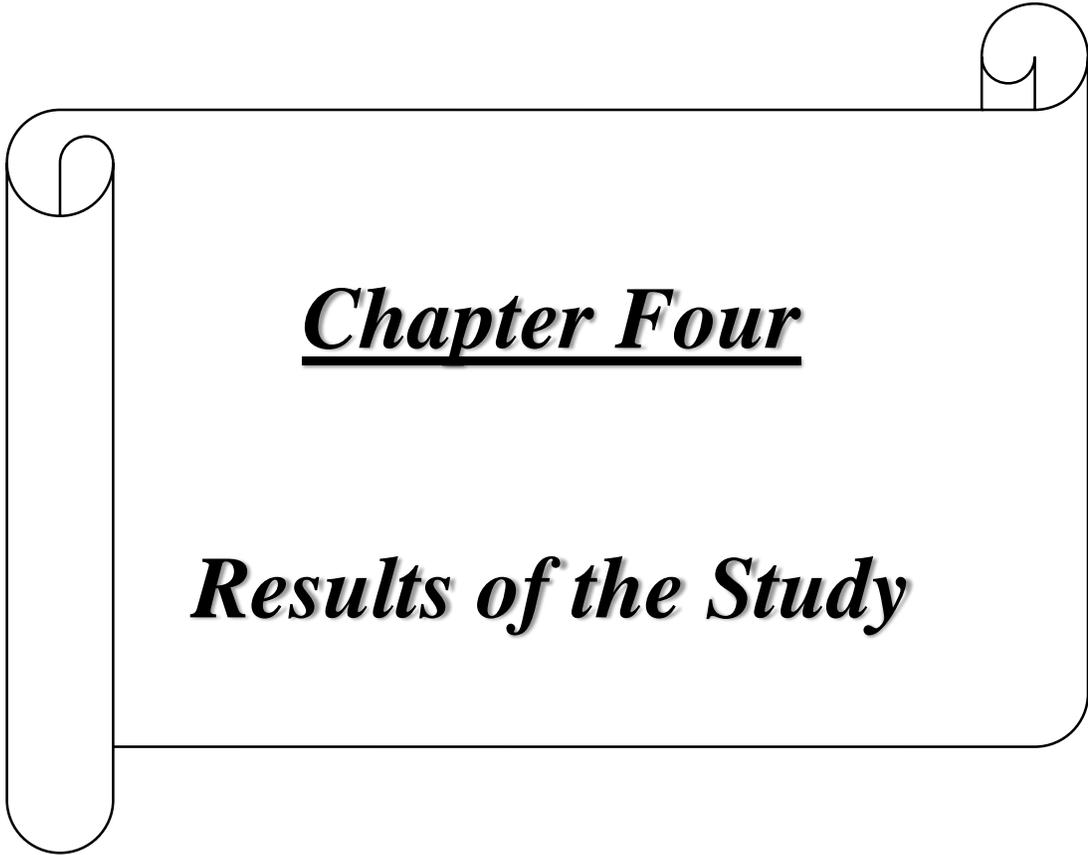
d.f: degree of freedom **k:** number of groups **n:** number of samples

SSR: Sum of squares residual **SSE:** Sum of squares errors

MSR: Mean of squares residual **MSE:** Mean of squares errors

3.12. Limitations of the study.

Limitations, the cross-sectional descriptive study cannot determine the causation of the variation in needs and the factors influencing them. It only tests the correlation between the variables. On the other hand, it follows the method of a non-random, purposeful sample in a short time. It is not easy to generalize the results to the entire study population. Also, this study did not test the patient's level of consciousness, ability to communicate, and medical diagnosis and how these impact on family needs.



Chapter Four

Results of the Study

Chapter Four

4. Results of the Study: This chapter shows the data gathered following statistical analysis as a tabulating and graphic presentation to facilitate scientific and logical interpretation and achieve study objectives.

Table 4-1: Distribution of family members related to their socio-demographic data.

Sociodemographic data		Frequency	Percentage
Age (year) Mean \pm SD = 41.16 \pm 12.434	20-29	27	22.5
	30-39	28	23.3
	40-49	32	26.7
	50-59	24	20.0
	≥ 60	9	7.5
Total		120	100%
Sex	Male	71	59.2
	Female	49	40.8
Total		120	100%
Level of Education	Not read and write	15	12.5
	Read and write	9	7.5
	Primary school	34	28.3
	Secondary school	30	25.0
	Institute	12	10.0
	College	14	11.7
	Postgraduate	6	5.0
Total		120	100%
Occupation	Student	5	4.2
	Free work	52	43.3
	Officeholder	27	22.5
	House wife	28	23.3
	Retired	8	6.7
Total		120	100%
Residency	Urban	55	45.8
	Rural	65	54.2
Total		120	100%

Cont. table 4-1.

Relation to the patient	Father/Mother	12	10.0
	Spouse	21	17.5
	Son/Daughter	35	29.2
	Brother/Sister	36	30.0
	Second-degree relative	16	13.3
Total		120	100%
Length of patient stay in the ICU Mean \pm SD = 7.75 \pm 4.137 (day)	<5	23	19.2
	5-10	77	64.2
	>10	20	16.7
Total		120	100%
Number of visits per day	1-3	105	87.5
	> 3	15	12.5
Total		120	100%
Previous admission to the intensive care unit	Yes	45	37.5
	No	75	62.5
Total		120	100%

This table represents the sociodemographic characteristics of family members. Out of 120 participants, the age group 40-49 made up (26.7%) of the total study sample, with a mean age of 41.16 years. Regarding sex, males comprised more than half (59.2%) compared to females. In terms of education, primary school (28.3%). Free work, which composed (43.3%) of the occupations of the sample, and residences in rural areas (54.2%), in relation to patient brothers and sisters, composed (30%) of the total members. 5-10 days (64.2%) is most of the length of patients' stay in ICU, with a mean (of 7.75 days). 1-3 visits per day were predominant (87.5%), and (62.5%) of participants had never been admitted to the intensive care unit before.

4-2. Importance needs of family members of critically ill patients

Table (4-2.a): Family of critically ill patients support needs.

Items				Rank
To talk about the possibility of the patient's death				1
Rating	F	%	Mean ± SD	Ass.
Not important	0	0	3.44 ± 0.591	Very Important
Slightly important	6	5.0		
Important	55	45.8		
Very Important	59	49.2		
Total	120	100%		
To have explanations of the environment of the intensive care unit before entering it to visit the patient for the first time				2
Not important	12	10.0	2.99 ± 1.008	Important
Slightly important	25	20.8		
Important	35	29.2		
Very Important	48	40.0		
Total	120	100%		
To be told about religious services				3
Not important	3	2.5	2.98 ± 0.772	Important
Slightly important	28	23.3		
Important	58	48.3		
Very Important	31	25.8		
Total	120	100%		
To have someone to help with financial problems				4
Not important	3	2.5	2.92 ± 0.784	Important
Slightly important	33	27.5		
Important	55	45.8		
Very Important	29	24.2		
Total	120	100%		
To have directions as to what to do at the bedside				5
Not important	12	10.0	2.82 ± 0.914	Important
Slightly important	26	21.7		
Important	53	44.2		
Very Important	29	24.2		
Total	120	100%		

To have a cleric visit			6
Not important	4	3.3	2.72 ± 0.758 Important
Slightly important	44	36.7	
Important	54	45.0	
Very Important	18	15.0	
Total	120	100%	
To talk about feelings about what has happened			7
Not important	10	8.3	2.48 ± 0.721 Slightly Important
Slightly important	49	40.8	
Important	55	45.8	
Very Important	6	5.0	
Total	120	100%	
To be told about other people that could help with problems			8
Not important	8	6.7	2.39 ± 0.690 Slightly Important
Slightly important	63	52.5	
Important	43	35.8	
Very Important	6	5.0	
Total	120	100%	
To have privacy in the hospital during the patient's visit			9
Not important	13	10.8	2.32 ± 0.700 Slightly Important
Slightly important	58	48.3	
Important	46	38.3	
Very Important	3	2.5	
Total	120	100%	
To have another person with me when visiting the intensive care unit			10
Not important	10	8.3	2.32 ± 0.673 Slightly Important
Slightly important	66	55.0	
Important	40	33.3	
Very Important	4	3.3	
Total	120	100%	
To be told about someone to help with family problems			11
Not important	15	12.5	2.26 ± 0.716 Slightly Important
Slightly important	63	52.5	
Important	38	31.7	
Very Important	4	3.3	
Total	120	100%	

To feel it is all right to cry when I want to				12
Not important	19	15.8	2.19 ± 0.714	Slightly Important
Slightly important	61	50.8		
Important	38	31.7		
Very Important	2	1.7		
Total	120	100%		
To have friends nearby for support				13
Not important	22	18.3	2.15 ± 0.741	Slightly Important
Slightly important	61	50.8		
Important	34	28.3		
Very Important	3	2.5		
Total	120	100%		
To have someone concerned with my health				14
Not important	37	30.8	2.04 ± 0.911	Slightly Important
Slightly important	51	42.5		
Important	22	18.3		
Very Important	10	8.3		
Total	120	100%		
To be alone whenever I want				15
Not important	31	25.8	1.95 ± 0.743	Slightly Important
Slightly important	69	57.5		
Important	15	12.5		
Very Important	5	4.2		
Total	120	100%		
Mean and SD for overall support items			2.53 ± 0.27	

"F=Frequency, %= Percentage, SD= Standard deviation, Mean Not important (1-1.74), Slightly important (1.75 - 2.49), Important (2.50- 3.24), Very important (3.25 – 4) "

In this table representing and ranking 15 items of support subscale dependent on the mean of items, the very important item was (1), important items were (2,3,4,5,6), Slightly important items were (7,8,9,10,11,12,13,14,15) and overall support items consider as important.

Table (4-2.b): Family of critically ill patients proximity needs.

Items				Rank
To receive information about the patient at least once a day				1
Rating	F	%	Mean ± SD	Ass.
Not important	0	0	3.76 ± 0.502	Very Important
Slightly important	4	3.3		
Important	21	17.5		
Very Important	95	79.2		
Total	120	100%		
To be told about transfer plans while they are being made				2
Not important	0	0	3.59 ± 0.587	Very Important
Slightly important	6	5.0		
Important	37	30.8		
Very Important	77	64.2		
Total	120	100%		
To have the waiting room near the patient				3
Not important	3	2.5	3.56 ± 0.547	Very Important
Slightly important	47	39.2		
Important	70	58.3		
Very Important	3	2.5		
Total	120	100%		
To be called at home about changes in the patient's condition				4
Not important	1	0.8	3.06 ± 0.652	Important
Slightly important	19	15.8		
Important	72	60.0		
Very Important	28	23.3		
Total	120	100%		
To see the patient frequently				5
Not important	0	0	2.83 ± 0.657	Important
Slightly important	38	31.7		
Important	65	54.2		
Very Important	17	14.2		
Total	120	100%		

To talk to the same nurse every day				6
Not important	9	7.5	2.81 ± 0.823	Important
Slightly important	27	22.5		
Important	62	51.7		
Very Important	22	18.3		
Total	120	100%		
To visit patient at any time				7
Not important	2	1.7	2.75 ± 0.759	Important
Slightly important	47	39.2		
Important	50	41.7		
Very Important	21	17.5		
Total	120	100%		
To have visiting hours changed for special conditions				8
Not important	2	1.7	2.67 ± 0.688	Important
Slightly important	48	40.0		
Important	57	47.5		
Very Important	13	10.8		
Total	120	100%		
To have visiting hours start on time				9
Not important	1	0.8	2.55 ± 0.708	Important
Slightly important	66	55.0		
Important	39	32.5		
Very Important	14	11.7		
Total	120	100%		
Mean and SD for overall proximity items			3.06 ± 0.309	

"F=Frequency, %= Percentage, SD= Standard deviation, Mean Not important (1-1.74), Slightly important (1.75 - 2.49), Important (2.50- 3.24), Very important (3.25 – 4) "

Table 4-2.b. revealed very important proximity items (1,2,3), important items (4,5,6,7,8,9), and mean of overall proximity items that were important.

Table (4.2.c): Family of the critically ill patient's information needs.

Items				Rank
To talk to the physician every day				1
Rating	F	%	Mean ± SD	Ass.
Not important	0	0	3.83 ± 0.473	Very Important
Slightly important	5	4.2		
Important	10	8.3		
Very Important	105	87.5		
Total	120	100%		
To help with the patient's physical care				2
Not important	0	0	3.68 ± 0.518	Very Important
Slightly important	3	2.5		
Important	32	26.7		
Very Important	85	70.8		
Total	120	100%		
To know exactly what is being done for the patient				3
Not important	0	0	3.68 ± 0.534	Very Important
Slightly important	4	3.3		
Important	30	25.0		
Very Important	86	71.7		
Total	120	100%		
To know how the patient is being treated medically				4
Not important	0	0	3.59 ± 0.527	Very Important
Slightly important	2	1.7		
Important	45	37.5		
Very Important	73	60.8		
Total	120	100%		
To know why things were done for the patient				5
Not important	0	0	3.45 ± 0.548	Very Important
Slightly important	3	2.5		
Important	60	50.0		
Very Important	57	47.5		
Total	120	100%		

To have a specific person to call at the hospital when unable to visit			6
Not important	3	2.5	3.03 ± 0.704
Slightly important	19	15.8	
Important	70	58.3	
Very Important	28	23.3	
Total	120	100%	
To know about the type of staff members taking care of the patient			7
Not important	5	4.2	2.91 ± 0.789
Slightly important	28	23.3	
Important	60	50.0	
Very Important	27	22.5	
Total	120	100%	
To know which staff members could give what type of information			8
Not important	4	3.3	2.90 ± 0.715
Slightly important	25	20.8	
Important	70	58.3	
Very Important	21	17.5	
Total	120	100%	
Mean ± SD for overall information items			3.38 ± 0.252

"F=Frequency, %= Percentage, SD= Standard deviation, Mean Not important (1-1.74), Slightly important (1.75 - 2.49), Important (2.50- 3.24), Very important (3.25 – 4) "

Table 4-2.c show the very important need for prompt information on patients' illness condition (1,2,3,4,5), important items were (6,7,8), and mean of overall information items were very important.

Table (4-2.d): Family of the critically ill patients assurance needs.

Items				Rank
To know the expected outcome				1
Rating	F	%	Mean ± SD	Ass.
Not important	0	0	3.88 ± 0.332	Very Important
Slightly important	0	0		
Important	15	12.5		
Very Important	105	87.5		
Total	120	100%		
To know specific facts concerning the patient's progress				2
Not important	0	0	3.83 ± 0.382	Very Important
Slightly important	0	0		
Important	21	17.5		
Very Important	99	82.5		
Total	120	100%		
2.To have questions answered honestly				3
Not important	0	0	3.54 ± 0.620	Very Important
Slightly important	8	6.7		
Important	39	32.5		
Very Important	73	60.8		
Total	120	100%		
5.To have explanations given that is understandable				4
Not important	0	0	3.44 ± 0.577	Very Important
Slightly important	5	4.2		
Important	57	47.5		
Very Important	58	48.3		
Total	120	100%		
To be assured that the best care possible is being given to the patient				5
Not important	0	0	3.25 ± 0.598	Very Important
Slightly important	10	8.3		
Important	70	58.3		
Very Important	40	33.3		
Total	120	100%		

To feel that the hospital personnel care about the patient				6
Not important	0	0	3.16 ± 0.580	Important
Slightly important	12	10.0		
Important	77	64.2		
Very Important	31	25.8		
Total	120	100%		
To feel there is hope				7
Not important	0	0	3.13 ± 0.533	Important
Slightly important	10	8.3		
Important	84	70.0		
Very Important	26	21.7		
Total	120	100%		
Mean ± SD for overall assurance items			3.46 ± 0.219	

" F=Frequency, %= Percentage, SD= Standard deviation, Mean Not important (1-1.74), Slightly important (1.75 - 2.49), Important (2.50- 3.24), Very important (3.25 - 4) "

Table 4-2.d represents very important needs. The necessity for hope in the favorable results (1,2,3,4,5), important items (6,7), and mean of overall assurance items were very important.

Table (4.2.e): Family of the critically ill patients comfort needs.

Items				Rank
To have a bathroom near the waiting room				1
Rating	F	%	Mean ± SD	Ass.
Not important	0	0	3.64 ± 0.577	Very Important
Slightly important	6	5.0		
Important	31	25.8		
Very Important	83	69.2		
Total	120	100%		
To have comfortable furniture in the waiting room				2
Not important	0	0	3.42 ± 0.784	Very Important
Slightly important	22	18.3		
Important	26	21.7		
Very Important	72	60.0		
Total	120	100%		

To have good food available in the hospital				3
Not important	10	8.3	3.36 ± 0.951	Very Important
Slightly important	10	8.3		
Important	27	22.5		
Very Important	73	60.8		
Total	120	100%		
To have a telephone near the waiting room				4
Not important	9	7.5	2.91 ± 0.820	Important
Slightly important	19	15.8		
Important	66	55.0		
Very Important	26	21.7		
Total	120	100%		
To be assured it is all right to leave the hospital for awhile				5
Not important	22	18.3	2.68 ± 0.979	Important
Slightly important	16	13.3		
Important	60	50.0		
Very Important	22	18.3		
Total	120	100%		
To feel accepted by the hospital staff				6
Not important	21	17.5	2.53 ± 0.925	Important
Slightly important	29	24.2		
Important	55	45.8		
Very Important	15	12.5		
Total	120	100%		
Mean ± SD for overall comfort items			3.09 ± 0.465	

" F=Frequency, %= Percentage, SD= Standard deviation, Mean Not important (1-1.74), Slightly important (1.75 - 2.49), Important (2.50- 3.24), Very important (3.25 - 4) "

This table shows very important needs related to individual well-being and comfort (1,2,3), important needs (4,5,6), and the mean of overall comfort needs were important

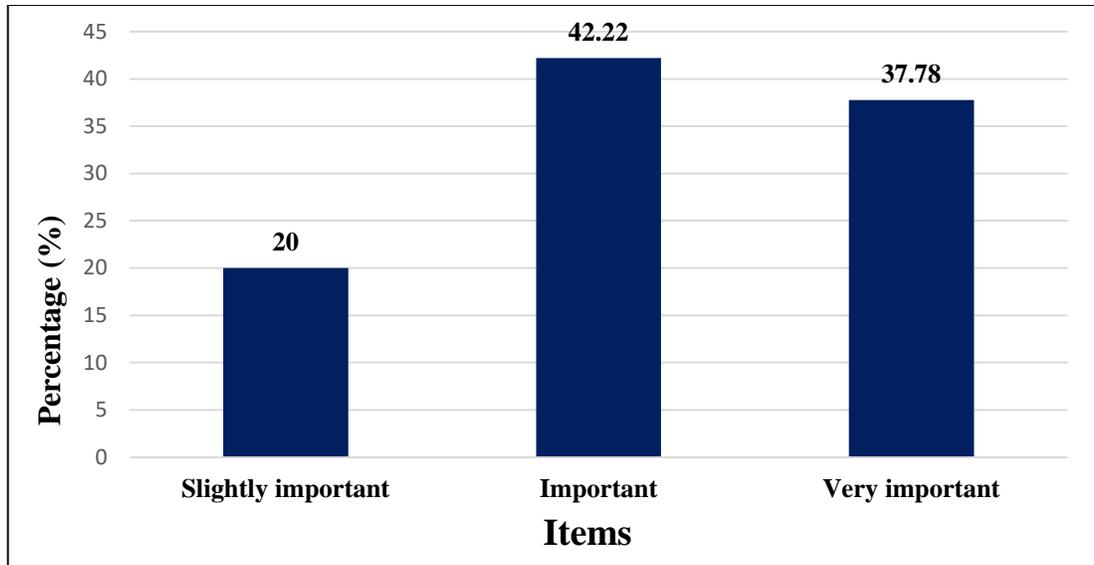


Figure (4-1): Distribution overall items of CCFNI.

Overall, according to the mean analysis, the findings indicate that (42.22%) of items were important.

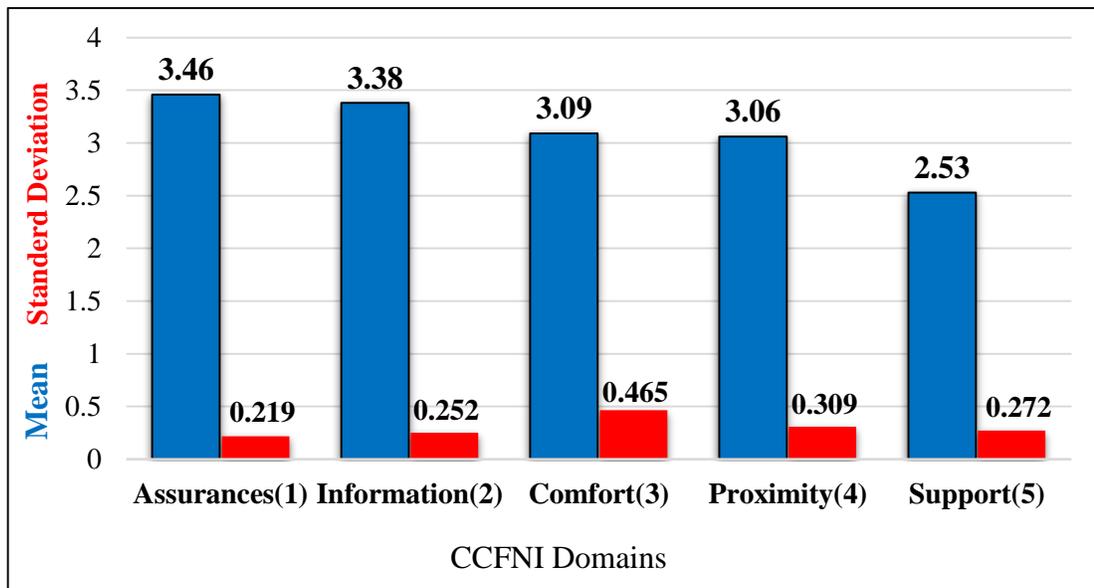


Figure (4-2): Ranking of the Critical Care Family Needs Inventory Subscales in terms of importance.

The results of the study showed that the most important needs are assurance (3.46) and information (3.38). Followed by comfort (3.09), proximity (3.06), and support (2.53).

4-4: Difference between the scores of the CCFNI domains and sociodemographic data of the study sample

Table (4.4.a): Independent sample t-test comparison of mean scores of the CCFNI domains according to sex, residency, number of visits per day, and previous admission to the intensive care unit.

Variables	Domains	t-test	P-value	Sig
Sex	Support	0.893	0.374	NS
	Proximity	1.125	0.301	NS
	Assurances	0.521	0.603	NS
	Information	0.479	0.633	NS
	Comfort	0.634	0.527	NS
Residency	Support	0.037	0.970	NS
	Proximity	0.435	0.664	NS
	Assurances	1.286	0.201	NS
	Information	0.193	0.847	NS
	Comfort	0.445	0.657	NS
Number of visits per day	Support	1.117	0.266	NS
	Proximity	0.359	0.720	NS
	Assurances	0.119	0.905	NS
	Information	0.650	0.517	NS
	Comfort	0.679	0.499	NS
Previous admission to the intensive care unit	Support	3.054	0.003	S
	Proximity	1.579	0.117	NS
	Assurances	1.182	0.240	NS
	Information	1.717	0.089	NS
	Comfort	0.227	0.821	NS

*NS: Not significant, S: Significant, Significant p value ($p < 0.05$)

* Independent sample t-test used with independent variables consisting of two categories

Table 4.4.a finding no significant association between sociodemographic data (sex, residency, number of visits, previous admission) and CCFNI subscales, except for one significant relationship between support needs and previous admission to the intensive care unit.

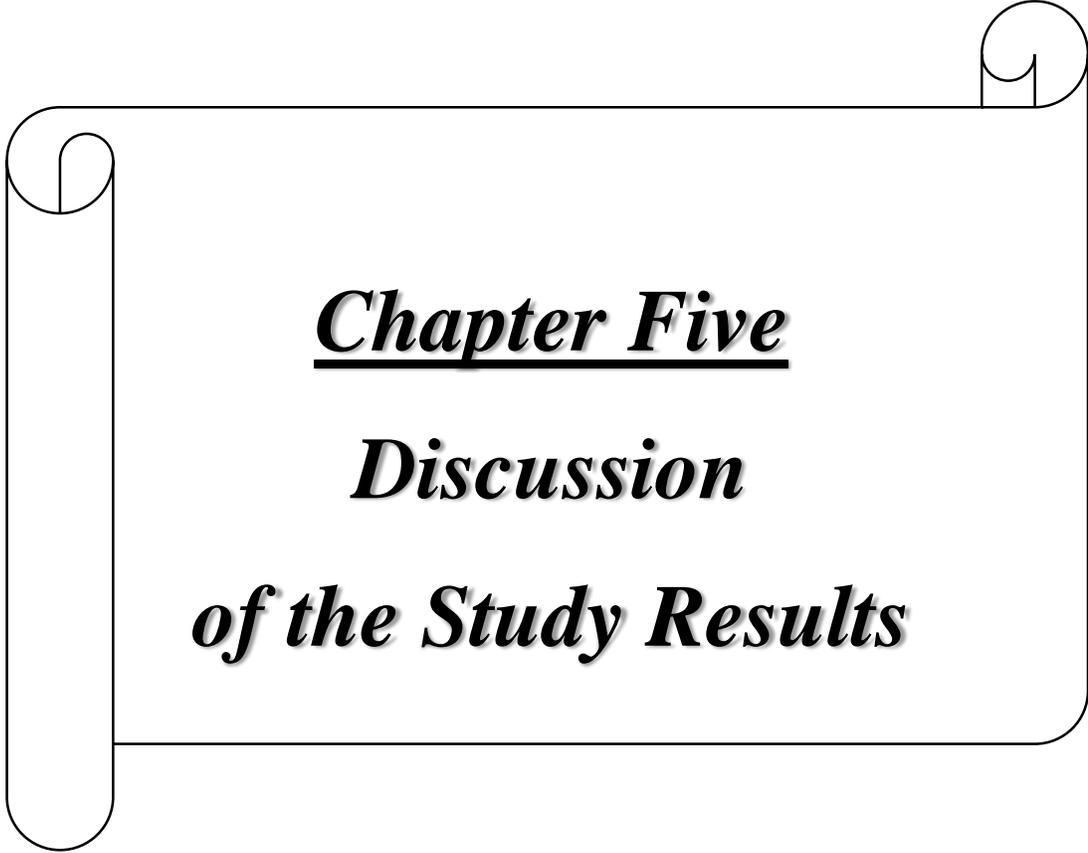
Table (4.4.b): One-way ANOVA comparison of mean scores the of the CCFNI domains according age, level of education, occupation, relation to the patient, and length of patient stay in the ICU.

Variables	Domains	ANOVA	P-value	Sig
Age	Support	0.951	0.438	NS
	Proximity	0.703	0.592	NS
	Assurances	0.724	0.524	NS
	Information	0.302	0.876	NS
	Comfort	1.277	0.283	NS
Level of Education	Support	1.300	0.263	NS
	Proximity	2.433	0.030	S
	Assurances	0.734	0.623	NS
	Information	0.734	0.624	NS
	Comfort	0.843	0.539	NS
Occupation	Support	0.196	0.940	NS
	Proximity	1.043	0.388	NS
	Assurances	1.042	0.389	NS
	Information	0.372	0.828	NS
	Comfort	1.194	0.317	NS
Relation to patient	Support	8.530	<0.001	HS
	Proximity	1.180	0.323	NS
	Assurances	1.338	0.260	NS
	Information	0.201	0.937	NS
	Comfort	2.448	0.050	S
Length of patient stay in the ICU	Support	0.666	0.516	NS
	Proximity	3.889	0.023	S
	Assurances	1.538	0.219	NS
	Information	2.224	0.113	NS
	Comfort	0.672	0.513	NS

* ANOVA: Analysis of variance, HS: Highly significant, NS: Not significant, S: Significant. Significant p value ($p < 0.05$)

*A One-way ANOVA test used with independent variables consisting of three categories or more.

This table finds a significant association between the level of education and proximity subscale. Highly significant association between support, comfort needs, and relation to the patient; it also finds a significant relationship between the length of patient stay in the ICU and proximity needs.



Chapter Five
Discussion
of the Study Results

Chapter Five

5. Discussion of the study results

This chapter provides a structured discussion and rationale for the findings of the study, supported by relevant literature and studies concerning the needs of family members of critically ill patients.

5.1: Sociodemographic characteristics of the participants.

Table (4-1) shows the family members' sociodemographic data. Aged 40 to 49, who comprised 26.7% of the research sample out of 120 individuals, had a mean age of 41.16 years. Males comprised more than half (59.2%) of the sample compared to females. These results agree with the study conducted in Iran by Hasandoost *et al.*, (2018), where they found that the average age of the participants was 47.5 years, and the percentage of males (59.8%) represented more than half as well.

Concerning level of education, the primary education level comprised (28.3%) of the total members. These results are similar to the study carried out by (Salameh *et al.*, 2020) , who found that the primary education level composed (27.92%) of the study sample. Free work constituted (43.3%) of the participants' occupations, and (54.2%) resided in rural areas. These findings are supported by the results of a study conducted by Elsayed *et al.*, 2022), where they found that (56.7%) of the participants work privately and (55%) reside in rural areas.

Regarding relationships between family members and patients, brothers/sisters made up (30%) of total members, these results coinciding with Liew *et al.*, (2018). They found siblings consist (28.3%). The mean period of stay of the patient in intensive care was 7.75 days. This result

agrees to some extent with a study conducted in Turkey by Elay et al., (2020), that found (62%) of the length of stay was one week. This also corresponds to an analytical study that included 3,925 patients and found an average patient stay in the ICU of 10 days (Toptas *et al.*, 2018).

In addition, (87.5%) of family members visited their patients (1-3) visits per day, and (62.5%) of the participating individuals had no previous admission to intensive care units. This finding corresponds to the study conducted by Dharmalingam *et al.*, (2016), which found that (65%) of the participants also had no previous experience in intensive care units.

5.2: Importance needs of family members of critically ill patients.

The result of the present study showed assurance (3.46 ± 0.219) and information (3.38 ± 0.252) were the needs that take priority for family members of patients, followed by consideration of the importance of comfort (3.09 ± 0.465), proximity (3.06 ± 0.309), and support (2.53 ± 0.27).

These findings are similar to the study conducted by Elay *et al.*, (2020), and another study conducted by (Kohi et al., 2016) also found assurance and information ranked as important needs, unlike with study conducted by Ahmed *et al.*, (2023) found comfort as important need.

In the current study, the assurance subscale had the highest score, assurance helps family members deal with the crisis situation they face when a loved one is in a life-threatening condition. The most important needs in terms of assurance were knowing the expected outcome for the patient, obtaining facts about the progress of the patient's health condition, obtaining answers to the questions of family members,

ensuring that the patient has received the best medical care, and assurance that there is hope for the patient's recovery these findings supported by Shdaifat, E, and Akhlak, S., (2016) also finding assurance needs take priority among families with relative in ICUs.

According to Liang et al., (2021) due to the severity of disease conditions, the family's distance from the patient in a waiting room, and the lack of continuous communication by health care providers, which increases the family's fears, anxiety, and dissatisfaction. Therefore, physicians and intensive care nurses have a great role in dispelling these fears through communication, conducting discussion sessions with the patient's family, and allowing them to visit and see the patient's closely. It is one of the most important indicators of the patient's family satisfaction and the quality of medical services.

The second most important subscale of needs was information, where items were arranged according to priority, talking to the attending physician daily, participating in providing physical care to the patient, reviewing medical procedures, knowing exactly what was done to the patient, communicating with a specialist when it was not possible to be in the hospital, and identifying the roles and the specializations of the medical staff present in the intensive care unit.

This is consistent with a study conducted in Saudi Arabia by Al-Mutair *et al.*, (2014), where information was also second in importance. The urgent desire of families to obtain continuous information about the patient's health condition is due to the fact that intensive care patients are going through a serious health crisis that threatens their lives, and they are constantly changing, and sometimes their health condition worsens or

they have serious complications, and with the presence of the family in a waiting room complicates matters and increases their desire to obtain information permanently and continuously (Ozbayir *et al.*, 2014).

Clear, understandable information is the key to moving from the initial phase of confusion to better control of the situation, understanding the patient's situation, and promoting involvement during the process of making decisions because information gives us details that make it easier to choose between this or that option (Bueno *et al.*, 2018).

Needs for physical comfort ranked third. Physical needs such as food, bathrooms close to the waiting room, and comfortable furniture represent individuals' most essential wellness needs since the patient's family members spend most of their time in the waiting room. In addition to that feeling of acceptance by health workers and assurance after leaving the hospital. Availability of physical needs gives a better experience for the patient's family, distracts their attention, and reduces their anxiety towards their loved ones (Gibaut *et al.*, 2013).

According to a study conducted by Day *et al.*, (2013), (65%) of the patient's family members also suffer from sleep deprivation, due to reasons including the environment and unfamiliar sounds, which increase levels of physical and psychological stress. Providing comfortable furniture and a quiet environment contributes to better sleep hours for patients' family members to reduce physical exhaustion.

In addition to that, there are basic criteria in the design of intensive care units, which emphasize the existence of a support zone for the family, which must be separate and with an area of 10 m² for every

eight beds, and equipped with two chairs for the relatives of each patient, there must also be a space for making tea or coffee, eating food and also contain TV and magazines (Bersten and Handy, 2013).

In this current study, the fourth dimension of needs was proximity. According to the family members, the most important needs are obtaining information about the patient's health condition at least once a day, informing the family about the plans to refer the patient if it is decided that the waiting room be near the intensive care unit, followed by the less important needs, which is the possibility of communicating with the family at home if they are unable to reach the hospital, visit the patient frequently, talk to the same nurse every day, and change the time of the visit if a circumstance occurs among family members.

However, Beesley *et al.*, (2016) find that the presence of family and loved ones next to the patient contributes directly to reducing psychological stress and anxiety for the patient's family and increases the satisfaction level.

Healthcare providers have an essential role in managing these needs, which includes organizing visiting times in a way that does not interfere with the times of providing care, as well as monitoring and clarifying the tasks that family members can perform at the patient's bedside and preventing abusive individuals from being present next to patients to maintain the safety of other patients (Mahajan *et al.*, 2021).

The current study results show the need for support ranked fifth among study participants. Family members reduce the importance of personal and physical needs and give priority to needs related to

reassurance and obtaining information about the health status of their patients.

The very important support item was talking about the possibility of the patient dying. The death of the patient is one of the biggest fears of the family. This is due to the severity of the patient's condition and the high mortality rate among the patients in intensive care, death rate range 10% to 29% globally, depending on age, comorbidities, and illness severity, according to the Society of Critical Care medicine report (SCCM).

Another study Abate *et al.*, (2021) finds, the death rate varies between (9%–60%) developing and low-income countries. Therefore, consider the family's concern about the possibility of the patient's death a priority when addressing support needs. Physician and ICU nurses have a great responsibility to support and inform the patient's family about the possibility of death and chances of survival.

Flugelman, (2021) provides a set of recommendations for dealing with the family regarding the possibility of the death of a loved one in the ICU. These recommendations include the first and essential role of informing the family as soon as possible. Inform the family that their relative received the necessary treatment while in the intensive care unit. Helping the family to come to terms with the possibility of the death of their relative after the stage of denial and anger. During the family conference, reduce or mitigate feelings of guilt among family members by saying that the best care was provided to save the patient and that nothing can change the course of the disease. The fifth role is to improve the

coping mechanisms of the family, helping them to maintain their unity during this difficult situation.

The other needs that the family considered important is obtaining an explanation about the nature of intensive care unit, as well as obtaining instructions on what to do when being at the patient's bedside. These needs are due to the fact that (62.5%) of the patients' family members did not have a previous admission into the intensive care units.

Spiritual needs were an important aspect of the family's concerns, as their desire to obtain available religious services such as places of prayer as well as their desire to allow a cleric to visit the patient if possible, these needs are due to their social and cultural nature. Spirituality is compared to armor that protects against any detrimental emotional and psychological effects that may arise in a stressful environment (Santos *et al.*, 2021).

5.3: Discusses association relationship between needs subscale and sociodemographic characteristics of family members.

The results indicate that there are significant differences between the educational levels of the participants with the mean of proximity needs (p-value 0.03), where the family members whose primary educational level (mean 3.18) and those who do not read or write (mean 3.15) more needed to be close to patients.

These findings are supported by a study conducted in Palestine by Salameh *et al.*, (2020) as well, which found that educational level was one of the variables with a significant relationship with the subscales of needs.

Significant differences exist between the relationship with the patient and the mean of support needs (p-value <0.001). The siblings (2.68) and children (2.54) needed more emotional, spiritual, and social support. This is due to the strong family bond and the extent to which close family members of the first degree are affected by the admission of a loved one into the ICU. The unexpected situation affects the family system's stability, which increases psychological and physical stress (Kang *et al.*, 2020).

These findings are supported by a study conducted in Chile by Padilla-Fortunatti *et al.*, (2018), where it was also found that siblings and children are more likely to receive emotional, spiritual, social, and financial support resources as well from health care providers.

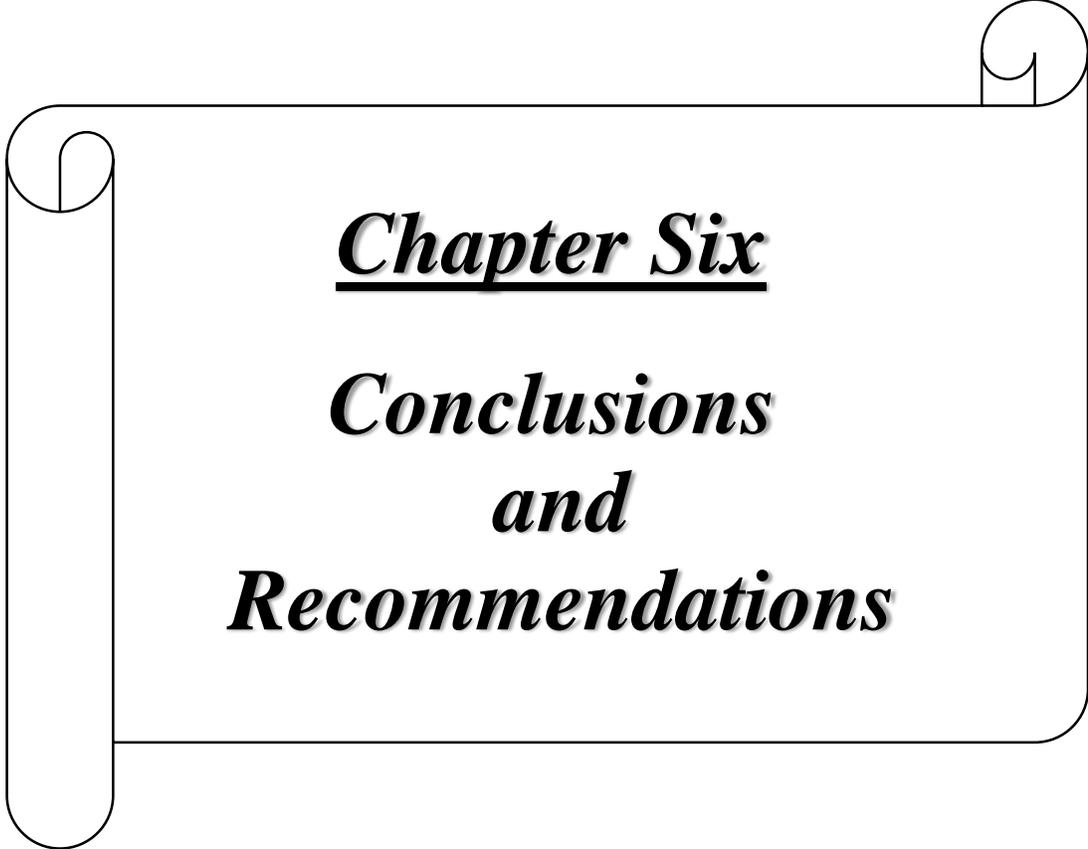
Regarding the duration of the patient's stay in the ICU. The family of patients admitted to the ICU in less than five days has a significant relationship (p-value 0.023) with the need to be close to the patient (2.59). The family's need for closeness increases in the first few days of admission to visit the patient frequently, spend time at the bedside, and obtain immediate information about the condition.

According to Hirshberg *et al.*, (2018) the probably the reason is that during the first days of admission to ICUs, other family members experienced a critical period, which increased their proximity needs; but over time, the families gradually accepted the situation and tried to adapt with. During the first days of admission, the families are unfamiliar with the hospital, wards, patients' status, and so on, which cause stress and more needs in the family. The other reason can be the stability of patient's health status or the acceptance of the status by the families.

Concerning the family's previous experiences in the ICU, there was a significant relationship with the need for support (p-value 0.003). Family members who did not have previous admission to the ICU needed more support (2.59). This finding is consistent with a study Liew *et al.*, (2018) where they were also found that individuals who have not had previous experiences need support and information more.

The new and unfamiliar surroundings, the severity of patients' conditions, the lack of communication, and the new experience make families more in need of receiving support to obtain clarifications about the nature of intensive care and what can be done at the patient's bedside in addition to that they need the presence of other friends near them to help also need to obtain spiritual support (De Beer and Brysiewicz, 2017).

In addition, previous experiences make people adapt quickly to unexpected situations, as they have coping mechanisms to deal with the hospitalization of a loved one in the ICU. Understanding the relationship between past experiences, emotional and psychological responses, and long-term outcomes leads to targeted interventions to meet support needs and increase family satisfaction (Harlan *et al.*, 2020).



Chapter Six

***Conclusions
and
Recommendations***

Chapter Six

6.1. Conclusion

In view of the objectives, findings, and discussion the study, concludes the following:

6.1.1. More than half of the family members were males in middle age.

Primary education level, free work occupation, and rural residency are the common sociodemographic characteristics among the participants.

6.1.2. Brothers and sisters followed by sons and daughters, are the most of relatives of patients in the intensive care unit.

6.1.3. The family's experience in intensive care was a mean length of patient stay in the ICU of about one week and visits ranging from 1-3 times per day, and more than half of the participants had no previous admission to the intensive care unit.

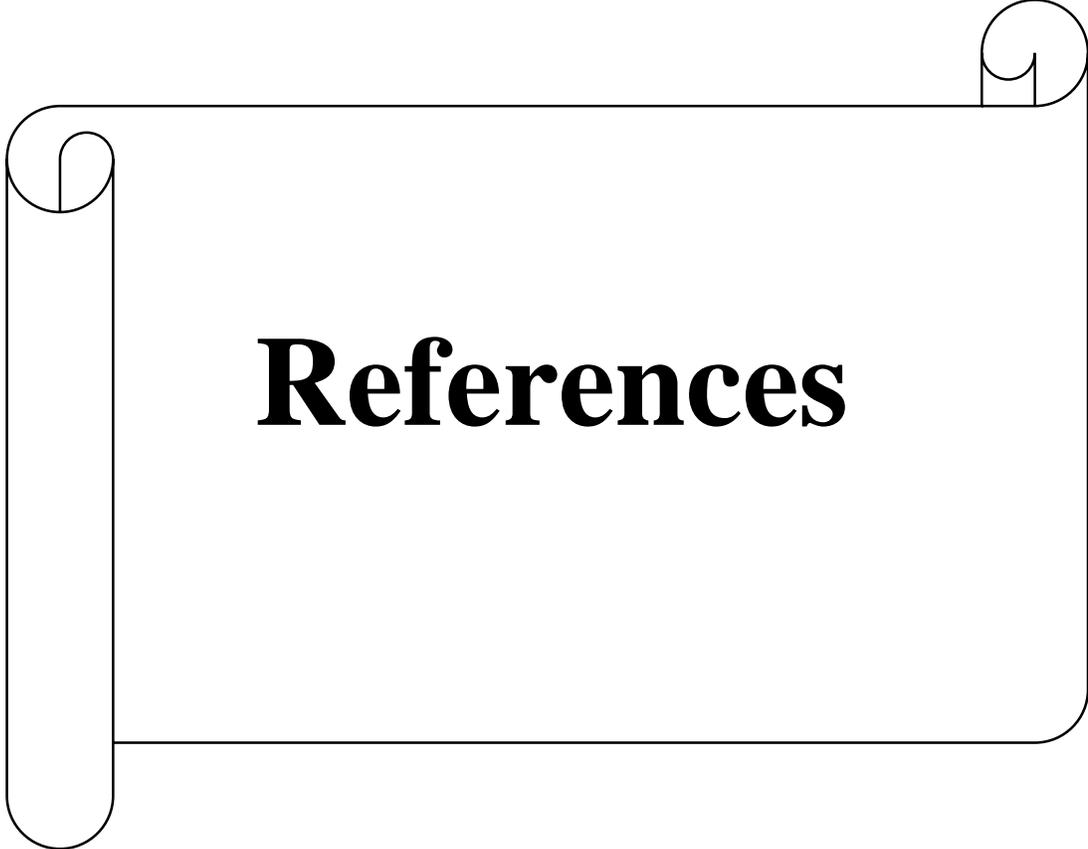
6.1.4. The most important needs of the participating individuals are assurance first and information second, followed by comfort, proximity, and support are less important.

6.1.5. Statistically significant relationships were found between sociodemographic characteristics (educational level, relation to the patient, length of patient stays in the ICU, previous admission to the intensive care unit) with needs dimensions (support and proximity).

6.2. Recommendations

According to the conclusion, the study recommends the following:

- 6.2.1.** Provide an Arabic booklet for family members and relatives that includes instructions and clarifications about the intensive care unit, the tasks and roles of its staff, and the available services.
- 6.2.2.** Developed a scheduled plan to meet assurance and information needs through family conference and flexible visiting times that do not interfere with patient care times.
- 6.2.3.** Applying the patient and family-centered care (PFCC) guide, making the family an important partner in decision-making, providing care, and cooperating with family to develop the quality of health services.
- 6.2.4.** Conduct a study on healthcare providers working in intensive care units, specifically nurses, to find out their perceptions and knowledge regarding the needs of families.
- 6.2.5.** Replication of the study on a larger number of patient's family members in Intensive Care Units and following the random sampling method in selecting to generalize the results of the study.



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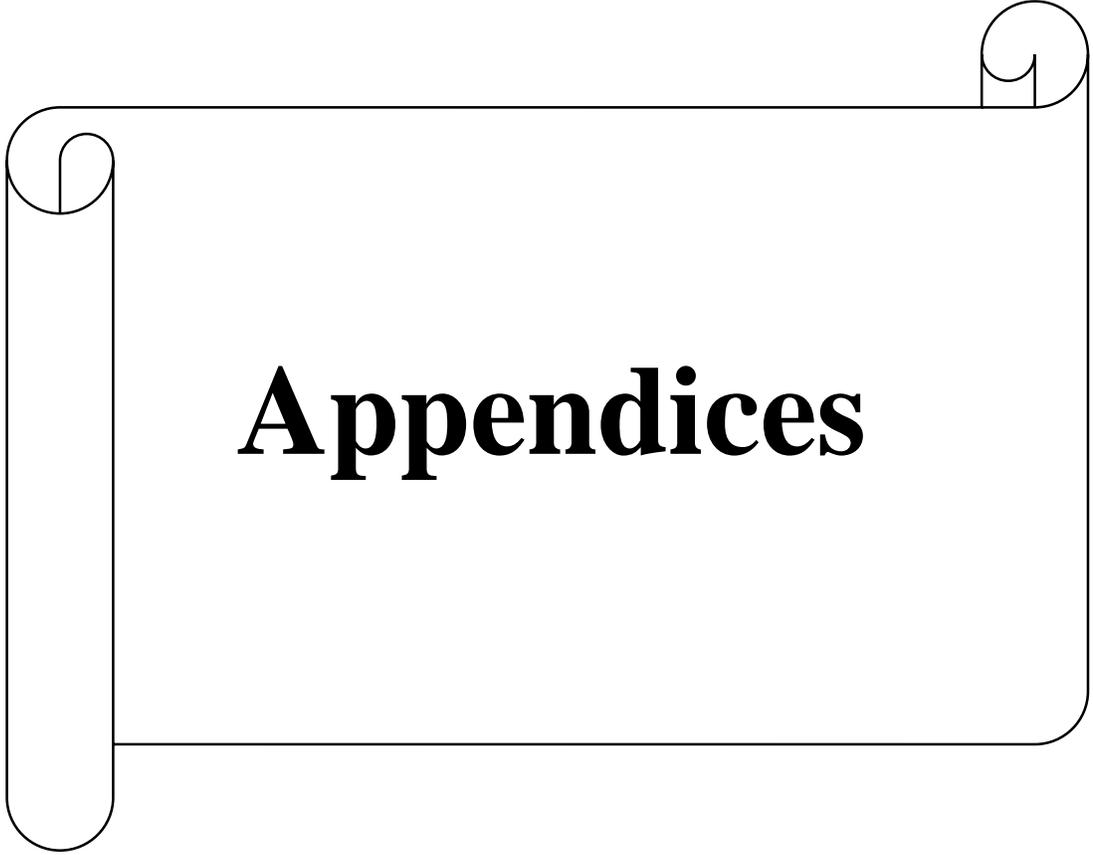
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Appendices

Appendix A Approval Letter

University of Babylon
College of Nursing
Research Ethics Committee



جامعة بابل
كلية التمريض
لجنة اخلاقيات البحث العلمي

Issue No:

Date: 24 / 1 /2023

Approval Letter

To,

ضياء حسين عبد علي

The Research Ethics committee at the University of Babylon, College of Nursing has reviewed and discussed your application to conduct the research study entitled **Families' Needs of Critically Ill Patients in Intensive Care Units at Al-Hilla Teaching Hospitals.**

The Following documents have been reviewed and approved:

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

Committee Decision.

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

Prof. Dr. Shatha Saadi Mohammed
Chair Committee
College of Nursing
Research Ethical Committee
24 / 1 /2023

UNIVERSITY OF BABYLON
COLLEGE OF NURSING

اللجنة اخلاقيات البحث العلمي

UNIVERSITY OF BABYLON - FACULTY OF NURSING

Appendix C

Approvals of the Babylon Health Directorate, development and training center

<p>Ministry Of Health Babylon Health Directorate Email:- Babel_Healthmoh@yahoo.com Tel:282628 or 282621</p>	<p>جمهورية العراق</p> 	<p>وزارة الصحة والبيئة دائرة صحة محافظة بابل المدير العام مركز التدريب والتنمية البشرية لجنة البحوث</p>
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استمارة رقم :- ٢٠٢١/٠٣

رقم القرار :- ١٧
تاريخ القرار :- ٢٠٢٣/٠١/٠٤

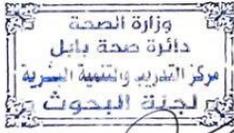
قرار لجنة البحوث

تحية طيبة ...

درست لجنة البحوث في دائرة صحة بابل مشروع البحث ذي الرقم (١٢ / ٢٠٢٣ / بابل)
المعنون (احتياجات اسر المرضى ذوي الحالات الحرجة في وحدات العناية المركزة
في مستشفيات الحلة التعليمية) ،
والمقدم من الباحث (ضياء حسين عبد علي) إلى وحدة إدارة البحوث والمعرفي مركز
التدريب والتنمية البشرية في دائرة صحة بابل بتاريخ ٢٠٢٣/٢/٦ وقررت :

قبول مشروع البحث أعلاه كونه مستوفيا للمعايير المعتمدة في وزارة الصحة
والخاصة بتنفيذ البحوث ولا مانع من تنفيذه في مؤسسات الدائرة .

مع الاحترام



الباحث
محمد عبد الله عجرش
رئيس لجنة البحوث
٢٠٢٣ / /

نسخة منه إلى :
• مكتب المدير العام / مركز التدريب ، التنمية البشرية / وحدة إدارة البحوث ... مع الأوليات .

سوزان

دائرة صحة محافظة بابل / مركز التدريب والتنمية البشرية // ايميل المركز babiltraining@gmail.com

Appendix D1

Approval to formally visit the hospitals

Al-Imam AL Sadiq Teaching Hospital

جمهورية العراق		
<p>Ministry Of Health Babylon Health Directorate Email:- Babel_Healthmoh@yahoo.com</p> <p>لأجل عراقى اخضر مستدام .. سنعمل معا لترشيد استهلاك الطاقة الكهربائية والمحافظة على البيئة من التلوث</p>		<p>وزارة الصحة دائرة صحة محافظة بابل المدير العام مركز التدريب والتنمية البشرية وحدة إدارة البحوث</p> <p>العدد : ١٤٧</p> <p>التاريخ: ٢٠٢٣/ ١ / ٣١</p>
<p>إلى مستشفى الأمام الصادق (ع) مستشفى الحلة التعليمي مستشفى مرجان التعليمي</p> <p>م // تسهيل مهمة</p>		
<p>تحية طبية ... أشارة إلى كتاب جامعة بابل/ كلية التمريض / الدراسات العليا ذي العدد ٤٠٦ في ٢٠٢٣/١/٣١ نرفق لكم ربطا استمارات الموافقة المبدئية لمشروع البحث العائد للباحث طالب الدراسات العليا/ ماجستير(ضياء حسين عبد علي).</p> <p>للتفضل بالاطلاع وتسهيل مهمة المومنا إليه من خلال توقيع وختم استمارات إجراء البحث المرفقة في مؤسساتكم وحسب الضوابط والإمكانيات لاستحصال الموافقة المبدئية لبتسنى لنا إجراء اللازم على أن لا تتحمل مؤسساتكم أية تبعات مادية وقانونية مع الاحترام</p>		
<p>المرفقات : استمارة عدد ٢ / مهمة التعليمي للإجراء اللازم</p>		
<p>وزارة الصحة دائرة صحة بابل مركز التدريب والتنمية البشرية</p> <p>التكوير محمد عبد الله عجرش مدير مركز التدريب والتنمية البشرية ٢٠٢٣ / ١</p> <p>نصير عبد جواد جواد NSC Pharmaceutics ٢٥/٤/١</p>		
<p>نسخة منه إلى : • مركز التدريب والتنمية البشرية / وحدة إدارة البحوث مع الأوليات ...</p>		
<p>دائرة صحة محافظة بابل / مركز التدريب والتنمية البشرية // ايميل المركز babiltraining@gmail.com</p>		

Appendix D2

Approval to formally visit the hospitals

Al-Hilla Teaching Hospital

جمهورية العراق		
 Ministry Of Health Babylon Health Directorate Email: Babel_Healthmoh@yahoo.com لأجل عراق اخضر مستدام..منعمل معا لترشيد استهلاك الطاقة الكهربائية والمحافظة على البيئة من التلوث.		وزارة الصحة دائرة صحة محافظة بابل المدير العام مركز التدريب والتنمية البشرية وحدة إدارة البحوث العدد: ١٢٧ التاريخ: ٢٠٢٣ / ١ / ٣١
إلى / مستشفى الأمام الصادق (ع) مستشفى الحلة التعليمي مستشفى مرجان التعليمي م // تسهيل مهمة		
تحية طيبة ... أشارة إلى كتاب جامعة بابل/ كلية التمريض / الدراسات العليا ذي العدد ٤٠٦ في ٢٠٢٣/١/٣١ نرفق لكم ربطا استمارات الموافقة المبذنية لمشروع البحث العائد للباحث طالب الدراسات العليا/ ماجستير(ضياء حسين عبد علي). للتفضل بالاطلاع وتسهيل مهمة الموما أليه من خلال توقيع وختم استمارات إجراء البحث المرفقة في مؤسساتكم وحسب الضوابط والإمكانيات لاستحصال الموافقة المبذنية ليتسنى لنا إجراء اللازم على أن لا تتحمل مؤسساتكم أية تكاليف مادية وقانونية مع الاحترام		
وزارة الصحة دائرة صحة بابل مركز التدريب والتنمية البشرية الدكتور محمد عبد الله عجرش مدير مركز التدريب والتنمية البشرية ٢٠٢٣ / ١	المدير العام الدكتور محمد عبد الله عجرش مدير مركز التدريب والتنمية البشرية ٢٠٢٣ / ١	المرفقات: استمارة عدد ٢/
نسخة منه إلى: مركز التدريب والتنمية البشرية / وحدة إدارة البحوث مع الأوليات ... دائرة صحة محافظة بابل / مركز التدريب والتنمية البشرية // ايميل المركز babiltraining@gmail.com		

Appendix D3

Approval to formally visit the hospitals

Marjan Teaching Hospital

جمهورية العراق

<p>Ministry Of Health Babylon Health Directorate Email:- Babel_Healthmoh@yahoo.com</p> <p>لأجل عراق اخضر مستدام.. منعمل معا لترشيد استهلاك الطاقة الكهربائية والمحافظة على البيئة من التلوث</p>		<p>وزارة الصحة دائرة صحة محافظة بابل المدير العام مركز التدريب والتنمية البشرية وحدة إدارة البحوث</p> <p>التاريخ: ١٢٧</p> <p>التاريخ: ٢٠٢٣ / ١ / ٣١</p>
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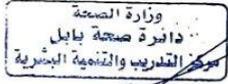
إلى / مستشفى الأمام الصادق (ع)
 مستشفى الحلة التعليمي
 مستشفى مرجان التعليمي

م // تسهيل مهمة

تحية طيبة ...
 أشارة إلى كتاب جامعة بابل/ كلية التمريض / الدراسات العليا ذي العدد ٤٠٦ في
 ٢٠٢٣ / ٣١
 ترفيقكم ربطا باستمارات الموافقة المبدئية لمشروع البحث العائد للباحث طالب الدراسات
 العليا ماجستير (ضياء حسين عبد علي) .

لتسهيل بالإطلاع وتسهيل مهمة العموم أليه من خلال توقيع وختم استمارات إجراء البحث
 المرفقة في مؤسساتكم وحسب الضوابط والإمكانات لاستحصال الموافقة المبدئية ليتسنى لنا
 إجراء لازم على أن لا تتحمل مؤسساتكم أية تبعات مادية وقانونية مع الاحترام

التاريخ: ٢٠٢٣ / ١ / ٣١
 العدد: ٢ /


 الدكتور
 محمد عبد الله عجرش
 مدير مركز التدريب والتنمية البشرية
 ٢٠٢٣ / ١

الدكتور / الأستاذ
 الدكتور / الأستاذ
 د. محمد عبد الله عجرش
 مدير مركز التدريب والتنمية البشرية


 التاريخ: ٢٠٢٣ / ١ / ٣١
 العدد: ٢ /

نسخة هذه إلى:
 مركز التدريب والتنمية البشرية / وحدة إدارة البحوث مع الأوليات ...

دائرة صحة محافظة بابل / مركز التدريب والتنمية البشرية // ايميل المركز babeltraining@gmail.com

Appendix E

Author permission to use Arabic version of CCFNI

⋮ ↩ ضياء حسين الخفاجي اول أمس
إلى afalsharari ✓ 

Dear Dr.Abdalkarem F Alsharari

I'm Diyaa Hussein from Iraq. I'm student Master Science of Nursing in University of Babylon. I would like ethical approval to use Arabic version of Critical care family need inventory (CCFNI) tool Which you used in your search.

Best regards

⋮ ↩ عبدالكريم فدغاش الشراري أمس
إلى أنا ✓ 

Dear Diyaa Hussein, Thank you for contacting me.

Please find the attached Arabic version of the CCFNI tool including the Reliability and Internal Consistency of the Tool. You have my permission to use it in your study or thesis. Please acknowledge in your thesis/publication using the reference provided in the attached document.

Let me know if need further assistance, I wish you all the best,

regards,

Appendix F1

List of Experts

ت	اسم الخبير	اللقب العلمي	مكان العمل	الاختصاص	سنوات الخبرة
1	د. راجحة عبد الحسن حمزة	استاذ	جامعة الكوفة	تمريض صحة البالغين	39
2	د. سلمى كاظم جهاد	استاذ	جامعة بابل	تمريض صحة المجتمع	38
3	د. سحر أدهم علي	استاذ	جامعة بابل	تمريض صحة البالغين	34
4	د. وداد كامل محمد	استاذ	جامعة بغداد	تمريض صحة البالغين	34
5	د. تحسين رجب محمد	أستاذ مساعد	جامعة بغداد	تمريض صحة البالغين	23
6	د. خالدة محمد خضر	استاذ	جامعة بغداد	تمريض صحة البالغين	20
7	د. حسن عبد الله عذبي	أستاذ مساعد	جامعة كربلاء	تمريض صحة البالغين	20
8	د. ضياء كريم عبدعلي	أستاذ مساعد	جامعة الكوفة	تمريض صحة البالغين	16
9	د. محمد عبد الكريم مصطفى	أستاذ مساعد	جامعة الكوفة	تمريض صحة البالغين	15
10	د. سيروان جعفر باقي	أستاذ مساعد	جامعة بغداد	تمريض صحة البالغين	14
11	د. صادق عبد الحسين حسن	أستاذ مساعد	جامعة بغداد	تمريض صحة البالغين	13

Appendix F2

Questionnaire Validity

حضرة الأستاذة/الفاضل/ة :

تحية طيبة

نظرا لما تمتلكه من خلفية ومكانة علمية وخبرة عملية في مجال اختصاصك يرجى التفضل
بمراجعة ورقة الاستبانة المرفقة والخاصة برسالة الماجستير الموسومة

(احتياجات اسر المرضى ذوي الحالات الحرجة في وحدات العناية المركزة في مستشفيات
الحلة التعليمية)

(Families' Needs of Critically Ill Patients in Intensive Care Units at
Al-Hilla Teaching Hospitals)

وابداء ملاحظتك القيمة عليها للأخذ بها مع فائق الشكر والتقدير.

الاسم الكامل:

اللقب العلمي:

مكان العمل:

سنين الخبرة:

التوقيع:

الباحث

طالب الماجستير

ضياء حسين عبد علي

جامعة بابل / كلية التمريض

Questionnaire -English

Families' Needs Critically Ill Patients in Intensive Care units at
Al-Hilla Teaching Hospitals

Part I: Sociodemographic characteristics of family members of
patients

Appendices

- 1- Age: _____ year
- 2- Sex: Male Female
- 3- Level of Education:
- Not read and write Read and write
- Primary school Secondary school
- Institute College
- Postgraduate
- 4- Occupation:
- Not work Free work
- Employed House wife
- Retired
- 5- Residency:
- Urban Rural
- 6- Relation to patient
- Father/Mother Spouse
- Son/Daughter Brother/Sister
- Second-degree relative
- 7- Length of patient stay in the ICU / days
- 8- Number of visit time/day
- 9- Previous admission to the intensive care unit
Yes No

Part II: Families' needs of critically ill patients

First Domain: Support

Appendices

Needs	Not Important (1)	Slightly Important (2)	Important (3)	Very Important (4)
1. To have explanations of the environment of the intensive care unit before entering it to visit the patient for the first time				
2. To talk about feelings about what has happened				
3. To have directions as to what to do at the bedside				
4. To have friends nearby for support				
5. To have privacy in the hospital during the patient's visit				
6. To have someone to help with financial problems				
7. To have a cleric visit				
8. To talk about the possibility of the patient's death				
9. To have another person with me when visiting the intensive care unit				
10. To have someone concerned with my health				
11. To feel it is alright to cry when I want to				

Appendices

12. To be told about other people that could help with problems				
13. To be alone whenever I want				
14. To be told about someone to help with family problems				
15. To be told about religious services				

Second Domain: Proximity

Needs	Not Important (1)	Slightly Important (2)	Important (3)	Very Important (4)
1. To have visiting hours changed for special conditions				
2. To visit at any time				
3. To talk to the same nurse every day				
4. To have visiting hours start on time				
5. To be told about transfer plans while they are being Made				
6. To be called at home about changes in the patient's condition				
7. To receive information about the patient at least once a day				

Appendices

8. To see the patient frequently				
9. To have the waiting room near the patient				

Third Domain: Information

Needs	Not Important (1)	Slightly Important (2)	Important (3)	Very Important (4)
1. To talk to the physician every day				
2. To have a specific person to call at the hospital when unable to visit				
3. To know which staff members could give what type of information				
4. To know why things were done for the patient				
5. To know about the type of staff members taking care of the patient				
6. To know how the patient is being treated medically				
7. To know exactly what is being done for the patient				
8. To help with the patient's physical care				

Fourth Domain: Assurance

Appendices

Needs	Not Important (1)	Slightly Important (2)	Important (3)	Very Important (4)
1. To know the expected outcome				
2. To have questions answered honestly				
3. To feel there is hope				
4. To be assured that the best care possible is being given to the patient				
5. To have explanations given that are understandable				
6. To feel that the hospital personnel care about the patient				
7. To know specific facts concerning the patient's progress				

Fifth Domain: Comfort

Needs	Not Important (1)	Slightly Important (2)	Important (3)	Very Important (4)
1. To have good food available in the hospital				
2. To have comfortable furniture in the waiting room				

Appendices

3. To feel accepted by the hospital staff				
4. To have a telephone near the waiting room				
5. To be assured it is alright to leave the hospital for awhile				
6. To have a bathroom near the waiting room				

استبانة - عربي

احتياجات اسر المرضى ذوي الحالات الحرجة في وحدات العناية المركزة في
مستشفيات الحلة التعليمية

الجزء أ: الخصائص الاجتماعية والديموغرافية لأفراد أسر المرضى

1- العمر: / سنة

2- الجنس: ذكر أنثى

3- مستوى التعليم:

<input type="checkbox"/>	لا يقرأ ولا يكتب	<input type="checkbox"/>	يقرا ويكتب	<input type="checkbox"/>
<input type="checkbox"/>	ابتدئي	<input type="checkbox"/>	ثانوي	<input type="checkbox"/>
<input type="checkbox"/>	معهد	<input type="checkbox"/>	كلية	<input type="checkbox"/>
<input type="checkbox"/>	شهادة عليا	<input type="checkbox"/>		<input type="checkbox"/>

4 - المهنة:

<input type="checkbox"/>	لا اعمل	<input type="checkbox"/>	اعمال حرة	<input type="checkbox"/>
<input type="checkbox"/>	موظف	<input type="checkbox"/>	ربة بيت	<input type="checkbox"/>
<input type="checkbox"/>	متقاعد	<input type="checkbox"/>		<input type="checkbox"/>

5- مكان السكن:

<input type="checkbox"/>	حضر	<input type="checkbox"/>	ريف	<input type="checkbox"/>
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6- صلة القرابة:

<input type="checkbox"/>	اب/ام	<input type="checkbox"/>	زوج/زوجة	<input type="checkbox"/>
<input type="checkbox"/>	ابن/ابنة	<input type="checkbox"/>	اخ/اخت	<input type="checkbox"/>
<input type="checkbox"/>	أقارب من الدرجة الثانية	<input type="checkbox"/>		<input type="checkbox"/>

7- فترة بقاء المريض في العناية المركزة: يوم

8- عدد الزيارات في اليوم: مرة/اليوم

9- هل لديك دخول سابق في العناية المركزة؟

<input type="checkbox"/>	نعم	<input type="checkbox"/>	لا	<input type="checkbox"/>
--------------------------	-----	--------------------------	----	--------------------------

الجزء ب: احتياجات اسر المرضى ذوي الحالات الحرجة

اولا: الدعم

مهم جدا (4)	مهم (3)	قليل الأهمية (2)	غير مهم (1)	الاحتياجات
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Appendices

				1-الحصول على توضيح لبيئة وحدة العناية المركزة قبل دخولها لزيارة المريض لأول مرة
				2-للتحدث عن مشاعري حول ما حدث
				3-للحصول على تعليمات عما يجب فعله أثناء تواجدي عند المريض
				4-تواجد الاصدقاء بالقرب مني للدعم
				5-للحصول خصوصية بالمستشفى خلال زيارة المريض
				6-للحصول على شخص ما للمساعدة في المشاكل المالية
				7-زيارة شيخ ديني للمريض
				8-للتحدث حول موضوع الوفاة للمريض (لا قدر الله)
				9- تواجد شخص اخر معي عند زيارة المريض بالعناية المركزة
				10- وجود شخص مهتم بصحتي الشخصية
				11- الشعور بأنه لا بأس من البكاء إذا لزم الأمر
				12- للتواصل مع أشخاص يمكنهم تقديم المساعدة عند الحاجة
				13- أن أكون لوحدي عند حاجتي لذلك
				14- للتواصل مع أشخاص يمكنهم المساعدة في المشاكل العائلية
				15- لإبلاغي عن الخدمات الدينية المقدمة

ثانيا: القرب

مهم جدا (4)	مهم (3)	قليل الأهمية (2)	غير مهم (1)	الاحتياج
				1- إمكانية تغيير ساعات الزيارة للظروف الخاصة

Appendices

				2- لزيارة المريض في أي وقت
				3- للتحدث مع نفس الممرض/ الممرضة كل يوم
				4- أن تبدأ أوقات الزيارة في الوقت المحدد تماما
				5- لإبلاغي عن خطط احالة المريض عند اقرارها
				6- للاتصال بي في المنزل في حال حدث تغيير في وضع المريض الصحي
				7- للحصول على معلومات عن المريض على الأقل مرة واحدة باليوم
				8- لمشاهدة المريض بشكل متكرر
				9- أن تكون غرفة الانتظار قريبة من مكان تواجد المريض

ثالثا: المعلومات

مهم جدا (4)	مهم (3)	قليل الأهمية (2)	غير مهم (1)	الاحتياج
				1- للتحدث مع الطبيب المعالج بشكل يومي
				2- للتحدث مع شخص محدد بالمستشفى في حال عدم التمكن من زيارة المريض
				3- لمعرفة دور أعضاء الطاقم الطبي والمعلومات التي يمكن أن يزودوني بها
				4- لمعرفة دواعي عمل بعض الاجراءات الطبية للمريض
				5- لمعرفة تخصصات ودور الطاقم الطبي الذي يقوم برعاية المريض
				6- لمعرفة الخطة العلاجية للمريض
				7- لمعرفة ما الذي تم عمله بالضبط للمريض

Appendices

				8- أن أساعد في العناية الشخصية والجسمية للمريض
--	--	--	--	--

رابعاً: الاطمئنان

مهم جدا (4)	مهم (3)	قليل الأهمية (2)	غير مهم (1)	الاحتياج
				1- معرفة النتيجة المتوقعة للمريض
				2- للحصول على اجابات صحيحة وصادقة عن استفساراتي
				3- الشعور بوجود أمل للشفاء
				4- للاطمئنان بحصول المريض على أفضل رعاية وأن كل شيء يلزم للمريض تم عمله
				5- للحصول على شرح ومعلومات واضحة أستطيع فهمها
				6- الإحساس بأن العاملين بالمستشفى يعتنون بالمريض
				7- لمعرفة معلومات وتفاصيل دقيقة حول الوضع الصحي للمريض

خامساً: الراحة

مهم جدا (4)	مهم (3)	قليل الأهمية (2)	غير مهم (1)	الاحتياج
				1- توفر وجبات طعام جيدة في المستشفى
				2- توفر أثاث مريح ومناسب في غرفة الانتظار
				3- الشعور بالقبول والرضا من قبل الفريق الطبي والعاملين بالمستشفى

Appendices

				4- وجود هاتف بالقرب من غرفة الانتظار
				5- للحصول على التشجيع والطمأنينة بإمكانية مغادرة المستشفى عند انتهاء الزيارة
				6- توفر دورات مياه بالقرب من غرفة الانتظار

كلية التمريض – جامعة بابل
لجنة أخلاقيات البحوث العلمية



نموذج موافقة الاشخاص للمشاركة بالبحوث العلمية

استمارة رقم (3)

رقم الاستمارة:
التاريخ : / / 2023

وزارة التعليم العالي والبحث العلمي
جامعة بابل - كلية التمريض

أنت مدعو للمشاركة بمشروع بحث علمي بعنوان:

" احتياجات اسر المرضى ذوي الحالات الحرجة في وحدات العناية المركزة في مستشفيات
الحلة التعليمية "

Appendices

يرجى أن تأخذ الوقت المناسب لقراءة المعلومات الآتية بتأن قبل أن تقرر إذا ما كنت راجباً بالمشاركة أم لا. وبإمكانك طلب مزيداً من الإيضاحات أو المعلومات الإضافية عن أي أمر مذكور بالاستمارة أو عن الدراسة من الباحث أو أي مختص آخر.

أولاً: معلومات البحث	
اسم الباحث	ضياء حسين عبد علي
اسم المشرف	أ.د. شذى سعدي محمد
أهداف البحث:	1- تحديد الخصائص الديموغرافية والاجتماعية لأفراد اسر المرضى ذوي الحالات الحرجة 2 - استكشاف أهم احتياجات أفراد اسر المرضى ذوي الحالات الحرجة في وحدات العناية المركزة. 3- معرفة العلاقة بين احتياجات أفراد اسر المرضى وخصائصهم الديموغرافية والاجتماعية.
الفترة المتوقعة لمشاركة الشخص في البحث	15-20 دقيقة
الاجراءات المتبعة في جمع العينات	موافقة افراد العينة للمشاركة في البحث
المخاطر المتوقعة كنتيجة للمشاركة في البحث	لا توجد
الفوائد التي ستعود على الشخص مقابل الاشتراك في البحث	التعرف على اهم احتياجات اسر المرضى

ثانياً: معلومات للشخص المشارك بالبحث
1. ان المشاركة في هذا البحث طوعية
2. بإمكانك سحب مشاركتك من الدراسة متى شئت ولأي سبب
3. من حقك ان لا تجيب عن اي سؤال لا ترغب بإجابته
4. ان مشاركتك بالبحث لن تحملك اي نفقات مالية
5. ان مشاركتك بالبحث لا يترتب عليها اي مسائلة قد تضر بك شخصياً أو بعملك.
6. ان اسمك سيكون سرىا وإن المعلومات الناتجة عن مشاركتك سوف تعامل بسرية تامة ولن يطلع عليها أي شخص ما عدا الباحث والمشرف ولجنة الاخلاقيات عند الضرورة.

Appendices

7. وأن المعلومات التي ادليت بها والنتائج العلمية لهذا البحث هي للأغراض العلمية فقط ولن تكون هناك أية إشارة إلى لك أو لعائلتك في أي منشور عن هذه الدراسة.
8. إن من حقك بمعرفة النتائج العامة للبحث، أو أي نتائج تتعلق بك بصورة خاصة.

ثالثاً: معلومات الاتصال

في حال وجود أي استفسار أو شكوى من قبلك حول مشروع البحث بإمكانك الاتصال بالباحث أو لجنة أخلاقيات البحث في جامعة بابل – كلية التمريض

اسم الباحث: ضياء حسين عبد علي

رقم الهاتف: 07800221363

البريد الإلكتروني: dia.hamza.nurh61@student.uobabylon.edu.iq

لجنة أخلاقيات الأبحاث العلمية – جامعة بابل – كلية التمريض:

رقم الهاتف:

البريد الإلكتروني: nursing@uoabylon.edu

في حال كون عمر الشخص المشارك أقل من 18 سنة، أو كونه غير قادر على فهم أو قراءة الاستمارة يرجى توقيع ولي أمره الشرعي.

اسم المشترك بالبحث:

Linguist's Certification

Ref. No.:
 Date: / /

الجامعة تأسس كلية التمريض
 السوارة
 العدد / ١٥٨١
 التاريخ ١٣ / ٦ / ٢٠٢٣

العدد : ٦٠٥٦
 التاريخ : ٢٠٢٣ / ٦ / ١٢

شعبة الامانة
 ادارة
 ادارة

الى / جامعة بابل / كلية التمريض

م/ تقويم لغوي

م. هادي الزبيدي
 ابراهيم
 ٦/١٢

نهدبكم للطيب التحيات ...

كتابكم ذو العدد ٢١٧٢ في ٢٠٢٣/٦/٤ ترافق لكم تقرير المقوم اللغوي الخاص برسالة طالب الدراسات العليا / الماجستير (ضياء حسين عبد طلي) الموسومة ب (احتياجات اسر المرضى ذوي الحالات الحرجة في وحدات العناية المركزة في مستشفيات الحلة التطعيمية) بعد تقويمها لغوياً واسلوبياً من قبل (أ.م. سوزان سعد محمد) وهي صالحة للمناقشة بعد الاخذ بالملاحظات المثبتة على متنها.

...مع الاحترام ...

المرافقات:

- رسالة الماجستير.
- القرار المقوم اللغوي.

أ.د. فراس سليبر جباري

معاون العميد للشؤون العلمية

٢٠٢٣/٦/١٢

- لمسحة منه الى/
- مكتب السيد العميد المحترم .. للتدخل بالاطلاع مع الاحترام
 - أ.م. سوزان سعد محمد
 - الشؤون العلمية.
 - الصادرة.



اناس//

basic@uobabylon.edu.iq

وطني ٠٧٢٣٠٠٣٥٧٤٤
 امينية ٠٧٦٠١٢٨٨٥٦٦

مكتب العميد ١١٨٤
 المعاون العلمي ١١٨٨
 المعاون الإداري ١١٨٩

العراق - بابل - جامعة بابل
 بناية الجامعة ٠٠٩٦٢٧٢٣٠٠٣٥٧٤٤

المستخلص

عادة ما تنظر الأسرة إلى دخول أحد الأقارب إلى وحدة العناية المركزة على أنه أزمة. يشير دخول أحد أفراد الأسرة إلى موقف مرهق للغاية ، بغض النظر عما إذا كان الدخول مخططاً له أو غير متوقع.

الهدف الرئيسي من هذه الدراسة هو استكشاف احتياجات أسر المرضى ذوي الحالات في وحدات العناية المركزة وكذلك تحديد العلاقة بين هذه الاحتياجات والخصائص الاجتماعية والديموغرافية.

دراسة وصفية مقطعية شملت عينة هادفة من 120 فرداً من عائلات المرضى ذوي الحالات الحرجة في الفترة ما بين الأول من ايلول 2022 إلى الخامس والعشرين من ايار 2023. أجريت الدراسة في ثلاثة مستشفيات تعليمية في مدينة الحلة. تم استخدام أداة للدراسة تتكون من جزئين: الأول يمثل المتغيرات الاجتماعية الديموغرافية للمشاركين والجزء الثاني يتضمن 45 عنصراً تصف احتياجات عائلات المرضى ، مقسمة إلى خمسة مقاييس فرعية. تم عرض الاستبيان على 11 خبيراً لتقييم الموثوقية وكانت قيمة الاتساق الداخلي للأداة (0.81). تم جمع البيانات من المشاركين عن طريق المقابلة.

أظهرت نتائج الدراسة أن أهم الاحتياجات هي الاطمئنان (3.46) والمعلومات (3.38). تليها الراحة (3.09) والقرب (3.06) والدعم (2.53). كانت هناك علاقات ذات دلالة إحصائية بين المتغيرات الاجتماعية الديموغرافية (المستوى التعليمي ، صلة القرابة بالمريض ، وفترة إقامة المريض في وحدة العناية المركزة ، والقبول السابق إلى وحدة العناية المركزة) مع المقاييس الفرعية للاحتياجات.

الاطمئنان والمعلومات هي أهم احتياجات الأسر. توجد علاقات ذات دلالة إحصائية بين بعض الخصائص الديموغرافية والاجتماعية لأفراد أسر المرضى والابعاد الفرعية للاحتياجات. واوصت الدراسة تطبيق دليل الرعاية المتمحورة حول المريض والأسرة ، مما يجعل الأسرة شريكا مهما في صنع القرار وتقديم الرعاية والتعاون معها لتطوير جودة الخدمات الصحية



جمهورية العراق
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احتياجات اسر المرضى ذوي الحالات الحرجة في وحدات
العناية المركزة في مستشفيات الحلة التعليمية

رسالة مقدمة

من قبل

ضياء حسين عبد علي

الى

مجلس كلية التمريض جامعة بابل

كجزء من متطلبات نيل درجة الماجستير في علوم التمريض

أشرف

أ.د. شذى سعدي محمد

تشرين الاول / 2023 ميلادية

ربيع الاول / 1445 هجرية