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**Addressing Parents' Needs at Neonatal Intensive Care
Units in Gaza Governorates: Toward
Family-Centered Nursing Care**

Mustafa Saidam

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**Addressing Parents' Needs at Neonatal Intensive Care
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Family-Centered Nursing Care**

Prepared By
Mustafa Saidam

Supervisor: Dr. Akram Abusalah

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Thesis Approval

Addressing Parents' Needs at Neonatal Intensive Care Units in Gaza Governorates: Toward Family-Centered Nursing Care

Prepared by: Mustafa Saidam

Registration No: 21612192

Supervisor: Dr. Akram Abusalah

Master thesis submitted and accepted. Date: / /

The names of signatures of the examining committee members are as follows:

1. Head of committee: Dr. Akram Abusalah Signature

2. Internal examiner: Dr. Hamza Abdeljawad Signature

3. External examiner: Dr. Osama Elian Signature

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Dedication

All the warm feelings and respect to my father and my mother who are praying and encouraged me all the time

My sincere gratitude to my wife and my children who supported me all the time through this study ...

Special thanks to my brothers for their encouragement, which provided me with energy to complete my study

I would like to express my appreciations to all the nurses who are working in Neonatal Intensive Care Units in Gaza Strip for their cooperation and support.

Mustafa Saidam

Declaration

I certify that this thesis submitted for the degree of Master, is the result of my own research, except where otherwise acknowledged, and this study (or any part of the same) has not been submitted for a higher degree to any other university or institution.

Signed:

Mustafa Saidam

Date: / /

Acknowledgement

First of all, praise to Allah, the lord of the world, and peace and blessings of Allah be upon our prophet Muhammad, all thanks for Allah who granted me the capability to accomplish this thesis.

I had the great fortune to complete this study under the supervision, guidance and valuable instructions of Dr. Akram Abusalah.

I would like to convey my warm thanks to all NICUs' nurses for their cooperation in data collection.

To my friends, and all those who contributed to the completion of this study, thank you very much.

Mustafa Saidam

Date: / /

Abstract

Having a baby admitted to Neonatal Intensive Care Unit (NICU) is a distressing event for parents associated with feelings of guilt, stress, and anxiety. The purpose of this study was to assess needs of the parents during hospitalization of their newborns at NICUs in governmental hospitals of Gaza Strip. The study utilized descriptive, analytical, cross-sectional design. The sample of the study was a convenient sample, consisted of 117 parents (95 mothers and 22 fathers) selected from four governmental hospitals in Gaza Strip; namely Al Shifa, Alnassr, European Gaza Hospital, and Nasser hospital. The researcher adapted the Neonatal Intensive Care Units Family Needs Inventory (NFNI) questionnaire and translated to Arabic language. Reliability of the questionnaire was tested and Cronbach alpha coefficient was 0.969 and split-half correlation was 0.901. The results showed that half of parents aged between 25–30 years old, two-thirds of them are not working, one-third have bachelor degree, majority of them have income of less than 1000 NIS, and about half of them have a family size of 4 – 6 persons. In addition, about two-thirds of neonates were males, 40% of them were premature babies, 43% of them stayed in NICU for 4–6 days. The results also showed that parents rated assurance as the highest need (82.2%), followed by information need (78.4%), proximity need (76.8%), comfort need (73.6%), and the lowest was support need (68.6). The parents of newborns admitted to NICU on Nasser hospital in Khanyounis reported higher score of the five needs compared to parents from the other hospitals. Also, parents who have bachelor degree, higher income expressed higher score of assurance need. Moreover, parents who have big families exhibited higher value of proximity need, and parents whose newborn admitted to NICU for 1–3 days expressed higher score of comfort need, and parents of newborns on breastfeeding reported higher score of all the needs. The results also showed that there were no statistically significant differences between the needs of fathers and mothers. Also, there were no statistically significant differences in parents' needs related to work, age, medical diagnosis of neonates, and gender of neonate. The study concluded that addressing parents' needs at NICU is very important in order to provide a high-quality holistic care for the parents and their babies, which is in accordance with the family-centered philosophy of care.

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List of Abbreviations

CCFNI	Critical Care Family Need Inventory
FCC	Family-centered care
GS	Gaza Strip
LBW	Low Birth Weight
MoH	Ministry of Health
NICU	Neonatal Intensive Care Unit
NFNI	Neonatal Family Needs Inventory
NMR	Neonatal Mortality Rate
PCBS	Palestinian Central Bureau of Statistics
UNHCR	United Nations High Commission for Refugees
UNICEF	United Nations International Children's Emergency Fund
WB	West Bank
WHO	World Health Organization

Chapter One

Introduction

1.1 Background

The presence of families within neonatal intensive care units (NICUs) is considered an integral part of their babies' care. Family-centered care (FCC) is the provision of care that is respectful and responsive to the parents' fundamental needs, values and preferences; it is considered an essential part to implement successful evidence-based practices in NICU (Staniszewska et al., 2012). To improve the provision of family-centered care, it is very important to assess the parents' needs since it is the major component of family-centered care, thus it is important and essential for the NICU nurses to identify these needs (Alves et al., 2016).

During the hospitalization period, parents spend long time in the hospital, which make them away from their other children, and that will be stressful to the parents (Lasiuk et al., 2013). Further stressors include as well the arranged and controlled opportunities of parents' interaction with their infants, inability to support infant's care, fear of infant survival and development, the intensified feelings of love, hope, fear, and loss (Alsaiani et al., 2019). Thus, the availability of good support is considered a critical point for the parents to cope with their feelings of grief and confusion; however, they do not know how to ask some help from the nurses and other health care providers; so, can be prevailed that they are often unsure of their own needs (Skene et al., 2012).

Also, the presence of parents in NICUs continuously, is pivotal to allow the family and/or the parents in participating in the care of their babies thus to improve the outcome (Guimaraes, 2015). In addition, other family members including siblings and grandparents should also visit the hospitalized babies. The participation of parents in the care as well as

the decision making of their babies is increasing worldwide in recent decades, ranging between 8 and 20% in a recent European study, this rate is relatively low and; so, the policy maker, nurses and other health care providers at the NICUs must develop considerable efforts to include the parents in decisions during clinical situation of their babies (Soares et al., 2013).

Several international studies carried out in Intensive Care Units that categorized family needs as involving information, communication, assurance, support, or comfort, but the parents' needs at the NICU are not well-established (Mundy, 2010). Therefore, the study takes place as an initial step in Gaza Strip (GS) to assess parents' needs at neonatal intensive care units in GS in order to be the first milestone for introducing the role of nurses in family-centered care.

1.2 Problem Statement

Actually, the hospitalization of the newborn in NICU constitutes a major disruptive life event with impact on family health. During the hospitalization period, the parents feel sad because they have difficulties in feeling part of their infant's care, and fear for his/her survival and future development, they are experiencing feelings of hope, love, and happiness as well. Moreover, the researchers previously have studied the psychological effects of experience within NICUs on parents and family, and others have studied the sources and availability of social supports which may provide help to the families to cope with negative feelings during hospitalization of their child in NICU, however, few researchers have studied and assessed the actual parental needs from the parents and/or families point of view. Especially in Palestine, little is known about the actual and unique needs of parents during hospitalization of their baby in NICU.

More importantly, the majority of previous literature have assessed the families' needs retrospectively rather than assessing these needs in the moment; but after the discharge of their baby from NICU. Thus, this study was conducted to assess the parents' needs during the time of baby hospitalization at NICUs to provide strong evidence for the future science. In addition, the issue of correlating the actual parents' needs with different babies' diagnosis have not been studied before in previous research, the issue that will be also taken into account in this study.

On the other hand, from the researchers' experience in this work field of this study, the nursing care focuses primary on the neonates without involving the parents in their baby care. Also, the nurses in GS face difficulties in identification of parents' needs correctly, thus this study came to identify these actual needs in order to fill this gap. Moreover, the parents are somewhat ignored during their stay outside the NICU while their baby is hospitalized, they need like this study to be a guide for the nurses and other health care providers during this critical issue. From another point of view, during the hospitalization of babies in NICU, parents and families' routine is changing. Thus, having major impact on their sons, daughters, and on the relationship itself between the parents themselves (Lasiuk et al., 2013), in this regard; it is important to assess and give support to the parents since it is considered an issue which is fundamental. Therefore, this study came to assess the parents' needs during their babies' admission in the NICUs at Governmental hospitals in Gaza strip.

1.3 Justification of the study

Parents' feelings of guilt, stress, rejection, and anxiety, are very common during hospitalization of their baby in NICU, as this situation is a distressing event for the parents and the family. This issue have not been examined in GS, therefore, it would be a basic guide for nurses and other health care providers to overcome this issue and to know exactly

what are the actual needs of parents during hospitalization of their babies in NICU instead of leaving parents outside the department without understanding of their actual needs and considering of their stress. Several feelings are experienced by parents during hospitalization of their baby in the NICU.

More importantly, family-centered care approach, which considered the respect of the parents and response to their preferences, needs, and values, is fundamental to yield a successful nursing and medical care design and for the implementation of evidence-based practice as well in NICU (Staniszewska et al., 2012). Therefore, this study highlighted this fundamental approach for the nurses and other health care providers. Also, this study would be meaningful because it will stress on the identification of parents' needs during hospitalization of their baby in NICU which will contribute in diminishing the risk of the development of parents' stress and anxiety during this critical issue.

Moreover, communication with parents is not always successful by the nurses and other health care providers, thus parents might remain dissatisfied outside the department due to non-availability of enough information about their hospitalized baby. So, it is necessary to improve the parent-staff communication; so, this study will emphasize on improving the methods of communication and information sharing by the nurses and other health care providers which are considered as critical point during hospitalization of their babies.

On the other hand, this study considered a milestone for developing family-centered care in governmental hospitals in GS including organizing and providing parents support programs for the families who have babies admitted to the NICU which is the first study in GS to address family centered practice in Governmental hospital.

To the best of the researcher's knowledge, this study is the first to be conducted in Palestine; it will provide the nurses, health care providers and the policy makers in the ministry of health as well with the importance to include the family and to listen to the parents needs in NICU. This will return the benefits to the newborn, parents and health care team as well; moreover, it will reduce the stress within parents during their newborn stay in the hospital.

1.4 Purpose of the study

The goal of the study is to assess the parents' needs during their newborns' hospitalization in the Neonatal Intensive Care Units at governmental hospitals of Gaza strip in order to attain an initial milestone for introducing the role of nurses in family-centered care.

1.5 Objectives of the study

1. To assess the parents' needs at neonatal intensive care units in Gaza Strip with regards to domains of the study (assurance, proximity, information, comfort and support).
2. To determine the differences in the parents' needs related to sociodemographic characteristics of parents (gender, age, level of education, work, family size, and monthly income).
3. To identify the difference in the parents' needs related to condition of their babies (medical diagnosis, length of stay, and mode of feeding).
4. To suggest recommendations to enhance family-centered care approach in neonatal intensive care units in Gaza governorates.

1.6 Research Questions

1. What are the parents' needs at neonatal intensive care units in Gaza Strip with regards to assurance, proximity, information, comfort and support?
2. Is there a significant difference between parents' needs attributed to sociodemographic characteristics of parents (gender, age, level of education, work, family size, and monthly income)?
3. Is there a significant difference in the parents' needs attributed to condition of their neonates (medical diagnosis, length of stay, and mode of feeding)?
4. What are the recommendations that could enhance the provision of family-centered care?

1.7 Theoretical and Operational Definitions

- **Parents' needs:** it is the requirements, which if supplied, relieves or diminishes their distress or improves their sense of adequacy or wellbeing (Mundy, 2010). In this study, the researcher defines it as parents' needs at NICUs in governmental hospitals that used to relieve their stress during this critical moment. It is measured throughout scale addressing five major needs; namely: assurance, proximity, information, comfort, and support.
- **Neonatal intensive care unit:** An intensive care unit is specialized for the care of ill or premature newborn infants. Neonatal period refers to the first 28 days of life. Neonatal care, as known in specialized nurseries or intensive care (www.nursesource.org, 2017). In this study, it is referred to specialized units at governmental hospitals in GS; where critically ill newborns receive care in the first 28 days of their life.
- **Assurance:** refers to parents' need to feel confident, secure, and hopeful about their newborn outcomes during hospitalization at the NICU, which measured by 9-questions constructed on 5-points Likert scale.

- **Comfort:** the comfort that may be important to the parents during their newborn hospitalization at the NICU, such as having a waiting room, which measured by 10-questions constructed on 5-points Likert scale.
- **Information:** refers to parents' need to obtain realistic information about their newborn during hospitalization at the NICU, which measured by 11-questions constructed on 5-points Likert scale.
- **Proximity:** refers to parents' need to remain near the new-born during hospitalization at the NICU, both emotionally and physically, such as visiting frequently and being called at home about condition changes, which measured by 9-questions constructed on 5-likert scale.
- **Support:** the resources, systems, and structures needed by parents during their new- born hospitalization at the NICU, such as the need to express emotions, and obtain spiritual guidance, which measured by 11-questions constructed on 5-points Likert scale.

1.8 Boundaries of the study

- **Conceptual boundary:** assess parents' needs at neonatal intensive care units in GS.
- **Setting boundary:** the study conducted in the governmental hospitals of the GS, that provide neonatal intensive care; namely: European Gaza Hospital, Nasser Hospital, and Al-Shifa Medical Complex.
- **Temporal boundary:** the study was conducted during the period from Sep. 2017 to Nov. 2019.
- **Population boundary:** parents who visit their babies in NICUs at governmental hospitals of GS during the time of data collection.

1.9 Context of the study

1.9.1 Sociodemographic context

Palestine occupies an area of 27,000 square kilometers (Km²). It is expanding from Ras Al-Nakoura in the north to Rafah in the south. The Palestinian territories is divided into three areas separated geographically; the West Bank (WB) 5.655 Km², GS 365 Km² and East Jerusalem. GS is a narrow zone of land surrounded by Egypt from the south, the Mediterranean Sea from the west, and by the occupied territories in 1948 from the east and north. More than two-thirds of the total population in GS are refugees. GS consists of five provinces: North of Gaza, Gaza, Mid-zone, Khanyounis, and Rafah (Palestinian Central Bureau of Statistics - PCBS, 2018).

Based on reports of the PCBS, in July 2019, the estimated total Palestinian population is 13 million, of them about 5 million live in Palestine (2.53 million males and 2.45 million females). The estimated population in the WB is about 2.99 million (1.53 million males and 1.46 females), while the population in GS is estimated to be 1.99 million (PCBS, 2019). Data revealed that the population of Palestine is a young population as 38.0% of Palestinian people are from the age group 0 - 14 years (36% in WB and 42% in GS), while ages over 65 years constituted only 3.0%. The population density (capita/km²) is 826 (528 in WB and 5453 in GS) (PCBS, 2019). Natural increase rate accounts for 2.8 (2.5 in WB and 3.3 in GS), life expectancy for males 72.1 years and for females 75.2 years, average household size 5.0 (4.6 in WB and 5.5 in GS) (PCBS, 2018). Crude birth rate is estimated at 30.2 live birth/1000 population (27.7 in WB and 33.9 in GS), while crude death rate estimated at 3.7 death/1000 population (3.9 in WB and 3.5 in GS). In addition, fertility rate estimated at 4.4 baby/woman (4.3 in WB and 4.5 in GS) (PCBS, 2019).

1.9.2 Ministry of health hospitals

The total number of hospitals in Palestine is 81 hospitals, 51 of them in WB including east Jerusalem and 30 in GS. The number of hospitals owned by MoH is 27 hospitals (14 in WB with bed capacity 1661 beds and 13 in GS with bed capacity 1664 beds). The number of physicians working in different centers and units of MoH is 2529 physicians, with 5.3 physicians per 10,000 population of Palestine; 4.1 physician per 10,000 populations in WB and 7.0 physician per 10,000 populations in GS, and the number of nurses working in MoH in GS is 3580 nurse representing 26.3% of total employees in MoH (MoH, 2018).

1.9.3 Neonatal intensive care units in Gaza strip

Neonatal intensive care units provide care for babies who are born unwell, premature or who require observation after birth. NICU units are a very busy part of a hospital with most functioning at full capacity, with babies requiring intense nursing and medical care and interventions, most days of the year (Turner, 2014). In Gaza strip, there are seven NICUs at governmental hospitals distributed over seven hospitals: Aldurra hospital, Alnassr hospital, Shifa Medical Complex, Al Aqsa hospital, Nasser Medical Complex, European Gaza Hospital and Al Emaraty hospital. The total capacity of NICUs in governmental hospitals in GS is 108 beds. In addition, there is one hospital with six neonatal beds governed by ministry of interior (MoH, 2017). Neonatal Units has 3 different levels according to the condition of the patient, however only the 2nd and the 3rd levels are included into the NICU and can be defined as a specialized care for the newborn or premature seriously ill child with use of the required special equipment (Al shifa, 2017).

Chapter Two

Conceptual Framework and Literature Review

This chapter includes two main parts; the first one is the conceptual framework; where the researcher provides a diagram of the conceptual framework of the study, and the second part is the literature review that related to the topic of study.

2.1 Conceptual framework

The below framework for this study is illustrated in Figure 2.1. The framework addresses the parents' needs during hospitalization of their babies at the neonatal care units towards nursing provision of family-centered nursing care.

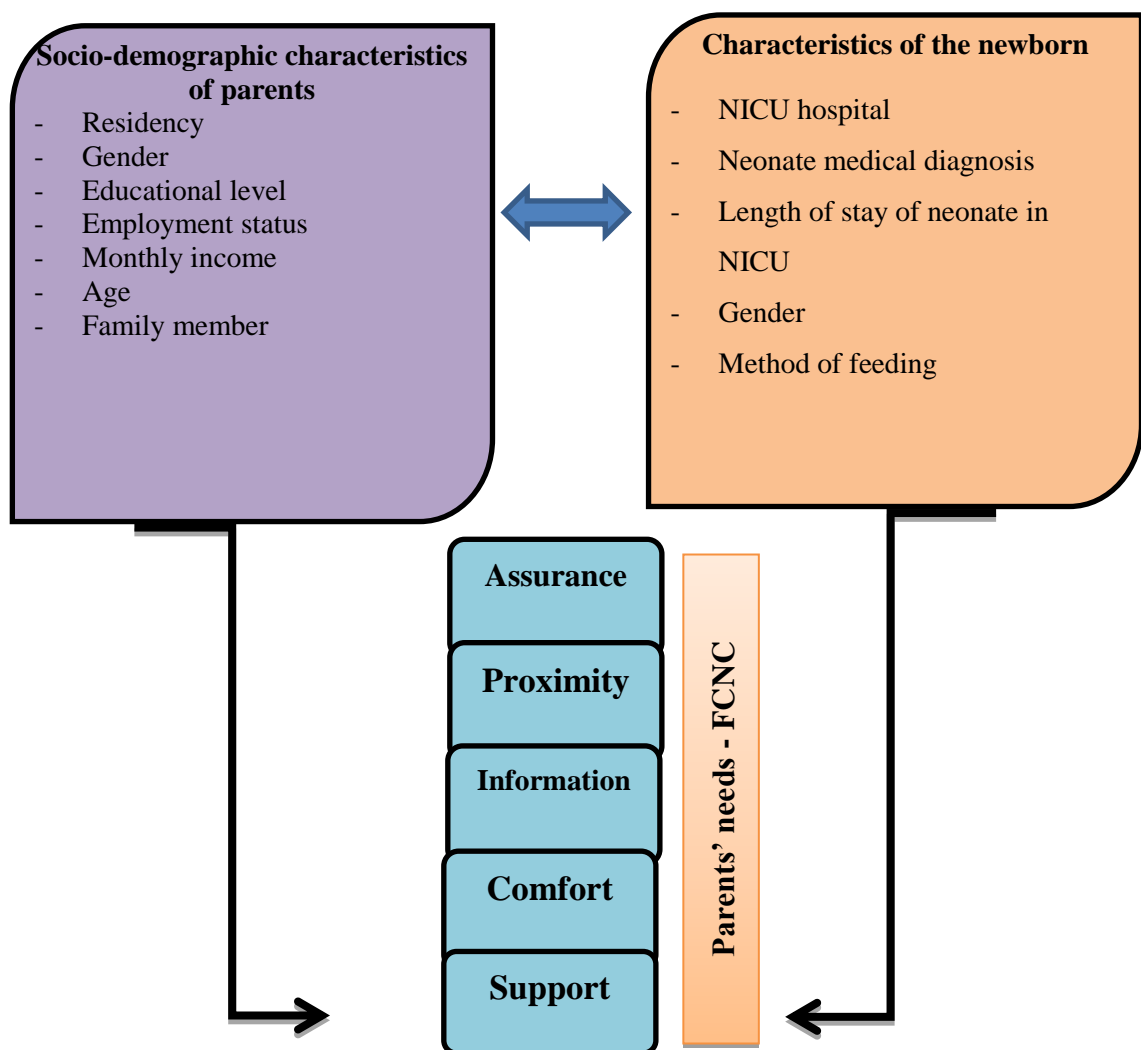


Figure (2.1): Conceptual framework (self-constructed)

The previous mentioned diagram presents the parents' needs during their hospitalized newborn in relation to domains of the study including sociodemographic characteristics of the parents (hospital, residency, gender of parent, educational level, occupation, income, and age of the respondent), and characteristics of the baby (medical diagnosis, length of stay, gender and method of feeding).

2.1.1 Parents' needs and selected sociodemographic characteristics

Acute illness of newborn requiring hospitalization is a stressful situation that can have negative effects on parents including emotional distress, altered roles and functioning. One of the challenges that nurses encounter in NICUs is their ability to identify, and meet the parents' needs. Previous studies document that there were significant differences in parents' needs related to sociodemographic characteristics of the parents. Gender of parent, as example, play a role in identifying a different score of parents' needs; as which Govindaswamy et al. (2019) declare that mothers rated assurance significantly more important than fathers, the same as Wang et al. (2018) found that gender of parents was significantly associated with the needs of the parents. Additionally, Obeisat and Hweidi (2012) indicated that the mothers perceived needs for support, information and proximity as significantly more important than the fathers, and also declare that the provision of quality, holistic, family-centered nursing care relies primarily on early and comprehensive needs assessment. Also, education of parents is considered a factor affecting of parents' needs; as Alves et al. (2016) indicated that less educated and older parents more frequently attributed a significantly higher importance to parent-cantered needs.

2.1.2 Parents' needs and neonatal characteristics

Characteristics of the newborn is crucial element in identifying the parent's needs at NICUs; as Baia et al. (2015) on a study aimed to assess the self-reported needs and stress among parents of very preterm infants hospitalized in NICU indicate an association

between length of hospitalization and parents' needs. Moreover, the study showed that the needs of assurance and proximity were the most rated, independently of the time of interview. Parents interviewed 15 to 22 days after their child's admission tended to attribute higher importance to almost all needs, in particular to support. Despite the lack of statistical significance, higher levels of stress were observed among parents interviewed 15 to 22 days after their child's admission, when compared with those interviewed 8 to 14 days, especially on subscale change in parental role.

2.1.3 Parents' needs and domains of the study

Much of the literature confirms that special needs are encountered by parents, such as the need for assurance, information, comfort, proximity, and support. Govindaswamy et al. (2019) carried out a prospective cohort study, aimed to identify needs of parents of newborns admitted to the NICU. The sample of the study consisted of 111 parents. Parents completed the Neonatal Family Needs Inventory (NFNI), comprising 56 items in five subscales (support, comfort, information, proximity, and assurance) at admission and discharge. The results showed that parents rated assurance needs as the most important at admission and at discharge, followed by proximity, and information. Overall, parents' most important needs were having questions answered honestly, seeing their infant frequently and knowing about the medical treatment.

The same as Alsaiani et al. (2019) conducted a study in Saudi Arabia, aimed to identify the needs of parents who had an infant in NICU in Riyadh City. The results showed that parents ranked the needs for assurance, proximity, and information as the most important needs. The comfort and support needs were ranked as the least important. Moreover, the highest top-ranked items were related to assurance of pain infant being treated for (86%), infant expected outcome (83%), and infant being handled gently (83%). The study concluded that nurses should create a relationship with parents and provide them with

comprehensible, honest assurance, information, and to provide a high-quality holistic care for parents that relies on their needs.

Moreover, Wang et al. (2018) carried out a study in China, aimed to investigate the needs of parents of premature infants hospitalized in NICU, and explore associated factors. The study included a convenience sample of 198 parents of premature infants hospitalized in a NICU. Parents rated 30 of 45 items on the Chinese version of Critical Care Family Need Inventory (CCFNI) as important or very important. Items on the assurance, information, and proximity subscales were perceived as the most important, while items on the comfort subscale were the least important.

In Jordan, a study carried out aimed to identify perceived parental needs of critically ill infants in NICU. The sample of the study consisted of 170 Jordanian parents who were visiting their infants admitted in NICU. Participants completed the demographic data sheet and the NICU Family Needs Inventory. The study results showed that those parents ranked assurance, information and proximity as the most important needs, while comfort and support were ranked the lowest. The primary concern of parents was to be assured and informed about the progress of their infant. In addition, the results indicated that the mothers perceived needs for support, information and proximity were significantly more important than the fathers. The study concluded that the nurses should establish a rapport with family members and provide them with understandable and honest information (Obeisat and Hweidi, 2012).

Internationally, Mundy (2010) carried out a study that aimed to assess the needs of parents in NICUs. Parents were interviewed by using the Neonatal Intensive Care Unit Family Needs Inventory. The results showed that 93% of the needs items were rated as important or very important, and parents rated the assurance needs as the highest need. Parents rated

the support needs higher at time of admission compared to time of discharge. There were no significant differences in needs of mothers and fathers. The study concluded that identifying the needs of parents in NICUs could enhance nursing communication and allow nurses to incorporate parents' needs into families' plans of care and provide a positive family-centered experience in the unit for neonates and their families.

The same as Vaskelyte and Butkeviciene, (2010) carried out a study to assess parents' needs at NICUs. The sample of the study consisted of two groups: 181 parents and 37 nurses. The NICU Family Needs Inventory was used for data collection. The instrument included the following five dimensions of needs: proximity, information, assurance, support, and comfort. The results showed that the majority of statistically significant differences between parents and nurses have been found in the proximity (75.0%) and informational (72.7%) needs related to the possibility for parents to be close to their newborns and to receive timely and adequate information about their newborns' health condition. Parents, if compared to nurses, rated these needs as more important. The assessment of support needs showed the lowest number of differences (38.9%). There was a statistically significant difference assessing the support in decision-making related to the newborn care, which was identified by parents as being more important. Nurses perceived the needs related to parent-to-parent support and possibility to share feelings as being more important.

2.2 Literature Review

2.2.1 Background

The NICU is a highly technological environment where the small and sick infants are treated and cared (Altimier & Phillips, 2016). The role of parents in the NICU environment is different from traditional parenting and somewhat peripheral to the care process, as the staff provides the specialized care that the infant requires and families have to cope with parenting their infants from a far (Bracht et al. 2013). Parents separated from their newborns often experience emotional strain, feel like outsiders and experience lack of control (Nyqvist et al., 2013). Family-centered nursing is professional support for the child and his/her parents via a process of empowering and negotiation, and a set of inclusion and involvement (Mikkelsen and Frederiksen, 2011). In family-centered nursing families are seen as the natural caregivers for the infant and parental involvement and decision-making is supported (McGrath, 2013).

Moreover, entering the NICU for the first time can be overwhelming for parents and processing new information while experiencing a traumatic life situation can be very difficult (Lee and O'Brien, 2014). Without proper education and guidance parents can feel a sense of powerlessness and intimidated by the situation. Lack of orientation can further isolate parents from their infants impacting both the early attachment and future parenting (Bracht et al. 2013).

Bracht et al. (2013) concluded that the parent education is absolutely necessary to enable parents to become familiar with their infants' care, and only through parental involvement family centered care can be fully incorporated. Sufficient orientation can affect positively on the motivation and family wellbeing, but also has a high correlation on patient safety and treatment results.

Also, the attachment processes have the potential to be disrupted or delayed as a result of the initial separation of the premature new-born and the mother after the admission to the NICU. The unlimited parents' presence is crucial in NICUs, to allow them to participate in the care of their children, improving their outcome (Bracht et al. 2013). The participation of parents in care and decision making of their newborns is increasing in recent decades, changing between 8 and 20% in a recent European study (Mikkelsen and Frederiksen, 2011).

2.2.2 Definition and epidemiology of the neonate

The neonatal period spans the first 28 days of a newborn's life and is considered an integral indicator of future child survival (World Health Organization-WHO, 2016). Approximately, two million newborn die during the first seven days of birth (UNICEF, 2015). According to WHO In 2016 it was estimated that 5.9 million children under the age of five died, with a global mortality rate of 42.5 per 1000 live births. Of these deaths, 45% were neonates with a neonatal mortality rate (NMR) of 19 per 1000 live births. The top three causes of neonatal mortality were prematurity, complications related to birth (birth asphyxia) and neonatal sepsis, these causes constituted 85% of neonatal mortality (UNHCR, 2013).

Progress in global neonatal mortality has been reported in some areas with the mortality rate declining from 37 deaths per 1000 live births to 18 deaths per 1000 live births from 1990-2017. However, progress in NMR has not been equal around the world; there was a 47% decline in NMR in developing countries versus a 58% decline in developed countries in the period 1990-2017. By 2030, a lack of accelerated action towards neonatal health will result in the death of 28 million newborns in the period 2018-2030 (UNICEF, 2018).

The rate of neonate birth has risen in developed countries over the last decade. Possible explanations include improved registration, broader use of ultrasound-based estimation of gestational age, infertility treatment, and changes in obstetric practice with preterm deliveries induced because of fetal or maternal indication (WHO, 2014). Approximately one-third of all infant deaths in the United States. Infants born have the highest mortality rate (approximately 50 percent) and if they survive, are at the greatest risk for severe impairment (Mandy, 2011). Though neonatal mortality rates are dropping, they remain high and are largely determined by gestational age at birth (over 10% mortality for infants born before 28 weeks, 5-10% at 28-31 weeks and 1-2% at 32-34 weeks). Severe neonatal morbidity and disabilities during childhood are also frequent and vary with gestational age (Torchin et al., 2015).

In Europe, approximately 75% of all neonatal deaths and 60% of all infant deaths occur to infants born preterm. Although survival of preterm infants has increased significantly in the past decade, these infants remain at higher risks of long-term motor and cognitive impairments as well as of chronic disease and mortality. Later, in life than infants born at term. Initiatives to prevent preterm births have had limited success (Delnord et al, 2015). In Sri Lanka, neonatal deaths have been estimated be approximately 4 million while the infant mortality rate is 11.2 per 1000 live births. Neonates are at risk for death due to various health problems, even though they have been born with average birth weights, thus, the morbidity and mortality rates in newborn infants are higher (Priyadarshanie and Pethiyagoda, 2017).

As a developing middle-income country, Palestine mirrors some of the same trends and challenges faced globally in neonatal health. Under-five and infant mortality rates were 13.0 per 1000 live births and 10.9 per 1000 live births respectively (MoH, 2017). During 1990-2017, the under-five mortality rate declined from 45 to 21 per 1000 live births, infant

mortality declined from 36 to 18, and neonatal mortality declined from 22 to 11 deaths per 1000 live births (UNICEF, 2018). At the same time, the NMR declined from 22 to 12 deaths per 1000 live births (UNICEF, 2015). However, a lack of prevention strategies that correspond to neonatal health needs, weaknesses in existing health systems in terms of equitable access to services; and inadequate knowledge, skill and experience of healthcare workers to respond appropriately to neonatal health ailments.

2.2.3 Morbidity and mortality of neonates

The neonatal period spans the first 28 days of a newborn's life and considered an integral indicator of future child survival (World Health Organization - WHO, 2016). Approximately, two million newborn die during the first seven days of birth (United Nations International Children's Emergency Fund - UNICEF, 2015). According to WHO (2016), it was estimated that 5.9 million children under the age of five died, with a global mortality rate of 42.5 per 1000 live births. Of these deaths, 45% were neonates with a neonatal mortality rate (NMR) of 19 per 1000 live births. The top three causes of neonatal mortality were prematurity, complications related to birth (birth asphyxia) and neonatal sepsis, these causes constituted 85% of neonatal mortality (United Nations High Commission for Refugees - UNHCR, 2013).

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2.2.4 Impact of admission in NICU

Hospitalization can be a stressful event for both the babies and the family. Babies and family members are seeking information regarding medical issues, assistance in symptom management, information regarding prognosis and/or recovery, and support in coping with these situations. (Hall, Levant & DeFrances, 2013). Over the last twenty years, there has been a steady increase in the survival rates of premature babies. Much of this change has been due to the large range of new medical procedures and equipment available to treat these babies. Along with this, there has been a steady increase of research and knowledge about delivery and premature babies. While this has provided enhanced medical care, it has also provided a unique situation for parents who have a critically ill baby in the NICU (Turner, 2014).

In addition, birth of preterm infants and hospitalization in NICU is a stressful experience for parents worldwide. Parents of preterm infants' experience multiple stressors related to several adverse conditions such as, the preterm birth, postpartum mother's medical state, new parenthood feelings, vulnerability status of the infant and infant physical separation due to admission to NICU (Lasiuk et al., 2013; Rich-Edwards et al., 2014). Further stressors include as well the arranged and controlled opportunities of parents' interaction with their infants, inability to support infant's care, fear of infant survival and development, the intensified feelings of love, hope, fear, and loss. NICU environment, facilities and technology, unpleasant machines sound, medical procedures, and rounds of health care providers are a source of stress as well. These stressors adversely affect parents physically, psychosocially and spiritually, and can affect the relationship between parents and their infant (Busse et al., 2013)

2.2.5 Parents in the neonatal intensive care unit

The environment of the NICU is not the environment that most parents imagined for their first encounters with their baby. Some parents find this an overwhelming and confusing time and for a number of parents this time is a loss of innocence as parents question their beliefs in safety, medical care and the roles of power amongst parents and staff. The noise, chaos and large numbers of staff in a unit often cause parents to feel a lack of both control and input into their baby's admission (Arnold et al., 2013). The initial visit to the NICU can be very frightening for parents of preterm infants. NICUs are very busy places with noises, smells, and people. Although they are often full of other patients, parents may have a sense of being alone. Parents are inundated with information about their baby, the equipment, the unit, the staff, the visiting hours, etc. The staff, in an attempt to help inform the parents, often gives them too much technical information, which quickly overwhelms them (Trainor, 2015).

Baby hospitalizations are on the rise, increasing by 11% between 2000 and 2010. During the period of being admitted to the NICU mother and babies should not be separated for a long period of time found, that basically the conversion to motherhood is a complicated period of time for every woman, however following NICU admission would have severe impact on the process of becoming a mother (Boxwell, 2010).

Factors that may contribute to parental stress in the NICU include the lack of opportunity to interact with their infant, the sights and sounds of the NICU, the appearance and behavior of their baby, and alteration in their parental role (Musabirema, 2015). In the NICU environment, where separation between the newborns and parents is inevitable, care that meets the needs of the whole family system is crucial (Bieleninik & Gold, 2014). The sources of stress for parents are mainly separation from and the fragile appearance of their baby in the NICU environment, and fear of their infant's death (Whittington, 2010). The staff also often gives them too much technical information, which quickly overwhelms them. Hospital and unit policies can create significant road blocks for parents (Wigert et al., 2014).

2.2.6 Family-centered care

Family-centered care is described as a caring philosophy that determines role of the parents that they are taking in child's treatment, respects and encourages their actions. The main goal of this concept is to support roles of the parents as caregivers and building open and trusting relationships between nurses and family (Kolmakova, 2015). FCC is a model of care where health-care policies, protocols and strategies are planned around the whole family and is based on the seminal work (Foster and Whitehead, 2017).

Apart from the baby's condition, nurses should also take care of the family members' needs, their mental and physical well-being, provide an education that would helping them

to adjust to the situation and take control of it. Moreover, it is very important to include parents into the creation of the care plan and decision-making process, which would improve care provided to the neonate (Ramezani, et al., 2014). FCC, as a medical concept, is a golden standard in NICU. This approach, as a team-oriented and multi-disciplinary one, involves families in breastfeeding, kangaroo care, cares planning, and limitless presence beside their neonates. In addition, it enables the family members to take care of their neonates with less expenses and optimal quality (Manning, 2012). The advantages of FCC for health organizations include saving expenses in the long run due to shortening the duration of neonates' hospitalization in NICU, decreasing the rate of nosocomial infections, and re-hospitalization (Ramezani, et al., 2014).

2.2.7 The role of the family and nurse in family-centered care

- **Family Role:**

According to Yuennan (2015), it is important for the parents to understand the nature of FCC and have a positive attitude about participating in the care of their child. Therefore, a parent can be a comforter and supporter and can offer emotional support to their child when medical treatment is taking place. Moreover, family involvement is closely linked to the nurses' support. Parents' role can be summarized as the following:

- Readiness to assume; parents are ready to embrace new change in role
- Support of healthcare professionals; parents collaborate in care of their babies
- Interaction with other families; it serves as an exchange of experiences
- Identification of roles that best matches their interest, background and skill
- Growing conviction of their ability to contribute to the care of their baby in a holistic way
- Negotiation in practice to agree on the level of parental participation, with a sharing of power and control.

- **Role of the nurse**

The scope of nursing practice is engrossed within the synergy model, which highlights the role of the nurse in the ICU. Nurses' current clinical practice is evidence based and guided by research and literature. By integrating their clinical experience, knowledge gained from literature and reflecting on the current practice nurses can be able to make sound clinical judgment in the healthcare area, hence improve on patient/family outcomes and satisfaction (Nibbelink, & Brewer, 2018). Collaboration between nurses and parents enables families to be more engaged in resolution making and persuade the course of the infant's recuperation. Moreover, parents obtain support from nurses underlining the significance of adopting a Family-Centered care model in healthcare setting (Gooding et al., 2011).

According to (Merimaa, 2012), during sickness of a family member, families go through complex stages of adjustment of their day by day schedule and way of life in order to contain the illness. In order to manage the condition, the nurse facilitates the process of adjustment. It is fundamental for nurses to search patients' needs so that a suitable manner and kind of support are identified. However, the nurses must remain alert to the possibilities for abuse that arise with vulnerable neonates and infants and thus expected to be in the forefront regarding protection of the patients' rights and ensuring comfort of the infants and their families.

2.2.8 Family's needs at NICU

According to Mundy (2010), improving well-being is the role of all healthcare providers especially nurses who innately foster health through caring. When an infant is admitted in the neonatal ward the healthcare team concentrate their focus on the sick child, neglecting the emotional and psychological needs of the parents.

- **Need for information**

For effective execution of family-centered care, information sharing is the cornerstone for its foundation and it does assist parents to be empowered and gain confidence in helping make informed decisions about their infant's plan of care. Excluding families from continuing information sharing and ongoing decisions involving their infants needs escalate their anxiety and stress levels (Wakwena, 2016).

In addition, Cockcroft (2011) noted that information sharing that is insufficient, ambiguous, and incompatible and deficient in negotiation erects an obstacle to successful implementation of FCC. Inconsistencies in the information that staff share with parents may heighten their anxiety levels. Health care providers view families as the prime caregivers of the baby in an ICU, thus it is imperative that the healthcare team share detailed information concerning the baby's prognosis and that their main responsibility is to provide care to the baby (Riley et al., 2014).

- **Need for Assurance**

According to Wakwena (2016), the admission of an infant to a neonatal ward can cause confusion and shock for the parents, hence they are incompetent to comprehend descriptions and grant care to the infant. The healthcare team need to fulfill their need for assurance. In NICU parents are often concerned about their infant's safety, comfort and that their infants are receiving the best care. Similarly, Mundy (2010) assessed the needs of parents in NICU, results revealed that the need for assurance was ranked highest with a mean score of 3.89 out of five and the lowest rated need was the need for support with a mean score of 3.33.

- **Need for proximity**

The physical presentation of the infant in neonatal ward can pose barriers to family proximity to the infant and this causes parents to experience depression, anxiety, anger and fear. This frustration compromises the attainment of parental role. Physical contact is significant during neonatal ward admission. Nurses must teach parents how to hold and feed the infant and encourage them to touch the baby. This helps to alleviate anxiety and depression experienced by parents as they are enabled to interact more with the infant (Obeisat and Hweidi, 2012).

According to Vazquez and Cong (2014), when parents first arrive in the neonatal ward, they are overwhelmed and terrified by the surrounding, that parents clearly mentioned the need for proximity. They need to know what the machines, wires and alarms do and mean and the rules for their baby. Such information is the foundation for improving parents' proximity to their babies.

- **Need for support**

Mundy (2010) revealed that support need was ranked lowest by family members of infants in NICU, specifically the support needs statements "to have support group with other family members available" and "to be able to talk to other parents whose infants are in NICU" had the lowest mean (2.93 and 2.95) respectively.

- **Need for comfort**

Family members give priority to the needs of their patient as compared to their own needs (Wakwena, 2016). Results of a study by Mundy (2010) showed that parents ranked the need for comfort lowest, which the mean of statement: "to have comfortable furniture in the waiting room", was reported as 2.90 out of five. It is relatively low as compared to scores for other need statements.

Chapter Three

Material and Methods

This chapter illustrates the materials and methods for this study which are related to methodologies used to answer the research questions, the chapter commences with study design, study population, study setting, period of the study, sample size, sampling and statistical procedures.

3.1 Study Design

The researcher used descriptive, analytical, cross-sectional design. This design is useful for describing the study construct in terms of people, resources. Moreover, it is practical and manageable and meets the study objectives in short time (Polit and Beck, 2016).

3.2 Setting of the Study

The study carried out in NICUs at selected governmental hospitals of Gaza strip, namely; European Gaza Hospital, Nasser hospital, Al Shifa hospital, and Alnassr hospital. These hospitals are the biggest hospitals that provide intensive neonatal health services in GS.

3.3 Study Period

The study was conducted from September 2017 to November 2019. Data collection take place from March to May 2018.

3.4 Study population

The population of the study consisted of all the parents of newborns who visited their babies at the NICUs of the predetermined localities during data collection period.

3.5 Sample size and sampling

Participants were identified as an accidental sample method; from parents those visited their babies at the selected NICUs during the period of data collection. The total number of sample subjects was 117 parents who met the determined inclusion criteria.

Table 3.1: Distribution of study sample according to hospital

Hospital name	Number	Percent
Al Shifa hospital	53	45.2
Alnassr pediatric hospital	27	23.1
Nasser hospital	23	19.7
European Gaza Hospital	14	12.0
Total	117	100.0

3.6 Eligibility criteria

- Parents (mother or father) those newborns were hospitalized at NICUs in the selected governmental hospitals.
- Interested to participate in the study.

3.7 Pilot study

A pilot study conducted before the start of actual data collection (pre-test of instrument). It has been conducted to test reliability of the questionnaire. The study was carried out on 20 subjects (5 from each) selected from the 4 predetermined hospitals. The sample of pilot study was omitted from the actual data analysis process because of some modification was done in the questionnaire and it used for the measuring the reliability of the questionnaire.

3.8 Instrument of the study

After review of literature, the researcher adopted the Neonatal Intensive Care Units Family Needs Inventory (Alves et al., 2016) as an instrument for data collection.

3.8.1 Questionnaire design

An interview structured questionnaire with 5-points Likert scale was used, that formulated in both English and Arabic versions (Annex 1& 2). Scoring of questionnaire items as the following: (5) extremely important, (4) important, (3) somewhat important, (2) not important, and (1) extremely not important. The researcher categorized the scoring of meeting parents' needs as the following:

Highly met	Moderately met	Poorly met
More than 80%	60% - 80%	Less than 60%

The questionnaire includes three main parts:

Part 1: Sociodemographic characteristics of the parents (mother / father) domain

Part 2: Newborn condition domain

Part 3: Parents' needs at NICU domain, which includes 50 questions distributed in 5 subdomains; namely: Assurance (9 items), comfort (10 items), information (11 items), proximity (9 items), and support (11 items) needs.

3.9 Validity of the instrument

The questionnaire distributed to a panel of experts (Annex 3) in the field of study and research methodology. The researcher asked the experts to put their comments about the adequacy of the questionnaire to evaluate the parents' needs at NICU, in addition to clarity of language and wording of the items.

9.10 Reliability of the instrument

The researcher used Cronbach alpha method to find the reliability for items in each 5-subdomains. The result of above 0.70 considered an accepted reliability of questionnaire as

recommended by Polit, and Beck (2016). The result was reported as 0.968 which consider as an excellent reliability (Table 3.2).

Table 3.2: Reliability by Cronbach alpha coefficient

Domain	Number of items	Alpha coefficient
Assurance need	9	0.895
Comfort need	10	0.905
Information need	11	0.889
Proximity need	9	0.843
Support need	11	0.942
Total score	50	0.968

3.11 Data collection

Data has been collected by the researcher during the study period using interview, structured questionnaire. Each questionnaire has a consent form in the first page that asks the participants to participate in the study voluntary. Time estimate for questionnaire filling is 20 minutes. The sample has been taken from the four NICUs in the Gaza strip. The procedure of data collection has been done in a consistent manner in each hospital to ensure appropriate filling of the questionnaires.

3.12 Data entry and analysis

The data were analyzed by using the SPSS program version 22. The stages of data analysis included: coding the questionnaires, data entry, and data cleaning. Data cleaning were performed by reviewing frequency tables. Cronbach alpha was used to assess reliability of the questionnaire. Also, frequencies and descriptive data (frequencies, percentage) were conducted to assess the research variables. Additionally, the researcher used analysis of variance (One-way ANOVA), and T-test to find out the significance and differences between variables, as which the results were statistically significant at ≤ 0.05 .

3.13 Ethical and administrative considerations

Before starting the study, the researcher obtained an official letter of approval from Al Quds University to conduct the study. Then an official letter of approval was obtained from Helsinki Committee in Gaza Strip (Annex 4). An official letter was obtained from MOH to conduct the study at governmental hospitals (Annex 5). Participants were asked for their agreement (Annex 6), and provided with an explanatory form about the study including the purpose of the study, confidentiality of information and some instructions.

3.14 Limitations of the Study

The main limitation of the study was unavailability of the newborns' parents all the time in hospitals, which the researcher needed to wait their coming to visit their baby. Other limitation was financial constraints due to reduction in salaries interfered with the research being accomplished in designated time. Additionally, limited literature about the topic related to the study locality was reported as a limitation, since it's the first study conducted in GS in the field.

Chapter Four

Results and Discussion

This chapter illustrates the findings of statistical analysis of data. Descriptive analysis of demographic characteristics of participants is illustrated and discussed in connection with available literature previous studies. In addition, results of different variables and domains were identified, and the differences between selected variables were explored using proper analytical statistical tests. The results are illustrated in the below figures and tables.

4.1 Results

4.1.1 Descriptive results

Sociodemographic characteristics of study respondents (mothers and fathers)

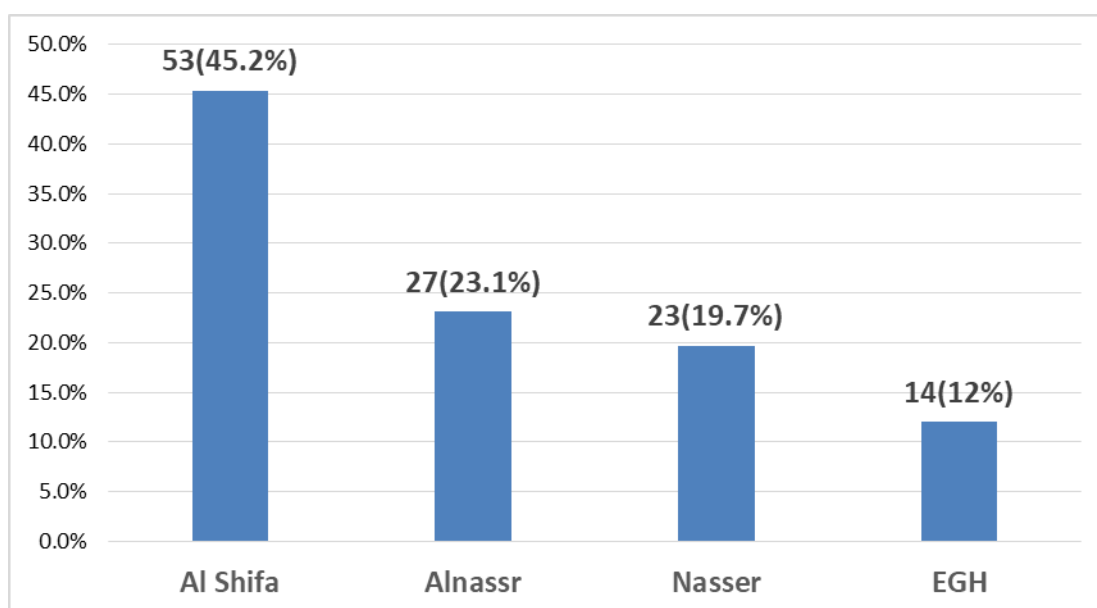


Figure 4.1: Distribution of respondents by hospital

Figure (4.1) showed that most of study participants 53 (45.2%) of the study participants are from Al Shifa hospital as it is the biggest NICU in GS, followed by 27 (23.1%) from

Alnassr hospital in Gaza city, 23 (19.7%) from Nasser in Khan Younis city and 14 (12%) from EGH.

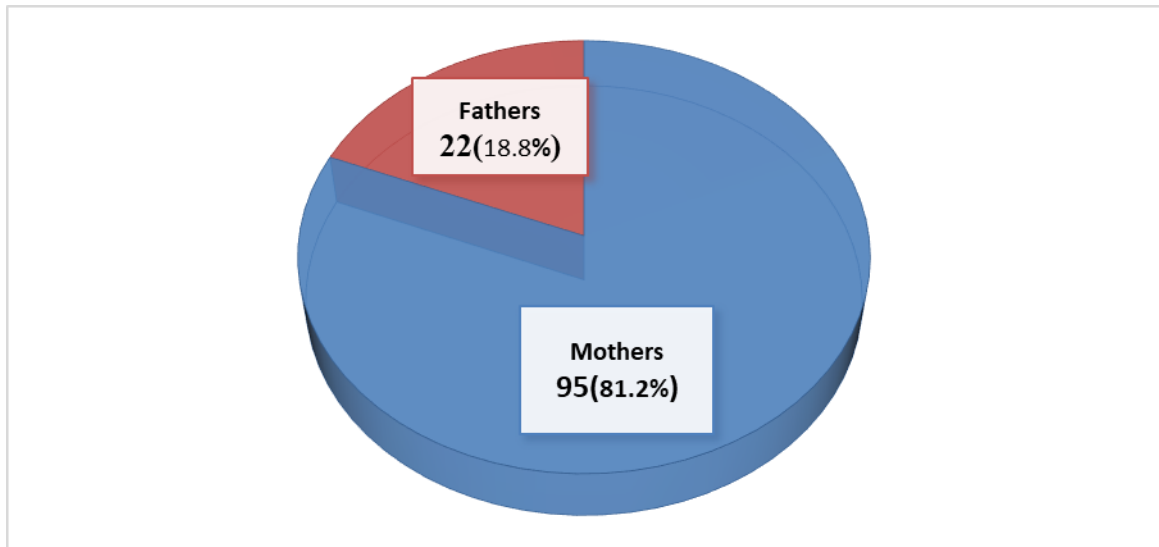


Figure 4.2: Distribution of respondent's by gender

Figure (4.2) showed that 95 (81.2%) of the study participants are mothers, and 22 (18.8%) of them are fathers.

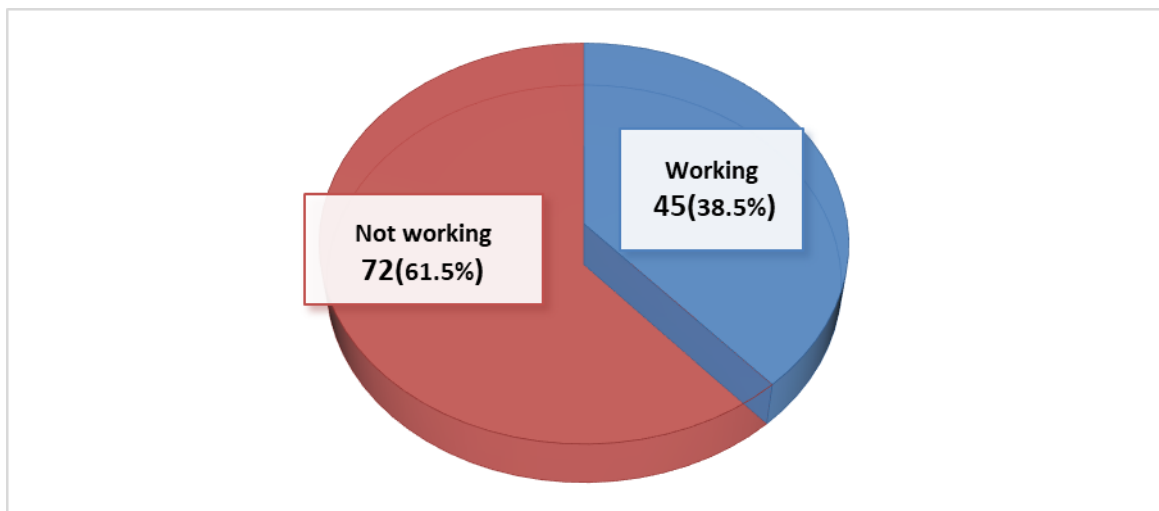


Figure (4.3): Distribution of respondent's by working status

Figure (4.3) showed that 72 (61.5%) of study participants were not working and 45 (38.5%) were working. This result is attributed to study participants, as the majority of them were mothers. In addition, the high rate of unemployment in Gaza strip.

Table 4.1: Sociodemographic characteristics of study respondents (N=117)

Variables		No.	Percent
Place of residency	North governorate	12	10.3
	Gaza governorate	52	44.4
	Middle governorate	12	10.3
	Khanyounis governorate	27	23.0
	Rafah governorate	14	12.0
	Total	117	100.0
Level of education	Below secondary	34	29.1
	Secondary	24	20.5
	Diploma	22	18.8
	Bachelor	37	31.6
	Total	117	100.0
Monthly income	Less than 1000 NIS*	82	70.1
	1000 – 1500 NIS	24	20.5
	More than 1500 NIS	11	9.4
	Total	117	100.0
	Mean income = 946.15 SD = 1079.654 NS		
Age of respondent	Less than 25 years	21	17.9
	25 – 30 years	60	51.3
	More than 30 years	36	30.8
	Total	117	100.0
	Mean age = 28.606 SD = 5.693 years		
Number of family members	3 and less	39	33.3
	4 – 6	55	47.0
	7 and more	23	19.7
	Total	117	100.0

*NIS= New Israeli Shekel

Table (4.1) showed that 52 (44.4%) of study respondents were from Gaza governorate, 37 (31.6%) have bachelor degree and 34 (29.1%) below secondary school, 82 (70.1%) have a monthly income of less than 1000 NS. In addition, 60 (51.3%) from the age group 25 – 30 years, and 55 (47%) have 4 - 6 family members. These results reflected that the majority of study participants are young age, and most of them have low income which is in accordance with the low economic status due to unemployment and high inflation rate in GS because of the siege against the strip for more than 13 years.

Characteristics of newborns

Table 4.2: Characteristics of newborns (N=117)

Variables		No.	Percent
Gestational age	<37 weeks	47	40.2
	≥37 weeks	70	59.8
	Total	117	100.0
Length of stay at NICUs	1 - 3 days	51	43.6
	4 – 6 days	51	43.6
	7 days and more	15	12.8
	Total	117	100.0
	Mean = 4.299, SD = 2.297 days		
Newborn gender	Male	75	64.1
	Female	42	35.9
	Total	117	100.0
Method of feeding	TPN*	22	18.8
	NG tube**	33	28.2
	Breast feeding	45	38.5
	Bottle	17	14.5
	Total	117	100.0

*TPN= Total Parenteral Nutrition; **NG tube= Nasogastric tube

Table (4.2) showed that 47 (40.2%) of hospitalized neonates were premature (gestational age of less than 37 weeks), 15 (12.8%) stayed in NICUs for 7 days and more, with mean 4.299 days. In addition, 75 (64.1%) were male babies, this result in accordance with literature as male babies affected more than female babies in prematurity, especially in hyaline membrane disease. The results also showed that 45 (38.5%) were fed by breastfeeding, and 17 (14.5%) were fed by bottle, and these results explains that some babies stayed in NICU for 7 days and more.

Table 4.3: Medical diagnosis of newborns (N=117)

Diagnosis / Health problem	No.	Percent
Respiratory problems	28	23.9
Septicemia / fever	27	23.1
Heart problems	23	19.7
Digestive system problems	19	16.2
Esophageal stricture	10	8.5
Renal problems	5	4.3
Neurological/spinal cord problems	5	4.3
Total	117	100.0

Table (4.3) showed that respiratory problems were the most prevalent 28 (23.9%) health problems among neonates admitted to NICUs, followed by septicemia and fever 27 (23.1%), and heart problems 23 (19.7%), while the least prevalent health problems included renal system problems 5 (4.3%) and neurological and spinal cord problems (5, 4.3% for each). These results were obtained from the parents and medical records in NICUs. Preterm infants are generally admitted to NICU because their underdeveloped condition renders them vulnerable to life-threatening diseases, such as sepsis, aspiration, malfunctioning digestive systems and respiratory failure (Alsaiani et al., 2019).

4.1.2 Analytical Results

4.1.2.1 Parental needs at NICUs

Table 4.4: Assurance needs of parents at NICUs

No.	Assurance needs	Mean	SD	Mean %	t	P value *	Rank
1	To have questions about my newborn answered honestly	3.98	0.96	79.6	11.51	< 0.001	9
2	To assure that there is a hope in treatment.	4.07	0.70	81.4	14.32	< 0.001	8
3	To be assured that the best possible care is being given to my newborn.	4.14	0.79	82.8	11.71	< 0.001	5
4	To be assured it is all right to leave the hospital for a while.	4.18	0.87	83.6	10.12	< 0.001	2
5	To know the expected outcome for my newborn.	4.20	0.79	84.0	10.99	< 0.001	1
6	To know that my newborn is being handled gently by healthcare providers.	4.09	0.84	81.8	11.68	< 0.001	6
7	To know that my newborn is being treated for pain.	4.15	0.91	83.0	10.13	< 0.001	4
8	To be recognized as important in my newborn's recovery	4.16	0.88	83.2	10.29	< 0.001	3
9	To feel free to choose to stay or leave when my newborn is experiencing painful procedures.	4.09	0.85	81.8	11.55	< 0.001	7
Overall		4.11	0.625	82.2	15.28	< 0.001	

One sample t-test *significant level at 0.05

Table (4.4) presented the assurance needs of neonatal parents' at NICUs. The highest score obtained in the need to know the expected outcome for their newborn (84%), followed by the need to be assured that it is all right to leave the hospital for a while (83.6%), while the lowest score obtained in the need to have honest answers when they asked about their babies (79.6%). In general, all the items of assurance needs obtained high (t) value, agreement mean and high statistical significance ($p < 0.001$). The overall score was 82.2% which indicated that the assurance needs of parents at NICU were highly met.

Table 4.5: Comfort Needs of Parents at NICUs

No	Comfort needs	Mean	SD	Mean %	t	P value*	Rank
1	To have a waiting room for the neonatal unit.	3.59	1.043	71.8	14.62	< 0.001	7
2	To have a telephone near the waiting room.	3.46	1.263	69.2	13.17	< 0.001	9
3	To have comfortable furniture in the waiting room.	3.46	1.103	69.2	15.09	< 0.001	10
4	To feel accepted by the hospital staff.	3.72	0.955	74.4	14.53	< 0.001	5
5	To have a bathroom near the waiting room.	3.72	0.964	74.4	14.39	< 0.001	6
6	To have comfortable chairs at my newborn's bedside.	3.54	0.970	70.8	16.30	< 0.001	8
7	To have the neonatal unit quiet to let my newborn rest.	3.76	0.897	75.2	14.95	< 0.001	3
8	To have the neonatal unit with dimmed lights at regular times	3.76	0.887	75.2	15.11	< 0.001	4
9	To have an employee to meet the needs of ward, such as sending samples to the lab.	3.86	0.850	77.2	14.46	< 0.001	2
10	To see that the staff team provide comfort to my newborn, such as giving my newborn a pacifier, and using blankets to support my newborn's body	3.97	0.866	79.4	12.82	< 0.001	1
Total		3.68	0.727	73.6	19.56	< 0.001	

One sample t-test *significant level at 0.05

Table (4.5) presented comfort needs of parents at NICUs. The highest scores obtained in the need to see that the nurses provide comfort measures to the neonate (79.4%), followed by the need to have an employee to meet the needs of ward, such as sending samples to the lab (77.2%), while the lowest score obtained in the need to have comfortable furniture in the waiting room (69.2%). In general, all the items of comfort needs obtained high (t) value, agreement mean and high statistical significance ($p < 0.001$). The overall score was 73.6% which indicated that the comfort needs of parents at NICUs were moderately met.

Table 4.6: Informational Needs of Parents at NICUs

No	Information needs	Mean	SD	Mean %	t	P value*	Rank
1	To know which staff members could give information about my newborn's health and general well-being.	3.67	0.900	73.4	16.02	< 0.001	11
2	To talk to the physician who involved in caring of my newborn every day	3.98	0.809	79.6	13.59	< 0.001	4
3	To be given understandable explanations	4.01	0.836	80.2	12.83	< 0.001	2
4	To be told the facts concerning my newborn's progress	3.91	0.896	78.2	13.10	< 0.001	8
5	To have a specific staff person to call at the hospital when unable to visit.	3.97	0.859	79.4	12.39	< 0.001	5
6	To have sessions about newborn's health and their special care needs	3.84	0.928	76.8	13.55	< 0.001	9
7	To know exactly what is being done for my newborn	3.97	0.919	79.4	12.18	< 0.001	6
8	To know why things were done for my newborn	4.02	0.799	80.4	13.31	< 0.001	1
9	To be informed that it is all right to cry.	3.80	0.902	76.0	14.34	< 0.001	10
10	To be given reading material concerning my newborn's medical concerns.	4.00	0.820	80.0	13.19	< 0.001	3
11	To be involved in decisions related to my newborn's plan of care	3.97	0.840	79.4	13.31	< 0.001	7
Total		3.92	0.598	78.4	19.48	< 0.001	

One sample t-test *significant level at 0.05

Table (4.6) presented the information needs. The highest score obtained in the need to know why things were done for their newborn (80.4%), followed by the need to receive explanations that are understood by parents (80.2%), while the lowest score obtained in the need to know which staff members could give information about their newborn's health and general well-being (73.4%). In general, all the items of information needs obtained high (t) value, agreement mean and high statistical significance ($p < 0.001$). The total score was 78.4% which indicated that the information needs of parents at NICU were moderately met.

Table 4.7: Proximity Needs of Parents at NICUs

No.	Proximity needs	Mean	SD	Mean %	T	P value*	Rank
1	To be told about transfer plans while they are being made	3.67	0.919	73.4	15.69	< 0.001	9
2	To be allowed to help with my newborn's physical care	3.70	0.823	74.0	17.08	< 0.001	8
3	To receive information about my newborn at least once a day	3.79	0.783	75.8	16.65	< 0.001	7
4	To be able to see my newborn frequently as possible	3.84	0.890	76.8	14.12	< 0.001	5
5	To have the breast-feeding room at the neonatal intensive care unit	3.91	0.847	78.2	13.87	< 0.001	3
6	To be called at home about important changes in my newborn's condition	3.85	0.823	77.0	15.05	< 0.001	4
7	To have a place to sleep near the NICU	3.84	0.820	76.8	15.34	< 0.001	6
8	To motivate me to be closed with my baby such as do breast-feeding	3.99	0.846	79.8	12.89	< 0.001	1
9	To hold my newborn in my arms and against my skin as soon as I can	3.98	0.890	79.6	12.35	< 0.001	2
Total		3.84	0.571	76.8	21.92	< 0.001	

One sample t-test *significant level at 0.05

Table (4.7) presented the proximity needs of parents at NICU. The highest score obtained in the need to be motivated to have close contact with the newborn such as breastfeeding (79.8%), followed by the need to hold the newborn in my arms, and have skin contact as soon as possible (79.6%). The lowest score obtained in the need to have information about transfer plans while they are being made (73.4%). In general, all the items of proximity needs obtained high (t) value, agreement mean and high statistical significance ($P < 0.001$). The overall score was 76.8% which indicated that the proximity needs of parents at NICU were moderately met.

Table 4.8: Support needs of parents at NICUs

No.	Support needs	Mean	SD	Mean %	t	P value*	Rank
1	To have friends/family nearby for support.	3.20	1.002	64.0	19.47	< 0.001	11
2	To be given directions about how I can provide care to my newborn in the NICU	3.56	0.986	71.2	15.84	< 0.001	3
3	To share my feelings about what has happened.	3.46	1.134	69.2	14.68	< 0.001	5
4	To be told about the environment before going into the neonatal intensive care unit for the first time.	3.69	0.987	73.8	14.34	< 0.001	1
5	To have a pious man “Sheikh” to visit my newborn	3.34	1.018	66.8	17.61	< 0.001	9
6	To give me chance to contact individuals that could help with problems concerning my situation.	3.57	1.069	71.4	14.44	< 0.001	2
7	To support me spiritually, if there is a possibility of my newborn’s death.	3.25	1.106	65.0	17.14	< 0.001	10
8	To be allowed to have my newborn’s sibling(s) visit.	3.39	1.034	67.8	16.82	< 0.001	8
9	To receive support in responding to the reactions of my newborn’s sibling(s).	3.40	0.956	68.0	18.07	< 0.001	7
10	To be able to talk to other parents whose newborn is in the NICU or has had a similar situation.	3.44	1.038	68.8	16.22	< 0.001	6
11	To have a place to be alone while I am in a crisis	3.48	0.979	69.6	16.81	< 0.001	4
Total		3.43	0.823	68.6	20.56	< 0.001	

One sample t-test *significant level at 0.05

Table (4.8) presented the support needs of parents at NICUs. The highest score (73.8%) was reported in the need to be informed about the environment before going into the NICUs for the first time, followed by the need to have a chance to contact individuals that could help with problems concerning parents’ situation (71.4%). The lowest score obtained in the need to have friends or family members nearby for support (64%). In general, all the items of support needs obtained high (t) value, agreement mean and high statistical significance ($P < 0.001$). The overall score was 68.6% which indicated that the support needs of parents at NICU were moderately met.

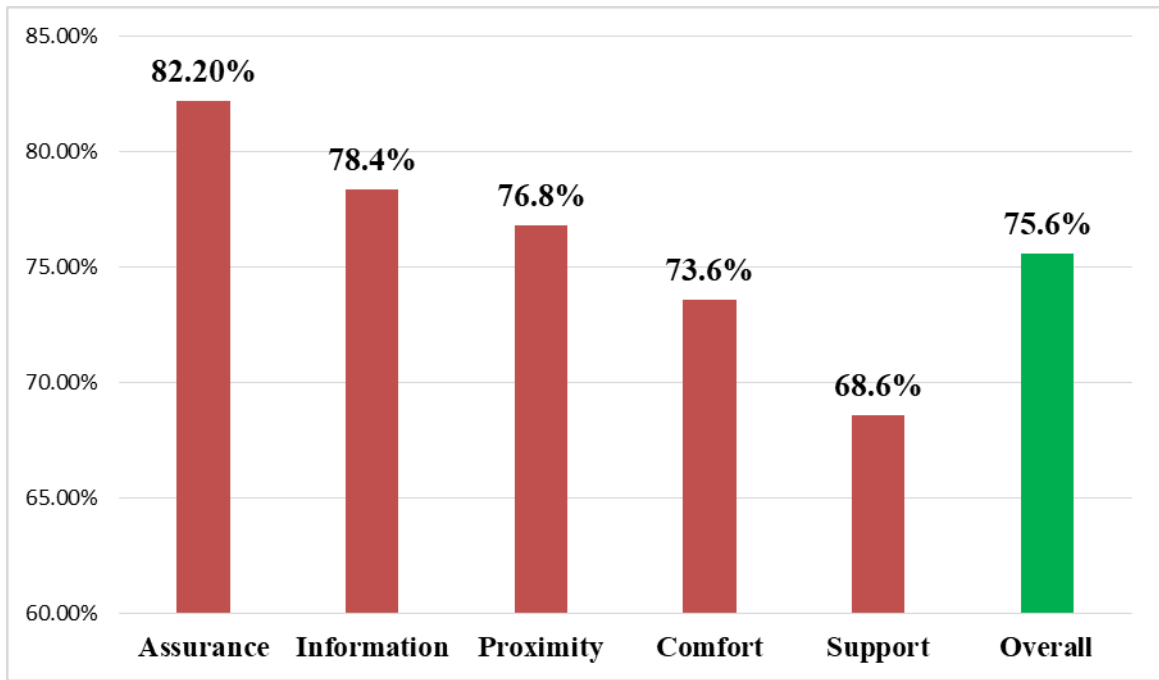


Figure 4.4: Rank of the met parents' needs at NICUs

Figure (4.4) showed that assurance need was the highest met need as reported by parents of neonates at NICU (82.2%), followed by information need (78.4%), proximity need (76.8%), comfort need (73.6%), and the lowest was support need (68.6%). The overall score for all met needs was 75.6%, which reflected that the parents' needs at NICUs were moderately met.

4.1.2.2 Differences in parents' needs related to the selected sociodemographic factors

Table 4.9: Differences in the parents' needs related to hospital

Variable		No.	Mean	SD	F	P value*
Assurance	Al Shifa	53	3.951	0.366	47.324	< 0.001
	Alnassr	27	4.432	0.243		
	Nasser	23	4.710	0.336		
	EGH	14	3.150	0.837		
	Total	117	4.115	0.625		
Comfort	Al Shifa	53	3.501	0.596	10.057	< 0.001
	Alnassr	27	3.707	0.786		
	Nasser	23	4.313	0.519		
	EGH	14	3.300	0.780		
	Total	117	3.684	0.727		
Information	Al Shifa	53	3.847	0.454	18.976	< 0.001
	Alnassr	27	4.016	0.430		
	Nasser	23	4.426	0.316		
	EGH	14	3.188	0.872		
	Total	117	3.921	0.598		
Proximity	Al Shifa	53	3.712	0.448	14.431	< 0.001
	Alnassr	27	3.880	0.548		
	Nasser	23	4.376	0.319		
	EGH	14	3.381	0.724		
	Total	117	3.842	0.571		
Support	Al Shifa	53	3.073	0.835	18.356	< 0.001
	Alnassr	27	3.528	0.415		
	Nasser	23	4.312	0.413		
	EGH	14	3.181	0.799		
	Total	117	3.435	0.823		
Overall	Al Shifa	53	3.602	0.469	24.952	< 0.001
	Alnassr	27	3.897	0.392		
	Nasser	23	4.420	0.198		
	EGH	14	3.237	0.745		
	Total	117	3.787	0.581		

One-Way ANOVA * Significant level at 0.05

Table (4.9) showed that there were statistically significant differences in meeting all the parents' needs between hospitals; assurance need (F= 47.324, p < 0.001), comfort need (F= 10.057, P < 0.001), information need (F= 18.976, P< 0.001), proximity need (F= 14.431, p< 0.001), support need (F= 18.356, p < 0.001), and the overall needs (F= 24.952, p< 0.001). As shown in table (4.9), the differences in the mean of parents' needs were in favor of Nasser hospital, which means that parents those their newborns admitted at NICU of

Nasser hospital were reported higher degree of met needs compared to parents from the other hospitals.

Table 4.10: Differences in the parents' needs related to gender

Variable	Respondent	No.	Mean	SD	t	P value*
Assurance	Mother	95	4.119	0.566	0.096	0.924
	Father	22	4.101	0.853		
Comfort	Mother	95	3.661	0.728	-0.727	0.469
	Father	22	3.786	0.732		
Information	Mother	95	3.926	0.538	0.138	0.891
	Father	22	3.900	0.825		
Proximity	Mother	95	3.839	0.542	-0.101	0.919
	Father	22	3.853	0.695		
Support	Mother	95	3.365	0.774	-1.670	0.106
	Father	22	3.735	0.970		
Overall	Mother	95	3.769	0.540	-0.597	0.556
	Father	22	3.869	0.742		

Independent sample t-test, * Significant level at 0.05

Table (4.10) showed that there were statistically no significant differences in meeting parents' needs related to gender of the parent, as p value was > 0.05 in all the needs and the overall score. This result indicated that both fathers and mothers whose newborns are admitted to NICUs reported similar needs.

Table 4.11: Differences in the parents' needs related to level of education

Variable		N	Mean	SD	F	P value*
Assurance	Below secondary	34	3.902	0.652	3.177	0.027
	Secondary school	24	4.004	0.682		
	Diploma	22	4.272	0.432		
	Bachelor	37	4.291	0.605		
	Total	117	4.115	0.625		
Comfort	Below secondary	34	3.670	0.618	1.133	0.339
	Secondary school	24	3.541	0.713		
	Diploma	22	3.922	0.856		
	Bachelor	37	3.648	0.742		
	Total	117	3.684	0.727		
Information	Below secondary	34	3.844	0.673	1.471	0.226
	Secondary school	24	3.909	0.497		
	Diploma	22	4.157	0.540		
	Bachelor	37	3.860	0.606		
	Total	117	3.921	0.598		
Proximity	Below secondary	34	3.761	0.649	1.211	0.309
	Secondary school	24	3.851	0.545		
	Diploma	22	4.040	0.541		
	Bachelor	37	3.792	0.519		
	Total	117	3.842	0.571		
Support	Below secondary	34	3.446	0.920	0.243	0.866
	Secondary school	24	3.367	0.796		
	Diploma	22	3.557	0.757		
	Bachelor	37	3.395	0.807		
	Total	117	3.435	0.823		
Overall	Below secondary	34	3.717	0.636	1.054	0.372
	Secondary school	24	3.723	0.561		
	Diploma	22	3.978	0.526		
	Bachelor	37	3.781	0.569		
	Total	117	3.787	0.581		

One-way ANOVA *Significant level at 0.05

Table (4.11) showed that there were statistically significant differences in assurance need ($F= 3.177$, $P= 0.027$) related to level of education, while there were statistically no significant differences in the other needs and the total score. As shown the differences in the mean of parents' needs were in favor of parents' needs who have bachelor degree

stated that their needs were met in higher degree compared to parents who have below secondary school education.

Table 4.12: Differences in the parents' needs related to working status

Variable	Working status	No.	Mean	SD	T	P value*
Assurance	Working	45	4.098	0.684	-0.233	0.816
	Not working	72	4.126	0.590		
Comfort	Working	45	3.677	0.788	-0.080	0.936
	Not working	72	3.688	0.692		
Information	Working	45	3.872	0.584	-0.695	0.488
	Not working	72	3.952	0.609		
Proximity	Working	45	3.844	0.602	0.031	0.975
	Not working	72	3.841	0.555		
Support	Working	45	3.333	0.830	-1.058	0.292
	Not working	72	3.498	0.818		
Overall	Working	45	3.750	0.613	-0.546	0.586
	Not working	72	3.811	0.562		

Independent sample t test, *Significant level at 0.05

As shown in table (4.12), there were statistically no significant differences in parents' needs related to work status of the parents, as P value was > 0.05 in all the needs and the overall score. This result indicated that parents who are working and those who are not working reported similar needs.

Table 4.13: Differences in the parents' needs related to income

Variable (income per NS)	N	Mean	SD	F	P value	
Assurance	<1000	82	4.023	0.640	4.254	0.017 *
	1000-1500	24	4.231	0.608		
	>1500	11	4.555	0.222		
	Total	117	4.115	0.625		
Comfort	<1000	82	3.742	0.702	0.880	0.417
	1000-1500	24	3.537	0.769		
	>1500	11	3.572	0.829		
	Total	117	3.684	0.727		
Information	<1000	82	3.890	0.641	0.793	0.455
	1000-1500	24	3.931	0.476		
	>1500	11	4.132	0.496		
	Total	117	3.921	0.598		
Proximity	<1000	82	3.832	0.590	0.045	0.956
	1000-1500	24	3.865	0.590		
	>1500	11	3.868	0.393		
	Total	117	3.842	0.571		
Support	<1000	82	3.449	0.915	0.056	0.946
	1000-1500	24	3.420	0.668		
	>1500	11	3.363	0.203		
	Total	117	3.435	0.823		
Overall	<1000	82	3.777	0.623	0.151	0.860
	1000-1500	24	3.782	0.537		
	>1500	11	3.880	0.312		
	Total	117	3.787	0.581		

One-way ANOVA, NIS= New Israeli Shekel, *Significant at 0.05

Table (4.13) showed that there were statistically significant differences in assurance need (F= 4.254, P= 0.017) related to income, while there were statistically no significant differences in the other needs and the total score. Also, the table showed that the differences in the mean of parents' needs were in favor of parents' needs of who have higher income stated that their needs were met in higher degree compared to parents who have lower income.

Table 4.14: Differences in the parents' needs related to age of respondents

Variable		N	Mean	SD	F	P value
Assurance	<25 years	21	4.195	0.521	0.750	0.475
	25-30	60	4.150	0.553		
	>30 years	36	4.012	0.781		
	Total	117	4.115	0.625		
Comfort	<25 years	21	3.671	0.618	0.759	0.470
	25-30	60	3.758	0.748		
	>30 years	36	3.569	0.754		
	Total	117	3.684	0.727		
Information	<25 years	21	3.978	0.517	2.475	0.089
	25-30	60	4.010	0.552		
	>30 years	36	3.739	0.686		
	Total	117	3.921	0.598		
Proximity	<25 years	21	3.804	0.645	0.743	0.478
	25-30	60	3.903	0.529		
	>30 years	36	3.762	0.596		
	Total	117	3.842	0.571		
Support	<25 years	21	3.320	0.905	2.267	0.108
	25-30	60	3.589	0.821		
	>30 years	36	3.244	0.743		
	Total	117	3.435	0.823		
Overall	<25 years	21	3.780	0.569	1.684	0.190
	25-30	60	3.873	0.561		
	>30 years	36	3.650	0.609		
	Total	117	3.787	0.581		

One-way ANOVA

Table (4.14) showed that there were statistically no significant differences in parents' needs related to age of the parents, as P value was > 0.05 in all the needs and the overall score. This result indicated that parents from different ages reported similar needs.

Table 4.15: Differences in the parents' needs related to number of family members

Variable		N	Mean	SD	F	P value
Assurance	3 and less	39	4.199	0.423	1.068	0.347
	4 – 6	55	4.026	0.665		
	7 and more	23	4.188	0.792		
	Total	117	4.115	0.625		
Comfort	3 and less	39	3.682	0.665	1.544	0.218
	4 – 6	55	3.592	0.754		
	7 and more	23	3.908	0.744		
	Total	117	3.684	0.727		
Information	3 and less	39	3.993	0.507	0.640	0.529
	4 – 6	55	3.856	0.613		
	7 and more	23	3.956	0.707		
	Total	117	3.921	0.598		
Proximity	3 and less	39	3.769	0.445	3.958	0.022 *
	4 – 6	55	3.771	0.609		
	7 and more	23	4.135	0.595		
	Total	117	3.842	0.571		
Support	3 and less	39	3.480	0.697	1.214	0.301
	4 – 6	55	3.322	0.899		
	7 and more	23	3.628	0.820		
	Total	117	3.435	0.823		
Overall	3 and less	39	3.814	0.449	1.546	0.218
	4 – 6	55	3.701	0.626		
	7 and more	23	3.948	0.650		
	Total	117	3.787	0.581		

*Significant at 0.05

Table (4.15) showed that there were statistically significant differences in proximity need (F= 3.958, P= 0.022) related to number of family members, while there were statistically no significant differences in the other needs and the total score. Also, the table showed that the differences in the mean of parents' needs were in favor for parents have big families compared to parents who have smaller families.

Table 4.16: Differences in the parents' needs related to diagnosis of their neonate

	Variable	N	Mean	SD	F	P value
Assurance	Respiratory problems	28	4.150	0.602	0.631	0.705
	Esophageal stricture	10	3.955	0.823		
	Heart problems	23	4.202	0.721		
	Septicemia / Fever	27	4.049	0.501		
	Digestive problems	19	4.111	0.701		
	Renal problems	5	4.466	0.388		
	Neurological problems	5	3.866	0.371		
	Total	117	4.115	0.625		
Comfort	Respiratory problems	28	3.825	0.681	1.010	0.423
	Esophageal stricture	10	3.670	0.804		
	Heart problems	23	3.665	0.722		
	Septicemia / Fever	27	3.640	0.658		
	Digestive problems	19	3.673	0.836		
	Renal problems	5	3.960	1.040		
	Neurological problems	5	3.020	0.164		
	Total	117	3.684	0.727		
Information	Respiratory problems	28	4.003	0.644	0.592	0.736
	Esophageal stricture	10	3.690	0.709		
	Heart problems	23	3.992	0.637		
	Septicemia / Fever	27	3.845	0.495		
	Digestive problems	19	3.928	0.653		
	Renal problems	5	4.127	0.487		
	Neurological problems	5	3.781	0.383		
	Total	117	3.921	0.598		
Proximity	Respiratory problems	28	3.972	0.523	1.029	0.410
	Esophageal stricture	10	3.588	0.753		
	Heart problems	23	3.927	0.579		
	Septicemia / Fever	27	3.753	0.525		
	Digestive problems	19	3.830	0.615		
	Renal problems	5	4.022	0.682		
	Neurological problems	5	3.577	0.121		
	Total	117	3.842	0.571		
Support	Respiratory problems	28	3.594	0.941	1.087	0.375
	Esophageal stricture	10	3.490	0.848		
	Heart problems	23	3.608	0.868		
	Septicemia / Fever	27	3.296	0.772		
	Digestive problems	19	3.392	0.710		
	Renal problems	5	3.200	0.690		
	Neurological problems	5	2.781	0.414		
	Total	117	3.435	0.823		
Overall	Respiratory problems	28	3.898	0.608	0.845	0.358
	Esophageal stricture	10	3.672	0.708		
	Heart problems	23	3.868	0.608		
	Fever	27	3.703	0.504		
	Digestive problems	19	3.774	0.603		
	Renal problems	5	3.932	0.577		
	Neurological problems	5	3.388	0.248		
	Total	117	3.787	0.581		

One-way ANOVA

Table (4.16) showed that there were statistically no significant differences in parents' needs related to diagnosis of their newborn, as P value was > 0.05 in all the needs and the overall score. This result indicated that parents reported similar needs regardless of the health problem of their newborns.

Table 4.17: Differences in the parents' needs related to length of stay at NICUs

Variable		N	Mean	SD	F	P value*
Assurance	1 – 3 days	51	4.185	0.581	0.629	0.535
	4 – 6 days	51	4.045	0.664		
	7 days and more	15	4.118	0.651		
	Total	117	4.115	0.625		
Comfort	1 – 3 days	51	3.905	0.729	4.640	0.012
	4 – 6 days	51	3.543	0.673		
	7 days and more	15	3.413	0.731		
	Total	117	3.684	0.727		
Information	1 – 3 days	51	4.023	0.596	1.569	0.213
	4 – 6 days	51	3.814	0.601		
	7 days and more	15	3.939	0.573		
	Total	117	3.921	0.598		
Proximity	1 – 3 days	51	3.973	0.572	3.028	0.052
	4 – 6 days	51	3.780	0.571		
	7 days and more	15	3.607	0.474		
	Total	117	3.842	0.571		
Support	1 – 3 days	51	3.525	0.871	0.796	0.454
	4 – 6 days	51	3.326	0.811		
	7 days and more	15	3.497	0.687		
	Total	117	3.435	0.823		
Overall	1 – 3 days	51	3.910	0.590	2.061	0.132
	4 – 6 days	51	3.688	0.576		
	7 days and more	15	3.709	0.518		
	Total	117	3.787	0.581		

*Significant at 0.05

Table (17) showed that there were statistically significant differences in comfort need (F= 4.640, P= 0.012) related to length of stay in NICUs, while there were statistically no significant differences in the other needs and the total score. Also, the table showed that

the differences in the mean of parents' needs were in favor for whose newborns were admitted to NICUs for 1 – 3 days compared to parents whose newborn stayed longer days.

Table 4.18: Differences in the parents' needs related to gender of the neonate

Variable	Gender	N	Mean	SD	T	P value
Assurance	Male	75	4.117	0.620	0.027	0.978
	Female	42	4.113	0.642		
Comfort	Male	75	3.664	0.722	-0.408	0.684
	Female	42	3.721	0.743		
Information	Male	75	3.950	0.566	0.693	0.490
	Female	42	3.870	0.656		
Proximity	Male	75	3.834	0.557	-0.209	0.835
	Female	42	3.857	0.601		
Support	Male	75	3.473	0.849	0.680	0.498
	Female	42	3.365	0.778		
Overall	Male	75	3.797	0.581	0.235	0.815
	Female	42	3.771	0.587		

Independent sample t-test

Table (4.18) showed that there were statistically no significant differences in parents' needs related to gender of their newborn, as P value was > 0.05 in all the needs and the overall score. This result indicated that parents reported similar needs regardless of the gender of their newborn.

Table 4.19: Differences in the parents' needs related to feeding mode of the **neonate**

Variable		N	Mean	SD	F	P value*
Assurance	Parenteral	22	4.075	0.764	3.516	0.018
	NG tube	33	4.158	0.546		
	Breastfeeding	45	4.259	0.627		
	Bottle	17	3.705	0.384		
	Total	117	4.115	0.625		
Comfort	Parenteral	22	3.445	0.670	6.804	<0.0001
	NG tube	33	3.509	0.655		
	Breastfeeding	45	4.040	0.736		
	Bottle	17	3.394	0.553		
	Total	117	3.684	0.727		
Information	Parenteral	22	3.838	0.593	4.372	0.006
	NG tube	33	3.887	0.580		
	Breastfeeding	45	4.125	0.583		
	Bottle	17	3.556	0.508		
	Total	117	3.921	0.598		
Proximity	Parenteral	22	3.772	0.562	6.047	0.001
	NG tube	33	3.727	0.485		
	Breastfeeding	45	4.088	0.571		
	Bottle	17	3.503	0.501		
	Total	117	3.842	0.571		
Support	Parenteral	22	3.413	0.729	6.792	<0.0001
	NG tube	33	3.435	0.764		
	Breastfeeding	45	3.713	0.833		
	Bottle	17	2.727	0.618		
	Total	117	3.435	0.823		
Overall	Parenteral	22	3.697	0.550	7.034	<0.0001
	NG tube	33	3.732	0.511		
	Breastfeeding	45	4.035	0.591		
	Bottle	17	3.358	0.423		
	Total	117	3.787	0.581		

One-way ANOVA *Significant at 0.05

Table (4.19) showed that there were statistically significant differences in the parents' needs related to mode of feeding; assurance need (F= 3.516, P= 0.018), comfort need (F= 6.804, P= <0.0001), information need (F= 4.372, P= 0.006), proximity need (F= 6.047, P= 0.001), support need (F= 6.792, P< 0.0001), and the overall needs (F= 7.034, P< 0.0001).

Also, the table (4.19) showed that the parents who's their newborn on breastfeeding reported that their needs were met in higher degree compared to parents who's their newborn fed by other modes such as parenteral or bottle feeding.

4.2 Discussion

Having a baby admitted to NICU is a distressing event for parents associated with feelings of guilt, stress, and anxiety. Special needs aroused during hospitalization, and the nurses are challenged to identify and meet these needs to help the parents pass this distressing event peacefully. This study aimed to address the parents' needs during their newborns' hospitalization in the NICUs at governmental hospitals in Gaza strip.

4.2.1 Characteristics of parents and neonates

The participants of the study consisted of 117 parents; 95 (81.2%) mothers and 22 (18.8%) fathers, half of them aged between 25 – 30 years old, two-thirds of them are not working, one-third have bachelor degree, majority of them have income of less than 1000 NIS, and about half of them have a family size of 4 – 6 persons. The results of Alnajjar (2017) showed that two-thirds of the parents were mothers, and about one half of them are aged between 40 to 49 years old. The results of Magliyah and Razzak (2015) showed that the majority of study participants were mothers, mean age of parents was 30.5 years, 39.4% had university education and 37.5% had high school education.

About two-thirds of neonates were males, 40% of them were premature babies, 43% of them stayed in NICU for 4 – 6 days. The results of Baia et al (2015) found longer duration of stay in NICU with a mean of 9.2 days. Respiratory problems were the most prevalent health problems among neonates admitted to NICU, followed by septicemia and fever, and heart problems.

4.2.2 Parents' needs

The results showed that parents reported that assurance was the highest met need, followed by information, proximity, comfort needs; while the lowest was support need. This result was consistent with the results of Obeisat and Hweidi (2012) which showed that assurance, information and proximity were the most important needs, while comfort and support were ranked the least important needs. In addition, the results obtained by Govindaswamy et al. (2019) showed that parents rated assurance needs as the most important, followed by proximity, and information. Furthermore, the results of Alsaiani et al. (2019) showed that parents ranked the needs for assurance, proximity, and information as the most important needs, while comfort and support needs were ranked as the least important. The results of Baia et al. (2015) found that needs of assurance and proximity were the most ranked domain. The same as the results of Mundy (2010) showed that 93% of the needs items were rated as important or very important, and parents rated the assurance needs as the highest need.

The results of this study revealed that, needs of assurance, information, and proximity were the most met needs as reported by parents of neonates hospitalized in NICU. These findings are supported by other studies as described above, and are on align with the parents' attempt to develop a sense of meaning about a new reality shaped in a strange environment of NICU. These needs are met through confidence in the care provided to their babies, involvement in decision-making and care giving activities, and trust on the accuracy of the information about infants' health status. In my opinion, nurse play a major role in fullfiling parents' needs by giving the parents the chance to see their baby and touch him as much as possible, and above that to provide high quality care to the neonate which will increase the confidence and trust of parents in the nursing care provided to their baby.

For assurance needs, parents reported the need to know the expected outcome for their newborn as the highest met need, followed by the need to be assured that it is all right to leave the hospital; while for the comfort needs domain, parents reported the need to see that the nurses provide comfort measures to the neonate as the highest need, followed by the need to have an employee to meet the needs of ward. For information needs domain, parents reported the need to know why things were done for their newborn as the highest met need, followed by the need to receive explanations that are understood by parents.

In my opinion, sharing information with the parents is one of the principles of implementing high quality care. Providing the parents with appropriate, clear, and timely information will help them to cope with their distress. Unmet of the parental needs increases the stress and can lead to further psychological and emotional disturbances. As shown in the discussion, many studies highlighted the importance of recognizing the needs of parents in order to be able to provide adequate emotional and psychological support to parents.

In proximity needs, the parents stated that the need to be motivated to have close contact with their newborn such as breastfeeding as the highest met need, followed by the need to hold the newborn in their arms, and have skin contact as soon as possible. For the support need, parents said that the need to be informed about the environment before going into the NICU for the first time as the highest need, followed by the need to have a chance to contact individuals that could help with problems concerning parents' situation. The results of Alnajjar (2017) reported that the highest priority needs were the need to know how their baby is being treated medically, followed by the need to know exactly what is being done for their baby, the need to talk to the doctor every day, and the need to have questions answered honestly. In addition, the results of Obeisat and Hweidi (2012) reflected that the primary concern of parents was to be assured and informed about the progress of their

infant. The same as, the results of Govindaswamy et al. (2019) indicated that parents' most important needs were having questions answered honestly, seeing their infant frequently and knowing about the medical treatment. Furthermore, Alsaiari et al. (2019) reported that the highest top-ranked items were related to assurance of pain infant being treated for, infant expected outcome, and infant being handled gently. In addition, Wang et al. (2018) found that items on the assurance, information, and proximity subscales were perceived as the most important, while items on the comfort subscale were the least important. On other study conducted by Vaskelyte and Butkeviciene, (2010) reported that the majority of parents ranked proximity and informational needs as more important, related to the possibility for parents to be close to their newborns and to receive timely and adequate information about their newborns' health condition, while support needs were valued as the least important. In contrast, Magliyah and Razzak (2015) found that many parents did not receive enough information from the unit, most of the parents described the information they received from nurses as difficult to understand. Also, most of the parents did not agree about the nurses' support towards their emotional feeling and care.

From the results of this study, it is clear that the results agreed with most of the previous studies which ranked assurance as being the highest need, followed by information and proximity needs, while comfort and support needs were of lower values. Therefore, the researcher declare that the parents are mostly worried about the condition of their baby, response to treatment, and how his health condition is progressing, and thus they need to be assured and be close to their baby, and receive honest information about the condition of their baby. in my opinion, having a baby in NICU is stressful and uncomfortable event for parents, as the parents are not looking for their own comfort, but they are concerned about their baby, and their worries will not be relieved until they see their baby in a good health and discharged from NICU.

In my opinion, nurses should recognize that caring of neonates in NICU extends to the parents and their needs in relation to optimizing the care of the FCC approach acknowledges that the parents has the greatest influence over an infant's health and well-being. Giving the mother the chance of setting with her baby as much as possible, let her breastfeed her baby in a comfortable place with privacy will increase the sense of bonding between the baby and his mother, and that will have positive effect on the emotional status of the mother and her baby.

4.2.3 Parents' needs and sociodemographic factors

The results showed that parents of newborns admitted at NICU in Nasser hospital in Khanyounis reported higher met needs compared to parents from the other hospitals and the other governorates. This result could be attributed to the circumstances surrounding the NICU in Nasser hospital as it is located nearby the maternity department, therefore, it is easy for postpartum mothers to see their babies and be in contact with their babies. In addition, there is a waiting area for parents with adequate space, so they can wait for visiting their babies in comfort, and having a good chance to talk to the physicians and nurses about the health condition of their babies.

The results showed that there were statistically no significant differences in parents' needs related to gender of parents. This result was consistent with the results obtained by Mundy (2010) which showed that there were no significant differences in needs of mothers and fathers, while the results of Obeisat and Hweidi (2012) indicated that the mothers perceived needs for support, information and proximity as significantly more important than the fathers, and Govindaswamy et al. (2019) found that mothers rated assurance significantly more important than fathers. In addition, Wang et al. (2018) found that gender of parents was significantly associated with the needs of the parents.

Therefore, the researcher declares that having a newborn admitted to NICU is a distressing event for parents, and they feel anxiety and worry about their baby. Therefore, nurses should pay attention to their needs for assurance, and comfort. They need to be closed to their baby and to know the progress of the health condition of their baby. It is important for nurses to recognize that hospitalization to NICU is emotionally charged situation, and taking their needs in consideration either fathers and mothers will help them pass this distressing period and alleviated their worries, and increase their confidence in the nursing team.

The results also showed that there were statistically no significant differences in parents' needs related to age and work, while parents who have bachelor degree, and higher income reported that assurance need was met in higher degree. Comparing our results with previous studies, the results of Alves et al. (2015) indicated that less educated and older parents more frequently attributed a significantly higher importance to parent-centered needs.

In my opinion, nurses should consider the perceptions of parents about their needs in NICU as important factor to optimize family support. Parents with different social and educational backgrounds are in need for honest information about the health condition of their baby and expected outcome. Also, then need assurance that their baby receives the best possible care, they need to speak to the treating nurse about the treatment plan. The parents' needs are normal components of personality because the Palestinian families are well known for their love, tenderness and care-giving attitude linked by their religious background and society values.

4.2.4 Neonatal characteristics

The results showed that parents who have big families stated that proximity need was highly met, and parents whose newborn admitted to NICU for 1 – 3 days stated that comfort need was met in higher degree. In addition, parents have their newborn on breastfeeding reported that their needs were met in higher degree. Moreover, neonatal medical diagnosis did not lead to significant differences in parents' needs. Comparing the results of this study with previous studies reflected that some results were consistent and other results were inconsistent with the results of this study. The results obtained by Baia et al. (2015) indicated an association between length of hospitalization and parents' needs.

In my opinion, the parents regardless of their sociodemographic characteristics are worried and distressed about their babies in NICU. The society in GS is characterized by strong family relations and bonding. Therefore, separation of the baby from his family, in addition to being severely sick, is a stressful event for the parents. Nurses are playing an important role in decreasing the stress and anxiety of parents by identifying and meeting parents' needs. Meeting the needs of parents is part of implementing the philosophy of family-centered care.

Chapter Five

Conclusion and Recommendations

5.1 Conclusion

This study highlighted the special needs of parents during hospitalization of their babies in NICUs. This topic did not gain adequate attention from researchers; therefore, this study would be the first of its kind in Gaza Strip.

The study was conducted in the main NICUs at four governmental hospitals in GS. The purpose of the study was to assess parents' needs for those their neonates admitted to NICUs. The study utilized descriptive, analytical, cross sectional design, and the sample of the study consisted of 117 parents from four governmental hospitals in Gaza Strip. The results of the study showed that parents rated assurance need as the highest need (82.2%), followed by information need (78.4%), proximity need (76.8%), comfort need (73.6%), and the lowest was support need (68.6%). The overall score for all the needs was 75.6%.

Several sociodemographic factors influence parents' needs such as parents' level of education, monthly income, hospital of treatment, place of residency, length of stay in NICU, and mode of feeding. The study concluded that nurses should create a positive relationship with parents and provide them with honest assurance and comprehensible information. In addition, it is important to identify parents' needs and provide a high-quality holistic care for the parents and their babies, which is in accordance with the family-centered philosophy of care.

5.2 Recommendations

In the light of the study results, the researcher recommends the following:

For nurses:

- Emphasize providing holistic quality care for the neonates and their parents to ensure the family-centered approach of care.
- Address the parents need for assurance, to be closed to their babies, and the need to receive accurate information about their babies.
- Respect the parents' need to know the expected outcome for their newborn.

For policy makers:

- The need to have a comfortable waiting area nearby the NICUs for parents and family members.
- The need to have a special room inside the NICUs, designed to maintain comfort and privacy for mothers during breastfeeding of their babies.
- The need to establish a support team to deal with parents' psychological and emotional impact caused by having their baby admitted in NICUs.

For further research:

- To conduct further qualitative studies with nursing and medical staff that aiming to identify barriers that hinder disclose of some information from the parents.
- To conduct a study to assess the psychological impact of unmet needs on the parents.

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Annexes

Annex (1): Neonatal Intensive Care Units Family Needs Inventory (English version)

Part I: Sociodemographic Characteristics

Respondents' characteristics	
Hospital :	<input type="checkbox"/> EGH <input type="checkbox"/> Nasser <input type="checkbox"/> Al Shifa <input type="checkbox"/> Alnassr
Residency:	<input type="checkbox"/> North <input type="checkbox"/> Gaza <input type="checkbox"/> Middle <input type="checkbox"/> Khanyounis <input type="checkbox"/> Rafah
Respondent:	<input type="checkbox"/> Mother <input type="checkbox"/> Father
Level of education:	<input type="checkbox"/> Below secondary <input type="checkbox"/> Secondary <input type="checkbox"/> Diploma <input type="checkbox"/> Bachelor
Work:	<input type="checkbox"/> Working <input type="checkbox"/> Not working
Income:	..... Shekel
Age:	..... Years
Family size:	..... Members
Neonatal characteristics	
Medical diagnosis:	.....
Length of stay in NICU:	..... Days
Gender:	<input type="checkbox"/> Male <input type="checkbox"/> Female
Mode of feeding:	<input type="checkbox"/> TPN <input type="checkbox"/> NGT <input type="checkbox"/> BF <input type="checkbox"/> Bottle

Part II: Parents' Needs at NICU

Mark the response that best describes you for the following items.

No.	Assurance Need	Extremely not important	Not important	Somewhat important	Important	Extremely important
1	To have questions about my newborn answered honestly					
2	To assure that there is a hope in treatment.					
3	To be assured that the best possible care is being given to my newborn.					
4	To be assured it is all right to leave the hospital for a while.					
5	To know the expected outcome for my newborn.					
6	To know that my newborn is being handled gently by healthcare providers.					
7	To know that my newborn is being treated for pain.					
8	To be recognized as important in my newborn's recovery					

9	To feel free to choose to stay or leave when my newborn is experiencing painful procedures.					
	Comfort Need	Extremely not important	Not important	Somewhat important	Important	Extremely important
1	To have a waiting room for the neonatal unit.					
2	To have a telephone near the waiting room.					
3	To have comfortable furniture in the waiting room.					
4	To feel accepted by the hospital staff.					
5	To have a bathroom near the waiting room.					
6	To have comfortable chairs at my newborn's bedside.					
7	To have the neonatal unit quiet to let my newborn rest.					
8	To have the neonatal unit with dimmed lights at regular times					
9	To have an employee to meet the needs of ward, such as sending samples to the lab.					
10	To see that the staff team provide comfort to my newborn, such as giving my newborn a pacifier, and using blankets to support my newborn's body					
	Information Need	Extremely not important	Not important	Somewhat important	Important	Extremely important
1	To know which staff members could give information about my newborn's health and general well-being.					
2	To talk to the physician who involved in caring of my newborn every day					
3	To be given understandable explanations					
4	To be told the facts concerning my newborn's progress					
5	To have a specific staff person to call at the hospital when unable to visit.					

6	To have sessions about newborn's health and their special care needs					
7	To know exactly what is being done for my newborn					
8	To know why things were done for my newborn					
9	To be informed that it is all right to cry.					
10	To be given reading material concerning my newborn's medical concerns.					
11	To be involved in decisions related to my newborn's plan of care					
	Proximity Need	Extremely not important	Not important	Somewhat important	Important	Extremely important
1	To be told about transfer plans while they are being made					
2	To be allowed to help with my newborn's physical care					
3	To receive information about my newborn at least once a day					
4	To be able to see my newborn frequently as possible					
5	To have the breast-feeding room at the neonatal intensive care unit					
6	To be called at home about important changes in my newborn's condition					
7	To have a place to sleep near the NICU					
8	To motivate me to be closed with my baby such as do breast-feeding					
9	To hold my newborn in my arms and against my skin as soon as I can					
	Support Need	Extremely not important	Not important	Somewhat important	Important	Extremely important
1	To have friends/family nearby for support.					
2	To be given directions about how I can provide care to my newborn in the NICU					

3	To share my feelings about what has happened.					
4	To be told about the environment before going into the neonatal intensive care unit for the first time.					
5	To have a pious man "Sheikh" to visit my newborn					
6	To give me chance to contact individuals that could help with problems concerning my situation.					
7	To support me spiritually, if there is a possibility of my newborn's death.					
8	To be allowed to have my newborn's sibling(s) visit.					
9	To receive support in responding to the reactions of my newborn's sibling(s).					
10	To be able to talk to other parents whose newborn is in the NICU or has had a similar situation.					
11	To have a place to be alone while I am in a crisis					

Thank you for your cooperation

Annex (2): Neonatal Intensive Care Units Family Needs Inventory (Arabic version)

تحديد احتياجات الوالدين داخل وحدات العناية المكثفة لحديثي الولادة في محافظات قطاع غزة نحو الرعاية التمريضية التي تركز على الأسرة

أولاً: الخصائص الاجتماعية والديموغرافية

الجزء الأول: خاص بالآباء والأمهات	
المستشفى:	<input type="checkbox"/> غزة الأوروبي <input type="checkbox"/> ناصر <input type="checkbox"/> الشفاء <input type="checkbox"/> النصر
مكان الإقامة:	<input type="checkbox"/> شمال غزة <input type="checkbox"/> غزة <input type="checkbox"/> الوسطى <input type="checkbox"/> خان يونس <input type="checkbox"/> رفح
المستجيب:	<input type="checkbox"/> الأم <input type="checkbox"/> الأب
المستوى التعليمي:	<input type="checkbox"/> أقل من ثانوي <input type="checkbox"/> ثانوي <input type="checkbox"/> دبلوم <input type="checkbox"/> بكالوريوس
العمل:	<input type="checkbox"/> يعمل <input type="checkbox"/> لا يعمل
الدخل الشهري:	..... شيكل
عمر المستجيب:	..... سنة
عدد أفراد الأسرة:	..... فرداً
الجزء الثاني: خاص بالمولود	
التشخيص الطبي:	.....
مدة الإقامة في الوحدة:	..... يوم
جنس المولود:	<input type="checkbox"/> ذكر <input type="checkbox"/> أنثى
طريقة التغذية:	<input type="checkbox"/> عن طريق الوريد <input type="checkbox"/> عن طريق الأنبوب المعدي <input type="checkbox"/> رضاعة طبيعية <input type="checkbox"/> رضاعة بالقنينة

ثانياً: الاحتياجات الوالدين ذوي الأطفال المنومين في قسم العناية المكثفة للأطفال حديثي الولادة

حدد/ي الاستجابة التي تمثل قناعتك بشكل أفضل في القائمة التالية

الرقم	الحاجة للثقة	غير مهم للغاية	غير مهم	مهم نوعاً ما	مهم	مهم للغاية
1	الإجابة عن الأسئلة المتعلقة بحالة طفلي بكل أمانة					
2	التأكد من أن هناك أمل في العلاج المقدم لطفلي					
3	التأكد من أنه تقدم أفضل رعاية ممكنة لطفلي					
4	التأكد من أن الأمور على ما يرام في حال مغادرتي المستشفى لفترة من الوقت					

					5	معرفة النتيجة المتوقعة لحالة طفلي
					6	التأكد من أن طفلي يتم التعامل معه برفق من قبل مقدمي الرعاية الصحية
					7	التأكد من انه يتم الاهتمام بجانب الألم أثناء تقديم الرعاية الطبية لطفلي
					8	أن يتم الاعتراف بأهمية دوري في تحسن حالة طفلي
					9	أن يتم اعطائي الحرية في البقاء أو المغادرة عند تعرض طفلي لإجراءات علاجه مؤلمه
مهم للغاية	مهم	مهم نوعاً ما	غير مهم	غير مهم للغاية		الحاجة للراحة
					1	الحصول على غرفة انتظار خاصة بوحدة حديثي الولادة
					2	الحصول على تلفون قريب من غرفة الانتظار
					3	الحصول على أثاث مريح في غرفة الانتظار
					4	أن تشعر بأنك شخص مرحب به من قبل العاملين في المستشفى
					5	الحصول على حمام قريب من غرفه الانتظار
					6	الحصول على كرسي مريح بجانب سرير طفلي
					7	أن تكون وحدة حديثي الولادة هادئة من أجل راحة طفلي
					8	أن تكون وحدة حديثي الولادة مزودة بأضواء خافته في أوقات محددة
					9	أن يكون هنالك موظف لتلبية احتياجات القسم اللوجستية، مثل إرسال العينات إلى المختبر
					10	أن يوفر العاملين سبل الراحة لطفلي، مثل اعطائه المصاصة واستخدام أغطيه لتحافظ على جسمه
مهم للغاية	مهم	مهم نوعاً ما	غير مهم	غير مهم للغاية		الحاجة للمعلومات
					1	أن يتم تعريفي بأي من العاملين يمكن ان يقدم لي معلومات حول صحة طفلي
					2	أن أتحدث مع الطبيب الذي يتابع حالة طفلي كل يوم
					3	أن يتم شرح حالة طفلي لي بطريقة مفهومة
					4	أن يتم اخباري بالحقيقة بخصوص تقدم حاله طفلي
					5	يكون هنالك موظف معين بالقسم للرد على اتصالي الهاتفي عند عدم قدرتي على زيارة طفلي
					6	أن يتم عقد محاضرات عن صحة الأطفال حديثي الولادة

					أن يسمح بدخول رجل متدين لقراءة القرآن الكريم على طفلي	5
					أن تعطى لي الفرصة بالتواصل مع أشخاص من الممكن أن يساعدوا في شفاء طفلي	6
					أن يتم مساندتي روحانياً، إذا كان هناك وفاة لطفلي	7
					السماح للأخ/الأخت الصغيرة بزيارة طفلي المريض	8
					أن أتلقى الدعم في استجابتي لردود أفعال الأخوة الصغار على مرض أخيهم	9
					أن أكون قادراً على التحدث مع الآباء الذين لديهم أطفال في وحدة العناية المكثفة أو لديهم موقف مماثل	10
					الحصول على مكان خاص لأكون منفرداً عن الآخرين عندما يكون الوضع متأزماً	11

شكراً لكم على حسن تعاونكم

Annex (3): Panel of experts

Nam	Place of work
Dr. Hatem Al Dabbakeh	Al Quds University
Dr. Osama Elian	Al Aqsa University
Mr. Ahmad Hamouda	Al Azhar University
Dr. Ahmad Nijm	Al Azhar University
Dr. Mohammad Al Jerjawy	Palestine College of Nursing
Dr. Samer Al Nawajha	University College of Applied Sciences

Annex (4): Approval from Helsinki

Committee



المجلس الفلسطيني للبحوث الصحي Palestinian Health Research Council

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

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

Helsinki Committee For Ethical Approval

Date: 05/02/2018

Number: PHRC/HC/345/18

Name: MUSTAFA SAIDAM

الاسم:

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

نفيدكم علماً بأن اللجنة قد ناقشت مقترح دراستكم
حول:

Addressing Parents' Needs at Neonatal Intensive Care Units in Gaza Governorates: toward Family-Centered Nursing Care.

The committee has decided to approve the above mentioned research. Approval number PHRC/HC/345/18 in its meeting on 05/02/2018

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

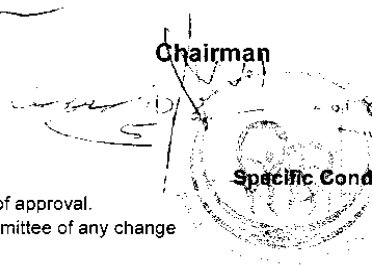
Signature

Member

Member

5/2/2018

Chairman



Genral Conditions:-

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

Specific Conditions:-

E-Mail: pal.phrc@gmail.com

Gaza - Palestine

غزة - فلسطين
شارع النصر - مفترق العيون

Annex (5): Approval from MOH

State of Palestine
Ministry of health



دولة فلسطين
وزارة الصحة

السيد : رامي عبد سليمان العبادلة المحترم

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

السلام عليكم ،،،

الموضوع/ تسهيل مهمة الباحث// مصطفى صيدم

التفاصيل //

بخصوص الموضوع أعلاه، يرجى تسهيل مهمة الباحث/ مصطفى محمود صيدم
الملتحق ببرنامج ماجستير التمريض - تخصص تمريض أطفال - جامعة القدس أبو ديس في إجراء بحث بعنوان:-
"تحديد احتياجات الوالدين داخل وحدات العناية المكثفة لحديثي الولادة في محافظات غزة نحو الرعاية التمريضية
التي تركز على الأسرة"
حيث الباحث بحاجة لتعبئة استبانة من ذوي الأفعال المنومين في أقسام الحضانه في مستشفيات غزة.
نأمل توجيهاتكم لذوي الاختصاص بضرورة الحصول على الموافقة المستنيرة من أولياء الأمور الذين هم علي استعداد
للمشاركة في الدراسة ومن ثم تمكين الباحث من التواصل معهم، بما لا يتعارض مع مصلحة العمل وضمن أخلاقيات
البحث العلمي، ودون تحمل الوزارة أي أعباء أو مسئولية.
وتفضلوا بقبول التحية والتقدير،،،
ملاحظة /

● البحث المذكور حصل على موافقة لجنة أخلاقيات البحث الصحي (الجنة هلسنكي)
تسهيل المهمة الخاص بالدراسة أعلاه صالح لمدة 3 أشهر من تاريخه.

محمد ابراهيم محمد السرساوي

مدير دائرة/الإدارة العامة لتنمية القوى البشرية -



التحويلات

إجراءكم بالخصوص (19/11/2019)	← رامي عبد سليمان العبادلة(مدير عام بالوزارة)	■ محمد ابراهيم محمد السرساوي(مدير دائرة)
إجراءكم بالخصوص (19/11/2019)	← خليل مصطفى أحمد شقفة(مدير عام بالوزارة)	■ رامي عبد سليمان العبادلة(مدير عام بالوزارة)
إجراءكم بالخصوص (19/11/2019)	← عبد السلام محمد عبد صباح(مدير عام بالوزارة)	■ رامي عبد سليمان العبادلة(مدير عام بالوزارة)

Gaza

Tel. (+970) 8-2846949
Fax. (+970) 8-2826295

تلفون . (970+) 8-2846949
فاكس. (970+) 8-2826295

غزة

Annex (6): Consent Form

رقم الاستبانة:

نموذج موافقة

عنوان الدراسة:

تحديد احتياجات الوالدين داخل وحدات العناية المكثفة لحديثي الولادة في محافظات قطاع غزة: نحو الرعاية التمريضية التي تركز على الأسرة

أوافق أنا الموقع أدناه على المشاركة في الدراسة المعدة بواسطة الطالب: مصطفى صيدم، من جامعه القدس أبو ديس. والتي تهدف إلى تحديد احتياجات الوالدين داخل وحدات العناية المكثفة لحديثي الولادة نحو الرعاية التمريضية التي تركز على الأسرة

عزيزتي المشارك/ة:

المعلومات التي تقدمها في هذه الاستبانة سوف تستخدم لأغراض البحث العلمي، ولن يتم استخدامها بطريقة من شأنها أن تسمح بتحديد استجابتك الفردية الخاصة بك. لذا سيتم عرض جميع البيانات وتوضيحها على شكل جداول وأرقام ونسب احصائية دون ذكر أسماء.

مشاركتم في هذه الدراسة طوعية، لذا لديك الحق الكامل في رفض المشاركة أو الانسحاب من الدراسة إذا شعرت بعدم الارتياح بأي شكل من الأشكال خلال تعبئة الاستبيان.

تعبئة الاستبانة تستغرق حوالي 10-15 دقيقة

مع خالص جزيل الشكر

التوقيع

التاريخ

العنوان: تحديد احتياجات الوالدين لدى الأطفال حديثي الولادة المنومين في أقسام العناية المكثفة في محافظات قطاع غزة: نحو الرعاية التمريضية التي تركز على الأسرة.

إعداد: مصطفى صيدم

إشراف: د. أكرم أبو صلاح

ملخص الدراسة:

تعتبر فترة مكوث الطفل في قسم العناية المكثفة للأطفال حديثي الولادة فترة تتسم بالضغط النفسي والقلق لدى الوالدين. هدفت هذه الدراسة إلى معرفة احتياجات الوالدين ذوي الأطفال المنومين في أقسام العناية المركزة للأطفال حديثي الولادة في المستشفيات الحكومية بقطاع غزة. تكونت عينة الدراسة من 117 فرداً (95 أم، و 22 أب) من أربعة مستشفيات هي: مستشفى الشفاء، مستشفى النصر للأطفال، مستشفى غزة الأوروبي، ومستشفى ناصر بخانيونس. لجمع البيانات تم استخدام استبانة تحديد حاجات الوالدين لدى الأطفال المنومين في أقسام العناية المكثفة لحديثي الولادة، وقد تم إجراء دراسة استطلاعية بهدف التأكد من ثبات الاستبانة حيث بلغ معامل ألفا 0.969. لتحليل البيانات تم استخدام برنامج الرزم الإحصائية للعلوم الاجتماعية (SPSS 22)، كما تم استخدام المعالجات الإحصائية التالية: التكرارات، النسب المئوية، المتوسطات، اختبار التباين الأحادي، واختبار (ت).

أظهرت نتائج الدراسة أن حوالي نصف الوالدين تراوحت أعمارهم بين 25 - 30 سنة، ثلثي الوالدين ليس لديهم عمل، ثلث الوالدين حاصلين على درجة البكالوريوس، غالبية الوالدين من ذوي الدخل المنخفض أقل من 1000 شيكل شهرياً، وحوالي نصفهم لديهم أسرة مكونة من 4 - 6 أفراد. كما تبين أن ثلثي الأطفال كانوا من الذكور، 40% منهم كان عمرهم الرحيمي أقل من 37 أسبوع، 43% منهم مكثوا في قسم العناية المكثفة من 4 - 6 أيام.

بالنسبة للاحتياجات، فقد أظهر الوالدين القيمة الأعلى للحاجة للثقة (82.2%)، يليها الحاجة للمعرفة (78.4%)، الحاجة للتقارب العاطفي (76.8%)، الحاجة للراحة (73.6%)، وأخيراً الحاجة للدعم (68.6%). كما بينت النتائج أن الوالدين ذوي الأطفال حديثي الولادة المنومين في مستشفى ناصر بخانيونس أظهروا قيمة أعلى لكل الحاجات الخمسة مقارنة بالوالدين في المستشفيات الأخرى. وأظهرت الدراسة أن الوالدين من حملة شهادة البكالوريوس ومن ذوي الدخل الأعلى لديهم قيمة أعلى للحاجة للثقة، في حين أظهر الوالدين من ذوي الأسر الكبيرة قيمة أكبر للحاجة للتقارب العاطفي، كما أن الوالدين ذوي الأطفال المنومين في قسم العناية المكثفة للأطفال حديثي الولادة لمدة يوم إلى ثلاثة أيام أظهروا قيمة أعلى لتلبية احتياجاتهم المتعلقة بالراحة، وأظهر الوالدين ذوي الأطفال حديثي الولادة الذين يحتاجون رضاعة طبيعية قيمة عالية لجميع الحاجات مقارنة بذوي الأطفال الذين يتغذون بواسطة الأنبوب المعدى أو عن طريق التغذية الوريدية.

وأظهرت النتائج عدم وجود فروق ذات دلالة إحصائية في الحاجات بين الأباء والأمهات، كما تبين عدم وجود فروق ذات دلالة إحصائية في احتياجات الوالدين تعزى لكل من عمر الوالدين، نوع العمل، التشخيص الطبي للطفل، ونوع الطفل (ذكر - أنثى).

وعليه فإن الدراسة أوضحت احتياجات الوالدين لذوي الأطفال المنومين في أقسام العناية المركزة لحديثي الولادة، مما يساهم في تقديم رعاية ذات جودة عالية للأطفال حديثي الولادة و إلى والديهم، وهذا بدوره يعزز مفهوم الرعاية التمريضية التي تركز على الأسرة.