

# Parental stress and perception of parental nursing care in neonatology

Estrés parental y percepción del cuidado parental de enfermería en neonatología  
 Stress parental e percepção dos cuidados de enfermagem parentais em neonatologia

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**Mery Yaneth Flores Chura**

<https://orcid.org/0000-0002-4638-3129>

Maestría en enfermería mención administración y gestión de los servicios de salud. Administración y gestión de los servicios de salud. Universidad Peruana Unión. Correo: meryflores@upeu.edu.pe

**Edgardo Javier Ramos Caballero**

<https://orcid.org/0000-0001-8545-5503>

Doctor en ciencias biomédicas. Corporación Universitaria Adventista. Correo: ejramos@unac.edu.co

## Abstract

**Introduction:** the psychoemotional state of parents is affected when their newborn is hospitalized when facing a new environment, dealing with strangers and delegating their first protective care. **Objective:** to determine the level of parental stress and the perception of parental nursing care in the neonatology service of a national hospital in Peru. **Methodology:** quantitative, descriptive-correlational, cross-sectional study. With a sample of 75 parents of babies hospitalized in neonatology. Questionnaires were applied: Parental Stress Scale - PPS:NIICU with  $\alpha=0.7$  and Nursing Parent Support Tool - NPST ( $\alpha = 0.96$ ). **Results:** 68.7% of the participants presented moderate level of parental stress, the main sources of stress were: alteration of parental role, impact of appearance, treatment and behavior of the baby. They considered parental nursing care to be low, with deficiencies in emotional, communicational and informational support; however, they recognized good nursing care. Finally, no significant relationship was found between both variables (Tau-b: -0.07; with  $p < 0.05$ ). **Conclusions:** there is an urgent need to implement initiatives that involve parents in different processes during the hospitalization of their babies, in addition to the training of nurses to identify and attend to psychoemotional needs.

**Keywords:** Stress; Parenting; Caregiving; Nursing; Hospitalization.

## Resumen

**Introducción:** el estado psicoemocional de los padres se ve afectado cuando su recién nacido es hospitalizado al enfrentarse a un ambiente nuevo, tratar con desconocidos y delegar sus primeros cuidados de protección. **Objetivo:** determinar el nivel de estrés parental y la percepción del cuidado parental de enfermería en el servicio de neonatología de un hospital nacional en Perú. **Metodología:** estudio cuantitativo, descriptivo-correlacional, de corte transversal. Con una muestra de 75 padres de bebés hospitalizados en neonatología. Se aplicó cuestionarios: Escala de estrés parental - PPS:NIICU con  $\alpha=0,7$  y Herramienta de apoyo a los padres de enfermería - NPST ( $\alpha = 0,96$ ). **Resultados:** el 68,7% de los participantes presentó nivel de estrés parental moderado, las principales fuentes de estrés fueron: alteración del rol parental, impacto de la apariencia, tratamiento y comportamiento del bebé. Consideraron como nivel bajo el cuidado parental de enfermería con deficiencias en apoyo: emocional, comunicacional e informacional; sin embargo, reconocieron una buena atención asistencial. Finalmente, no se halló relación significativa entre ambas variables (Tau-b: -0,07; con  $p < 0,05$ ). **Conclusiones:** urge la implementación de iniciativas que involucren a los padres en diferentes procesos durante la hospitalización de sus bebés; además de la capacitación y entrenamiento de las enfermeras para identificar y atender necesidades psicoemocionales.

**Palabras clave:** Estrés; Padres; Cuidado; Enfermería; Hospitalización.

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## Resumo

**Introdução:** o estado psicoemocional dos pais é afetado quando o seu recém-nascido é hospitalizado, uma vez que enfrentam um novo ambiente, lidam com estranhos e delegam os primeiros cuidados de proteção. **Objetivo:** determinar o nível de stress parental e a percepção dos cuidados de enfermagem dos pais no departamento de neonatologia de um hospital nacional no Peru. **Metodologia:** estudo quantitativo, descritivo-correlacional, transversal. Com uma amostra de 75 pais de bebês hospitalizados em neonatologia. Foram aplicados questionários: Parental Stress Scale - PPS:NIICU com  $\alpha=0,7$  e Nursing Parent Support Tool - NPST ( $\alpha = 0,96$ ). **Resultados:** 68,7% dos participantes apresentaram nível de stress parental moderado, as principais fontes de stress parental foram As principais fontes de stress foram: alteração do papel parental, impacto da aparência, tratamento e comportamento do bebê. Consideraram os cuidados de enfermagem parentais baixos, com deficiências no apoio emocional, comunicacional e informativo; no entanto, reconheceram bons cuidados de enfermagem. Por fim, não foi encontrada relação significativa entre as duas variáveis (Tau-b: -0,07; com  $p < 0,05$ ). **Conclusões:** é urgente implementar iniciativas que envolvam os pais em diferentes processos durante a hospitalização dos seus bebês, bem como formar os enfermeiros para identificar e atender às necessidades psico-emocionais.

**Palavras-chave:** Stress, Pais, Cuidados, Enfermagem, Hospitalização.



## INTRODUCTION

The hospitalization of a newborn is an unexpected, frightening and stressful event for a family. The support of the nursing staff could be essential to cope with this process, in which the situation of a child's loss of health demands overexertion from the parents and endangers their personal wellbeing. In recent decades, due to technological progress and the specialization of health professionals, the survival of premature infants (WHO, 2020) and newborns with severe pathologies has increased considerably (Ota Nakasone, 2018). In the face of this breakthrough in neonatology which, at first focused almost exclusively on newborn survival, left in oblivion the psychosocial aspects affecting the primary caregiver and the family (Jabraeili et al., 2018).

Therefore, for parents and family, the birth of a child is generally associated with feelings of joy, excitement and happiness (Escartí et al., 2016b). However, almost no one is prepared for complications or illnesses that will provoke the hospitalization of the anxiously awaited new being (Caporali et al., 2020; Beheshtipour et al., 2014). Thus, parental stress can be defined as an overwhelming (Novak & Vittner, 2021) and very complex process in which parents feel overwhelmed by the demands they must face in their role as parents (Escartí et al., 2016a). Many times, this situation implies that parents must give up the expectations they had of their child after childbirth and try to adapt to the new situation facing their child and themselves (Villamizar-Carvajal et al., 2018; Caporali et al., 2020; Grunberg et al., 2020; Arias-De la Torre et al., 2019).

In this context, the need to also address the psychosocial needs of parents has intensified, which is related to the provision of high quality health services (Cuesta et al., 2012; Valderrama Sanabria & Muñoz de Rodríguez, 2016). Therefore, the support provided by the nurse to the parents of hospitalized babies is an essential axis of neonatal care. Therefore, the family's perspective on nursing support and perceived stress is relevant; therefore, the present study aims to describe the level of parental stress and the perception of parental nursing care and to determine the relationship between the two in the neonatology service of a national hospital in Peru.

## THEORETICAL FRAMEWORK

Several studies at the international level, in the USA (Golfenshtein et al., 2017; Grunberg et al., 2020), Jordan (Kawa4a, 2018), Norway (Tandberg et al., 2013), Philippines (Mariano et al., 2022), Colombia (Alvarado Socarrás et al., 2017) and Chile (Astudillo Araya et al., 2019; Palma I et al., 2017), show evidence of the stress that parents suffer during the hospitalization of their babies, which contributes to authorize psychosocial risk (Golfenshtein et al., 2017), the burden of negative emotions (Yang et al., 2017) and alteration between the parental-filial bond (Browne & Talmi, 2005). In Peru, 87.5% of primary caregivers at the National Children's Institute presented symptoms of depression and anxiety (Aranda-Paniora, 2017), whose predecessor could be related to stress (Brondolo et al., 2017).

Often, the experience in the neonatal care unit is generally perceived as positive for some parents (Yang et al., 2017), given that many of them get to take their child home. However, the experience during hospitalization was a crucial moment in every parent's life.

and this has generated an extremely high level of stress, because they see this scenario as the dissatisfaction of their expectations and non-fulfillment of their maternal role due to physical and emotional isolation (González Escobar et al., 2012). The most stressful elements for parents in the neonatal intensive care unit are very premature birth, birth of twins (Turner et al., 2015), birth of babies with complex heart disease (Golfenshtein et al., 2017) and babies with congenital malformations (Fontoura et al., 2018) or different chromasopathies.

Parental stress composes a complex process in which parents experience dis-bordant feelings in the face of the demands they must cope with in their role as parents (Padilla et al., 2014).

The hospitalization of a newborn constitutes a very significant psychic stress for fami- lias (Davis et al., 2012), which can result negatively in psychomotor and affective development (Palma I et al., 2017); since the parents' ability to adapt to the situation and the quality of the early relationship is a critical factor for the infant's later development (Nuez, 2010). Therefore, family-centered preterm actions during neonatal hospitalization and transition to home have been shown to decrease stress (Palma I et al., 2017) and maternal depression (Aranda-Paniora, 2017), improve maternal self-esteem (Martinez Gertner, 2010), and improve early interactions between parents and their preterm infants (Browne & Talmi, 2005).

Hence, recognizing the emotional stressors experienced by parents is a first step in providing support (Lee & O'Brien, 2018) while promoting the development of parenting skills needed to bond and care for their infant from admission to discharge and beyond (Turan et al., 2008; Lau & Morse, 2001). For Miles, parental stress may be related to different factors during the child's hospitalization, such as: The presence of Images and sounds (Miles et al., 1993), the physical environment of a neonatal unit, the use of medical equipment with technology and high complexity, become strange elements for parents (Parra Falcón et al., 2009); the appearance, treatment and behavior of the child, can impact the emotional state of the parents when they see the condition in which they are (Acosta Romo et al., 2017) ; and the parental role, the interruption in the mother-child bonding, generates a negative impact on mothers: fear, sadness and anguish (Acosta Romo et al., 2017).

With regard to parental care, it is also attributed to the attention provided by health professionals to the needs of parents (Miles et al., 1999). Known in recent times as family-centered care (Ramezani et al., 2014), which allows parents to actively participate in the care of newborns until they are discharged and in other cases to cope with the sequelae of illness or loss of their children.

In relation to what has been described, the journey from birth to neonatal hospital discharge can affect the parents' lifeworld, the different experiences of parents trigger feelings of loneliness and existential guilt and difficulties in combining the role of mother with that of partner. This is how, emotional and informational support for parents is important for them to be more competent in coping with their newborn's hospitalization (Yang et al., 2017). Parents interact with a multitude of teams from various disciplines during their child's admission to the neonatal intensive care unit (Melnyk et al., 2006). Therefore, they demand support from professionals in order to fulfill their role as parents (Montes Bueno et al., 2016), coping with the critical situation, contributing affectionate support to their children, participating in their care and recovery (Banerjee et al., 2018; Gonzá-

lez-Serrano et al., 2012). Therefore, emotional and informational support for parents is essential to make them more competent in coping with their newborn's hospitalization in the neonatal intensive care unit (NICU) (DesMadryl et al., 2021; Lee & O'Brien, 2018).

The nurse as a health professional who cares for the newborn has as one of its functions to attend and support the needs and concerns of the family (Novak & Vittner, 2021), who demand continuous information about the illness or state of health of their loved one and about everything that is happening around it, such as procedures, referrals, medical and pharmacological treatment (Zeng et al., 2020). For that reason, nurses should know the mechanisms involved in the establishment of maternal bonding and parental attachment with the newborn to promote and support the integration of parents in the care and recovery of their children.

## **METHODOLOGY**

### **3.1. TYPE OF STUDY**

A quantitative, analytical correlational study with a cross-sectional design was carried out.

### **3.2. SAMPLE**

It consisted of 75 parents of babies hospitalized in neonatology.

Inclusion criteria: parents of premature infants hospitalized in neonatology who agreed to participate in the study.

### **3.3. DATA COLLECTION TECHNIQUES**

Data collection was carried out through two instruments according to the study variables.

The first, Parental Stressor Scale Neonatal Intensive Care Unit: PSS: NICU (Miles et al., 1993); developed and validated by Dr. Margaret Miles in North Carolina, United States, in 1993; this is a multidimensional scale, developed to measure and evaluate the stress related to the stay of parents in neonatal-pediatric intensive care units. This scale has been translated into different languages: Persian (Beheshtipour et al., 2014); Italian (Monti-rosso et al., 2012); Japanese (Ichijima et al., 2011); Turkish (Turan et al., 2008), Spanish (Domínguez-Martínez & Cortés-Escárcega, 2019; Caruso & Mikulic, 2012); and different cultural settings. The translated scales were shown to have good to excellent reliability with Cronbach's alpha values ranging from 0.70 (Domínguez-Martínez & Cortés-Escárcega, 2019) to 0.90 (Caruso & Mikulic, 2012). Its short version and in Spanish, consists of 26 items and allows distinguishing the level of stress in three dimensions: Images and sounds (5 items), assesses the stress perceived by parents in the physical environment of the unit; Appearance, treatment and behavior of the newborn (14 items), assesses how the newborn behaves in relation to the treatment and parental role (7 items), assesses the perception of mothers and fathers to the loss of the bond with their newborn. The reliability of the instrument by di-

mensions (Domínguez-Martínez & Cortés-Escárcega, 2019) was 0.82; 0.93 and 0.90 respectively.

The second, the questionnaire "Nurse-Parent Support Tool - NPST. Margaret Miles (1999). The validity of the scale was confirmed in terms of content and translation validity (Valizadeh et al., 2009). The reliability of the scale was determined with Cronbach's alpha ( $\alpha = 0.96$ ). It contains 21 items and four domains: emotional support (3 items); communicational-informational support (9 items); self-esteem support (4 items) and quality of care support (5 items).

## RESULTS

The use of the parent survey with demographic data and Neonatal Intensive Care Unit Parental Stressor Scale was able to identify which areas of the experience of a child's hospitalization in neonatology are most stressful, as well as parent and infant factors that contribute to high levels of parental stress.

Table 1 shows the sociodemographic characteristics of the parents to whom the survey was administered. Seventy.7% were between 22 and 35 years old and 86.7% had between 1 and 2 children. At least 54.7% were married and 68% had higher education (technical or university).

**Tabla 1**  
*Datos sociodemográficos de padres de bebés hospitalizados en neonatología*

Variables	Frecuencia	Porcentaje
Sexo	Femenino	70 94,7
	Masculino	5 5,3
Estado civil	Casado	41 54,7
	Conviviente	34 45,3
Número de hijos	1	32 42,7
	2	33 44,0
	3	8 10,7
	4	2 2,7
Grado de instrucción	Secundaria	24 32,0
	Técnico superior	30 40,0
	Superior	21 28,0
	Universitario	
Tipo de trabajo	Contratado	28 37,3
	Independiente	9 12,0
	No trabaja	38 50,7
Grupo de apoyo	Familia	61 81,3
	Iglesia	5 6,7
	Ninguno	9 12
Número de días estancia hospitalaria de su bebé	0-30 días	33 44
	31-60 días	16 21,3
	61 – 90 días	9 12
	91 días a más	17 22,7
Edad	22-35 años	53 70,7
	36-45 años	21 28
	46 años a más	1 1,3

*Nota:* Elaboración de los autores.



It is important to mention that the scale used to obtain the measurement of the level of parental stress is in accordance with the models proposed by Wormald et al., 2015, who estimated total parental stress based on the average of the subscales and Palma et al., 2017, which used the mean and standard deviation. For this study, the minimum and maximum value was defined, obtaining the range and amplitude, for four intervals for the measurement of excessive, high, moderate and mild stress.

Therefore, Table 2 shows the level of parental stress in parents of babies hospitalized in neonatology, where 66.7% present moderate level of parental stress and at least 1.3% high stress.

**Tabla 2**

*Nivel de Estrés parental y sus dimensiones en padres de bebés hospitalizados en neonatología*

	Excesivo		Alto		Moderado		Leve	
	f	%	f	%	f	%	f	%
Estrés Parental general	-	-	1	1,3	50	66,7	24	32,0
Dimensión imágenes y sonido	-	-	4	5,3	43	57,3	28	37,3
Dimensión Apariencia, tratamiento y comportamiento	2	2,7	39	52,0	31	41,3	3	4,0
Dimensión rol parental	58	77,3	13	17,3	2	2,7	2	2,7

*Nota:* Elaboración de los autores.

Regarding the images and sounds dimension, 62.6% of the respondents presented stress between moderate and high levels. And at least 93.4% of the parents presented between moderate and high levels of stress in the dimension appearance, treatment and behavior. Likewise, 94.6% of the parents obtained stress levels between high and excessive in the parental role dimension.

The results of stress level according to sociodemographic data are presented below.

Of those between 22 and 30 years of age, 77.8% showed moderate stress and 22.2% showed mild stress. Likewise, 58.1% of those between 31 and 40 years of age had moderate stress, 39.5% had mild stress and 2.3% had high stress. Among those aged 41 to 50 years, 75% had moderate stress and 25% had mild stress. 100% of those aged 51 years and older had moderate stress.

Regarding the number of children, of those with 1 to 2 children, 30.5% had mild stress, 67.3% had moderate stress and only 1.4% had high stress. Of those with 3 to 4 children, 39.4% had mild stress and 60.6% had moderate stress.

On the other hand, according to hospital stay, 97% of those with 0-30 days presented moderate stress and 3% high stress. Of those who reported 31 to 60 days, 50% had mild stress and the other 50% moderate stress. Of those 61-90 days, 55.8% had mild stress and 44.2% moderate stress. From 91 days to more, 64.6% had mild stress and 35.4% moderate stress.

With respect to work status, 32% who had a job under contract presented mild stress and 32% who had a job under contract presented mild stress.



68% had moderate stress, 10.9% of those who were self-employed had mild stress, 78% had moderate stress and another 10.8% had high stress. Of those who were not employed, 63% had moderate stress and 37% had mild stress.

For the interpretation of the perception of parental care we use the one proposed by Valizadeh et al. (2012), who argue for the baremation to four intervals very high, high, low and very low, derived from the relationship between the mean and the standard deviation.

Table 3 shows the level of perception of parental nursing care and shows that 57.3% have a low level of perception of parental nursing care.

**Tabla 3**

*Percepción de cuidado parental de enfermería a padres de bebés hospitalizados en neonatología*

	Muy alta		Alta		Baja		Muy baja	
	f	%	f	%	f	%	f	%
Estrés Parental general	1	1,3	31	41,3	50	66,7	43	57,3
Dimensión apoyo emocional	1	1,3	32	42,7	34	45,3	8	10,7
Dimensión Apariencia, tratamiento y comportamiento	6	8,0	24	32,0	30	40,0	15	20,0
Dimensión rol parental	7	9,3	66	88,0	2	2,7	-	-

*Nota:* Elaboración de los autores.

Likewise, 56% of the parents rated the perception of emotional support as very low to low, as well as the dimension of communicational and informational support (60%). However, 97.3% rated the perception of quality of care as high and very high.

Regarding sociodemographic data, 55.6% of those between 22 and 30 years of age rated their perception of parental nursing care as low and 44.4% as high. Of those aged 31 to 40 years, 55.8% rated it as low, 41.8% as high, and 2.4% as very high. Those aged 41 to 50 years, 75% indicated low level, while 25% as high level. 100% of those aged 51 years and older rated it as low.

Likewise, it was observed that 58.3% of those with secondary education rated the perception of parental care as low, while 41.7% rated it as high. Of those with higher education, 63.3% rated it as a low level, while the remainder rated it as a high level. Of those with university education, 47.7% rated low, 47.7% rated high and 4.6% rated high the perception of parental nursing care.

Finally, of parents whose babies are hospitalized within the first 30 days, 81.8% rated the perception of parental nursing care as low and 15.2% as high, while from 31 to 60 days 43.8% rated it as low and 56.2% as high, those from 61 to 90 days 22.2% rated it as low and 56.2% as high, and those from 61 to 90 days 22.2% rated it as high.

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The average number of days of operation was low - 77.8% was high, from 90 days to more than 90 days 41.2% was low and 58.8% was high.

On the other hand, when making the general comparison of both variables, the Kendall's Tau b correlation coefficient was -0.07 and the p value = 0.56, that is, there was no correlation between the two variables.

## DISCUSSION

Stress is an adaptive reaction that allows us to react adequately to a threatening situation. When stress is prolonged over time or is very intense, it is harmful to health (WHO, 2020).

Nowadays, the birth of a child is considered a privilege that generates feelings of joy and excitement. However, not everyone gets to enjoy this new stage as such, every year approximately 30 million newborns in the world have or will have a health problem that will require specialized medical care and hospitalization in neonatology units (WHO, 2018). This event- to, is often stressful for parents (Christian, 2020), especially when babies have critical life-threatening conditions; this is how, primary caregivers present stress and may end up in psychoemotional affections (Aranda-Paniora, 2017; Brondolo et al., 2017).

The participants in this study were mostly female. Women are considered caregivers par excellence (Comunidad Mujer, 2018), contributing an intangible, transcendental and invaluable role as health agents, as informal caregivers for their families and for society (Scholtus & Domato, 2019; Vaquiro & Stiepovich, 2010). Likewise, the majority indicated having between 1 and 2 children, which reflects data from Peru as of 2020 with the total fertility rate of 1.9 (INEI, 2021) and similar also in Latin America (ECLAC, 2019).

Regarding age, it was especially concentrated in the young adult range, where 71% were aged between 22 and 35 years, similar data were found in Mexico in a study where the age was between 21-45 years (Mariano et al., 2022) and in another 68% ranged between 21-35 years (Dominguez-Martínez & Cortés-Escárcega, 2019); likewise in Chile, Astudillo Araya et al. (2019) found that 73% of the participants were between 20-34 years old, equivalent data we also see in Austria, Jordan and the Philippines (Kawa4a, 2018; Rojas, 2014; Turner et al., 2015). The approximation of the age ranges that predominate in each study may be due to the overall similarity that the countries have in terms of their development and delayed childbearing stage for women to ensure their work and professional performance.

Most of the babies were within the first 30 days of hospitalization, prolonged stay affects quality, generates high costs for the State and its family, affects the bond and labor condition of parents, and causes deterioration of the health status of patients (Mendoza Tascón et al., 2014); the most prominent factors for its prolongation are comorbidity and the degree of severity of the disease and its complications (Marrugo-Arnedo et al., 2019).

Next, in the experience of hospitalization of their infants, most parents obtained



"moderate" level of stress, a fact that is consistent with studies in Peru (Wormald et al., 2015), Argentina (Caruso, 2012), Paraguay (Wormald et al., 2015), Chile (Palma I et al., 2017; Wormald et al., 2015), Colombia (Villamizar-Carvajal et al., 2018) and Ong & et al. (2019) in Malaysia. As described by Kawa4a (2018), the struggles of infant hospitalization create stressful situations for parents and families for which they are unprepared. These experiences can be distressing, complex (Novak & Vittner, 2021) and have an incalculable psychological impact on vulnerable parents generating overwhelming scenarios (Escartí et al., 2016a) that lead to parental stress and when extended over time can lead to physical symptoms (Padilla et al., 2014).

Likewise, the factors related to parental stress are linked to the neonate's health condition, the environmental characteristics of the place where he/she is hospitalized (Aguñaga-zamarripa et al., 2016), the lack of knowledge about the process in which he/she is (Navarro-Tapia et al., 2019), decision making (Christian, 2020) and separation from his/her child (Palma I et al., 2017).

One of the most significant factors in this study, which had an impact on parental stress in parents with infants hospitalized in neonatology, was the parental role dimension, which was identified as the highest stress level (77%). The dimension represents the challenges parents face in their role as parents and their relationship with their infant. This finding is congruent with that of Turner et al. (2015), Wormald et al. (2015), Palma I et al. (2017), Domínguez-Martínez et al. (2019), Ong et al. (2019) and Caporali et al. (2020), where parents perceive the general feeling of physical, affective separation and their inability to care for their babies as the most stressful facet of the experience in a neonatal unit. Therefore, they see this scenario as the dissatisfaction of their expectations, failure to fulfill their role as parents (González Escobar et al., 2012), deprivation of the longed-for caregiver identity (Caporali et al., 2020), resulting in detrimental effects on the mother-father-child bond (Domínguez-Martínez et al., 2019). In addition, it is important to highlight that the promotion of mother-child bonding increases mothers' confidence and their ability to care for the baby whenever medically possible (Seiiedi-Biarag et al., 2021) which becomes a protective factor against parental stress (Palma I et al., 2017).

Likewise, it was evidenced that the results in the dimension appearance, treatment and behavior exerted a significant influence on parental stress; these results were congruent with some authors in Mexico and Brazil whose means were 2.29 and 3.32 respectively (Aguñaga-zamarripa et al., 2016; Balbino et al., 2016; Domínguez-Martínez & I. Cortés-Escárcega, 2019). The emotional state of parents is affected and varies according to the health condition of their baby, of the diagnosis, when the treatment places life at risk or depends on the available technology and when the stay within a hospital center is longer (Acosta Romo et al., 2017; Kawa4a, 2018). Parental stress could be reduced by providing education about the normal appearance of premature infants and other pathologies and their common physical behaviors (Turner et al., 2015).

Finally, in this section it is important to highlight that parental stress is a factor that can affect the mental health status of parents (Seiiedi-Biarag et al., 2021) and plays a transcendental role in the social (Mensah & Kiernan, 2010), cognitive, emotional and behavioral development of infants (Kahn et al., 2004) in the future.

Parents have contact with various people from the health care team during their child's hospitalization (Melnik et al., 2006) and are usually confronted with strong emotions such as anger, despair, anxiety, fear, uncertainty and helplessness (Swinburn, Lobo, 2020). This is how it becomes evident



cia the need for support from the professional in order to fulfill their role as parents (Montes Bueno et al., 2016), promoting participation in the care and recovery of their child favoring affection and family bonding (Banerjee et al., 2018; González-Serrano et al., 2012).

Parents should be considered as active participants and not mere spectators of their baby's care or visitors, creating a space that allows them to feel accepted, loved and important in the neonatal hospitalization unit (Ramirez-Perdomo et al., 2020).

Likewise, emotional and informational support becomes an indispensable piece for parents when coping with the hospitalization of their newborn (DesMadryl et al., 2021; Lee & O'Brien, 2018).

The present study also examined the perceptions of parents with infants hospitalized in neonatology, the majority reported a low level of perception of parental nursing care. That is, the attention given by nursing professionals to the emotional, communication, self-esteem and quality of care needs of parents during their child's hospitalization was considered low. These findings are congruent with Enke et al. (2017) and where parents express a deficit in support for their demands as parents, likewise other researchers in Iran indicated that "not very often" they received support for their needs (Mousavi et al., 2016; Valizadeh et al., 2012). It should be emphasized that health professionals are in a valuable place to provide support to parents in multiple ways, as they go through a great emotional, psychological, economic and social impact (Cordova Rodas & Núñez Odar, 2021; Palma I et al., 2017).

On the other hand, studies in Turkey, Italy and Qatar (Akkoyun & Tas Arslan, 2019; Çekin & Turan, 2018; Mariano et al., 2022; Montirosso et al., 2012; Yapici et al., 2018), contrast with the results found since, the parents surveyed reported that they were adequately supported by knowing the parents' necessities during the accompaniment of the sick child in the hospital context, promoting parental interest and involvement in health care, resulting in humane and quality health care (Melo et al., 2014).

Likewise, according to the dimensions, the study showed that communicational and informational support has been rated as the lowest (60%). For parents receiving information is a connection towards care, by seeking information about their baby's health status they feel they create a bond with their child on the road to recovery, so it is expected that nurses and the interdisciplinary team provide the necessary support for families (Mirlashari et al., 2019; Ramirez-Perdomo et al., 2020). This finding is congruent with studies in the United States, Germany, and Singapore (DesMadryl et al., 2021; Enke et al., 2017; Yang et al., 2017) where they highlight the importance of empathic and proactive communication with parents. According to Wigert et al. (2014), responding with empathy and compassion makes hospital care meaningful.

Second, the study also identified deficiency in emotional support as Dingwall & Cooke (2008) and Tran et al. (2009) expressed in the way nurses respond to the concerns and worries of parents with hospitalized infants in neonatology. Parents with an infant hospitalized in neonatology have unique needs, in particular, about the impact of hospitalization on emotionality. When parents feel support provided by staff, worries decrease (Lindberg & Öhring, 2008) and they can also control their negative feelings (Aliabadi et al., 2014). Although this finding differs with Mariano et al. (2022) since, in their study

It was evident that the emotional support provided by the nurses was positively perceived by the parents, both highlighting the urgency and importance of satisfying the emotional needs of the parents when their babies are hospitalized.

Likewise, with respect to quality of care, unlike the other dimensions, this one obtained positive results and higher scores. Despite some shortcomings in other dimensions, Mousavi et al. (2016) allude that this is due to the fact that parents feel and recognize that the caring behaviors towards their babies by nurses are important and beneficial. They further see nurses as experts in the field of medical care and care, being the most trusted means for the care and well-being of their babies (Yang et al., 2017).

Finally, when relating the parental stress variable and the variable of perception of parental nursing care, they were not found to be significantly related ( $p < 0.05$ ). This finding is congruent with Akkoyun & Tas Arslan (2019) who used T - Student and F - Snedecor, where  $p > 0.05$  and Mariano et al. (2022) when using Pearson Correlation ( $p > 0.05$ ). However, they reported that there is evidence of significant positive relationship between the subscale of Parental Stress: Parental Role and Parental Nursing Care, as parental nursing care increased, parental stress related to parental role decreases. This is probably attributed to mothers perceiving more stress from feeling unable to perform their maternal role, but feeling great support from knowing that nurses are caring for their babies. Several studies support the last mentioned by showing satisfactory affirmations from mothers towards the nursing care provided to their babies (Coyne, 2007; M. S. Miles et al., 1999; Turan et al., 2008).

On the other hand (Yapici et al., 2018) regarding the relationship between both variables, found that mothers' stress was lower when perceiving greater nursing support ( $p < 0.05$ ). However, although the nurses were a great support in reducing mothers' stress, they observed less support in how to become familiar with the names and roles of the team members caring for their babies, participation in decision-making processes, and concern for the mother's well-being.

## CONCLUSIONS

The birth of a child is considered a privilege, which generates feelings of joy and excitement, but not everyone is able to enjoy this new stage due to various characteristics of the hospitalization environment, lack of knowledge, decision making and separation, among other factors that favor a frequent level of parental stress in parents whose babies are hospitalized.

The parental role dimension is the most affected in this process, which makes it important to implement initiatives or programs that allow parents to participate in the different stages during the hospitalization of their babies.

Likewise, the perception of parental nursing care is perceived by parents as low in general, and there is evidence of essential deficiencies in communication and emotional support for parents on the part of nurses. This calls for training or coaching for nurses to identify these special needs so that they can be addressed.



Finally, no significant relationship was found between the level of parental stress and the perception of parental nursing care. This is probably because there are other factors that trigger different experiences during the hospitalization of their babies, as some parents perceive more stress when they feel unable to perform their parental role; however, it is important that parents feel the nurse's care as their main support group to mitigate the emotional, psychological, economic and social impact during their baby's hospitalization.

### *Conflicts of interest*

I declare that there is no actual, potential, or potentially perceived conflict of interest (financial, professional, or personal) that could result in bias in the publication of this work.



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