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**Original Article** 

# Exploration of the mental health of mothers and fathers of premature hospitalized in the neonatal unit during the COVID-19 pandemic<sup>1</sup>

Exploração da saúde mental de pais de prematuros hospitalizados em unidade neonatal durante a pandemia de COVID-19

Exploración de la salud mental de padres y madres de prematuros hospitalizados en unidad de neonatología durante la pandemia COVID-19

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### **Abstract**

Introduction: The COVID-19 pandemic has significantly affected the mental health of our population, including mothers and fathers of babies who are hospitalized in the Neonatal Intensive Care Unit (NICU) where the rehabilitation teams, including occupational therapists play a pivotal role. High levels of stress, anxiety, distress, depression and post-traumatic stress symptoms may lead to complications in family and infant performance in the future. **Objective:** To describe mental health in parents of preterm newborns hospitalized in the context of the pandemic in the Metropolitan Region, Chile. **Methodology:** Qualitative study consisting of four semi-structured interviews with parents who experienced the birth during the pandemic and were hospitalized in the NICU. The research focused on the occupational, emotional and psychological impacts of the pandemic on family dynamics. **Results:** The results indicate that families are aware of their children's developmental conditions, the hospitalization process and the pandemic

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situation, however, their daily activities have been significantly affected, as well as their activities of daily living, and they report feelings of grief, fear and distress in this process. This would generate great distress and anxiety in the family dynamics. **Conclusion:** This study confirms the parents' experience and at the same time contributes to the understanding of the process that families go through in relation to the family dynamics around a premature child and how it is negatively affected by this pandemic.

**Keywords:** Hospitalization, Neonatology, Infant, Premature, Mental Health, COVID-19, Occupational Therapy.

### Resumo

Introdução: A pandemia da COVID-19 afetou significativamente a saúde mental da nossa população, incluindo mães e pais de bebês que estão hospitalizados na Unidade de Terapia Intensiva Neonatal (UTIN), onde a equipe de reabilitação, incluindo terapeutas ocupacionais, desempenha um papel fundamental. Altos níveis de estresse, ansiedade, angústia, depressão e sintomas de estresse póstraumático podem levar a complicações no desempenho da família e do bebê no futuro. Objetivo: Descrever a saúde mental dos pais de recém-nascidos prematuros hospitalizados no contexto da pandemia na Região Metropolitana do Chile. Metodologia: Estudo qualitativo composto por quatro entrevistas semiestruturadas com pais que vivenciaram o nascimento durante a pandemia e foram hospitalizados na UTIN. A pesquisa concentrou-se nos impactos ocupacionais, emocionais e psicológicos da pandemia na dinâmica familiar. Resultados: Os resultados indicam que as famílias estão cientes das condições de desenvolvimento de seus filhos, do processo de hospitalização e da situação de pandemia, porém, suas atividades diárias foram significativamente afetadas, bem como suas atividades de vida diária, e elas relatam sentimentos de tristeza, medo e angústia nesse processo. Isso geraria grande angústia e ansiedade na dinâmica familiar. Conclusão: Este estudo confirma a experiência dos pais e, ao mesmo tempo, contribui para a compreensão do processo pelo qual as famílias passam em relação à dinâmica familiar em torno de uma criança prematura e como ela é afetada negativamente por essa pandemia.

**Palavras-chave:** Hospitalização, Neonatologia, Recém-Nascido Prematuro, Saúde Mental, COVID-19, Terapia Ocupacional.

### Resumen

Introducción: La pandemia del COVID-19 ha repercutido de manera significativa la salud mental de nuestra población, incluyendo a madres y padres de los bebés que están hospitalizados en la Unidad de Cuidados Intensivos Neonatales (UCIN), donde el equipo de rehabilitación, incluyendo terapeutas ocupacionales, juegan un papel fundamental. Altos niveles de estrés, ansiedad, angustia, depresión y síntomas de estrés postraumático que podrían llevar a complicaciones en el desempeño de la familia y del bebé en el futuro. **Objetivo:** Describir la salud mental en padres de recién nacidos prematuros hospitalizados durante la pandemia en la Región Metropolitana, Chile. **Metodología:** Estudio cualitativo que consistió en la realización de cuatro entrevistas semiestructuradas dirigidas a padres que vivieron el nacimiento durante la pandemia y estuvieron hospitalizados en la UCIN. La investigación se enfocó en los impactos ocupacionales, emocionales y psicológicos

de la pandemia en la dinámica familiar. **Resultados:** Los resultados indican que las familias conocen las condiciones de desarrollo de sus hijos, el proceso de hospitalización y la situación de la pandemia, sin embargo, sus actividades cotidianas se han visto significativamente afectadas, así como sus actividades de la vida diaria, y reportan sentimientos de pena, miedo y angustia en este proceso. Esto generaría gran angustia y ansiedad en la dinámica familiar. **Conclusión:** Este estudio confirma la experiencia de los padres y al mismo tiempo contribuye a la comprensión del proceso que atraviesan las familias en relación con la dinámica familiar en torno a un niño prematuro y cómo se ve afectada negativamente por esta pandemia.

**Palabras-clave:** Hospitalización, Neonatología, Recién Nacido Prematuro, Salud Mental, COVID-19, Terapia Ocupacional.

### Introduction

The health crisis caused by COVID-19 in Chile has affected and will affect our mental health in the short, medium and long term (Chile, 2020a).

The concept of Mental Health has different meanings depending on where it is analyzed and observed. For the purposes of this research, mental health will be understood as:

The ability of people to interact with each other and with the environment, in order to promote subjective well-being, the development and optimal use of their psychological, cognitive, affective and relational potential, the achievement of their individual and collective goals, in accordance with justice and the common good (Chile, 2017, p. 31).

Given the conditions generated by the pandemic such as confinement and social isolation (Chile, 2020b), these interaction processes are interrupted to prevent the contagion and spread of COVID-19.

This also highlights through the "Two-continuum Model" that a person's low level of mental health is associated with a lack of opportunities for fulfillment, quality of their social relationships and lack of personal skills to face their daily life (Chile, 2017). Based on the above, we can understand that the current experience of carrying out quarantines in the population during this health crisis has an effect on people's mental health, in addition to affecting various areas in which they operate. In the case of this study, the Neonatal Unit of the hospitals, specifically the Neonatal Intensive Care Unit. There, changes have occurred, as a preventive measure, in the management of users and in visits, which shows us a first impact on the daily life of mothers and fathers, which, due to the context of the health crisis, sees even more diminished opportunities to carry out their role as parents.

In the case of parents of premature babies hospitalized in the neonatal intensive care unit (NICU), according to various studies (Ouwendijk-Andréa et al., 2020; Roque et al., 2017; Palma et al., 2016; Escartí et al., 2015), their mental health is already affected, presenting high levels of stress, anxiety, anguish, depression and

symptoms of post-traumatic stress. If we add to the above the new factors and risks caused by the pandemic, it becomes clear that they are a vulnerable group in this health crisis, a group that is not minor when taking into account that at least 10% of newborns require hospitalization due to different health issues (Toso, 2019).

On the other hand, in the NICU, care is quite focused on premature babies, where they are given care that improves their adaptation to extra uterine life, and newborns who are in risk situations are detected and intervened in a timely manner (Chile, 2017) and care for parents "[...] involves a continuous evaluation of the emotional state of the mother and her newborn with an emphasis on the detection of early indicators of psychosocial risk" (Chile, 2017). Despite the fact that the Health System is organized based on a Comprehensive Model of Family and Community Health (Chile, 2017), it can be seen that care is directed especially to the mother and not to the father, who according to studies (Ouwendijk-Andréa et al., 2020; Roque et al., 2017; Palma et al., 2016; Escartí et al., 2015) also present symptoms that affect their mental health. In this sense, a complete and comprehensive protection is not being ensured for the family and the environment of this newborn, hence the importance of making these antecedents known

On the other hand, during this pandemic, the Chilean government implemented a website called "SaludableMente (mental health and-or healthy in Spanish)" that is related to the field of mental health, where self-care advice and professional help directed to the community (children, adolescents, parents, mothers, elderly people, teachers, etc.) are provided. However, advice is not included nor are tools provided to address the mental health of parents who have hospitalized premature babies, even so, the "SaludableMente" program responds to a support network system for the population (Chile, 2023c).

Therefore, according to the above, it is known that outside of a pandemic context, having a premature newborn hospitalized generates stress in their caregivers. In addition, occupational therapy identifies that the role of the father and the mother is interrupted due to the conditions that comprise the care of a premature newborn related to their hospitalization to safeguard his vitality. In addition to this, the sanitary precautionary measures taken in the pandemic have generated changes in the neonatology service that further alter their caregiving role. Therefore, the research question is: What is the perception of fathers and mothers of babies hospitalized in the Neonatology Unit during the COVID-19 pandemic? Therefore, the objective of this study is to explore mental health in fathers and mothers of newborns (NB) hospitalized in the Neonatology Unit in the context of a pandemic in the metropolitan region.

# Methodology

The study design is phenomenological, because it focuses on the subjective individual experiences of the participants, rescuing the meaning, structure and essence of the lived experience, regarding a particular phenomenon. On the other hand, it allows the researcher to contextualize these experiences in terms of specific time and space, define the physical people who experienced them and the relational context (Salgado Lévano, 2007).

The study was carried out through semi-structured interviews which were carried out through video calls and telephone calls, whose script was supported by the Ethics and Scientific Research Committee of the Clinical Hospital of the University of Chile, (hereinafter HCUCH).

The sample was obtained using the snowball method or also called network sampling. For this procedure, the main researcher was used as a key informant of the people who can participate in the project. The recommended individuals were contacted by the Department of Neonatology from the database of patients who were hospitalized in the Unit. Thus, four mothers were recruited for this study.

Regarding the selection of the participants, the following criteria were considered, considering the broad aspect of parenting experience:

Inclusion criteria:

- Having confirmed their consent before starting the interview.
- Having a device such as a cell phone or tablet/computer with internet access during the interview.
- Parents of moderate or late PTNB (>32 weeks)

Exclusion criteria:

- Parents of extreme PTNB (<31 weeks + 6)
- Parents of PTNB less than 2500 grs.
- Parents of PTNB with comorbidity

To achieve the objectives of the research, a semi-structured interview was conducted for mothers and fathers who have premature daughters or sons hospitalized in the neonatal unit during the pandemic. The procedure was estimated to last 60 minutes and would involve an interview by phone or online video call using the Meet application (depending on the method that best suited the participant) and the method of recording information was to record and transcribe the interviews to later systematize and code the experiences received. The questions were directed at general and descriptive data about the experience of having a newborn hospitalized during the pandemic.

### Ethical aspects

The ethics committee of the Clinical Hospital of the University of Chile approved the study protocol from the ethics committee No. 67, exempt resolution No. 1060, Approval date: 05.10.20, and the study was carried out in the Neonatology Unit of the Clinical Hospital of the University of Chile during the month of November 2020. With free and voluntary acceptance by the participants through informed consent authorized by the ethics committee of the institution. And there were no harm or unwanted effects reported from the interviews conducted.

### Results

Table 1. Sample characteristics.

Interviewee	Age (days)	Initials	First-time mother/father	Days of hospitalization of the NB	Premature*	Included
1	28	NM	Yes	16	Yes	Yes
2	29	MM	No	7	Yes	Yes
3	27	CH	No	3	Yes	Yes
4	39	DM	Yes	1	Yes	Yes
-	28	CC	No	3	No	No
-	28	IR	No	4	No**	No
-	36	MF	Yes	7	No	No

**Notes:** \*Newborn under 37 weeks of gestation. \*\*Not premature newborn, however, both (father and son) infected with COVID-19. *Source:* Prepared by the authors based on a database of hospitalized patients.

Seven relatives were contacted to conduct the interview; however, only four met the inclusion criteria, the details of the sample are described in Table 1.

To organize the results of this research, the experiences of mothers and fathers were classified by themes predetermined by the researchers, which allowed the interviews to be coded and the results to be presented in an orderly manner as shown below:

The themes extracted from the interviews were:

# (a) Core context:

- Family Networks/Friendships
- Mother/Father Role
- Newborn

# (b) Occupations before and during the pandemic

- Occupations before the pandemic
- Occupations during the pandemic
- Routine and Activities of Daily Living (ADL)

### (c) Context:

- State Networks and Programs
- Visits/Hospital Setting
- Expectations of the Health System

# (d) Emotions:

- Thoughts and Emotions

### Core context

# Family networks/friends

When asked about family networks and friendships regarding support during hospitalization, 4 mothers reported that their main family network was their partner. In the case of interviewee 3, when asked who she goes to when she has a problem, she mentions "oh... only my partner." Some also report that their partner is a support in phrases such as "[...] for me, the support of my partner has been super important, in all areas" (interviewee 1) and "I am fully supported" (interviewee 3).

On the other hand, interviewee 1 mentions that due to the pandemic she felt isolated for not being able to see people like her neighbors and coworkers with whom she was all day. She expresses that this condition "[...] *some weeks took its toll*". Likewise, she could not share the pregnancy process with her family, she highlights the only experience they were able to have "my sister... that week that we were where my mom helped me to paint the little belly that she wanted and things like that, that was also cool", and adds that the teleworking required during the pandemic has allowed her to feel accompanied all the time because she spends more time with her husband.

# Mother/father role

Of the people interviewed, 4 of them mention aspects related to their partners and the separation they experienced due to the restrictions caused by the pandemic, one of them says "[...] he still did not take on the role of father because he could not take care of him, he could not go in and know how he was, be able to touch him and everything" (interviewee 1). In the same way, another interviewee says that the couple could not see the newborn any day, she says "[...] not even the 3 days and then the day he was hospitalized, that is, she met him like the fifth day of life" (interviewee 4).

These effects of the separation between mothers/fathers and newborns are also evident when interviewee 1 mentions "the second week, it was like I just assumed like to say: I am the mother", since this happened to her due to the 2 hours that she could see him, likewise about the separation they had as soon as the baby was born "[...] at the beginning it was also complex, that like a sense of belonging with the other" and "[...] it was not so easy honestly".

### Newborn

As for hospitalization of newborns, it ranges from 1 to 16 days of hospitalization

# Occupations before and during the pandemic

Regarding the occupational context of the interviewees, questions were asked to find out about the situation before and during the pandemic. Two mothers reported that the health situation caused a change in their occupations. Interviewee 1 said that prior to the health restrictions she attended social gatherings with her family and used to travel outside the city. However, interviewee 4 said that the pandemic had no effect on her

occupations. Regarding the work area, interviewees 2 and 3 were without work during the period due to the pandemic restrictions.

During the pandemic, the main occupations of mothers are related to the care of their children. Regarding this, interviewee 1 said that there is a joint responsibility with her partner when dividing certain feeding tasks.

Regarding routine and ADL, two of the interviewees mentioned having had problems with appetite and sleep. Interviewee 1 said that her lunch time coincided with her newborn's visits and that her pre-pandemic routine was much more structured. She also said that her leisure and free time activities were affected. On the other hand, interviewees 2 and 3 said they had not experienced a change in their routines. However, interviewee 3 said that there was an impact on her partner's work activities due to the hospitalization of her baby, stating that "[...] it was complicated". Finally, interviewee 4 said that her routine underwent a positive change, as she stated, "[...] it has allowed me to be with my son at all times".

# Hospital context

# State networks and programs

Interviewees 2 and 4 said they were not aware of any state programs to support the health and development of children. Interviewee 1 has heard about the national program Chile Crece Contigo (Chile grows with you in Spanish) and similar networks but has not used them or does not know in detail what they consist of, but Interviewee 2 also mentions that the support she received was mainly from the municipality that gave her access to milk. However, she believes that this help is not enough because there are more significant expenses such as the purchase of diapers. On the other hand, interviewee 3 says that the support received from the networks has been prenatal and postnatal leave (Chile, 2023a, 2023b).

### Visits/hospital setting

The hospital protocol was structured with schedules, so visits to premature newborns could be every day with a defined duration. Interviewee 2 details that "I went every day, almost every day to see him". These visits were characterized by: 1) the main caregiver cannot reside in the hospital during the hospitalization of the premature newborn. 2) visits during the hospitalization of newborns are intended for mothers, fathers only have access to visit their sons and daughters once on the condition of having a negative PCR at that time. Related to this, Interviewee 1 details that the father "[...] was able to go alone the day after he was born... he managed to spend 15 minutes" and the partner of Interviewee 3 could not be in the process of contractions due to problems with obtaining the PCR. In addition, Interviewee 4 could not be accompanied at any time by the father of the child due to the closure of the laboratories at that time. 3) mothers had to wash, disinfect themselves and use personal protective equipment before approaching the room where the newborns were 4) during the visit they were allowed to interact with their child, these interactions were gradual and depended on the regulation state of the premature newborn. For example, interviewee 2 at the beginning of the visits mentions

that: "I couldn't touch him, none of that", however, she says that over time she was able to increase these actions, managing to touch her son. Similarly, **interviewee 3's** contact with her daughter consisted of 1 hour for breastfeeding. In this regard, she says that: "[...] the thing is that my baby was very demanding regarding the milk issue so they gave him supplements many times, therefore many times I couldn't breastfeed him" so she had to stay alone to look at her due to the health condition of her daughter who was undergoing phototherapy. In addition, **interviewee 1** had the possibility of changing his clothes, changing him, supporting the staff in charge with the baby's hygiene tasks, among other activities. 5) Finally, upon discharge, the health personnel give a talk on first aid for babies and explain the characteristics of breastfeeding and the use of fillers.

One of the interviewees said that the midwives encouraged her to remain calm in the different hospital situations, and in relation to this, more than half of them said that the protocols and ways of working were adequate.

# Expectations of the health system

Among the expectations of the health system after their experience, the possibility of visits to the newborn also being possible for the father at least once a week was mentioned. **Interviewee 1 mentioned:** "[...] at least for my partner it was very important". On the other hand, half of the interviewees needed psychological support during the process, and **interviewee 1** even classified psychological support as important especially for the father. They also expressed the need for equal treatment for all mothers, support and meaningful connection with staff, **interviewee 3**: "[...] it is important that the midwife or the gynecologist [...] have attachment to the mother".

More than half of the interviewees highlight the importance of having guidance and psychoeducation during the hospitalization process and health of the premature newborn, on topics such as the national context of the pandemic, the state and prognosis of the baby's health and topics related to parenthood such as the role of mothers and fathers during the process and the characteristics of hospitalization in the neonatal unit that allow mothers and fathers to moderate their expectations and fears at that time.

### **Emotions**

### Thoughts and emotions

In all the interviews carried out, two common emotions were found: "anguish" and "sadness." Some interviewees added "anxiety" and the term "painful", referring mainly to the separation process experienced between mother and child when the child had to remain hospitalized and the mothers had to leave the hospital. This can be seen in the following sentence from interviewee 1 where she mentions that "[...] arriving home and not having him was such a very, very big anguish, knowing if, if he is well cared for... that anguish was so tremendous, tremendous, tremendous". In the case of interviewee 3, the same occurs since she refers to the following: "[...] there is that pain and that anguish of having left her [...]" however, the health team of the neonatology unit counteracted those emotions by giving the mother peace of mind regarding the information that was given to her.

On the other hand, some of the interviewees report that their partners and fathers of the newborns also experienced a rather complex process, this due to the restrictions that had to be carried out because of the pandemic since the fathers were not allowed to make visits. That is why interviewee 1 describes some sensations that the father experienced: "[...] what is the mood, the anguish, the anxiety that he had during all that time wanting him to leave, that he was at home". In this regard, she believes that the attachment of fathers to their children, especially in the first few days, is important and necessary. She points out "[...] understanding when I see my partner affected as well, wanting to see him, wanting to know how he is, wanting to touch him and everything, because for him it was also complex what we talked about at some point, feeling like a father too". We can see that the acquisition and execution of roles was made difficult due to the lack of interaction that some fathers had with their children during the hospitalization process.

## Discussion

This study allows us to describe the experiences of mothers and fathers during the hospitalization of premature newborns in the context of the COVID-19 pandemic. The results of the study, through the classification of topics from the interviews conducted, explore different aspects related to the family unit, relationship with the newborn, performance in daily life activities, roles and routines, both before and during the pandemic, expectations of the health system, as well as affective elements involved in this context.

In relation to the core context, it is observed that the partners of the mothers interviewed play an important role as the main support network during the hospitalization process. The mothers, the main informants in this study, highlight the importance of having the support of the fathers in a comprehensive way, from the most practical aspects as well as emotional support. However, they report a feeling of isolation due to the restrictive measures at the social level and in the unit due to the pandemic, which significantly limits interactions and the possibility of sharing the process of pregnancy, hospitalization and the first days of their children with family and friends, being one of the essential aspects within the elements of support in this process (Ionio et al., 2016; Fowlie & McHaffie, 2004).

Regarding the role of mother/father, several challenges generated by the separation from their children because of the restrictions due to hygiene measures can be identified. Fathers and mothers report the difficulty in fully assuming their role as caregivers due to the impossibility of being physically with their children during this period. This generates a feeling of sadness and difficulties in establishing an effective bond with their newborn children, findings that are related to this feeling as reported by other studies in different parts of the world (Lotterman et al., 2019; Ho et al., 2010). It should be noted that variability was observed during hospitalization, in which the range was from 1 to 16 days, so this variability also significantly affects the possibility of adaptation of fathers and mothers, such as the performance of their dynamics and their occupations.

As for occupations before and during the pandemic, they refer to changes in daily routines and activities, even having an impact on other spheres, such as difficulties in falling asleep, changes in appetite and organization in other social activities, leisure and

free time. International studies mention the importance of the relationship between stress and the impossibility of carrying out their occupations in a normal way, which negatively affects the well-being of mothers and fathers (Balanesi, 2019; Turner et al., 2015). It is also mentioned that co-responsibility is a crucial factor within couples, and in these cases, it can allow them to better cope with this time, considering that dyadic relationships and construction are altered in stressful situations (Ionio & Di Blasio, 2014). According to Hidalgo, Rivera and Hortega, there are mainly three sources of parental stress in the NICU, these being the alteration of the parents' role, the appearance of the baby, and the images and sounds of the environment. They also add that communication with health personnel and the contextual barriers of the NICU contribute to the development of stress in parents, which coincides with the findings of this research. (Hidalgo et al., 2020)

On the other hand, some mothers report that due to the restrictions resulting from the health measures, they were allowed to spend more time alone with their children, something perceived as a positive change. It should be noted that during the prepandemic stage, mothers and fathers had established occupations that included housework, paid activities, among others, occupations that provided emotional support, provided by the feeling of purpose, satisfaction and connection with the environment. However, because of this crisis, it implies a limitation in the feeling of being useful and having a normal performance in the occupations expected in the parenting process (Gibbs et al., 2010).

In relation to the hospital context, mothers expressed that they had limited access to visit their sons and daughters due to the protocols established by the unit. Visits were restricted to mothers, and fathers could only access them in special circumstances, such as having a negative PCR test result. These restrictions generated anguish and sadness in mothers and fathers, who expressed the need for greater emotional support and accompaniment during the hospitalization process, considering that this pandemic affected not only the hospital context, but was transversal in all aspects of their lives. Despite this feeling, the importance of receiving clear information and psychoeducation about the health status of newborns and the context of the pandemic from the team is highlighted.

Regarding emotions, anguish and sadness were the predominant emotions experienced by mothers and fathers during the hospitalization of newborns. These emotions were related to separation, the uncertainty of what this extraordinary situation generated, in addition to the lack of being able to fully participate in the care of their children, which can make it difficult to establish the parent-child bond, generating frustration and affecting the acquisition of parental roles as mentioned by Ionio et al. (2017) where it was shown that mothers of preterm babies may have difficulties in recognizing and identifying cues and as a result a decrease in interaction (Mira et al., 2022; Ionio et al., 2017). In agreement with this finding, Romero, Argumedos and Pérez express that parents of premature babies are more likely to develop mental health problems, problems in interaction with the baby, mainly in their mother-child relationship, confusion in the interpretation of their babies' cues and even difficulties in the relationship between parents (Romero et al., 2019)

Regarding the state networks and programs implemented during the pandemic, the importance of having external support and resources available to families during the

pandemic was evident. The scarce information, uncertainty due to the lack of central guidelines, increased mobility restrictions, limited visits and the reduction of support services may have affected the ability of mothers and fathers to access the necessary help. It is essential that health systems and social policies respond to the needs of families and provide adequate solutions in crisis.

### **Conclusions**

The COVID-19 pandemic is a reality that continues to coexist in the daily life of our society, which directly influences the various areas of individuals belonging to this society. In this way, it is evident that the area of Mental Health of mothers/fathers with hospitalized newborns is not left out of being affected by the contingency.

This hospital area is also under strict sanitary measures due to COVID-19, which makes a big difference in visits to hospitalized babies during this period. Such restrictions generate stress for parents because the first contacts with their children are mainly affected. This can be exacerbated by the current approach of the Health System, because these extreme sanitary measures and the reorganized efforts of health personnel due to the current pandemic restrict the development of the mother-father-child triad, since visits are exclusive to mothers. This also has a negative impact on parental mental health because there are no meetings between all the members of the triad.

The above also shows a patriarchal view of parenting in our society that is expressed in our Health System, since the restriction of visits exclusively to mothers of newborns continues to limit women in the task of care and leaves men out of their parental role.

Furthermore, it is important to consider that within the expectations of the Health System, a support process is required during the hospitalization of mothers and newborns. This is essential because, under the current pandemic, many procedures have been modified and people who go to health services are unaware of the new regulations, which can generate more stressful situations in the Mental Health of users. On the other hand, it is important to review the restrictions on visits to hospitalized mothers since carrying out this process alone also has a negative effect on their Mental Health. In addition, it is essential to include the father in this process with support and visits so that the triad can develop in the most satisfactory way possible.

This study on the experiences of mothers and fathers during the pandemic highlights the importance of addressing occupational aspects, which allows establishing a structure, a sense of purpose, satisfaction and emotional well-being. During this time, caregivers have had to face drastic changes in assuming new roles and responsibilities, all of this generating a significant emotional overload, with little external support (networks).

These findings highlight the importance of considering occupational and occupational therapy aspects in the design of team intervention plans, providing support in the occupational demands of the family, the organization of time, tasks and roles that promote emotional well-being and social connection. This allows for a more comprehensive approach that considers both the needs of the newborn and emotional support for care. In this way, families can better cope with the difficulties that arise thanks to adequate and effective support, promoting well-being, role fulfillment and improving quality of life.

# References

- Balanesi, M. (2019). Percepciones de las madres acerca de los cuidados brindados por el equipo de salud a sus hijos durante su internación en la Unidad de Cuidados Intensivos Neonatales en un hospital público materno-infantil. *Revista de Enfermería Neonatal*, (31), 22-29.
- Chile. Ministerio de Salud. (2017). Plan nacional de salud mental. Recuperado el 3 de julio de 2023, de https://www.minsal.cl/wp-content/uploads/2017/12/PDF-PLAN-NACIONAL-SALUD-MENTAL-2017-A-2025.-7-dic-2017.pdf
- Chile. Gobierno. (2020a). Saludablemente. Recuperado el 3 de julio de 2023, de https://www.gob.cl/saludablemente/
- Chile. Gobierno. (2020b). Salud mental en situación de pandemia: documento para mesa social. Recuperado el 3 de julio de 2023, de https://cdn.digital.gob.cl/public\_files/Campa%C3%B1as/Corona-Virus/documentos/Salud\_Mental\_V2.pdf
- Chile. Ministerio de Desarrollo Social y Familia. (2023a). *Acerca de Chile Crece Contigo*. Recuperado el 3 de julio de 2023, de http://www.crececontigo.gob.cl/acerca-de-chcc/
- Chile. Ministerio de Desarrollo Social y Familia. (2023b). *Chile Crece Contigo: 0-2 años*. Recuperado el 3 de julio de 2023, de http://www.crececontigo.gob.cl/temas-y-recomendaciones/ninos-y-ninas-de-0-a-2-anos/
- Chile. Ministerio de Salud. (2023c). Saludablemente: estrategia integral. Recuperado el 3 de julio de 2023, de https://www.minsal.cl/saludablemente/estrategia-integral/
- Escartí, A., Boronat, N., Llopis, R., Torres, R., & Vento, M. (2015). Estudio piloto sobre el estrés y la resiliencia familiar en recién nacidos prematuros. *Anales de Pediatria*, 84(1), 3-9.
- Fowlie, P., & McHaffie, H. (2004). Supporting parents in the neonatal unit. *BMJ*, 329(7478), 1336-1338.
- Gibbs, D., Boshoff, K., & Lane, A. (2010). Understanding parenting occupations in neonatal intensive care: application of the person-environment-occupation model. *British Journal of Occupational Therapy*, 73(2), 55-63.
- Hidalgo, B., Rivera, M. E., & Ortega, M. C. (2020). Intervenciones en el manejo de estrés para los padres con neonatos hospitalizados: revisión integrativa de la literatura. Revista Iberoamericana de Educación e Investigación en Enfermería, 10(4), 45-55.
- Ho, H., Chen, W., Tran, C., & Ko, C. (2010). Parental involvement in taiwanese families: father-mother differences. *Childhood Education*, 86(6), 376-381.
- Ionio, C., & Di Blasio, P. (2014). Post-traumatic stress symptoms after childbirth and early mother—child interactions: an exploratory study. *Journal of Reproductive and Infant Psychology*, 32(2), 163-181.
- Ionio, C., Colombo, C., Brazzoduro, V., Mascheroni, E., Confalonieri, E., Castoldi, F., & Lista, G. (2016). Mothers and Fathers in NICU: the impact of preterm birth on parental distress. *Europe's Journal of Psychology*, 12(4), 604-621.
- Ionio, C., Lista, G., Mascheroni, E., Olivari, M., Confalonieri, E., Mastrangelo, M., Brazzoduro, V., Balestriero, M., Banfi, A., Bonanomi, A., Bova, S., Castoldi, F., Colombo, C., Introvini, P., & Scelsa, B. (2017). Premature birth: complexities and difficulties in building the mother-child relationship. *Journal of Reproductive and Infant Psychology*, 35(5), 509-523.
- Lotterman, J., Lorenz, J., & Bonanno, G. (2019). You Can't Take Your Baby Home Yet: A Longitudinal Study of Psychological Symptoms in Mothers of Infants Hospitalized in the NICU. *Journal of Clinical Psychology in Medical Settings*, 26(1), 116-122.
- Mira, A., Coo, S., Bastías-Lemp, R., & González, R. (2022). Interacciones entre las madres y sus bebés prematuros moderados durante la hospitalización. *Andes Pediátrica*, 93(6), 889-897.
- Ouwendijk-Andréa, M., Bröring-Starre, T., Molderink, A. C., Laarman, C. A. R. C., Oostrom, K. J., & van Dijk-Lokkart, E. M. (2020). Parental emotional distress after discharge from the neonatal intensive care unit: a pilot study. *Early Human Development*, 140, 104892.

- Palma, I. E., von Wussow, K. F., Morales, B. I., Cifuentes, R. J., & Ambiado, T. S. (2016). Estrés en padres de recién nacidos hospitalizados en una unidad de paciente crítico neonatal. Revista Chilena de Pediatria, 88(3), 332-339.
- Romero, K., Argumedos, C., & Pérez, D. (2019). Estudio de la interacción mamá-bebé prematuro a través de la escala Brazelton y algunas implicaciones sobre la salud mental de las madres. *Ocho Estudios de Salud Mental*, 40(2), 39-72.
- Roque, A. T. F., Lasiuk, G. C., Radünz, V., & Hegadoren, K. (2017). Scoping review of the mental health of parents of infants in the NICU. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, 46(4), 576-587.
- Salgado Lévano, A. C. (2007). Investigación cualitativa: diseños, evaluación del rigor metodológico y retos. *Liberabit*, 13(13), 71-78.
- Toso, P. (2019, 15 mayo). XVIII Seminario Internacional Avances en Pediatría Neonatal. *SAVAL net*. Recuperado el 3 de julio de 2023, de https://www.savalnet.cl/mundo-medico/galerias/xviii-seminario-internacional-avances-en-pediatria-neonatal.html
- Turner, M., Chur-Hansen, A., Winefield, H., & Stanners, M. (2015). The assessment of parental stress and support in the neonatal intensive care unit using the Parent Stress Scale Neonatal Intensive Care Unit. Women and Birth; Journal of the Australian College of Midwives, 28(3), 252-258.

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