# Supporting a double hospitalization during the pandemic: The experience of fathers whose infants were hospitalized while their mothers were also hospitalized due to COVID-19

Constanza Mena<sup>a</sup> (0), Francisca Cortés<sup>b</sup> (0), Macarena Romero<sup>a</sup> (0)

# ABSTRACT

*Introduction.* The hospitalization of a baby in the neonatal intensive care unit may be highly stressful for both mothers and fathers, and this was even more intense in the context of the COVID-19 pandemic. To date, no studies have been found that describe the experience of fathers who underwent the simultaneous hospitalization of their partner and newborn infant during the COVID-19 pandemic.

**Objectives.** To explore the experience of fathers who had their babies hospitalized in the Neonatal Unit while their partner were hospitalized due to worsening of COVID-19.

*Population and method.* Four semi-structured interviews were conducted and analyzed using an interpretative phenomenological analysis.

**Results.** Four moments were identified when specific emotions arose: a) onset of infection, b) partner hospitalization, c) baby birth, and d) baby hospitalization. Guilt, fear, death anxiety, loneliness, and uncertainty appear very early and are later combined with emotions such as happiness and empowerment, among others. The lack of physical contact with their partners and babies and failures in communication with the health care team stand out as factors that hinder the exercise of the paternal role, while an effective communication with the health care team and active participation in the baby's care are protective factors. Fathers fulfill multiple roles, the most important of which is their role as protectors.

**Conclusions.** Family-centered communication and care and active involvement in baby care may potentially protect against the impact of this complex experience of double hospitalization.

Keywords: COVID-19; qualitative research; mental health; neonatal intensive care units; father.

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<sup>a</sup> Unit of Neonatology, Clínica INDISA, Santiago, Chile; <sup>b</sup> Division of Neonatology, Hospital Clínico Universidad Católica, Santiago, Chile.

Correspondence to Constanza Mena: cmena@neored.net

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# **INTRODUCTION**

The hospitalization of a newborn (NB) in a neonatal intensive care unit (NICU) may be highly stressful for both fathers and mothers. Fathers often emotionally support the mother and baby without receiving psychological support for themselves,<sup>1</sup> take on communication with the extended family, take care of other children, and some must return to work days after the birth.<sup>2,3</sup>

Not being able to protect their infants from pain, the physical appearance of their NBs,<sup>3,4</sup> restricted visiting hours, the physical environment of the unit, among other factors,<sup>5</sup> may increase stress levels in the NICU. About 41% of fathers experience minor depression within the first 2 weeks of their babies' hospitalization,<sup>6</sup> and although it decreases 2 months after discharge,<sup>6</sup> the impact may remain; one-third of fathers suffer post-traumatic stress 4 months after the birth.<sup>7</sup>

In addition, extended visiting hours, gathering with other fathers, an effective communication with the healthcare team, and participation in baby care<sup>8</sup> are factors that promote the paternal role, understood as a dynamic and subjective behavioral pattern of the exercise of fatherhood.<sup>9</sup>

Hospitalization of a NB during the COVID-19 pandemic was a demanding experience, with fathers having to bond with their baby in the midst of health restrictions.<sup>10</sup> Fathers whose babies were hospitalized during the pandemic had higher levels of depression and anxiety than those who had their children hospitalized outside the context of a pandemic.<sup>11</sup> Thus, the hospitalization of a NB during the pandemic may have a more severe and longer lasting impact due to the accumulation of traumatic events.<sup>12</sup>

Some fathers had their partners hospitalized at the same time; another factor that impacted on their mental health.<sup>13</sup> To date, no studies have been found that assessed the experience of fathers who had their partners hospitalized due to COVID-19 at the same time as their infants were admitted to the NICU.

The objective of this study is to explore the experience of these fathers by describing their emotional experiences, the barriers and facilitators of their paternal role, and the roles acquired during the hospitalization of their NB.

# **POPULATION AND METHOD**

An exploratory qualitative study with a phenomenological perspective was conducted with fathers whose babies were hospitalized in the NICU of a private clinic in Chile in the context of the SARS-CoV-2 pandemic and whose partners —the mothers of their NBIS— were hospitalized due to COVID-19 during the 2020–2021 period.

A 1-hour online semi-structured interview was conducted 5 to 6 months after birth. All babies had been discharged at the time of the interview. Data were collected on the sociodemographic and clinical history of the pregnancy and the baby, with a special emphasis on NBs birth and hospitalization experience (*Supplementary material*).

Interviews were recorded and transcribed verbatim for analysis.

### **Data analysis**

The interpretative phenomenological analysis methodology<sup>14</sup> was implemented to explore the subjective perspectives of participants,<sup>15</sup> which requires small samples to delve into personal meanings.<sup>16</sup>

#### **Reliability and validity**

The interviews were analyzed independently by 2 researchers, who identified emerging patterns. The information was then triangulated and a single interpretive account was generated and reviewed under supervision. The analysis process was recorded in detail.

#### **Ethical considerations**

The study was approved by the Scientific Ethics Committee of Clínica Indisa.

# RESULTS

Of a total of 5 eligible fathers, 4 gave their consent to participate, an adequate sample for a small-scale qualitative study such as this one.<sup>17</sup>

*Table 1* describes the sociodemographic, perinatal, and hospitalization history data. All fathers were in a stable relationship with the mother of their baby at the time of the interview. All babies had been born preterm due to severe maternal complications caused by COVID-19.

# **Emotional experiences of fathers**

Through the fathers' accounts, 4 phases with specific emotions were identified: a) onset of infection, b) partner hospitalization, c) baby birth, and d) baby hospitalization.

a. The onset of infection marked the beginning of an intense experience. Guilt appears as one of the most prominent emotions. Despite following protective measures to prevent the

Variables	P1	P2	P3	P4
Sociodemographic data				
Age (years)	25	38	31	30
Level of education	ITCD	CTCD	CTCD	CTCD
Employment status	Active	Active	Active	Active
Health system	Public	Public	Private	Public
No. of children	1	3	2	1
Mental health history				
Paternal mental health	NH	NH	NH	NH
Maternal mental health	NH	NH	NH	AD
Pregnancy history				
Planned pregnancy	No	No	Yes	No
Spotting or miscarriage	No	Yes	Yes	No
Fertility treatments	No	No	No	No
Admission for ultrasounds/controls	Sometimes	No	Yes	No
Prenatal diagnosis	No	No	No	No
Maternal complications during pregnancy	No	No	No	No
Childbirth history and hospitalization				
Type of delivery	ECS	ECS	ECS	ECS
Presence during childbirth/C-section	No	No	Yes	No
Visits to Neonatology Unit in the first 24 hours	No	Yes	Yes	No
NB history				
Gestational age at birth	32	31	31	30
Adequacy of birth weight	AGA	AGA	LGA	AGA
Invasive mechanical ventilation	No	No	Yes	No
Non-invasive mechanical ventilation	Yes	Yes	Yes	Yes
Surgery	No	No	Yes	No
Nutrition 0 > 48 hours*	No	No	Yes	Yes

# TABLE 1. Characteristics of participants

\*No enteral nutrition started for more than 48 hours.

NB: newborn; AGA: adequate for gestational age; LGA: large for gestational age; P: participant; ITCD: incomplete technical college degree; CTCD: complete technical college degree; NH: no history; AD: anxiety disorder; ECS: emergency C-section.

infection, 3 of the 4 participants were the first member in their households to become infected and felt responsible for the initiation of the infection and its consequences. "I cried a lot because I felt guilty, because of the whole situation she was going through. (...) If I was the one who brought it home, why am I not the one going through this and she's not here, at home, with her little baby girl waiting?" (P2).

The fear associated with transmitting the infection to their partners and children is another emotion described by the fathers. "Not knowing what was going to happen, if my wife was already infected, if the children (...) that I could, could be the cause of... something serious for the family" (P3).

b. The hospitalization of the partner due to COVID-19 was identified as a second moment. The health restrictions in place meant a physical separation from them and their unborn babies. They were not able to accompany and care for them during hospitalization, and feelings of loneliness and emptiness arose. "I felt lonely (...) they were taking something away from me [the baby], that maybe might not come back (...) I was left feeling empty inside, in my soul, my body, and my brain; I felt like they tore it away from me and I was left with only my body" (P4).

Death anxiety associated with the possibility that their partner or baby might die also emerged. "I was already kind of traumatized thinking what if they call me and tell me that she has died (...) I never thought that she would get sick and then all of a sudden we were there at the point of death" (P2).

c. After the birth of the baby, positive emotions arose for the first time regarding meeting their baby, although the emotions described above remained. The accounts were of high emotional intensity and filled with ambivalence. "The burden of not being able to see him, of not having been there at the time of his birth, then there were mixed feelings (...) happiness obviously because my son was born... But also sadness because of everything that was going to happen" (P1).

For the fathers who were not able to be present during birth, this was a devastating experience when they connected with their lack of a sense of belonging and ownership in such once-in-a-lifetime event. "It's hard to know that your partner is giving birth to your daughter and not being able to be with her. You don't have that connection of being there during labor, and knowing that there is someone inside your partner who is also yours" (P4).

d. During the hospitalization of their babies, the fathers took on a participatory role because the NICU allowed visits during the pandemic. Fathers managed to consolidate feelings of happiness by feeling involved in the lives of their NB and strived to stay by their side and be useful. The perception of empowerment and belonging in their paternal role marked this stage. "As a dad (...) you want to learn everything you can do for your baby, anything you can do to take care of them (...) I was super involved while at the clinic" (P1).

However, ambivalent feelings towards caring for their NB appeared. Fathers described being fearful of their baby's frailty and, at the same time, happy to be with them and be able to care for them. "I was also very scared, even of holding her (...) I was afraid that she was going to slip out of my arms, because she was so small" (P2).

Concern also remained about the clinical course of their partners, with some still intubated or hospitalized in the ICU. "I was, oof, I was happy, but at the same time I was super sad because [my partner] was going to be intubated... so I had mixed feelings at that moment..." (P1).

#### Barriers and facilitators of the paternal role

The lack of physical contact with their partners and babies due to COVID-19 restrictions stood out as a barrier for the development of their fatherhood. Despite the restrictions, fathers mentioned their desire to be close to their babies to feel active in their paternal role. "I felt bad, I wanted to be with him (...) as my brother-in-law's brother couls go in, he videocalled me... so I was there, standing in the park outside the clinic, watching him there feeling sad because I was so close and was not able to be with him" (P1).

Failure to communicate with their partners' healthcare teams increased the sense of fear and helplessness. "That Sunday I came home, not knowing what to tell my children because we hadn't heard any news about her since Saturday [gets emotional] how can I tell my mother-in-law that I don't know where she is? If she was in your care, how could you not look after her? [crying]. That was one of the worst days" (P2).

In contrast, an effective communication with the healthcare team, who were available to answer questions and provide clear information, promoted emotional well-being. "She [the gynecologist] gave me the peace of mind that she was in very good hands (...) because she explained it to me with apples and pears (...) and left me in no doubt" (P3).

An active participation in infants care, encouraged by the NICU staff, helped them feel active and important in the relationship with their NB and their recovery. "It has been a very important learning experience for me, being able to be a dad without a mom, because I had to be a mom and a dad during those months when my wife wasn't there, so it has been very positive, I realized I can do a lot of things" (P3).

# Fathers' roles during the hospitalization of their newborns

The role of protector and supporter emerges transversally in all accounts. Fathers appear strong and contained to provide peace of mind to their partners and families. "I also didn't want to overwhelm her with everything I went through, so that she would not absorb it, because I knew she was still recovering" (P3).

Fathers also fulfilled multiple functional roles, mainly oriented to practical needs, financial and work responsibilities, and receiving and transmitting medical information about their partners and babies. "I had to be everywhere, here and there at the same time so I could be with [my older children] and with [the NB] at the clinic, and then, in the afternoon, receive information [about my partner]" (P3). This is a highly demanding experience that is impossible to sustain over time. "It was so much pressure....that one day I, I couldn't bear it... [coughs, silence... gets emotional]" (P2).

#### DISCUSSION

We explored the experiences of fathers whose NBIs were hospitalized in the NICU while their

partners were hospitalized due to COVID-19 and identified 4 phases that described their emotional experience. First, there is guilt and fear, which are emotions that have been described in the pandemic,<sup>18</sup> although these fathers spoke about their fear for the impact that the infection may have on their families, not on themselves. The latter is in line with what other authors have pointed out about the paternal role; fathers tend to put off their own needs in order to protect their immediate family.<sup>19,20</sup> In the second stage, loneliness and death anxiety prevail, which, although they are common among people with severe COVID-19,18 in the case of a father who takes on the responsibility for the care of his family and who also feels responsible for the dissemination of the infection-and potential death-, are feelings experienced with great intensity.

In addition, the physical separation from their partners and their unborn child experienced by these fathers represented a break in the development of the bond with their child. The pandemic health protocols restricted the participation of fathers in ultrasounds and childbirth and limited their possibilities to build their role together with their partners, which may constitute a barrier to perform their protective role. This could have negative emotional consequences; it is a risk factor in the development of the father-child bond.<sup>21</sup> For a father, being separated from their unborn child can be very devastating as they lose every possibility of contact. These results show that fathers' involvement is a need, as evidenced by their efforts to be present despite the restrictions in place.

Subsequently, the birth allows them to resume the protective and participatory role they lost when their partners were hospitalized. Some authors describe the father's involvement during childbirth as a transformative and challenging moment at an individual and family level.<sup>22</sup> These results also show that the absence of the father at birth can be a devastating experience for them, resulting in much disconnection.

Finally, physical contact with the baby and active participation in baby care empowers fathers and facilitates the development of a safe bond.<sup>23</sup> However, the fathers of preterm infants are often afraid to touch their babies because they see them as being frail.<sup>24</sup> The group of fathers included in the study initially lacked the company of their partners; they had lost the mutual support that facilitates the exercise of their paternal role. Not being able to experience co-parenting with a partner may lead to an intense sense of loneliness<sup>10</sup> and more feelings of anxiety, anger, and depression, potentially impacting their bond with their baby.<sup>25</sup> The healthcare team is essential to encourage and accompany the encounter between the father and the baby.

The quality of communication between the healthcare teams and the patient's close relatives was a determining factor in the emotional well-being of participants. Studies confirmed that the care provided by healthcare teams is one of the most important supportive factors, providing a sense of safety and trust.<sup>26</sup> A twoway communication may alleviate the fear and uncertainty experienced during hospitalization due to COVID-19.<sup>27</sup>

A challenging aspect of supporting fathers is that they often repress or put off their emotions in order to support their family,<sup>19</sup> which puts them at risk of making their needs less seen. Offering a containing environment where they can express themselves openly is very relevant<sup>3</sup> not only in the context of the pandemic, but also from the first moment they face the birth and hospitalization of their babies in the NICU. Fathers are reference and contact figures for both the healthcare team and their families, in addition to supporting the care of the mother and the baby in the first hours after birth, especially when the mother has complications.<sup>3</sup>

Regarding the limitations of this study, it is worth noting that variables associated with relationship quality and pregnancy planning, which influence prenatal bonding<sup>28</sup> and could have affected the results, were not assessed. Further studies are also required to discriminate the impact of the pandemic context from that of the partner's hospitalization.

The results of this study raise new questions about the impact on the mental health of these fathers; quantitative studies are required to determine the course of their symptoms. An effective communication with the healthcare team and an active involvement in hospitalization may protect against the impact of this complex experience of double hospitalization. ■

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