

Establishment of the Relationship Between Fathers and Premature Infants in Neonatal Units

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ABSTRACT

Background: Parents and their preterm infants (born between 32-37 weeks of gestation) are often overlooked by the healthcare system. And very little attention is given to the relationship parents develop with their infants in the neonatal unit (NNU). Specifically, very few studies focused on fathers and how they establish a relationship with their infants. However, we know that the father–infant relationship is extremely important for their future social development and more.

Purpose: This article presents the results of a qualitative study of the establishment of the father–premature infant relationship in an NNU.

Methods/Search Strategy: The study's theoretical framework was Bell's model of the parent–infant relationship, which encompasses discovery, physical proximity, communication, involvement, and emotional attachment. Ten fathers of premature infants (gestational age: 32-37 weeks) participated in 2 semistructured interviews (1 individual and 1 "in situ," ie, at the infant's bedside) during the first week following the premature birth.

Findings/Results: The results confirm the emergence of different components of the relationship between fathers and their children from the first days of hospitalization in the NNU. The commitment component is the basis for the development of other components in the relationship with their children. Furthermore, involvement influences the deployment of emotional attachment, discovery, physical proximity, and communication toward premature infants. Similarly, the 5 themes of the model can be seen as forming a dynamic nexus in which each theme influences the others.

Implications for Practice: For neonatal nurses, this model of the early father–child relationship helps the understanding of the deployment of that relationship according to 5 components. Similarly, it provides awareness of the experiences of fathers so that nurses can be better equipped to support and individualize interventions tailored to their specific needs, thus helping them develop and sustain the relationship with their children.

Implications for research: This study allows us to better understand fathers' experience regarding the establishment of the relationship to their premature infants born between 32 and 37 weeks of gestation. However, there is little understanding about the early paternal experience and more research on this dyad is necessary in neonatology.

Key Words: attachment, Bell's model, fathers, neonatal unit, parent–infant relationship, premature infant

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An increased rate of premature births has been reported throughout the Western world in the last few years.¹ This rate reached 7.1% in Canada² and 11.39% in the United States.³ When an infant is born before term, parents must abruptly assume their parental roles and cope with the consequences of their infants' hospitalization in an intensely public and technological place, the neonatal unit (NNU).⁴ As well, because premature birth modifies the circumstances in which infants first encounter their parents, the establishment of parent–infant relationships in NNUs presents, for them, a challenge.⁵

Over the years, the mother–premature infant dyad has been more extensively studied than the father–infant dyad in the establishment of parent–infant relationships. Some authors have suggested that the research focus on mothers reflects interest not only in the unique maternal perspective but also in the greater presence of mothers in NNUs.⁶ Research studies dedicated to fathers are few, but

some studies include fathers in their presentation of results of the experience of parents in NNUs.⁷⁻¹³ Nevertheless, fathers and mothers are different and generally react differently to the hospitalization of their infants in NNUs.¹⁴

When father–infant studies are consulted, they are devoted mainly to the description of the experience and role of fathers with their children.^{6,11-13,15,16} For example, Fegran et al⁵ tried to add to the understanding of the experience of the fathers in relation to their children admitted to the NNU. They concluded the fact that accompanying their children from the delivery room to the NNU is a source of satisfaction for fathers. In other studies, it was concluded that fathers also engage with their children by ensuring their presence at their infants' bedside.^{6,15-19} Similarly, other studies demonstrated that they want to protect their children.^{18,19} Furthermore, fathers want to support the mother–child relationship^{6,8,12} by acting as a bridge between the two. As for their participation in the care of their children, some fathers do not express the need to be in control²⁰ whereas others want to be more involved.^{15,21} In the first few days following the birth, fathers mention being afraid of hurting their children if they interact with them physically.^{5,7} Thus, some prefer a more distant interaction in the form of speaking to and watching over them.⁸ Finally, it seems that paternal involvement in infant care facilitates the development of emotional attachment and paternal skills.¹⁶

It should be noted that studies of the father–premature infant dyad, and those involving both parents, had a variety of objectives but seemed to provide only a partial portrait (mainly from their experience and involvement as fathers) of the development of the relationship between fathers and premature infants. Furthermore, all these studies were conducted in neonatal intensive care units, and the experience of parents of infants in NNUs, offering less specialized services, may be different. Moreover, it must be pointed out that there have been no studies on this subject for infants classified premature (born between 32 and 37 weeks of gestation). It may well be that the development of a mutual relationship between fathers and NNU-hospitalized premature infants of this gestational age is subject to different challenges.

In this study, the development of the father–premature infant relationship is described in terms of Bell's²² model, which comprises 5 themes—discovery, physical proximity, emotional attachment, communication, and involvement. *Discovery* is the sum of the parents' initiatives to know their infants in order to understand the infants' behaviors and needs. *Physical proximity* includes physical contact with the infant and the quest for such contact. *Emotional attachment* is defined as emotional interactions and the expression of feelings shared with the infant. *Communication* is observable as the initiation and maintenance of interactions.

What This Study Adds

- The expression of components of the early father–child relationship.
- The commitment component is the basis for the development of other components in the relationship with their children.
- A new understanding of how fathers establish the relationship with their premature “infants” born between 32 and 37 weeks of gestation admitted to the neonatal unit.

Involvement represents the parents' sense of responsibility toward their infants and capacity to truly engage with them. This model is the extension of qualitative studies carried out to identify the manner in which the parent–infant relationship is constructed during the first months following full-term birth.²²⁻²⁵

STUDY

Objective

The objective of this research was to describe the establishment of the father–premature infant relationship in an NNU.

Methodology

This study used a grounded theory²⁶⁻²⁸ design, a systematic approach to the description and analysis of the principal sociopsychological and structural processes active in a given social context.²⁹ In this study, grounded theory was used to generate empirical descriptions of the development of the relationship between fathers and their premature infants hospitalized in NNUs.

Setting and Participants

The study was conducted between 2009 and 2012 in a level IIIb NNU of the largest university mother–baby center in Canada³⁰ with a capacity of 65 beds. The center admits more than 1100 infants annually.³¹

The study participants were fathers of premature single-birth infants with a gestational age between 32⁰/₇ and 32⁶/₇ weeks; this age corresponds to standard “premature”^{32,33} classifications. Other criteria were established to avoid including infants with health issues other than prematurity (Table 1).

Data Collection

All data were collected by the principal researcher; research nurses assisted in parent recruitment. During the first week following the premature birth, the fathers were contacted to plan 2 semistructured interviews (one individual interview, conducted in an interview room, and a follow-up interview at the infant's bedside) conducted the same day. Two care

TABLE 1. Selection Criteria for Infants and Parents

Infants	Parents
Single pregnancy, born between 32-37 weeks of gestational age, age-appropriate weight (>3rd and <97th percentile)	Biological parents, aged 18+ y
Hospitalization in an neonatal unit, no imminent discharge or transfer	First premature birth
No birth defect, serious medical complications, or risk of death	Parents cohabitating at the time of study, adequate conversational, reading, and writing skills in French
No placement or adoption	No known acute psychiatric illness, substance abuse disorder, family violence

guidebooks, based on Bell's²² 5-theme model, were developed for fathers. Sociodemographic data were also collected through a questionnaire, as well as other information through a daily journal and the infant's medical record.

Data Analysis

The interviews were recorded on audiotape, and the complete transcript was analyzed. The transcripts were coded using the QRS NVivo 8 data management software package. The coding of data was double-checked by other members of the research team. The data were analyzed on the 3 levels of coding from Strauss and Corbin^{26,27}: open, axial, and selective coding.

Ethical Considerations

The study was approved by the Research Ethics Committee of the Centre hospitalier universitaire (CHU) Sainte-Justine, of the CHU de Sherbrooke, and of the Université du Québec à Trois-Rivières.

RESULTS

Initially, 20 fathers were approached for participation in the study; of these, 12 accepted and only 2 agreed to a second interview (infant's bedside). Thus, a total of 14 interviews were conducted. The main reason offered by fathers who declined to participate was lack of time. Their sociodemographic and personal data are presented in Table 2. The mean gestational age of their infants was 34 $\frac{2}{7}$ weeks and the mean birth weight was 2130 g. Characteristics of the premature infants are presented in Table 3.

The results are presented in themes of the father–infant relationship (involvement, emotional attachment, discovery, physical proximity, and communication) and in decreasing order of importance. Figure 1 is a representation of the importance of each theme and its role in the father–premature infant relationship.

Involvement

Involvement is the capacity of fathers both to assume new responsibilities and to truly involve themselves with their infants.²² In this study, involvement occupies a central role in the establishment of the

father–premature infant relationship and takes the form of accompanying and protecting the infant as well as supporting the mother–premature infant dyad. Also, participating in infant care and conveying news back to the mother define paternal involvement with infants in NNUs.

Accompany and Protect the Infant, and Support the Mother–Infant Dyad

From the very first minutes following the birth of their infants, fathers become involved with their infants and accompany them. All the fathers accompanied their infants from the delivery room to the NNU. For most fathers, this was a way to inquire about their infants' medical condition, reassure themselves, and observe the situation. This accompaniment engendered positive feelings in some fathers.

I'm the one who accompanied my daughter to neonatology. I was able to be at her side. It made me very happy. (F6)

Paternal involvement also took the form of protecting the infant. Half of the fathers mentioned the need to ensure their infants were not left alone, a desire to remain close to their infants, and, by extension, difficulty separating themselves from their

TABLE 2. Sociodemographic and Personal Characteristics of the Fathers (N = 12)

Characteristic	n	Characteristic	n
Age, y		Educational level	
18-25	2	High school or less	3
26-35	6	Trade/vocational	4
>35	4	School	5
		University	
Marital status		Total family revenue	
Married	2	\$20,000-\$29,999	2
Common law	10	\$30,000-\$39,999	2
		\$40,000-\$49,999	2
		\$50,000-\$59,999	0
		>\$60,000	6
Infant's birth order		Employment status	
		Full-time	8
1	8	Part-time	2
2	3	Occasional part-time	1
3	1	Full-time studies	1

TABLE 3. Characteristics of Premature Infants (N = 12)

Characteristic	n	Characteristic	n
Sex		Delivery	
Male	7	Vaginal	7
Female	5	Cesarean	5
Gestational age, wk		Birth weight, g	
32 to 33%	5	<1500	1
34 to 36%	7	1501-2000	3
		2001-2500	4
		>2500	4
Apgar score (at 5 min)		Hospital unit	
<7	0	Intermediate care	8
7	12	Case-specific postnatal monitoring	4

infants. This desire to be near their infants also takes the form of a desire for discovery, interaction, and touching.

It's important that I can see him, talk to him, simply touch him so that he knows I'm there. (F5)

Another important dimension of paternal involvement is the support of the mother–premature infant dyad, which was expressed by half of the fathers. Support for the mother may take the form of the father's presence near her, desire to take care of her, and desire to have her involved with the infant.

I think that the mother is more important than the father, even though both would like to hold her. The

baby was with the mother from the beginning, since conception. (F8)

The fathers described their support for the mother–premature infant dyad as a dual concern for both the mother and the infant. Support for that dyad is also marked by a desire to support the mother–premature infant relationship, as if the father was the glue that binds the 2 together.

I fulfilled my role as father, then I took it and gave it to her mother. I let Mom take my place. (F1)

Participate in (or Abstain From) Infant Care

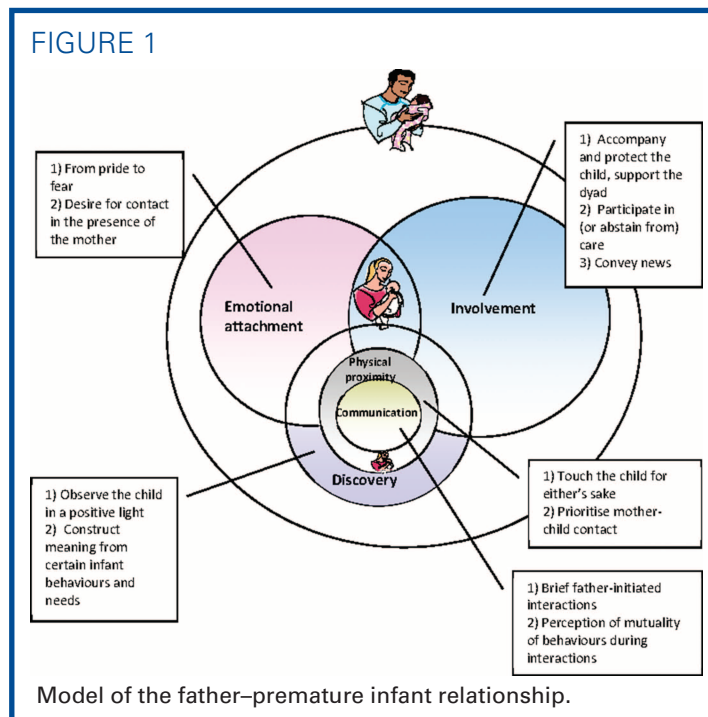
One-third of the fathers stated that they participated in infant care, and an equal number stated that they did not. The main reasons offered for abstaining from infant care were failure to take initiative, refusal to perform certain types of care, and fear of not providing the care correctly.

I didn't always feel comfortable holding him or giving him a bottle. I didn't want to do anything wrong. (F5)

On the contrary, a reduction in technological support for the infant and the forging of a partnership with the spouse were reported to favor participation in care.

Convey News

The last way fathers involve themselves in the relationship with their infants is by conveying news. So, the fathers shuttled back and forth between the NNU and the mother's room to convey news. They



were their spouses' eyes and ears, who were often unable to follow their infants or rapidly go to the NNU in case of a medical deterioration.

Emotional Attachment

Emotional attachment takes the form of the emotional interactions between parents and their infants.²⁸ In this study, the fathers' emotions in the context of the father–premature infant relationship ranged from pride to fear and included a desire for emotional interaction in the presence of the mothers. Emotional attachment was the second most important theme.

From Pride to Fear

The results indicate that during the development of the father–infant relationship in the NNUs, fathers may experience positive, negative, or ambivalent emotions. In fact, the majority of fathers mentioned that their infants had elicited this type of feeling, an amalgam of pure happiness, appreciation for the beauty of life, pride, and wonder. Half of the fathers stated that they were happy and confident with regard to the health of their infants because their infants exhibited behaviors and reactions associated with favorable development. For example, positive feelings were elicited by vigorousness, response to paternal stimulation, and silent monitors. However, almost half of the fathers also reported negative emotions in connection with their premature infants, related to the infants' medical condition, the environment necessary for the infants' care, seeing their infants hooked up to equipment, and the fear of complications triggered by images of severely premature infants. Finally, ambivalent emotions were reported by one-third of the fathers. These emotions reflect worry despite the fact that the infants were in good hands or were in good health.

Desire for Emotional Interaction in the Presence of the Mother

Another dimension of the emotional attachment of fathers with their premature infants was the desire for emotional interaction with the infant concomitant with concern for the mother's presence during this interaction. For many, interactions with the infant elicited positive paternal feelings. Thus, significant contacts, such as the first skin-to-skin episode of kangaroo care or the infant's tight squeezing of his or her father's finger, were intense moments.

Despite the positive emotions experienced during interactions with their infants, it appears that the fathers remained concerned by their partners. In fact, although the interviews targeted the development of their relationship with their infants, more than one-third of the fathers stated they were disturbed by the fact that the mother could not be present. Thus, fathers reported feeling powerless in the

face of the mother's inability to visit the NNU, hold or see the baby, or share precious moments with the father and the infant. Thus, while fathers did emotionally interact with their infants, their desire for family reunification made them long for and appreciate the presence of the mother with the infant.

It was a relief because I saw that in fact the separation hadn't lasted long. It made me very happy to see my spouse with the baby on her. There was recovery, and that's really important. (F5)

Discovery

Discovery reflects the desire to know one's infant and curiosity about the infant.²⁸ In this study, it is defined by the observation of the infant in a positive light and the construction of meaning from certain infant behaviors and needs. This theme was the third most important in the fathers' discourse.

See the Infant in a Positive Light

When fathers were asked in the NNU to describe their infants, 2 principal themes emerged: physical appearance and personality/temperament as well as health. When talking about their infants' physical characteristics, almost all the fathers focused on their wonder and the beauty of their infants' features. Almost one-third of the fathers talked about their infants' vulnerability, although this was not necessarily seen in a negative light.

A minority of fathers felt the need to compare their premature infants with a full-term infant or infants previously hospitalized in an NNU. Interestingly, when their infants was bigger than the other hospitalized infants, fathers appeared to realize that their infants' appearance could be misleading.

You tell yourself that because he's big he's fine. But that doesn't help, because his lungs aren't any more mature than those of a baby one or two pounds lighter. In a way, it's false relief, false reassurance. (F8)

All the fathers perceived their infants' personality and temperament positively. Mostly, fathers described their infants as easygoing, sweet, or calm.

Construct Meaning From Certain Infant Behaviors and Needs

Fathers appear to construct meaning from their infants' behaviors and needs. Both positive ("things are going well") and negative ("things aren't going so well, the infant isn't improving") perceptions were reported. The most noteworthy finding was that one-third of the fathers interpreted movement by the infant as a sign that the infant was vigorous and doing well. They considered this sign a good omen. Turning to signs with a negative connotation, almost half of the fathers mentioned that their infants did not like them to disturb or, in some cases, even touch them.

Among infants' needs, hunger, elimination, human warmth, and human presence were mentioned by one-third of the fathers. One father, talking about his infant's need for human presence, explained that he understood that the infant liked feeling contained and warm and having contact with his parents.

In his mother's belly, he had everything on a silver platter. And now, in the incubator, he has nothing. Even worse, he's all by himself, there are no more heartbeats, no heat, everything is controlled, there's nothing physical. (F8)

Physical Proximity

According to Bell,²² physical proximity in parents takes the form of warm and frequent physical contact, and physical contact during moments of infant distress. The fathers in this study reported physical contact to have had an effect both on them and on their infants. Furthermore, fathers wished to prioritize contact between the mother and the premature infant. This theme was present in the fathers' discourse but was not a major concern in the development of their relationship with their premature infants.

Touching the Infant for the Father's or Infant's Benefit

Although some fathers stated that they limited their physical contact with their infants, most of them accepted and initiated physical contact when given a chance. Physical contacts were either offered by the nursing personnel or initiated by the father and varied from touching through the incubator ports to taking the infant in their arms or performing a kangaroo care session. Fathers found these moments significant, and some felt these moments could make a difference to the infant. For some fathers, significant physical contact was associated with a positive emotional awakening and was thus perceived positively.

I did a bit of kangaroo with him and when I looked at him ... wow! I'm going to be paternal, I know. (F4)

Consequently, physical contact initiated by the fathers had an impact on both fathers and infants. Thus, tangible gestures have dual meaning, as well as an emotional charge that contributes to the construction of the father-premature infant relationship.

Prioritizing Mother-Infant Contact

Despite the desire for physical proximity, one-third of the fathers emphasized that priority should be given to the mother in parent-infant contacts. Thus, some fathers preferred waiting and letting the mothers take the lead. Their reasons included not wanting to pick up the infant for the time being, being afraid of hurting the infant, or wanting to proceed step by step.

Another aspect of this dimension was the fathers' support for the mothers during physical contact with the infant. The fathers acted like a bridge

between the infant and the mother, facilitating accessibility and mother-infant contact.

Communication

Communication is defined as the initiation and maintenance of interaction, the verbal content of interactions, and even the flexibility of interactions.²² In this study, communication took the form of brief father-initiated interactions and by the fathers' perception of the mutuality of behaviors during interactions. This theme was the least prevalent in fathers' discourses.

Brief Father-Initiated Interactions

In the NNUs, almost all the fathers recounted several brief interactions with their premature infants. These interactions were always initiated by the fathers and were, for the most part, perceived positively. The most significant interactions were the infant looking the father in the eyes or reacting to the father's voice. Interactions were mentioned by more than half of the fathers and were a source of positive emotions for many of them.

Perception of the Mutuality of behaviors During Interactions

When asked whether communication with their infants was possible, almost all the fathers said "yes." According to them, their behavior triggered behaviors in their infants. Thus, fathers described their communication with their infants in terms of a directly observable infant behavior: they did not use emotional, indirect, or other terms to describe it. For some fathers, communication was a sort of test of the infant's reactivity, which helped reduce their worries.

She squeezed my finger, that was one of the first things I tested. It really relieved me to see that she reacted. (PTF1)

DISCUSSION

To our knowledge, this study is the first to examine the early relationship between fathers and their premature infants born between the gestational age of 32 to 37 weeks hospitalized in an NNU. Furthermore, by its approach, this study presents a holistic understanding of the relationship in terms of 5 defining themes.

In summary, it appears that *involvement* is the primary theme by which fathers establish a relationship with their infants in the NNU and that this relationship commences in the first minutes following delivery. For example, involvement takes the concrete form of carrying their infants to the doors of the NNU and engenders positive emotions. This is consistent with the observations of Lindberg et al,^{15,16} who mentioned that this type of contact favors feelings of affection. The results of this study concerning feelings of protection, which may take

the form of providing the infant with a physical presence, confirm those of several previous studies,^{6,15-19} although they do contradict results of Lundqvist et al,¹⁰ who reported that fathers felt unable to protect their infants who were hooked up to monitors and placed in an incubator. In this study, an equal number of fathers participated in and abstained from the care of their children. This equivocal result is consistent with the literature on this subject, which indicates that while some fathers do not feel the need to be in control of care,^{8,12,20} others would like to be more heavily involved.^{8,12,21} Similarly, fathers' support for both the infant and the mother at the cost of their own needs has also been reported in other studies.⁸ Specifically, the father is the primary source of support for the mother.^{12,34} Finally, the role of fathers as conveyors of news was reported by Lindberg et al,¹⁵ who noted that this role allowed fathers to be involved and act as a bridge between the infant and the mother.

The results of this study concerning the *emotional attachment* theme of the father–premature infant relationship suggest that there is a wide spectrum, ranging from pride to fear. Fathers in this study reported more pride in their infants than did fathers in studies involving infants of younger gestational age. These reactions are similar to those of fathers of full-term infants.³⁵ This contrasts with the results of Lundqvist et al¹⁰ and Hugill et al,¹³ who reported initial paternal emotions marked by distance, and of Sullivan,³⁶ who reported an absence of paternal emotion in the first few days following delivery. The fathers' fear was primarily associated with the sight of their infants hooked up to equipment, not associated with concerns about the infants' survival, as was the case in the studies by Lindberg et al¹⁵ and Jackson et al.²⁰ It is clear that the infants' health status and gestational age may have influenced the results of this study. Among other things, the verbalized fears inherent to severely premature infants and the possible complications discussed in the media left an indelible mark on the fathers in this study. As these fears have been reported elsewhere,¹⁶ their presence appears to be independent of the gestational age of the infant. The desire for emotional interaction in the presence of the mother may reflect the fathers' self-reported profound emotion at the first sight of the mother with the infant and the promotion of positive emotions involving the infant by improvements in the mother's and infant's health status and by the mother's presence by the infant.^{10,15}

With regard to *discovery*, fathers in this study described their infants' physical appearance and personality. These results differ from those of other studies, which report that fathers are afraid to see their infants in the incubator, hooked up, and dependent on technical equipment.¹⁰ In this study, the characteristics of the infants appear to be favorable to the

deployment of this theme in the father–premature infant relationship. These favorable perceptions may be related to gestational age and selection criteria of the infants, who are relatively late-term and not in a critical state. Despite this, it is important to take into account the effect of having an infant physically larger than the others in the NNU, something noted by some of the fathers in this study. As fathers discover their infants they may develop behavioral, interactional, and other expectations similar to those of fathers of full-term infants. It is clear that the tertiary care mission of the NNU selected for this study may have encouraged fathers to make such comparisons, as they are exposed to infants who are more premature or ill than theirs'. Another fact revealed by this study is that fathers did not hesitate to interpret their infants' behaviors and needs. In addition, they appear to be able to identify their infants' likes and dislikes and perceive the benefit their presence brings to their infants. These results have not, to our knowledge, been reported before. As a result of their relatively advanced gestational age, the infants in this study had well-developed interactional capacities and this no doubt facilitated the fathers' construction of meaning from the behaviors they observed.

Manifestations of *physical proximity* included fathers accepting invitations from the personnel to initiate contact with their infants, initiating contact themselves, and knowing that the contact can make a difference to their infants. Fathers perceive proximity to have benefits not only for their infants but also for themselves. Surprisingly, fathers in the present study appeared to be satisfied with both their direct and indirect contacts with their infants. These results contrast with those of Lundqvist et al,¹⁰ who reported that the incubator constitutes a physical barrier to contact between fathers and their infants. Equally, Lundqvist and Jakobsson¹⁵ and Helth and Jarden²¹ reported the happiness elicited by holding the infant for the first time; this was also noted by the fathers in the present study. However, a new finding from this study is the background concern of fathers for physical contact between the mother and the infant, which led some to restrain themselves, limit themselves, or act as intermediaries with the mother. Besides their own needs, some fathers expressed a desire for the reunification of the mother–infant dyad. These results can be compared with those of Guillaume et al,⁸ who concluded that “most of the fathers reported they interacted with the baby to promote their wife's psychological well-being.” It is possible that the fathers in this study were confident that they would have unfettered physical access to their infants upon discharge and that they therefore preferred to leave in-hospital physical contact to the mother.

Finally, this research demonstrates that *communication* between fathers and premature infants is possible,

Summary of Recommendations for Practice and Research

What we know:

- Fathers occupy an important place in the development of their children whether born at term or prematurely.
- Fathers are facing different challenges compared with mothers following a premature birth.
- Very few studies have been devoted to fathers and none to describe the establishment of the relationship between fathers and their premature babies born between 32 and 37 weeks of gestation.
- The majority of studies describe their role and commitment to their infants and not the way they establish the relation with their infants.

What needs to be studied:

- How fathers establish the relationship with their children following a premature birth.
- Identifying and exploring the components of such relationship.
- The place of mothers in the establishment of the father–child relationship for the premature infant.

What we can do today:

- Recognize the importance of the role of fathers in establishing the relationship with their infants in the neonatal unit.
- Promote the role of fathers in their unique way of relating with their infants in the neonatal unit.
- Provide support and individualized interventions tailored to the needs of fathers to help them develop and support the relationship with their infants.
- Recognize unique experiences of fathers of infants born prematurely between 32 and 37 weeks of gestation.

although the fathers were the initiators of the interactions. An important point emerges from the behavioral interactions mentioned in the father–premature infant dyadic language: most fathers stated that communication with their infants was mediated by behaviors. It is highly likely that the fathers felt the need to see tangible evidence of communication with their infants and that the infants responded to them specifically by a behavior. These results contrast with those of Lundqvist et al,¹⁰ who reported that infants of gestational age of no more than 32 weeks had little response to social interactions. Moreover, the relationship between communication and the awakening of positive paternal feelings has also been reported by Jackson et al,²⁰ who identified first visual contact of the father and the infant as the turning point.

Recommendations for Practice

It is recommended that healthcare professionals working in the delivery room and the NNU be sensitive to the development of the father–premature infant relationship. In addition, the results of this study raise questions about the practices of healthcare professionals who see infants of this gestational age as near-term infants and thereby transmit a message of low neonatal risk to the parents. This may engender relational expectation conflict with the behavioral reality of premature infants. But when healthcare professionals see an infant as a minor NNU case, fathers may have little room to express their feeling and may end up suffering silently. It is therefore crucial that the healthcare professionals bear in mind that they have distinct, unique, and individual needs that may differ from those of mothers.

Strengths and Limitations of the Study

The study's greatest strength is its holistic approach. One limitation of the study is that the results reflect the experience of fathers establishing a relationship with their preterm infants of 32 to 37 weeks gestational age and hospitalized in a tertiary care NNU. Hospitalization in such a unit, in which younger and ill infants were also present, may have influenced the fathers and limits the generalizability of our results. Finally, the study was conducted in the first week of life of the premature infant and the results thus apply only to the early stage of the father–premature infant relationship.

CONCLUSION

Knowledge of the themes of the establishment of the father–premature infant relationship sheds light on the complexity of the relationship and the reality of the nascent interactional dyads. In addition, the expression of each of these themes creates a new understanding of the establishment of the relationship between fathers and late-premature infants of 32 to 37 weeks gestational age and hospitalized in NNUs.

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