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# The Role of the NICU in Father Involvement, Beliefs, and Confidence

## *A Follow-up Qualitative Study*

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**ABSTRACT**

**Background:** Fathers are important to infant outcomes. Infants of involved fathers have improved weight gain, sleep, and psychosocial behaviors. Father involvement with neonatal intensive care unit (NICU) infants reduces the length of stay.

**Purpose:** The purpose of this study was to explore and describe involvement, confidence, and beliefs of fathers of infants who were hospitalized in the NICU and discharged home in order to begin to investigate NICU father involvement from a longitudinal perspective.

**Methods:** This exploratory qualitative study was conducted 4 to 5 years after the initial NICU stay using telephone interviews. Fathers who participated in this study were selected from participants of a previous NICU study. Qualitative analysis was conducted using standard procedures for grounded theory.

**Results:** Nineteen fathers participated in the study. The major themes were "It was scary," "Just be there," "It was rough," "It's not about yourself," "A special bond," and "Almost a treat." The fathers reported that the NICU providers, nurses, and staff helped them to overcome uncertainty and lack of knowledge, which helped them improve their confidence and involvement during the NICU stay.

**Implications for Practice:** Fathers see nurses as a source of support. Nurses can encourage fathers to visit regularly and participate in infant care activities. NICU presence aids fathers in developing confidence and knowledge in parenting during their child's infancy, which can set the stage for ongoing involvement.

**Implications for Research:** Future work should continue to focus on longitudinal studies of fathering and the role of the NICU in encouraging involvement and parenting readiness.

**Key Words:** family-centered care, father, infant, neonatal intensive care unit

Healthy infants whose fathers have participated in their care have improvements in cognitive development,[1] in sleep behavior,[2] and reduced odds of later childhood obesity.[3] Further, evidence from fatherhood research with children has shown that duration of involvement is important to childhood outcomes such as reduced incidence of childhood neglect.[4] Inversely, negative fathering behaviors such as disengagement and remoteness at age 3 months have been found to be associated with behavioral problems at 1 year.[5] Father involvement is multidimensional and therefore it is important to study multiple aspects such as confidence, and role beliefs in addition to involvement.[6]

In the neonatal intensive care unit (NICU), father visitation is associated with infant weight gain and improved psychosocial behaviors of the infants at 18 months.[7] Father involvement in the NICU has also been shown to reduce the length of stay for the infant.[8] Research with fathers of NICU infants has identified issues in confidence, role beliefs, and involvement of the fathers, namely fathers' lack of confidence, barriers to involvement created by social and cultural role expectations for fathers, and factors that impact father involvement with NICU infants.

## CONFIDENCE

Qualitative studies of fathers of preterm infants have shown that as a parent in the NICU, fathers often lack confidence after their infant is born preterm. NICU fathers describe feeling out of control or like a novice[9,10] and feel more comfortable in the role of a financial provider than in their role as a NICU father.[10] Going back to work helps fathers to cope with a difficult situation and gives them a sense of comfort because they feel confident in their job.[10,11] In addition to traditional paternal responsibilities that demand their attention and time and thus pull them away from the NICU, fathers were also reluctant to engage in care activities because they were afraid of touching and holding the fragile infant.[12,13] Fathers have reported that they feel that the NICU

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staff focuses more on the mother of the infant, thus, making them feel excluded. This perception of exclusion lowers their self-esteem, coping ability, and increases distress and decreases confidence for caring for the infants after discharge from the hospital.[12,14]

Certain NICU involvement activities may be important to reducing a father's fear, lack of confidence, uncertainty, and distress. For example, the performance of kangaroo care (skin-to-skin holding) in the NICU has been found to be associated with increasing paternal confidence.[15,16] Confidence aids fathers in establishing positive beliefs in their role and improves their involvement with their preterm infant, which results in a significant reduction in the infant's length of stay.[8]

## ROLE BELIEFS

Highly involved fathers perceive themselves to be equal to the mother in terms of their own importance to the infant and are more likely to perform kangaroo care, bathe the infant, and visit most of the day.[17] However, social norms and expectations often create barriers for father involvement in the NICU.[13] Studies from different countries found that fathers are often torn between their desire to be involved in the care of their child and the social expectations of providing for their family. Deeney et al[18] found in their study that men of higher socioeconomic status could better overcome this role dilemma due to available financial resources and more flexible work options. However, despite changing cultural standards in regard to fatherhood, mothers are often still seen as the primary caregivers.[18] Another belief based on gendered role expectations that impact father involvement is the expectation of being strong and supporting the family, especially the mother, during the time in the NICU.[12,13,19,20]

## INVOLVEMENT

A widely used model of father involvement is the 3-component model proposed by Lamb et al.[21] This model includes engagement (or direct care), taking responsibility, and availability. Feeley et al[17] provided qualitative data that showed that direct engagement activities such as kangaroo care and bathing have been linked with fathers who report themselves as more involved. The authors reported that fathers who identified themselves to be as "equal to the mother" spent more time in the NICU and were the only ones to perform these "higher-level activities."[17] Quantitative evidence, by Clarkson et al,[15] showed that kangaroo care and bathing were not only important in increasing overall involvement (visitation, feeding, talking, holding while swaddled, changing clothes, participating in medical decisions, etc), but kangaroo care was also associated with improved confidence in performing these activities.[15] Fathers in the NICU want to be involved in care despite feeling some reluctance due to their infants' fragile conditions.[22] NICU nurses believe that it is important to encourage fathers to participate in care.[23] However, fathers typically return to work during their infant's NICU stay[10] and nurses only spend a portion of the time with the father compared with the time they spend during the visit of the mother or other relatives.[23] A recent comprehensive literature review showed that "despite much interest in engaging with parents as full parents in the care of the baby, engaging fathers remains suboptimal."[19] Another review found that "fathers continue to report their feelings of lack of control and inequality in regard to parental involvement."[24] While in some studies, fathers expressed the wish that nurses would push them to get more involved in infant care[13]; others found that the expectation to care for the infant in the NICU in addition to working and taking care of the family and home added significant stress for the fathers.[12,13]

### What this Study Adds

- It provides more evidence about the factors that affect the involvement and confidence of fathers with NICU infants.
- It provides insights into father involvement, confidence, and beliefs from fathers whose infants were discharged from the NICU a few years ago and are now reflecting on the impact of the NICU on their involvement, confidence, and beliefs as fathers.
- It adds insights to the Lamb model of father involvement. Based on our findings, we would like to suggest that involvement affects a change in role beliefs, which in turn enhances confidence and thus leads to more involvement.
- It reveals findings on father involvement, confidence, and beliefs based on a diverse demographic sample inclusive of different ages, socioeconomic status, educational attainment, employment, and multiple births.
- It shows evidence of the pivotal role of NICU staff in helping fathers to become more confident and involved by pushing fathers to making the necessary efforts and adjustments to engage and by providing much needed support and knowledge to care for the infant.

## GAPS IN THE STATE OF THE SCIENCE

The known association between NICU father involvement, confidence, and beliefs provided the framework for the interview questions in this study. Lamb[25] proposed that father involvement is influenced by psychological factors such as motivation and self-confidence, children's characteristics like gender or temperament, social support, community and cultural influences, and institutional practices

and public policies. A lack of skills and a lack of sense of competence prevent involvement and feelings of closeness. Fathers' role beliefs influence their involvement by either compensating or emulating their own experiences with their fathers, but they are also clearly influenced by cultural ideologies.[25] However, these variables have not been studied with fathers with preterm infants who had been hospitalized in the NICU.

The purpose of this study was to fill a gap in the state of the science by exploring and describing involvement, confidence, and beliefs of fathers with infants who were hospitalized in the NICU and discharged home in order to begin to investigate NICU father involvement from a longitudinal perspective. The findings will contribute to the existing literature by providing more evidence about the factors that affect the involvement and confidence of fathers with NICU infants. The findings will also add insights to the model of father involvement described earlier.

Although the purpose of this study was to investigate the effect of the NICU on the fathers' *current* involvement, confidence, and beliefs, much of what the fathers had to say reflected on their NICU experiences. Participants remembered the time at the NICU in vivid detail and reflected on the impact of the NICU on their involvement, confidence, and beliefs as fathers. The data from these reflections have been presented here and a subsequent article will report on the impact of the NICU on their *current* involvement.

## METHODS

An exploratory qualitative study design was used following the tenets of grounded theory. We conducted 19 telephone interviews using a semistructured format with fathers whose infants were discharged from the NICU approximately 4 to 5 years ago. The participants in this study were fathers whose infants were previously hospitalized in a NICU in a large urban hospital in the southeastern United States and who participated in a survey study between 2013 and 2014. The purpose of the first study was to determine factors that were associated with father involvement with their hospitalized preterm infant. Eighty participants completed a self-report online survey. The survey consisted of 37 questions. Fathers were eligible to participate if they were recognized as the father of the infant and either were planning to be or were already involved with the infant. The infants were in a less acute phase of hospitalization to allow enough time for the fathers to be actively involved with their infants prior to taking the survey. Infants with neonatal abstinence syndrome, infants with ongoing Department of Children and Families investigations, infants up for adoption, or infants being placed into foster care were not included in the original study.[15]

### Participant Recruitment

For the follow-up study, approval was obtained by the researchers' institutional review board before data collection began. Participants in the first study were asked to provide contact information for a future study at the time of data collection. Fifty-seven of the 80 (71.3%) first-study participants agreed to be contacted in the future. These fathers provided a variety of home addresses, e-mail addresses, or telephone numbers. For this follow-up, we contacted those who had agreed to be contacted again using e-mail, telephone, and by sending letters. Only 5 letters were sent. We received no response from these letters and it is unknown whether the fathers received these letters. We were unable to contact 26 (45.6%) of the 57 fathers. Of the 31 (54.4%) fathers we were able to contact, 19 (61.3%) agreed to participate in the current study and 12 (38.7%) declined. We recruited 8 (42.1%) of the 19 fathers by e-mail and 11 fathers (57.9%) agreed to participate after speaking with the primary investigator (PI) over the telephone. Participants knew the PI because she was the PI and a nurse practitioner at the NICU where the first study took place.

### Instruments

Existing theories and research regarding father involvement, confidence, and beliefs about the role of a father provided the framework for developing the interview questions. We had demographic information about the participants, which had been gathered in the first study, including the participants' age, marital status at birth, the child's birth status (single or multiple births), total number of children, and occupation. In the interviews, we asked participants about their current marital status, if they were living with the child, and about current custody arrangements. Questions for the semistructured interviews were developed by 2 researchers—one an expert in qualitative interviewing and the other an expert in neonatal intensive care and the PI of the first study. Fathers were asked about their current involvement, confidence, and beliefs, their child's health status since the NICU stay, and aspects of the NICU stay, which may have affected their involvement, confidence, and beliefs. For example, we asked participants, "How is your child doing?" "How many hours per week do you spend with your child?" "What activities did you do with your child in the NICU?" "Do you think, taking care of a newborn with health issues influenced how you are fathering your child?" "Do you have any suggestions how fathers could be better supported as a parent of a newborn with health issues?"

### Data Collection Methods

Participants were interviewed individually by telephone using a semistructured format. A consent form was e-mailed to the fathers for their review prior to the start of the interviews. Verbal consent over the telephone was recorded. The length of the interviews ranged between 15 and 60 minutes, with a mean of 31.8 minutes. Telephone interviews were digitally recorded and transcribed and then checked for accuracy. Notes were taken during each interview on substantive and methodological issues.

### Data Analysis

The analysis of the interview data was performed in accordance with the standard procedures of grounded theory. The production of the themes is seen as an expression of the taken-for-granted understanding of the interviewees' place in the world, and his interaction with self and others.[26,27] Grounded theory is a widely used approach for ethnographic research across various disciplines such as education, business, public health, psychology, software engineering, or nursing.[27-29]

Analysis of the interviews started after all interviews were transcribed, checked for errors, and names of the fathers, children, and other identifying information were changed to generic words such as "place," "city," "hospital," and "spouse" in all of the transcripts. In a first step, the transcripts of the interviews were coded line by line independently by 3 coders. The coders looked for emergent and recurrent phrases and themes. In a group discussion, the coders agreed on the most important codes from the initial coding and checked these eminent themes across all interviews. The most significant codes were then placed into tentative categories. The themes and categories were organized in a table with data and quotes from all interviews. We looked for quantity of occurrences—how initial codes fit into themes; how themes fit into and across categories; and how the themes or categories relate to each other—and noted in vivo codes that best illustrated the themes. Throughout the study, methodological and theoretical memos were written and filed to create an audit trail. After completion of the analysis, findings were member-checked by the participants.

Demographic information was summarized using descriptive statistics. In addition to the presentation of descriptive statistics for this study, $\chi^2$ tests of independence were used to compare baseline characteristics of those who participated in the follow-up versus those who did not (results next). IBM SPSS Statistics, version 24, 2016, was used.

## RESULTS

### Demographics

The participants of the study were between 28 and 57 years old (mean = 38.1 years). Identified as white were 73.7% (n = 14) of the fathers; 26.3% of the fathers identified as black (n = 5). Three of the white participants described themselves as ethnically Latino (15.8%). All but one of the fathers were employed. The participants worked as managers, business owners, warehouse workers, and paramedics. On average, they had 2 children with a range from 1 to 5 children. Three of the participants were no longer in a relationship with the mother of the NICU infant (15.8%). Of the remaining 16 fathers (84.2%), 14 were married (87.5%), 1 was engaged (6%), and 1 was living with the mother of the NICU infant (6%). We compared characteristics of the fathers who participated in the follow-up study with the participants of the first study. We found no statistically significant differences ($P < .05$) between fathers who participated in the follow-up versus those who did not. Participants of the follow-up study are a representative sample of the original study conducted in 2013/14.

### Qualitative Findings

Major themes derived from the analysis included "It was scary," "Just be there," "It was rough," "It's not about yourself," "A special bond," and "Almost a treat." We also identified the subthemes *fear* and *uncertainty, helplessness, be present, moral imperative, time and role conflicts, money, selflessness, pride and awe, time, worries, support,* and *educating dads* (Table 1).

### Theme 1: "It Was Scary"

#### *Fear and Uncertainty*

Fear, uncertainty, nervousness, and anxiety are the initial emotions when having an infant that needs to be in the NICU. The uncertainty of the situation was difficult to endure. As Oliver states, "it was scary not knowing what was coming …." The infant

TABLE 1. Major Themes and Subthemes

| Major Themes | Subthemes |
|---|---|
| Theme 1: "It was scary" | Fear and uncertainty<br>Helplessness |
| Theme 2: "Just be there" | Be present<br>Moral imperative |
| Theme 3: "It was rough" | Role and time conflicts<br>Money |
| Theme 4: "It's not about yourself" | Selfless<br>Pride and awe |
| Theme 5: "A special bond" | Time<br>Worries |
| Theme 6: "Almost a treat" | Support<br>Educating dads |

seems fragile and vulnerable, concerns about serious health issues, and possible death are looming. The fear that they experienced was typically described as "scary." Freddie and Charlie recount being panicked:

> … it freaked me out because when she was first born she'd stop breathing in there. She would turn pale. I mean, I was freaking out ... (Freddie)

> I remember just sitting there looking at the, the machine just holding her, just praying, just not knowing, you know, if she was going to make it. And every time it would like flat line I'd freak out and, you know … (Charlie)

### *Helplessness*

The fathers experienced strong emotions concerning both the infant and themselves. They feared for the infant's well-being and they were afraid of being incompetent and inadequate fathers. The technical aspects of the NICU, machines, and tubes connected to their infant are intimidating. William states: "All the tubes and all that was scary in the beginning. You feel kind of helpless."

While their infant is treated in the NICU, the fathers often experienced a deep sense of helplessness. They have little knowledge about their infant's condition and treatment; they have no control over the situation; they cannot really help their infant.

> I don't know. You do feel less because you can't do anything to help them. I think every father feels that. (Thomas)

They cannot be the "man of the house" as Harry says, instead, they have to rely on others, mostly professionals who are in charge of the fate of their infant:

> Like, I was always maybe at the mercy of the doctors because he knows how being in the NICU took a little bit longer to develop. We had to rely a lot on the practitioners to let us know what was going on. You kind of feel a little bit out of control. So, as the man of the house you want to be able to provide confidence because sometimes I had the confidence on the outside but on the inside, it felt like it was outside of my hands, you know. (Harry)

## Theme 2: "Just Be There"

### *Be Present*

Despite feeling scared and helpless, the fathers feel the need to become involved. As Alfie puts it: "… it was step up to the plate type deal …"

Yet, the decision to be involved often means little more than "being there":

> …. you just have to be there for them sometimes. Even if there nothing you can do. You just have to be present. Be present if you're not able to do anything …. (George)

> As far as being a dad you just have to be there physically and emotionally, and all the other stuff will come after. So, I think it's really important that you're there. (Archie)

Being a father in the NICU means not having much control or decision-making power. They are present in the NICU when they are allowed to be there; they are told what to do and what they are allowed to do.

### *Moral Imperative*

The participants see "being there" as an act of common decency, a "no-brainer," something that any father would do, but they are also surprised how many parents are not "there." They believe basic morals and ideals of masculinity would lead any man to be engaged.

> I mean, I don't know what person in their right mind, no matter what kind of s**t your child is in, that you don't be there for them. That's not a real man. (Freddie)

## Theme 3: "It Was Rough"

The fathers needed to adjust to the new and often unexpected situation, which typically translates into what Theo describes as: "… just a rough time in our lives. That's really how I remember it." The fathers worried about their infant; they spend a lot of time in the hospital and commuting from home and work; and existing responsibilities could not be suspended.

### *Role and Time Conflicts*

Not only are they on an emotional roller coaster, but they also have to juggle all their roles and responsibilities, such as work, finances, and other children, and make time for being with the sick infant.

> Yeah, I wish I could have been there more, but I had so many other responsibilities. I had to take care of the house and school and my other two kids. (George)

Harry struggled with the different responsibilities he had to attend to. He felt that other obligations negatively affected his ability to be involved.

> I felt like I had dual obligation; I had to go to work, someone had to make some money and I couldn't be two places at one time. But ideally, I would want to be at all the medical appointments and would want to stand with my wife while she was going through some medical appointments with the boys and for support. But, you can't just go to work and then tell your boss and everybody: "Hey, I can't be here today." There is only so much time off I can get. I have that dual responsibility. It affected how I wanted to be there as a father. (Harry)

Also, a new kind of support is expected of these fathers. They know how to be financial providers,

but they are new to providing care or emotional support for their child. All fathers reported being quite involved, but not all felt comfortable with the expectations and tasks they were asked to do. For example, some fathers did not perform kangaroo care in the hospital, mainly due to the lack of privacy. Yet, once the infant was home, they were comfortable with providing kangaroo care.

### *Money*

In addition to feeling pressure to attend to different responsibilities, financial worries plagued many of the fathers. Money became an issue not only because of missed work, but also because of long commutes to the hospital.

> It's like the money issue, like back and forth. Cuz like I said, we live so far out you know and then that taken a lot of money and getting our extra money in our pocket going back and forth like that. (Freddie)

## Theme 4: "It's Not About Yourself"

### *Selfless*

When the fathers started to spend more time with their infant(s), the situation and the emotions improved: the focus shifted from their own feelings and issues to the infant.

> But when you have a kid, that's going to have more obstacles than your average kid … so it's really not about yourself. (Jacob)

> Well I never had that, I never had that intense desire to be selfless like ... I remember in that moment in the NICU those few days ... I was basically saying take me, just leave her … Like I was making all these deals with God, you know …. You know she's so ... so like innocent and precious … (Charlie)

### *Pride and Awe*

Their fear of health issues, looming death, or simple a fragile body turns to awe of the infant's strength and resilience.

> I think it just gave me immense pride … I will still tell her story to anyone who will listen. I was super proud … After I had wrapped my head around what she and my wife have been through, it kind of elevated my pride which elevated my love, confidence, and what we're doing and what was going on. (Jacob)

The initially shell-shocked father now becomes a protective and selfless father, an image that is much more in line with the traditional ideals of fatherhood that many of these fathers share.

## Theme 5: "A Special Bond"

### *Time*

The heightened emotional state fraught with fears and uncertainty, as well as the demands pulling on these fathers, set the stage for the involvement of these fathers. Once the fathers got involved, and often it is just being there or holding their infant, the effect is in most cases a special bond and close connection with the infant. Spending all this "limited" and "special" time with their infant led to deep emotional connections.

> … like I have other kids, but I have a closer bond between them. And definitely "Sophia" because you had to be there all the time with them. Unlike my first ones … I wasn't really there in the hospital stay with them. But with the twins, I was there all the time. It's just a different kind of bond … (James)

> It brought me closer to my son, a lot closer. With the health issues, you had to be around. I had to come out to the NICU every day. I had to sit there for hours and sleep down there, so it actually brought me closer to my son. (Joshua)

### *Worries*

In addition to the extra time they spend with their infant, it is, as Thomas points out, also the concerns about the infant that contribute to a deeper bond.

> I have a special bond with him compared to the other one. It was a little different because you were so worried. When they were in the NICU I got so much time … it was more special during the limited time. (Thomas)

## Theme 6: "Almost a Treat"

### *Support*

Once the fathers dealt with the lack of control and agency as a father and man—once they decided to become engaged and to spend time in the NICU—they also appreciated the instructions and support from staff and other families. The support from NICU nurses staff, doctors, as well as other parents in the same situation, was an important factor in overcoming the helplessness, anxiety, and lack of sense of control that these fathers initially experienced.

> I mean as a whole just being in the NICU was a scary place and not knowing what's going to happen … not knowing what's going on it was just very nice to have everyone that was there supporting us and helping any way that they could trying to give encouragement and telling us to rest more than we were wanting to rest. Just giving us everything that we needed. (Leo)

### *Educating Dads*

The NICU became almost a bonus: extra time with the infant and a place of extended learning and training on how to be a father. The learning included both hands-on education and reconsidering priorities.

> It was an education for me. Those first couple of months was … I mean babies grow so fast that after

> some time it was kind of a treat for us, you realize what's important. (Henry)

> … it was an extended intimacy that we got to enjoy. It was almost like a treat for us. (Henry)

> We had the opportunity to learn more just by staying a little bit at the hospital. I think that played a big impact. Now that you say that … I think the NICU had a big impact on how "Lily" … the early part of her life because if you think about it, we had support. We had hospital support as opposed to she had the baby now she has to go home. We had additional time to adjust to a newborn. We didn't have to figure it out after being sent home. We had nurses around us teaching us and caring for "Lily" and her mother. It's an extra set of hands. That's priceless, definitely. (Logan)

### Summary: Forging Fathers

The extended time in the NICU allowed the fathers to become more involved and increase their confidence. The process of becoming a "better father" started with the expectations set by NICU staff:

> Because they pretty much want someone there all the time, and it don't look good if the parent ain't there and nobody there every day. (Freddie)

The NICU was the physical location where this transformation took place—a source of support; a teaching center on how to take care of infants; the institution that conveyed the expectations for "being a good dad"; and a place where simply spending time with the infant was valued and subsequently led to deeper bonding between the infant and the father.

## DISCUSSION

Our interviews with fathers who reflected on their experiences in the NICU several years after their infant was discharged reveal recollections in vivid detail of a roller coaster of emotions and adjustments, and the role of support in this journey. The narratives of these fathers reflecting on their time in the NICU describe a process, from being torn between the demands of work, family responsibilities, the infant's needs, feelings of fear, uncertainty, and helplessness to turning their focus to the infant, bonding with the infant, and becoming a "better father." The NICU staff as well as other parents at the NICU played an important role in this process. While the expectation to be involved in the care of the infant and the importance of their involvement was clearly conveyed to the fathers, they had to make the decision to "step up to the plate." This decision was often framed as a moral imperative or just plain common decency.

Similar themes found in prior studies emerged, such as "scary," "rough," and "helpless." Our participants also experienced a host of strong emotions during the birth and hospitalization of their infant. As found in other studies, the fathers initially lacked confidence and had a strong sense of lack of control.[9,10] Before fathers could get involved, they had to overcome the fear to touch or hold their fragile infant.[12,13,22] Our findings also revealed that social norms and expectations, such as providing financially for the family and letting mothers partake in infant care, created barriers for father involvement in the NICU.[13] As described elsewhere, expectations to be present in the NICU created some significant stress for the fathers,[12,13] since most fathers typically returned to work[10] and attended to other family responsibilities such as taking care of older siblings and the home. Other studies have found that fathers often found comfort and confidence in work.[10,11] We did not find any indications that our participants were seeking "shelter" from the onslaught of emotions and challenges in their work. Instead, we found that the experiences and emotions pushed these fathers to make a different decision: they decided to "just be there," to make time for their infant even if that meant being torn between their responsibilities as financial providers, taking care of older siblings, and engaging with their ill infant. "Being there" also meant letting go of being in control and relying on NICU staff for information and support. Cultural ideals of masculinity of being in control, autonomous, and independent had to be set aside before the support and instructions from the NICU staff were accepted. Fathers had to become more passive ("just being there") and depend on the support and expertise of others.

Once the fathers overcame their fears and reluctance to engage with the seemingly fragile tiny bodies—once they let go of the masculine ideal of being in control—the focus shifted to the infant. The resilience of the infant often instilled awe and pride. And the proud father now assumed the role of protector. Ironically, letting go of some aspects of traditional role expectations enabled these fathers to assume another traditional father role with one important modification: they admitted the need for support.

With regard to role beliefs, we found 3 major roles that fathers assumed: financial provider, care provider, and protector of the infant. In the interviews, the fathers emphasized the roles of care provider and protector. To provide financially for their family introduced some stress such as managing time demands. They described dealing with the competing role demands as a "rough time." They all said that they wished they could have spent more time in the NICU. These fathers were exhausted from the role overload and the unending demands on their time and energy.

Compared with other studies,[12,14] we did not find strong feelings of exclusion or differential treatment of fathers.[19,24] On the contrary, fathers in our study reported that they felt they were expected to be involved; they were engaged and equally involved. Involvement appeared to be a must and not an option. This requirement for involvement was often justified in terms of the known better health outcomes for the infants or just basic human decency. While other demands such as family and home often pulled fathers away from the care of their NICU infant, they also made significant efforts and sacrifices to be with their sick infant (and they continued, at times, extraordinary efforts once the infant was discharged). They felt they needed to make extra efforts in order to achieve the same "natural closeness" that the mother and infant enjoyed. Some fathers mentioned that naturally the mother is central in this situation; however, it was not a major theme in our interviews.

With regard to the different aspects of involvement, we found that fathers often were initially reluctant to engage with their infants, but then made the conscious decision to be available, which they often described with "just being there." Considering the aforementioned model of father involvement developed by Lamb and others,[21] that availability is 1 of the 3 aspects of involvement, including engagement, availability, and responsibility, our data do not support the notion that availability directly led to engagement as argued by Feeley et al.[17] Indeed, it appeared that availability was the first step into changing role beliefs, which then led to being an involved father, but it was also not easy for fathers to take that first step because of reluctance, fear, and the need to accept control by others, mainly the NICU staff. However, once they engaged with their infant, "bonding" took place and paved the way for more involvement.

Based on our findings, we suggest amending the existing theoretical model of the association between NICU father involvement, confidence, and beliefs. Lamb[25] suggests that increased confidence increases involvement and that role beliefs affect involvement. We would like to suggest that involvement affects a change in roles and possibly role beliefs, which in turn enhances confidence and thus leads to more involvement. Only once fathers take the step to be involved with their NICU infant, do they assume the new roles of caregiver and protector for their NICU infant. The prior role of provider continues, which naturally adds considerable stress for the father. The path to identifying as a caretaker started with little more than spending time with their infant, which often was dictated by the infants' conditions. "Being present" at their infant's bedside, at times holding the infant, more than any actual care taking activities, initiated a deep bond with the infant, which changed the understanding of the role of the father. The fathers then increasingly engaged more and more in care-taking activities, which enhanced their competence as caretakers. But it was primarily making time for their infant, which was clearly expected and pushed by NICU staff, which changed their understanding of being a father and boosted their confidence. It was "sensitive fathering," the fathers' adaption to the needs of the infant and situation, that led to more involvement and confidence.

## Strengths

A diverse demographic was sampled for this study and was inclusive of age, socioeconomic status, education, employment, and multiple births. The principal investigator who conducted all of the interviews had established a strong level of trust with participants during their initial NICU stay. This almost certainly had positive effects for study recruitment as well as conducting the interviews. Based on the results of this study using a grounded theory approach, we suggested some amendment to existing theories of father involvement, confidence, and beliefs. Furthermore, we are using results from this study to design a longitudinal study on rural fathers with NICU infants who face additional barriers to involvement.

## Weaknesses

One of the major limitations of this study is the possible bias due to self-selection of respondents. Fathers who are not involved anymore with their children or who have less contact and involvement might have opted not to respond as well as fathers who did not have access to a phone. This research was conducted with fathers whose infants had stayed in a large urban NICU in the southeastern United States that may have been more or less family friendly than other NICUs. Thus, findings might not apply to other areas in the United States, especially more rural areas and NICUs, who lack similar family care practices. Since we used telephone surveys, we could not read and interpret physical cues. However, the reliability and quality of data collected through telephone interview has been documented.[30,31] In addition, interviewer bias might be avoided by using telephone interviews.[32] Respondents might also feel more relaxed and therefore more willing to disclose sensitive information.[30] Finally, social desirability bias might have influenced the answers from the fathers.

## Application for Practice

Nurses should be aware that fathers see them as a major source of support while their infants are in the NICU. NICU staff had a pivotal role in helping fathers to become more confident and involved. First, the clear expectation that fathers should "be there" and take part in the care pushed fathers to making the necessary efforts and adjustments to engage. Second,

| Summary of Recommendations for Practice and Research | |
|---|---|
| **What we know:** | • Fathers are important to infant sleep, cognitive development, and psychosocial behaviors.<br>• NICU fathers are trying to cope with a difficult situation and often lack confidence.<br>• Traditional role beliefs of fathering and dominant cultural ideals of masculinity may be a barrier to father involvement in infant care.<br>• Nurses and fathers both want fathers to be included in care. |
| **What needs to be studied:** | • Advanced inferential statistics, which explore which dimensions of fathering might influence long-term involvement.<br>• Longitudinal studies, which focus on NICU family-centered care and a relationship with long-term fathering.<br>• Focus on different populations of fathers or parents including rural, minority, and same-sex couples.<br>• Focus on the changing role of fathers and cultural norms for fathering of infants with health issues. |
| **What we can do today:** | • Encourage fathers to visit and participate in their infant's care.<br>• Continue to educate fathers and assess knowledge of infant care during each visit.<br>• Reassure fathers that feelings of stress, discomfort, and lack of confidence are normal but that by participating in care, these feelings can be reduced.<br>• Particularly encourage "higher-level" activities such as bathing and kangaroo care. |

NICU staff also helped fathers' confidence by providing the support and knowledge they needed to care for the infant. All the fathers in our study reported continued significant involvement with their children and pointed to the important role of the NICU staff in becoming more confident and involved. Thus, with the encouragement and support of a village (NICU), the initially scared and somewhat distant fathers became more involved fathers who made themselves available, engaged with their infants, and took on multiple roles as caregivers, providers, and protectors.

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