# Transition to Fatherhood Modeling the Experience of Fathers of Breastfed Infants

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Transition to parenthood has long been examined from the angle of mothers' experience. When looked at this transition through fathers' lens, fathers' involvement and perceived parental efficacy appear to be landmarks of this experience. This article examines a model of the relationships among father involvement, perceived parental efficacy, events related to breastfeeding, support, stress, and income with a sample of 164 fathers of breastfed infants. This model highlights the direct and indirect contributions of support and stress to fathers' perceived parenting efficacy and involvement. Possible directions for nursing practice, education, and research are proposed to ease men's transition to fatherhood. **Key words:** breastfeeding, fatherbood, father involvement, nursing, parenting efficacy, social support, stress, structural equation modeling, transition

THE TRANSITION into parenthood, the process that consists in discovering and assuming the parenting role after the birth of a child, is a stressful time for most parents. Mothers and fathers have to review their lifestyles and redefine their relationships to

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work and daily life, which becomes characterized by a lack of time, fewer leisure activities and sexual relations, and reorganization of the tasks of every member of the new family. Some of the challenges that this transition raises for men have been made clear, for example, that of being involved with the child, which requires that the father find a balance between the role of provider and the desire to be present for the child and develop a relationship with him or her.<sup>2</sup> The need to acquire the knowledge and skills to take care of the child in order to have a sense of parenting efficacy<sup>3-5</sup> is also an important stake in fathers' transition to parenthood.

Men become fathers in a context where mothers all over the world are strongly encouraged to breastfeed their infants. <sup>6,7</sup> Studies dating as far back as the mid-90s have revealed that fathers of breastfed infants tend to feel excluded and rejected from the mother-infant relationship. <sup>8-10</sup> These fathers viewed breastfeeding as an obstacle to access to the child <sup>10,11</sup> and specified that breastfeeding delayed their involvement with their infant. <sup>9</sup> Twenty years later, little is known about how breastfeeding today contributes or hinders fathers' involvement and sense of parental efficacy nor, ultimately, fathers' transition to

parenthood. A model of fathers of breastfed infants' experience of the transition to parenthood will be examined in this article, with father involvement and parental efficacy being the landmarks of this transition.

# **FATHER INVOLVEMENT**

Father involvement is a central element of men's development and contributes to their self-esteem. 12 Father involvement is composed of 4 dimensions: direct father-child interactions, the father's availability, day-to-day planning of the child's life, and the father's capacity to think about his child when not in the child's presence. 13 Father involvement has been found to benefit children's cognitive and social development.<sup>14</sup> More specifically, father involvement decreases behavioral problems in adolescence, improves social and relational functioning in childhood and adulthood, and sustains better educational outcomes.<sup>14</sup> Father involvement contributes to family health, enhances mother satisfaction in the marital relationship, and reduces maternal stress. 15,16 While studies on paternal involvement are relatively recent, different factors have been found to influence father involvement, such as fathers' sense of efficacy, 17 a strong marital relationship 18 and the support of health professionals.<sup>4</sup> Certain conditions that favor fathers' participation in the lives of their children have been identified. For example, fathers are more involved if they attribute importance to the paternal role in their identity, 13 if they think they can make a difference in family life, 19 if they are involved right after birth<sup>20</sup> and if they are independent and stable rather than depressed and anxious.21

Anxiety and stress have also been noted to be influential variables of perceived parenting efficacy, a variable pinpointed during previous studies as a key element of fathers' transition to parenthood. <sup>22,23</sup> Thus, both perceived parenting efficacy and parental stress will be examined in the theoretical model of father's transition to parenthood.

On the level of family characteristics, men seem to be more involved with their children if their spouse believes that the father's presence is important, if she supports him,<sup>5,24</sup> and if the conjugal relationship is good.<sup>5,25</sup> Support from other family members and friends, <sup>26</sup> from health professionals, <sup>5</sup> and from colleagues at work<sup>26</sup> are also influential variables for father involvement. Mothers' gate-keeping behaviors and a lack of professional support act as obstacles toward fathers' involvement.<sup>5,27</sup> In light of these results, the "perceived support" variable, which encompasses marital, family, and professional support, was integrated as an influential variable in the model under study.

Finally, because recent studies indicate that breastfeeding can be a factor inhibiting paternal involvement in some cases, 5,28 this variable is defined in detail later so as to be integrated into the model.

# FATHER INVOLVEMENT AND BREASTFEEDING

The effects of breastfeeding on the child's physical and psychological development and its repercussions on mother-infant attachment are well known. <sup>28,29</sup> Although fathers are noted by authors across the world as important factors in mothers' decisions to initiate and pursue breastfeeding, <sup>30-33</sup> they have only rarely been investigated as key players in the experience, with research focusing mainly on the mother-infant pair. <sup>34,35</sup>

When fathers are questioned, they are generally found to have positive attitudes toward breastfeeding and be well-informed about its effects on the infant. <sup>28</sup>, <sup>29</sup>, <sup>33</sup>-<sup>35</sup> A few studies have recently highlighted fathers' desire to have their role in the breastfeeding experience recognized and valued. <sup>34</sup>-<sup>36</sup> Fathers' ambivalence when mothers meet with difficulties while breastfeeding has been revealed in a study carried out with first-time fathers in Quebec. <sup>37</sup> Rarely have fathers been allowed the opportunity to share how the breastfeeding experience has impacted on

their involvement with their child. A recent study in Quebec with a sample of fathers whose spouse pursued breastfeeding more than 6 months (N: 21) and a sample of fathers whose spouse weaned the infant in the first 3 months (N: 15) revealed that, in both groups, some fathers were dissatisfied with the relationship they had with their infant and felt that their involvement was delayed because of breastfeeding.<sup>28</sup> This study highlights that events in the breastfeeding experience are likely to be associated with certain effects upon fathers. Events in the breastfeeding experience, which are significant incidents for fathers that may influence their adjustment to their roles as parents, have been explored mainly through qualitative studies.<sup>28</sup> A number of events related to the decision to breastfeed, the breastfeeding experience in hospital, the first month of breastfeeding, and the subsequent months until weaning have been revealed. These events pertain to (1) coming to terms with the physical and emotional demands and difficulties related to breastfeeding; (2) coping with parental demands; (3) maintaining conjugal functioning; (4) coming to terms with environmental demands; and (5) exchanging information with health professionals.<sup>38</sup> We question whether events in the breastfeeding experience influence father involvement directly or indirectly.

# **CONCEPTUAL MODEL**

A theoretical model of the primary variables of interest, father involvement, perceived parenting efficacy, parental stress, perceived support, events of the breastfeeding experience, and income is presented in Figure 1.

#### **Covariates**

A variable in the hypothesized theoretical model was controlled for because it is known to co-vary with the primary variables of interest. This covariate pertains to income. Research measuring the impact of income on paternal involvement indicates that poverty seems to have a negative effect on fathers' involvement.<sup>24</sup> In a study with parents of children younger than 5 years, income was directly related to parenting stress and indirectly related to perceived efficacy through parenting stress, such that mothers and fathers with lower incomes experienced more parenting stress. Parents with more parenting stress also reported low parental efficacy.<sup>39</sup>

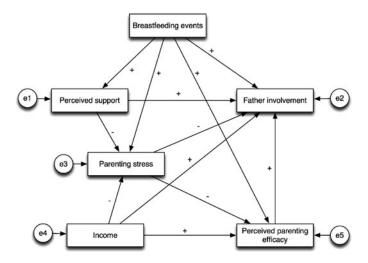


Figure 1. Theoretical model of fathers of breastfed infants' experience of the transition to fatherhood; e = error term.

Income was thus retained in the present model.

# **PURPOSE**

The purpose of this study was to examine the extent to which, controlling for income, a theoretical model of father involvement through perceived parenting efficacy, parenting stress, perceived support, and events in the breastfeeding experience could be supported by data collected from a community sample of 164 fathers (N: 87 first-time fathers and 77 fathers of 2 or more children, of which 57 had 2 children; 15 had 3 children; and 5 had 4 children). The model predicts 9 direct pathways (Figure 1):

- 1. A direct, positive path from (*a*) the quality of the events during the breast-feeding period to fathers' involvement, and from (*b*) the quality of the events to perceived parenting efficacy;
- a direct, positive path from perceived parenting efficacy to father involvement;
- 3. A direct, negative path from (*a*) parenting stress to fathers' involvement and from (*b*) parenting stress to perceived efficacy;
- 4. A direct positive path from (a) income to fathers' involvement and (b) income to perceived efficacy and a direct negative path from (c) income to parenting stress;
- 5. A direct positive path from perceived support to father involvement, such that when fathers feel supported, they report being more engaged. There is also an indirect path from perceived support to father involvement, such that when fathers report more positive breastfeeding events, they feel supported, and report less stress and more positive father involvement.

These hypotheses were constructed on the basis of the review of the literature and on previous research modeling fathers' transition to fatherhood. <sup>22,23</sup>

# METHODS AND PROCEDURES

A descriptive correlational study was conducted with a community sample of fathers of infants who were breastfed exclusively for at least 6 months from September 2007 to March 2009. All eligible fathers were approached by the research assistant before the mother's discharge from the hospital. Fathers who agreed to participate were called when the infant was 7 weeks old. If the baby had been weaned, the fathers were invited to participate in research pertaining to fathers' experience of early weaning (N: 51). If breastfeeding was still going on, the fathers were called back when the infant was 6 months old. Sixty-seven percent of fathers who had initially agreed to participate were retained in the study at this point. Twenty-four fathers had to be withdrawn later on because the infant was not breastfed for 6 months. It is possible that these fathers would have contributed a portrait of the difficulties related to breastfeeding, which brought about late weaning. The remaining 164 fathers were then visited at home, at a time that suited them, on average during the eighth month after birth (range 6-10 months). Questionnaires took about 60 to 75 minutes to complete. Participants were compensated CAD\$15 for their time and inconvenience.

# Sample

The convenience sample was drawn from 2 tertiary care centers in the province of Quebec, Canada. Inclusion criteria included the following: French-speaking biological fathers aged 19 years or older, of a singleton healthy term infant weighing more than 2500 g and of more than 36 weeks' gestation. The fathers were living with the infant's mother. Data were collected when the infant was aged 6 to 10 months. Protection of human participants was reviewed and approved by the institutional review boards of the University of Quebec in Outaouais (583), the University of Quebec in Trois-Rivières (06-115-06-05), and the participating medical centers (298-060424).

The sample size of 120 fathers was determined a priori using the convention of 10 observations per measured variable. <sup>40</sup> This study sample was planned to treat first-time fathers (n: 87) and fathers of 2 and more children (n: 77) as individual samples, allowing up to 6 predictor variables per group. Because there was no variation between the 2 groups of fathers as evidenced by the *t* test scores for father involvement and perceived efficacy (as shown in Table 1), first-time fathers and fathers of 2 and more children were treated as a single group. The total sample consisted of 164 fathers.

#### Measures

Six measures were used to obtain information about father involvement, perceived parental efficacy, perceived support, events of the breastfeeding period, parenting stress, and personal characteristics. The reliability and validity of each scale has been well established across different group of fathers in a variety of nonclinical and community populations. 5,22,23,38,41-43

Father involvement was measured using the father involvement questionnaire<sup>44</sup> (52 items), which enables fathers to describe their ability to interact directly with their children, their accessibility, and their ability to recall important events involving their children. For example, fathers must say how often they carry certain tasks, such as "Give my child a bath" (Q7). In a previous study with 285 fathers, the Cronbach  $\alpha$  score was 0.86 for fathers. In the present study, the Cronbach  $\alpha$  score was 0.82 for fathers.

The parent expectations survey (PES) was used to measure perceived parenting efficacy. The PES<sup>41</sup> is a 25-item scale that assesses mothers' and fathers' beliefs about their abilities to mobilize the motivation and cognitive resources and take the courses of action needed to meet the demands of parenting. The reliability and validity of the PES have been established with fathers of infants of less than 1 year of age. Scale items are descriptors of actions fathers perform to meet the demands

of parenting. Fathers rate their ability to carry out these actions on a scale of 0 (cannot do) to 10 (certainly can do), with items such as "I can tell when my baby is sick" (Q5). The score is determined by adding all the items and dividing by the total number of questions. In 4 studies with fathers in the postnatal period, internal consistency has ranged from 0.90 to 0.93. In the present study, Cronbach  $\alpha$  score was 0.86 for fathers.

The Social Support Questionnaire,  $^{42}$  which consists of 18 items that ask the individual to rate "how helpful people in his/her network have been in recent weeks," measured perceived social support. This instrument allows exploration of the contribution of family members, friends, colleagues, and health care providers to fathers' perceptions of support. The internal consistency of this instrument gives a Cronbach  $\alpha$  coefficient of 0.79. In the present study, the Cronbach  $\alpha$  score was 0.77 for fathers.

The inventory of event during the breastfeeding period consists of 82 items that describe significant events for fathers during the breastfeeding period that may influence their adjustment to the role of parent.<sup>38</sup> Parents must indicate whether they experienced the incident (Scale A: no/yes) and whether the incident was negative or positive for them (Scale B), on a scale of 1 (very difficult) to 5 (very easy). The total score is a function of the mean of the B scale; a low score implies a low number of events and/or events with a negative valence, while a high score implies many positive events. The 82-item scale has an internal consistency of 0.91. Examples of such items are "Experiencing difficulties related to breastfeeding," "Experiencing positive emotions in regards to breastfeeding," and "Receiving support and information related to breastfeeding."

The Parenting Stress Index—Short Form<sup>43</sup> consists of 36 items derived from the Parenting Stress Index. It allows a parent to evaluate the level of tension perceived in the parenting role with questions such as "I feel lonely and without friends" (Q9). It has been empirically validated to predict observed parenting

behavior. It has excellent psychometric qualities among samples of parents with infants and young children. In this study, the internal consistency is 0.88 for fathers.

A sociodemographic questionnaire<sup>39</sup> comprising 20 questions was used to collect sociodemographic data, such as family income and level of education, age, obstetrical data, and parental health status.

## ANALYSES OF DATA

PASW SPSS 18.0 (SPSS Inc, Chicago, IL) was used for all analysis. Descriptive statistics (frequencies, proportions, means, and standard deviations) were reported to characterize the variables. The means, standard deviations, and *t*-test results are presented in Table 1. To test associations, Pearson correlations were computed (Table 2).

The hypotheses were tested using structural equation modeling with maximum likelihood estimation from Amos 18.0.45 Missing data, which constituted less than 5% of data, were replaced using the mean of each variable. To assess model fit, the hypothetical model (Figure 1) was tested using a 2-step procedure. First, preliminary analyses of the variables were conducted to ensure that the data did not violate the basic premises inherent in the multivariate analyses.<sup>46</sup> No significant outlier was noted and the distributions were normal and allowed to proceed with further analysis. Second, structural equation modeling analyses of structural equations using AMOS (18.0) software were based on the covariance matrices by using the maximum likelihood method of estimation.

Evaluation of the plausibility of the model is based on a variety of measures. These measures are now briefly discussed. The absolute fit indices include the chi-square, the goodness-of-fit index (GFI), and the root mean

<b>Table 1.</b> Mean, Standard Deviation.	and T-Test Results for the 2 Groups of Fathers	
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	First-Time Fathers		Fathers of 2+ Children		t Test		
	Mean	SD	Mean	SD	t	df	P
Father involvement	4.35	0.46	4.27	0.47	1.20	162	.70
Perceived parenting efficacy	8.11	0.97	7.97	0.83	-0.99	162	.14
Perceived support	1.87	0.63	2.14	0.72	2.56	162	.47
Breastfeeding events	1.95	0.54	2.20	0.60	2.83	162	.53
Parenting stress	63.55	15.12	63.70	13.11	0.07	162	.58
Income	9.58	2.33	9.60	2.53	0.06	162	.81

**Table 2.** Correlation Matrix

Variable	1	2	3	4	5	6
1. Father involvement	1.00					
2. Perceived parenting efficacy	.20**	1.00				
3. Perceived support	.08	09	1.00			
4. Breastfeeding events	.03	.03	.08	1.00		
5. Parenting stress	13	43**	.16*	.07	1.00	
6. Income	.00	14	.001	.03	18*	1.00

 $<sup>^*</sup>P < .05; ^{**}P < .01.$ 

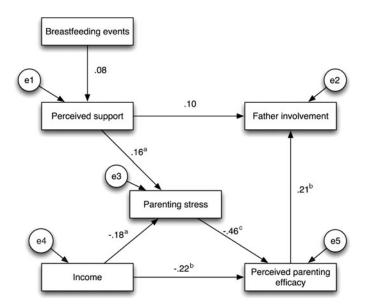
square error approximation (RMSEA). The chi-square is an inferential test of the plausibility of a model explaining the data. A small chi-square indicates a good model adjustment and is an appropriate statistical test for samples between 100 and 200 (D. Coulombe, Oral communication, May 9, 2011).<sup>47</sup> The GFI adjusts for the number of parameters estimated and ranges from 0 to 1 with values of 0.9 or greater indicating a good fitting model.<sup>45</sup> The RMSEA expresses the lack of fit because of reliability and also model (mis)specification.<sup>48</sup> Our criteria for accepting model fit include a RMSEA less than or equal to 0.05, which indicates a very good model fit. The comparative fit index (CFI) examined is the CFI, which indicates the relative reduction of lack of adjustment of a tested model (using  $x^2$ ) compared with the independent model. Adapted from FI/RNI, it varies from 0 to 1, with a CFI greater than 0.90 reflecting very good model fit.

# **RESULTS**

Of the 241 fathers who had agreed to participate, 77 were withdrawn from the sample (51 were incorporated into another study, 24 were unavailable or lacked interest, and 2 had completed the questionnaire incorrectly). The final convenience sample consisted of 164 fathers: 87 first-time fathers and 77 fathers with 2 or more children; they were living with the mother and were able to speak, understand, and read French. The fathers' average age was 32 years (range 21-49 years), while the mothers' average age was 30 years (range 21-44 years). Two percent of mothers and 10% of fathers were 40 years or older. The majority of the fathers (87%) were born in Canada. All fathers lived with the child's mother. The average length of the relationship was 7 years (range 1-21 years). Fortyfour percent (N: 72) of the fathers were married and 56% (N: 92) lived in common-law union, which is representative of marital life in Quebec. Eighty-eight percent (N: 144) of the fathers were employed full time, 7% (N: 11) were employed part-time, while 5% (N: 9) were unemployed or students. Of the fathers surveyed, 17% had fewer than 12 years of formal education (N: 28), approximately one-third held a college degree (N: 89), and 54% had completed a university degree (N: 89). Eighty percent (N: 132) of fathers participated in prenatal classes, which included a class on the topic of breastfeeding. The vast majority of them attended the birth (97. 5%). Birth occurred after 40 weeks' gestation for 40% of the mothers. Seventy-seven percent of mothers had given birth vaginally, while 23% had had a cesarean birth. The infants were aged 6 to 10 months at the time of the study. Eighty-six infants were boys (52.8%) and 78 were girls (47.2%). No mothers or children had any health problems during the postpartum period. All fathers reported that they agreed with the way the child was being fed (breastfeeding). Seventy-four percent (N: 122) of the babies were still being breastfed at the time of the interview.

The initial model fitted well for unconstrained parameters—  $\chi^2 = 0.25 \ (P = .97);$ df = 3; RMSEA = 0.00; CFI = 1.000; GFI = 0.999. However, the standardized residual matrix suggested the removal of several nonsignificant paths: (1) from breastfeeding events to parenting stress; (2) from breastfeeding events to perceived parenting efficacy; (3) from income to father involvement; (4) from breastfeeding events to father involvement; and (5) from parenting stress to father involvement (critical ratios for regression weights < 1.96). The final model (Figure 2) showed an excellent model fit,  $\chi^2 = 2.742$ (P = 0.950); df = 8; RMSEA < 0.00; CFI = 1.00; GFI = 0.99. Standardized parameter estimates for the final model of the experience of the transition to fatherhood for fathers of breastfed infants are presented in Figure 2.

Hypothesis 1 predicts that fathers who have positive perceptions of events of the breastfeeding period will report higher involvement and parenting efficacy. However, the paths between the events, father involvement, and perceived efficacy proved to be nonsignificant and were removed from the final model. This hypothesis was not supported.



**Figure 2**. Model of fathers of breastfed infants' experience of the transition to fatherhood.  ${}^{a}P < .05$ ;  ${}^{b}P < .01$ ;  ${}^{c}P < .001$ .

Hypothesis 2 was supported to the effect that parenting efficacy was directly and positively related to father involvement ( $\beta = .21$ , \*\*P < .01).

Hypothesis 3 predicts that fathers who experience parenting stress will report lower father involvement and lower perceptions of parenting efficacy. This hypothesis is partially sustained. While parenting stress is not related, in this model, to father involvement, it is negatively related to perceived parenting efficacy such that the more stressed the father, the less competent he reports feeling  $(\beta = -.46, P < .001)$ . Stress is indirectly related to father involvement, such that the more stressed the father is, the less competent he reports feeling, the less involved with his child he is ( $\beta = .21$ , P < .01). Hypothesis 4 predicts that there is a direct, positive relationship between income and fathers' involvement. It is rejected. This hypothesis also predicts that there is a positive relationship between income and perceived efficacy; and a negative relationship between income and parenting stress. Our results indicate that income is directly related to parenting stress and to perceived parenting efficacy such that,

when income is high, perceived efficacy is low ( $\beta = -.22$ , P < .01), thus reflecting a negative relationship between the 2 variables. However, when income is high, parenting stress is low ( $\beta = -.18$ , P < .05), thus confirming this last hypothesis. The hypothesized direct positive relationship between perceived support and father involvement (hypothesis 5) such that when fathers feel supported, they report being more involved, is accepted in the model, but this relationship is not significant ( $\beta = .10$ ). There is also an indirect non-significant relationship between perceived support and father involvement, such that when fathers report more positive breastfeeding events, they feel supported ( $\beta$ = .08). Contrary to expectations, supported fathers reported more, not less, parenting stress ( $\beta = .16$ , P < .05). Because parenting stress is inversely related to perceived efficacy such that fathers who report a high level of stress report low perceived efficacy  $(\beta = .46, P < .001)$  and low father involvement ( $\beta = .21, P < .01$ ), support is indirectly related to father involvement such that high support scores can correlate with low father involvement.

# DISCUSSION

This model tested 6 variables (father involvement, perceived parenting efficacy, events of the breastfeeding period, support, parenting stress, and family income), which were hypothesized to be significant in fathers of breastfed infants' experience of the transition to fatherhood. Three results deserve to be discussed.

The first hypothesis predicted that the events during the breastfeeding period had direct influence on fathers' involvement and perceptions of efficacy. The absence of significant links between these variables indicates that these events do not seem to create special risks or provide special protection for the development of father involvement or perceptions of parental efficacy in this group of fathers. We cannot compare these findings with previous research because to our knowledge these factors have never been brought into relation before. Our own research is being pursued to see whether this also applies in the cases of fathers who experienced early weaning of their children owing to breastfeeding problems. The indirect relationship between events of the breastfeeding period, the father involvement, and perceptions of efficacy, through the mediation of perceived support, though relatively weak, is nonetheless an avenue of future research.

As predicted, perceived parenting efficacy was positively related to father involvement such that fathers who perceived themselves as more competent with their children were more involved. We had hypothesized a direct relationship between parenting stress and perceived efficacy, because previous studies had found such a relationship. 22,23 In this sample, as previously, stressed fathers reported feeling less competent with their children. What is a specific finding of the present research is the contribution of support to stress. While it might be expected that the quality of support would be negatively related to stress in such a way that supported fathers would report less stress, the reverse is found in the present study: supported fathers reported higher stress level. These findings can be explained by paying closer attention to the average scores obtained in the support scale, as well as to the frequency of the scores. The average support score was 1.99 for all 164 fathers, specifically 1.87 for first-time fathers and 2.14 for fathers of 2 or more children. The "Quality of Social Support" instrument has a 6-point scale, where 0 reflects not having needed help; 1-help not available; 2help not helpful; 3—help sometimes helpful; 4—help generally helpful; and 5—help very helpful. On an average, these fathers found that the help was not helpful. A closer look at the frequency of the scores indicates that 93% of the fathers reported a score of 3 or less, either not having needed help, or at best, having found help sometimes helpful. The maximum score obtained was "help generally helpful" (related to the spouse's support); no father said that help was very helpful. This important finding can possibly be explained by the culture of masculinity, which makes it difficult for men to ask and receive help,<sup>49</sup> thus reflecting that 10% of the sample did not need help or found that help was unavailable (score of 0-1). Other explanations can account for the experience of 83% of the fathers in this sample, who did not find the help they received helpful. On one hand, previous studies have revealed that in the course of breastfeeding, support is generally oriented toward the mother. Health professionals, and other family members, tend to neglect fathers' needs.<sup>28</sup> This in itself can prove to be stressful. On the other hand, we can also hypothesize that the greater the number of events experienced by the father, the more he will be asking for help. Thus, if the help received is inappropriate, the stress level will be heightened. We can also ponder the definition and the meaning of support for fathers. If they are in need of something, but something else is offered, help will be perceived as inadequate, thus enhancing stress. To explain how fathers end up being more involved yet with little support, we can hypothesize that when the support received does not fit the need felt, fathers invest more in finding their own solutions in regard to their child. At best, these reflections surrounding fathers of breastfed infants' experience of support in the first 6 to 10 months of their child's life invite us to pursue this line of research to better understand the dynamics of this experience.

The last finding that deserves to be discussed is the relationship between income, perceived efficacy, and stress. The results pinpoint income as a risk factor for father involvement, whether it is high or low income. Low income contributes directly to increase parenting stress, and indirectly to lower perceived efficacy and father involvement. These results are similar to what has been found in previous research on the topic.<sup>24</sup> For example, the study carried out by deMontigny and Lacharité in 2008 with 189 fathers identified the same kind of relationship between income, parental stress, and perceived efficacy. Unveiling that high income contributes directly to lower perceived parenting efficacy and indirectly to father involvement is, however, something new, which has not, to our knowledge, been identified before. We can hypothesize that higher-income fathers might also hold higher expectations and beliefs in regard to their role as fathers, having a larger access to information. These results highlight how the help given to parents during the perinatal period must not be tailored uniquely to socioeconomic criteria but should be based on a thorough assessment of individual couples' needs and resources. Nurses should assess fathers' knowledge base, their expectations toward themselves, their spouse, and their social network. Exploring fathers' beliefs toward what constitutes "good fathering" will enable nurses to establish a sensitive relationship with fathers, based upon their specific needs.

One limitation pertains to the sample being selected by convenience. It is possible that the fathers who chose to participate might have had a different breastfeeding experience form those who chose not to participate. Also, even if these parents represented different age groups, incomes, and educational backgrounds, their ethnic origin was mostly Cau-

casian and French speaking. This study needs to be replicated with a more diverse sample.

A second potential limitation concerns the measures used. The instruments selected were theoretically solid, well-constructed, and valid within a French population. However, self-administered questionnaires might induce in fathers a desire to answer in a socially acceptable fashion. They are limited by the quality of reflection an individual has about his own experience. These might have influenced the fathers' answers in such a way as to portray their experiences more positively than accurately.

# CONCLUSION AND IMPLICATIONS

Developing a sense of parental efficacy and engaging as a father are important landmarks of men's transition to fatherhood and are essential to the family's well-being as a unit. This study's finding that for fathers of breastfed infants, support is directly linked to stress, which in turn impacts on perceived parenting efficacy and father's involvement, indicates that nurses need to reflect upon the quantity and quality of support they address to fathers. For nurses, this means adopting beliefs that fathers are significant members of the family and do not focus their care solely on the mother-infant dyad. Recognizing the existence of the father, by addressing his needs and his experience, and by enquiring about his abilities, is a known practice to enhance fathers' sense of efficacy.<sup>23</sup>

Because the hypothesis of a direct path between breastfeeding events, perceived parenting efficacy, and father involvement was not sustained in this study, research needs to be continued to better understand the experience of fathers of breastfed infant.

In conclusion, it is relevant for nursing education to educate nurses to develop participatory, collaborative practices with fathers, based on mutual sharing of expertise. Involving fathers in decision-making and respecting their rhythm will allow them to develop a sense of parenting efficacy. As fathers develop their abilities to make decisions

regarding their experience of breastfeeding, diminish their stress level, and engage with their infant, nurses' support will ease men's transition to fatherhood.

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