Fathers’ to be’ knowledge about breastfeeding

Abstract
Aim: To assess Portuguese fathers’ knowledge on breastfeeding at 28-32 gestational weeks and to examine fathers’ knowledge in relation to socio-sdemographics and paternal characteristics.

Design: A cross-sectional design was used. The face-to-face interviewing was used to collect data using a dichotomy clinical instrument composed by 18 knowledge breastfeeding descriptors that emerged from literature review and validated by a panel of experts. The reliability was established using Kuder-Richardson Coefficient and it was 0.84.

Setting: Health Centers in a region of North of Portugal. Participants: Participated in the study a convenience sample of 143 fathers.

Key findings: More than 90% of fathers revealed lack of knowledge in 14 out of 18 subjects assessed. Age, education, parity, planned pregnancy showed no difference. The difference was observed in relation to prenatal decision to breastfeeding and in willingness to support breastfeeding mother.

Conclusion: Fathers’ knowledge on breastfeeding is very poor and the prenatal involvement is relevant to promote father knowledge to support breastfeeding mother. Future implications: There is need to develop fathers’ knowledge to support mothers’ decisions and actions concerning to the breastfeeding. Thus, to contribute for breastfeeding success, the father must be considered as a client of care.

Keywords: breastfeeding, paternal knowledge, assessment

Introduction
The decision to breastfeed is important both for the child and the mother. Therefore, mother and father should be engaged in the decisions related to their child, namely the decision to breastfeed. Breastfeeding is a process that needs to be learned by mothers and fathers. Although fathers do not breastfeed, their emotional, practical and physical support is critical factors to promoting successful breastfeeding.1, 4 Based on a literature review,2 identify that fathers influence the breast-feeding decision, assistance at first feeding, and duration of breastfeeding.

There is strong evidence that fathers can influence the initiation and maintenance of breastfeeding3, 11-12 contributes to maternal breastfeeding confidence12-14 and influence decisions regarding duration and weaning.2 Without fathers’ support, mothers are more likely to breastfeed for a shorter duration.15, 16 When fathers are not supportive, breastfeeding rates are lower.17

Some authors have suggested that the baby’s father is one of the most influential persons to the mother decisions and actions, and that he can act as either key supporter or deterrent to the breast-feeding process.20 However, many fathers lack the awareness of their relevance to breastfeeding success. This notion was confirmed by a study that involved mothers and fathers who attended antenatal interventions. The authors found that the maternal and paternal learning interests during pregnancy were super imposable, except for learning needs associated with breastfeeding. In fact, mothers ranked breastfeeding learning needs as fourth most important, and fathers ranked it twenty-first.21

However, another study suggested that fathers want to be involved and be part of the parenthood process, including infant feeding.1 The authors developed a qualitative exploratory design to identify parents’ perceptions of what constitutes support for breastfeeding, particularly focusing upon paternal support. Data from the mothers revealed that “dads do make a difference” and data from the fathers showed they wanted to be involved. The three sub-themes related to fathers included: wanting more information, learning the role, and being an advocate.

In a study evolving 49 fathers aimed to describe Finnish parents’ prenatal breastfeeding attitudes, the authors concluded that fathers found breastfeeding important and they should be included in prenatal breastfeeding counseling.22, 23

Understanding the importance of breastfeeding and its benefits to both, baby and mother, can in-crease the opportunities for fathers to support the mothers in their efforts to breastfeed.24 A controlled trial investigated whether supporting fathers recognized the relevance of their role in the success of breastfeeding.25 The results showed that the prevalence of full breastfeeding at six months was 25% in the intervention group and 15% in the control group, and that of any breastfeeding at 12months was 19% and 11%, respectively. Moreover, significantly more women in the intervention group reported receiving support and relevant help with infant feeding management from their partners. The authors inferred that teaching fathers how to prevent and manage the most common lactation difficulties was associated with higher rates of full breast-feeding at six months.

During pregnancy, both mother and father need to start preparing to enhance their knowledge on breastfeeding, e.g., good positioning, latch.26-28 Fathers who have access to breastfeeding information have the potential to be better prepared to make informed decisions and be supportive to the mother with greater consistency.
Several studies have highlighted that the fathers’ knowledge also significantly influenced breastfeeding rates. One study found that children, whose fathers knew more, had a 1.76 higher chance of being exclusively breastfed at the end of the first month, and a 1.91 higher chance of receiving maternal milk at the end of the third month. That study results showed that fathers who received advice on breastfeeding were almost five times more likely to have above average knowledge on this topic.

The evidence has shown that a simple educational intervention can increase the level of the fathers’ knowledge about breastfeeding, and, therefore, increase rates of breastfeeding in the first six months after birth. In a randomized study, fathers were given an antenatal educational intervention that provided information about child care, breastfeeding, and how to help the mother. The authors observed that 74% of the mothers whose partners had attended the education sessions had initiated breastfeeding. This adherence to breastfeeding dropped to 41% in the control group.

Some authors have argued that their studies have ascertained what men believe they need to know how to be an effective breastfeeding advocate. Others have suggested that more research is needed to identify methods and means of support that fathers can use to ensure breastfeeding success and identify in what fathers need to be better prepared to assume their role as breastfeeding supporters. Although nurses and midwives stated that the fathers occupied a prominent place, the father had not yet assumed as a relevant client of care when breastfeeding is the focus of practice. In fact, fathers are currently not target in breastfeeding promotion interventions provide by nurses-midwives. The information that fathers need to learn and their level of breastfeeding knowledge are not clear and well established. So, the study objectives were:

a. What do Portuguese fathers know about breastfeeding during pregnancy?

b. What is the level of knowledge of fathers?

c. Are there differences in fathers’ level of knowledge about breastfeeding in relation to age, education, parity, planned pregnancy, decision for breastfeed, participation in the decision and willingness to support mother and child in breastfeeding process?

Methods

A cross-sectional study was developed in three Health Centers in North of Portugal, with previous authorization of the Ethics Committee of the institutions. Participants were recruited during their visit to the Health Centre. The sample was constituted for fathers which fetus had 28-32 gestational age, resulting in a convenience sample. Eligible fathers provided voluntary consent for participation after researcher explanation of the study purpose, procedures, benefits and that declining participation would have no adverse consequences in health care provision. All participants were assured of confidentiality. The data were collected using face-to-face interview to complete the instrument, conceded specifically for this purpose, from January to July of 2011.

Based in literature review, was developed an instrument to guide the assessment of fathers’ breastfeeding knowledge during pregnancy. The purpose of literature review was to identify the basic knowledge to support breastfeeding initial decisions and actions. A panel including 12 pediatric nurses and midwives experts and a panel of eight fathers with previous experience in breastfeeding reviewed the content of the instrument. It content validity established by consensus.

The instrument included of 18 knowledge descriptors (Figure 1). Breastfeeding knowledge descriptors

- benefits of breastfeeding
- characteristics of colostrum and milk
- criteria to decide the timing and duration of feeding
- signs of adequate nutritional intake
- criteria for deciding when to offer one or two breast
- hunger signs
- safety signs
- position of mother and child
- proper latch signs
- strategies to keep the baby awake during the feeding
- milk production and release signs
- breastfeeding prevention measures
- measures that stimulate lactation
- influence of mother’s nutrition upon milk supply (composition)
- risk factors for fissure of the nipple
- prevention of nipple fissure
- difference between let down reflex and breast engorgement
- risk factors for breast engorgement

Figure 1 Breastfeeding knowledge descriptors.

The instrument consisted of two parts: first, the demographic, obstetric and paternal data; and second, the breastfeeding knowledge descriptors. It was determined that paternal breastfeeding knowledge assessment during pregnancy should be conducted between 28-32 gestational weeks. Each knowledge descriptor of the instrument should be documented according to the nurse-midwife clinical judgment of the fathers’ knowledge on the specific topic (nursing diagnosis). If fathers revealed the knowledge, their response were recorded as “yes” meaning adequate knowledge; otherwise, the response was recorded as “no” meaning a lack of knowledge (ICN, 2011). For instance, to assess the fathers’ knowledge about hunger signs, they were asked, “How do you think you know that the baby is hungry/need to be fed?” If the father mentioned that the baby’s is awake, seeks to grab any object that touch the mouth area, seeks the nipple, sucks on fingers, and cry (late sign), the response was documented “yes,” meaning they had adequate knowledge about baby hunger signs.

The reliability was analyzing using Kuder Richardson Coefficient indicated to dichotomous instrument. In this study the K-R 20=0.8549 and K-R 21=0.8438. A value of K-R 20 considered valid is ≥0.70. To analyze the data, the Statistical Package for Social Sciences (SPSS) program, version 19.0, was used. The fathers’ knowledge was analyzed using descriptive statistics, and the profile of fathers more knowledgeable on breastfeeding was analyzed using inferential statistics.

Results

This study addressed to assessment of fathers’ knowledge on breastfeeding during pregnancy. It also examined fathers’ knowledge...
in relation to demographics and breastfeeding plan. Fathers’ demographics characteristics and breastfeeding plan. One hundred and forty six fathers participated in the study. The fetus gestational age was at the timing of assessment between 28-32 weeks, with gestational age mean of 29.6 weeks. The mean age of fathers was 31.95 (SD=6.57). Was observed that 31.5% of fathers had higher education and 33.6% had nine years of school. Most of fathers were living with the mother and for 78.1% was the first child.

Concerning breastfeeding plan, 93.2% of the cases revealed intention of breastfeeding their baby. Most of fathers stated that didn’t participated in the decision (58.9%) and one third (34.9%) stated that discussed the subject with their spouse. In the assessment timing, 34.9% of fathers stated the willingness to support mother during breastfeeding process but 65.1% still hadn’t thought about it.

Fathers to be’ knowledge on breastfeeding. The results of the examination of fathers’ knowledge of breastfeeding revealed that they have a poor knowledge in every aspects assessed Table 1.

**Table 1** Distribution of fathers with lack of knowledge on breastfeeding descriptors

<table>
<thead>
<tr>
<th>Lack of knowledge % (N)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge of benefits of breastfeeding</td>
<td>71.3 (102)</td>
</tr>
<tr>
<td>Knowledge of satiety signs</td>
<td>83.9 (120)</td>
</tr>
<tr>
<td>Knowledge of hunger signs</td>
<td>85.3 (122)</td>
</tr>
<tr>
<td>Knowledge of influence of mother’s nutrition upon milk supply (composition)</td>
<td>88.7 (126)</td>
</tr>
<tr>
<td>Knowledge of position of mother and child</td>
<td>90.1 (127)</td>
</tr>
<tr>
<td>Knowledge of strategies to keep the baby awake during the feeding</td>
<td>90.9 (130)</td>
</tr>
<tr>
<td>Knowledge of characteristics of colostrum and milk</td>
<td>91.6 (131)</td>
</tr>
<tr>
<td>Knowledge of criteria to decide the timing and duration of feeding</td>
<td>93.7 (133)</td>
</tr>
<tr>
<td>Knowledge of signs of adequate nutritional intake</td>
<td>93.7 (133)</td>
</tr>
<tr>
<td>Knowledge of criteria for deciding when to offer one or two breast</td>
<td>96.5 (138)</td>
</tr>
<tr>
<td>Knowledge of milk production and release signs</td>
<td>96.5 (138)</td>
</tr>
<tr>
<td>Knowledge of proper latch signs</td>
<td>97.2 (137)</td>
</tr>
<tr>
<td>Knowledge of difference between let down reflex and breast engorgement</td>
<td>97.9 (140)</td>
</tr>
<tr>
<td>Knowledge of risk factors for fissure of the nipple</td>
<td>97.9 (140)</td>
</tr>
<tr>
<td>Knowledge of breast engorgement prevention measures</td>
<td>97.9 (140)</td>
</tr>
<tr>
<td>Knowledge of prevention of nipple fissure</td>
<td>98.6 (141)</td>
</tr>
<tr>
<td>Knowledge of risk factors for breast engorgement</td>
<td>98.6 (141)</td>
</tr>
<tr>
<td>Knowledge of measures that stimulate lactation</td>
<td>99.3 (142)</td>
</tr>
</tbody>
</table>

A considerable percentage of fathers revealed lack of knowledge in all knowledge descriptors. Concerning basic knowledge to support the decisions more than 90% of fathers displayed lack of knowledge in 14 of the descriptors. In fact, they didn’t displayed knowledge to contribute to the decisions related to timing and duration of feeding (93.7%), to recognize signs of adequate nutritional intake (93.7%), or to recognize signs of proper latch (97.2%).

The milk production is a relevant issue related to breastfeeding success. Regarding this matter, all fathers revealed lack of knowledge about measures that stimulate lactation revealed lack of knowledge and 96.5% revealed lack of knowledge of milk production and release signs. The same picture can be observed concerning breastfeeding complications. Almost all fathers revealed lack of knowledge of risk factors and prevention measures of fissure and breast engorgement.

Fathers revealed a very poor total knowledge score. The calculation of knowledge score emerged of the sum of the results of clinical judgment ‘yes’ (0) and ‘no’ (1) and divided for the total of items (18). The result of this equation varied between 0 (lower score) and 1 (higher score). The mean score was 0.066 (SD=0.13). Analysis of variance to test fathers’ knowledge on breastfeeding showed no significant difference in relation to fathers’ age, education, parity, planned pregnancy and intention of breastfeeding. However, were observed a difference in relation to father participation on the prenatal decision of breastfeeding (U=1570.50; p=0.013) and the willingness to support mother with the decisions and actions (U=1525.00; p=0.001), whereas the fathers that feel involved are more knowledgeable.

**Discussion**

The literature has highlighted that the lack of knowledge can influence the success and duration of breastfeeding. The evidence has also shown that a higher knowledge level about breastfeeding and complications management has the potential to lead to an increase in the duration of breast-feeding and to produce more positive perceptions of the breastfeeding experience. The fathers’ knowledge level about breastfeeding appears to be critical for supporting the mothers’ decisions and actions. This idea was conveyed in another study that found that the father’s support, in relation to breastfeeding, was considered essential by most of the mothers (54.2%). However, the results of this study indicated a significant lack of breastfeeding knowledge among fathers during pregnancy. In fact, most of the fathers demonstrated a knowledge deficit in all decriptors assessed relating to how to manage breastfeeding complications, promote lactation and assure proper latch.

A study that aimed to describe breastfeeding knowledge of childbearing parents found that the respondents correctly answered 68% of the items related to breastfeeding knowledge. Nevertheless, the issues for which the most of fathers revealed a lack of knowledge were similar to this study. The authors concluded that parents needed more information about ways to increase lactation.

The success of breastfeeding is more easily achieved if both mother and father work together for the same objective. When a mother feels insecure or fearful about her ability to breastfeed the child, the father’s support can make a difference in the maintenance of breastfeeding. Regarding breastfeeding, the most important goal of nursing and midwifery care is to promote effective breastfeeding, healthy growth and development of the child, maternal satisfaction with
the breastfeeding experience, and the fathers’ involvement in the decision and process. To achieve these goals, nurses and midwives need to implement interventions able to develop mothers’ and fathers’ knowledge about breastfeeding, starting this learning process during pregnancy.

Conclusion

Paternal knowledge and support are relevant factors for effective breastfeeding. The challenge is to prepare fathers to assisting breastfeeding mothers. However, fathers revealed a significant lack of knowledge on breastfeeding during pregnancy. Therefore, nurses-midwives need to consider fathers as a relevant client of care in prenatal breastfeeding promotion intervention.

Implications for clinical practice

Increasing fathers’ knowledge of breastfeeding is a critical component for effective breastfeeding success. Assessing paternal breastfeeding knowledge is an essential step for the conception and implementation of care. First step of a care plan is to assess care needs to offer significant care and result in effective outcomes. The development of an instrument to guide the assessment of fathers’ breastfeeding knowledge constitutes an important contribution for quality of care. In addition, using the instrument to assess the individual learning needs is essential for developing effective and meaning educational interventions.

Acknowledgements

None.

Funding and conflict of interest

The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article.

References


