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Women's perceptions, knowledge and breastfeeding decision-making

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It takes a mother to practise breastfeeding: Women's perceptions of breastfeeding during the period of intention

*"The beauty and mystery of the ethnographer's quest is to find the unexpected stories,
the stories that challenge our theories"*

(Behar, 2003)

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Abstract

In the Netherlands, 81% of mothers initiate breastfeeding. After one month the percentage of mothers still breastfeeding drops, despite positive intentions. Little is known about women's perceptions of breastfeeding during the period of intention. This qualitative study aimed to gain insight into these perceptions among first-time mothers from middle and high socioeconomic backgrounds in the northern part of the Netherlands.

We used the theory of planned behaviour as the deductive model. In 2008, 16 in-depth interviews were conducted with 8 mothers who intended to breastfeed. The interviews were conducted at two time points (prepartum and postpartum) and covered the same period (that is, from the time when the intention was formed until after childbirth). The interviews were transcribed verbatim and analysed using grounded theory.

Five inductive themes were identified: combining breastfeeding with work, learning about breastfeeding, making arrangements for childbirth, reflecting on the intention, and becoming a mother. During the extended period of intention, the women anticipated breastfeeding, but were cautious in expressing their intentions. They felt that the experience of becoming a mother would be critical to their breastfeeding outcomes.

The theory of planned behaviour has been widely used in breastfeeding research. However, the period of intention is relatively long for breastfeeding. Rather than recommending an intensification of antenatal breastfeeding education, recommendations must incorporate the awareness that practising breastfeeding should not be considered the continuous outcome of the intention to do so - it takes a mother to practise breastfeeding.

Introduction

In the Netherlands, 81% of mothers initiate breastfeeding when their babies are born. After one month this percentage is 48%, after three months 30%, and after six months 13%, according to figures reported in 2007 (Lanting & Wouwe, 2007). In 2010, breastfeeding rates were 75% at birth and 46% after one month (Lanting & Rijpstra, 2011; Statistics Netherlands, 2012). Although there are some variations in different countries and regions, these figures represent a common pattern in current breastfeeding rates in most countries in the Western world, with the highest drop-out occurring in the first weeks after birth (MacKean & Spragins, 2012). National campaigns and guidelines that emphasise the health benefits of breastfeeding have been developed with the aim of extending the duration of breastfeeding (Netherlands Nutrition Centre, 2002). These campaigns follow the World Health Organization (WHO) guidelines, which recommend exclusive breastfeeding until six months of age (WHO, 2001). While these campaigns have been successful in increasing the initiation rate over the past decade, they have not extended the duration of breastfeeding (Lanting & Wouwe, 2007). Breastfeeding initiation rates reflect a high intention to breastfeed; the rapid decline indicates that this intention does not result in successful breastfeeding outcomes. The discrepancy between intended and actual breastfeeding duration is associated with low maternal satisfaction (Kerkhoff & Wouwe, 2008; Reede, 2011).

Research on the determinants of the decline in breastfeeding rates in the first months has shown higher breastfeeding rates in women who are older (Bulk-Bunschoten et al., 2001) and who have higher socioeconomic status (SES) (Rossem et al., 2009; Scott et al., 1999) but also that in all SES groups, mothers often drop out before the end of their intended breastfeeding duration (Lanting & Wouwe, 2007). Early breastfeeding discontinuation is also common in primiparous mothers (Dewey et al., 2003). Cross-sectional surveys have shown that, in general, the main reasons for early weaning in the Netherlands are pain, insufficient milk and work; among women with high SES, the main reason is work (Kools et al., 2006; Lanting & Wouwe, 2007). Although this sheds some light on why women stop breastfeeding early, it does not reveal what underlies these reasons (Lanting & Wouwe, 2007).

The theory of planned behaviour (TPB), which had been developed by Ajzen and Fishbein (Ajzen, 1991; Fishbein & Ajzen, 1975), describes how behaviour is preceded by behavioural intention. The intention is determined by attitude, social norms and perceived control (Ajzen, 1991). The TPB has been frequently used in health-related studies in both qualitative and quantitative designs, including breastfeeding studies (Avery et al., 1998; Dodgson et al., 2003; Duckett et al., 1998; Li et al., 2005; McMillan et al., 2008; Swanson & Power, 2005; Wambach, 1997), confirming that breastfeeding intention is a strong predictor

of breastfeeding initiation (Duckett et al., 1998; McMillan et al., 2008; Swanson & Power, 2005; Wambach, 1997). Intention has been reported as one of the strongest predictors of breastfeeding initiation and duration (Meedyia et al., 2010).

In the Netherlands, a mother's intention to breastfeed or bottle-feed is formed long before childbirth: 67% of women decide prior to gestation and 32% develop their intentions in the first trimester (Kools et al., 2005; Lanting & Wouwe, 2007). Consequently, there is a long period between setting the intention and initiating breastfeeding. Despite this extended period of intention, most studies have focused on this period only at one particular time point: either prepartum (Lee et al., 2005; Persad & Mensinger, 2008) or postpartum (Kong & Lee, 2004; Mistry et al., 2008). These studies have all been quantitative, focusing on breastfeeding attitudes or determinants of breastfeeding outcomes. Hoddinott and Pill (1999) conducted qualitative research on perceptions of breastfeeding among women with low SES at two time points: prepartum and postpartum. Prepartum, they focused on intention, and postpartum, on breastfeeding outcomes (Hoddinott & Pill, 1999).

None of these studies focused specifically on intention at two time points (that is, prepartum and postpartum). We proposed that using a qualitative design to study women's perceptions both prepartum and in retrospect would generate a deeper understanding of these perceptions, which would contribute to the appraisal of interventions that aim to support mothers in their breastfeeding intentions. For this reason, we asked women to share their breastfeeding perceptions both during the period of intention (that is, prepartum) and retrospectively (that is, postpartum).

To understand the motives underlying breastfeeding decision-making, the significance of biological, social and cultural conditions must be recognised (Maher, 1992). Traditionally, giving birth was perceived as a natural and uncontrollable event (Romano & Lothian, 2008). With modernisation, pregnancy and birth have been medicalised in most parts of the world. This has resulted in a reduction in perinatal maternal and child mortality (Liljestrand, 1999). At the same time, it has changed the perception of birth from a natural event to a potentially risky endeavour that needs to be medically monitored. How and where to deliver has become a matter of choice and decision-making for both health professionals and future parents. In the Netherlands, although it is common for women to opt for a home delivery in the absence of contraindications, more and more women are choosing to deliver in a hospital or birth centre. Currently, about a third of mothers give birth at home (Lanting et al., 2005). Dutch reproductive care is organised within an integrated system of obstetric, midwifery and maternity care (Kools et al., 2006). Antenatal care is provided by midwives or gynaecologists (depending on whether a home delivery is involved), while postnatal care is provided by midwives and maternity assistants at home or in a birth centre. Most health insurance companies cover eight days of maternity care at home. After one month, the baby

clinics take over professional postnatal care (Kools et al., 2006). No standardised services are provided by professionals between the eighth and thirtieth day after delivery.

According to two midwives (Campen & Kreulen, 2008), at 20 weeks of gestation midwives or gynaecologists usually inquire about the mothers' intentions to breastfeed or bottle-feed. In addition, these professionals may provide breastfeeding information, depending on the guidelines of their profession. Postpartum, the maternity assistants support breastfeeding initiation until day eight. Additional professional support may be provided by lactation consultants, which is not included in the integrated (funded) care system. As part of the campaigns to increase Dutch breastfeeding rates, many reproductive health and maternity care agencies have received Baby-Friendly Hospital Initiative (BFHI) certification, developed by WHO in 1991 and supervised nationally by the Dutch BFHI accrediting body. Virtually all maternity organisations in the Netherlands have been certified to date (Dutch Ministry of Health, Welfare and Sport, 2008).

The expectations associated with women's roles can be conflicting: women are expected to take care of their children (including breastfeeding) and at the same time participate in the labour market. Employment rates of Dutch women have increased considerably over the past decade. In the period 2005–2009, female labour participation was 71.5%, which is higher than the European average (Statistics Netherlands, 2011a). However, 75% of these women worked part-time, which is the highest rate of part-time work in Europe according to figures for 2009 (Eurostatistics, 2011). Because government policy aims to increase full-time female labour participation (Dutch Ministry of Social Affairs and Employment, 2007), provisions for leave and facilities for childcare are high on the agenda. Mothers are eligible for 16 weeks of maternity leave, usually 4 weeks prepartum and 12 weeks postpartum (Dutch Ministry of Social Affairs and Employment, 2011a). Paternal leave is generally two days postpartum. Subsequent parental leave is allowed, but is usually unpaid (depending on employment agreements).

Until their child is nine months old, mothers are entitled to use 25% of their working time to express breast milk. The employer is obliged to provide a room for expressing breast milk and to arrange for storage facilities (Dutch Ministry of Social Affairs and Employment, 2011b). However, women report that frequently they have to organise this themselves (Vogel et al., 2009). The nature of their work does not always allow women to interrupt their activities during working hours.

The Dutch social and cultural background outlined above shapes the context of breastfeeding decision-making. In this context, we studied perceptions of breastfeeding during the period of intention in primiparous women in the northern part of the Netherlands.

Methods

We conducted qualitative fieldwork according to the ‘Hutter-Hennink qualitative research cycle’ (HH-QRC) (Hennink et al., 2011). This cyclic model provides tools for accomplishing a coherent process of defining research questions, collecting and interpreting data, and developing theory. The authors emphasise the importance of reflexivity, making inferences and linking empirical data to theory by inductive and deductive reasoning. The HH-QRC includes three stages: the design cycle, the ethnographic cycle and the analytical cycle. In our study, these three stages were accomplished by moving back and forth between these cycles, conducting in-depth prepartum and postpartum interviews, using the TPB as a deductive conceptual framework, and generating theory refinement, as explained by Snow et al. (2003). We selected a purposive sample of eight pregnant women from one midwife clinic in a mid-sized town in the province of Friesland, in the northern part of the Netherlands. The midwives invited women in gestation week 20 to participate in the research; they did this in person. Inclusion criteria for the prepartum interview: primiparous, capable of breastfeeding and able to speak Dutch or English. Criteria for the postpartum interview: mother and infant both healthy and no contraindication for breastfeeding. Prior to the prepartum interview, the principal researcher (a cultural anthropologist) explained to the participants that her interest was in their personal experiences from their own perspectives, aiming to understand these experiences from the ‘inside perspective’ which is also referred to as the ‘emic perspective’ (Hennink et al., 2011). The researcher invited the participants to talk about their experiences in their own words (Spradley, 1979). All responses would be considered equally right or relevant. The researcher, who was a breastfeeding mother herself once, would not express opinions on attitude, knowledge or practice. Each participant was given a description of the research and anonymity was guaranteed. The participants could withdraw from the study at any time. All participants agreed and gave their informed consent. No participants withdrew from the study.

Empirical data were collected between June and December 2008 by conducting 16 face-to-face in-depth interviews up to saturation level. The interview guides were semi-structured with open-ended questions and probes in variable sequences (Hennink et al., 2011), covering the topics of the TPB concepts, including knowledge (Duckett et al., 1998). The prepartum interview questions focused on attitudes toward breastfeeding, social norms, perceived control, and breastfeeding knowledge. The postpartum questions concerned the same topics in retrospect, as well as childbirth experiences and actual feeding practice. We conducted the prepartum interviews (1) in the participants’ third trimester of gestation and the postpartum interviews (2) at six weeks. The prepartum interviews were conducted at the midwife clinic and took 30 to 45 minutes. The postpartum interviews were conducted at the participants’ homes and took 45 to 60 minutes. During the postpartum interviews, the

infants were present in the same or in a separate room. Two interviews were interrupted by the infants' crying.

All interviews were conducted by the first author and audio-recorded. The recordings were listened to again and a diary was kept for reflection, making it possible to draw inferences for deeper inquiry into the information provided. Information saturation, as defined by Glaser and Strauss (1967) was achieved by determining that no new information was being obtained. The recordings were transcribed verbatim by a research assistant, who was supervised by the first author and one co-author (HH).

Content analysis was used to analyse all transcripts, starting with open coding and using ATLAS.ti (6.015) software. Labelling and coding were kept close to the vocabulary of the participants. We passed through four interpretive stages, moving back and forth between the original data and emergent patterns toward theory. We applied the principles of grounded theory – originally developed by Glaser and Strauss (1967) and elaborated further by others (Charmaz, 2006; Corbin & Strauss, 2008) – and combined inductive and deductive reasoning. First, 260 codes were identified according to the criteria: recurrence, repetition and forcefulness (Owen, 1984). Comparing, interpreting and subsequent inductive reasoning generated 50 supercodes. Subsequently, these 50 supercodes were merged into five themes: combining breastfeeding with work, learning about breastfeeding, making arrangements for childbirth, reflecting on the intention, and becoming a mother. We used deductive reasoning to arrive at theory refinement (Snow et al., 2003), which is represented in our inductive model.

Quotes were selected to illustrate the results. Although the participants' colloquial language was retained, their names were changed to protect participant anonymity. Scientific rigour (as defined by Mays and Pope, 1995) was achieved by keeping a record of the interpretation process and by consulting peer researchers for agreement on interpretation during each stage, from the original transcripts to the inductive model. Our theory development was based on inductive as well as deductive reasoning, and was well grounded in the empirical data.

Findings

Participant characteristics

All participants (n = 8) intended to breastfeed. They were Dutch primiparous women aged 25–31, living in a marital or cohabitant relationship with the infant's biological father in a mid-sized town in the northern part of the Netherlands. As determined by Dutch educational level standards, they had middle or high socioeconomic backgrounds, and were employed for a minimum of 12 hours a week. All women attended the same midwife clinic,

were in good health and were non-smokers. Four mothers gave birth at home and four had clinical deliveries. They all started feeding their newborns with their own milk. Two women initially expressed breast milk, and six fed directly from the breast. At six weeks, five women were breastfeeding exclusively, two women were practising mixed feeding (breast milk and formula) and one mother was practising formula feeding exclusively.

Five themes

We identified five themes relating to the women's perceptions during the period of intention: combining breastfeeding with work, learning about breastfeeding, making arrangements for childbirth, reflecting on the intention, and becoming a mother.

1. Combining breastfeeding with work

All of our participants had thoroughly considered the impact their breastfeeding intentions would have on their work. They indicated that their work was important and that they aimed to return to work once their maternity leave was over, thus combining breastfeeding with work if possible: *But of course it has to be possible to combine it [breastfeeding] with work* (Marissa, 1).

One woman did not intend to 'combine' work and breastfeeding. This mother preferred to be available to her infant full-time during the first five months: *From that moment you're there completely for the baby and that's it. You don't have to do anything else, you don't have to go to work, you don't need to go anywhere, and in that sense you're not distracted* (Rianne, 1).

All women were familiar with the recommendation of six months of breastfeeding. They were all eligible for three months postpartum maternity leave, which they considered too short: *I think that leave in the Netherlands is actually quite short, because I don't know whether I'll be ready to start working again at that time, and I don't know whether my baby will be ready for me to go back to work, and weaning might be very stressful. And yes, I've heard other mothers talk about this* (Jantine, 1).

Combining motherhood and employment involves making arrangements for childcare by professionals or relatives. All women had discussed the subject prior to delivery:

Jessica, 1: *We've already arranged for childcare. Our baby will go to childcare one day [a week], because we don't want my mother to babysit three days a week ... So my mother is going to babysit two days and my mother-in-law one day.* Interviewer, 1: *So you've thought all this through already?* Jessica, 1: *Yes, you have to, you have to be ready. Otherwise we'd have a problem!*

Whatever type of childcare was preferred, it had consequences for the feeding method: *At some point the baby will have to go to childcare, so it will also have to get used to the bottle* (Esther, 1).

In the prepartum interviews, all women acknowledged that they were allowed to express breast milk at work, according to employment agreements. However, most participants expected expressing milk at work to be inconvenient: *In an office you could say, 'Well, I'll just put my things aside and go express some milk'. But not here – there are customers waiting for you, and I don't know how I, um, when you're a bit tense, how you'll deal with it at that time* (Anna, 1).

One woman indicated that expressing milk was common among her colleagues; she did not expect difficulties nor did she prepare for expressing milk: *We have all kinds of small rooms at work where you can go and sit quietly. I work with 100 women. There's always someone pregnant at work, so I know how things go, they just take a key and they go sit somewhere and express milk and that's it* (Boukje, 1).

To the other women, expressing milk at work was uncommon; they avoided discussing the subject and did not anticipate it: *I haven't discussed it at work yet. It's not my number-one priority. You have to arrange so many things, and I think, when the baby is there, maybe I won't have any milk or things won't work out from the start, and, well, then you've arranged for everything already. I think it's better to wait and see how things go, and then I can still make the arrangements in those three months if necessary* (Jessica, 1).

2. Learning about breastfeeding

The women in our study acknowledged the significance of breastfeeding information, although most of the information they found prepartum focused on health benefits. This contributed to a positive attitude toward breastfeeding and supported the women's intentions. Information on breastfeeding skills and the lactation process, however, was limited: *That's the question!* [when asked if she understood how breastfeeding worked] *Well, more or less ... I think you won't really learn that until, um, the baby is there* (Daniëlle, 1). And: *Well, yes, I know the theory about hormones and those kinds of things, but I don't yet have a clear idea of how it works, in the sense of latching on and positioning and those kinds of things* (Jantine, 1).

The interviewees expected to know how to breastfeed once their infants were born. They believed breastfeeding would come naturally; they expected nature to take the lead. In addition, they thought the maternity assistant would instruct them: *Nature also has to help out a little and show how things work, and well, yes, then I do believe it will work out. They say it will all be fine once the maternity assistant arrives, because she will be more involved with you and the child than with housework and things like that, so you just have to make use of that* (Daniëlle, 1).

Some women got information from brochures or the Internet. Or alternatively, they attended breastfeeding classes: *I think it's important to know what to expect and what may happen when things don't work out or don't go well. They [in the breastfeeding classes] will give you lots of information about it* (Boukje, 1).

During the period of intention, none of the women had anticipated feeling uninformed about breastfeeding. Once the child was born, however, they realised that their knowledge was inadequate, which generated surprise or disappointment: *We really thought there would be milk right after birth! But that's not the case, ha ha* (Rianne, 2). And: *Then I think, oh, we're really far removed from our nature actually – apparently it's not that natural at all* (Esther, 2). And: *Nobody ever told me!* (Daniëlle, 2).

Breastfeeding classes were useful to some women, but one mother felt clearly discouraged by the information on potential difficulties: *I think the videos were very useful, especially with latching on and nursing positions. In the beginning I thought it would be easy, latching on, it'll be a piece of cake, but then I went to the breastfeeding classes and it became clear that it wasn't that easy at all ... All the problems that could arise. I thought, oh my goodness, what a hassle* (Esther, 2).

3. Making arrangements for childbirth

In the prepartum period, women were busy making arrangements for the delivery and the immediate postpartum period, including organising maternity care, decorating the nursery and preparing birth announcements. *You have to make so many arrangements, the whole process is so daunting ... arranging birth announcements, the nursery will be finished this weekend, and then this, and then that* (Jessica, 1).

When opting for childbirth at home, the parents had to arrange for an appropriate bed and other materials: *She [maternity assistant] visited me last week. Everything's been taken care of. The only thing I still have to arrange for is the bed* (Boukje, 1).

Five women attended antenatal classes accompanied by their spouses. They indicated that they felt more insecure about giving birth than about breastfeeding: *Yes, antenatal classes, I think they're important, to prepare for the delivery, because basically I feel more insecure about the delivery than about breastfeeding* (Esther, 1).

4. Reflecting on the intention

The women interviewed had shaped their intention prior to gestation or in the early stages of pregnancy. Information obtained during pregnancy played a limited role in this process: Interviewer, 1: *And do you think that this information motivated you to do this [breastfeeding]?* Rianne, 1: *No, no, I already would have, if you'd have asked me that ten years ago, and I wouldn't have had that information, I would have chosen for that as well.*

Some women were unaware that there was a choice to be made. Either they had perceived it as a very obvious choice, or they had intuitively made a decision without being aware of it: *And then I read that book, and I thought, oh, that you really have to make a decision about this for yourself, I hadn't realised that, because for me it was already obvious, like, of course*

you'll do that (Rianne, 1). And: And then I understood much better why people asked me – because at first I could never understand the question – when people asked me, are you going to breastfeed or bottle-feed? And at the time [before delivery] I always thought it was such a strange question (Rianne, 2).

Although the certainty with which they expressed their intention varied, most women were cautious in their comments. They would use the verb 'to try': *Yes, I would just like to try (Boukje, 1)*. Other verbs indicating uncertainty or not being in control were 'to be able to manage', 'to succeed' or 'to make it work'. Only two women showed a clear determination to breastfeed: *I just feel like 'this is how I'm going to do it and this is how I would like it to be' (Marissa, 1)*. One of these women added that she saw the experience of breastfeeding as a challenge: *That's also what I like about it. It's something new, and I'm just going to do it (Rianne, 1)*.

One woman questioned the extent to which she could influence breastfeeding success: *Well, it just has to work, but what does that depend on? I don't know yet, what that could depend on ... Yes, I very much hope it will work (Rianne, 1)*. Two participants explicitly indicated that they expected to influence breastfeeding success, either by being persistent or by being able to remember the information provided in breastfeeding classes. However, both women remained cautious, and expressed this by using the verb 'to hope': *I do hope I'll have some level of persistence, so that it will be successful (Jantine, 1)*. *And: I noticed that already during the classes I was starting to feel insecure. Like, I hope it will work, because ... because I hope I'll be able to remember it all! (Esther, 2)*.

5. Becoming a mother

Parturum, the women in our study perceived that it was difficult to imagine what being a mother would be like: *I always like to be prepared and know what to expect in advance, but I also know that's not always possible. But I believe I can deal with that now (Marissa, 2)*. This was confirmed by their responses in the postpartum interviews: *Well, it's nothing like you expect it will be (Anna, 2)*. The experience of childbirth was perceived as a physically and emotionally overwhelming event over which they had very little control: *I was in a kind of shock after giving birth – well, my hands were really shaking, I couldn't even hold her properly or anything else (Marissa, 2)*.

Some women felt confused or distant: *It's just like it all happened somewhere else. It's very weird ... You're not really there at first (Anna, 2)*. *And: What happened in the hospital, I hardly remember a thing. I don't remember much about those first days (Marissa, 2)*.

All women experienced intense emotions that they had not encountered before. One mother explicitly referred to the establishment of the mother-infant bond: *He was there and of course you're immediately in love, like 'wow' (Daniëlle, 2)*. One mother explained that

she felt strong, powerful and competent, encouraged by her new identity as a mother and buoyed by the upsurge of hormones: *Also probably because of the hormones. We've got a child now, no one can harm us. We have a very healthy child, we are very, very happy, we don't need anybody else ... Amazing how much energy you get from that* (Rianne, 2).

Compared to giving birth, starting breastfeeding was even more difficult to imagine in the prepartum period: *I find it hard to imagine, because it's for the first time* (Anna, 1). One mother explained that although it was hard for her to imagine breastfeeding now, she anticipated the situation after birth: *Well, then [after childbirth] it will be easier, you're in the situation, you're in the middle of it* (Daniëlle, 1).

Inductive model

The five inductive themes generated the inductive model presented in Figure 1.

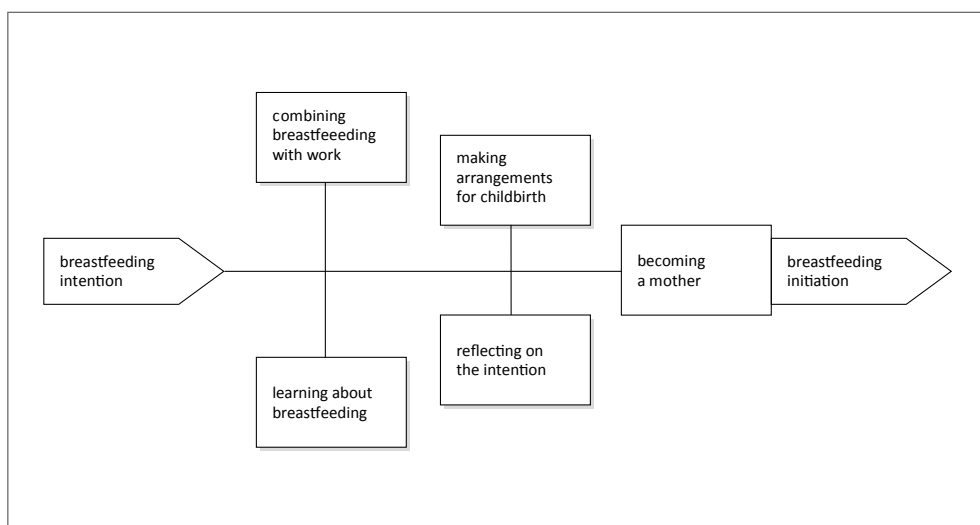


Figure 1: Inductive model: perceptions of women during the period of intention

Discussion

Our research focused on the perceptions of breastfeeding during the period of intention in primiparous women with middle and high SES. We identified five themes: combining breastfeeding with work, learning about breastfeeding, making arrangements for childbirth, reflecting on the intention, and becoming a mother. These five themes reflect general as well as personal breastfeeding perceptions. The first three themes are more general in nature and the other two themes are more personal, a sequence that is represented in

the participants' responses. 'Combining breastfeeding with work' was the first issue the women addressed as a starting point in the prepartum interviews. The reason for this might be that work is a rather general and acceptable topic that also has considerable impact on individuals' everyday lives. Other breastfeeding studies also report the importance of work in breastfeeding decision-making (Scott et al., 1999).

The perceptions that were most personal were represented by the theme 'becoming a mother'. Becoming a mother was identified as crucial, and as shaping the context of the perceptions in the other four themes. The women in our study intended to perform a natural, healthy and generally recommended practice. They perceived that, prior to this, they would have to experience a major life event and a transition, which also in the literature has been referred to as becoming a mother (Wiklund et al., 2009). Although childbirth may have become a controllable event from a medical point of view (Locke, 2009), in childbirth, the hormones, emotions and a newborn take control. In women who intend to breastfeed, it is hypothetical to anticipate practising breastfeeding prior to this uncontrollable event.

The perceptions that are represented by 'learning about breastfeeding', our second theme, must also be understood within the context of becoming a mother. Although mothers had access to information, learning about breastfeeding was limited, as was the circulation of breastfeeding information. One explanation might be that most breastfeeding information focuses on the advantages of breastfeeding – that is, the health benefits. Our participants were familiar with these advantages already, which is confirmed by the literature reporting that the health benefits of breastfeeding are well known in the Netherlands (Kools et al., 2006; Lanting & Wouwe, 2007). Second, breastfeeding is perceived as a natural practice, and therefore women believe that nature will take the lead and that they do not need to learn in advance (Locke, 2009). The third explanation, which refers specifically to the Dutch context, is that all the mothers in our study anticipated relying on the services of their maternity assistant, which is supported by Dutch figures: 95% of Dutch mothers make use of maternity care for an average of seven days (Statistics Netherlands, 2011b). Although all of the explanations mentioned above are obvious, inductive reasoning from our empirical data showed that the women did not consider the prepartum period as appropriate for learning about breastfeeding, because they had the perception that they had to become a mother first. In retrospect, however, they perceived their knowledge as insufficient and inadequate.

Also in 'making arrangements for childbirth', our third theme, the anticipated impact of becoming a mother on breastfeeding decision-making was evident. There was a considerable difference between the efforts in making arrangements for childbirth and the efforts in making arrangements for breastfeeding. Arrangements for childbirth were made thoroughly, and although the effect of attending antenatal classes on the perceived quality of the delivery has been questioned recently in the literature (Bergstrom et al.,

2009), mothers appreciated attending antenatal classes for expectant parents. Compared to antenatal classes, the breastfeeding classes are not the number-one priority. Although mothers perceived both giving birth and breastfeeding as natural events, they responded to these events differently.

Our fourth theme, 'reflecting on the intention', also represents the perception that a major event has to be experienced before starting breastfeeding. Our participants expressed their intentions cautiously in order to measure up to the public norm and also to allow for opposite outcomes. Some researchers report that mothers' breastfeeding decisions relate to the mothers' low level of self-efficacy (Kools et al., 2005; Meedya et al., 2010). Inductive reasoning from our empirical data showed that the mothers' cautiousness was sensible from their perspectives, and should not be confused with low self-efficacy. In this context, statements such as 'I want to try', 'I hope it will work' and 'I hope it will be successful' are inevitable. 'Hope' is an important factor in women's breastfeeding outcomes, as has been reported elsewhere (Thomson et al., 2012).

In the context of becoming a mother, perceptions concerning combining breastfeeding with work, learning about breastfeeding, making arrangements and reflecting on the intention become meaningful. The relevance of recommendations for policy can only be determined when considering these perceptions in context.

Policymakers aim to increase labour participation by women (Dutch Ministry of Social Affairs and Employment, 2007) and Dutch women are recommended to anticipate combining work and childcare, including breastfeeding. At the same time, the three-month postpartum maternity leave in the Netherlands is half of the six months of exclusive breastfeeding recommended by WHO guidelines (WHO, 2001). To meet these guidelines, women would have to express breast milk at work. Although all women were conscious of their legal right to express milk at work (Dutch Ministry of Social Affairs and Employment, 2011b), at the same time they perceived that, in general, expressing milk is poorly facilitated. This contradiction is reflected in a national debate on the challenges faced by women who want to combine breastfeeding with work. There are roughly two main opposing groups in this debate: one group maintains that mothers should make more of an effort to breastfeed because it benefits public health, and the other argues that it is hard for women to measure up to the contradictory expectations in taking on a double role with no supportive facilities (Rijk et al., 2008). We believe that women should be considered capable of making cognitive decisions regarding birth and childcare, but the fact that there may be conflicting policies must be taken into account (Fahlquist & Roeser, 2011) when considering low breastfeeding outcomes.

Along with other authors, we found a limited circulation of breastfeeding information in the prepartum period. Some authors have found a correlation between

inadequate prepartum breastfeeding education and low breastfeeding outcomes (Avery et al., 1998; Scott et al., 1999). Findings like these usually generate recommendations in favour of intensifying professional antenatal education. Consequently, antenatal education is high on the agenda in many countries (Hoddinott et al., 2010). However, our results show that we should reconsider whether intensifying antenatal breastfeeding education is the best way to support mothers in their breastfeeding intentions.

There are limitations to what can be learned about breastfeeding from antenatal education. A study on breastfeeding class attendance reported that women expressed 'fear' of breastfeeding (Craig & Dietsch, 2010). Although the mothers in our study did not express 'fear', they did perceive unfamiliarity – because despite being a natural practice, most women have not watched others breastfeed. In the 1970s in the United States it was found that most people within a mother's circle had never seen breast milk (Raphael, 1973). This is also applicable to the Netherlands, even up to the present day. Dutch culture is not explicit about breastfeeding – we rarely see women breastfeeding in public, nor is breastfeeding portrayed in movies or computer games. Television or video could stand in for exposure to real life (Hoddinott & Pill, 1999), and the mass media could positively support the breastfeeding intentions of pregnant women (Kools et al., 2005; Vogel et al., 2009). At present, 45% of the Dutch population objects to breastfeeding in public (Netherlands Nutrition Centre, 2013).

Not only is breastfeeding rare in the public environment, even the participants' close relatives were unfamiliar with breastfeeding. None of the mothers in our study mentioned their relatives as major sources for learning about breastfeeding. Relatives did not share their personal breastfeeding experiences. Research has shown that the Dutch grandmothers of today have little experience with breastfeeding because of the decline in breastfeeding in the 1960s and 1970s; therefore, they cannot advise their daughters on breastfeeding practices (Bulk-Bunschoten et al., 2001). At the same time, we know that significant others can affect breastfeeding attitudes and intentions in women (Kools et al., 2006). Family support is reported to be critical to increasing breastfeeding rates (Grassley & Eschiti, 2008; Meedya et al., 2010).

One cannot rehearse breastfeeding, and the first few days postpartum are critical to breastfeeding outcomes (Sheehan et al., 2013). Even so, this does not automatically mean that breastfeeding education should be intensified in the prepartum period. We believe that health messages should aim to raise awareness that becoming a mother involves a discontinuity that concerns all aspects of a woman's life and identity, including her work. Although this message should appeal to pregnant women, it should above all appeal to the mothers' social environment as well as to policymakers in order to facilitate an environment that supports mothers in their breastfeeding intentions. In a country with a well-organised system of postpartum maternity care at home, one would expect higher breastfeeding rates. Further

research should explore how the concept of becoming a mother relates to breastfeeding outcomes in this specifically Dutch context.

The theory of planned behaviour

The TPB was an appropriate deductive model for our research. It generated the topics for our interview schedule and guided the interpretation of our data through deductive and inductive reasoning, focusing on the period of intention. According to the TPB, intentional behaviour is a determinant for actual behaviour. This is in contrast to the discontinuity of a major life event perceived by our participants. Therefore the applicability of the theory seems ambiguous. At the same time, it is precisely this ambiguity of the TPB in our context that generated insight into the specific character of breastfeeding intentions. This resulted in our conclusion that practising breastfeeding is not a continuous outcome of the intention to do so. The ambiguity of the TPB in our context will be expressed in three comments below.

Our first comment concerns the duration of the period of intention prior to initiation. In our study this was a minimum of 20 weeks, because the women formed their intentions early, as reported elsewhere (Lanting & Wouwe, 2007). During this period, women have to wait before they can put their intentions into practice, and various events may occur that can hinder a continuous transition from intention to actual practice. Other health-related behaviour studied using the TPB – such as weight loss (Schifter & Ajzen, 1985), smoking cessation (Norman et al., 1999), and alcohol intake (Spijkerman et al., 2004) – could be initiated immediately, without leaving much time for interfering factors.

Second, initiating breastfeeding for the first time is a novel practice, in contrast to health behaviour aimed at returning to previous familiar behaviour or discontinuing unhealthy habits. Our empirical data showed that distinguishing between novel and familiar behaviour is crucial, which is confirmed by studies on food preference using the TPB (Arvola et al., 1999).

Third, the TPB might be too limited when applied to behaviour in which biological and emotional processes predominate (Sutton et al., 2004). This observation has also been acknowledged by Ajzen and Fishbein, who had developed the TPB, and which has contributed to adjustments of their original theory (Fishbein & Ajzen, 2010). The new identity as a mother, along with the newly developed bond between her and her newborn, means that breastfeeding should be considered within a much broader context than intended and actual behaviour.

Strengths and limitations

The strength of our research is the combination of its qualitative design and the conceptual framework. Deductive and inductive reasoning guaranteed that our results were well grounded in the data, linking fieldwork to theory as well as to recommendations for policy. Scientific rigour and the quality of the study could be determined by applying the consolidated criteria for reporting qualitative research (COREQ) (Tong et al., 2007). Our approach is unique because the in-depth interviews we conducted at two different time points covered the same period. Consequently, we achieved a detailed understanding of the mothers' emic point of view. Other researchers have collected data at one time point, either prepartum (Lee et al., 2005; Persad & Mensinger, 2008), or postpartum (Kong & Lee, 2004; Mistry et al., 2008), or collected data at two or more time points but without our specific focus on intentions (Duckett et al., 1998; Hoddinott et al., 2000; Wambach, 1997).

Although becoming a mother as a concept is not new, its impact for mothers when anticipating during the period of intention, and shaping the context for their other perceptions, has not been reported before. As has been pointed out by Morse in her plenary address delivered at the first Global Congress for Qualitative Health Research (2012), developing concepts and examining concepts within different contexts should remain the main challenge for qualitative health researchers (Morse, 2012).

Limitations of the study are that a purposive sample was used. Other limitations of the research are that only women with middle and high SES participated in the research. A consecutive study should also include mothers with low SES.

Conclusion

During the extended period of intention, the mothers in our study anticipated breastfeeding, but expressed their intentions cautiously because they felt they had to experience a biological and emotional life event: becoming a mother. Our participants intended to combine breastfeeding with work, but did not prepare for expressing milk at work. Although they had access to breastfeeding information, they perceived breastfeeding to be a natural practice and did not start learning about breastfeeding in advance. They usually depended on the support of a maternity assistant. Generally, the women made arrangements for childbirth but not for breastfeeding. Rather than recommending an intensification of antenatal breastfeeding education, recommendations should incorporate the awareness that practising breastfeeding is not a continuous outcome of the intention to do so – it takes a mother to practise breastfeeding.

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