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Women's perceptions, knowledge and breastfeeding decision-making

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4

Preferred infant feeding choice and health literacy: Discrepancies in health messages aimed at breastfeeding women

“One need not travel so far, theoretically or geographically, to engage in theoretical extension”

(Hunt & Benford, 1994)

Abstract

Women are recommended to exclusively breastfeed their infants until the age of six months. In this study, we assessed women's use of information in their decisions to stop or continue breastfeeding in the first month after delivery. We used the framework of health literacy, which refers to individuals' capacity to obtain, process, and understand health information needed to make health decisions. The three progressive levels of health literacy (as adopted by Nutbeam) are fundamental, interactive, and critical health literacy. We aimed to identify whether the concept and levels of health literacy can be used to understand women's breastfeeding decision-making.

Empirical data were collected in 2008 and 2011 by conducting 26 prepartum and postpartum in-depth interviews up to saturation level. Participants were 13 Dutch primiparous women who intended to breastfeed, with middle and high socioeconomic status (SES) as well as low SES. All transcripts were analysed using analytic questioning, with the framework of health literacy as a sensitising concept. From the participants, we selected for cases as examples to illustrate the women's functional, interactive and critical health literacy.

Our findings show a progression from functional to interactive to critical health literacy in some women, but not in all of them. Women with low health literacy did not necessarily discontinue breastfeeding, and women with high health literacy did not necessarily continue breastfeeding.

Women are expected to be critically health literate and to make their own decisions, but are also expected to follow health promotion recommendations. There is a discrepancy in the messages health professionals give to breastfeeding women, requiring both a reconsideration of these messages and a nuancing of the concept of health literacy.

Introduction

Because of its health benefits for mother and child, breastfeeding is considered to be the preferred infant feeding choice (Kramer & Kakuma, 2002; Rossum et al., 2005; World Health Organization (WHO), 2001). International guidelines advise women to initiate breastfeeding, and to breastfeed exclusively until the age of six months (WHO, 2003). Among the women who start breastfeeding, only a small number practice long-term breastfeeding as recommended in these guidelines. In most countries in the Western world, most dropout occurs in the first month after birth (MacKean & Spragins, 2012). In the Netherlands as well, many of the women who stop breastfeeding do so in the first month (Lanting & Wouwe, 2007). In 2007, 81% of mothers started breastfeeding; after one month, this rate was 48% (Lanting & Wouwe, 2007). In 2010, these figures were 75% at birth and 46% after one month (Lanting & Rijpstra, 2011; Statistics Netherlands, 2012).

National campaigns and guidelines have been developed with the aim of extending the duration of breastfeeding (Netherlands Nutrition Centre, 2002). These campaigns emphasise the health benefits of breastfeeding, and follow WHO guidelines (WHO, 2003). Although these campaigns have successfully increased the initiation rate over the past decade, they have not extended the duration of breastfeeding (Lanting et al., 2003; Lanting & Wouwe, 2007; Netherlands Nutrition Centre, 2002).

Earlier research has shed some light on the determinants of breastfeeding initiation and duration. In general, higher breastfeeding rates are found in mothers who are older and have higher educational backgrounds (Bulk-Bunschoten et al., 2001; Rossem et al., 2009; Scott et al., 1999). Reasons reported for breastfeeding discontinuation were 'pain', 'work', and 'not enough milk' (Lanting & Wouwe, 2007). Recent qualitative focus group research in the Netherlands also identified the themes 'autonomy' and 'breastfeeding didn't go as expected' as being associated with breastfeeding discontinuation (Vogel et al., 2009). However, we still know little about the reasons that underlie women's decisions on breastfeeding duration.

We conducted qualitative research on primiparous mothers' decisions to stop or continue breastfeeding in the first month after delivery. In an earlier part of the research project, one of the important themes we identified was 'learning about breastfeeding', which has been reported elsewhere. In the current study, we assessed the women's use of breastfeeding information in their decision-making, using empirical data we collected in two series of in-depth interviews. We aimed to link these empirical data to theory (Snow et al., 2003) by using the framework of health literacy as a sensitising concept in the analysis of the data. A sensitising concept is a theory or idea derived from the literature that provides guidance for approaching data (Thornberg, 2012). Sensitising concepts offer ways of seeing, organising, and understanding experiences (Blumer, 1954; Charmaz et al., 2003;

Thornberg, 2012), and provide a framework for analysing participants' narratives (Bowen, 2006). Our study aimed to identify whether the concept and levels of health literacy can be used to understand women's breastfeeding decision-making.

Since the introduction of the concept of health literacy in the 1970s (Simonds, 1974), many authors have contributed to the search for consensus on its meaning, definitions, and measures (Baker, 2006; Berkman et al., 2010, 2011; Freedman et al., 2009; Kickbusch, 2002, 2009; Nielsen-Bohlman et al., 2004; Nutbeam, 2000, 2008; Nutbeam & Kickbusch, 2000; Parker et al., 1995; Ratzan, 2001; Sorensen et al., 2012; WHO, 1998; Zarcadoolas et al., 2005). In 1998, health literacy was defined as 'the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand, and use information in ways which promote and maintain good health' (WHO, 1998).

Two different disciplinary approaches have been used to address health literacy: the biomedical approach and the public health approach (Nutbeam, 2008; Pleasant & Kuruville, 2008). Both approaches recognise the crucial role of information, although the relationship between information and health literacy is conceptualised differently (Pleasant & Kuruville, 2008).

Approaching health literacy from the biomedical perspective addresses patients' basic skills and an adequate understanding of information to achieve compliance with treatment and recommendations from health professionals (Pleasant & Kuruville, 2008). Therefore, within the context of breastfeeding, health literacy implies that women have the skills to understand the information about the benefits of breastfeeding and that they will initiate and continue breastfeeding, which is the preferred health outcome.

More recent approaches to health literacy adopt a public health perspective, and address the social determinants of health that are connected to encouraging personal autonomy and empowerment. From this perspective, the determinants of health literacy are health education and health promotion (Kickbusch, 2002, 2009; Nutbeam, 2000; Ratzan, 2001). Individuals' health literacy is therefore considered to be the key outcome of adequate health education and health promotion (Kickbusch, 2002; Nutbeam, 2000). The concept of health literacy thus contains the underlying assumption that there is a link between health education and health literacy (Jahan, 2000; Ratzan, 2001; WHO, 1998). So, within the context of breastfeeding, health literacy implies that women have developed skills that promote personal autonomy and empower them to practice breastfeeding, in line with breastfeeding education and promotion.

Initially, the outcomes of health literacy were considered to be achieving and maintaining health. Some studies reported evidence that low levels of health literacy are associated with poor health (Easton et al., 2010; Nielsen-Bohlman et al., 2004; Wang, 2000). Apart from achieving and maintaining health, another health literacy outcome was

obtaining adequate health knowledge (Kalichman et al., 2000; Williams et al., 1998). More recently, the focus has shifted toward health decision-making as the primary outcome of health literacy, rather than achieving health, maintaining health, or obtaining adequate health knowledge (Nielsen-Bohlman et al., 2004). A new definition of health literacy has emerged from this orientation toward decision-making as an outcome: ‘the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions’ (Nielsen-Bohlman et al., 2004). A recent systematic review also reported that a shared characteristic of all current definitions is the focus on ‘appropriate health decisions’ as outcomes of health literacy (Sorensen et al., 2012). We chose this framework of health literacy as a sensitising concept for the analysis of our empirical data on breastfeeding women’s decision-making.

Health literacy is conceptualised as three progressive levels: functional health literacy, interactive health literacy, and critical health literacy (Nutbeam, 2000). These three levels originate from a general three-level classification of literacy proposed by Freebody and Luke (1990). Functional literacy refers to having enough basic reading and writing skills to be able to function effectively in everyday situations. The second level, interactive literacy, refers to having more advanced cognitive and literacy skills which, together with social skills, can be used to actively participate in everyday situations, extract information, derive meaning from different forms of communication, and apply this information to changing circumstances. The third level, critical literacy, refers to having more advanced cognitive skills which, together with social skills, can be applied to critically analyse information, and to use it to exert greater control over life events and situations (Freebody & Luke, 1990). Together, these three levels are believed to progressively allow for greater autonomy and personal empowerment in health-related decision-making (Kickbusch, 2002; Manganello, 2008; Nutbeam, 2000).

The functional level of health literacy corresponds to the biomedical perspective with regard to the capacity of patients or clients to understand health information in order to achieve compliance with treatment and recommendations from health professionals. Health literacy measurement instruments that have been developed include the Rapid Estimate of Adult Literacy in Medicine (REALM) (Murphy et al., 1993) and the Test of Functional Health Literacy in Adults (TOFHLA) (Parker et al., 1995). In the Netherlands, the European Health Literacy Survey (HLS-EU) was administered to a sample of the general population to obtain an initial measure of health literacy (Heide, vd. et al., 2013). All of these instruments were limited to measuring functional health literacy.

In the conceptualisation of health literacy as a progression, critical health literacy is the highest level (Nutbeam, 2000). Critical health literacy, along with greater autonomy and personal empowerment, enables individuals to analyse information critically when

making health decisions and thus engage in social and political action to enhance health equity among individuals and groups (Nutbeam, 2000). Scepticism in the discourse on critical health literacy as a distinct dimension of the concept of health literacy illustrates that critical health literacy adds nothing new to the existing terminology (with such terms as empowerment, personal autonomy, and patient involvement), and is therefore ‘new wine in old bottles’ (Tones, 2000). However, other authors who have contributed to the health literacy discourse have suggested that this critical level of health literacy is an important dimension of the concept because, particularly at this level, health literacy is obviously both a precondition for critical understanding and also an outcome of health promotion (Chinn, 2011; Kickbusch, 2014; Sykes et al., 2013; Wills, 2009).

The three-level classification is relevant in our study because it helps identify progress in women’s use of breastfeeding information when making decisions. It has been suggested that there is a link between being critically health literate and making health decisions that are in line with current health promotion recommendations. We aimed to identify functional, interactive, and critical health literacy in women by using these dimensions of the health literacy framework in the analysis of our empirical data.

We defined functional health literacy as having sufficient skills to understand breastfeeding information and function effectively. Interactive health literacy refers to having the skills to extract breastfeeding information and derive meaning from different forms of communication. Critical health literacy involves having the skills to critically analyse breastfeeding information and to use this information to exert greater control.

In the Netherlands, women can obtain breastfeeding information from professionals during antenatal and postnatal obstetric clinical care and midwifery home care. This creates a unique system of integrated care (Kools et al., 2006), which includes postnatal maternity services at home until day eight.

Methods

We analysed empirical data that were collected during two series of in-depth interviews up to saturation level (Glaser & Strauss, 1967): the first in 2008 among eight women with middle and high socio-economic status (SES), and the second in 2011 among five women with low SES. SES was determined by educational background, according to the Dutch standard classification of education (Statistics Netherlands, 2008). The in-depth interviews were conducted at two time points: prepartum (t1) in the women’s third trimester of gestation, and postpartum (t2) between four and six weeks after delivery. We conducted 26 interviews with 13 primiparous women who were recruited by the midwives of two midwife clinics in the northern part of the Netherlands. Participants were invited to participate in the research

if they intended to breastfeed, were capable of breastfeeding, and were able to speak Dutch or English. The first author contacted the women by telephone and explained that she was interested in their personal experiences from their own perspectives. The participants could withdraw from the study at any time, and anonymity was guaranteed. All women gave their informed consent. The participants were invited for the postpartum interview if there was no contraindication for breastfeeding and if both mother and infant were healthy.

The prepartum interviews were conducted at the midwife clinic, and took 30 to 45 minutes to complete. The postpartum interviews were conducted at the participants' homes, and took 45 to 60 minutes to complete. The interview topics were identified from the theory of planned behaviour for breastfeeding (TPB-BrF) (Ajzen, 1991; Duckett et al., 1998; Fishbein & Ajzen, 1975) and concerned attitudes toward breastfeeding, social environment and norms, perceived behavioural control, breastfeeding intention, and breastfeeding knowledge. The postpartum interview questions dealt with these topics in retrospect, and also addressed childbirth experiences and actual feeding methods, as well as the mother's decision to stop or continue breastfeeding in the first month. The interview guides were semi-structured, and questions were broad and open-ended, with probes in variable sequences (Hennink et al., 2011). All of the women's narratives were audiotaped and transcribed verbatim by a research assistant and the first author. Contextual field notes were also collected and documented.

The transcripts of the first series of interviews (middle and high SES) were analysed using open coding and by applying grounded theory (Glaser and Strauss, 1967). Five inductive themes were identified, as has been reported elsewhere. One of these themes was 'learning about breastfeeding'.

In the current study, the transcripts of the second series of interviews (low SES) were also first analysed using open coding. Subsequently, all of the codes concerning learning about breastfeeding, knowledge, and information from both series of interviews were combined in the consecutive stage of the analysis. The research question in this analysis was: 'Can the concept and levels of health literacy be used to understand women's breastfeeding decision-making?' We used analytic questioning as our data search strategy (Hennink et al., 2011), with the framework of the three levels of health literacy as sensitising concepts. The analytic questions were 'What is the functional health literacy [and interactive health literacy, and critical health literacy] of the women in our study?' Using these questions, we systematically searched all of the transcripts containing the codes 'learning about breastfeeding', 'knowledge', and 'information'. We then searched all of the transcripts and contextual field notes. From this analysis, we selected four cases as examples of the connection between women's health literacy and their breastfeeding decisions.

This combination of initial inductive reasoning and deductive reasoning, using the framework of health literacy as a sensitising concept, allowed us to link empirical data to theory (Snow et al., 2003). The coherence between the data collection method, research question, theory, and analytic questions contributed to scientific rigour (Hennink et al., 2011; Mays & Pope, 1995).

Results

All participants ($n = 13$) intended to breastfeed. They were Dutch primiparous women aged 20–31. The women attended midwife clinics in the northern part of the Netherlands, and were in good health. They all began feeding their newborns with their own milk. Two women initially expressed breast milk, and eleven fed from the breast. At six weeks, six women were breastfeeding exclusively, three women were practising mixed feeding (breast milk and formula), and four mothers were practising formula feeding exclusively.

We selected four cases as examples to illustrate the women's health literacy and their decisions to either stop or continue breastfeeding in the first month after delivery. The four cases present two women from the first series of interviews (high and middle SES) and two women from the second series of interviews (low SES). Two of the four women continued and two discontinued breastfeeding in the first month.

Sonja

Sonja is a 21-year-old woman who continued breastfeeding in the first month after delivery. During the prepartum interview, she talked about her background and explained that she had a low educational level (primary school) and no work experience: *Later on I'll probably find a job or something like that* (1). She sometimes felt it was difficult to function effectively, which suggests limited functional literacy: *Sometimes I'm kind of distracted – it feels like, like I'm not really there* (1). At the same time, she stated she had enough basic reading and writing skills to read breastfeeding information, and that she had found some information on the Internet: *I've read about it [breastfeeding] on the Internet* (1).

Sonja had a difficult and painful clinical delivery. She felt disoriented after being discharged from the hospital. Her husband could not take care of her and the baby full-time because of his job, and so she had been moving between her own home and her parents' home. The postpartum interview took place at her parents' home. Sonja's mother (the baby's grandmother) took care of Sonja and her baby, and after six weeks, Sonja had not yet gone out for a walk: *The only thing I could do was just lie flat on my back. I couldn't do anything else because I was in so much pain. Even now I can't say, I'm going to take her out for a nice walk in the pram. I just can't manage that yet* (2). She started breastfeeding and continued

to do so in the first month, and she had encountered no problems with breastfeeding: *She [the infant] took to it pretty quickly. It's been going very well. It's going perfectly. She's growing fast* (2). Although Sonja felt she had received sufficient support, she had not received any breastfeeding information from either her mother (who had no breastfeeding experience herself) or from professionals, which suggests limited interactive health literacy. Sonja did not feel she had made the decision by herself or that she was in charge, and she felt that circumstances were beyond her control, which indicates limited critical health literacy.

Therefore, Sonja's case indicates limited health literacy at all three levels. Her case is thus an example of limited functional, interactive, and critical health literacy, while she continued to breastfeed her child in the first month after delivery.

Jennifer

Jennifer (20) had discontinued breastfeeding. She had basic reading and writing skills, a low educational level, and little work experience, which indicates functional literacy. In the prepartum interview, Jennifer talked about her unintended pregnancy. She and her boyfriend had met only recently, and were adjusting to their relationship, arranging for housing, and preparing for the delivery. Jennifer reported that she had discussed her breastfeeding intentions with her midwife, but had felt that this communication had been unsatisfactory. She had not pursued the subject any further with her midwife: *Because I did ask if I could breastfeed at night and bottle-feed during the day. But this wasn't practical.* Interviewer: Who said so? The midwife. *I said to her, I would just alternate a bit, but she said it wasn't practical. Why I don't know.* Interviewer: You don't know? *No. But it wasn't logical, so, um ... I don't know* (1). The postpartum interview was conducted at four weeks after delivery. Jennifer said that, in the immediate postpartum period, she had had difficulty breastfeeding. Her maternity assistant tried to support her, but Jennifer did not perceive this assistance as helpful: *So every time, just trying again and again ... The maternity assistant was here, but she was writing ... they just keep writing in that booklet of theirs, they go on writing for nearly two hours. Then, she has an hour for us, because she's only got three hours. Because I had three hours [maternity care covered by health insurance]* (2). Jennifer's case shows that the information exchange between her and the health professionals was limited. It also illustrates that interactive health literacy involves the communication skills of both the health care recipients and the health professionals.

Jennifer decided to discontinue breastfeeding. She said that in doing so, she felt she was reasserting control over her own life and that of her infant. The feeling of being in control was reinforced by her decision to start her fitness classes again: *We're also going to fitness classes again in the evenings. Wasn't really allowed to do that. I was [only] allowed to start fitness again after six weeks. I didn't like that at all. I thought, I'll start again* (2). From her

point of view, going back to her fitness classes represented her independent decision to stop breastfeeding.

Therefore, Jennifer's case indicates functional literacy and critical literacy, but limited interactive literacy (from both her own and the professionals' perspectives). She discontinued breastfeeding and thus did not comply with the recommendation.

Willemien

Willemien (30) continued breastfeeding in the first month. She had completed higher education, which indicates functional literacy. Initially, Willemien did not have basic breastfeeding knowledge: *We really thought there would be milk right after birth! But that's not the case, ha ha* (2). In the prepartum period, she had not talked much with anyone about breastfeeding and had not read any breastfeeding information because she had perceived breastfeeding to be a natural practice. From her perspective, it was obvious she would start breastfeeding, and this did not involve decision-making on her part: *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* (1). In the postpartum interview, Willemien said she had encountered difficulties with breastfeeding, and that she had started to communicate intensively with professionals, which shows interactive health literacy: *I thought: I'll need to give a bottle as well, there's something wrong. Then, the woman [the maternity nurse] said, just wait a bit, don't panic, you need to stay calm. She said, I'll come to weigh the baby again on Wednesday. We both really liked that. You can go to the clinic [the baby clinic] just to be sure* (2). She felt that the intensive interaction had been crucial to her explicit decision to continue breastfeeding: *Especially because she [the maternity assistant] really pulled me through*. Willemien felt satisfied with her decision and with the way she had used the different types of information: *I was proud of myself that we went there [the baby clinic]* (2).

Willemien was thus able to critically analyse breastfeeding information and to distinguish whether information was useful to her. She also felt able to exert control over her own life and that of her infant while she continued breastfeeding. Her case is thus an example of being health literate at all levels, and achieving the preferred decision-making outcome of continuing to breastfeed her child in the first month after delivery.

Ellen

Ellen (30) had discontinued breastfeeding. She had completed intermediate-level education, which indicates functional literacy. Ellen had not obtained antenatal information, and had expected that breastfeeding would come naturally. She had decided not to attend antenatal breastfeeding classes, and her decision was reinforced by her mother-in-law's advice: *My*

mother-in-law told me, you don't need classes for that, we were able to do it, so you'll be able to do it too (1). Postpartum, Ellen encountered severe breastfeeding difficulties and went looking for useful information. She communicated intensively with health professionals and others in her social environment, which indicates interactive health literacy. She felt she had tried everything but that nothing had worked, and so she decided to discontinue breastfeeding: *It just didn't work ... I couldn't have done anything more, because I was exhausted and desperate. And that's no good, either. Then I thought, what am I supposed to do? So I rang them [the baby clinic]. She [the maternity nurse at the baby clinic] said, you know yourself what's best. I don't need to tell you. You'll know yourself. You'll be able to feel what's best. Now, my intuition tells me to use the bottle and just stop breastfeeding (2).* By stopping breastfeeding Ellen felt in control, which shows a high level of critical health literacy: *From that time on, he [the infant] has really been growing a lot, and everything is going very well (2).* However, her breastfeeding decision did not correspond with her intention, that is, to continue breastfeeding, which made her feel guilty: *The only thing is, you feel guilty, but of course, you know this is best (2).*

Ellen thus exhibited health literacy at all three levels. She was capable of critically analysing breastfeeding information and making her decisions independently, exerting control over her own life and that of her infant, while she did not comply with the recommendation.

Discussion

The four cases above are examples of functional, interactive, and critical health literacy, as adopted by Nutbeam (2000), in women who continued or discontinued breastfeeding in the first month after delivery. Our findings showed a progression (Nutbeam, 2000) from functional to interactive to critical health literacy in some women. However, this progression was not found for all participants. One of the women in our cases (Jennifer) had functional and critical literacy, but limited interactive literacy. As reported by Chinn (2011), critical health literacy might not depend on abilities at the interactive level; this was also found by Jahan (2000) and Wang (2000). Chinn argues that the different health literacy levels are not hierarchical or mutually exclusive but rather indicate what abilities the different levels allow individuals to achieve in terms of health (Chinn, 2011). The observation that the different levels of health literacy do not necessarily correspond or show a progression has also been reported by others (Ishikawa et al., 2008). Sykes et al. (2013) argue that critical health literacy can emerge without functional health literacy (including literacy and language skills) and interactive health literacy.

Our results show that critical health literacy does not necessarily induce decisions that correspond with health promotion recommendations, that is, to continue breastfeeding. Similarly, low health literacy does not necessarily induce decisions that run contrary to

these recommendations, that is, to discontinue breastfeeding. Breastfeeding decision-making is too complex to provide evidence for causal pathways between health promotion and health literacy or between health literacy and breastfeeding outcomes. Constraints in discovering causal pathways between health literacy and health outcomes have also been reported for other health-related issues (Paasche-Orlow & Wolf, 2007). Thus, the concept of health literacy does not provide explicit explanations for individuals' health outcomes. Actually, because the key paradigm underlying health literacy is that people are able to take care of and give shape to their own lives and health (Kickbusch, 2014), critical health literacy implies that individuals can make decisions regarding their own health that are not in line with the recommendations of health professionals.

The relevance of our application of the health literacy framework extends beyond discovering causal pathways between health promotion, health literacy, and health outcomes. Our research contributes in a different way, that is, through the discovery of a discrepancy in the health messages concerning breastfeeding. There is a discrepancy between health messages that encourage individuals to critically analyse information so they can exert greater autonomy and be more empowered, and health recommendations that encourage conformity to particular outcomes (for example, continuing breastfeeding). The analysis of our data generated new questions, including the following: If a woman decides to stop breastfeeding after having critically analysed breastfeeding information, is this an unhealthy decision? Similarly, if she continues to breastfeed even though she exhibits limited health literacy and feels she has no control over her own life, is this a healthy decision? Or, should continuing to breastfeed be considered the appropriate health outcome regardless of a woman's circumstances?

These questions arising from our analysis represent what has been described as a discrepancy, one which enables health service users to make any choice, as long as it is the appropriate one (Powers, 2003). In the current breastfeeding discourse, this discrepancy is also referred to as the moralisation of women's infant feeding choices (Murphy, 1999). Recent studies propose that health professionals should take into account that recommending breastfeeding as the preferred choice might encourage a societal tendency toward the moralisation of mothers, based on their decisions to breastfeed or not (Gillis et al., 2013). Breastfeeding has become both the medical and the moral gold standard for mothering (Knaak, 2005). Fahlquist and Roeser (2011) have also examined the ethics of breastfeeding recommendations, and they conclude that 'the way breastfeeding is currently promoted by WHO, UNICEF, and the national health authorities does not respect mothers as autonomous beings capable of making good decisions for themselves and for their families.' We argue that women who continue breastfeeding for six weeks or longer while feeling worried or dissatisfied should not be considered to be more successful than women

who discontinue breastfeeding but feel satisfied with their breastfeeding decisions.

The discrepancy between messages that recommend particular health practices and messages that recommend critical health literacy can be found in the health promotion vocabulary. Examples include phrases such as ‘the desired way’, ‘the informed choice’, ‘the preferred choice’, or ‘the educated choice’ (Renkert & Nutbeam, 2001). Nutbeam (2000) reports that ‘high literacy levels are no guarantee that a person will respond in a desired way [*italics added*] to health education’. Similar phrases are commonly used in breastfeeding recommendations and refer to the importance of enabling women to make informed feeding choices – however, with the preferred choice being breastfeeding (WHO, 2003).

This discrepancy could be considered to represent the two different disciplinary approaches in health literacy: the biomedical perspective (which focuses on compliance with health recommendations) and the public health perspective (which focuses on an adequate level of critical health literacy and personal autonomy, and which induces health decision-making that conforms with health education or health promotion) (Nutbeam, 2008; Pleasant & Kuruvilla, 2008). However, even if health literacy is addressed from the public health perspective, there is no consensus on what is truly meant by ‘critical health literacy’ and ‘critical decision-making’. The current discourse on critical health literacy (Chinn, 2011; Sykes et al., 2013; Wills, 2009) indicates that, particularly with regard to critical health literacy, there continues to be considerable variation in what public health professionals and policymakers understand this to be (Sykes et al., 2013).

We do not address breastfeeding decision-making specifically from a biomedical or a public health perspective, but from the participants’ perspectives, within the context of their own lives. In doing so, we provide evidence for the valuable contribution provided by qualitative research, which cannot be achieved with quantitative research designs. Chinn (2011) also refers to the benefit of applying qualitative research methods when studying health literacy issues.

Phrases such as ‘informed feeding choices’ (WHO 2003) and ‘educated choices’ (Renkert & Nutbeam, 2001) suggest that feeding choices are based upon information or education, which corresponds to the assumption that health literacy is the outcome of health education or health promotion (Nutbeam, 2000). This approach does not recognise that women also use information sources other than professionals, such as knowledge provided by their social environment or their own maternal intuition. Health care providers need to acknowledge that health care users bring their own knowledge and abilities to the health setting (Banister et al., 2011). We argue that functional, interactive, or critical health literacy can be achieved using sources other than health education or health promotion. Therefore, further research must take women’s use of different sources of breastfeeding knowledge into account.

A strength of our research is the interaction between empirical data and theory. By linking the women's own experiences to health literacy and using this as the deductive sensitising concept, we address the health literacy discourse from both an empirical and a conceptual point of view. It generates a more refined understanding of both the women's health literacy and their breastfeeding decisions, which involves a nuancing of the concept as well as implications for practice and policy.

Our contribution to the current discourse on the concept is to emphasise the discrepancy between expecting care recipients to be critically health literate and make their own decisions while also expecting them to follow health promotion recommendations. We acknowledge that additional research is required on health and health interventions based on the health literacy concept, along with further efforts to achieve consensus on its definitions, meanings, and measures. Assessing interactive and critical literacy remains a major challenge (Nutbeam, 2008), and there is an ongoing need to develop specific tools that measure all aspects of health literacy (Smith et al., 2013), particularly critical health literacy (Chinn, 2011). However, we argue that these efforts are only useful when the empirical data are interpreted from the health care recipients' perspectives. Otherwise, as Begoray and Kwan (2012) suggest, health literacy research and interventions might surpass our conceptual understandings.

One of the implications for practice and policy is that it is not only the health literacy of health care recipients that needs to be addressed, but also that of professionals. This means that health messages from professionals should contain clear language (Baker 2006; Zarcadoolas, 2011) and avoid the moralisation of women's infant feeding choices.

If breastfeeding is considered to be the result of informed choice, then health messages aimed at women by professionals or other sources must ensure that breastfeeding choices are always embedded in the context of the women's own experiences and perspectives.

Conclusion

We identified functional, interactive, and critical health literacy (as adopted by Nutbeam) in women's decision-making to stop or continue breastfeeding in the first month after delivery. Our four cases illustrated that a progression in health literacy was not found in all women. Women with low health literacy did not necessarily discontinue breastfeeding, and women with high health literacy did not necessarily continue breastfeeding. Women are expected to be critically health literate and to make their own decisions so they can exert control over their lives, but are also expected to follow health promotion recommendations, that is, to continue breastfeeding. This discrepancy requires both a reconsideration of the messages that health professionals deliver on breastfeeding and a nuancing of the concept of health literacy.

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Intermezzo

The researcher's positionality and sensitivity

"If one wants the best data, then deep familiarity is how one gets in."

(Lofland, 1995)

In this research project, particular consideration has been given to the researcher's positionality. As a cultural anthropologist, although I had conducted fieldwork in different foreign cultures, I had never done so in my own culture. I had been a breastfeeding mother myself once, and the participants' narratives reminded me of my own experiences. My own socioeconomic status (SES) corresponded with those of the participants in the first sample (high SES). Interviewing participants in one's own culture requires a specific cultural sensitivity to be able to observe and reflect on 'differences between' as well as 'differences within' cultures (Hadolt, 1998). There are advantages to the interviewer having had the same experiences as the interviewees: the researcher is sensitive, understanding, and approachable, and this can facilitate participant recruitment and data collection. Participants may feel comfortable talking with someone like this, even if they have no shared experiences with the interviewer. During all of the interviews I conducted for this study, I perceived the women as being open, truthful and straightforward in their responses and when sharing their perceptions and opinions. As a result, I felt comfortable as well, and did not hesitate to ask further questions. Hoppe (2012) has also pointed out that 'experiential knowledge' has many valuable advantages: people talked more openly to her because they felt she had been through similar experiences (Hoppe, 2012). Disadvantages of this are that the interviewer understands what the participants are talking about too easily. Hence, knowledge and experience can also block the researcher from recognising new or unexpected issues in the data (Hennink et al., 2011). When reflecting on her experiences in conducting fieldwork, Hadolt (1998) indicated that 'it could be dangerous to assume that there was a "sameness" to our experiences'. Interviewees who know that the person interviewing them has had similar experiences might be less explicit in their responses because they assume that the researcher already knows what they mean (Hoppe, 2012). I was continually reflecting on my own experiences and positionality, something that is essential not only during data collection, but also during data analysis (Hesebeck, 2012).

Consideration of the researcher's positionality also includes ethical sensitivity. Particularly when interviewing women with low SES, I perceived the quality of life of some of the women and their infants to be problematic from my perspective. I indicated that because I was a researcher and not a health care professional, I would not give my opinion or provide information, even though some of the participants asked for advice. At the same time, I assured the participants that the information contained in their narratives would be treated confidentially, and would not be shared with other professionals. To guarantee the anonymity of the participants, their names were changed when presenting the results. I reflected on these aforementioned ethical considerations thoroughly, distinguishing between my own and the interviewees' experiences, perceptions, and opinions, and retaining my role as a researcher.

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