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Health care professionals report positive experience with a breastfeeding training program based on the Baby-Friendly Hospital Initiative for Neonatal Intensive Care

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ABSTRACT

Support from health care professionals (HCPs) with good knowledge and positive attitudes toward breastfeeding has been associated with better breastfeeding outcomes in the mothers of preterm infants. The aim of the study was to describe HCPs' experiences of a breastfeeding training program. A total of 48 specialist registered nurses, registered nurses, assistant nurses and physicians working at a neonatal intensive care unit attended a breastfeeding training program and answered a questionnaire including Likert scales and open-ended questions. The participants reported that their interest in breastfeeding had increased as a median (range) of 10 (8–10) on a 10-point scale and rated to what extent they had received new tools for breastfeeding support as a median of 10 (8–10) after training. There were no differences in the median between different professions' ratings. Qualitative content analysis of the open-ended questions resulted in two categories: *Discussions of the case scenarios in the group* and *Knowledge regarding breastfeeding*. The results showed that discussions based on breastfeeding scenarios were perceived as valuable; the health care professionals reported receiving new knowledge and useful practical skills. This program was shown to increase health care professionals' interest in breastfeeding and is useful for different health care professions.

1. Introduction

It is well documented that breastfeeding is the best nutrition for both full-term infants (born >37 + 0 weeks of gestation) and preterm infants (born <37 + 0 weeks of gestation) (American Academy of Pediatrics, 2012; Cano-Sancho et al., 2020; Cheong et al., 2020; Mosca and Gianni, 2017), and that supporting mothers to breastfeed is a very cost-effective measure (Bartick et al., 2017). However, establishing breastfeeding can be a difficult challenge for many mothers of preterm infants (Shattnawi, 2017). Possible barriers to successful breastfeeding are many, and include: stress and anxiety, which are common in mothers to preterm infants (Cescutti-Butler et al., 2019; Ericson and Palmer, 2019); the infant's inability to coordinate breathing; sucking and swallowing being affected by immaturity and extensive medical problems (Lau et al., 2003); and stressful hospital routines, such as the separation of mother and infant (Lau, 2018). In Sweden, where this study was performed, a decrease in exclusive breastfeeding has been observed the last decades and approximately 45% of the preterm infants are exclusively breastfeeding at discharge from hospital (Ericson et al., 2016). The Baby-Friendly Hospital Initiative and its Ten Steps to Successful Breastfeeding has been a key component in supporting breastfeeding among full-term infants (Rollins et al., 2016). In 2012, the Baby-Friendly Hospital Initiative for Neonatal Intensive Care (Neo-BFHI) was formulated, recommendations to improve breastfeeding support for preterm and ill infants were published (Nyqvist et al., 2013), and three guiding principles were established (Nyqvist et al., 2012).

Recommendations in the form of clinical guidelines—such as the Neo-BFHI—are used to optimize health care practices; they can help to create patient safety, quality of care, and clinical effectiveness. However, the availability of guidelines does not ensure that they are being followed. Reasons why they might not be followed include lack of time, lack of interest, or poor outcome expectancy (Wieczorek et al., 2015; Rollins et al., 2016). Clinical routines are central in health care; they are made to optimize care and can be described as procedures and practices for all professionals to follow, based on knowledge and available

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Abbreviations

HCP	Health care professional
NICU	Neonatal intensive care unit
Neo-BFHI	Baby-Friendly Hospital Initiative for Neonatal Intensive Care

evidence. The transfer from research to clinical practice does not happen automatically, however, and strategies to bridge the gap between science and practice are needed (Cunningham et al., 2018). In addition to the need for active strategies to improve care practices, attitudinal barriers to optimizing care may exist. Breastfeeding routines are often persisting in old patterns in health care (Wieczorek et al., 2015) and the option to breastfeed is often considered a personal choice and the responsibility to succeed is seen as an individual responsibility (Cescutti-Butler et al., 2019). This shifts the focus away from the importance of professionals' knowledge, skills and adherence to guidelines onto the responsibility of the parents' themselves.

Support from health care professionals (HCPs) with good knowledge and positive attitudes toward breastfeeding has been associated with better breastfeeding outcomes in mothers; furthermore, breastfeeding training programs can increase knowledge and improve attitudes (Ekstrom et al., 2005). In order to be feasible, such training should be relevant and useful for different professionals, while being affordable for the employer. The training should be of interest to HCPs, provide them with tools for improved breastfeeding work, and should also been seen as valuable by employers and colleagues (Rollins et al., 2016). The training must aim to help HCPs to integrate and use the breastfeeding guidelines in their daily practice. The training program described in this article is part of a program based on the Ten Steps to Successful Breastfeeding and prepared through Intervention Mapping (Oras et al., 2021). Intervention Mapping is a protocol for implementing complex interventions (Kok et al., 2016); it focuses on not only the effectiveness of the intervention, but also the extent to which the participants can adapt to the changes and whether the implementation has a high level of completeness and feasibility (Fernandez et al., 2019). To evaluate a training program, it is important to explore HCPs experiences of the program.

2. Methods

The aim of this study was to describe HCPs' experiences of a breastfeeding training program based on the Neo-BFHI.

2.1. Research questions

1. How do HCPs rate their interest in breastfeeding support?
2. What changes would HCPs like to see in the neonatal intensive care unit (NICU) to make it easier for mothers to breastfeed?
3. How do HCPs experience the breastfeeding training program?

2.2. Design

Mixed methods were used to capitalize on the strength of both qualitative and quantitative methodologies in order to increase the breadth and depth of the understanding of HCPs' experiences, perspectives, and prospects for breastfeeding support for preterm infants. Before and after the training day the HCPs answered an individual research questionnaire with both Likert scales and open-ended questions. During the training day, the HCPs worked in inter-professional groups and wrote down proposed breastfeeding support improvements and how they could be implemented in the NICU.

2.3. Setting

The studied NICU is a Swedish regional referral center (level IIIB) serving a population with approximately 23,000 births per year. The NICU consists of three open-bay intensive care rooms, with four infant care spaces each. Each infant care space has at least one parental bed, allowing parents to stay with their infant around the clock; the parents also have the opportunity to perform skin-to-skin contact 24 h/day. In addition, the NICU has nine single-family rooms where infants stay around the clock with their parents and siblings, and where the infant's care is provided by the parents with support from the HCPs. Visits from siblings and relatives are unrestricted in both the intensive care and single-family rooms. In Sweden, parents are entitled to a total of 480 days of paid parental leave. If a newborn infant is admitted to a NICU, both parents are entitled to additional paid temporary parental leave during the infant's whole NICU stay (The Swedish Social Insurance Agency).

2.4. Sample

A total of 169 HCPs were working at the studied NICU and the 48 who mostly worked with the families staying in the single-family rooms were selected by the NICU's managers to attend the training program. At the beginning and end of the training day, the 48 participants were asked to complete a paper-and-pencil questionnaire, and 44 (92%) did so.

2.5. Measurements

2.5.1. Information material for parents

The training program for HCPs that is described in this article was part of a larger project aiming to revive the Ten Steps to Successful Breastfeeding initiative for both full-term and preterm infants. Another part of the project involved developing information material for parents. A breastfeeding expert group, consisting of seven HCPs, developed all of the material used in the training program. During this development, both parents and members of the Swedish breastfeeding support group reviewed the material and suggested changes. Attachment theory (Bowlby, 1969) was used as the overarching theory for developing the material, and the theory of self-efficacy (Bandura, 1977) was used as a theoretical framework. The information material consists of a flipchart and a brochure (Gerhardsson and Funkquist, 2019). The flipchart is intended to be used by HCPs when giving oral information to parents in order to provide standardized, evidence-based, and non-conflicting information. Parents are also given a summary of the information in the form of a brochure for further reading (Gerhardsson and Funkquist, 2019). A pilot study was conducted at an NICU in central Sweden involving seven mothers and 18 HCPs, and showed that the developed material was feasible (Kempe and Iveros, 2015).

2.5.2. The training program

The training program was based on the Neo-BFHI and the latest research in the field, and focused on HCPs' behaviors and practices in order to enable reinforcement of the steps and three guiding principles. The steps and additional principles (Table 1) have been identified as quality indicators and have been set as the standard of good quality of care (Nyqvist et al., 2012).

The program was divided into two parts. The first part comprised eight web lectures, listed below (Uppsala University, Medfarm Play, 2019). The HCPs were given the opportunity to watch the films during working hours; during the day, a facilitator, who is an experienced pediatric nurse, was available to relieve them from work duties. Each film also had a self-test through which the HCPs could test their knowledge after watching the web lectures.

Table 1
The Ten Steps for the Baby-Friendly Hospital Initiative for Neonatal Intensive Care and the three guiding principles.

1.	Have a written breastfeeding policy that is routinely communicated to all health care staff.
2.	Educate and train all staff in the specific knowledge and skills necessary to implement this policy.
3.	Inform all hospitalized pregnant women at risk for preterm delivery or birth of a sick infant about the management of lactation and breastfeeding and benefits of breastfeeding.
4.	Encourage early, continuous, and prolonged mother–infant skin-to-skin contact ("kangaroo" mother care) without unjustified restrictions. Place babies in skin-to-skin contact with their mothers immediately following birth for at least an hour. Encourage mothers to recognize when their babies are ready to breastfeed and offer help if needed.
5.	Show mothers how to initiate and maintain lactation and establish early breastfeeding with infant stability as the only criterion.
6.	Give newborn infants no food or drink other than breast milk, unless medically indicated.
7.	Enable mothers and infants to remain together 24 h a day.
8.	Encourage demand feeding or, when needed, semi-demand feeding as a transitional strategy for preterm and sick infants.
9.	Use alternatives to bottle-feeding at least until breastfeeding is well established and use pacifiers and nipple shields only for justifiable reasons.
10.	Prepare parents for continued breastfeeding and ensure access to support services/groups after hospital discharge.
	Three guiding principles
1.	The staff attitude toward the mother must focus on the individual mother and her situation.
2.	The facility must provide family-centered care, supported by the environment.
3.	The health care system must ensure continuity of care, that is, continuity of pre-, peri-, and post-natal and post-discharge care.

1. Breastfeeding and professional support (9 min)
2. Breastfeeding and health (8 min)
3. Breastfeeding and self-efficacy (7 min)
4. The very first breastfeeding session (9 min)
5. Breastfeeding, skin-to-skin, and kangaroo mother care (7 min)
6. Attachment, skin-to-skin contact, and breastfeeding (10 min)
7. Hand expression, expressing breast milk, and additional feedings (9 min)
8. How to prevent breastfeeding problems (13 min)

The second part of the program comprised an 8-h training session in which active learning was applied. The day started with a 30 min recapitulation of the eight web lectures and a discussion on their content. *Active learning* was used to coach the HCPs through the learning process and as a strategy to change their attitudes (Kok et al., 2016). The HCPs were randomly placed in groups of four or five people, and were instructed to discuss their own experiences of breastfeeding, their professional role with regard to breastfeeding, and suggestions for improvements in breastfeeding support that they would like to see in their clinical work. The small groups wrote down their proposed improvements on a worksheet of paper. Next, the large group discussed how these might be implemented. In order to elucidate priorities, responsibilities, and policies, a *structural redesign* theory was used. Participants with different professional backgrounds were randomly mixed in groups in order to bridge knowledge differences and facilitate inter-professional collaboration (Cummings and Worley, 2008). The participants' own breastfeeding experiences and their professional role were also discussed with the whole group, since reflections on personal experiences and attitudes are important in behavioral change. During the training, the HCPs had the opportunity to review the information material that had been developed for parents and suggest changes. This resulted in some changes in wording and images that were considered to be more suitable in the context of preterm infants. However, the main part of the course focused on breastfeeding scenarios. During the afternoon session, the HCPs was divided into groups of four or five people and were instructed to discuss three breastfeeding scenarios in depth, with each group having a different set of scenarios. A total of 17 scenarios were then discussed in the large group. The course leader had written down important aspects of each scenario beforehand; these were highlighted by the course leader if they were not spontaneously discussed by the participants. To apply the theory of *shifting perspectives*, the HCPs were encouraged to take the perspective of both the infant and the mother. The same underlying theory was used when discussing on-demand feeding and non-separation (Batson et al., 1997). The theory of *belief selection* was also used, which included the use of messages to strengthen positive beliefs, weaken negative beliefs, and introduce new beliefs to mothers. For example, the HCPs were shown how to empower mothers to handle latching on their own by demonstrating with a textile breast prototype and a doll instead of through hands-on help. Because this theory includes perceived social pressure as motivation for a certain behavior, positive beliefs were reinforced through discussion (Fishbein and Ajzen, 2010). The course leader followed four principles when facilitating the group work: attending to others' experiences, accepting others' experiences, conveying acceptance for others' experiences, and indirectly correcting misconceptions (Cohen, 2004).

2.6. Data collection

Two training days with 23 and 25 different participants on each were conducted in February 2019 and were held by the authors. Ethical scrutiny and approval were provided by the regional ethical review board (Dnr 2016/274). Written information was given to the HCPs ensuring them of confidentiality, the right to secrecy, and the right to withdraw their participation without giving any reason. The course leader asked the participants to answer an anonymous paper-and-pencil research questionnaire on the start of the training day (Appendix 1). The questionnaire was made by the research group and included five questions about background characteristics, asking for the participants' age, sex, education, and years in the profession. One question asked whether the participants thought it was interesting to work with breastfeeding, and another asked how important they thought their role was in improving breastfeeding support in the care chain. The questions were answered on a 10-point scale ranging from 1 = *Not correct at all* to 10 = *Absolutely right*, and from 1 = *Not important at all* to 10 = *Very important*. After the training day, the participants were asked in the research questionnaire whether their interest in breastfeeding had increased during the training and whether they had received new tools that they could use when providing breastfeeding support. These questions were answered using a 10-point scale ranging from 1 = *Not correct at all* to 10 = *Absolutely right*. The questionnaire concluded with two evaluative questions, in which the participants could answer in free text what was particularly good about the training and what they thought could be improved (Appendix 1).

2.7. Data analysis

Sample characteristics are presented by descriptive statistics using mean, median and range. The Kruskal-Wallis test was used to analyze median differences in how the HCPs answered the 10-point scales, and Spearman's rho was used for correlation analyses of the same scales. A p-value of <0.05 was considered significant. The open-ended questions from the questionnaire and the suggestions for improvements in breastfeeding support from the worksheets of paper were analyzed using manifest qualitative content analysis (Graneheim and Lundman, 2004). In total, 32 participants wrote free answers in the research questionnaire and during the training day and 10 inter-professional groups with four or five people in each group suggested in total 65 improvements for breastfeeding support. These texts were read through several times and two of the authors (EG and YTB) independently identified meaning units related to the research questions. The meaning units were then sorted into categories based on similarities in content. After that, the analyses were compared and any differences discussed until consensus was

reached. The process was flexible and iterative, i.e. steps were repeated when needed. The final analysis was discussed with a third author (E-LF).

3. Results

The background characteristics for the 44 HCPs who attended the training day are given in Table 2. All participants, except one physician, were female. They had a mean (range) of 14 (0.5–43) years in the profession.

3.1. Research question 1: How do HCPs rate their interest in breastfeeding support?

At the start of the day, the participants reported their interest in breastfeeding as a median (range) of 10 (5–10) points on the 10-point scale. The participants rated the importance of their role in providing better breastfeeding support in the care chain as a median (range) of 10 (7–10) points. The Kruskal-Wallis test showed no significant differences between the specialist registered nurses', registered nurses', assistant nurses', and physicians' ratings. A positive correlation was seen between the participants' interest in breastfeeding and whether they considered their role in improving breastfeeding support to be important (r_s = 0.766, $p < 0.001$).

3.2. Research question 2: What changes would HCPs like to see in the NICU to make it easier for mothers to breastfeed?

In the qualitative content analysis of the suggestions for improvement that were submitted during the group discussions, four categories were identified: *Adaption of the physical environment*, *Practical support*, *Strengthen parents*, and *The health care professional's role.*

3.2.1. Adaption of the physical environment

The HCPs stated that the NICU's environment should provide the possibility for the mother to stay with her infant around the clock, to care for the infant skin-to-skin, to express the mother's milk, and to breastfeed. Facilitating this would include having a parental bed in all infant care spaces, along with comfortable armchairs, large care places with room for siblings, and an opportunity for the parents to put up a "do not disturb" sign outside the infant's care space/room. Early on, parents should be provided with carrying aids such as baby slings and carriers so that they can care for their infant skin-to-skin over long periods of time while having their hands free. "Help parents use carrying aids and portable monitoring to get out of the care room with their infant". The NICU environment around the infant and the family should be calm and quiet, and should signal that it is desirable for the parents to remain at the unit around the clock. The HCPs should provide encouragement, support, and care to the parents to enable the parents to handle the situation. For example, this might involve making sure that there are comfortable pillows and enough chairs in the care space.

3.2.2. Practical support

An important task, according to HCPs, was to facilitate parents' care for their infant by doing practical things, such as serving foods and drinks to the parents, offer them "good coffee to increase well-being" or "heating the infant's milk". "Make everything easier for the mother; warm and prepare the baby's food etcetera". Helping parents with practical things allows the parents to concentrate on caring for their infant skin-to-skin and the mother to focus on expressing her milk and breastfeeding. "Ask the mother what she wants help with". Another way to give parents practical support is to make sure that the HCPs at the NICU cooperate with the HCPs at the maternity ward and that both do their utmost to allow the mother to be with her infant around the clock right after birth, for example that "the obstetricians perform the medical round of the mothers at the NICU".

Table 2
Background characteristics for the participants ($n = 43$[a]) of the training day.

Participants	Value
Mean age in years (range)	40 (19–64)
Mean years in profession (range)	14 (0.5–43)
Registered nurse, *n* (%)	13 (30)
Specialist registered nurse, *n* (%)	8 (18)
Assistant nurse, *n* (%)	20 (46)
Physician, *n* (%)	2 (5)

[a] Background characteristic missing for one participant.

3.2.3. Strengthen parents

The HCPs considered it important to strengthen and motivate mothers by providing both parents with early and consistent information—preferably before the infant is born. "We need to get even better at the first meeting with the parents and informing about pumping and breastfeeding. Information should be given before the delivery". Such information should include the importance of the mother's milk and skin-to-skin care, and should teach parents how to interpret the infant's breastfeeding cues. Furthermore, HCPs should not hold back on using interpreters when needed to ensure that parents and professionals understand each other. Peer support and parents' meeting places in the ward at the NICU, where parents can meet and support each other, were also considered to be important.

3.2.4. The health care professional's role

The HCPs considered that they have an important role in helping and supporting mothers. This support can be manifested by asking each individual mother what help and support she needs. Another way is to avoid being rigid and to clearly show that the HCPs have time for the family by, for example, sitting down for a chat and conveying that they are mentally present. "Show that you have time for the family, for example by sitting down for conversation and breastfeeding support". The HCPs should have a positive attitude toward breastfeeding and should possess good knowledge so that they can provide information and support the mothers. In order to provide uniform information and support, good documentation must be kept in the hospital records.

3.3. Research question 3: How do HCPs experience the breastfeeding training program?

After the training day, the participants estimated that their interest in breastfeeding had increased according to a median (range) of 10 (8–10) and considered that they had received new tools for breastfeeding support according to a median of 10 (8–10) points. The Kruskal-Wallis test showed no significant differences between the HCPs' ratings (physicians excluded due to few observations). A positive correlation was seen between participants' interest in breastfeeding before the training and whether they felt that their interest in breastfeeding had increased because of the training day (r_s = 0.634, $p < 0.001$), and between their interest and whether they felt that they had been given new tools by the training to provide breastfeeding support ($r_s = 0.519$, $p < 0.001$).

3.3.1. Answers to open-ended questions

Of the HCPs who participated in the training day, 31 (74%) answered the open-ended questions about how they felt the training had gone. Two categories were identified: *Discussions of the case scenarios in the group* and *Knowledge regarding breastfeeding*.

Discussions of the case scenarios in the group: The HCPs stated that the group discussions were good and valuable. They thought it felt good to have time for reflection and appreciated the opportunity to share their experiences and knowledge with others. The discussions based on breastfeeding scenarios were perceived very positively. A specialist registered nurse wrote: "Everything was great! Important to discuss

problems and cases and solve them together". However, some thought that there were too many scenarios, which led to the stress of not being able to discuss each scenario sufficiently. A nurse thought an improvement could be: "Slightly fewer patient cases – interesting to read but it takes very long time to go through and it is difficult to stay focused". The scenarios were perceived to be concrete; the HCPs felt that they could relate to them, and appreciated this.

Knowledge regarding breastfeeding: The HCPs considered that it was good to have a recapitulation of the web lectures at the beginning of the day. They also thought that it was valuable that all participants were well prepared by having seen the lectures and done the self-test and a specialist registered nurse stated: "Good relevant information. Clearly. Good working material".

Furthermore, they considered that the training day provided them with new knowledge and practical information. One HCP wished that the training day had been extended to two days, and another thought that the training should be repeated at regular intervals. Suggestions for improving the training including having more concrete tips, clarifying the difference in breastfeeding a preterm and a full-term infant, and discussing how to achieve functional breastfeeding with a sick newborn infant. "Clarify the differences between the sick and the healthy infant, perhaps …".

4. Discussion

The aim of this study was to describe HCPs' experiences of a breastfeeding training program based on the Neo-BFHI. Quantitative data showed that the HCPs considered that their interest in breastfeeding had increased after the training program; they also reported that they had received new tools for breastfeeding support and there was no difference between the professions. A positive correlation was seen between HCPs' interest in breastfeeding before the training, and whether, after the training day, they felt that their interest in breastfeeding had increased and they had been given new tools for providing breastfeeding support. Qualitative data also showed that the HCPs perceived the training day as valuable.

Support from HCPs with expertise in breastfeeding a preterm infant has been identified as having a significant influence on mothers opting for breastfeeding, especially during the immediate postpartum period (Milinco et al., 2019). In recent years, the Neo-BFHI has been partly implemented in many countries; however, many neonatal wards still need to increase their efforts to support breastfeeding (Maastrup et al., 2019). In one study, nurses noted that implementation of the Ten Steps is inhibited by inconsistency in clinical practice. For example, physicians were criticized for prescribing supplementation on loose grounds and in a nonchalant manner. What the nurses valued most was learning efficient strategies to communicate about breastfeeding with new mothers (Cunningham et al., 2018). A previous study showed that HCPs' interest in breastfeeding was linked with their ability to provide breastfeeding support (Ekstrom et al., 2005). The circumstances described above highlight the importance of providing HCPs with both interesting knowledge and communication techniques (Cunningham et al., 2018); they also highlight the need for inter-professional learning to negate the myths and misunderstandings that surround breastfeeding in order to provide holistic and supportive care (Quinn and Tanis, 2020). The training program aimed to address all these aspects.

The training day began with a summary of the content of the eight web lectures that the HCPs had watched. This pedagogical model is known to increase knowledge (Wallace et al., 2018), and the qualitative data showed that the HCPs appreciated this recapitulation at the beginning of the day. They also perceived other participants as being well prepared due to the preparation of web lectures and a self-test beforehand. The professional backgrounds of the participants varied (including specialist registered nurses, registered nurses, assistant nurses, and physicians). The participants stated that the training helped to bridge knowledge differences and facilitate inter-professional learning, which may have been due to the mixing of the participants' professional backgrounds. The qualitative analysis showed that the discussions based on breastfeeding scenarios were perceived very positively, even though some participants thought that there were too many scenarios. The schedule of the training day was constructed in such a way that it can easily be copied by other NICUs or used for new employees. However, it might be beneficial to reduce the number of scenarios used for discussions.

The HCPs' suggestions to improve breastfeeding support showed that they wanted facilitating, appealing, and breastfeeding-friendly care. This perspective aligns with how breastfeeding mothers want care to be designed at NICUs (Cescutti-Butler et al., 2019). Despite the coherence between the HCPs' and mothers' views, care is often provided in a hierarchical way that subordinates breastfeeding. Research shows that the kind of care that is received by mothers of late preterm infants tends to result in feeding becoming a source of stress and anxiety (Cescutti-Butler et al., 2019). The HCPs described experiencing difficulties when informing parents about breastfeeding, and were concerned that this lack of communication might result in misinformed decisions by mothers (Cunningham et al., 2018). Rigid breastfeeding routines seem to be part of the accepted norm and are very hard to change. The information material for parents in this study attempted to move away from strict feeding regimes and support parents in their ability to read their infants' cues and understand their needs. The training program in this study aimed to strengthen the HCPs' ability to provide facilitating support to parents and their ability to increase the self-efficacy of mothers of late preterm infants, which would give mothers a better chance at successful breastfeeding. We have previously shown that mothers' self-efficacy in breastfeeding predicts breastfeeding among late preterm infants (Gerhardsson et al., 2018). We have also shown in the same sample that self-efficacy predicts the mother's adaption to the infant's cues and needs (Gerhardsson et al., 2020). This is an important finding, as the mother's adaption to the infant is closely related to the theories of bonding (Klaus, 1998) and attachment (Bowlby, 1969).

Active learning helps to influence attitudes—since the participants are active during the process of learning—and is more efficient than passive learning occurring through sitting and listening. Learning new things through active learning requires participants to have a high level of motivation, and it is important for professionals to stay open-minded (Kok et al., 2016). Several of the HCPs expressed that it was good to see the material they would work with before it was implemented.

4.1. Limitations

Compliance with the Neo-BFHI requires all HCPs to be trained in skills that are necessary to implement the breastfeeding policy. Even though physicians have an important role in breastfeeding support, many are not adequately educated (Balogun et al., 2017). The main limitation in this study is that although a total of 169 HCPs were working at the studied NICU, only 48 participated in the training program. Of course, it would have been better—and perhaps absolutely necessary in order to achieve breastfeeding support improvements—for all of the HCPs at the studied NICU to be included in the study. In addition, few physicians participated. In our experience, it is difficult to motivate physicians to partake in these types of studies, as breastfeeding is not seen as a high-priority topic in that profession, even though physicians often decide how infants should be fed. Since the health care system has a hierarchical structure, it is very difficult to change attitudes and routines around breastfeeding support unless all HCPs are included in the education programs. In Sweden, we still have a long way to go to deal with this problem. We will in future research use participatory action research (White et al., 2004) to engage parents in the development of the education program and in the information material for parents. Since the studied hospital is a university hospital, there are many ongoing studies, which can make it difficult to encourage HCPs to prioritize nursing studies—despite the fact that breastfeeding has proven to be one

of the most crucial health-promoting factors for preterm infants (Mosca and Gianni, 2017).

5. Conclusion

The breastfeeding training program presented in this article is relevant and useful for various HCP categories. It was shown to increase HCPs' interest in breastfeeding and to provide them with tools for improved breastfeeding work. The program is designed to be easy to copy and spread to other NICUs in Sweden, and can be used for newly employed HCPs. However, it is important to allocate time and resources for participation, to design metrics adapted to improvement processes, and to promote employee engagement.

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Declaration of conflicting interests

The authors declared no potential conflict of interest regarding research, authorship, or publication of this article.

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Appendix A. Supplementary data

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