Understanding the Challenges of Induction of Lactation and Relactation for Non-Gestating Spanish Mothers

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Abstract

Background: Induced lactation and relactation are the processes that enable breastfeeding in non-gestating mothers.
Research aim: The aim of this study was to describe and interpret the challenges faced by mothers who undergo induced breastfeeding and relactation for adopted infants, infants born via surrogacy, and infants born to same-sex female partners.
Methods: A qualitative study was performed using in-depth interviews conducted with Spanish women (N = 9) who had decided to undergo induced lactation or relactation. The data were collected between October 2014 and May 2017. The length of the study was due to the difficulty in locating and recruiting the sample. Interviews were transcribed and coded with the ATLAS.ti v.7.5.7 software. We performed a deductive thematic analysis, creating categories based on the interview questions, which we developed on the basis of previous literature about induced lactation and relactation.
Results: Participants described the following challenges: the physical hardships of the process; breastfeeding problems; difficulty with accessing information about induced lactation or relactation; and lack of support from health professionals. Breastfeeding periods lasted from 1.5 months to 4 years. Participants reported that breastfeeding increased the closeness between the mother and child and that this feeling of closeness tended to decrease after breastfeeding cessation.
Conclusion: We offer data and analysis that can improve our understanding of the lived experiences of women undergoing the process of relactation or induced lactation and may help guide intervention strategies to support women in this situation.

Keywords

breastfeeding, induced lactation, qualitative methods, relactation

Background

Human milk, as the normal food for infants, contains antibodies and a multitude of other immune factors needed for normal growth and development and the long-term protection from numerous chronic illnesses. It also reduces the mother’s risk of breast and ovarian cancer, Type 2 diabetes, and postpartum depression (World Health Organization [WHO], 2017). Additionally, Gibbs, Forste, and Lybbert (2018) show that breastfeeding provides a strong foundation for the mother–child bond. Breastfeeding also serves as a social symbol of maternal identity (Marshall, Godfrey, & Renfrew, 2007; Schmied & Lupton, 2001; Williams, Kurz, Summers, & Crabb, 2012). The pressure to provide the best for one’s baby, minimize the risk of illness, and meet social expectations is likely to affect the decision to breastfeed (Afflerback, Carter, Koontz, & Grauerholz, 2013).

While most women who breastfeed do so with babies they have gestated, non-gestating mothers can still choose to breastfeed children who were adopted (Szucs, Axline, & Rosenman, 2010), born through surrogacy (Banapurmath, Banapurmath, & Kesaree, 1993), or born to their female partner (Wilson, Perrin, Fogleman, & Chetwynd, 2015). For women who have not previously breastfed, this process is
called “induced lactation.” If they have previously breastfed, it is termed “relactation” (WHO, 1998). Mothers often decide to undergo induced lactation or relactation to strengthen the mother–child bond (Flores-Antón, García-Lara, & Pallás-Alonso, 2017).

Induced lactation and relactation have gained popularity in Spain over the past 15 years, as traditional families have given way to new family structures, under which children enter a family via adoption, surrogacy, or sperm donation. Adoption has become very common in Spain, where around 1000 children are adopted each year (Ministerio de Sanidad, Servicios Sociales e Igualdad, 2017a). When it comes to surrogacy, although the practice is illegal in Spain (Techniques of Assisted Human Reproduction Act, 2006), Spanish citizens often arrange surrogate pregnancies in countries where the practice is legal (Darnovsky & Beeson, 2015). Couples comprising two women can legally use insemination with donor sperm to achieve a pregnancy (Techniques of Assisted Human Reproduction Acts 2006, 2015).

In Spain, according to the most recent national health survey, 74% of infants aged 6 weeks are fed with human milk. This figure drops to 64% at 3 months and 39% at 6 months (Instituto Nacional de Estadística [INE], 2017). The main reasons for cessation of breastfeeding is perceived milk insufficiency and returning to work (Ramiro et al., 2017). There are no data available regarding the prevalence of induced lactation or relactation in Spain.

Much of the existing research about induced lactation and relactation concerns methods. In the pharmacological method, women take galactagogues or hormonal treatments (estrogen and progesterone). Hormonal treatments create a hormonal state similar to that which occurs during pregnancy. Both treatments have potential side effects, including weight gain, headaches, gastric problems, depression, and irregular periods. In addition to taking medication, women using the pharmacological approach must also undergo breast stimulation (Forinash, Yaney, Barnes, & Myles, 2012; Sabatini & Cagiano, 2006). Induced lactation and relactation can also be performed using non-pharmacological methods based on the frequent stimulation of the breasts. Herbal galactagogues (e.g., fenugreek and blessed thistle) are sometimes used to assist in relactation and induced lactation (Wittig & Spatz, 2008).

Researchers have identified success factors for induced lactation and relactation, including maternal motivation, positive attitude, frequent stimulation of breasts, sucking by the baby, family support (especially the partner’s), and support from health professionals (Gribble, 2004). Lommen and Brown (2015) concluded that the support that women received from breastfeeding services and their families enabled them to breastfeed their babies and face feelings of rejection, anger, stress, and failure. Flores-Antón et al. (2017) described a mother who managed to feed her adopted baby exclusively with her own milk and argued that motivation and confidence helped her succeed.

As we have outlined, studies about induced lactation and relactation focus on methods and success factors. However, there is a lack of research about the experience of women who undergo these processes, which we divided into three phases: induction/relactation until the establishment of milk production; the breastfeeding of the infant; and breastfeeding cessation. As far as we know, our study was the first in which researchers examined, under a single lens, the three modes of reproduction in which women may choose lactation and relactation (adoption, surrogacy, and sperm donation). Specifically, we describe the challenges faced by women in Spain undergoing induced lactation and relactation. This research is important because new family models in Spain have increased cases of induced lactation and relactation, but little is known about how non-gestating women experience these processes. Our aim in this study was to describe the challenges faced by mothers who undergo induced breastfeeding and relactation for adopted infants, infants born via surrogacy, and infants born to same-sex female partners.

**Methods**

**Design**

This was a prospective and cross-sectional generic qualitative study. To explore the experiences of women who had undergone induced lactation and relactation, we deemed qualitative methods to be most appropriate, given that they allow researchers to understand participants experiences (Jiggins & Evans, 2016; Renate, 2014; Sandelowski, 2000). The research was approved by the Research Ethics Committee of the Health Corporation of Parc Taulí Hospital (reference 2015568) and the Bioethics Committee of the University of Barcelona (reference IRB00003099).
Setting
The research were based in Catalonia, Spain. Spain has a public health system providing universal, comprehensive, free care to citizens and foreign residents. Pregnancy, childbirth, and postpartum care are fully covered. Spain also has private hospitals offering pregnancy, childbirth, and postpartum care. Breastfeeding is encouraged and supported in both the public and private systems. In both systems, pregnant women receive breastfeeding education and support during pregnancy, immediately after childbirth, and during postpartum visits (Ministerio de Sanidad, Servicios Sociales e Igualdad, 2017b). Outside the health system, women can also receive breastfeeding support privately from lactation support providers and International Board Certified Lactation Consultants.

Sample
The target population was women living in Spain who had undergone induced lactation or relactation to breastfeed an adopted child, a child born through surrogacy, or a child born to the woman’s same-sex partner through sperm donation. We define breastfeeding as the process by which a child consumes human milk (including expressed milk and milk from a wet nurse). The breastfed infant may also consume other food or liquid, including non-human milk and formula (Noel-Weiss, Boersma, & Kujawa-Myles, 2012). Inclusion criteria were: (1) women who had undergone induced lactation or relactation and were no longer breastfeeding their children; (2) women who, after undergoing induced lactation or relactation, were still breastfeeding; or (3) women who had undergone induced lactation or relactation and who were in the process of ceasing breastfeeding. All women participated voluntarily in the study. Sample exclusion criteria were: (1) < 18 years of age at the time of the study; (2) women who did not speak Spanish or Catalan; and (3) women outside Catalonia who were unable to perform the interview via videoconference. Participants were not required to have undergone induction or relactation within a certain timeframe.

Author 1 contacted breastfeeding support groups and lactation support providers to identify the first participant. The remaining participants were identified with snowball sampling. Ten women were identified, and nine of these met the inclusion criteria. We contacted these nine women via email to offer study details, provide a consent form guaranteeing data confidentiality, and to commit to informing participants of the study results. The sample was small due to the small population size and the difficulty of recruitment. We were able to recruit three participants each from the three situations in which induced lactation and relactation occur. We ceased recruiting participants when we reached data saturation.

Data Collection
All participants gave their consent before being interviewed. All data were collected between October 2014 and May 2017. The lengthy timeframe for data collection resulted from our difficulties in recruiting participants. Few women in Spain choose induction or relactation in the case of adoption, surrogacy, or a partner’s pregnancy. Moreover, there is no database tracking the existing cases.

Semi-structured interviews were conducted using open-ended questions that addressed difficulties during the process, motivational and de-motivational factors, feelings and thoughts, and an evaluation of the entire process (Kallio, Pietilä, Johson, & Kangasniemi, 2016). We organized the interview guide (Table 1) around the three phrases of induction and relactation, and we developed the interview questions following classic studies in which researchers have laid the groundwork for understanding the experiences of women undergoing these processes (Auerbach & Avery, 1981; Hormann, 1977; Thearle & Weissenberger, 1984). This kind of deductive design is useful in ensuring that all areas the researchers wish to investigate emerge in the interviews (Percy, Kostere, & Kostere, 2015). Author 1 conducted in-person interviews with five participants and Skype interviews with four. Interviews were conducted in Catalan and/or Spanish and averaged 50 min (range = 40–160). They were recorded and transcribed in the original language and checked by Authors 1 and 2. A professional translator translated the examples from the original language into English.

To maximize the reflexivity of the research process (Buétow, 2019; Dogson, 2019), Author 1 kept a field diary in which she reported her impressions of each interview. In the interviews, she presented herself to study participants as a nurse–midwife and a student undertaking a PhD in nursing. Participants’ awareness that Author 1 was a nurse–midwife may have led them to paint an overly positive picture of breastfeeding. However, their multiple descriptions of the difficulties they faced seems to discourage this interpretation.

Participants’ names were substituted with the letter “P” (participant), followed by a number. Author 1 saved the transcribed interviews on a personal hard drive to maintain participants’ confidentiality. Once the study is completed and published, transcripts will be destroyed.

Data Analysis
The analysis process is detailed in Table 2. Following Braun and Clarke (2006), we familiarized ourselves with the data, generating an initial set of codes that drew on the theoretical model and our interview guide. Then Authors 1 and 2 jointly read and coded the transcriptions using ATLAS.ti v.7.5.7 (Scientific Software Development GmbH, 2015). We then incorporated the emerging codes into our predetermined
categories (Table 3). We conducted team meetings to compare and contrast our interpretations of the data and to identify relationships among codes and categories (Dogson, 2019).

Results
The average age of the participants when undergoing induced lactation or relactation was 33 years (standard deviation [SD]: 3.87). The average age of the infants at the start of breastfeeding was 17 days (SD: 28.92) and the average length of breastfeeding was 17 months (SD: 17.06). In all cases, it was the first time that the participant underwent a process of induced lactation or relactation. Seven participants breastfed a single child, while two breastfed twins. Table 4 shows the demographic characteristics of the participants.

We organized our data into three categories: challenges of induced lactation or relactation; challenges of breastfeeding; and challenges of breastfeeding cessation.

### Challenges of Induced Lactation or Relactation

**Physical Challenges.** Seven (78%) of the participants underwent the process of relactation or induced lactation before their child arrived. The remaining two (22%) participants, P-2 and P-3, began the process after the child arrived. The process of induced lactation or relactation required round-the-clock stimulation of the breasts, which often caused stress to participants. All participants reported that it was worth undergoing induced lactation or relactation to be able to breastfeed their children.

The stress that it can cause you at the beginning with your partner, with your family, and imposing those routines, because it is quite a tedious routine, every 2 or 3 hours and at night, whatever we do, having to go to the bathroom to pump milk, and touch my breasts for 10 minutes. (P-2)

The process not only affected their relationship with their partners but also their colleagues: “The most difficult was at work,
disappearing for 10, 15 minutes. It was very strange [to my
colleagues] for me to disappear” (P-7). For P-2 and P-8, on
medication during the process, side effects during hormonal
treatments and galactagogues included weight gain, headaches,
and decreased sexual desire. These participants did not inter-
pret these symptoms negatively: “I gained a few sizes due to
the medication, however, truthfully, I did not mind” (P-2).
“The medication gave me a headache and very low sexual
desire. But I knew why so I could live with it” (P-8).

Lack of Information From Health Professionals. Only P-5, who
became a mother by surrogacy in 1999, said she felt satis-
fied with the support of her physicians during the process of
inducing lactation. The other participants felt that the infor-
mation and support provided by their midwives, nurses,
and physicians was inadequate, which made them turn to
the Internet: “I remember the phrase [from my family doc-
tor]: ‘You will not be able to breastfeed, not even an ant’”
(P-1).

Table 3. Categories, Definitions of Categories, Codes, and Definitions of Codes.

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition of Category</th>
<th>Code</th>
<th>Definition of Code</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Challenges During Induction of Lactation or Relactation</strong></td>
<td>The participants experienced challenges during the period of induction of lactation or relactation, until they were able to produce milk</td>
<td>1. Hardship during the process of inducing lactation or relactation</td>
<td>1. Routines, disciplines, stimulation both during the day and night, secondary effects of medication, stress</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Difficulty obtaining information from health professionals (midwives, RNs, and physicians)</td>
<td>2. No access to information, inappropriate information, lack of information</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Doubts and fears during the process of inducing lactation or relactation</td>
<td>3. Not being able to produce milk, insufficient milk supply</td>
</tr>
<tr>
<td><strong>Challenges During Breastfeeding</strong></td>
<td>The participants experienced challenges during the establishment of breastfeeding and the period of breastfeeding itself</td>
<td>4. Problems with the breast</td>
<td>4. Cracked nipples, nipple blebs, blocked ducts, pain, suction problems</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Doubts about whether the amount of milk supplied was sufficient</td>
<td>5. Insufficient milk supply for feeding the baby</td>
</tr>
<tr>
<td><strong>Difficulties During Breastfeeding Cessation</strong></td>
<td>The participants experienced challenges during breastfeeding cessation</td>
<td>6. The end of shared responsibility for breastfeeding with the partner</td>
<td>6. In the case of couples comprising two women, the induced or relactating mother ceased breastfeeding before her partner</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7. Reduced feeling of closeness</td>
<td>7. The end of breastfeeding diminished the mother's sense of closeness to the child</td>
</tr>
</tbody>
</table>

Table 4. Demographic Characteristics of the Participants (N = 9)

<table>
<thead>
<tr>
<th>ID</th>
<th>Maternal Age (years)</th>
<th>Maternity without Pregnancy</th>
<th>Prior Pregnancy</th>
<th>Prior BF</th>
<th>Induction/relactation Method</th>
<th>Type of BF</th>
<th>BF Support</th>
<th>Child's age at start of BF</th>
<th>Child's age at BF cessation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>29</td>
<td>Adoption</td>
<td>Full term</td>
<td>Yes</td>
<td>H, H, G, S</td>
<td>Mixed</td>
<td>None</td>
<td>12 weeks</td>
<td>13 months</td>
</tr>
<tr>
<td>2</td>
<td>36</td>
<td>Partner's Pregnancy</td>
<td>No</td>
<td>No</td>
<td>HG, S, SNS</td>
<td>Mixed</td>
<td>RN</td>
<td>6 weeks</td>
<td>7 months</td>
</tr>
<tr>
<td>3</td>
<td>38</td>
<td>Adoption</td>
<td>Full term</td>
<td>Yes</td>
<td>HG, S, SNS</td>
<td>Mixed</td>
<td>IBCLC</td>
<td>8 days</td>
<td>4 years</td>
</tr>
<tr>
<td>4</td>
<td>36</td>
<td>Adoption</td>
<td>Miscarriage 2nd trimester</td>
<td>No</td>
<td>HG, S</td>
<td>EBF</td>
<td>RN</td>
<td>4 days</td>
<td>4 years</td>
</tr>
<tr>
<td>5</td>
<td>37</td>
<td>Surrogacy</td>
<td>None</td>
<td>No</td>
<td>H, H, G, S</td>
<td>Mixed</td>
<td>Physician</td>
<td>From birth</td>
<td>6 months</td>
</tr>
<tr>
<td>6</td>
<td>30</td>
<td>Partner's Pregnancy</td>
<td>None</td>
<td>No</td>
<td>H, H, G, S</td>
<td>EBF</td>
<td>Midwife IBCLC</td>
<td>From birth</td>
<td>15 months</td>
</tr>
<tr>
<td>7</td>
<td>28</td>
<td>Partner's Pregnancy</td>
<td>None</td>
<td>No</td>
<td>H, H, G, S</td>
<td>EBF</td>
<td>Midwife LSP</td>
<td>From birth</td>
<td>4 months</td>
</tr>
<tr>
<td>8</td>
<td>32</td>
<td>Surrogacy</td>
<td>None</td>
<td>No</td>
<td>H, H, G, S</td>
<td>Mixed</td>
<td>None</td>
<td>From birth</td>
<td>10 months</td>
</tr>
<tr>
<td>9</td>
<td>38</td>
<td>Surrogacy</td>
<td>Miscarriage 1st trimester</td>
<td>No</td>
<td>H, H, G, S</td>
<td>Mixed</td>
<td>IBCLC</td>
<td>1 months</td>
<td>1.5 months</td>
</tr>
</tbody>
</table>

Note. Abbreviations: BF = breastfeeding; EBF = exclusive breastfeeding; H = hormonal; HG = herbal galactagogues; IBCLC = International Board Certified Lactation Consultant; LSP = lactation support provider; mixed feeding = BF and formula; S = stimulation; SNS = supplemental nursing system, registered nurse (RN).

*M Maternal age at time of induction or relactation.
of the process as expressed by P-1, an adoptive mother: “The
while expecting a child to their own doubts about the success
of induced lactation or relactation for babies raised by two
women: “Is there anything missing? Well, that would be
more training for health professionals about couples so they
know that this is possible, positive, and that both of you can
do it” (P-2).

Lack of Support From Close Family Members and Friends. Pri-
mary support came from participants’ partners. All admitted
to being questioned about their decision by their family and
close friends: “At first, it is like: ‘What is she doing?’ And
that is tough, at least in my case it was” (P-3). Participants
admitted feeling questioned for undergoing induced lactation
or relactation and about the quantity and quality of their
milk: “Many people, friends, told me: ‘Do you know that
you are going to be a mother anyway, even if you do not
breastfeed?’ They felt it was a major complication” (P-9).
“Later, when I produced milk they said: ‘Ok, but is that milk
real? Will it be of any use to the baby?’” (P-4). P-2, P-6, and
P-7, participants who underwent induced lactation or relacta-
tion to breastfeed a child born by their female partner felt
judged not only for wanting to be mothers, but also for want-
ing to breastfeed their babies.

Doubts About the Outcome. All participants experienced
doubts about whether they would be able to induce lactation
or relactation successfully. These doubts were due to the
slow pace of inducing lactation and relactation, the long
waiting period before results emerged, the fact that milk pro-
duction sometimes plateaued, and their frustration during the
process. “I saw that you came to a point at which it [the milk]
did not increase any more, and it made me think: ‘Oh my
goodness, will that be enough?’” (P-1). They also feared
that their babies would have difficulty breastfeeding or might
reject the breast.

I did not know if all this effort was going to be worth it. At first,
you feel full of hope, see if this will work, when you see it does,
you get very excited, when you see that you really have milk.
But it is also frustrating because I was scared my baby might not
want it. (P-2)

Some participants linked the stress that they experienced
while expecting a child to their own doubts about the success
of the process as expressed by P-1, an adoptive mother: “The
chances of succeeding already are not great … and in a pro-
cess like adoption, which is really long, maybe you are not at
your best” (P-1).

Challenges During Breastfeeding

Problems with Breast Health. P-1 and P-3 had had prior
breastfeeding experience and did not experience any prob-
lems with their breasts during breastfeeding after relacta-
tion. However, the remaining participants, who had not
breastfed before, reported problems including cracked nip-
les (P-6, P-9); nipple blebs or milk blisters (P-4, P-9); sti-
fiffened areas of the breast due to stimulation (P-2); the
baby having problems with sucking (P-5); the baby having
difficulty in latching on to the participant’s breast, but not
to the gestating mother’s breast (P-7); and blocked ducts
(P-8). These problems appeared during the first month of
breastfeeding and were mostly resolved during the first
month and a half, except for P-8, who, when back at work,
again experienced blocked ducts, and P-7, who reported
that her baby had difficulty latching on for the entire
4-month period of breastfeeding. To solve sucking prob-
lems, P-5’s registered nurse taught her exercises to stimu-
late sucking. For P-4’s nipple blebs and P-6’s cracked
nipples, lactation support providers taught them to perform
postural changes when breastfeeding to drain all areas of
the breast. One of P-6’s twins required a frenotomy to cor-
correct a tongue-tie.

Doubts About Milk Supply. Participants reported doubts about
whether their induced milk supply would be enough for their
babies. Participants who had previously breastfed (P-1, P-3)
acknowledged having more doubts about breastfeeding after
relactation compared to previous experiences:

Considering that the baby was smaller, and that it was not
breastfeeding immediately after birth, there was a doubt that the
baby would have enough [milk], you know? I had that doubt,
you know? More doubts. (P-1)

Challenges During Breastfeeding Cessation

The end of Shared Breastfeeding Responsibility With the Part-
ner. P-2 and P-6 had shared breastfeeding with their female
partners who had given birth to their babies. When these par-
ticipants ceased breastfeeding, their partners continued
breastfeeding. This change caused stress in the couples and
shifted their responsibilities in caring for their children. P-6’s
partner went from feeding one of their babies to feeding
both: “Sharing the burden is the least romantic part, but it is
true that I also felt motivated to continue supporting my part-
ner, because it was very tiring with the two of them” (P-6).
Except for P-2, who decided to stop breastfeeding for per-
sonal reasons, all participants stopped breastfeeding because
of the baby’s disinterest in breastfeeding. The babies asked
to nurse less often, and the babies who received formula supplements (P-7 and P-9) preferred the bottle to the breast.

**Reduced Closeness.** P-4 and P-7 were still breastfeeding at the time of their interviews, while the other participants had already ceased breastfeeding or were in the process of doing so. All participants saw the end of breastfeeding as a loss and linked it to a decrease in the closeness between mother and child. This aspect made breastfeeding cessation particularly difficult for the participants, since the desire for closeness was the main reason they had undergone induced lactation or relactation in the first place. An example is P-2, whose female partner was still breastfeeding their child, even though P-2 herself had weaned:

There is a change, in the sense that no, they do not seek you out in the same way; there is not the dependency now that the child has with my partner, when it was more shared—and yes, it changes. For me, it changes. (P-2)

**Discussion**

Our study participants faced the same challenges, regardless of the mode of reproduction. The greatest challenge of induced lactation or relactation was physical. As also reflected in previous studies, the process required an effort that could be stressful but that was rewarded when the mother was able to breastfeed her baby (Da Rocha, Meneses, & Nazareth, 2014). The most difficult part of the process for our participants was the round-the-clock stimulation of the breasts (Shiva, Frotan, Arabipoor, & Mirzaaga, 2010). It should be pointed out, however, that induced lactation and relactation can also be achieved after the baby arrives by putting the baby to the breast (Abejide et al., 1997). This option should be kept in mind as a way of avoiding the onerous process that our study participants went through, and thus reducing stress.

Because of the physical difficulty of the process, external support is essential, and our participants expected that health professionals would provide relevant information and support. Other researchers have shown that health professionals often do little to promote induced lactation or relactation because they are unfamiliar with these processes (Da Rocha et al., 2014; Saari & Farahwahida, 2014). When our participants failed to receive professional support, they obtained additional information via the Internet, a strategy that, without supervision from a health professional, may lead to inappropriate conclusions (Hartzband & Groopman, 2015). While participants found that professional support was lacking, they reported receiving emotional support from their partners, which increased their willpower and sense of security, and assisted them through the challenges of the process. While participants reported good support from their partners, they agreed that they received very little support from friends, compared to women who breastfeed children to whom they have given birth. We agree with Lommen and Brown (2015) that more support and a positive outlook would help encourage breastfeeding in non-gestating mothers.

The challenges of breastfeeding itself that our study participants faced were similar to those reported for gestating mothers: breast health and milk supply (Barbosa et al., 2017). Like previous researchers (Hackman, Schaefer, Beiler, Rose, & Paul, 2015), we show that participants who were breastfeeding for the first time often had more difficulty initiating breastfeeding than those who had breastfed previously. With respect to their doubts about milk supply, similar to other findings (Da Rocha et al., 2014; Saari & Farahwahida, 2014; Shiva et al., 2010), the type of feeding (i.e., exclusive breastfeeding, predominant breastfeeding, mixed feeding or bottle feeding), and the inability to exclusively breastfeed a child, did not negatively affect the participants. This finding coincides with their belief that the benefit to the mother–child relationship was significant regardless of how much milk was produced.

Finally, the participants agreed that their feeling of closeness with their child had been strengthened by breastfeeding and that this closeness weakened when they ceased breastfeeding. Although returning to work is often related to breastfeeding cessation (Li, Fein, Chen, & Grummer-Strawn, 2008), this factor did not affect participants in our study because they were all able to reduce their working hours or lengthen their leave.

Participants’ motivation for breastfeeding was to improve their sense of closeness to their infants, and they reported that their expectations had been fulfilled. In future studies, researchers should compare sense of closeness to one’s infant between non-gestating mothers who breastfeed their infants and those who do not.

**Limitations**

We included two study participants who were still breastfeeding and therefore who had not gone through the phase of breastfeeding cessation; as a result, our sample for this phase was limited to seven participants. Overall, the small size of our sample limits our ability to making definitive claims or generalize our results to other settings. The sample may appear to be skewed toward women with a high educational level. However, this characteristic is probably general to women who choose induced relactation or relactation, and therefore not a sampling error. Our use of snowball sampling may have skewed the sample toward women who were similar to each other. Finally, the authors’ own positioning as nurses and nurse–midwives—and therefore recognizable as people in favor of breastfeeding—could have affected the participants’ responses and the researchers’ interpretations.
Conclusion
At a time when people use a range of modes of reproduction to create their families, health professionals need to know about induced lactation and relactation in order to provide proper guidance and assistance. Researchers and practitioners can use our study to better understand the lived experiences of women during induced lactation and relactation, and health professionals and lactation support providers can draw on it when they offer care during these processes.

Acknowledgments
The authors thank all women who have shared their experiences and have allowed the realization of this study. Furthermore, we would like to thank Dr Clara Juandó Prats for her research support, and Dr Susan Frekko, who translated the article from Spanish to English and provided feedback on several versions.

Declaration of Conflicting Interests
The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding
The authors received no financial support for the research, authorship, and/or publication of this article.

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