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# **BREASTFEEDING AND ADOPTION.**

## **A RETROSPECTIVE QUALITATIVE SURVEY**

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### **ABSTRACT**

The breastfeeding of adopted infants has been recorded for many years, but little has been written about women's reports of such experiences. This descriptive retrospective survey reviews the observations of women who attended a breastfeeding centre for counseling about induced lactation and breastfeeding. Nineteen women outline their knowledge of and attitude towards breastfeeding and adoption. Mothers who tried breastfeeding describe it as very pleasurable, say that it greatly enhanced bonding and believe that it is well worth the effort. These women had varying success with induced lactation. An average of 50 mls breast milk per feed, ranging between zero and 220 mls, was produced. The effect was found to be time consuming and required great dedication. Thirty percent of mothers decided after counseling not to attempt induced lactation and breastfeeding. Their reasons included lack of knowledge, too little warning and time to prepare and the turmoil that accompanied adoption. The adoptees fell through in five cases. Lack of support from health professionals and hospitals was identified as barrier to success.

**KEY WORDS:** Breastfeeding, lactation, induced lactation, adoption and breastfeeding.

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### **INTRODUCTION**

Some families, prompted by infertility or social desire, decide to adopt children. Given the growing understanding of the nutritional and nurturing value of breastfeeding, women are seeking information about breastfeeding an adopted infant. Induced lactation in the non-pregnant woman has been described in both scientific and lay publications, and dates back to the first reports by Hippocrates.<sup>1</sup> In 1934, Selye and McKeown<sup>2</sup> performed the first animal studies in which rats and mice, not recently pregnant, were able to feed adoptive litters to maturity. In several cultures, breastfeeding adopted children has been described as routine,<sup>3</sup> but the success rates are undefined. Published reports concentrate primarily on the novelty of breastfeeding an adopted child and include few case studies<sup>4-10</sup> The exceptions are the works by Auerhach et al.<sup>8</sup> who studied 240 women attempting to breastfeed adopted children and Nemba<sup>11</sup> who studied 37 women in Papua, New Guinea. Nemba used a simple protocol combining a high degree of motivation with medication, support and encouragement. Eighty-nine percent of the women breastfed successfully, but a clear definition of breast-feeding was lacking.

Mammogenesis, or growth of the mammary gland, occurs naturally during pregnancy under the influence of a variety of hormonal lactotrophes including estrogen, progesterone and prolactins. Lactation occurs following successful mammogenesis and parturition, and is triggered by frequent nipple stimulation and milk removal.

There are several anecdotally described methods of inducing lactation and preparing for breastfeeding, some of which can be started before the arrival of the infant. Direct nipple stimulation has been described as the most important component of this process.<sup>12,13</sup> It not only stretches and acclimatizes the skin, but it also triggers the release of prolactin which is thought to help to stimulate the glandular development of the breasts and to facilitate milk production.<sup>14</sup> Nipple stimulation can be performed by hand or by such mechanical means as an electric breast pump. Hand stimulation has the advantage of being easy and portable, but mechanical pumping stimulates greater milk production in lactating women.<sup>15</sup>

A variety of pharmacological lactotrophes and galactogues have been used to induce lactation. Estrogen and progesterone promote mammogenesis by stimulating alveoli and lactiferous duct proliferation. They inhibit milk synthesis by blocking the action of prolactin on the mammary glands and are used in preparation for breastfeeding only.<sup>16,17</sup> Galactogues, for example phenothiazines, sulprides and domperidone, have also been described.<sup>18,22</sup> They are dopamine antagonists and block the inhibition of prolactin, which is a potent lactotrophe. Metoclopramide and chlorpromazine are commonly used galactogues but have many potential side effects, including sedation, extrapyramidal symptoms and tardive dyskinesia. Domperidone has little effect on the central nervous system and has fewer side effects. Oxytocin is the hormone responsible for milk ejection; it stimulates the contraction of myoepithelial cells around the mammary alveoli causing milk ejection. It does not directly affect milk synthesis.<sup>23</sup>

Relactation is often more successful than induced lactation. Phillips<sup>24</sup> studied six Australian mothers who relactated in response to direct nipple stimulation alone. Ahejide et al.<sup>25</sup> described five of six Nigerian surrogate mothers who successfully relactated and breastfed orphan children. Each mother continued partial breast-feeding for several months. Banapurmath<sup>26</sup> described 10 surrogate mothers who attempted relactation. Two mothers breastfed exclusively and three mothers partially. Some authors feel that hormones used to promote lactation are harmful to the child and do not advise their use.<sup>27,28</sup> Drug excretion in breast milk is very limited, and in combination with low milk production, probably poses no risk to the infant.

## METHODS

This retrospective survey follows a cohort of women who received counseling about breastfeeding an adopted child at the Vancouver Breastfeeding Centre and documents their subsequent experiences.

The Vancouver Breastfeeding Centre (VBFC) is a referral centre for women with breastfeeding concerns. The clinic is operated under the auspices of the University British Columbia and sees 800 new patients per annum. A small number of women visit the centre requesting information about breastfeeding and adoption.

All women requesting information about breastfeed and adoption receive specific counseling about the biological, psychological and social issues surrounding breastfeeding and induced lactation. The nutritional and nurturing aspects of breastfeeding are emphasized. Women and their partners are questioned about their beliefs, attitudes and knowledge and are given ample time to discuss questions and concerns. The physiology mammogenesis and lactation are described to patients a detailed maternal history is obtained to identify factors that might interfere with lactation and a physical examination of the breasts is performed to identify anatomical factors that might interfere with suckling. These steps are followed by a short review of breast-feeding techniques, using a model doll and a demonstration of a feeding device, consisting of a bottle of formula with a feeding tube to be placed at the breast.

The regime used by the VBFC to induce lactation is discussed. The process combines pharmacological and mechanical breast stimulation. Patients are informed that the protocol has not been formally evaluated and verbal consent is obtained. At six to eight weeks preadoption, estrogen (one

Estraderm 50 mg patch per breast) and progesterone (10 mug. t.i.d.) are started and withdrawn when the infant arrives. This regimen is continued for up to ten weeks, if the adoption is delayed. Domperidone (10 mg. t.i.d.) is also started six to eight weeks pre-adoption and continued post-adoption for as long as effective, which may be up to two to three months. Breastfeeding using a feeding device (e.g. the Medela Supplemental Nursing System) is initiated when the infant arrives and is followed by 10 to 20 minutes of breast stimulation using an electric pump. Women are advised that their menstrual cycle will be disrupted, and oral contraception should be avoided and replaced by barrier methods, if required. Potential side effects and the risks of high dose estrogens are discussed.

Subjects were identified by chart review and received letters inviting them to participate in the study. A telephone interview was conducted, including a standardized open-ended questionnaire asking about their experiences, their initial contact with the idea of breast-feeding an adopted child, about how they prepared for breastfeeding and any advice they would give to future adoptive parents. The results were analysed by hand and the data were grouped in clusters.

## RESULTS

During 1991 and 1992, 28 women attended the centre to obtain advice about breastfeeding adopted children. Nineteen women completed the survey, three women had moved with no forwarding address, one had died (cancer) and five did not wish to participate. Clinic records showed that three of the non-participants adopted children and two attempted to breastfeed. The women completing the study were all married and Caucasian with an average age of 35.6 (range 28 to 46). They had all received post-secondary education, eight in health care fields, and only 11 stayed at home. All were well read and highly motivated to offer their best to the new children. Most women (13) were nulliparous and most (14) had never breastfed before. There were 19 completed adoptions amongst fourteen women (range 1—3 each). Of these, 70 percent (10) attempted to breastfeed and 30 percent (4) decided not to. Five other women were waiting to adopt children, and 18 pending adoptions had fallen through for seven women (Figure 1).

Outcome	Participants N=19	Non-participants N=9
Adopted	14	3
Adoption pending	5	2
Breastfeeding attempted	10	2
Breastfeeding not attempted	4	1
Deceased		1
Lost to follow-up		3

On average, the women had two month. (range 0—8 months) warning of the impending adoption. The age of the infant at first contact was 18 days (range, birth to 4 months) and this has been shown to be a positive predictor of breastfeeding.<sup>15</sup> Five surrogate mothers were present at the birth of the infant.

### *Awareness*

The women learned about breastfeeding adopted children from many sources, including the La Leche League (25%), information provided by the Adoptive Parents Association of British Columbia (25%), from past experience and training (30%). Two women heard about breastfeeding adopted children from support groups through infertility clinics, and in one instance the birth mother was a strong advocate of nursing. The medical community was not included as an information source.

### *Preparation*

The methods used for inducing lactation varied, depending on how much warning the parents had about the upcoming adoption, the certainty of adoption occurring and the preferences of the women. The

most common methods of attempting to induce lactation were breast stimulation using electric breast pumps and the use of domperidone (Figure 2). None of the mothers complained of any side estrogen, progesterone or domperidone.

FIGURE 2 METHODS TO INDUCE LACTATION* (N=19)		
	Pre-adoption	Post-adoption
Breast stimulation by hand	2	0
Breast stimulation by electric pump	6	3
Breast stimulation by baby	0	10
Breast stimulation by feeding device	0	8
Estrogen patches	3	1
Progesterone	2	2
Domperidone	4	5
Nothing	5	4

\*Most women used more than one method.

The women were asked to comment on the statement: “Even though the chance of an adoption falling through is high, preparation for breastfeeding including inducing lactation should be attempted before the arrival of the child.” Most women disagreed (10/19), claiming that adoption is a very uncertain time, and inducing lactation adds one more stress to themselves and their families. However, a good number were unsure (6/19), feeling that the decision was individual (Figure 3).

FIGURE 3 SHOULD WOMEN INDUCE LACTATION BEFORE ADOPTION?			
	Strongly Agree	Strongly Disagree	Unsure
Women who breastfed adopted child	4	4	2
Women who did not breastfeed adopted child	2	2	
Women who have not yet adopted	4		1

### Success

Three groups emerged: women who adopted children and attempted breastfeeding,<sup>10</sup> women who adopted and chose not to attempt to breastfeed<sup>4</sup> and women who were still waiting to adopt.<sup>5</sup> There was a slight overlap between these groups because some women adopted or attempted to adopt more than once. Success was defined in two ways: induced lactation for nutritional benefits and breastfeeding for nurturing benefits. Seventy percent of the mothers who adopted attempted to breastfeed. They breastfed for an average of 12 weeks (range 3 days to 7 months and ongoing). Approximately 80 percent of feeds per day involved the breast (range 50—100%) but none of the women was able to breastfeed exclusively and stop supplementation. Six out of ten mothers used a feeding tube attached to the nipple which allowed their infant to receive complementary food while breastfeeding, two used the breast, then bottle fed and two used a combination of feeding device and bottles. The women had varying degrees of success in producing milk. Following a standard test feed and pumping residual milk, an average of 50 mls milk yield per feed (range 0—220 ml) was obtained. (The amount of milk was determined by weighing the infant pre-and post-feeds or was observed by mothers who pumped.) The mothers reported that the rate of milk production varied with time, over days and months and also throughout the day. Two women used complementary donor breast milk, the others used formula. A neonate drinks 90 to 110 mls per feed and so these women provided

roughly 50 percent of their infants' daily nutritional requirements. All mothers who breastfed felt successful in achieving their goals of bonding, nurturing and providing the best possible start for their infant.

### ***Support***

The women believed that good support was essential to breastfeeding an adopted infant. This opinion confirmed previous reports.<sup>8,11</sup> They were asked to rank the support they received from various people. The women received help from a variety of sources including the La Leche League, the birth mother and VBFC. Most families and friends were supportive, with the husbands being strongest. The Adoptive Parents Association of British Columbia offered positive advice on a variety of issues including breastfeeding the adopted child.

Reports of low support from family and friends were attributed to several causes. "My family is very traditional and cannot seem to grasp that cannot produce real' grandchildren. They have rejected the entire idea of the adoption and all that is related." "My husband was very supportive at first but when he saw how dejected and frustrated I was becoming, he encouraged me to quit."

Of most concern to the authors, as family practitioners, were the reports of actual antipathy from several primary care physicians. According to the study patients, many doctors were unaware of the possibility of breastfeeding an adopted child. Some doctors told their patients that breastfeeding was "insignificant" and a "waste of time to try to pursue." It was interesting to note that in medical journals, many articles by specialists and general practitioners seemed very negative: Breastfeeding an adopted child "requires excessive amounts of frequent stimulation over extended periods of time...four or five months." "An adoptive mother may run the risk of another failure of physical function and further loss of self esteem" (the first loss being the inability to bear children). One woman in this survey did express that she was ambivalent about breastfeeding her adopted child because she did not want her body to fail her again.

The hospital administrators were also very reluctant to allow adoptive parents to have contact with the newborn infants, while the infants were still in hospital. One family had to go to the extreme measure of becoming the child's guardians while the infant was still in utero to give them the right to be present at the delivery. The reports from these women indicate that different hospitals have different policies and practices, and so prospective parents may want to explore their options at different hospitals, if they have that luxury.

### ***Experience***

The women were asked to rank several statements to quantify their impression of breastfeeding as a pleasurable experience and one that enhanced the bonding. "Breastfeeding is parenting". Some found the process very labour intensive and time consuming. "... it took me away from my other children for an extended period of time." Most felt strongly that it did not interfere with other aspects of caring for the newly adopted child and was worth the effort.

The women who chose not to breastfeed highlighted the need for some warning prior to adoption as well as adequate preparation and support from family and friends. Most of these women emphasized that the arrival of the child, often following many years of waiting, was an exhausting, overwhelming time. "Our house was zoo...I was so exhausted". "I didn't find out about breastfeeding an adopted child until too late." "I'm not worried about bonding with him. He needed to be fed every hour and so he got lots of holding!"

Each woman expressed a strong desire to do the best that was possible for her new child. These women found, however, that the time around the adoption changed their feelings of control. They expressed the need to be as fully prepared for a new child as circumstances would allow. Sutherland and Aucrbach<sup>17</sup> describe the new adoptive family as any other new family, which should be given gentle support and time alone to learn to be a family and to establish breastfeeding.

The group of women who anticipated adoption only to find that it fell through, emphasized the difficulty of sharing plans for adoption and breastfeeding with family and the sorrow when the adoptions did not materialize. Three out of five had nutrition as their primary reason for breastfeeding: "far superior

nutrition". The remaining two women felt that enhanced bonding with the new child was their primary reason for planning to breastfeed.

The group of women who were waiting to adopt had markedly different goals for breastfeeding than the rest of the women, in that they had much higher expectations of being able to feed their children without supplementation. They reported bonding as a secondary benefit of their efforts. Other studies have noted that women with high expectations of nutrition are usually disappointed in their experiences. Without further realistic counseling, these women may be disappointed.<sup>8, 26, 29</sup>

### ***Problems***

The biggest problem encountered by breastfeeding mothers was technical difficulties in the provision of nutritional supplements. Almost all women commented that trying to hook up a feeding tube device to the breast (with tapes and tubes) "while calming a screaming, hungry baby" was very difficult. Other concerns included difficulties dealing with hospital administration, explaining to others their actions and goals ("They all thought that I was cracked") and dealing with all of the changes that are part of adoption, especially changing emotions, job expectations and sleep patterns. Some women noted that it difficult to find time while in their work places to pump their breasts in order to prepare for the child. No one reported side effects with the medication.

One woman had to deal with the very difficult situation of losing the child to the birth family after four weeks because of conflict between the birth parents. "This particular patient had been able to establish a good milk supply, and she found that producing milk reminded her all the more that she had lost this child. "It was like he had died, and everything, including my full breasts, reminded me of his loss."

### ***Advice***

Women embarking on breastfeeding adopted children must do so with clear expectations. Many adoptions fall through and any preparations for the child's arrival (preparing rooms, telling family and preparing to breastfeed) are strong reminders of this fact. One woman described an adoption that had fallen through as, "like another miscarriage". Women in this study were very mixed in their feelings of the advisability of preparing to breastfeed before the child had arrived. Some felt that their motivation to breastfeed after the child arrived would have been stronger had they had "more chemical support" but most felt that induced lactation was just too risky. All these women emphasized that preparing to breastfeed prior to the arrival of the child was not to be taken lightly and must be an individual, informed decision.

Women in this study offered several unique ideas. One suggested having two or more of the infant feeding devices and practicing setting them up before the child arrived. This would familiarize the woman with the set up and cleaning of the equipment in a calm environment. Another patient was advised by her lawyer to breastfeed the adopted child as much as possible. This mother was involved in a dispute with the birth family, and the lawyer felt the courts would be very hesitant to disturb a woman/child nursing partnership. Another woman did not attempt to induce her own milk production but instead rented breast pumps for nursing friends. She used their expressed breast milk rather than formula to feed her own child. The authors advise great caution with this plan because of the inherent risk of transferring communicable diseases through unpasteurized donor milk.<sup>2</sup> Some women have access to pasteurized donor breast milk through local hospital milk banks which would be a much safer alternative.

The majority of participants felt that breastfeeding an adopted child was a time consuming process but was well worth the effort. Their overwhelming advice to women who were considering breastfeeding an adopted child was "go for it".

## **DISCUSSION**

This study was unique in that it contacted all groups of women who requested information on breastfeeding an adopted child rather than simply those who were successful at doing so. It is interesting to compare the findings with the study by Auerbach and Avery<sup>8</sup> which noted that 63 percent of women were able to reduce supplements to < 454 mg per day (some eliminated them altogether) and that 76 percent of women evaluated adoptive nursing positively. Their study had a higher percentage of women who had

breastfed a natural child in the past and these women set very high goals for breastfeeding, which may explain some of the differences. The group of women studied by Thearle and Weissenberger<sup>28</sup> (live nulliparous women during six adoptions) demonstrated that all required ongoing supplements and all were pleased with their experience. Nemba's<sup>11</sup> study in New Guinea found that 24 of the 27 women who attempted the induced lactation programme achieved adequate lactation within ten days and were known to continue lactation for at least nine months. Our retrospective, descriptive survey does not address the effectiveness of the induced lactation protocol. It does confirm that it is clinically possible to induce partial lactation in well-motivated non-pregnant women. Further studies will be necessary to refine the protocols.

The concept of breastfeeding an adopted infant appears to be gaining greater acknowledgement from many groups. The study confirms previous findings that the basic factors required for success are knowledge, confidence, support, breast stimulation in and suckling. Groups that include the La Leche League and Adoptive Parents Association have done a good job of informing women/families about their options. It is hoped that the medical community will learn more of this phenomenon and become a source of appropriate counseling. Based on the findings of this study, women should be asked to consider seriously the positive and negative aspects of breastfeeding adoptive infants. Women deserve to be supported in whatever informed decision they make.

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