

Breastfeeding Mothers Returning to Work: Possibilities for Information, Anticipatory Guidance and Support from US Health Care Professionals

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Abstract

Today, more mothers in the United States are in the labor force, and returning to the workforce presents numerous challenges for the breastfeeding mother. Although it has been demonstrated that maternal employment is associated with a decrease in the length of time a mother continues to breastfeed, health care providers are in a unique position to enhance a mother's breastfeeding success as she transitions back into the workplace. This article describes various commonly perceived obstacles to combining breastfeeding and working and provides examples of information, anticipatory guidance, and support that health care providers can use to assist a breastfeeding mother with a successful return to the workforce.

Keywords: breastfeeding, lactation, employment, workplace, breastfeeding support, health care professionals

Because of the demonstrated health benefits of human milk, both the American Academy of Pediatrics (AAP) and WHO/UNICEF have policy statements supporting breastfeeding. These policies emphasize the importance of human milk for optimal growth and development and state that infants should be exclusively fed human milk for the first 6 months of life.^{1,2} The AAP recommends that breastfeeding should continue through the child's first year and for as long as is mutually desirable by the mother and child.¹ The WHO/UNICEF policy recommends that breastfeeding should continue

through the child's second year and beyond.² These recommendations are universal and cut across socioeconomic, ethnic, and racial lines.

Although these recommendations support optimal feeding practices, it is important to consider the social reality of today's working mothers in the United States. According to the US Department of Labor's Bureau of Labor Statistics, approximately 60% of women in the United States participate in the labor force, and slightly more than 70% of employed mothers with children under the age of 3 work full-time.³ In the United States, approximately one third of women return to work within 3 months of giving birth and two thirds return within 6 months.^{4,5} Participation of women in the labor force has been associated with a negative impact on the continuation and duration of breastfeeding rates. It has been demonstrated that maternal employment is associated with a decrease in the length of time a mother continues to breastfeed.⁴⁻⁷ For example, among women who initiate breastfeeding, there appears to be a dramatic decline in breastfeeding rates when the child is between 3 and 5 months old.^{8,9} This correlates with the time that many women return to work, and it may be speculated that these women wean their children prior to returning to work because they have concluded that they will not be able to manage both breastfeeding and employment.⁴

Received for review March 13, 2008; revised manuscript accepted for publication November 11, 2008.

No financial or other material support was received for this work. Presented as "Supporting Breastfeeding Mothers Returning to Work" at the Health Professionals Seminar, Florida La Leche League Conference, Cocoa Beach, Florida, October 11-14, 2007.

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J Hum Lact XX(X), XXXX

DOI: 10.1177/0890334408329482

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Although current rates are in stark contrast to the breastfeeding recommendations made by the AAP and WHO/UNICEF, single and low-income mothers, who have the financial need to return to work sooner, have even lower breastfeeding initiation and continuation rates.⁸ It is concerning that the children of these single, low-income mothers not only are socioeconomically disadvantaged but additionally have compromised health because they are missing the nutritional and immunological benefits found in human milk.

Along with labor and delivery, breastfeeding has undergone significant medicalization, and as a result women are now turning to health care providers for breastfeeding information.¹⁰ In an effort to achieve the Healthy People 2010 goals of increasing breastfeeding rates in the United States to 75% in the early postpartum period, 50% at 5 months, and 25% at 1 year, it has been recommended that health care professionals use prenatal and well-child visits to supply information and support resources to breastfeeding mothers who intend to return to work.^{11,12} Although concern has been raised regarding the quality and usefulness of breastfeeding information provided by health care professionals,¹³⁻¹⁵ they are in a unique position to enhance a mother's breastfeeding success. This article describes commonly perceived obstacles to combining breastfeeding and working and explains how health care providers can support a breastfeeding mother's successful transition into the workforce by providing accurate information, anticipatory guidance, and follow-up.^{16,17}

Maternity Leave

Although easily overlooked, maternity leave plays an important role in breastfeeding success.^{4,18} Maternity leave not only provides time for the mother to heal from birth but also provides time for the mother and infant to bond and learn the art of breastfeeding. Maternity leave also provides the mother an opportunity to build a back-up supply of stored milk. During the pregnancy, a health care provider can encourage the mother to determine whether she is eligible for up to 12 weeks of unpaid leave under the Family Medical Leave Act (FMLA) and to consider how she could maximize maternity leave within her family's financial limitations.¹⁹ Twenty states, the District of Columbia, and Puerto Rico have legislation related to breastfeeding in the workplace. Health care providers should be familiar with the legislation in their state and share that information with mothers. The National Conference of

State Legislatures provides an online summary of state breastfeeding laws.²⁰

Mothers can be encouraged to explore various options for balancing breastfeeding and employment. In addition to taking maternity leave, the breastfeeding mother can consider returning to work part time and gradually return to full-time employment.^{4,9} When compared with full-time employment, part-time employment is associated with not only higher rates of breastfeeding but also longer durations of breastfeeding.^{4,9} Additionally, a mother may be able to negotiate working from home or having a caregiver bring the child to the mother's workplace or a nearby location to be breastfed. A health care professional can recommend that a woman explore whether her employer has a workplace lactation program because these programs often include flexible breaks, flexible work hours, part-time work, or phase-back programs that allow women to return to work gradually.^{4,21}

Health care providers may want to encourage a mother to express and store her milk during her maternity leave in preparation for returning to work. Having a back-up supply to supplement days if milk production is low or if there is a missed expression session can significantly decrease the mother's stress levels. Although a back-up supply is an asset, it is recommended that a mother begin expressing breast milk after the baby is 2 to 4 weeks old.²² Prior to this time, the mother and her newborn should be developing their breastfeeding relationship.

Milk Expression Scheduling

Time for milk expression, in line with the child's regular feeding schedule, is a crucial aspect of successfully managing breastfeeding and working.¹⁶ Preferably, a woman would discuss her needs with her supervisor and schedule allocated break time for expressing her milk. To support the mother, a health care professional can write a letter of support to the mother's employer that includes the benefits to the breastfeeding mother, her child, and the employer. Health care providers can share information about free consumer brochures, such as those in the United States, "The Business Case for Breastfeeding," that focus on employee, management, and organizational roles in creating a breastfeeding-friendly worksite.²³ The health care provider can also describe the cost savings to the employer from creating a breastfeeding-friendly worksite. Significant cost savings for organizations have been associated with reduced turnover, absenteeism, and

health care costs.^{23,24} Breastfeeding mothers have been shown to have fewer absences, fewer absences related to the illness of their children, and shorter absences when their children were ill.^{6,7}

Milk expression not only is important for the production of milk for the child but has significant implications for the breastfeeding mother. If a breastfeeding mother does not have the opportunity to express her milk regularly, she may experience embarrassing leakage, painful engorgement that can lead to infection or mastitis, or a decrease in her milk supply. Lack of break time for expressing can also lead the mother to feel overwhelmed and to wean sooner than she had desired. Although it is recommended that a mother express every 3 to 4 hours while she is separated from her child,¹¹ the amount of time needed to express depends on whether the mother is working part time or full time and the age of the child. Although a mother who is working part time may be able to express only once while at work, it is recommended that a mother who is working full time express two to three times for approximately 15 to 30 minutes per session, at regular intervals throughout the day.⁶ However, because approximately 76% of the total milk expressed occurs during the first 2 milk ejections, if the mother is under time restrictions, expression for as little as 8 minutes may be sufficient.²⁵ Even when the mother expresses at work, she will more easily maintain her milk supply if she breastfeeds the child when they are together. For example, a mother breastfeeding her child in the morning before she leaves home and again at the daycare setting, if possible, would then express at regular intervals throughout the day and breastfeed her child as soon as they are reunited after work.

A woman has the option of either manually expressing her milk or using a breast pump, and a health care professional can assist her in selecting the most appropriate method based on her individual situation. A woman who finds it inconvenient to use a breast pump may prefer to manually express her milk. Manual expression may also be preferable to a woman who works part time, does not have access to electricity, or has limited financial resources needed to purchase or rent a breast pump. Although some women are successful at manually expressing their milk,¹⁶ others prefer expressing their milk with a breast pump. Additionally, it has been demonstrated that women often collect more milk with mechanical expression than hand expression.²⁶ Health care providers can guide a mother in finding the most appropriate breast pump for her situation and budget. Because most nonhospital-grade pumps

are designed for individual use and should not be shared, the healthcare professional should recommend that the mother purchase a new breast pump from a reputable provider.

Several types of breast pumps are available on the market, including manual pumps, small portable pumps, double electric pumps, and hospital-grade electric pumps. Generally, the manual pumps and small portable models are designed for shorter term or infrequent use such as when the mother is occasionally separated from the infant.¹¹ These models may benefit a woman who works outdoors, does not have access to a table needed to hold a larger model, or does not have access to a reliable power supply (eg, agricultural or fast-food employees).

The double electric pump and the hospital-grade electric pump are recommended for women working outside the home for 20 or more hours a week.¹¹ The double electric pump is generally the size of a briefcase and can be carried to and from work daily, and some models contain a cold storage unit with ice packs to store milk until it can be placed in a refrigerator or freezer. This type of pump can express milk from both breasts simultaneously. The double pumping action expresses milk more quickly than a single pump, which is important in a time-conscious work environment. The double pumping action may also maintain milk supply better than a single pump.^{27,28} In addition, some models can also be operated with batteries or vehicle lighter adapters, which are important features for mothers who travel, work outside of an office setting, or live in geographical areas that regularly lose electrical power.

In contrast to the double electric pumps, hospital-grade electric pumps are larger, more efficient, and more expensive but can often be rented on a monthly basis.^{11,29} Because the mechanical features are sealed, these pumps can be used by different individuals. Each woman is provided with an individual package of tubing and breast shields.

It is important to remind the mother that expressing at work is a time-limited situation that will not last forever. In normally growing and exclusively breastfed infants, milk intake increases from birth to around 1 month of age and then stabilizes.^{30,31} Between 1 to 6 months of age milk intake averages 750 to 800 mL per day, but because individual infants consume different quantities of milk, intake may vary from 440 mL to more than 1220 mL daily.^{30,31} At approximately 6 months of age, when other supplemental foods are introduced,

the amount of milk that the mother will need to express decreases,⁹ and after supplemental foods are introduced, a mother may find that she no longer needs to express at work. She can maintain the breastfeeding relationship when she and her child are together and provide supplemental foods while she is at work. Additionally, if a mother finds that it is too difficult to continue exclusive breastfeeding while working and the health care provider fears that the mother may wean prematurely, it may be suggested that the mother provide age-appropriate complementary solid food or, as a last resort, formula when they are separated and breastfeed while they are together, as this would still allow at least 2 or 3 breastfeeding sessions per day. As a motivational factor for the mother to continue breastfeeding, the health care professional may want to explain that even partial breastfeeding will allow the ongoing bond with her child and is helpful in reducing the incidence of illness among infants compared with complete weaning.

Milk Supply

At some point, a working mother may find that the quantity of milk she is producing is not keeping up with her child's demand.^{32,33} There are some techniques that can assist a woman in maintaining or increasing her milk supply. It is important for mothers to understand that little to no milk is expressed prior to the initial milk ejection and that the strength of the pump's vacuum has no significant effect on the volume of milk expressed prior to milk ejection.²⁵ However, because the milk ejection is a conditioned reflex,³⁴ health care professionals can provide the mother with information about the importance of experimenting to find the techniques that trigger that reflex, such as dimming the lights, closing her eyes or focusing on a photo of her child, practicing breathing exercises, and either listening to tranquil music or playing a recording of her child's sounds. Breast massage can also be used to stimulate the milk ejection reflex. Health care professionals can assure a mother that the reflex will become conditioned over time. Once the initial milk ejection has occurred, mothers can maximize the amount of milk expressed and minimize the time needed for expression by increasing the vacuum to the mother's maximum comfort level.²⁵ The individual maximum comfort level will vary between women and is not necessarily the maximum vacuum available on the breast pump.²⁵ Health care professionals can encourage mothers to determine their own maximum comfort level because it has been found

to yield more milk and more of the available milk.²⁵ Additionally, more frequent, short expression sessions are more efficient than less frequent, longer ones.³⁵ For example, instead of spending 1 hour expressing at lunch, the mother could take three 20-minute sessions, spaced evenly throughout the work day, such as morning, noon, and late afternoon. Another technique that a mother can use to increase her production includes adding a milk expression session when she wakes up in the morning and prior to or just after breastfeeding her baby. A mother can also express on her days off, in addition to directly breastfeeding her baby.

When a woman begins expressing her milk, she may be concerned her milk is different than what she expected or might not be of good quality. A health care provider has the opportunity to educate the mother about human milk. For example, the health care provider may need to explain that it is normal for human milk to have a thin, watery texture, similar to that of skim milk, and it may appear to be bluish in color or occasionally yellowish, brownish, or greenish.^{36,37} Foremilk may appear thin, whereas hindmilk generally appears creamier because of the higher fat content.³⁸

The health care provider may also take the opportunity to describe issues regarding human milk storage. After a mother expresses her milk at work, it should be kept cool through storage in a refrigerator or cold storage container with ice packs.³⁷ Some employers might be concerned about the storage of or exposure to human milk in a public refrigerator at the workplace. Health care providers have the opportunity to inform mothers and their employers that the Occupational Safety and Health Administration (OSHA) states that human milk is a food, rather than a body fluid, and exposure to human milk does not constitute an occupational hazard.³⁹ However, if the mother is concerned about negative repercussions from supervisors or possible tampering, the health care provider can advocate that for the optimal safety of the milk, it can be stored in an individual cold storage container with ice packs and kept in a secure location.

If the milk is going to be used within 8 days, it can be stored in a refrigerator.⁴⁰ All containers should be labeled with the child's name and the date that the milk was expressed.³⁶ After it sits in the refrigerator, human milk will separate, with the creamier fat floating to the top.³⁷ This is a normal process and is not an indication that the milk has spoiled.^{11,37} If the milk has separated, it is easily re-emulsified by being swirled in the container.³⁷ According to the Human Milk Banking

Association of North America (HMBANA), breast milk is safe to sit at room temperature for 6 hours.⁴⁰ However, if the mother is not sure when the milk is going to be used, it should be frozen as soon as possible after it is expressed. It is safe to store in a freezer compartment of a 1-door refrigerator for 2 weeks, in a freezer compartment of a 2-door refrigerator for 3 to 4 months, and in a deep freezer for 12 months.⁴⁰ Milk can be thawed slowly in the refrigerator, at room temperature, or in a container of warm water. Heating milk directly on the stove top or in a microwave oven is not recommended because important components of the milk can be destroyed and microwaves can create hot spots in the milk that can burn an infant's mouth.^{37,41,42} Once milk has been frozen and thawed, it can be stored in a refrigerator for 48 hours.⁴³

The Child's Needs

When the breastfeeding mother returns to work, there are considerations that must be made regarding the child. First, someone will need to help the infant take milk from a bottle or cup. Many mothers have found that it is easier if that someone is the father or another caregiver. This helps the child identify breastfeeding with the mother and bottle or cup feeding with another caregiver. Some babies who reject bottles will accept cup feedings. The older the baby is, the more likely that cup feeding will be acceptable. If the child is going to be given a bottle, it is useful to start with several different bottle and nipple styles or models, because the child may find one more comfortable. The materials may differ in texture, firmness, and taste, and the child's preference may lead him to completely reject one type but quickly accept another. Breastfed infants should be offered slow-flow nipples and be allowed to pace feedings. Rather than feeding on a schedule, the caregiver should watch for early signs of hunger, such as rooting, lip smacking, and sucking on hands, fingers, or lips. It is also appropriate to pause intermittently during the feeding, which more closely mimics a natural breastfeeding session. To avoid overfeeding, the caregiver should allow the infant to determine when the feeding session is finished rather than trying to finish the bottle. Additionally, if the infant is not showing signs of hunger, the caregiver should avoid feeding the infant as an initial response to calm fussiness. Instead, the caregiver may first try calming the infant by rocking him, carrying him in a sling or giving him a gentle bath or message, and providing a feeding as a final option if these are unsuccessful.

After returning to work, some mothers have experienced what is known as reverse-cycle feeding. In some cases, infants who had previously breastfed more during the day and slept during the night begin to reverse their cycles and wake to feed more during the night.⁴⁴ It seems as though the children, who have decreased access to their mothers during the day, compensate by gaining the closeness of feedings at night. Although the AAP recommends that all mothers and infants sleep in close proximity¹ and this has been associated with a reduction in SIDS,⁴⁵⁻⁴⁷ it is especially beneficial to the breastfeeding working mother. Because of synchronous sleep-arousal cycles,^{45,46} the infant sleeping in close proximity may rouse and breastfeed when the mother and infant cycle into a lighter sleep. Importantly, this may allow the working mother to get more rest overall. Sleeping in close proximity promotes increased breastfeeding,⁴⁷ which assists in maintaining the mother's milk supply and provides closeness.⁴⁸ Because getting enough rest is critical for the working mother's emotional and physical well-being, the health care provider may want to encourage the mother to nap when the infant naps on weekends.

Breastfeeding support groups have been found to provide guidance and emotional support and have been used to identify and correct organizational obstacles to breastfeeding success.⁴⁹⁻⁵¹ La Leche League International provides online information, online discussion forums, telephone support, and local support groups.⁵² If a mother is employed at an organization that provides a workplace lactation program, that program may offer access to lactation consultants and a support group. Otherwise, the health care provider can refer the mother to WIC, hospital programs, or other community based breastfeeding support groups.

Summary

In the United States, approximately 60% of women participate in the labor force. Of these, approximately one third of mothers return to work within 3 months of giving birth and two thirds return within 6 months. Unfortunately, maternal employment is associated with a decrease in the length of time a mother breastfeeds. If the United States is to increase its breastfeeding rates, mothers need additional information, anticipatory guidance, and support as they transition back into the workforce. Health care providers can provide information regarding negotiating maternity leave and time for milk expression with employers. They can write letters of

support to employers describing the individual and organizational benefits of breastfeeding. They can provide anticipatory guidance regarding maintenance of a mother's milk supply and human milk storage. They can also encourage the mother to recognize and support the unique needs of the child in adapting to these changes and recommend breastfeeding support groups that will provide the mother with emotional support, encouragement, and assistance from other mothers who are trying to balance the unique challenges of working and breastfeeding.

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