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Breast-feeding And The Working Mother

SUMMARY

Despite the resurgent popularity and known benefits of breast-feeding, most Canadian women do not consider the possibility of continuing breast-feeding when they return to work. This paper examines the reasons why many women make this choice, and what factors are involved in continuing to breast-feed. The long-range goal of our society should be to increase the percentage of mothers who continue to breast-feed their babies until at least six months of age, and to increase the percentage of places of employment where it is possible for an employee to continue to breast-feed after returning to work. *(Can Fam Physician 1985; 31:1685-93.)*

SOMMAIRE

Malgré le regain de popularité et les bénéfices connus de l´allaitement au sein, la majorité des canadiennes n'envisagent pas la possibilité de poursuivre l´alimentation au sein lorsqu´elles reprennent le travail. Cet article examine les raisons de ce choix chez beaucoup de femmes et les facteurs impliqués dans la poursuite de l´alimentation au sein. L´objectif social à long terme devrait être de favoriser l´augmentation du pourcentage des mères qui continuent de nourrir leur bébé au sein jusqu´à l´âge de 6 mois et d´augmenter le pourcentage des emplois oú il est possible pour une mère de nourrir son bébé au sein lorsqu´elle reprend le travail.

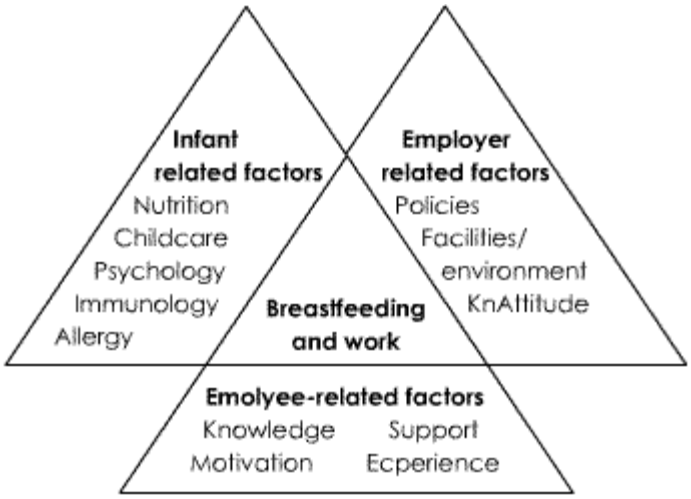
Key words: Breast-feeding, infant nutrition, employment

Despite the popularity and known benefits of breast-feeding, most Canadian women do not continue breast-feeding once they return to work. A new mother may not consider it possible to return to work while breast-feeding because she lacks knowledge about the physiology of breast-feeding and expressing and storing breast milk. Employers may not understand the importance of good nutrition in the early months of life, nor realize what factors need to be considered to allow breast-feeding once the mother returns to work. They may not allow breast-feeding on the premises or may deny an employee time off to breast-feed elsewhere. This means that babies may be unnecessarily deprived of the benefits of mothers' milk.

Some issues need to be studied further, such as why mothers discontinue breast-feeding when they return to work, how and why some mothers continue to breast-feed after resuming work, and what factors currently exist or must exist in the work place to make breast-feeding and employment possible.

The infant, mother and employer all need to be considered separately. However, each person interacts with the others and so cannot be thought of in isolation. A conceptual framework has been devised to illustrate this interrelationship (see Fig. 1).

Fig. 1. Conceptual framework illustrating interrelationships of factors associated with breast-feeding and work



In considering the problem the following questions need to be addressed:

- What is the scope of the problem?
- Is it physiologically possible to breast-feed and work?
- Which factors positively influence breast-feeding and work?
- Which factors negatively influence breast-feeding and work?
- Can these factors be manipulated to increase the percentage of breast-feeding mothers in the workplace?

The Scope of the Problem

There is little information on how many mothers continue to breast-feed while working. Women's employment statistics seldom contain information on infant feeding practices. Research on infant feeding seldom includes information about maternal employment.

A 1984 Edmonton study of breast-feeding patterns in first-time mothers showed that 85% began breast-feeding in hospital. However, by two months only 50% were fully breast-feeding and by six months only 8% were fully breast-feeding.[1] Seventy-five percent were partially breast-feeding at two months and 38% by six months.

As the breast-feeding rate has climbed, so has the number of employed mothers. The largest increase in women's employment has occurred among those with children under age three. Over 50% of American women are employed and women comprise the fastest growing segment in the labor force.[2] Buumpass and Sweet[2] report that of 42% of women who work at some point during pregnancy, 48% are still working in the third trimester, and nearly 25% return to work within four months after giving birth.

In 1981, an American study showed that only 20% of mothers whose infants were six months old breast-fed if they were fully employed, compared to 50% of mothers who were not employed. For every 100 women with full-time employment who were breast-feeding their infants at age six months, 65.4% used a supplemental bottle. Among women who were not employed, 23.2% provided a supplemental bottle at six months.[3]

In 1981, Bergman and Feinberg[4] interviewed 291 working women in Israel, seven to nine months after childbirth. The researchers found that on average, working women breast-fed for only two to three

months. One third never breast-fed and only 5% continued after six months. Women who breast-fed more were very religious, better educated, born in Europe, over age 40, primiparas, or had four or more children. Women in academic positions continued to breast-feed longer than did teachers, nurses, clerks, and unskilled workers. Women generally returned to work after completing breast-feeding; 13.8% returned while still feeding the baby.

Some breast-feeding rates for working women show that employment and breast-feeding are compatible. In Finland, there is no significant difference in breast-feeding duration between employed and unemployed women at one month (78% at home, 80% employed) or six months (8% home, 7% employed).[5] Further work should be done in Canada, to assess the scope of the problem and to find out how many mothers discontinue breast-feeding prematurely because of working, and how many would continue to breast-feed if work facilities and conditions were more favorable.

Is It Physiologically Possible to Breast-feed and Work?

Many people mistakenly believe that mothers have to breast-feed frequently in order to maintain their milk supply. When lactation is being established, many babies breast-feed every two hours,[6] but once lactation is established the frequency of nursing decreases. While the prolactin level falls, lactation continues. It is certainly possible to breast-feed only once or twice a day and maintain lactation for several months. Physicians should carefully explain this phenomenon of supply and demand to mothers who may believe that when alternate feeding is begun, breast-feeding must gradually decrease ad stop.

There is a problem known as nipple confusion, associated with combining breast and bottle feeding.[6] Sucking from the breast and from a bottle require different techniques and it is advisable not to introduce a baby to a rubber nipple in the early weeks. This enables breast-feeding to become well established. By the time the mother returns to work, breast-feeding is usually second nature to both infant and mother and the introduction of a rubber nipple does not seem to create the same problems. There is very little work done on the effect of combining formula feeding with breast-feeding. However, as long as breast-feeding continues, the baby benefits from its nutritional, immunological and psychological components, although the allergenic component of formula is introduced.

We are completing a study of women who have successfully and unsuccessfully combined breast-feeding and work. We hope to have more information on the physiological and psychological response to lactation and work.

Positive Factors Influencing Breast-feeding And Work

Health professionals acknowledge that breast-feeding has many significant advantages over formula feeding, both for the infant and mother, and that new mothers should be encouraged and helped with breast-feeding for as long as six months.

The Nutrition Committee of the Canadian Pediatric Society and American Society of Pediatrics[7] in 1980 clearly outlined the benefits of breast-feeding, and recommended that “full-term newborn infants should be breast-fed for the first six months. Human milk is the ideal food, and breast-fed infants therefore have definite advantages over those who are bottlefed”.

The benefits to the infant of prolonged breast-feeding include optimal nutrition, increased immunological protection, fewer allergies, less eczema, and positive psychological effects associated with bonding.[8]

There is little information in the literature and so it can only be theorized that the benefits of continuing breast-feeding and work to the mother include the ability to maintain lactation, personal satisfaction, reduced separation anxiety, strengthened bonding and possibly earlier return to work, which offers financial and career advantages as well as job security.[9] Breast-feeding is the cheapest form of infant feeding and probably the least time-consuming.[10] The decreased rate of infection among breast-fed infants can directly affect absenteeism among mothers who might otherwise have to remain at home to look after their infants.[11] If modifications at work are made to allow breast-feeding, it may directly influence the

mother's productivity by keeping her more content, and may encourage her to return to work sooner. Her expertise as worker increases and the need to hire and train new personnel is minimized.

Employees who have less separation anxiety may have more job satisfaction and hence become more productive and cost effective. It has been shown that productivity and profits improve when such arrangements as flexible hours, job sharing and part- time work exist.[12] Jimenez and Newton's[13] study on job orientation, adjustment to pregnancy and early motherhood showed that of those mothers planning to re-enter the work force after delivery, the shorter the planned postpartum interval before returning to work, the higher the satisfaction with work, with opportunities for promotion and importance work.

Negative Factors Influencing Breast-feeding and Work

Very little work has been done on this question. It can only be theorized that the disadvantages of combining breast-feeding and work, for the infant, include separation from the mother and the introduction of a 'surrogate mother'. Also, demand feeding becomes difficult, supplemental feeding is often started early, and the infant may be exposed to pollutants from the workplace.[14]

The disadvantages to the employee who continues to breast-feed include fatigue associated with role overload,[15] decreased milk production, lack of privacy to breast-feed and/or express breast milk, expense involved in extra time needed to travel and breast-feed during the work day, uncomfortable, leaking breasts and modification to wardrobe.

The disadvantages to employers include the financial burden for maternity benefits and lactation breaks. This may discourage them from hiring married women. In Malaysia, married women are not hired in the electronics industry and are required to resign upon marriage so the employer does not have to pay maternity benefits required by law.[16] Other companies keep the number of women employees just below that requiring provision of daycare. The employer may have to provide special facilities for a nursing mother, such as a private room and fridge. An infant on the premises may disturb other employees.

Why do Working Mothers Stop Breast-feeding?

Maternal employment is often cited as a major cause for the decline in breast-feeding throughout the world. However, the evidence has never been examined systematically, so most knowledge about breast-feeding and employment is anecdotal.[17-20] When empirical data are available they are often restricted to single aspects, such as reasons why breast- feeding is terminated.[21] In these studies, women seldom give employment as a specific reason; many of their reasons are vague. Yeung[22] recently looked at factors influencing the discontinuation of breast-feeding among mothers in Toronto and Montreal. In the later stages the main reason given was 'inconvenience' which may have referred to the problems of returning to work.

Van Esterik[23] looked at trends in the existing world literature and summarized the relationship between work and breast-feeding. She compared several studies looking at work as a reason for not initiating breast-feeding, starting bottle feeding and terminating breast-feeding. In a 1979 Canadian study, Bergerman, Misskey and Thompson[24] showed 18% of women gave work as a reason for terminating breast-feeding.

In 1982, Auerbach[15] surveyed 660 American mothers, who represented a cross section of all working mothers. Fatigue was the most common complaint, while finding time at work to pump/express milk, worry about milk supply and no time for self were other prominent concerns. Most problems, however, were resolved over time as the mother became more proficient at combining employment and breastfeeding. Auerbach concluded that although some studies of maternal employment and breast-feeding showed that the two roles combine poorly, her findings suggested that such a conclusion was simplistic and inaccurate. Breast-feeding was easier when mothers and infants had frequent and unrestricted access to one another. Many breast-feeding problems were preventable if the mother was well informed. The most significant difficulty was the role overload associated with simultaneous parenting, homemaking and employment.

This study was performed on a self- selected group of women, so the results may well be biased towards successful mothers. To date, there has been no work on a random population of women to find out more about the reasons why and how some do and some do not combine breast-feeding and work.

In June 1984, the American Surgeon General held a workshop on Breast-feeding and Human Lactation. [25] During this workshop a small interdisciplinary group of health professionals specifically addressed the issues of employment. They reported that there are many barriers at work and school "which can negatively influence a woman's decision to breast-feed and/or her breast-feeding experience". These barriers include:

- lack of knowledge by the public, including mothers, employers, health providers, and other support people to whom the mother may turn for assistance and/or advice.
- logistic elements such as how, when, how often, and where to nurse her baby or to empty her breasts when separated from the baby, and to store milk.
- a social, psychological, and political climate which significantly separates the worlds of work and home. The working, breast-feeding mother often receives negative messages about her efforts, specifically, that she is attempting to combine incompatible roles and threatening the decisions others have made to keep the worlds of work and home separate.

The workshop report also stated that "data necessary to direct effective promotional efforts to working women and to those who influence them are not available. Also lacking are the appropriate support systems, (e.g., prenatal care, paid maternity leave, and flexible work arrangements) which are essential for the success of programs designed to promote breast-feeding by working mothers".[25]

Increasing the Percentage of Breast-feeding Workers

Protection of breast-feeding mothers in the work force is not new issue. The maternity protection convention of 1919,[26] adopted by the International Labour Office, applied to women employed in industry and commerce. Not only did it outline the laws governing maternity leave and benefits, it also stated in Article 5 of Convention Nos. 3 and 103: "If a woman is nursing her child she shall be entitled to interrupt her work for this purpose at least twice a day for not less than half an hour". In the revision of 1952 it recommended that nursing breaks should be considered and paid as working hours.[27]

WHO recommendations

The World Health Organization made the following recommendations in association with the ILO about facilities for nursing mothers and their children:[28]

"The frequency and length of nursing periods during working hours need considerable flexibility. Not only will they vary with the needs of the child and the mother, but also with the facilities provided for the nursing mother and her infant. The periods should be timed so that the mother may nurse the child at fairly regular intervals and should be of sufficient length and so planned that the mother might have time to rest as well as nurse her baby. These nursing periods might total 1½ hours during a working day. Provided that adequate accommodation is not available, the periods might be lengthened to up to one hour twice a day, and the mother permitted to leave the premises. Adjustments in the frequency and length of the nursing periods should be permitted on medical certificate. The type of facilities available for infants of mothers who work varies tremendously. The question arises as to what type of facility is considered most suitable from a health point of view. Nurseries and creches have been shown to be practical from the standpoint of convenience for the mother, but a good home atmosphere should be a healthier environment for the child".

Recently, the WHO proposed a target that by 1985, 80% or more of the world's infants should be exclusively breast-fed for the first four to six months.[27] In 1977, an international conference on lactation, fertility and the working woman looked at ways to enable working mothers to combine the roles of mother and worker, with the support of necessary legislation and social measures. It was felt that breast-feeding

was declining because of a trend towards women having dual roles. Lack of support by health services, inadequate education of health workers, and the production and promotion of milk substitutes by the infant food industry all played a part in this decline.[29]

The recommendations included recognizing that women have a right to work outside the home, if they wish, as well as to bear children, which is essential to a nation's development. Conference members also felt that they should work towards implementing the existing ILO conventions.

Finally, they recommended an analysis of the means used to make breast- feeding easier in different communities: nursing breaks, day care centres, creches, flexible working hours, part- time work schedules, incentive payments and development of home industries. Cost effectiveness of the different systems was also to be compared.

Anecdotal evidence

The literature available on breast-feeding after re-entering the workforce tends to be based on personal anecdotes. [9,18-20,32]

In China, approximately 90% of women are employed. Wray described the measures taken to promote breast-feeding: "All mothers employed in factories, or working for the government in educational, health or administrative posts, are given two months maternity leave with pay, in order to allow breast-feeding to become well established. . . . Mothers arriving at work leave their babies in the creche and are provided and expected to take, two half-hourly breaks during the working day to breast-feed their infants. In the rural communities, where 80% of the mothers live, nursing mothers are routinely given work near their home to facilitate breast-feeding".

The article does not describe how successful this measure is and how long women continue to nurse.

The Canadian Employment Standards Act of 1981 provides an employee with maternity benefits for a maximum of 18 weeks.[31] There is no financial advantage for the mother to remain at home longer, nor is there any financial help in taking time out of the working day to breast-feed.

There is little, if any, work done on assessing employers' problems, what modifications are needed to allow breast-feeding at work, or what information is pertinent for employers. However, as well as having a flexible work schedule and suitable facilities, the employer must have a sound knowledge of breast-feeding and a positive attitude towards it.

The Family Physician's Role

Family physicians are key people in counseling mothers, since they have more access to the mother and infant than most other health professionals.

Prenatally, physicians should discuss the benefits of breast-feeding and help patients plan to breast-feed. They should supervise the initiation of breast-feeding in the immediate postpartum period and be available to help with minor problems in the early weeks following the birth. The family doctor should also be aware of factors influencing a mother's decision to continue breast-feeding, and anticipate the problems in returning to work. Family physicians should discuss the possibility of combining work with breast- feeding and routinely ensure that all nursing mothers learn to express milk, either manually or with the aid of a breast pump.[33] The technique is often helpful when the mother experiences breast engorgement, or when the mother and infant are separated. At all times the physician should support breast-feeding. When a mother decides to return to work she should be encouraged to continue to breast-feed whenever she is at home and leave bottle-feeding to the child care giver. The quantity of milk produced rapidly decreases to meet the reduced requirements. With planning and a supportive environment, a mother can often express milk before leaving for work and when she returns. This breast milk can be given to the baby during her absence.

Some women freeze breast milk during their maternity leave in preparation for work. Breast milk freezes well inside plastic bottle liners and can be stored for up to three weeks in the freezer or up to six months in a deep freeze. The milk should be allowed to thaw gently. Quick heating may cause the bag to break. There are several useful La Leche League booklets on working and breast-feeding.[19, 20, 32] These cover the practical aspects of expressing and storing milk, clothing to wear for work, leaking breasts, etc.

The family physician should be able to discuss potential hurdles in the work force, such as lack of support from other employees or unsympathetic employers. Often, there is minimal disruption to other workers and probably little adverse effect on the mother's productivity if she works in a supportive atmosphere.

Conclusion

The infant's needs for good nutrition, child care, positive psychological and physiological development must be considered of paramount importance. A mother must have knowledge, motivation, good support and a positive experience with breast-feeding before she can successfully combine work and breast-feeding. The employer must have suitable policies, facilities, knowledge and attitudes.

In the future, carefully designed, epidemiological studies must be done to show that it is practical and physiologically and psychologically possible to continue to breast-feed and work when certain modifications are made at work. Other studies must then implement these modifications in the work place. Appropriate educational material should be developed for mothers, employers, health professionals, the public and policy makers, to help promote breast-feeding during employment.[34]

The long-range goal must be to increase the number of mothers who, when they return to work, continue to breast-feed their babies until they are at least six months old, and to increase the number of work-places where it is possible for an employee to breast-feed. The accomplishment of these long-term objectives would give women more choices and greater control over their lives, and have a positive impact on the status of women in Canadian society.

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