Among the goals of Healthy People 2010 are an increase in breastfeeding initiation to 75 percent of all newborn babies and an increase of babies breastfeeding at 6 months to 50 percent (Healthy People 2010, 2004). The American Academy of Pediatrics has published breastfeeding guidelines, encouraging new mothers to nurse their babies for at least twelve months and recommending that pediatricians encourage employers to support continued lactation in the workplace (AAP, 1997). State and federal legislation has been introduced protecting mothers’ right to breastfeed at work and offering companies tax incentive to establish lactation support programs (USBC, 2003a; Baldwin et al., 2004). In the last 20 years a growing number of women remain in the labor force throughout their childbearing and childrearing years (Ferber, et al., 1991; Moen, 1992; USBC, 2003b). All of these factors have come together to make breastfeeding in the workplace an emerging public health issue in the United States.

Medical research addresses the benefits of breastfeeding and the risks of artificial formula feeding (Walker, 1993) and a number of studies examine women’s experience of combining breastfeeding and outside employment (Auerbach and Guss, 1984; Gielen et al., 1991; Shepherd and Yarrow, 1982; Auerbach, 1990; Kearney and Cronenwett, 1991; Bar-Yam, 1998a; Dunn et al., 2004; Susser et al., 2004). This research provides a demographic picture of the breastfeeding working mother: she tends to be white, from the western part of the United States, she is older and has more formal education than her non-breastfeeding or non-employed counterparts (Ryan and Martinez, 1989; Hills-Bonczynk et al., 1993; Visness and Kennedy, 1997; Fein and Roe, 1998; Roe et al., 1999; USDL, 1999; USDHHS, 2000). Research on interactions between breastfeeding and employment is mixed; one major barrier to women’s contin-
ued nursing is their need to return to outside employment in the first year post partum (Shepherd and Yarrow, 1982; Gielen et al., 1991; Visness and Kennedy, 1997). However, other research indicates that employment and nursing need not be mutually exclusive (Auerbach, 1990; Kearney and Cronenwett, 1991; Bar-Yam, 1998a, 1998b; Brown et al., 2001).

Research also points to several factors that are important in helping employed women to continue nursing successfully. They include length of maternity leave (Auerbach and Guss, 1984; Kurijn et al., 1989; Ryan and Martinez, 1989), hours worked upon return to work (Kurijn, 1989; Bridges et al., 1997), prenatal and post partum education and support (Kearney and Cronenwett, 1991), and proximity of the baby to the mother's workplace (Morse et al., 1989).

One study, examining employer attitudes, found that employers are more likely to support breastfeeding if they know employees who have successfully combined breastfeeding and work and if they know other companies where such policies have been successfully implemented (Bridges et al., 1997). The research reported here investigated the attitudes and concerns of employers regarding corporate lactation support and how women in different settings combine breastfeeding and working.

Methods
This study used both case study and individual interviews for data collection and both quantitative and qualitative data analysis techniques.

Two urban teaching hospitals and one insurance company formed the basis of the case studies. All three companies offered generous work/family benefits including lactation support. Cedar Hill Hospital has about 6,000 employees, 69 percent women. Watson Medical Center has 2,000 employees, 75 percent women. Lambda Insurance Company has multiple offices throughout the state, employs about 5,500 employees, 78 percent women. Names of the companies have been changed here.

Case studies, called here the Hospital/Insurance Group, involved in-person interviews with new mothers, supervisors and human resource managers and visits to the Nursing Mothers' Rooms, day care center and several departmental offices. Thirty-two people were interviewed in all three sites.

The second part of this study involved telephone interviews with twenty-three women from companies all over the country that do not offer lactation support programs. Twenty of the women in the Pioneer Group were contacted, directly or indirectly, through the Internet. A description of the research was circulated on several e-mail lists and women contacted the researcher directly to schedule telephone interviews.

In both groups, the nursing mothers included a wide range of professions and work settings, including nurses, lab technicians, secretaries, social workers, administrators, artists, stock brokers, lawyers and others. Unfortunately, none of the interviewees worked in manufacturing, education or retail sales.
Findings

This study revealed several interesting factors in maternal and corporate strategies for workplace lactation support: a continuum of levels of lactation support; four factors—time, space, support, and gatekeepers, essential to successful workplace breastfeeding support; workplace philosophy and its effect on maternal and corporate strategies to support lactation in the workplace; and the unique strategies developed by new mothers with no workplace lactation support.

Continuum of workplace lactation support: definitions

Workplaces implement a range of different types of lactation support depending on available resources, needs of employees, and attitudes of the employers toward the interface between work and family demands on employees. Table 1 illustrates the continuum described here.

1. **Lactation Program**: A workplace lactation program includes several elements. The first is designated Nursing Mothers’ Room (NMR). A NMR has good lighting and ventilation, privacy (locking door or “occupied” sign), sink, electrical outlet, and often, a refrigerator. Sometimes the company provides a hospital grade breast pump and gives or sells personal supplies to the mother.

   A lactation program also includes the services of a lactation consultant who meets with the mother as needed, beginning during her maternity leave to help plan the transition back to the workplace, and continuing after her return to work to ease the adjustment to the new schedule and demands. The lactation consultant may be employed by the company or paid as an independent consultant. Sometimes the lactation consultant also provides education to expectant and new fathers. Some workplaces with lactation programs also have on-site or near-site day care where mothers can nurse their babies during the day. Workers are given time necessary to pump or breastfeed.

2. **Lactation Support**: Many workplaces have policies which support continued breastfeeding without having fully developed programs. They have a NMR as well as hospital grade breast pumps or personal breast pumps that are sold, rented, or given to new mothers. Time is made available for mothers to express milk during the workday.

3. **Lactation Awareness**: In some companies, it is the new mothers who make their employers aware of their needs and the employers do their best to accommodate them. Often they make some space, such as a spare office or conference room, available to workers. They do not provide equipment or education. Often, such arrangements are made within the department and do not involve company policy.

4. **No Lactation Support**: Many companies do not provide any support for nursing mothers. Unlike pregnancy, there are currently no laws protecting a mother’s right to nurse her baby in the workplace and sometimes women must either express milk without the knowledge of their employers or they do not
Table 1: Continuum of Different Types of Corporate Lactation Support.

<table>
<thead>
<tr>
<th>Lactation program</th>
<th>Lactation support</th>
<th>Lactation awareness</th>
<th>No lactation support</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. designated equipped* space</td>
<td>1. designated, equipped* space</td>
<td>1. designated space i.e., conference room, spare office</td>
<td></td>
</tr>
<tr>
<td>2. breast pumps for sale, rent or provided by employer</td>
<td>2. breast pumps available for sale, rent or free</td>
<td>2. no equipment</td>
<td></td>
</tr>
<tr>
<td>3. lactation counselling from prenatal through return to work.</td>
<td>3. time available for workers to breastfeed or pump.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. time available for workers to breastfeed or pump.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. (optional) on-site or near site day care</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*equipment includes: electrical outlets, good ventilation, good lighting, sink, counter, comfortable chair.
optional equipment: refrigerator, reading material, tapes of pleasant music, curtain to divide the room in two when necessary.
express milk during the day. These women often feed their babies breast milk substitutes during working hours and nurse when they are at home (Morse et al., 1989; Gielen et al., 1991; Bar-Yam, 1997).

**Workplace philosophy**

The existence, or not, of workplace lactation support indicates different approaches to the interface among worker, workplace and family. Corporate lactation support indicates to employees that the company understands and values the importance of their roles as mothers and that they, as people, cannot be separated into “workers” and “mothers.” Nursing mothers with no lactation support face the opposite situation. For them, breastfeeding in the workplace is their indication to their employers that they are both “workers” and “mothers” and that these roles cannot be separated.

Feminist scholars and activists have spent much thought and energy grappling with the issue of whether women workers are equal to men in that they can carry out the same responsibilities and tasks and should therefore be treated equally, or whether, because it is they who bear, nourish and nurture children, women are special and should receive special consideration in the workplace (Giele, 1995; Vogel, 1993).

Both of these philosophies motivated the corporations in this study to offer generous work/family benefits, including lactation support, however they resulted in different strategies for supporting nursing mothers.

The philosophy at Cedar Hill Hospital reflects the ‘women are equal’ approach. There, it is understood that all workers have lives outside of work and that is ethical and beneficial for the employer to help workers balance their responsibilities inside and outside of work; this balance is a human issue, not a women’s issue. This philosophy at Cedar Hill Hospital has resulted in on-site day care and fitness centers, camps for school age children of employees on school vacation weeks, and earned time (workers’ vacation, sick and personal leave days are put in one “account” and workers can withdraw time from that account at any time for any reason.) The lactation program is very well developed and includes two NMRs and lactation consultant services that begin before or during maternity leave and continue through the return-to-work adjustment period. Workers at the day care center telephone mothers when their babies need to nurse.

The philosophy motivating the policies at Watson Medical Center and Lambda Insurance Company reflects the ‘women are special’ approach. The work/family policies, including the lactation policy, developed because most of their employees are women. In order to maintain the largely female professional work force, hospitals have a long tradition of offering benefits, which account for women’s family responsibilities (Bar-Yam, 1997). Lambda Insurance Company has more recently become a largely female professional workforce and generous work/family benefits are seen to increase productivity. These places view work/family balance as a women’s issue.
Naomi Bromberg Bar-Yam

offers generous earned time benefits, allowing women to take extended maternity leave and/or to return to their full workloads slowly without losing pay and benefits. The lactation program includes breast pumps in the postpartum unit, which are shared with postpartum patients. Lactation consulting is available informally from labor and postpartum nurses upon return to work. Lambda Insurance Company offers day care at one of its sites and Nursing Mothers’ Rooms at several sites throughout the state. Lactation consultant services are not available.

While each of these workplace philosophies aims to increase the workers’ flexibility and autonomy, the resulting policies affect autonomy in very different ways. Because work and life balance at Cedar Hill Hospital is seen as an important issue for all workers, their programs support a great deal of autonomy within the workplace environment; i.e. on-site day care and extensive lactation support. At Watson Medical Center, where work and life balance is seen as a women’s issue, women have a great deal of autonomy out of the workplace; that is, they can stay home for longer with pay and benefits and ease their transition back into the workplace at a slower pace than their peers at Cedar Hill Hospital. Thus, because many mothers return to the workplace later and part-time, there is not as much need for an extensive lactation program. However, the women who do return early and/or full-time have more difficulty combining nursing and working. The two philosophies and their manifestations in work/family and lactation policies are also present in other types of workplaces (Stein et al., 2001).

Implementation of lactation support

Four elements are essential for successful workplace lactation support: space; time; support; and gatekeepers. Women in different settings experienced these elements very differently.

Space

It is necessary to have some designated space in the workplace for women to nurse or express milk for their babies. Women who have them usually use their offices for this. However, many women do not have their own offices and wish to continue nursing upon their return to work.

Women in the Hospital/Insurance Group, who had lactation support programs, used either their own offices or the Nursing Mothers’ Room (NMR). However, a number of women in this group had difficulty using the NMR because it was too far from their own workspace to use on a 20-minute break. These women found two solutions, neither of them ideal: several women used artificial formula for their babies during the day and others switched to part-time work for the time that they were breastfeeding. This usually involved a temporary switch to another department and some financial difficulty.

Women in the Pioneer Group who did not have their own offices tended to use three spaces for pumping or nursing: lavatories; vacant offices or
conference rooms; or nursing the baby at home or in day care. Most women found using the lavatory difficult and distasteful due to lack of privacy and sanitation as well as the difficulty in relaxing enough to let down their milk.

Some women arranged to use the same space every day, but more often, they had to use whatever spare office or conference room was vacant when they needed to pump. A few women were able to arrange to nurse their babies directly in three ways: they had the baby with them at work while they were infants; they arranged child care very close to their work place and either went to the baby or had the baby brought to them to nurse. Some women used a combination of these arrangements depending on the age of the baby.

In general, women in the Pioneer Group were more creative in finding space to nurse than women in the Hospital/Insurance Group who found the NMR to be inconvenient.

**Time**

Women in both groups expressed concerns about time in two ways: making the time daily to pump and making more time to spend with their children.

Breastfeeding and breastmilk expression take time. How much time depends on how old the baby is when the mother returns to work. A mother of a fully breastfed infant will probably need three twenty minute breaks in an eight hour workday. As the baby begins to take solid foods, at about six months of age, the need to pump at work diminishes. Mothers who combine breastfeeding and formula feeding for their babies pump less frequently and for shorter time periods. By the age of nine months or so (usually about six months after returning to work,) most mothers no longer pump at work (Petschek and Barber-Madden, 1985).

Women in both groups reported difficulty in making time daily to pump. A bank manager who spent much of her workday in meetings described the frustration.

What really hurt me was the type of work that I have. If I had to pump at 10:30 and I was in a meeting that started at 9:30 and just ran late, oh my goodness, here it is at 11:30, 12…. You’re dying there [the discomfort of full breasts] and everybody says, “well let’s go to lunch.”

This research supports other research (Auerbach and Guss, 1984; Kurinij et al., 1989, Ryan and Martinez, 1989; Morse et al., 1989; Brown et al., 2001; Susser et al., 2004; Dunn et al., 2004) indicating that the length of maternity leave and the number of hours worked upon return to work have a direct bearing on successful lactation. The workplace philosophies described above result in differences in both these areas. At Cedar Hill Hospital, whose philosophy reflects the “women are equal” approach, 80 percent of the women interviewed took three months of maternity leave and when they returned to work, over half
of them returned full-time. Most of them used the on-site day care and the lactation program. However, at Watson Medical Center, which reflects the ‘women are special’ philosophy, the new mothers’ return to work was spread out from one month to seven months and almost all of the new mothers return to work part-time.

**Support**

All breastfeeding mothers need support and nursing working mothers need support for both choices. Women who had workplace lactation programs felt that the programs themselves indicated the support of the workplace for their dual roles as mothers and workers. They also usually knew other mothers who were nursing or had nursed in the workplace, often meeting them at the Nursing Mothers’ Room.

Although the attitude of the workplace as a whole, as manifested by human resource policies and programs, influenced supervisors’ attitudes and actions, supervisors made their own decisions regarding their departments. This sometimes led to inconsistencies among departments in policy implementation. This was generally not viewed negatively by supervisors or workers, but rather as a necessity due to differing tasks and scheduling demands of each department. Supervisors and human resource managers were aware of this unevenness and continually strove to implement policies as fairly as possible.

Women who worked in places with no lactation support took pride in their roles as pioneers and educators. They educated their employers, colleagues, and other new or expectant mothers about the feasibility and benefits of nursing at work. They were part of a chain of mother-to-mother support—they sought out mothers who had nursed at work before them for practical advice and moral support. The support was returned when they served as mentors to other mothers after them. Several of the women in this study belonged to local breastfeeding support groups and even more found support on the Internet in listserve groups and chat rooms where they “met” other nursing working mothers from all over the world facing similar challenges and joys.

The women in the Pioneer Group expressed frustration at health care professionals’ lack of knowledge regarding breastfeeding. One bank manager summed it up well, “It’s so strange, the nursing mother just falls in between an OB-gynecologist and the pediatrician and nobody helps the nursing mother.” Women had difficulty obtaining basic information about breast pumps and the unique needs of working nursing mothers.

**Gatekeepers**

Gatekeepers are those in each workplace who make sure that time, space and support come together. In companies that offer lactation support, the most important gatekeeper is the human resource manager who administers the program. In other places it is the supervisor who makes sure that things in the department are flexible enough that the new mother(s) can take the time and
find the space to pump. Among women in companies with no lactation support, the most important gatekeeper is often the office manager or secretary who knows which offices and conference rooms are empty and arranges schedules so that the new mother can pump as necessary.

Discussion

This research suggests several policy, training and research directions in the arena of public health and the workplace: co-operation between the public health and corporate communities regarding breastfeeding and other health related work/family issues; better training of health professionals in lactation; further research regarding effective workplace lactation policies and programs.

An increasing number of mothers of infants are in the work force. Raising the rates of breastfeeding initiation and duration are recognized public health goals. It follows that corporate lactation support is an important part of the public health strategy to meet its goals. Economic incentives such as better retention, loyalty, and productivity of workers (Bailey and Deck, 1993; Bar-Yam, 1997) are compelling reasons for companies to offer generous work/family benefits, including lactation support. Taken together, these trends create an excellent opportunity for the public health and business communities to form a partnership to improve the health and well being of workers and their families. This will require public health professionals to learn the vocabulary and culture of business and human resources in order to make effective contributions. Fora for this partnership include joint educational and policy meetings and research; promotion of current (USBC, 2004a; Baldwin et al., 2004) and future legislation that address the needs of nursing working mothers, and establishment of effective lactation support programs in corporate, government, and private workplaces.

In U.S. society, breastfeeding is viewed as a medical concern and new mothers rely on their health providers for information and guidance. However, this study suggests that the lack of knowledge of health professionals about lactation, milk expression, and the unique needs of working nursing mothers is a barrier to breastfeeding success. This problem can be addressed in two ways. First, physicians, nurses, nutritionists, and other health professionals who work with new mothers should receive ongoing education in the area of human lactation, including its physiological, nutritional, immunologic, social, and psychological aspects. Second, lactation consultants, health professionals specially trained in the area of lactation, should be part of the health care team that serves new mothers. Lactation consultant services and breast pumping equipment should be covered by third party reimbursements and referrals to lactation consultant for new mothers returning to work should be a routine part of post partum care.

This research was exploratory and its findings suggest as many questions as they answer. While some preliminary conclusions can be drawn from this small study, further research would determine how far these trends can be
Naomi Bromberg Bar-Yam

generalized. This research indicates that different corporate philosophies result in different work/family and lactation policies. A larger study could determine whether the philosophies found in this study are common and whether they result in similar differences in strategies for supporting lactation and other work/family policies in other types of industries and geographic areas. Further research is also needed to evaluate the effectiveness of breastfeeding promotion and workplace lactation policies for working nursing mothers in all types of work settings.

Conclusions

This research suggests that co-operation between public health and corporate sectors to develop effective workplace lactation programs will result in more productive, loyal, and healthier workers.

New mothers rely on health care professionals for information and guidance about breastfeeding. This research indicates that they are often disappointed by the lack of knowledge of their health care providers, especially in the area of breastfeeding and work. Better education and training of perinatal health care providers and integration of lactation consultants into the perinatal health team would help new mothers successfully blend breastfeeding and outside employment.

References


Bar-Yam, N.B. 1998b. “Workplace Lactation Support, Part II: Working with...


How do the 100 Best Create a Family-Friendly Workplace?" Working Mother (October): 77-156.


