

Speaking Out

Paid Maternity Leave and Its Impact on Breastfeeding in the United States: An Historic, Economic, Political, and Social Perspective

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INTRODUCTION

THE AMERICAN ACADEMY OF PEDIATRICS has recently reiterated its position that breastfeeding is, with rare exceptions, the preferred method of feeding for all infants, and that infants should be exclusively breastfed for the first 6 months of life. Thereafter, breastfeeding should continue, with the addition of complementary foods, for the first year of life or even longer, if desired by mother and infant.¹

With approximately two-thirds of all new mothers returning to work during the first year after birth of the infant, maintenance of breastfeeding for the optimal duration is difficult. This review of the historical, medical, economic, legal, and social issues of breastfeeding points to the need to consider paid maternity leave for employed mothers as a national priority in the United States.

As of 2004, breastfeeding rates in the U.S. continued to fall short of the *Healthy People 2010* objectives;² nationwide, 70.3% of new mothers initiated breastfeeding, and only 36.2% continued to breastfeed by the time their infants were 6 months of age. Only 14.1% of 6-month-old infants were exclusively breastfed by the year 2004.³ A number of barriers to breastfeeding have been identified, including educational background, low income, ethnic and cultural influences, primiparity, and employ-

ment outside of the home.⁴ Strategies to help make employment more compatible with breastfeeding include prenatal educational programs designed for working women, provision of "flex-time," job-sharing, breaks for milk expression or breastfeeding, lactation rooms, on-site availability of electrical breast pumps and refrigerators for breast milk storage, work-based lactation counseling programs and support groups, and on-site or near-site child care centers.⁵ Left largely unaddressed, at least in the United States, is the issue of maternity leave.

The gender character of the American work force has changed dramatically over the last half century (Fig. 1). In 1900, 19% of women were in the work force. Currently, the number has risen to 45%. There was a 200% increase in the number of working women from 1950 to 1990. Sixty-five percent (65%) of all mothers are currently working outside the home.⁶ In 2004, 52.9% of mothers with children under 1 year of age were in the work force.⁷

During the 1960s, it was the practice of most women (63%) to quit their jobs prior to giving birth. By the 1980s, only 27% of expectant women did so. In addition, only 17% of women during the 1960s returned to work by 12 months after delivery, compared with 60% in the early 1990s (52% by 6 months). Also in the 1990s, of those mothers who returned to work

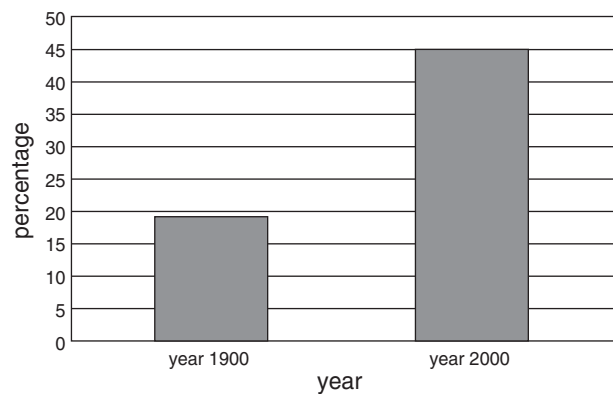


FIG. 1. Percentage of women in the U.S. workforce.⁸

within 12 months, more than half did so by 3 months, and 75% by 6 months.⁸

A number of factors may explain the increasing involvement of women in the American work force.⁸ In 1978, the Pregnancy Discrimination Act was passed. This legislation banned employment discrimination on the basis of pregnancy or childbirth. The federal tax code was altered to extend credit to working families in order to defray the cost of child care. Changes have been made at many places of employment to make them more compatible with child rearing, including the institution of flexible working hours and on-site child care facilities. In *California Federal Savings and Loan v. Guerra*, the United States Supreme Court in 1987 upheld the right of states to mandate unpaid disability leave for childbirth and newborn care.

This was followed in 1993 by the passage of the Family and Medical Leave Act of 1993, federal legislation that requires employers, under specified conditions, to provide their employees with 3 months of unpaid leave to attend to a personal or family medical problem.

It is reasonable to presume that the recent influx of women into the work force must have an impact on national breastfeeding rates. Even though both trends are increasing, it does not necessarily follow that the former has no impact on the latter. Feeding decisions tend to be contingent upon employment decisions, rather than vice versa.⁹ The results of the National Survey of Family Growth indicate that most nursing mothers do not breastfeed and maintain employment concurrently; only 31.5% actually do so. Rather, most breastfeeding mothers are ei-

ther not working (47.1%) or stop breastfeeding shortly after returning to work (31.5%).¹⁰

INITIATION OF BREASTFEEDING

The Infant Feeding Practices Survey, a nationwide study involving 1488 mothers, found a significant difference in breastfeeding initiation rates for mothers expecting to return to work (67.2%) as compared with those mothers who did not (81.5%; $p < 0.05$).¹¹ However, the National Maternal and Infant Health Survey of 9087 women demonstrated no such difference in breastfeeding initiation rates; among women returning to work within 12 months postpartum, 53.9% initiated breastfeeding, compared with 52.7% of those not returning.¹² Likewise, the Avon Longitudinal Study of Pregnancy and Childhood, following 10,530 women, found no general association between breastfeeding initiation rates and employment plans. Of note, however, is that there was a significant relationship between breastfeeding initiation and return to work within 6 weeks of delivery; those mothers returning so soon after giving birth were significantly less likely to choose to breastfeed.¹³ The same association was noted in the National Maternal and Infant Health Survey.¹² Kurinij¹⁴ also found a reduction in the initiation rate among white women returning to work within 6 weeks of delivery compared with white women who did not, but found no such association among black women.

The Ross Laboratories Mothers' Survey of 2002 demonstrated a 12.3% increase in breastfeeding initiation rates from 1996 to 2001 among fully employed women, from 60.2% to 67.6%. On the other hand, breastfeeding initiation among non-employed women increased 20.0%, from 57.5% in 1996 to 69%. However, at neither point in time was the difference in initiation rates between fully employed and non-employed mothers significantly different.¹⁵ The Johns Hopkins University Infant Feeding Study, involving 1900 women, failed to identify an association between employment status and breastfeeding rates at any of three intervals of time within the first 6 months postpartum (first 6 weeks, 6 to 12 weeks, 3 to 6 months).¹⁶ Finally, in her survey of 1179 Wash-



FIG. 2. Percentage of breastfeeding initiation by employment status.

ington, DC women, Kurinij found no difference between breastfeeding initiation rates among women planning to return to work within 12 months of delivery versus those who planned not to return, irrespective of racial background (white or black).¹⁴

To a degree, the nature of the occupation to which a woman returns may influence her feeding decision. Results from Kurinij¹⁴ and the National Maternal and Infant Health Survey¹² demonstrated that professional women were significantly more likely to decide to breastfeed than were women in other occupations, although the Johns Hopkins University Infant Feeding Study found no association between initiation rates and the particular type of employment.¹⁶

Thus, most of the evidence suggests that employment, *per se*, does not appear to have a significant impact on the decision to initiate breastfeeding, with perhaps one important exception: The mother may choose not to breastfeed if she plans to return to work very soon after delivery, that is, within the first 6 weeks (Fig. 2).

DURATION OF BREASTFEEDING

There is consistent and compelling evidence that employment considerations strongly influence the duration of breastfeeding (Fig. 3). The mean duration of breastfeeding for non-working mothers in the Infant Feeding Practices Study was found to be 25.1 weeks, compared with 16.5 weeks for full-time working mothers, a statistically significant difference.¹¹

Employed women included in this survey were significantly less likely to be breastfeeding at 3 months than were non-employed women. The findings of the Johns Hopkins University Infant Feeding Study were similar. Non-employed mothers were 3.24 times more likely to be breastfeeding at 6 to 12 weeks postpartum than were their employed counterparts.¹⁶ The Ross Laboratories Mothers' Survey found that from 1996 to 2001, breastfeeding rates among both non-employed mothers and employed mothers at 6 months postpartum increased significantly. However, in 2001, the 6-month breastfeeding rate remained significantly higher for the former group compared with the latter (35.8% and 25.1%, respectively).⁴ The numbers remained virtually the same in 2003 (35.0% for non-employed mothers vs. 26.1% for fully employed mothers).¹⁵ Kurinij¹⁴ was able to demonstrate that black women who returned to work after 7 months postpartum breastfed longer than those who returned earlier, although she was unable to demonstrate such an association for white women.

Employed women who participated in the National Maternal and Infant Health Survey were also found to breastfeed for a significantly shorter period of time than non-employed women. During the first 8 weeks postpartum, a precipitous decline in rates of breastfeeding was noted for employed, as opposed to non-employed, white women. There was a similar decline for both employed and non-employed black women, although the mean breastfeeding duration for non-employed black women remained significantly longer.¹²

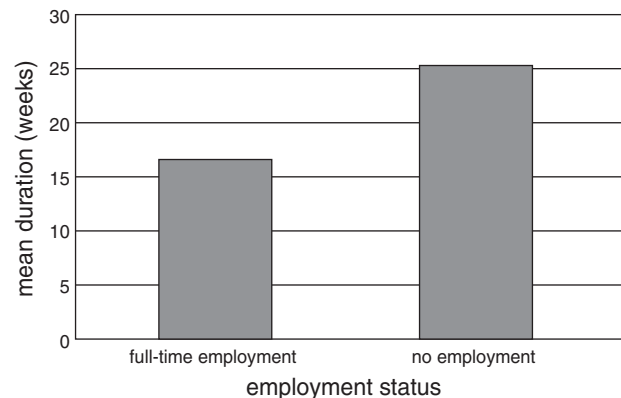


FIG. 3. Mean duration of breastfeeding by employment status.¹¹

In the University of Nebraska Survey of 567 breastfeeding mothers across the country, early weaning was found to be more likely when mothers returned to work within 4 months of delivery as opposed to later.¹⁷

The impact of employment on breastfeeding duration may be modified to some extent by the specific type of work to which the mother returns. Although Auerbach¹⁷ found no relationship between breastfeeding duration and type of work, Kurinij¹⁴ noted a significantly longer duration among professional mothers than among those in other types of occupations. The same association between prolonged breastfeeding duration and professional employment was identified in the National Maternal and Infant Health Survey with respect to white women, although not with respect to black women.¹²

MATERNITY LEAVE

There is a consistent correlation across studies between the duration of breastfeeding and the duration of time away from work outside the home. Data derived from the Infant Feeding Practices Study of the Food and Drug Administration indicate that each week of maternity leave increases the duration of breastfeeding by almost half a week.⁹ At least among white women, Kurinij¹⁴ noted a positive correlation between length of time away from work and duration of breastfeeding (22.0 weeks for women returning 1 to 2 months postpartum, vs. 32.2 weeks for those returning 5 to 7 months postpartum). Such a relationship could not be demonstrated among the population of black mothers studied. Auerbach¹⁷ found that, although breastfeeding duration was negatively correlated with the weekly number of hours worked, the time of return to work was the more powerful predictor of duration. The importance of maternity leave as an inducement to a more extended duration of breastfeeding becomes all the more significant, taking into consideration the conflicting national trends of rising mean breastfeeding duration rates and shortening intervals of time postpartum before return to work.¹⁰

Over the last 20 years, American women have increasingly availed themselves of paid

and unpaid leave time for childbirth. From the time interval 1981–1985 to 1991–1995, the proportion of mothers using paid leave increased from 32% to 36%; at the same time, use of unpaid leave increased from 30% to 37%.⁸

Women most likely to use paid maternity leave tend to be older and more highly educated. From 1991 to 1995, only 7% of women under 18 years of age took paid leave, compared with 59% of women 30 years of age and older. Sixty-three percent (63%) of women with a bachelor's degree or higher took advantage of paid leave; only 18% of women who had not graduated from high school did so.

On the other hand, women under 22 years of age were much more likely to quit their jobs to have their babies (44%) than women over 25 years of age (19%).⁸ These numbers are important, because the very women most in need of the additional breastfeeding support provided by maternity leave are the ones least likely to use such leave, the young and the less well educated.

Clearly, what is needed, if greater breastfeeding rates are to be achieved in the United States, is more maternity leave time. In practice, most American women arrange some combination of leave time for childbirth, involving short-term disability, sick leave, vacation time, personal days off, and unpaid family leave. Short-term disability generally covers all or part of the salary and is paid by the employer, union, state government, employee, or any combination thereof. The employee may purchase a short-term disability policy to obtain additional coverage. Short-term disability usually covers a period of 4 to 6 weeks and generally provides for 50% to 100% of salary.¹⁸

THE FAMILY AND MEDICAL LEAVE ACT

There is only one U.S. federal law dealing with maternity leave, the Family and Medical Leave Act (FMLA).⁶ FMLA was signed into law in 1993. The law provides for 12 weeks of unpaid leave over a 12-month period for childbirth and newborn care, adoption or foster care, care of a seriously ill family member, and personal medical care for impairment sustained as

a result of a serious health problem. Employers are further required to maintain health coverage and other benefits enjoyed by the employee prior to leave, and must guarantee return of the employee to the same or an equivalent position at the same level of pay, the same benefits, and the same terms of employment. Accrued benefits, such as seniority, retirement plan funding, and vacation time, do not apply to unpaid leave time under FMLA.

To be eligible, an employee must have worked with a company covered by FMLA for at least 12 months and for a minimum of 1250 hours. FMLA only applies to companies employing 50 or more workers who reside within 75 miles of the place of work. All governmental operations, municipal, state, and federal, must also adhere to FMLA requirements. An employee can only take advantage of FMLA within a period of 12 months after the birth of a baby. If both parents are employed by the same company, they must combine their FMLA leave time. The employer has the right to apply paid or unpaid personal or family leave time and vacation time to leave time to which the employee is entitled under FMLA. The employer is not obligated to provide unpaid leave under FMLA if the employee does not provide notification at least 30 days in advance. Finally, the employee may not qualify for unpaid leave under FMLA if he or she is in the highest 10% pay bracket within the company, and the employer is able to demonstrate that the company would suffer undue economic hardship should the employee in question take unpaid leave (Table 1). For those states in which there are also state laws mandating unpaid leave, FMLA usually offers more generous terms, and by law, FMLA requirements must take precedence.

Currently 14 states have enacted laws that extend the benefits of FMLA. For example, some

of these laws require companies with fewer than 50 employees to provide their employees with unpaid leave. Other states require companies to give more than 12 weeks of unpaid leave. Finally, still other states offer paid maternity leave. As of August 2002, in five states plus Puerto Rico, such maternity leave programs are funded jointly by employers and employees. Funding also may be provided by means of unemployment insurance. This option involves contributions by the state and federal governments and is being considered in 12 states.¹⁹

Potentially, FMLA covers 65 million employees in the United States, 50 million in the private sector and 15 million in the public sector. In total, 300,000 businesses throughout the United States must comply with FMLA. However, although 47% of employees in the private sector are eligible for FMLA, only 2% to 4% actually used FMLA benefits from 1994 to 2000, and of those who did, only 50% took more than 10 days off. The most likely explanation is that few families can afford to take unpaid time off.⁶

In 2000, the General Conference of the International Labor Organization (ILO) reaffirmed its support of the 14-week maternity leave. At least 6 of the 14 weeks would be required after childbirth.²⁰ It was further recommended that member nations make every attempt to extend maternity leave to at least 18 weeks.²¹

ILO called upon member nations to provide the equivalent of no less than two-thirds of the worker's pay during maternity leave, or an equivalent sum if an alternative compensation formula is applied.²⁰ Again, members were encouraged to pay the full amount of usual earnings, if possible.²¹ Benefits are to be provided by means of "compulsory social insurance or public funds."²⁰

One hundred forty (140) of 152 nations surveyed by the ILO in 2003 (92%) had some form

TABLE 1. FMLA ELIGIBILITY REQUIREMENTS⁶

Applies only to companies with 50 or more employees residing within a 75-mile radius.
Employee must have worked at the company a minimum of 12 months and for a minimum of 1250 hours.
Benefits must be utilized within 12 months of birth of the infant of the employee.
If both parents have the same employer, they must share FMLA benefits.
The employer may apply all paid and unpaid leave time to FMLA benefits.
Employee loses right to FMLA benefits if employer is not notified at least 30 days in advance of anticipated leave.
Employer may exclude from FMLA benefits those employees in the highest 10% pay bracket whose absence would constitute an undue hardship for the company.

TABLE 2. A SAMPLING OF MINIMUM PAID MATERNITY LEAVE MANDATES (AS OF 1998)²²

<i>Nation</i>	<i>Leave time</i>
Norway	38 weeks
Italy	5 months
Spain	16 weeks
United Kingdom	14 weeks
Israel	12 weeks
India	12 weeks
Honduras	10 weeks
Bolivia	60 days
Tunisia	30 days
United States	0

of paid maternity leave in place²² (Table 2). Twenty-nine (29) of the 35 “developed countries” surveyed (83%) had paid leave policies. Compensation for employees in these countries ranged from 50% to 100% of wages. Sixteen (16) of the 29 (55%) countries provided 100% compensation. The median compensation of the remaining nations was 75%. Compensation is generally provided through social security (86%), unemployment insurance (3%), employer funding (3%), or a combination of social security and one of the other funding methods (7%). Duration of paid leave in developed countries ranges from 8 to 48 weeks, with a median of 16 weeks.

Other sources have estimated the average paid maternity leave in industrialized countries to be 12 to 14 weeks; the European Community Commission requires all member nations to provide at least 14 weeks of paid maternity leave.⁶ In Germany, women are permitted 14 weeks of paid maternity leave, during which time 100% of the wages are paid. France also compensates 100% of wages, for a minimum of 16 weeks. In Great Britain, 90% of wages are provided for the first 6 weeks, with a flat rate thereafter for a minimum total of 14 weeks.²² Mothers in Norway may receive either 100% paid maternity leave for 42 weeks, or 80% paid leave for 52 weeks.²³

PSYCHOLOGY AND DEVELOPMENT

From a developmental standpoint, much more may be at stake with respect to an extended maternity leave than optimization of breastfeeding rates.

Much has been learned about the profound psychological, emotional, and physiologic dependence of the infant upon the mother during the first months of life, and its crucial impact on long-term physical and mental health.²⁴ It is biologically necessary that mothers be with their infants, especially during the first few months postpartum. This is not likely to become a reality until working families are granted a sufficiently long, and paid, maternity leave as a matter of national policy.

A growing body of evidence demonstrates that the dynamics of early dyadic attachment have a significant and lasting effect on the growing brain. As Schore states:

There is now widespread agreement that the brain is a self-organizing system, but there is perhaps less of an appreciation of the fact that the self-organization of the developing brain occurs in the context of a relationship with another self, another brain.²⁵

Research done on the species *Octodon degus** demonstrates a profound effect of separation of the young pup from its mother on neuronal synaptic growth and development within the limbic cortex.²⁶

That is, those pups deprived of continuous and undisturbed contact with their mothers demonstrate long-lasting and perhaps permanent alteration of the ratio of spine-to-shaft synaptic densities and degrees of dendritic ramification within the anterior cingulate cortex. Use of this particular laboratory animal is especially relevant to humans; similar to primates but in contrast to laboratory rats and mice, the degus demonstrates strong attachment behaviors with respect to the mother shortly after birth. Changes in its brain development resulting from mother–infant separation might well be applicable to humans as well.

The impact of mother–infant interaction on the growth of the human brain may be all the more significant, taking into consideration the profound state of immaturity into which the

**Octodon degus* is a small animal about the size and coloring of a gerbil native to Chile but used as a laboratory subject.

human infant is born, compared with other primates. As an evolutionary consequence of the twin developments of bipedalism and cranial enlargement, the growth of the human brain occurs primarily after birth. Although the brain of the chimpanzee is already 45% of its adult brain size at the time of birth, that of the human newborn is only 25% of its adult size. As a result, the human infant is delivered in a state of physiologic and neurologic immaturity relative to other primates. Being immature, the human newborn is not a truly autonomous entity, but lives in a state of biological, social, and psychological dependence on its mother for a period of many months.²⁷

Postnatal brain growth is of particular relevance with respect to the orbitofrontal cortex, that part of the brain that governs affect regulation.²⁵ The orbitofrontal cortex is profoundly dependent for its development on interactions with the social environment, particularly those interactions involving the mother. Affect dysregulation resulting from insecure attachments may lead to major "empathy disorders" and psychosomatic disturbances later in life: "Early failures in the dyadic regulation therefore skew the developmental trajectory of the corticolimbic systems that mediate the social and emotional functioning of the individual for the rest of the lifespan."²⁵

Defining infantile affect dysregulation as impaired self-regulation of affect evolving in relation to the interaction of the infant with its mother, the NICHD Early Child Care Research Network followed 1023 infants from 1 month through enrollment in the first grade of elementary school.²⁸ It was found that there was a strong association between affect dysregulation at 24 and 36 months of age, and antecedent attachment problems evident as early as 6 months of age. Furthermore, affect dysregulation at these ages was linked with impulsivity, impaired development of social skills, and compromised academic performance apparent as far removed in time as the first grade. The authors conclude:

The findings that dysregulated toddlers and preschoolers differ with respect to both antecedent and concurrent correlates as well as social and cognitive sequelae

several years later confirm the value of observing and studying early affect regulation in a dyadic context. . . . It is perhaps not so much child or even maternal affective characteristics that are most predictive, but relationship qualities to which both partners contribute and which are best captured at the dyadic level.²⁸

ECONOMICS

What about the cost of a paid maternity leave? Can American businesses and American workers afford a paid maternity leave policy? To estimate the cost, one could use the suggested model for civilian employees of the federal government, proposed by the United States Office of Personnel Management (OPM).²⁹

The estimates are based on the statistics of the Congressional Budget Office. The OPM wished to estimate the cost of a paid leave of 6 weeks' duration, which took into consideration two scenarios: a paid leave policy applying only to mothers, and a similar leave applying to both mothers and fathers. For these purposes, only the former option is considered.

The policy looked at a population of 350,000 women earning an average of \$43,200, and 380,000 men, earning an average of \$50,800. CBO estimates that a maximum maternity leave offered to mothers (but not fathers) would cost \$126 million over a period of 1 year. If the cost of the program were to be assumed equally by employer and employee, the sum deducted from the average salary would amount to \$86. Extrapolating to a 14-week paid leave, the amount deducted would come to \$200 per annum; in other words, the deduction financing the paid leave would amount to only 0.4% of the average salary. In like manner, the employer, in this case the federal government, would contribute only 0.4% of the total payroll to the program.

In fact, these calculations grossly overestimate the cost of the program, because they do not take into account employees over 45 years of age, who would contribute to the program even though they would not directly benefit from it. The numbers for these employees are not available from this particular model.

The Australian Catholic University provides 12 months of paid maternity leave to its employees. It is estimated that even if all of its eligible female employees of childbearing age were to take paid maternity leave in 1 year, the cost would amount to only 1% of the payroll.³⁰ Considering the benefits of a paid maternity leave, the cost seems to be more than reasonable.

What, exactly, might those benefits be? The Section on Breastfeeding of the American Academy of Pediatrics supports a paid maternity leave policy because it would very likely result in improved breastfeeding rates, particularly with respect to duration.³¹ The benefits of continued breastfeeding to families, employers, and society at large have been summarized in several extensive review articles.^{1,5,32,33}

For the mother, breastfeeding may diminish the risks of ovarian and premenopausal breast cancer, pregnancy-induced obesity, osteoporosis, and postmenopausal hip fractures. Lactational amenorrhea may result in increased child spacing, with resulting decrease in prematurity and infant mortality rates.

Formula-feeding can be considerably more costly than breastfeeding, not only for families, but for public assistance programs, as well. Parents of breastfeeding infants require less time off from work to care for sick infants, because breastfed babies tend to be healthier than infants who are not breastfed. Employee productivity should increase as a direct consequence, together with a decline in health care costs.

Ecologically, increasing breastfeeding rates can be expected to result in decreased refuse in the form of discarded formula containers, feeding bottles, and bottle liners. Energy use for preparation and transportation of infant formula is also eliminated.

However, beyond the favorable impact on breastfeeding rates, a paid maternity leave policy may well have other important benefits for American society, not the least of which would be contributing to the solvency of the Social Security system. According to the OPM study previously cited:

European countries have increasingly adopted maternity leave policies as a means of increasing birth rates and re-

ducing infant mortality rates. With a shrinking workforce and growing social welfare systems, European countries have become concerned that the working age population is not sufficiently large to support growing social insurance obligations.²⁹

Do such considerations apply to the United States as well?

According to the United States Census Bureau, the number of childless women 40 to 44 years of age doubled from 1976 to 1998. The proportion of women who have four or more children dropped from 36% in 1976 to less than 10% today. As in Europe and Japan, women in America are being forced to make a choice between joining the workforce and having children, and are choosing the former.³⁴

There is raging today a great debate about the future, and survivability, of Social Security. Much has been made of the financial burden imposed on the younger generation of workers by the older. In 1965, the worker-beneficiary ratio was 4:1, dropping to 3.3:1 in 1984. It is anticipated that Social Security will remain solvent if the ratio stabilizes at 2.4:1 by 2045, but this depends on an increasing, or at least an unchanging, birth rate. If the birth rate continues to decline, Social Security will become unportable.³⁵

Declining fertility rates are likely to continue as long as employment outside the home remains incompatible with adequate conditions for raising a family, including sufficient maternity leave.

OBJECTIONS

Several objections to a paid maternity leave policy could be raised. It could be argued, for example, that a paid maternity leave policy, in the end, would jeopardize the competitive position of women of reproductive age in the work force; companies may be reluctant to hire such women because of the economic drain it might entail. However, the course U.S. society has set for itself is clear. When the Congress passed, and the President signed, the Family and Medical Leave Act in 1993, the government

of the United States in effect embraced the principle that a woman has the right to job protection while on a 12-week maternity leave.⁶ A hiring policy that precludes a woman from consideration for employment solely on the basis of her reproductive potential is blatantly illegal under the Pregnancy Discrimination Act of 1978. Such a policy would likely lead to substantial penalties against the offending party.⁸

Another objection is that small businesses, including medical practices, could ill afford a generous maternity leave policy. For this reason, the policy should be modeled after FMLA, which applies only to businesses employing 50 or more workers within a radius of 75 miles. In addition, employees would need to meet the same eligibility requirements and be subject to the same restrictions that apply to FMLA: 12 months of prior employment involving a minimum of 1250 hours; combining of leave time for both parents employed by the same company; rolling of other forms of available leave time into maternity leave; and exclusion from the proposed maternity leave policy of employees in the highest 10 percent pay bracket within the company, if their respective employers are able to demonstrate an undue financial burden incurred as a result of the loss of services of said employees.⁶

JUSTIFICATIONS

The American Academy of Pediatrics recommends breastfeeding for all infants, with rare exceptions, for at least the first year of life. The AAP further recommends exclusive breastfeeding for the first 6 months of life.¹ Yet as more and more women of childbearing age enter the American work force, the possibility of achieving these objectives becomes more remote. There are to date no compelling data to indicate that breastfeeding initiation rates are adversely affected by maternal employment (with the possible exception of return to work within 6 weeks of delivery). On the other hand, return to work has consistently been demonstrated to be associated with reduced breastfeeding duration. Furthermore, the later the return to work, the longer the duration of breastfeeding.

Although there are data to suggest that measures to support breastfeeding in the workplace can help mothers to achieve their breastfeeding goals,³⁶ such measures require a commitment on the part of the business community. Little information has been published about this matter, but what data exist are not encouraging. Libbus and Bullock, for example, report that of 85 employers surveyed, only 35% felt that changes should be made in the workplace to make it more conducive to breastfeeding.

Only slightly more than half acknowledged any responsibility for supporting mothers who wished to combine breastfeeding and employment; and a large majority saw no business advantage in supporting breastfeeding in the workplace.³⁷ Bridge et al. found that only 20% of 69 employers disagreed with the statement, "formula-fed infants are as healthy as infants who receive human milk"; and only 17% agreed that "if a woman in my employ wanted to nurse her infant or express milk in my workplace, I would support it"; only 16% acknowledged a responsibility "to support mothers who combine nursing with employment."³⁸

Making the workplace more breastfeeding-friendly may arguably have a modest impact on breastfeeding rates, but in order to provide mothers with the time they need to achieve optimal breastfeeding practices, U.S. society must come to terms with the urgent need for an extended, paid maternity leave. This is more than a breastfeeding issue; it is truly a family issue, an issue that goes to the very core of the quality of our lives.

For at least most of the first year of life, human infants remain profoundly dependent on their mothers, emotionally as well as physiologically.²⁴ In a very literal sense, a mother and her infant need to be together for the first several months after delivery; to rend them apart in order to satisfy the pecuniary exigencies of society is one of the great unmentioned scandals of today. It is a ubiquitous practice bordering on cruelty. The toll that families will have to pay for it in the years to come has yet to be calculated.

Most other nations have begun to grapple with the problem. The United States, a nation of unparalleled affluence and power, has not. While other nations have been providing their

workers with paid maternity leave, the federal government of the United States has only recently come around to recognizing the right of workers to even an *unpaid* leave.

Physicians should advocate for the right of the American working family to compensated leave time to nurture and care for a newborn baby. In line with the recommendations of the International Labor Organization and the practices of most developed countries around the world, such compensation should be equivalent to two-thirds of customary pay. Also consistent with these guidelines, an employee should be entitled to approximately 14 weeks of paid maternity leave. Although not ideal, such leave time would allow for a reasonably close approximation of the objective of 6 months of exclusive breastfeeding. Eligibility requirements could be modeled after those of the Family and Medical Leave Act. The maternity leave program would be financed through social security.

CONCLUSIONS

In short, an abundance of evidence is now emerging that clearly supports what Winnicott declared in 1960, "There is no such thing as a baby; there is a baby and someone."³⁹ In view of the marked neurologic, physiologic, and psychosocial dependence of the infant upon its mother and the potentially adverse impact of a premature separation, the implications of a brief or nonexistent maternity leave are indeed disturbing.

It is not particularly popular to suggest an increase in taxes, but such an investment would yield significant dividends in the future, in terms of healthier mothers, children, and families; less absenteeism from work; reduced health care costs; and happier, more productive workers. The need for maternity leave reform is long overdue. If not now, when?

It could be argued that advocating in favor of a paid maternity leave falls within the province of politics, not medicine; but advocacy always has been an integral part of medical practice, for the physician has a moral obligation to lend his or her voice in support of those social measures that best serve the health

interests of one's fellow citizens. Abraham Jacobi, the father of pediatrics, understood this well. In 1904 he declared, "It is not enough, however, to work at the individual bedside in the hospital . . . (the pediatrician) is a legitimate advisor to the judge and jury, and a seat for the physician on the councils of the republic is what the people have a right to demand."⁴⁰ As physicians, we must counsel in support of a national policy of paid maternity leave.

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REFERENCES

1. American Academy of Pediatrics, Section on Breastfeeding. Breastfeeding and the use of human milk. *Pediatrics* 2005;115:496-506.
2. U.S. Department of Health and Human Services. *Healthy People 2010: Conference Edition- Volumes I and II*. U.S. Department of Health and Human Services, Public Health Service, Office of the Assistant Secretary for Health. Washington, DC, 2000:47-48.
3. CDC Breastfeeding National Immunization Data, Table 3: Any and exclusive breastfeeding rates by age. Available at: www.cdc.gov/breastfeeding/data/NIS_data/2004/age.htm.
4. Ryan AS, Wenjun Z, Acosta A. Breastfeeding continues to increase into the new millennium. *Pediatrics* 2002;110:1103-1109.
5. U.S. Department of Health and Human Services. *HHS Blueprint for Action on Breastfeeding*. U.S. Department of Health and Human Services, Office on Women's Health, Washington, DC, 2000.
6. Decker KH. *Family and Medical Leave*. West Group, St. Paul, MN, 2000.
7. Bureau of Labor Statistics employment characteristics of families summary. Available at: <http://stats.bls.gov/news.release/famee.nr0.htm>.
8. Smith K, Downs B, O'Connell M. *Maternity leave and employment patterns: 1961-1995*. U.S. Census Bureau, Current Population Reports, Washington, DC, 2001.
9. Roe B, Whittington LA, Fein SB, et al. Is there competition between breast-feeding and maternal employment? *Demography* 1999;36:157-171.
10. Lindberg L. Trends in the relationship between breastfeeding and postpartum employment in the United States. *Soc Biol* 1996;43:191-202.

11. Fein SB, Roe B. The effect of work status on initiation and duration of breast-feeding. *Am J Public Health* 1998;88:1042–1046.
12. Visness CM, Kennedy KI. Maternal employment and breastfeeding: Findings from the 1988 National Maternal and Infant Health Survey. *Am J Public Health* 1997;87:945–950.
13. Noble S. Maternal employment and the initiation of breastfeeding. *Acta Paediatr* 2001;90:423–428.
14. Kurinij N, Shiono PH, Ezrine SF, et al. Does maternal employment affect breast-feeding? *AJPH* 1989;79:1247–1250.
15. *Breastfeeding Trends—2003*. Mothers' Survey, Ross Products Division of Abbott Laboratories.
16. Gielen AC, Faden RR, O'Campo P, et al. Maternal employment during the early period: Effects on initiation and duration of breast-feeding. *Pediatrics* 1991;87:298–305.
17. Auerbach KG, Guss E. Maternal employment and breastfeeding. *AJDC* 1984;138:958–960.
18. Maternity leave: The basics. Available at: www.babycenter.com/refcap/pregnancy/pregnantatwork/449.
19. United States Breastfeeding Committee. *State Legislation that Protects, Promotes, and Supports Breastfeeding*. United States Breastfeeding Committee, New York, 2005.
20. General Conference of the International Labor Organization, C183, maternity protection convention. Available at: www.ilo.org/ilolex/cgi-lex/convde.pl.
21. General Conference of the International Labor Organization, R191, maternity protection recommendation. Available at: www.ilo.org/ilolex/cgi-lex/convde.pl.
22. United Nations Statistics Division: Demographic and Social Statistics, Table 5.C: *Maternity Leave Benefits, as of 1998*. United Nations Statistics Division. Available at: <http://unstats.un.org/unsd/demographic/products/indwm/table5c1x.htm>.
23. Frank E. Breastfeeding and maternal employment: Two rights don't make a wrong. *Lancet* 1998;352:1083–1084.
24. Schore AN. Back to basics: Attachment, affect regulation, and the developing right brain: linking developmental neuroscience to pediatrics. *Pediatr Rev* 2005;26:204–217.
25. Schore AN. The experience-dependent maturation of a regulatory system in the orbital prefrontal cortex and the origin of developmental psychopathology. *Dev Psychopathol* 1996;8:59–87.
26. Helmeke C, Ovtscharoff W, Poeggel G, et al. Juvenile emotional experience alters synaptic inputs on pyramidal neurons in the anterior cingulate cortex. *Cerebral Cortex* 2001;11:717–727.
27. Trevethan WR, McKenna JJ. Evolutionary environments of human birth and infancy: Insights to apply to contemporary life. *Children's Environ* 1994;11:13–36.
28. NICHD Early Child Care Research Network. Affect dysregulation in the mother-child relationship in the toddler years: Antecedents and consequences. *Dev Psychopathol* 2004;16:43–68.
29. United States Office of Personnel Management, report to Congress on paid parental leave. Available at: www.opm.gov/oca/leave/HTML/ParentalReport.htm.
30. Australian Government Equal Opportunity for Women in the Workplace Agency, paid maternity leave. Available at: www.eowa.gov.au/About_Equal_Opportunity/Key_Agenda_Items/Work_Life_Balance/Paid_Maternity_Leave/Benefits_Of_Providing_Paid_Maternity_Leave.asp.
31. Minutes of the American Academy of Pediatrics Section on Breastfeeding Leadership Team Meeting, April 16–17, 2005.
32. American College of Obstetricians and Gynecologists. Breastfeeding: Maternal and infant aspects. *ACOG Educational Bulletin Number 258*. American College of Obstetricians and Gynecologists, Washington, DC, 2000.
33. American Academy of Family Physicians, breastfeeding position paper. Available at: www.aafp.org/x6633.xml.
34. Mencimer S. The baby boycott. *The Washington Monthly*. June 14–19, 2001.
35. Hiltzik MA. *The Plot Against Social Security*. Harper-Collins, New York, 2005.
36. Ortiz J, McGilligan K, Kelly P. Duration of breast milk expression among working mothers enrolled in an employer-sponsored lactation program. *Pediatr Nurs* 2004;30:111.
37. Libbus MK, Bullock LFC. Breastfeeding and employment: An assessment of employer attitudes. *J Hum Lact* 2002;18:247–251.
38. Bridges CB, Frank DI, Curtin J. Employer attitudes toward breastfeeding in the workplace. *J Hum Lact* 1997;13:215–219.
39. Winnicot DW. The theory of parent-infant relationship. In: *The Maturation Processes and the Facilitating Environment*. International Universities Press, New York, 1960.
40. Burke EC. Pediatric history: Abraham Jacobi, MD: The man and his legacy. *Pediatrics* 1998;101:309–312.

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