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Maternity leave duration and full-time/part-time work status are associated with US mothers' ability to meet breastfeeding intentions

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Abstract

Background—Breastfeeding provides numerous health benefits for infants and mothers; however, many infants are not breastfed as long as recommended or desired by mothers. Maternal employment is frequently cited as a barrier to breastfeeding.

Objectives—To assess whether maternity leave duration and return-status (full-time [FT], part-time [PT]) were associated with not meeting a mother's intention to breastfeed at least 3 months.

Methods—We used data from the Infant Feeding Practices Study II, a cohort study. Analyses were limited to women employed prenatally who intended to breastfeed 3 months or longer (n=1172). Multivariable logistic regression was used to assess the relationship between maternity leave duration and return to work-status (<6 weeks/FT, <6 weeks/PT, 6 weeks – 3 months/FT, 6 weeks – 3 months/PT, not working by 3 months) and meeting a mother's intention to breastfeed at least 3 months.

Results—Overall, 28.8% of mothers did not meet their intention to breastfeed at least 3 months. Odds of not meeting intention to breastfeed at least 3 months were higher among mothers who returned to work FT before 3 months (<6 weeks/FT: aOR = 2.25, 95% CI: 1.23 – 4.12; 6 weeks – 3 months/FT: aOR = 1.82, 95% CI: 1.30 – 2.56), compared with mothers not working at 3 months.

Conclusions—Returning to work full-time before 3 months may reduce a mother's ability to meet her intention to breastfeed at least 3 months. Employer support for flexible work scheduling may help more women achieve their breastfeeding goals.

Keywords

breastfeeding; breastfeeding intentions; employment; maternity leave; work status

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Background

Only 63% of U.S. infants are breastfeeding at 3 months of age, and only 27% at 12 months.¹ Furthermore, approximately 60% of mothers do not breastfeed their infants as long as they want.² Maternal employment is frequently cited as a barrier to breastfeeding.^{3–10} Indeed, mothers who anticipate earlier return to work and/or return to full-time work are less likely to prenatally intend to initiate exclusive breastfeeding.¹¹ Additionally, earlier return to work and return to full-time work are associated with shorter durations of exclusive/predominant breastfeeding and shorter duration of overall breastfeeding.^{3–10} As such, national initiatives include recommendations for employer support for breastfeeding women. For example, Healthy People 2020, the 2011 Surgeon General’s Call to Action to Support Breastfeeding, and the National Prevention Strategy all include recommendations for employer support.¹²

While shorter durations of breastfeeding have been documented from mothers who return to work earlier and/or full-time,^{3–10} these studies do not consider the possibility of reverse causality – that women planning to breastfeed for a shorter duration are returning earlier to paid employment. We sought to address this issue by assessing the impact of maternity leave duration with part-time/full-time return status on the ability of a mother to breastfeed for at least 3 months, among a cohort of women who all reported prenatally that they intended to breastfeed for at least 3 months.

Methods

Study sample

This study used data from the Infant Feeding Practices Study II (IFPSII), a longitudinal survey conducted between 2005 and 2007 by the Food and Drug Administration (FDA) in collaboration with the Centers for Disease Control and Prevention. This study was approved by the FDA’s institutional review board. A detailed summary of the study methods is published elsewhere.¹³ Our study sample included only women who were employed during pregnancy and who prenatally responded that they intended to breastfeed for 3 months or longer and who completed at least one prenatal survey.

Outcome variables

The primary outcome of this study was the ability of a mother to meet her intention to breastfeed at least 3 months. During the third trimester of pregnancy, women were asked “How old do you think your baby will be when you completely stop breastfeeding (in months)?” Mothers who responded less than 3 months were excluded. At nearly monthly postnatal surveys, mothers were asked the age of their child when breastfeeding stopped. A mother was classified as not meeting her intention to breastfeed at least 3 months if her breastfeeding duration was less than 3 months (13.035 weeks).

Predictor variable

Mothers were asked the age of their baby when they returned to paid employment and the number of hours per week they usually worked (part-time [PT]: <30 hours/week, full-time [FT]: 30 hours/week) at 3 months postpartum. Five exposure categories were created: not

working at 3 months, 6 weeks – <3 months/PT, 6 weeks – <3 months/FT, <6 weeks/PT, <6 weeks/FT.

Statistical analysis

We used a multivariable logistic regression to assess the association between maternity leave duration/return status and meeting 3-month breastfeeding intention. Potential confounders known to be associated with our primary outcome and frequently included as potential confounder in similar studies^{3–11} were included as covariates in the model: maternal age, marital status, race, parity, mother's education, household income, WIC participation, and pre-pregnancy BMI. Statistical significance was set at $\alpha < 0.05$.

Results

Among 1506 women who were prenatally employed and intended to breastfeed at least 3 months and completed at least 1 postnatal survey, 191 were excluded because they had incomplete data on post-natal employment. An additional 133 women were excluded due to missing socio-demographic information and 10 women left the study before 3 months while breastfeeding, resulting in a final analytic sample of 1172 women. Among women who were prenatally employed and intended to breastfeed at least 3 months, women who were excluded for incomplete or missing data varied from the analytic sample by body mass index and were more likely to be younger, non-white, unmarried, WIC participants, have lower household incomes, and less education.

The average age of women in our study was 29 ± 5.4 years. Our sample was predominantly white (86.2%) and married (79.0%); 48.6% were college graduates and 31.5% participated in WIC. Among our sample of mothers who intended to breastfeed for at least 3 months, more than 40% intended to breastfeed 12 months or longer. More than half of mothers returned to paid employment within 3 months of delivery, with 13.7% returning before 6 weeks (Table 1). Of those who had returned to work within 3 months, 54.1% returned to work full-time.

Overall, 28.8% of mothers in our study did not meet their intention to breastfeed for at least 3 months (Table 1). Mothers who returned to work before 6 weeks/FT had 2.25 times the odds and mothers who returned FT after 6 weeks but before 3 months had 1.82 times the odds of not meeting their intentions to breastfeed for at least 3 months, compared to mothers not working at 3 months. No association was observed between returning to work part-time and not meeting intentions to breastfeed for at least 3 months.

Discussion

Among mothers who intended to breastfeed for at least 3 months, those who returned to full-time work before 3 months were less likely to meet their intention to breastfeed at least 3 months. Fifty-seven percent of U.S. mothers with infants under one year of age participate in the work force, with 63% of these employed mothers working more than 35 hours per week.¹⁴ Support for employed mothers to meet their breastfeeding intentions may help improve U.S. breastfeeding rates.

Previous studies have documented shorter breastfeeding durations among mothers who return early to work or return to full-time work.^{3–10} Yet, these studies were cross-sectional and could not rule out whether mothers planning to breastfeed for shorter durations returned to work earlier or for more hours than mothers planning to breastfeed longer. Our study takes into account a mother's prenatal intention regarding breastfeeding duration and demonstrates that early return to work, specifically full-time work, may result in a shorter than intended duration of breastfeeding.

Our study had several limitations. Mothers were categorized as full-time or part-time based on the number of hours they reported upon their initial return to paid employment, but mothers may have increased their working hours subsequently. Data are from 2005–2007 therefore are representative of working women during these years. While IFPSII included a national sample of women, it is not nationally representative; mothers were more likely to be older, white, and more highly educated, all factors associated with higher employment rates and better feeding practices.^{13, 15, 16} Moreover this study is limited to mothers who intended to breastfeed for at least 3 months, therefore the findings are not generalizable to all breastfeeding mothers. While our study focused on the ability of a mother to meet her goal to breastfeed for at least 3 months, the American Academy of Pediatrics recommend continued breastfeeding for the first 12 months or longer.¹⁷ Strengths of our study include the frequency of postpartum questionnaires to minimize recall bias regarding feeding and the inclusion of mother's prenatal report of her breastfeeding intention.

A mother's return to employment after giving birth is likely influenced by the amount of paid leave she is granted and the amount of unpaid leave she can afford to take. Of the 167 countries reviewed by the International Labor Organization (ILO), the U.S. is one of only three that does not mandate paid leave for new mothers.^{18, 19} ILO recommends a minimum of 18 weeks paid maternity leave,²⁰ however in the U.S. 83% of working mothers return to their job within 12 weeks.²¹ Action 13 of the 2011 Surgeon General's Call to Action to Support Breastfeeding calls for "work toward establishing paid leave for all employed women".¹² Returning to work full-time within the first 3 months postpartum may interfere with a woman's ability to breastfeed as long as she intends to, which may result in the loss of health benefits associated with breastfeeding and in more women falling short of AAP recommendations for breastfeeding durations.

Conclusion

We found that mothers who return to full-time work before 3 months postpartum were less likely to meet their intentions to breastfeed for at least 3 months. Support for a mother's delayed return to paid employment, or return at part-time hours, may help more mothers achieve their breastfeeding intentions. This may increase breastfeeding rates and have important public health implications for U.S. mothers and infants.

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Well Established

Breastfeeding provides numerous health benefits to mothers and infants. A mother's early return to paid work and full-time work are associated with shorter breastfeeding durations.

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Newly Expressed

In the United States, mothers who return to work full-time before their infant is 3 months old are less likely to meet their intentions to breastfeed for at least 3 months when compared to mothers not working during the first 3 months.

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Table 1

Among women who intend to breastfeed at least 3 months, the odds of not breastfeeding at least 3 month, Infant Feeding Practices Study II, 2005–2007 (n=1172)

	Odds of not meeting intention to breastfeed for at least 3 months			
	n	% did not breastfeed at least 3months	Adjusted aOR^A	95% CI
Not working at 3 months	493	27.6%	1.00	-
6 wks-3 months, part-time	211	21.8%	0.94	0.63–1.42
6 wks-3 months, full-time	308	33.8%	1.82	1.30–2.56
<6 wks, part-time	101	25.7%	1.14	0.67–1.93
<6 wks, full-time	59	42.4%	2.25	1.23–4.12
Total	1172	28.8%		

Abbreviations: odds ratio (OR), confidence interval (CI)

aOR^A – odds ratio adjusted for maternal characteristics including: age, race, marital status, maternal education, household income, WIC participation, parity, and pre-pregnancy BMI.

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