THE EFFECT OF WORK STATUS ON BREASTFEEDING INITIATION AND DURATION

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Presenter Disclosures

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“No relationships to disclose”
Motivation & Objective

- Importance of breastfeeding in developed countries is increasingly emphasized
- National U.S. health objectives call for exclusive breastfeeding for 6 months and breastfeeding duration for at least 12 months
- More U.S. mothers of infants are participating in the workforce
- Postpartum return to work is associated with lower rates of initiation and shorter duration of breastfeeding in the United States
- Previous work has investigated the relation between employment and breastfeeding, but the focus has primarily been on full-time vs. non-working groups
- We analyze the effect of full-time and part-time employment on breastfeeding initiation and duration
Conducted by the FDA in collaboration with the CDC from May 2005 to June 2007

- Longitudinal study of women from late pregnancy through their infant’s first year of life - 12 surveys (primarily mail)
  - 1 prenatal questionnaire
  - 1 telephone interview near the time of the infant’s birth
  - 1 neonatal questionnaire at infant age 1 month
  - 9 questionnaires sent about every 4 weeks during infant ages 2 to 7 months and then approximately every 7 weeks until infant age 12 months

- 4902 qualified pregnant women completed the prenatal questionnaire

- Model 1 ($N = 1964$): Breastfeeding Initiation - if mother ever breastfed her infant; Logistic regression

- Model 2 ($N = 1470$): Breastfeeding Duration - infant’s age in weeks when breastfeeding completely stopped; Censored regression
Independent Variables

- **Common in both models**
  - Total available maternity leave - no leave, \( \leq 6 \text{ wk} \), 7-12 wk, >12 wk and not working
  - Demographics – Age, education, income, marital status
  - Interaction between parity & previous experience
  - Medical and health variables - # nights in hospital, physician as birth attendant, # cigarettes/day during pregnancy
  - Social support for breastfeeding - # friends who breastfed, mother was breastfed, attended any class that discussed breastfeeding

- **Additional variables**
  - Model 1: prenatal expectation of postpartum work status (\( \geq 35 \text{ h} \), 20-34 h, 1-19 h, none); amount of leave taken after delivery (\( \leq 12 \text{ wk} \), >12 wk)
  - Model 2: amount of leave taken after delivery x work status (\( \leq 12 \text{ wk} \), \( \geq 35 \text{ h} \); \( \leq 12 \text{ wk} \), 20-34 h; \( \leq 12 \text{ wk} \), 1-19 h; >12 wk, \( \geq 35 \text{ h} \); >12 wk, 20-34 h; >12 wk, 1-19 h; and not working); feeding (baby fed on schedule, fed on demand, fed sometimes on demand, sometimes on schedule); comfortable nursing around close women friends
Descriptive Statistics - Model 1

- 86.5% initiated breastfeeding
- Prenatal expectation of postpartum work status
  - ≥35 h: 29.3%
  - 20-34 h: 22.1%
  - 1-19 h: 11.3%
  - None: 37.3%
- Amount of leave taken after delivery
  - ≤12 wk: 39.8%
  - >12 wk: 60.2%
Descriptive Statistics - Model 2

- **Mean # of weeks breastfeeding = 31.6**
- **Amount of leave taken after delivery × work status**
  - ≤12 wk, ≥35 h: 18.7%
  - ≤12 wk, 20-34 h: 9%
  - ≤12 wk, 1-19 h: 12.3%
  - >12 wk, ≥35 h: 4.7%
  - >12 wk, 20-34 h: 4.2%
  - >12 wk, 1-19 h: 7.4%
  - Not working: 43.7%
- **Feeding**
  - Baby fed on schedule: 7.6%
  - Baby fed on demand: 52.6%
  - Baby fed sometimes on demand, sometimes on schedule: 39.8%
- **Comfortable nursing around close women friends: 71.6%**
Descriptive Statistics – Common Variables

- Maternity leave available (prenatal)
  - No leave – 10.7%
  - \( \leq 6\) wk – 13.4%
  - \( > 6\) but \( \leq 12\) wk – 20%
  - \( > 12\) wk – 6.9%
  - Not working – 49%

- Demographics - 28.2 y mean age; 38.8% college or higher educated; $43,600 median income; 79% married

- Parity × previous breastfeeding experience - 32.3% no children, 7.7% with 1 child & no experience, 4.6% with \( \geq 2\) children & no experience; 31.2% with 1 child & experience; 24.2% with \( \geq 2\) children & experience

- Medical and health variables - 3.1 \# nights in hospital on average; 88.9% had physician as birth attendant; 1.1 \# cigarettes/day during pregnancy on average

- Social support for breastfeeding – 2.6% friends who breastfed; 49.4% mothers were breastfed; 60.3% did not attend any breastfeeding class
Breastfeeding Initiation (Results)

- Only expecting to work full time was significantly associated with decreased odds of initiation
  - Adjusted initiation rate for the full-time work category was significantly lower than for non-working mothers (81.9% vs. 87.5%, \( P < 0.05 \)) and marginally lower than for mothers working 1-19 h/wk (81.9% vs. 88.8%, \( P=0.08 \))
- Maternity leave
  - Available maternity leave did not affect initiation
  - Amount of leave actually taken also not significant in explaining initiation
- Positive relation - mother having been breastfed as infant
- Negative relation - number of cigarettes smoked daily during pregnancy, and not attending a class that discussed breastfeeding
- Parity \( \times \) previous breastfeeding experience
  - Mothers with other children who had not previously breastfed were much less likely than new mothers to initiate breastfeeding
  - Mothers with other children who had previously breastfed were much more likely to initiate.
Breastfeeding Duration (Results)

- Maternity leave taken by work status
  - Among mothers who returned to work in the first 12 weeks postpartum
    - Working ≥ 20 hours per week (30 weeks) had a strong negative effect on duration relative to not working (43.2 weeks)
    - But working < 20 hours per week (40 weeks) only had a marginal negative effect
    - Full-time work was associated with shorter duration than part-time work < 35 h/wk (28.3 weeks vs. 36 weeks, P < 0.01)
  - Among mothers who returned to work after 12 weeks
    - Working full-time (24.8 weeks, P < 0.05) decreased duration relative to not working
    - But working any type of part-time (35.6 weeks) schedule did not
    - Part-time workers spent an average 40.9 weeks breastfeeding compared with a significantly shorter duration of 32.7 weeks among full-time workers (P < 0.05)
Breastfeeding Duration (Results cont.)

- Available maternity leave was not significantly associated with duration
- Negative relation - number of cigarettes smoked daily during pregnancy, and not attending a class that discussed breastfeeding
- Feeding schedule
  - Mothers who had not previously breastfed had significantly shorter durations than those who had breastfed before
  - Mothers who breastfed on demand had longer duration than those who breastfed on schedule
- Mothers who reported being comfortable nursing around close women friends breastfed longer than those who reported not being comfortable in the neonatal survey
Conclusions

- Full-time employment remains a significant barrier to breastfeeding while part-time work has much less impact
  - Particularly if the mother does not return to work until after 12 weeks postpartum
- The research team concludes that workplace support for breastfeeding will be more effective
  - If it includes viable options for part-time work when the mother first returns to work
  - If it includes adequate leave for mothers