

# **The Effects of Father Involvement during Pregnancy on Receipt of Prenatal Care and Maternal Smoking**

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# Background

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- Fathers also provide resources and support to mothers, which is particularly important during the prenatal period.
- Pregnant women who feel more emotionally supported by their partners experience lower emotional distress.
- Women who view their partner as not dependable or lacking in financial, emotional and instrumental support are also more likely to view their pregnancy as unwanted.

# Background

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- Until recently, father involvement has been a neglected area of study.
- Father involvement is associate with a host of positive child outcomes, including:
  - Academic achievement
  - Psychological outcomes
  - Behavior

# Study Objectives

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- To examine the association between father involvement during pregnancy and two maternal behaviors important to a successful pregnancy and a healthy baby:
  - accessing early prenatal care
  - reducing the number of cigarettes smoked during the prenatal period.
- To examine characteristics of fathers associated with a higher level of involvement in their partner's pregnancy

# Hypotheses

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- Women whose partners are involved in their pregnancy will be more likely to
  - Receive early prenatal care
  - Reduce amount of cigarettes smoked during pregnancy

# Early Childhood Longitudinal Study-Birth Cohort (ECLS-B)

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- Nationally representative study of children born in 2001
- Data collected from birth certificates, parent interviews and direct child assessments
  - Measures multiple aspects of child development, family processes and health outcomes
  - Specific focus on father involvement, with surveys of both residential and non-residential fathers
- Analyses for this study were limited to Wave 1 data, when children were approximately 9 mos. old

# Sample

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- 5,404 biological mothers who resided with the biological father at the start of the study, and who had a partner who completed the resident father survey
- Analyses on smoking reduction during pregnancy were limited to mothers who had smoked in the 3 mos. prior to conception (n=1,076)

# Measures – Father Involvement

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- Fathers reporting that they had done 5 or more of the following activities were classified as involved:
  - Discussed the pregnancy with spouse;
  - Saw a sonogram/ultrasound;
  - Listened to baby's heartbeat;
  - Felt baby move;
  - Attended childbirth or Lamaze classes; or
  - Bought things for the baby.
- 83.2% of fathers were involved in their partner's pregnancy

# Measures – Prenatal Behaviors

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## Prenatal Care:

- Prenatal care initiated during 1st trimester (yes/no)

## Smoking Consumption:

- Continuous variable measuring the percent reduction in the number of cigarettes smoked between conception and birth

# Measures – Controls

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## Sociodemographic Characteristics

- Educational attainment
- Race/ethnicity
- Employment at nine months
- Number of previous live births
- Parent age
- Marital status of child's biological parents
- Family income in the past year
- Pregnancy intention (both wanted, mom wanted, dad wanted, neither wanted)

# Analytic Methods

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- Multivariate regression models were used to examine the association between father involvement and receipt of early prenatal care (logistic regression) and reduction in smoking (linear regression)
- Analyses controlled for maternal characteristics
- Logistic regression was also used to identify characteristics of fathers associated with involvement during pregnancy.

# Results:

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- Women with involved partners were 1.4 times more likely to receive prenatal care in the first trimester compared to those whose partners were not involved (OR = 1.42; 95% CI: 1.01-1.99).
- Women with involved partners reduced their cigarette consumption 36% more than women whose partners were not involved in the pregnancy (p=0.09).

# Results:

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- Men who wanted the pregnancy were more likely to be involved during pregnancy.

**Table 1. Logistic regression analyses of the association between sociodemographic characteristics and father involvement**

<u>Characteristics</u>	Father Involvement OR (95% CI) N=5,034	
Paternal education		
Less than HS	0.45	(0.31,0.65) **
HS diploma	0.74	(0.54,1.01)
Some college/vocational	1.10	(0.82,1.49)
BA/BS or higher	ref. cat.	
Father's Race/Ethnicity		
White	ref. cat.	
Black (non Hispanic)	0.82	(0.56,1.18)
Hispanic	0.52	(0.39,0.69) **
Asian	0.81	(0.57,1.17)
Other	0.94	(0.46,1.93)
Marital status to bio dad at birth		
Married to bio mother	ref. cat.	
Cohabiting with bio mother or not married	1.10	(0.71,1.71)
Neither married nor cohabiting with bio mother	0.55	(0.23,1.31)
Father's age at time of birth		
Under 20 years old	ref. cat.	
20-29 years old	1.08	(0.50,2.32)
30 years +	0.74	(0.35,1.58)
Household income		
\$20,000 or less	ref. cat.	
\$20,001-\$35,000	1.69	(1.2,2.37) *
\$35,001-\$50,000	1.16	(0.79,1.71)
\$50,001+	1.69	(1.15,2.48) *
Father's work status at 9 months postpartum		
Full time	ref. cat.	
Part time	1.17	(0.67,2.06)
Unemployed	0.76	(0.53,1.09)
Number of previous live births (father)		
1+ previous births	ref. cat.	
0 previous births	2.45	(1.89,3.17) **
Pregnancy intention status		
Both parents report wanting the pregnancy	1.44	(1.06,1.95) *
Only mother reports wanting the pregnancy	1.04	(0.70,1.54)
Only father reports wanting the pregnancy	1.70	(1.14, 2.51) **
Neither parent reports wanting the pregnancy	ref. cat.	

\*p<.05, \*\*p<.01, \*\*\*p<.001

# Conclusions

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- The positive benefits of father involvement often reported in the literature on child health and development can be extended into the prenatal period.

# Limitations

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- Sample only includes resident fathers as non-resident fathers were not asked about their prenatal involvement.
- Recall bias/under-reporting in report of cigarette smoking during pregnancy

# Implications

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- Programs aimed at improving father involvement in children's lives may be extended to include the importance of being involved during the prenatal period, particularly for men who are likely to become fathers again.
- Finally, our findings reiterate the importance of family planning, as fathers who wanted the pregnancy were significantly more likely to be involved in their partner's pregnancy.

# Future Directions

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- Future research is needed to further validate these findings, particularly with longitudinal data, and to test whether father involvement during the prenatal period has long-term outcomes for both the mother and the child once the child is born.
- Results of this study should be replicated to identify whether similar patterns of association exist for fathers who are not living with the mother.

# Research in the service of children

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