

# Support from the father of the baby and preterm birth among Black women

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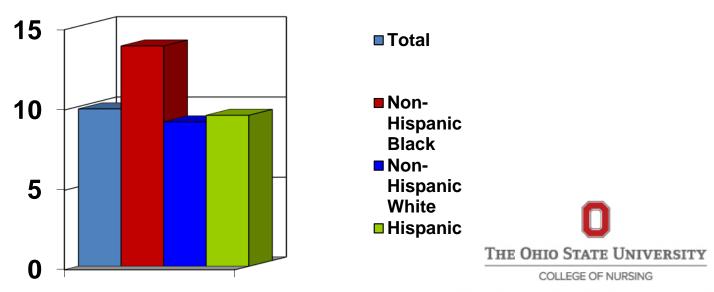
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#### Preterm birth

- Preterm birth (<37 weeks gestation)</li>
- Prematurity
  - leading factor of neonatal mortality
  - major cause of long-term health problems



# Background

- Depressive symptoms during pregnancy have been related to preterm birth among Black women.
- Social support may decrease levels of depressive symptoms among Black women.
- Black women whose father of the baby was supportive during pregnancy had lower levels of depressive symptoms compared with women whose father of the baby was not supportive during pregnancy.

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# Purpose

 The purpose of this secondary analysis was to examine if father of the baby support moderated the associations between depressive symptoms and preterm birth among Black women.



### Design and Sample

- Secondary analysis of Life-course Influences on Fetal Environments (LIFE) data.
- N=1,410 women Black women
  - < 35 years of age (85%)</p>
  - graduated high school or completed a high school equivalency test (92%)
  - household income of ≥\$20,000 (72%)
  - 250 women had PTB (17.7%)

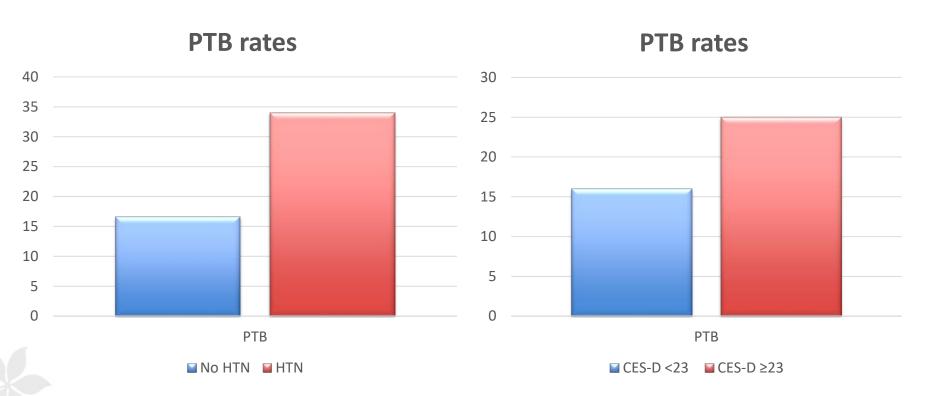


#### Methods

- Women were recruited from Labor and Delivery and Postpartum units of a Detroit suburban hospital from June 2009 to December 2011.
- Women completed questionnaires including the Center for Epidemiologic Studies Depression Scale (CES-D) and the Social Networks in Adult Relations Questionnaire.
- Gestational age at birth was collected from medical records

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#### Results



There were no other differences in maternal characteristics between women with term births and women with preterm births



#### Results

- Women who had CES-D scores ≥23 were 1.8 times more likely to have PTB compared with those with CES-D scores <23 (OR=1.82; 95% CI: 1.33, 2.50; p<.001).</li>
- The risk of PTB did not vary by the mother's FOB scores ≥60 (above the median reflecting higher support) compared to those <60 (OR=1.03; 95% CI: 0.77, 1.36; p=0.8).



#### **Odds Ratio of Preterm Birth in** women with CES-D scores ≥ 23 vs. CES-D scores < 23

Unadjusted model Adjusted model

(N=1,236)

 $(N=1,046)^a$ 

Women with FOB

scores < 60

2.57\*

(1.68, 3.94)

2.79\*

(1.75, 4.45)

Women with FOB

scores ≥ 60

1.34

(0.74, 2.44)

1.21

(0.62, 2.35)

\*p<.05

a: Model adjusted for advanced maternal age, low household income, low level of education, smoking in the past year, hypertensive disorders, inadequate prenatal care, and BMI



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#### Results

- Among women with FOB scores <60 (suggesting low levels of support), women with CES-D scores ≥23 had nearly 3 times the odds of PTB compared to women with CES-D scores <23.</li>
- Among women with FOB scores ≥60, the odds of PTB in women with CES-D scores ≥23 was not statistically significantly different compared to the odds of PTB in women with CES-D scores <23</li>

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#### Conclusion

- Among women whose fathers of their babies were less supportive, women who had high levels of depressive symptoms were more likely to have PTB compared with women who had low levels or no depressive symptoms.
- Among women whose fathers of their babies were more supportive, the risk of PTB was not different between the two groups of depressive symptoms.

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#### Conclusion

- Maternal depressive symptoms play a major role in increasing the risk for PTB among women with less support from the fathers of their babies.
- Maternal depressive symptoms do not increase the risk for PTB among women who have more support from the fathers of their babies.

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#### Conclusion

 The buffering effect of father of the baby support on the association between depressive symptoms and preterm birth may be one mechanism by which the father of the baby influences birth outcomes among Black women.

