DO UNEMPLOYED WOMEN GIVE BIRTH TO INFANTS WITH HIGHER RATES OF INFANT MORTALITY AND LOW BIRTHWEIGHT?

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Helen Scharber¹

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RESEARCH PROBLEM AND DATA

Higher unemployment rates in recent years have sparked renewed interest in the connections between employment status and health, although the relationship between maternal unemployment and birth outcomes is understudied. Some previous research indicates that unemployment is correlated with worse birth outcomes, including higher rates of low birthweight and infant mortality, possibly due to stress-related endocrine system changes. High rates of low birthweight in certain populations present public health and social justice problems, since lower birthweights are correlated with increased incidences of adult lung disease, heart disease, and diabetes as well as poorer outcomes in schooling attainment, use of disability programs, and adult wages.

To examine the relationship between maternal employment status and birth outcomes, I conducted multivariate regression analyses using data on 1.3 million sibling births to 600,000 mothers in Texas between 1994 and 2003. Because mothers were tracked across sibling births, I was able to assess whether the same women had different birth outcomes when they reported being engaged in market work versus when they reported unemployment or homemaker status. I also investigated whether the relationship between unemployment and birth outcomes differed based on access to prenatal care or the presence of health complications.

KEY FINDINGS

- When women were unemployed, their babies had lower average birthweights and higher chances of dying within one year than when the same women were engaged in market work or identified as homemakers, after I controlled for variables such as education, race-ethnicity, marital status, and smoking behavior.
- Women with no medical risk factors had similar birth outcomes regardless of employment status, while women with medical risk factors had significantly poorer birth outcomes when they were unemployed (Figure 1).
- Women with adequate prenatal care had similar birth outcomes regardless of employment status, while women with inadequate prenatal care had significantly poorer birth outcomes when they were unemployed (Figure 2).

Figure 1. Difference in rate of low birthweight, compared to being employed with no risk factors.

Figure 2. Difference in rate of low birthweight, compared to being employed with adequate prenatal care.

Note: Risk factors include anemia, cardiac disease, lung disease, diabetes, hydramnios, hemoglobinopathy, chronic hypertension, pregnancy-associated hypertension, eclampsia, incompetent cervix, previous preterm infant, renal disease, isoimmune blood, sexually transmitted diseases, and “other.” Differences shown include controls for year, sex of child, birth order, age, maternal education, ethnicity, marital status, smoking behavior, prenatal care, and gestation. ***p < .001.

Policy Implications

Disproportionately high rates of infant mortality and low birthweight among some groups of mothers—such as unemployed women—interfere with the broadly shared goal of providing equal opportunities for children. This research shows that unemployment seems to “hurt” birth outcomes most when the mother has inadequate prenatal care or at least one medical risk factor. As we work toward providing adequate healthcare for all people, policies should ensure that unemployed pregnant women have access. For those with healthcare, unemployed women might be flagged for additional monitoring to reduce the employment status gap among those with known risk factors. Finally, requiring that a mother identification variable be added to publicly available birth record data is a low-cost way to improve research in this area.
Erratum


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In the above paper, the figures were incorrect. The corrected paper is given as follows:
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Note: Prenatal care adequacy is defined according to Katechuck’s Adequacy of Received Services index, which categorizes birth records according to the percentage of expected prenatal care visits, given the month prenatal care was initiated. Inadequate is defined as <50% of expected visits and adequate is defined as 80%-109% of expected visits. Differences shown include controls for year, sex of child, birth order, age, maternal education, ethnicity, marital status, smoking behavior, pregnancy risk factors, and gestation. *p < .05, ***p < .001.