

The Impact of Reproductive and Birth
Technologies on Health, Fertility and Labor Outcomes

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Cesarean Section for High-Risk Births: Short- and Long-Term Consequences for Breech Births

Cesarean sections (C-sections) are the most commonly performed surgical procedures in industrialized countries. While they can be potentially lifesaving in cases of high-risk pregnancies, as with any surgical procedure, they can pose complications, and little is known about their long-term consequences for the mothers and children involved. In this paper, I use a sample of “at-risk” births - namely, breech births, in which the fetus is presented with its head upward instead of downward - to study the causal impact of C-sections on the health of infants and on the health, subsequent fertility, and labor market outcomes of mothers. Because selection into C-section may be endogenous, I exploit an information shock to doctors in 2000, in which a new study about the benefits of planned C-sections for breech births led to a sharp 23% increase in planned C-sections. This increase occurred across the board: I find no evidence of a shift in the composition of women receiving C-sections following the shock. I then use this information shock in a reduced form pre-post analysis and as an instrument for C-sections in a 2SLS analysis of Swedish birth, in-patient, and labor market register data associated with births taking place between 1997 and 2003. I find that an increase in C-sections among breech births led to strong improvements in child health originating from both short- and long-term improvements, as indicated by higher Apgar scores at birth and fewer nights hospitalized during ages 1-7. The estimates suggest that the medical intervention almost completely narrowed the gap in health between breech and cephalic (normal position) births. I find no significant impact on maternal health at birth or subsequent births, nor on maternal labor market outcomes. Though marginally insignificant, estimates suggest a potential negative impact on future fertility.

Keywords: fertility, maternal health, child health, birth technology, labor market response

JEL Codes: J13, I11, I12, I38, J24

Multiple Births, Birth Quality and Maternal Labor Supply: Analysis of IVF Reform in Sweden

In this study we examine the passage of a reform to in-vitro fertilization (IVF) procedures in Sweden in 2003. Following publication of medical evidence showing that pregnancy success rates could be maintained using single rather than multiple embryo transfers, the single embryo transfer (SET) was mandated as the default IVF procedure. Using linked registry data for the period 1998-2007, we find that the SET reform was associated with a precipitous drop in the share of multiple births of 63%. This narrowed differences in health between IVF and non-IVF births by 53%, and differences in the labor market outcomes of mothers three years after birth by 85%. For first time mothers it also narrowed the gap in maternal health between IVF and non-IVF births by 36%. Our findings imply that more widespread adoption of SET could lead to massive gains, reducing hospitalization costs and the foregone income of mothers and improving the long-run socioeconomic outcomes of children. This is important given that the share of IVF facilitated births exceeds 3% in several industrialized countries and is on the rise.

Keywords: IVF, fertility, maternal health, neonatal health, career penalty, human capital formation

JEL Codes: J13, I11, I12, I38, J2

The Impact of Abortion Legalization on Fertility and Female Empowerment: New Evidence from Mexico

We examine the effect of a large-scale, free, elective abortion program implemented in Mexico City in 2007. This reform resulted in a sharp increase in the request and use of early term elective abortions. We document that this localized reform resulted in a legislative backlash in 18 other Mexican states which constitutionally altered penal codes to increase sanctions on abortions. We take advantage of this dual policy environment to estimate the effect of progressive and regressive abortion reform on fertility and women’s empowerment. Using administrative birth data we find that progressive abortion laws reduce rates of child-bearing, particularly among young women. Additionally, the reform is found to increase women’s role in household decision making - an empowerment result in line with economic theory and empirical results from a developed-country setting. We however find little evidence to suggest that the resulting regressive changes to penal codes have had an inverse result over the time period studied. In turning to mechanisms, evidence from a panel of women suggests that results are directly driven by increased access to abortion, rather than changes in sexual behavior, contraceptive use or contraceptive knowledge.

Keywords: fertility, female empowerment, abortion legalization, Mexico

JEL Codes: J13, I15, I18, O15

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