Paternal Involvement in Pregnancy

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The best thing about fatherhood is the opportunity to be a part of the development process of a new life.

~ Seal ~
Defining & Describing Paternal Involvement during Pregnancy (PIdP)

“activities or practices by the male partner and a couple anticipating birth that ideally lead to an optimal pregnancy outcome”

(JCPES – CPIPO)
Defining & Describing PIdP

- During pregnancy, an involved father…
  - is accessible to the mother,
  - is engaged in the pregnancy process,
  - takes responsibility for the pregnancy, and
  - communicates with the mother regardless of the couple relationship status for the benefit of the coming infant.
How has PIpD been measured?

- Paternal completion of self-administered questionnaires
- Maternal perception (questionnaires and interviews)
- Paternity acknowledgement, contributions during pregnancy, and intentions to contribute as obtained from in-hospital interviews
- Missing paternal information in vital statistics records
- Partner or spousal-specific support
- Use of indicators: mother’s relationship with the father, paternal suggestion of an abortion, financial support from the father
- Composite score derived from living arrangements and frequency of contact
Why is PIIDP important?

- Maternal wellbeing
- Maternal behavior
- Fetal development
- Birth outcomes
- Racial Disparities
- Cost of health care
When fathers are involved during pregnancy…

- Maternal stress is reduced
- Positive maternal behaviors are increased (early prenatal care, reduced smoking, less alcohol/illicit drug use, healthier eating & exercising)
- Risk of preterm birth, low birth weight and fetal growth restriction is significantly reduced
When fathers are involved during pregnancy…

- We can save on health care cost:
  - cost savings of between $1,139 or $1,827 per birth (GLM & decision analysis model; FL state data)
“The introduction of interventions during the antenatal period that are only 25% efficacious will yield cost savings in the amount of $169 million and $105 million in annual healthcare expenditures within the U.S.” as a result of improved birth outcomes associated with diminished rates of hospitalization costs.
When fathers are not involved during pregnancy…
PIdP: The example of Florida

- Birth Files 1998-2005
- N=1,646,853
- PI measure: missing father’s information on birth certificate
PIdP and Infant Morbidity in Florida

Among father-not-involved births:

- higher rates of low birth weight, very low birth weight, preterm birth, and SGA; and 87% increased risk of very preterm birth
- higher risks of poor birth outcomes
- Black women had the highest risk of low birth weight, very low birth weight, preterm birth, very preterm birth, and SGA
PIdP and Feto-infant Morbidity

Crude estimates of **feto-infant morbidity** outcomes by father involvement status in Florida (1998 – 2005). P-values for all comparison was less than 0.01
PIdP and Infant Mortality

Crude estimates of **infant mortality outcomes** by father involvement status in Florida (1998 – 2005). P-values for all comparison was less than 0.01
PIdP and Racial/Ethnic Disparities

- Lack of paternal involvement during pregnancy widens the black-white gap in infant mortality almost four-fold.
Importance of PIEdP for Black Families

- increasing number of children born into one-parent households
- 70% of black infants, 50% of Hispanic infants and 27% of white infants in the US are born to unmarried women
- black adolescents are more likely to be teen parents than white teens
- maternal prenatal behaviors have an immediate and lifelong effect on the health of a child
PIdP and Racial Disparities

Increasing paternal involvement during the perinatal period may be especially important for the black population as they already bear a disproportionate burden of adverse birth outcomes and have a high proportion of births outside of formal marriage.
How does PIIDP impact pregnancy and its outcomes?

- Suggested pathways and mechanisms:
  - Maternal stress
  - Maternal behavior
Mechanisms & Pathways

Sources of Stress & Coping Strategies

- Significant life events
- Mental health issues
- Work
- Racism/discrimination
- Daily hassles
- Social support
- Chronic stress
- Poor nutrition
- Tobacco use
- Pregnancy-specific stress
- Pregnancy desirability

Birth Outcomes

- Pre-term birth
- Low birth weight

Pathways:

- Estrogen precursor
- Fetal cortisol
- Fetal stress response
- Maternal cortisol
- Catecholamine

Effects:

- Suppresses maternal appetite
- Reduces substrate (nutrition) to fetus
Barriers to PIdP

- Intrapersonal
- Interpersonal
- Community/Neighborhood
- Institutions
- Policies
Intrapersonal Barriers

- Socio-economic issues faced by father (e.g., current/past incarceration, unemployment, multiple child support responsibilities)
- Residence/geographic location away from mother carrying his child
- Lack of father figure/role model in own life
- Fear of responsibility, of the unknown
- Little knowledge of legal rights as a father
Interpersonal Barriers

- Sensitive and complex issues relating to the mother-father relationship (e.g., relationship status, fact that the “father” may not be the biological father)
- Dealing with another “father” (either the biological father or the “resident” father)
Community/Neighborhood Barriers

- Cultural variations in perceptions of fatherhood and fathers
- Socio-economic factors (high rates of unemployment & incarceration)
- Social factors (high rates of single motherhood)
Institutional Barriers

- Focused on maternal care - Fathers not expected to be involved in care
- Lack of awareness of importance of involving fathers in the process
- Lack of training on how to engage fathers in the prenatal care process
Policy-Level Barriers

- Existing laws and initiatives (e.g., EIC, TANF, child support):
  - focus on the mother and child
  - often penalize families with present fathers
  - do not promote informal paternal involvement
  - discourage fathers and mothers from reporting paternity
  - do not help to eliminate economic barriers to paternal involvement
- Lack of funding for fatherhood programs in MCH
Factors that need to be better understood in PIdP

- Cultural variations in fatherhood
- Sensitive issues relating to the mother-father relationship
- Different faces of “fathers” (e.g., another male might take the role of the biological father) and associated relational complexities
- Measuring PIdP
- Physiological mechanisms
Next Steps?

- Develop and assess effectiveness of interventions to increase PI in prenatal care services
- Develop and test more comprehensive measures
- Identify population-specific characteristics of PI
- Revisit MCH policies that are not father or family friendly
- Take a more holistic approach to MCH to include fathers and establish new guidelines for prenatal care programs
- Increase funding for research and programs
Thank you!