

AJPH PREGNANCY RISK ASSESSMENT MONITORING SYSTEM

Pregnancy Risk Assessment Monitoring System for Dads: Public Health Surveillance of New Fathers in the Perinatal Period

As Father's Day approaches each June, the nation pauses to reflect on the importance of fathers. In the United States, approximately 60% of American men are fathers, 82% of whom live with at least one of their children.¹ Over the past few decades, we have learned that paternal involvement is strongly associated with better prenatal and postnatal maternal health and with improved developmental outcomes for children.² A number of key indicators demonstrate the influence fathers have on perinatal maternal and child health,³ including improvements in first trimester prenatal care initiation, infant morbidity and mortality, and breastfeeding initiation and continuation. Although fathers' involvement in families is increasing, there has been limited research on how fatherhood affects the health and well-being of fathers themselves, especially around the time of the transition into fatherhood. In particular, surveillance efforts examining new fathers' behaviors and attitudes remain suboptimal. Expectant fathers' preconception health is a newly emerging area of research focused on measuring the health of men during their

reproductive years, a key tenet of men's health.⁴

MALE HEALTH AND NEW FATHERS

Beyond influences of paternal involvement on maternal and child health outcomes, enhanced paternal health surveillance presents an opportunity to benefit overall male health, as the transition to fatherhood affects male mental and physical health.⁵ A healthy father is more likely to produce healthy offspring, participate fully in child-rearing, and provide financial support. Yet from the time of their high school physical until they reach middle age, many men do not access health care. The transition to fatherhood could be an opportune time to promote the integral involvement of fathers in their children's lives as well as serve as a lever for men's health change.⁶ Focused surveillance designed to better understand the health care needs of new fathers would provide insight into the gap in male health care services and use, ultimately supporting men and their families.

PERINATAL HEALTH SURVEILLANCE

Although a few existing systems, such as the National Survey of Family Growth and the Fragile Families and Child Wellbeing Study, touch on aspects of fatherhood, there are no large-scale US-based public health surveillance efforts designed specifically for men during the perinatal period and the significant period of transition to fatherhood.

PRAMS

One of the longest-running and most successful public health surveillance programs is the Centers for Disease Control and Prevention's Pregnancy Risk Assessment Monitoring System (PRAMS), a 30-year-old state-based surveillance system

conducted annually of mothers' perinatal behaviors, attitudes, and experiences (see Shulman et al. in this issue of *AJPH*, p. 1305). PRAMS has been especially useful for tracking health indicators over time, evaluating public health programs, and addressing emerging health issues (e.g., e-cigarette use, influenza vaccine, Zika) during the perinatal period through the use of short questionnaire supplements.

Currently, the primary question asked about fathers in PRAMS relates to domestic interpersonal violence around pregnancy. Although information regarding fathers could be expanded by using a PRAMS supplement, the issue remains that mothers would be reporters, hindering a firsthand examination of the father's perinatal experience. To expand knowledge of fatherhood risks, benefits, and opportunities—inclusive of positive aspects of parenthood as well as men's health—a wealth of topics related to fathers and their families could be directly asked of men, rather than indirectly through women, thereby

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completing a picture of male and family health during a significant life course event.

PRAMS for Dads

Building on the success and infrastructure of PRAMS, a dedicated new surveillance program exclusively focused on fathers, PRAMS for Dads, was developed. By collecting data reported directly by fathers, PRAMS for Dads expands knowledge of the transition to fatherhood and addresses current and emerging public health issues unique to fathers and their families. PRAMS for Dads is currently conducting a father-centered feasibility pilot study of more than 500 recent fathers in the state of Georgia with specific questions about the transition to fatherhood, endeavoring to reach all possible fathers through a nuanced methodological approach. Embarking in this new direction has challenges. First, any surveillance efforts focused on fathers must appreciate the diversity of new-parent relationships in the United States. Although reaching married parents through joint surveillance would seem relatively straightforward, this approach may miss the 40% of unmarried fathers in couples with newborns, a group at higher risk for poor health outcomes.⁷ To reach these fathers, surveillance efforts must focus on ways to optimize use of the acknowledgment of paternity form along with the completed birth certificate. Gathering data on noncohabiting and non-married fathers is essential in order to fully understand fatherhood experiences, their influences on pregnancy and child outcomes, and men's health, and to evaluate this at-risk population.

A second challenge will be engaging other fatherhood populations of interest that are historically difficult to reach, such as adolescent, incarcerated, or minimally involved fathers. Lessons learned in the pilot project may assist future efforts to engage these other groups in surveillance. Finally, because of the complexity of fatherhood and the limitations of cross-sectional data, PRAMS for Dads will focus on psychosocial and social determinants of fatherhood rather than ascertaining the biological relationship between fathers and children. Nonetheless, this approach provides a greater opportunity to complete the picture of health in contemporary American families.

PRAMS for Dads will make special efforts to reach fathers by appealing to their integral role in families—with vital core topics that mirror PRAMS, such as health care access and utilization—while extending survey topics to father-specific areas such as infant involvement. The Georgia pilot will also test a “direct to dads” approach of reaching out to fathers without first contacting mothers, with the alternative “mothers as gatekeepers” approach to assess response rates. The “mother as gatekeepers” approach is similar to that used in other surveillance approaches, with a separate PRAMS for Dads survey included in the mothers’ PRAMS survey; however, it risks missing noncohabiting, non-married fathers that a “direct to dads” approach using the birth certificate-associated acknowledgment of paternity information may capture. PRAMS for Dads will also make use of father-specific incentives, such as father-focused graphics on the survey and envelopes to encourage survey engagement.

Although much of the attention in maternal and child health focuses on the mother as parent, PRAMS for Dads focuses squarely on the contributions, involvement, impact, and effect of becoming a father on men’s health and interaction with their partner and family. In addition, when both parents chose to participate in the study, maternal PRAMS data can be linked to PRAMS for Dads to better understand the interrelationships between parents and families.

With the notable gaps in empirical knowledge about expectant and recent fathers, initiatives to collect better public health data directly from fathers are necessary. Fathers are more involved with their children than ever before and are often integral to the health of mothers and children. Most research, however, continues to focus exclusively on maternal and child health, thus presenting an incomplete picture of family health. The absence of information on fatherhood complicates the ability of researchers to understand not only transitions to fatherhood but also motherhood and parenting in contemporary families. Creating a national surveillance program aimed at understanding the health and behavior of recent fathers is a necessary element to improving the public health of fathers, children, and families. **AJPH**

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REFERENCES

1. Monte L. Fertility research brief. Current Population Reports, P70BR-147, US Census Bureau. Available at: <https://www.census.gov/content/dam/Census/library/publications/2017/demo/p70br-147.pdf>. Accessed January 21, 2018.
2. Association of Maternal & Child Health Programs. AMCHP fact sheet. Father involvement in MCH programs. Available at: <http://www.amchp.org/programsandtopics/womens-health/resources/Documents/Father-Involvement-Fact-Sheet.pdf>. Accessed January 21, 2018.
3. Commission on Paternal Involvement in Pregnancy Outcomes, Joint Center for Political and Economic Studies. Commission outlook: best and promising practices for improving research, policy and practice on paternal involvement in pregnancy outcomes. Available at: <http://www.nationalhealthystart.org/site/assets/docs/CPIPO%20Report%20051910%20Final.pdf>. Accessed June 7, 2016.
4. Kotelchuck M, Lu M. Father's role in preconception health. *Matern Child Health J*. 2017;21(11):2025–2039.
5. Garfield CF, Duncan G, Rutsohn J, et al. A longitudinal study of paternal mental health during transition to fatherhood as young adults. *Pediatrics*. 2014;133(5):836–843.
6. Frey KA, Navarro SM, Kotelchuck M, Lu MC. The clinical content of preconception care: preconception care for men. *Am J Obstet Gynecol*. 2008;199(6):S389–S395.
7. Centers for Disease Control and Prevention. Unmarried childbearing. Available at: <http://www.cdc.gov/nchs/fastats/unmarried-childbearing.htm>. Accessed June 7, 2016.