Title:
Perinatal Nurse Home Visiting and Rates of Diabetes and Hypertension Among Child-Bearing Mothers

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Session Title:
Perinatal Health
Slot:
L 14: Sunday, 30 July 2017: 8:30 AM-9:45 AM
Scheduled Time:
8:50 AM

Keywords:
gestational diabetes, gestational hypertension and perinatal nurse home visiting

References:


Abstract Summary:
The purpose of this presentation is to examine perinatal nurse home visiting services for medically high-risk pregnant women and referral patterns related to their diagnoses of diabetes and/or hypertension that complicated their pregnancies.

Learning Activity:
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<tr>
<th>LEARNING OBJECTIVES</th>
<th>EXPANDED CONTENT OUTLINE</th>
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<tbody>
<tr>
<td>To provide the background of gestational diabetes and hypertension in pregnancy</td>
<td>Explain the physiology, signs and symptoms, treatment, and complications associated with GDM and hypertension in pregnancy</td>
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<tr>
<td>Discuss the perinatal nurse home visiting model of care in the U.S. used to manage pregnancy complications</td>
<td>Provide a concise overview of what the model of care looks like for perinatal nurse home visiting for pregnant women with complications</td>
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<td>To review the secondary data analysis conducted to examine referral patterns to understand the prevalence rates of GDM and hypertension in Philadelphia</td>
<td>Review the methodological steps involved in the secondary data analysis</td>
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<td>Discuss the findings of the secondary data analysis</td>
<td>Results of this secondary data analysis will be presented</td>
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<td>Discuss conclusions and implications for healthcare providers</td>
<td>The transitional model of perinatal nurse visiting tailored for women with hypertension and diabetes exists, however is absent in any maternal child health literature. The use of this new database provides opportunities for dissemination of information about this transitional model of care, about perinatal home visiting and its outcomes, and about medically high risk childbearing populations.</td>
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**Abstract Text:**

**Purpose:**

Increased rates of maternal mortality in the United States and prevalence rates of diabetes and hypertension especially among women who live in socioeconomically disadvantaged communities, underscore the importance of perinatal nurse home visiting tailored to pregnant women with hypertension and diabetes. Concurrently, an increasing number of maternal and child health (MCH) home visiting services have emerged nationally and internationally as a key strategy to improve population-level health among socioeconomically disadvantaged mothers and their families. Three years of life are crucial in determining an infant’s life course, the Affordable Care Act of 2010 allocated increased funding for MCH home visiting services. In addition, the national Maternal, Infant and Early Childhood Home Visiting (MIECHV) program, through the Maternal and Child Health Bureau of the Health Resources and Services Administration (HRSA), provides funding for evidence-based home visiting programs in communities with high rates of infant morbidity and mortality, often in low-income areas with diverse ethnic and racial marginalized minority populations. Specifically, public health MCH models of home visiting that are well studied and that provide programs that focus on reduction of psychosocial risk (e.g., Nurse-Family Partnership, Healthy Beginnings, Healthy Families America; Hayes et al., 2014; Issel, Forrestal, Slaughter, Wiencrot, & Handler, 2011; Olds et al., 2014; Wen et al., 2015) are now eligible for increased funding through the Affordable Care Act. They are listed on MIECHV’s Web site (HRSA, 2016). However, the evidence-based transitional care model (TCM) of perinatal home visiting that was developed decades ago by Brooten and colleagues (Brooten, Brooks, Madigan, & Youngblut, 1998; Brooten et al., 2001; Brooten et al., 2007; Brooten et al., 2012) for pregnant women with medical complications is absent from MIECHV’s list of eligible programs.
Before the publication of the randomized clinical trial by Brooten et al. (2001), the standard of care for many high-risk pregnant women with diabetes and hypertension was hospitalization. In their seminal work, these researchers implemented in-home nurse interventions for high-risk women with pregnancy-related complications that entailed careful monitoring with tailored nursing interventions that incorporated teaching, guidance, counseling, and activating appropriate referrals for transdisciplinary clinical and community resources (Brooten et al., 2002; Brooten 178 et al., 2007; Brooten et al., 2012). The frequent, long antenatal hospitalizations for pregnant women with hypertension and diabetes no longer exists as a result of these researchers’ findings, which changed practice and showed that perinatal nurse home visiting was cost effective (Brooten et al., 2001). However, little is known about the use, processes, and outcomes of perinatal nurse home visiting services that evolved from the original TCM.

Various models of home visiting programs exist to improve maternal child health (MCH) outcomes. In the context of rising maternal mortality rates, an evidence-based translational care model (TCM) of perinatal nurse home visiting tailored for pregnant women with hypertension and diabetes warrants attention. To study access to TCM perinatal nurse home visiting services for medically high-risk pregnant women, we examine referral patterns among this urban population of pregnant women referred for this model of care because of their diagnosis of diabetes and/or hypertension.

**Methods:** Secondary analyses were conducted to study referral patterns to home visiting and prevalence rates of diabetes and hypertension among childbearing mothers in Philadelphia. During 2012, 595 pregnant women with diabetes and/or hypertension were referred to perinatal nurse home visiting services.

**Results:** Factors influencing a larger dosage for services included the diagnosis of diabetes, gestational age at the time of referral and having public (Medicaid) insurance (p < 0.05). On average, 23,000 women give birth yearly in Philadelphia. The prevalence rate for diabetes was 4.2% with the Asian population having the highest prevalence of 7.8%. The prevalence rate of hypertension was 9.4% with the Black population having the highest prevalence of 12.7%.

**Conclusion:** The transitional model of perinatal nurse visiting tailored for women with hypertension and diabetes exists. Surprisingly underrepresented in the larger discourse of MCH programs, further research of this model of care is for this medically high-risk childbearing population is needed. Opportunities for innovation in health promotion and prevention interventions among this medically high risk childbearing populations have promise in changing life course trajectories of chronic illness.