

Phone contact with nurses linked with better outcomes for women with gestational diabetes

May 25 2012

Among women with gestational diabetes mellitus, referral to a telephone-based nurse management program was associated with lower risk of high baby birth weight and increased postpartum glucose testing, according to Kaiser Permanente researchers.

Investigators for the Kaiser Permanente Northern California Division of Research examined the associations between referral to telephone-based nurse consultation and outcomes in 12 Kaiser Permanente medical centers with variation in the percent of patients referred to telephonic nurse management.

"Compared with [women](#) from Kaiser Permanente medical centers where the annual proportions of referral to nurse management at the Kaiser Permanente Regional Perinatal Service Center was less than 30 percent, women who delivered in medical centers with an annual referral proportion of greater than 70 percent were less likely to have a high [birth weight](#) infant without increasing the risk or having a low birth weight infant," said Assiamira Ferrara, MD, PhD, a research scientist with the Kaiser Permanente Northern California Division of Research and the lead author of the study. "In addition, they were more likely to have postpartum glucose testing, which leads to earlier identification and management of postpartum [glucose intolerance](#) or diabetes."

The study appears online in the [American Journal of Obstetrics and](#)

[Gynecology.](#)

Investigators used data from the Kaiser Permanente Northern California GDM registry to identify women who had pregnancy complicated by GDM from 1997 through 2006. They restricted their cohort to women with GDM according to the National Diabetes Data Group criteria. During the study period, 96 percent of all pregnant women without preexisting diabetes who delivered an infant were screened for GDM. Researchers excluded women who delivered [multiple births](#) due to their increased risk of perinatal complications. Overall, researchers identified 11,435 women with GDM at the 12 medical centers, of whom 44.5 percent were referred to the perinatal service center.

"The Kaiser Permanente Regional Perinatal Service Center is a nurse-based management program for women with GDM that offers supplemental care via telephone counseling to women with high-risk pregnancies, including those complicated by GDM," explained co-author Monique Hedderson, PhD, a research scientist with the Kaiser Permanente Northern California Division of Research.

The program includes a call center with 32 registered nurses and two registered dietitians who offer phone counseling seven days a week and address glucose monitoring and control, diet and physical activity. Nurses are available 24 hours a day, seven days a week, while dietitians are available to patients during the week from 8 a.m. to 5 p.m. In addition to care provided by obstetricians, women referred to the center receive one to two counseling calls per week to help them manage their blood glucose levels during pregnancy. The center also sends a laboratory slip for postpartum glucose testing and a reminder telephone call if the screening test was not performed.

The Kaiser Permanente Regional Perinatal Service Center GDM program was first implemented in 1997 in two medical centers and

gradually disseminated to 12 more centers. By 2006, the program was implemented in all Kaiser Permanente medical centers.

"Due to the timeline for program implementation, there was some medical-center level variation in the percent of patients referred to the program," said Dr. Ferrara. "This allowed us to develop a quasi-experimental design to examine the association between referral to the program and infant adverse outcomes (infant high and [low birth weight](#)) and to measure processes such as patient postpartum [glucose testing](#)."

Provided by Kaiser Permanente

Citation: Phone contact with nurses linked with better outcomes for women with gestational diabetes (2012, May 25) retrieved 25 April 2024 from <https://medicalxpress.com/news/2012-05-contact-nurses-linked-outcomes-women.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.