

STOPPING GESTATIONAL DIABETES IN DAUGHTERS AND MOTHERS

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The goal of this study is to help young American Indian and Alaska Native (AIAN) girls learn how to prevent gestational diabetes (or diabetes that occurs during pregnancy). The Stopping Gestational Diabetes in Daughters and Mothers (Stopping GDM) is an education program on women's health that includes a video, an online book, and online questionnaires. Girls and their mothers participate together. Girls can also participate with another AIAN adult female, such as their grandmother, aunt, or older sister.

WHY IT MATTERS

Gestational diabetes (diabetes during pregnancy) is the most common complication of pregnancy. Having gestational diabetes (GDM) increases the mother's risk for developing diabetes following delivery of her baby and also increases the risk for her baby to later develop diabetes. American Indian/Alaska Native (AIAN) women have a higher risk for GDM and later getting Type 2 diabetes than non-AIAN white females. Lowering risk for GDM in young AIAN girls can reduce diabetes in future generations.

HOW WAS THIS DONE

If girls and their mothers (or other adult AIAN female caregivers) agree to be in the study, they meet with the research study nurse 4 times over 9 months. All girls and their mothers are in one of two groups, chosen randomly by the research team. Choosing randomly is like tossing a coin. All girls in both groups are weighed and measured for height at every visit and are checked to make sure they don't have diabetes already with a fingerstick blood test at the first and last visit. All mothers and daughters in both groups also answer questions on a computer and read pamphlets from the March of Dimes on having a healthy pregnancy at each visit. One group receives the Stopping GDM educational video, part 1 of the booklet, and part 2 of the booklet in their first 3 visits. The other group does not receive the booklet or video until the end of the study. Besides containing information on how to have a healthy weight, the education program teaches what GDM is; its risk factors (or what things increase the chances of getting GDM); the problems for a mother and her baby that can be caused by GDM and an unhealthy weight during pregnancy; changes to a girl's body as she becomes a woman; and, how to plan for a healthy pregnancy. Mothers also receive advice about how to talk with their daughters about sensitive topics like dating and starting to have periods.

WHAT WAS FOUND

From the pilot study, conducted in one urban AIAN health clinic with only one visit, we learned this educational intervention was acceptable to both AIAN mothers and daughters. Compared to their knowledge before watching the video and reading the eBook, we found positive changes in their diabetes prevention and women's health knowledge after reading the Stopping GDM eBook and watching the video. We also found that the daughters' self-confidence in living a healthy lifestyle and planning for a healthy pregnancy improved. Mothers and daughters rated their satisfaction with the web-based eBook and video as high or very high.

WHAT IT MEANS

So far, our research shows that without education included in the Stopping GDM program, AIAN girls and their mothers don't have the knowledge they need to prevent gestational diabetes in their lives. Learning how to prevent GDM and its complications for both the mother and the baby could benefit AIAN communities by reducing birth complications associated with GDM and overweight and reducing diabetes in future generations.

This summary describes the works of:

Moore K, Charron-Prochownik D, and the SGDM Study Group for "Stopping Gestational Diabetes in Daughters and Mothers". For more information please contact Kelly Moore, MD, at Kelly.moore@ucdenver.edu