Diabetes in pregnancy: an opportunity for healthy change

Jessica Lynn

In July, the Centers for Disease Control (CDC) published updated statistics on diabetes in the United States. Nearly half the US population has diabetes or its precursor, pre-diabetes.[1] On one hand, these numbers are staggering. On the other, there's no disease with such opportunity for prevention and even reversal. When I was growing up with type 1 diabetes (T1D), my father often reminded me how fortunate I am to have a manageable disease. He told me I could live a long and even healthier life as a result of having T1D. "It's not a death sentence. It's an opportunity!" he'd say.

I realize this is not a typical viewpoint. Barriers to managing a chronic disease are many and multifaceted. Taking advantage of an opportunity like this requires desire, consciousness and a confluence of positive factors, including mental and physical health, access to healthcare, education, financial tools and community support.

In addition to having diabetes and the privilege of being a mother of two, I am a nurse midwife and perinatal diabetes educator. I have had the great honour of delivering babies and caring for women with diabetes in the US, Jamaica and Guatemala. Today, I am part of a dedicated diabetes-in-pregnancy practice at NYC Health + Hospitals, Woodhull in Brooklyn (New York, US) with a team of high-risk doctors, nurses and dietitians. We work in a diverse and under-served population where rates of diabetes and its complications are even higher than average in the US. We recognize the need to provide more comprehensive screening and support as our population has been deeply affected by racial and socioeconomic health disparities.

Working with a population of pregnant women who have diabetes, I am inspired to see their remarkable potential as change agents. They have the lowest no-show rate. They readily make healthier food choices and decide to exercise. They consistently drop their HbA_{1c} throughout pregnancy. Their health habits routinely influence their families. Women are lifestyle guides for their children, partners, parents, churches and schools. Observing this made me wonder: what if we could help women sustain the healthy changes made during pregnancy for the rest of their lives?

Jessica Lynn

I developed and continue to update diabetes in pregnancy guidelines for the New York City public hospital system, but guidelines are not enough. Diabetes in pregnancy deserves a conversation, a sharing of ideas for how to make change happen. In addition to talking with patients and other healthcare providers, I often speak to obstetrics departments to encourage more comprehensive diabetes prevention and management. Here are some highlights from my presentations:

Pregnant women with the clinical team of Woodhull Hospital's Diabetes in Pregnancy Practice

All health care providers need diabetes education

Diabetes is no longer a disease for endocrinologists alone, nor solely primary care providers. Diabetes is present in every medical specialty and at home for people without any medical care. In obstetrics, we are often the first healthcare access point for women. This makes us primary care providers. To help create positive change in the diabetes epidemic, I encourage all healthcare providers to borrow some wisdom from a diabetologist.

Suspect hyperglycaemia

Knowing that hyperglycaemia affects almost half our population, we added HbA1C to our initial labs for all pregnant women with or without known diabetes. We have been able to put individual hyperglycaemia on the map, screen women earlier for gestational diabetes mellitus (GDM) and more closely follow changes in glycaemia throughout pregnancy. We actively find undiagnosed type 2 diabetes (T2D), as well as identify and discuss pre-diabetes within a receptive population.

High blood glucose is the culprit, not diabetes

Hyperglycaemia (undiagnosed or unmanaged) causes miscarriage, excessive fetal growth, birth trauma, increased caesarean section rates, and even fetal death. Hyperglycaemia in pregnancy also contributes to neonatal complications and childhood disease including obesity, T2D and non-alcoholic fatty liver disease. When I tell a woman she has diabetes in pregnancy, she is often frightened, disappointed, and confused. I reassure her it's not the diabetes diagnosis but high blood glucose that can cause harm to her and her baby. I always let her know that our medical team will help her learn how to manage blood glucose and reduce her risks of complications.

Collaborate across disciplines

The American Congress of Obstetricians and Gynecologists (ACOG) recently made sweeping changes in their GDM guidelines: recommending more comprehensive screening, expanding the time frame for postpartum glucose testing, and reconsidering the role of insulin in pregnancy as opposed to oral hypoglycemics.[2] Throughout the guidelines, ACOG referenced the position of the American Diabetes Association. This is an example of sharing research and clinical experience to improve outcomes. Good news for all!

Women need individualized and culturally specific care

First line therapy for diabetes is lifestyle change, and lifestyle is affected by cultural, socioeconomic and family factors. It's important to get to know your patient. Ask her what happens in a typical day. Is her schedule determined

by her children's activities? Does she work at night? Does she eat pizza and soda and or tacos and rice? Consider helping her tailor her life, instead of overhauling it. This leads to a higher likelihood of success. We have a Yemeni population at my hospital and I noticed many women have high blood glucose following their afternoon meal. I learned they were eating asida, essentially a cooked wheat flour sometimes with butter or honey and often eaten alone. Once I knew this, I was able to suggest workable options: smaller portions, limiting the honey, and going for a walk after the meal. Talking about culturally important factors like asida and fasting during Ramadan have been trust building. The ultimate result: improved blood glucose that's sustainable in pregnancy and beyond.

Every visit is a preconception visit

With or without diabetes, almost half of pregnancies in the United States are unintended. Unplanned pregnancy is associated with poor outcomes, more so for women with diabetes. Healthcare providers should have preconception discussions with women of childbearing age. One Key Question® can be a useful tool. Ask women at every visit 'Would you like to become pregnant in the next year?' If the answer is no, offer contraception. If yes, provide preconception care. For women with diabetes, this starts with HbA_{1c} <6%. In our busy practice, we encourage this approach.

Discuss goals with women

I've seen first-hand that pregnant women are interested in health and extremely goal oriented. Discuss targets for blood glucose, HbA_{1c}, and weight at every visit. I often give women their HbA_{1c} history in writing so they can be involved and proud when they meet their goals. Pregnant women with diabetes can and do reach those goals, more often when discussed with a healthcare provider.

GDM is a form of prediabetes

Gestational diabetes does not disappear at birth. This myth of its disappearance is pervasive and potentially injurious. At the time of their initial postpartum glucose testing, nearly half of women diagnosed with GDM have either impaired fasting glucose, impaired glucose tolerance, or overt diabetes. I tell every woman I meet in our practice, "You have gestational diabetes which often leads to type 2 diabetes. However, your healthy changes in diet, weight loss, exercise, and breastfeeding can help prevent or delay diabetes in your future."

Small changes are important changes

Eliminating liquid carbohydrate can have a powerful effect on health, changing the course of diabetes. Recently, a woman in our practice with no known history of diabetes had an HbA_{1c} of 6.7% at her initial prenatal visit. She was drinking 4 glasses of juice a day, but otherwise had a healthy diet of moderate carbohydrate, no processed food, lots of vegetables and proteins. Still, I thought she would need insulin therapy. Fortunately, she was willing to completely stop drinking juice. I had her monitor blood glucose and return in 5 days. To my surprise, her blood glucose was 100% within our pregnancy target. She proceeded to drop her HbA_{1c} to 5.9% in the second trimester and 5.2% by the third trimester having made just that one change in her diet.

Believe in the ripple effect

Think of women as central to the health of their families and communities. Talk about reducing or eliminating juice and soda intake. Encourage more physical activity, stress reduction and adequate sleep. Women can and will alter the lifestyles of their children and beyond. They are central to the powerful ripple effect for change we need to see in diabetes.

Be inspired. Be positive. Diabetes is an opportunity for health!

Jessica Lynn, MSN, CNM, CDE is a nurse midwife and perinatal diabetes educator in Brooklyn. She has lived passionately with T1D for more than 40 years, and devotes her career to diabetes care for women.

1. Centers for Disease Control and Prevention. National Diabetes Statistics Report, 2017. National Center for Chronic Disease Prevention and Health Promotion, Division of Diabetes Translation. July 17, 2017. Accessed via Internet: https://www.cdc.gov/diabetes/pdfs/data/statistics/national-diabetes-statistics-report.pdf
2. The American College of Obstetricians and Gynecologists. Practice Bulletin: Gestational Diabetes Mellitus. July 2017. Accessed via Internet: https://www.acog.org/Womens-Health/Gestational-Diabetes
3. Bellanca HK, Hunter MS. "One key question" Screening women for pregnancy intentions as a critical reproductive health strategy. Oregon Foundation for Reproductive Health. Accessed via Internet: https://www.arhp.org/uploaddocs/RH13_Presentation_One_Question.pdf