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Short and Sweet: A Commentary on Short Sleep Duration and Hyperglycemia in Pregnancy

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In their meta-analysis of 12 studies, Reutrakul and colleagues unequivocally conclude that short sleep duration is a risk for hyperglycemia in pregnancy, also known as gestational diabetes mellitus (GDM) [1]. This should not be surprising, since short sleep duration is a known risk factor for Type 2 diabetes in the general adult population. In GDM, however, it is twice as serious because two patients, mother and fetus, are impacted by hyperglycemia. The mother may require early induction of labor because the fetus is getting too large for gestational age, a cesarean birth is highly likely, the newborn may require intervention for hypoglycemia, and both mother and infant usually require a longer hospital stay.

In pregnancy and in the general population, risk factors for hyperglycemia include age, race, and body mass index (BMI). In pregnancy, additional risk factors include parity and increasing gestational age. Controlling for all these factors, Reutrakul and colleagues' exquisite meta-analysis still concluded that short sleep duration during pregnancy (less than 6.25 h or less than 7 h) placed women at high risk for GDM.[1] Their findings have direct implications for both clinicians and researchers that will be briefly highlighted in this commentary.

As all meta-analyses should do, their results answer some questions and raise even more questions to support their call for more randomized clinical trials (RCT).[1] RCTs are always difficult to design for pregnant women, and the ethical considerations are complex. For me, a critical question about timing would be amenable to an RCT based on the summary of when measures were evaluated in Table 2, with a range of 9 to 29 weeks gestation.[1] Because early intervention and prevention has high potential for minimizing adverse maternal-infant