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## Pregnancy Weight Gain: Why the Disconnect?

BY SUSAN LONDON

FROM THE ANNUAL MEETING OF THE SOCIETY OF OBSTETRICIANS AND GYNAECOLOGISTS OF CANADA

VANCOUVER, B.C. – When it comes to counseling women about weight gain during pregnancy, there is plenty of room for improvement, new data suggest.

In a survey of more than 300 pregnant women, fewer than a third reported being counseled on the topic, researchers reported at the meeting. And even fewer, merely an eighth, were counseled correctly about how much weight to gain.

In likely related findings, three-fourths of women who were overweight or obese before conceiving planned to gain more weight than was recommended for them in guidelines.

"A lack of reported counseling has been associated in the literature with inappropriate weight gain, both excessive and inadequate," said lead investigator Dr. Sarah McDonald, an ob.gyn at McMaster University in Hamilton, Ont. "So these findings were very concerning for us."

She noted that most women who were approached agreed to participate in the survey and were comfortable about discussing weight. Therefore, "it appeared unlikely that the lack of reported counseling was due to patient-driven factors, apart from possibly forgetting."

Interestingly, a staggered companion survey of the providers had dramatically different findings, showing high reported rates of counseling. "It was like I was surveying people on a different plan-

Major Finding: Only 29% of women were counseled about gaining a specific amount or range of weight during pregnancy, and 12% were counseled correctly about how much to gain.

**Data Source:** A cross-sectional survey of 310 pregnant women with a live, singleton gestation, who visited prenatal clinics.

**Disclosures:** Dr. McDonald reported that she had no relevant financial disclosures.

et," she commented. "We think we are doing very well," yet there is an obvious discrepancy that is as yet unexplained.

Citing the obesity epidemic, Dr. McDonald endorsed repeated counseling of women about weight, both before and during pregnancy.

"Obviously, an optimal BMI [body mass index] prepregnancy is ideal, but that's not the situation where most of us come into contact with our patients; it's when they are already pregnant. Then, I think talking about optimal gestational weight gain to not compound the problems of overweight and obesity is important," she said. "But given the size of the [obesity] epidemic, [the approach has] got to be multipronged."

In 2009, the U.S. Institute of Medicine released new recommendations regarding gestational weight gain, tailored to prepregnancy BMI, that have been adopted by Canada and other countries.

"However, previous studies done in the era of the 1990 guidelines have shown that only about 30%-40% of pregnant women gained the appropriate amount of weight during pregnancy," Dr. McDonald noted. "And we were curious what was going on in the era of the new guidelines."

The investigators surveyed 310 women (94% of those approached) who made at least one visit to representative Hamilton prenatal clinics, other than for pregnancy diag-

nosis, and currently had a live, singleton gestation. The women's mean age was 30 years, and the median gestational age was 33.0 weeks. Fully 74% were white, and for 43%, the birth would be their first. They had a mean prepregnancy BMI of 25.1 kg/m².



Clinicians' survey responses were so different, 'it was like I was surveying people on a different planet.'

DR. McDONALD

"Interestingly enough, 84% of the women reported that they were either comfortable or very comfortable talking about weight-related issues with their care provider, despite the fact that the mean BMI [in this study] is already in the overweight category prepregnancy," Dr. McDonald observed.

Only 29% of the women reported that their provider counseled them to gain a

specific amount or range of weight, and for just 12% overall, that amount or range was correct according to the new guidelines. Only about a quarter of women reported being told that there were risks associated with gaining too much or too little weight during pregnancy.

The median number of prenatal visits before the survey was 10 for the study population, she pointed out, and "so there were multiple opportunities for discussion about weight gain."

"We wondered, are clinicians just too busy to be talking about weight and weight-related matters, and nutrition, and preventive-type medicine?" said Dr. McDonald. Yet nearly all of the women (97%) reported being counseled to take a vitamin.

When asked how much weight they planned to gain during pregnancy, only 12%-54% of women, depending on prepregnancy BMI category, cited an amount within the guideline-recommended range for them. In particular, in a finding that she described as "alarming," 75% of overweight and obese women were planning to gain more weight than was recommended for them.

The proportion of women counseled about weight gain differed by the type of provider that had provided the majority of a woman's pregnancy care; it was 40% for midwives, 24% for obstetricians, 23% for general practitioners, and 28% for other providers. The proportion that was correctly counseled showed a similar pattern, but the differences were not significant.

## Influenza Vaccine in Pregnancy Seems to Benefit Baby, Too

BY PATRICE WENDLING

FROM THE ANNUAL MEETING OF THE INFECTIOUS DISEASES SOCIETY FOR OBSTETRICS AND GYNECOLOGY

CHICAGO – Influenza vaccination appears to improve neonatal outcomes, but coverage remains inadequate among pregnant women.

Among 1,641 evaluable women delivering at Duke University Medical Center,

weeks; both P less than .0001).

Major Finding: Receipt of any flu vaccination was significantly associated with higher infant birth weight (3,178 gram vs. 2,903 grams) and

**Data Source:** Preliminary analysis of 1,641 women delivering at Duke University Hospital during the 2009-2010 influenza season.

longer gestational age (38.3 weeks vs. 36.8

**Disclosures:** The study was funded by the 2010 American College of Obstetricians and Gynecologists/Merck & Co. Research Award on Immunization. Dr. Fortner and her colleagues reported no relevant financial disclosures.

Durham, N.C., during the 2009-2010 influenza season, receipt of any flu vaccination was significantly associated with higher infant birth weight (3,178 g vs. 2,903 g) and longer gestational age (38.3

weeks vs. 36.8 weeks; both *P* values less than .0001).

Women who received at least one flu vaccine also were significantly less likely to require an antepartum visit or hospital admission than were those who did not (39% vs. 44%; P = .005).

"This information supports prior accumulating data that receipt of a flu vaccine improves not only maternal outcomes, but also birth outcomes," Dr.

Kimberly Fortner said at the meeting.

In all, 44% of women in the preliminary analysis received both vaccines in compliance with recommendations, far higher than historical influenza vaccination rates of 12%-34% and comparable to other reports from the season. Another 7% elected no vaccine at all, and 24% of the population had no documented receipt of vaccine in obstet-

rical records or other electronic medical

Uptake of seasonal influenza vaccine was 58% vs. 55% for the 2009 H1N1 influenza vaccine, which is unique among



The vaccine gives pregnant women a greater chance of having a heavier baby who is born closer to term.

published prior literature. Even though rates were nearly equal, 24% of women elected to receive only one of the two recommended vaccines, resulting in inadequate coverage, said Dr. Fortner of the Translational Medicine Institute at Duke.

The researchers hypothesized that pregnant women may have had inappropriate or inadequate vaccination during the 2009-2010 flu season due to issues of vaccine distribution, sensationalism of the H1N1 influenza pandemic, and recommendations by the Centers for Disease Control and Prevention Advisory

Committee on Immunization Practices that pregnant women receive both the seasonal and H1N1 influenza monovalent vaccines.

The earlier women went in for prenatal care, however, the more likely they were to receive a vaccine, she said.

Mean gestational age at first prenatal visit was significantly lower at 14.8 weeks among women who received the vaccine, compared with 18.6 weeks for

women who did not receive any vaccine and 21.2 weeks for those with unknown vaccine status (*P* less than .0001).

Black women and those with public insurance or no insurance were significantly less likely to receive any vaccine.

In multivariate analysis that adjusted for maternal age, black race, less than a high school education, Medicaid or no insurance, and medical comorbidities, receipt of any influenza vaccine during that season was significantly associated with an estimated 133.7-g increase in birth weight (P = .0003).