## Pregnant Teens' Higher-Risk Factors Quantified

BY SHERRY BOSCHERT San Francisco Bureau

NEWPORT BEACH, CALIF. - Compared with pregnant adults, pregnant adolescents are significantly more likely to be anemic, to smoke during pregnancy, and to deliver before 32 weeks' gestation, a retrospective study of nearly 26,000 pregnancies found.

These factors, plus a significantly lower rate of breast-feeding in the 996 pregnant adolescents in the study, put these young mothers and their offspring at higher risk compared with the pregnant adults in the rest of the cohort, Dr. Andrew Stewart of Dalhousie University, Halifax, N.S., said at the annual meeting of the North American Society for Pediatric and Adolescent Gynecology.

Dr. Stewart and his associates analyzed data on all nulliparous, singleton gestations resulting in live births from 2000 to 2006 in Nova Scotia; these data are from the H.B. Atlee Perinatal Database. The investigators compared the characteristics and outcomes for adolescent mothers aged 18 years and younger with those of older mothers.

Their findings stress the importance of regularly checking hemoglobin levels in pregnant adolescents, of treating anemia, and of making sure they have access to prenatal vitamins and to nutritionists or social workers when needed. Extra effort should be put into encouraging the cessation of smoking, and clinicians should consider educating pregnant adolescents about the signs and symptoms of preterm labor, said Dr. Stewart.

'We must ask ourselves if we should be screening these patients with a transvaginal ultrasound to monitor cervical length," he added. The results also point to a need for increased promotion of breast-feeding through education and support before and after delivery

Although it's well accepted that adolescents are a high-risk obstetric population, the medical literature is contradictory about the specific risk factors and outcomes of adolescent pregnancies, he noted. The literature does not reveal whether young maternal age itself enhances the risk for poor obstetric outcomes, or if they are the result of a constellation of biological, psychological, and sociological factors.

In the current study, 39% of adolescents smoked during pregnancy, compared with 18% of adults. In all, 10% percent of adolescents and 8% of adults were anemic.

The adolescents weighed less than the adults before pregnancy (59 kg vs. 69 kg) and gained more weight during pregnancy (17 kg vs. 16 kg); these differences between age groups were statistically significant. The lower an adolescent's weight before pregnancy, the more she gained during pregnancy, he said.

Spontaneous vaginal delivery was significantly more common for adolescent mothers (72%) than for adult mothers (54%). Adolescents had lower rates of assisted vaginal delivery (14%) or C-section (15%), compared with adults (17% and 29%).

Although the mean gestational age at birth was 39 weeks in both groups, 2% of adolescents delivered before 32 weeks' gestation, compared with 1% of adults, which was a significant difference. Adolescents were less likely, however, to deliver a baby needing neonatal intensive care (9%), compared with adults (13%).

After controlling for the effects of smoking and anemia, the investigators found that being age 18 years or younger increased the likelihood of delivery before 32 weeks by 65%, Dr. Stewart reported. After controlling for the effects of young

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age, investigators found that smoking and anemia remained significant risk factors for preterm birth.

The mean weight of 3,311 g for babies born to adolescents was significantly lower than the mean weight of 3,404 g for babies born to adults. Babies with low birth weight (defined as less than 2,500 g) constituted 8% of births to adolescents and 6% of births to adults, a significant difference.

Adolescents were less likely than adults to develop gestational diabetes (1% vs. 2%) or mild pregnancy-induced hypertension (5% vs. 9%), or to give birth to a macrosomic baby (10% vs. 13%).

At discharge from the hospital, 40% of adolescent mothers were breast-feeding, compared with 72% of adult mothers.

The investigators hope to conduct future research on the potential influence of diet, socioeconomic status, small stature, and sexually transmitted infections on the increased risk for preterm delivery in pregnant adolescents.

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