Reuters Health

Stress, high blood pressure tied to birthweight

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By Amy Norton

NEW YORK (Reuters Health) - Pregnant women with both high stress levels and high blood pressure may be at increased risk of having an underweight baby, a study suggests.

What's more, researchers found, the combination of high stress and elevated blood pressure was twice as common among African-American women versus white women. They say the findings may help explain why black women are at particular risk of having a low-birthweight baby.

In the study, which appears in the journal Psychosomatic Medicine, researchers followed 170 white and African-American women who had their blood pressure and stress levels measured at different points during pregnancy.

The researchers assessed the women's stress levels in several ways. One questionnaire asked about chronic stressors in everyday life -- such as whether the women worried about paying their bills or about crime in their neighborhood. They were also asked whether they often felt stressed or out of control, and about any symptoms of general anxiety and pregnancy-related anxiety.

Overall, the study found, women who had both high stress levels and high diastolic blood pressure were at increased risk of having an underweight baby. Diastolic blood pressure refers to the second number in a blood pressure reading.

While the high stress/high blood pressure combination seemed to affect birthweight for white and black women alike, black women were more likely to have both problems.

This higher prevalence may help explain why African-American women are generally at greater risk of having a low-birthweight infant, according to lead researcher Dr. Clayton J. Hilmert, of North Dakota State University.

The findings also suggest that pregnant women with both high blood pressure and chronic stress should be monitored more closely, he and his colleagues say.

As it stands, some doctors assess pregnant women's stress levels, particularly when it is a high-risk pregnancy, Hilmert told Reuters Health.

"But research has been suggesting that it may need to be considered more often, in a variety of populations, and possibly in more standardized ways," he noted.

According to the researchers, stress and high blood pressure may affect fetal growth in a number of ways -- by constricting blood flow to the uterus, for example, or through effects on hormone levels or immune system function.

SOURCE: Psychosomatic Medicine, January 2008.

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