Reducing Alcohol Use Reduces Prematurity and Low Birth Weight

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One of the goals of the Public Health system in Georgia is the reduction of low birth weight and preterm birth. It is well known that infants who are small or born before 37 weeks gestational age have a higher risk for morbidity and mortality. Low birthweight babies contribute to an infant mortality rate in Georgia that is higher than in most other states. The problem is more serious in African-American women and among women who are economically disadvantaged.

A recent study from Detroit suggests that educating women about the effects of substance use in pregnancy could help to reduce preterm birth and lower birthweight. In this study, which was carried out at an inner city hospital in Detroit, 6,684 women were recruited and 3130 were followed from the time that they applied for prenatal care until their infant was born. At the time the women were enrolled in the study, the investigators asked questions about alcohol, cigarette, and other drug use, including cocaine, marijuana, morphine and methadone as well as other social and medical factors that might affect fetal growth and health. Because of the hospital where the recruitment was done, the majority (92%) of women in this study were African-American and economically disadvantaged.

In this group of women, alcohol and cigarette use was relatively common and cocaine use was reported by 6.6% of the women. Only 2.1% of the women reported other illegal drug use. For the purposes of analysis, premature birth was described as
either “extreme”, that is <32 weeks gestational age, or “mild”, that is, 32 to 36 weeks. The authors report that alcohol and cocaine use were both associated with “extreme” prematurity but that the effect of alcohol use was twice that of cocaine, particularly for women who were less than 30 years old when their child was delivered. There was no effect of cigarette use on the likelihood of delivery before 32 weeks. For “mild” prematurity (32 to 36 weeks), the risk was higher for younger women who used cocaine and cigarettes and for older women (30 years and above) who used alcohol, cocaine or cigarettes. The authors also noted that, for delivery at less than 32 weeks, abstaining from alcohol use led to a preterm rate similar to that of the women who did not use any drugs or alcohol. They suggested that alcohol was the most important of the drug-use factors for this kind of preterm birth. The authors noted that, based on the rates of prematurity and alcohol and drug use in this sample, if women abstained from alcohol use, 41.4% of births before 32 weeks could be avoided.

This study suggests that prevention efforts with pregnant women should involve education about the effects of alcohol, as well as other drug use, on pregnancy outcomes. Particularly for women older than 30, such efforts would reduce the change of a low birthweight infant. For more information about this study, you can consult the article listed below.

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Reference