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GENECARE

How much is too much?

Alcohol and pregnancy

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Emma is pregnant with her fourth child and is scared. She has been on her own raising her three children since last year when the divorce became final. Her relationship with her husband, Peter, had deteriorated over the years in part due to the fights that occurred during the couple's evenings of heavy drinking. Two of Emma's children are in school but her youngest son, Jamie, is not and accompanies her to her OB appointment.

Emma meets with a genetic counselor at the OB office to discuss the results of the screening tests drawn at her last visit. During Emma=s session the counselor notices that Jamie has some interesting facial features. Jamie=s philtrum is smooth (this area between a person's nose and their upper lip usually has ridges), his face appears somewhat flat (especially the bridge of his nose), and he is small for a four-year-old. Jamie makes quite a disturbance during the session, often interrupting the conversation as he bounces around the room, ignoring Emma's pleas for him to settle down.

As part of the session, the genetic counselor asks Emma questions about her possible exposure to toxins, medications, and other substances during the pregnancy. Emma responds that she has had occasional glasses of wine during the pregnancy but that she drank some during her other pregnancies and her kids turned out just fine. Because of her life experience, growing up in a family and being in a marriage where alcohol use was prevalent, what Emma considers to be occasional use qualifies as a heavy intake level. The counselor also realizes that women tend to under-report the amount of alcohol they drink because they are aware that drinking during pregnancy is "wrong". Yet most women are not quite sure why it is wrong to drink. Also troubling is that Jamie's appearance and behavior are suggestive of a child who may have been exposed to alcohol before birth.

Jamie, like an estimated 1 in every 500 children in the US, has fetal alcohol syndrome (FAS). Many more children show some effects from alcohol exposure in the womb but do not have all the symptoms of FAS. Children with FAS tend to have delays in growth and small head size. They can have mental retardation, seizures, attention deficit disorder and/or hyperactivity. In some cases, fetal alcohol exposure results in birth defects involving the heart or genitalia. For ethical reasons it is not possible to do controlled studies on alcohol exposure in pregnancy to determine exactly how much it takes to have an effect on a baby's development. There are sets of twins in which one twin developed FAS while the other twin did not. Since twins experience virtually the same environment in the womb, this suggests that it may not be possible to answer the question of Ahow much is too much?@ We do know that binge drinking, especially during certain critical times in pregnancy, and chronic high volume usage increases the chance of FAS. Since no amount of alcohol can be proven safe, the general recommendation is to abstain during pregnancy.

Like most Americans, Emma has heard about Acrack babies@ and their behavior problems. But later, when Jamie=s pediatrician diagnoses him with FAS, Emma is surprised because it is the first time she has heard about the specific effects of alcohol. In our story, the genetic counselor has a good background in teratology (the effects of substances on pregnancy) and the pediatrician makes good observations as well. However, it is still difficult for health care providers to recognize FAS and to know what to do when they discover a mother is drinking heavily during pregnancy. Surprisingly, studies show physicians are not as aware of the symptoms of FAS as we might expect, given its high incidence, and so it often goes undiagnosed. Increasing public awareness of FAS might help prevent some of the problems that children like Jamie face.

Health care providers should make it part of their routine examination to ask any expecting mother about her drinking habits. It may be tempting to assume that someone else **B** the primary care or obstetric health provider-will educate an expecting mother about the dangers of alcohol or ask them about their usage. Asking a question cost no money but the NIH estimates the cost of treating FAS in the US approaches 2 billion dollars a year. That cost includes special education, judicial system expenses, as well as health care dollars.

There is no guarantee that an expecting mother will paint an accurate picture of her alcohol intake for her health care providers. A mother abusing alcohol may be in denial of the problem or may fear that disclosing the problem will result in the loss of her children or bring criminal charges against her. There have been cases in which pregnant women have been jailed to force them to abstain from alcohol. However, prison is certainly not the ideal place for an infant to take its first breath and the threat of punishment may scare women away from seeking treatment and routine prenatal care.

Despite the challenges, health care providers should be familiar with alcohol treatment facilities and be able to make referrals when needed. Most mothers want their babies to be healthy and pregnancy can be a strong motivator to participate in treatment. In FAS, the old cliche about an ounce of prevention being better than a pound of cure certainly holds true. It is worth all of our efforts raise awareness of FAS for the sake of children like Jamie and those around them.

GeneCare Medical Genetics Center, in Chapel Hill, offers counseling to women at risk for having a baby with birth defects or other complications due to exposure to alcohol and other teratogens. For more information please call (919) 942-0021 or 1-800-277-4363 or visit our web site: www.genecare.com. For information about FAS prevention, diagnosis, and support group resources in your area, visit the FAS National Directory at www.mofas.org or call the NC Fetal Alcohol and Drug Program at 1-800-532-6302.