The Conventional Pregnancy Wisdom is Right—Do **NOT** Drink while Pregnant.

Once again, here comes a book "Expecting Better: Why the Conventional Pregnancy Wisdom is Wrong—And What You Really Need to Know" where the author Dr. Emily Oster, a professor of economics at the University of Chicago, reassures pregnant women that drinking just one alcoholic drink a day during pregnancy is safe. To the contrary, The conventional pregnancy wisdom is <u>Right</u>—and here is what you Really need to know.

First, a little history to set the stage... The year 2013 marks the 40th anniversary of the coining of the term fetal alcohol syndrome (FAS) in the medical literature. But 1973 was not the year we discovered the dangers of alcohol use during pregnancy. Clear reference to this danger dates back to biblical times "Behold, thou shall conceive, and bear a son; and now drink no wine or strong drink...Judges 13:7".

Individuals with FAS have severe, lifelong brain damage caused by their mother's use of alcohol during pregnancy. Although we have made tremendous progress over the past 40 years educating women and medical professionals about the dangers of alcohol use during pregnancy, the challenge continues.

The latest challenge is coming from women pushing back against public health notices like the Surgeon General's Advisory "There is no known safe amount of alcohol to drink while pregnant". Apparently we, the medical profession, have taken all the fun out of pregnancy. Surely this public health message is too conservative, too overly protective. After all-how much damage could a single drink a day possibly do? Helping to fuel this pushback are headlines from two recent studies out of Denmark and Ireland claiming drinking is safe. Add to this the release of Dr. Oster's book in August 2013 and you have the perfect storm

In an interview with the <u>Wall Street Journal</u>, Dr. Oster reports "When I looked at the data from hundreds of studies, I found, basically, no credible evidence that low levels of drinking (a glass of wine or so a day) have any impact on your baby's cognitive development". She goes on to report "The key to good decision making is evaluating the available information—the data—and combining it with your own estimates of pluses and minuses. As an economist, I do this every day." Well, as a Professor of Epidemiology and Pediatrics, director of an <u>FAS diagnostic clinic</u> that has diagnosed over 2,550 individuals with fetal alcohol spectrum disorders (FASD) over 20 years, and creator of one of the largest FASD databases, I too do this every day. As an economist, Dr. Oster concludes a drink a day during pregnancy is safe. As a pediatric epidemiologist, I conclude a drink a day is not safe. So which of us is correct?

I had an opportunity to speak with Dr. Oster the other day. We have a bit in common. We are both professors. We both crunch numbers for a living. And I do believe we both care deeply about the well-being of children. In preparation for our conversation, I had my FASD database open, ready to answer any question she may have.

She asked me "What proportion of children born with FAS were exposed to only 1 drink per day?" I think she expected me to say a drink per day cannot cause FAS. But my answer was "1 out of every 14 children we have diagnosed with full blown FAS over the past 20 years had a reported exposure of just 1 drink per day". In fact, one of these children was reported to have been exposed to just 1 beer

per day for the first 4 months. While it is true that the majority of children born with FAS were exposed to higher levels of alcohol, some (like this child) were exposed to just 1 drink a day.

So how can this be true? How could peer-reviewed published studies like the Danish and Irish studies fail to find an effect? How could Dr. Oster, a University professor, review the medical literature and come to the wrong conclusion?

Let me illustrate how this happens.

 <u>Danish researchers</u> studied 870 preschool children whose mothers drank during pregnancy and compared them to 758 preschool children whose mothers did not drink during pregnancy. They concluded that drinking up to 8 alcoholic drinks per week during pregnancy had no effect on children's' intelligence or attention levels. Headline: <u>Moderate drinking during pregnancy</u> <u>branded 'safe'</u>.

But wait... if you look at the <u>2,550 alcohol-exposed children</u> who received FAS diagnostic evaluations in the WA State FAS clinics over the past 20 years:

- a. 1 out of every 7 children diagnosed with full FAS (the most severe outcome of alcohol exposure) had a reported exposure of 1-8 drinks per week. (The Danish study did not conduct FAS diagnostic evaluations on the children)
- b. Half of the children with FAS in our clinic had developmental scores in the normal range as preschoolers. But all had severe brain dysfunction confirmed by age 10. (The Danish study only assessed preschoolers.)
- c. Only 10% of our children with FAS had attention problems by age 5. 60% had attention problems by the age of 10. (The Danish study only assessed attention at age 5.)
- d. Only 30% of our children with FAS have an IQ below normal. But 100% had severe dysfunction in other areas like language, memory, and activity level (The Danish study did not assess these other areas.)
- 2. <u>Irish researchers</u> studied over 5000 alcohol-exposed pregnancies and concluded that women who drink in early pregnancy, even those who binge drink, are not at increased risk for having a premature baby, a low birth weight baby, or a pregnancy complicated by preeclampsia. Headline: <u>Drinking early in pregnancy not associated with worse outcomes</u>.

But hold on, if you look at the 2,550 children from our FAS clinic:

- a. The vast majority of children born with full blown FAS were NOT born premature (62.4%), were NOT low birth weight (75.9%), and were NOT the result of a pregnancy complicated by preeclampsia (99.4%). (The Irish study looked at outcomes that are very insensitive measures of the adverse effects of prenatal alcohol exposure).
- 3. One final example: Dr. Oster (an economics professor) reviews the medical literature on FASD and concludes it is safe to drink 1 drink a day during pregnancy.

But once again, if you look at the 2,550 children from our FASD clinic:

a. 1 out of every 14 children diagnosed with full FAS were exposed to just 1 drink a day.

What these examples illustrate is: The studies are not incorrect, but each one taken individually is limited in scope. Children with prenatal alcohol exposure (even children with full blown FAS) look deceptively good as preschoolers. They will not show the full impact of their alcohol damage until they reach grade school. To conclude that moderate drinking is OK based on the Danish study of 5 year olds would be a tragic mistake. And there is long list of adverse outcomes that drinking during pregnancy is not strongly associated with (preeclampsia being one), but that does not make drinking during pregnancy safe.

These studies, if you read them carefully, do NOT conclude drinking during pregnancy is safe. It's the press headlines and social media making these claims. These headlines have a major influence on women's behavior and place real children at real risk.

Bottom line- some children are especially vulnerable to the damaging effects of alcohol. Which children are most vulnerable? We have no way of knowing because risk is not just based on how much alcohol the mother drank. We know from twin studies that genetics also plays a role. When genetically different twins are exposed to the same levels of alcohol, one twin can be born with FAS while the other twin is normally developed.

Now you see why the Surgeon General's Advisory states there is no known safe amount to drink during pregnancy. The goal of that message is to protect <u>ALL</u> children, especially the most vulnerable like the child born with FAS whose mother drank only 1 beer a day. He turns 20 years old this year. Rather than live an independent, productive life, he will require support and assistance lifelong. Ask him if a drink per day is OK.

If you are pregnant or planning on getting pregnant, please do not drink. If you are unable to stop drinking, please <u>contact us</u>. We are here to help you and your child.

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