We are alarmed by a rash of recent newspaper reports suggesting that light drinking during pregnancy may be beneficial for your unborn child. These misleading and irresponsible reports followed a recently published study by Kelly and colleagues suggesting that 5-year-old children whose mothers drank “lightly” during pregnancy were not at risk for certain behavioral problems (Kelly et al., 2010, J. Epidemiol. Community Health, doi:10.1136/jech.2009.103002). The erroneous interpretation by the lay press about some “beneficial” effects of drinking during pregnancy was NOT part of the study’s findings. Indeed, the comments by the press also run counter to research studies indicating that low levels of alcohol can damage a fetus.

The results from the study by Kelly and colleagues must be interpreted with extreme caution for reasons that were overlooked in subsequent news reports. First, the “light drinkers” in this study were more socially and economically advantaged compared to both the heavier drinkers and the women who did not drink during pregnancy. Higher socio-economic status is generally associated with better nutrition, prenatal care and postnatal care-giving environments. The study’s authors suggested that any apparent differences in child development between the light drinkers and abstainers may be due to social factors, not drinking.

Second, the study focused only on children up to five years of age. Generally, the adverse effects of light drinking during pregnancy are subtle and may go undetected in young children. However, other group studies of more moderate or “social” drinking levels during pregnancy have shown an adverse impact on multiple aspects of development through adolescence and young adulthood, even when important environmental factors are taken into account.

Third, “light drinking” was defined in the study as anyone who had “no more than one or two drinks a week or no more than two drinks on an occasion.” This broad categorization includes patterns of drinking that have been shown to affect fetal brain development in laboratory research studies.

Public health policymakers, health care providers, and the public all want to understand the dangers of alcohol consumption during pregnancy. Studies of pregnant women may not provide clear answers. But carefully controlled laboratory research studies clearly show that the blood alcohol levels that occur with “light drinking” can interfere with biological processes that are critical for proper development of the fetal brain. Repeated consumption of this amount of alcohol during pregnancy has also been shown to cause functional brain damage and behavioral problems.

It is an inconvenient fact of life that alcohol is a “teratogen,” that is, a chemical that can cause physical or functional birth defects. Prenatal exposure to alcohol is widely accepted to be a risk factor in child development, which may be associated with other prenatal or environmental risk factors. Other risk factors include smoking, stress, poor nutrition and diseases affecting a mother’s health, such as diabetes, obesity and high blood pressure. As risk factors accumulate, developmental outcomes are usually less positive.

The consensus recommendation of the hundreds of scientists and clinical investigators, who study Fetal Alcohol Spectrum Disorders, along with public health officials around the world, is very clear - a
woman should abstain from drinking during pregnancy as part of an overall program of good prenatal care that includes good nutrition, adequate exercise, sufficient rest, and proper prenatal health care.

Respectfully submitted by: The Fetal Alcohol Spectrum Disorders Study Group

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Clinical Research References:

Laboratory Research References:

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**Governmental and Organizational Recommendations:**

U.S. Department of Health and Human Services (DHHS)

U.S. Surgeon General Advisory (February 21, 2005) on Alcohol Use in Pregnancy “Urges Women Who Are Pregnant or Who May Become Pregnant to Abstain from Alcohol”

http://www.lhvpn.net/hhspress.html

The National Academy of Sciences, The Institute of Medicine


U.S. National Institutes of Health (NIH), National Institute on Alcohol Abuse and Alcoholism (NIAAA)

Alcohol Alert, No. 50 (December 2000) “Fetal Alcohol Syndrome and the Brain”

U.S. National Institutes of Health (NIH), National Institute on Alcohol Abuse and Alcoholism (NIAAA)

“When You Are Pregnant ... Drinking Can Hurt Your Baby”

U.S. National Institutes of Health (NIH), National Institute on Alcohol Abuse and Alcoholism (NIAAA),
Interagency Coordinating Committee on Fetal Alcohol Syndrome
http://www.niaaa.nih.gov/AboutNIAAA/Interagency/default.htm

U.S. Centers for Disease Control (CDC) National Center on Birth Defects & Developmental Disabilities
http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5114a2.htm

State of California Department of Health Services, Maternal, Child and Adolescent Health Branch and
The University of California San Francisco
“Alcohol Use During Pregnancy”

Bower C.  Alcohol and Pregnancy: The Pivotal Role of the Obstetrician. "New draft alcohol guidelines
for Australia state that, for pregnant women and women planning pregnancy, ‘no drinking is the
safest option’."  

World Health Organization (WHO)
Europe: http://www.euro.who.int/mentalhealth/Policies/20070921_4
Americas:  http://www.paho.org/English/DD/PIN/ePersp001_news03.htm
Africa: http://www.afro.who.int/rc57/documents/AFR-RC57-
14_Harmful_use_of_Alcohol_in_the_WHO_African_Reg_final.pdf