

PREVALENCE OF ALCOHOL CONSUMPTION AMONG WOMEN POSES A SIGNIFICANT HEALTH RISK FOR THE UNBORN POPULATION

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A CRITICAL REVIEW of “Alcohol consumption among women who are pregnant or who might become pregnant- United States, 2002.” *MMWR Morb Wkly Rep* 2004;53(50):1178-81.

The combined rate of FAS and FASD has been estimated to be as high as 1 in 100 births.¹ Estimates of the economic burden of FAS and FASD in the U.S. have ranged anywhere from \$75 million² to \$9.7 billion per year.³ Considering alcohol-related birth defects and disabilities are preventable and that FAS is a leading cause of mental retardation,² it remains critically important to identify and follow the risk of prenatal alcohol exposure and characteristics associated with it in order to monitor and better focus efforts of education and prevention.

The objective of the present study was to determine alcohol consumption patterns among women of childbearing age, including those who are pregnant or who might become pregnant. “Women who may become pregnant” were defined as women who were not using any type of birth control and who gave one of the following list of reasons: wanted a pregnancy, did not care whether pregnancy occurred, did not think they would become pregnant, feared the side effects of birth control, thought they were too old to become pregnant, could not pay for birth control, or had lapsed in use of a method. Excluded from this category were women who claimed they were not sexually active, had a same sex-partner, had undergone sterilization or hysterectomy, were postpartum breastfeeding, were currently pregnant, had other unspecified reasons for not using birth control, or did not provide any reason. A potential caveat with the exclusion criteria is that women who were postpartum breastfeeding, or who had either unspecified reasons or who did not provide any reason for not using birth control were not included as women who could become pregnant without explanation. Reasons for these

particular exclusions should have been given, as it seems that these women could have easily become pregnant. The authors did however point out that the study was limited by the fact that only women who reported not using birth control were included as women who might become pregnant, thereby omitting any women who might have ineffectively used a method of birth control, or women whose method might have failed for other reasons.

Data for women aged 18-44 (n = 64,181) were collected from the 2002 Behavioral Risk Factor Surveillance System (BRFSS) survey, which is a monthly, state-based, random-digit-dialed telephone survey of non-institutionalized U.S. civilian population aged ≥18 years in all 50 states, District of Columbia, and three U.S. territories.⁴

The median state/area response rate for 2002, as reported by the current study, was 58.3 % (range 42.2%-82.6%). The participants were asked about their alcohol usage during the preceding month, specifically the number of days per week or month the respondents had at least one drink, the average number of drinks per drinking day, the number of occasions the respondents had five or more drinks, and the number of times they drove when they had “perhaps too much to drink.” Drinking patterns assessed were defined as: any use (at least one drink on one occasion), binge drinking (five or more drinks on one occasion), and frequent drinking (seven or more drinks in a week or binge drinking). Binge drinking served as a subgroup of frequent drinking, and both binge and frequent drinking served as subgroups of any use. Although this is a common and unavoidable practice, the reader should be aware of this fact when interpreting results, and be careful not to add data from categories as they are not mutually exclusive.

The article reports that approximately 10% of pregnant women used alcohol, and that roughly

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2% of those women engaged in binge drinking or frequent use of alcohol. However, the values for pregnant women who binge drink and drink frequently are both listed as 1.9 %. Therefore, it would be helpful if the authors were more specific as to label the 2% of pregnant women as binge drinkers rather than leaving it up to the reader to arrive at this conclusion. Moreover, the article reports that 54.9% of “women who might become pregnant” admit to use of alcohol, and that of these women 12.4% report binge drinking, and 13.1% report frequent use of alcohol. Among all women surveyed of childbearing age, 52.6% were reported to use alcohol, 12.4% of those women admitted to binge, and 13.1 % to use alcohol frequently. Even though the latter category included women who are unable to have children, it is interesting to note that the values are nearly identical to those of women who might become pregnant (those not using birth control), underlining the need for increased educational efforts regarding the danger of fetal alcohol exposure during early gestation before a women may be aware she is pregnant. A former investigation, based on survey data from 1988 reported that 45% of women consumed alcohol during the 3 months before finding out they were pregnant, 5% reported consuming 6 or more drinks per week, and 60% of these women did not learn they were pregnant until after the fourth week of gestation.⁵

Of women who might become pregnant, younger women, non-Hispanic whites, current smokers, unmarried women, and impaired drivers had greater binge-drinking prevalence rates than Hispanic or non-white women, nonsmokers, married women, or unimpaired drivers. In congruence with these observations, previous studies have reported that women who are either not pregnant or women who do not know they are pregnant, are at greater risk for binge or frequent drinking if they were unmarried, non-Hispanic whites, smokers, or women with higher levels of education.^{5,6} Interestingly in one of these studies⁶ and another previous study,⁷ similar risk factors associated with drinking heavily or frequently during pregnancy were reported, which included being younger, unmarried, or a smoker, however race was no longer a factor for alcohol use in these pregnant women. The current study did not investigate characteristics associated with

drinking in women who were pregnant, rather only in women who might become pregnant, because of the limited number of pregnant women in their sample size (n=2689). While it is evident that preventative efforts against alcohol use during pregnancy should be focused on younger, unmarried women, and smokers, because these groups use alcohol at substantially higher rates than other women, the fact that non-Hispanic white women only exhibit higher risk for frequent drinking than Hispanic or non-white women before they are aware of their pregnancy suggests that this group should be targeted especially with educational efforts regarding birth control and the danger of drinking during early gestation of the fetus.

The prevalence rates reported for drinking among pregnant women and women of childbearing age are similar to those reported in past years.^{6,7,8} In addition, the current study is the first to report prevalence rates among women who might become pregnant, and these rates show they are almost identical to those of women of childbearing age. These results are very disconcerting because they demonstrate that previous efforts to educate women about the dangers of drinking during pregnancy, and drinking without using methods of contraception while being sexually active, have failed to reduce the risk of prenatal alcohol exposure. This means that a significant proportion of the unborn population is still at risk for the adverse effects of in-utero alcohol exposure. Consequently, future directions of research should be to investigate where and why methods of prevention have failed or been inadequate, to resolve these issues, and to continue to measure success of such strategies by monitoring prevalence rates of alcohol use among women of childbearing age.

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