

Brief Intervention Curbs Prenatal Alcohol Use

BY DIANA MAHONEY
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TORONTO — A single-session intervention can reduce prenatal alcohol use among at-risk pregnant women, especially those with higher reported alcohol consumption at baseline, Dr. Grace Chang reported at the annual meeting of the American Psychiatric Association.

Additionally, partner participation significantly enhances the positive effects of the intervention.

The findings suggest that “screening and assessment with a validated instrument embedded into a patient information form can provide clinicians with important information about a woman’s risk status and need for some type of intervention,” according to Dr. Chang of Brigham and Women’s Hospital in Boston. Also, providing at-risk women and their partners with alcohol education and behavior management tools early in pregnancy can significantly affect subsequent risk behaviors, she said.

To assess the impact of a brief psychoeducational intervention on women identified as being at risk for alcohol consumption during pregnancy, Dr. Chang and her colleagues randomized 304 pregnant women who met predefined alcohol risk criteria and their partners to receive a diagnostic interview and the single-session intervention or the diagnostic interview alone. Potential study participants were gleaned from Boston-area obstetrical practices based on their responses to a prenatal health and habits survey, which included questions about diet, smoking, exercise, stress, and drinking.

The predefined risk criteria for study enrollment included a total score of two or more on the four-item T-ACE alcohol screening instrument and any alcohol use in the 3 months before study enrollment (while pregnant), consumption of at least one drink per day in the 6 months before study enrollment, or drinking during a previous pregnancy. The T-ACE instrument asks four questions: How many drinks does it take to make you feel high (Tolerance)? Have people ever annoyed you by criticizing your drinking (Annoyed)? Have you ever felt you ought to cut down on your drinking (Cut down)? Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover (Eye-opener)? The need for more than two drinks as a response to the tolerance question is worth two points, whereas positive answers to the remaining questions are each worth one point.

All of the study participants were at less than 28 weeks gestation at the time of the diagnostic interview and intended to carry their pregnancy to term, and all were required to select a partner to participate in the study with them. Potential participants were excluded if they were under current treatment for alcohol or drug

abuse or substance abuse-related medical illness, if they had current physical dependence on alcohol requiring medically supervised detoxification, if they were unable to complete the study questionnaires, or if they intended to terminate their pregnancy before gestation.

Study participants were, on average, at 11.5 weeks’ gestation at the time of the study, and nearly half expected their first child. About 79% of the subjects were white, and 80% were married. Their median age was 31.4 years, and the median education level was a 4-year college degree or the equivalent.

At baseline, all of the pregnant participants underwent a diagnostic interview to measure daily drinking before the study, temptation to drink in certain social situations, and awareness of prenatal health behaviors. The partners underwent a separate interview to gauge their own drinking habits, their perception of their pregnant partners’ drinking, and their knowledge of prenatal health behaviors.

Those partner pairs randomized to the intervention met with one of two trained nurse-practitioners or Dr. Chang for a single 25-minute session consisting of four components: knowledge assessment with feedback, contracting and goal setting, behavior modification, and summary. The knowledge assessment and feedback component included a discussion of both partners’ thoughts and misperceptions about prenatal health behaviors relative to alcohol use. “We did not discuss the women’s actual alcohol consumption in the presence of her partner unless they disclosed it voluntarily, for reasons of privacy and safety,” Dr. Chang said. “But the knowledge assessment was the springboard for the discussion of alcohol use during pregnancy.”

In the goal-setting and contracting component, the discussion focused on prenatal drinking goals. “It was not uncommon to hear women say their goal was to have ‘just one drink’ per week—and the women in the study were generally older and well educated. This would lead to a discussion of the surgeon general’s advisory that no amount of alcohol is safe during pregnancy and that any prenatal alcohol exposure can have negative consequences,” Dr. Chang said.

In the behavior-modification segment, the pregnant subjects were encouraged to think about circumstances, such as social events, that might invite the temptation to drink during pregnancy and to develop a list of alternative behaviors, “such as having something to eat or having a fake drink,” Dr. Chang said. “We also asked the partner to list plans for personal behavior changes that could

support the pregnant woman, such as drinking less or socializing differently.” Finally, the intervention was summarized on paper and provided to the partners.

The intervention and control subjects underwent a postpartum follow-up interview to review the frequency and quantity of alcohol consumed during pregnancy and changes in alcohol-related health habits since the time of enrollment. “We had a 95% follow-up rate overall, and only 3% of partners were ultimately unable to participate in one part of the study or another,” Dr. Chang noted.

The investigators used univariate and multivariate analyses to compare the intervention and control groups before and after study enrollment, and least squares regression models were used to evaluate the effect of the intervention on three dependent variables: alcohol consumption quantity, frequency, and both.

When the two groups were compared, “there were no statistically significant differences in the amount or frequency of prepregnancy alcohol consumption, and most of the women in both conditions demonstrated overall reduced alcohol consumption once enrolled,” Dr. Chang said. “Many of the women spontaneously decreased the frequency of their alcohol consumption to a mean of 5% drinking days, although fewer than 20% were abstinent.”

The results of an intention-to-treat analysis showed a significant interaction between the intervention and prenatal alcohol consumption, Dr. Chang said. “The brief intervention was most effective in reducing the frequency of consumption among women who drank more at the time of the study enrollment. The intervention was more effective for heavier drinking subjects when the partner was involved. It was really quite exciting to see that, because most of the previous research regarding partner influence has focused on two areas: prenatal cigarette smoking, where the partner’s smoking habits are strong predictors of the woman’s; and breast-feeding, where partner support is an important factor.”

The analyses also identified several additional variables that increased the risk of prenatal alcohol consumption: the amount of prenatal alcohol use before study enrollment, level of education, temptation to drink in social situations, and number of years of regular alcohol use. “We found that the strongest predictor was alcohol use at the previous time—lifetime use predicted prepregnancy use, prepregnancy use predicted early pregnancy use, and so on,” Dr. Chang said. “Partners’ drinking was not a predictor, which was a surprise; nor was knowledge of risks a predictor.”

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Aspirin’s Prevention of Preeclampsia Confirmed in Metaanalysis

BY MITCHEL L. ZOLER
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LISBON — Prenatal treatment with aspirin cut the incidence of preeclampsia by 10% in a metaanalysis of results from 26 controlled studies that involved more than 30,000 women.

Prophylaxis with aspirin also led to a similar reduction in the rates of preterm delivery (less than 34 weeks), small-for-gestational-age births, and all serious adverse outcomes, Lisa M. Askie, Ph.D., said at the 15th World Congress of the International Society for the Study of Hypertension in Pregnancy.

The metaanalysis “confirms that aspirin works, producing a moderate but consistent 10% reduction in important outcomes,” said Dr. Askie, an epidemiologist

at the University of Sydney (Australia).

Many physicians in the United States do not now prescribe aspirin to women at risk for preeclampsia. The new finding may help persuade them to start, commented Dr. Baha M. Sibai, professor and chairman of obstetrics and gynecology at the University of Cincinnati. “Aspirin is safe and inexpensive, so why not offer it” to at-risk women? he asked. “The analysis showed that the number needed to treat [to prevent one serious adverse outcome] was 36. I think this number-needed-to-treat will be persuasive,” he said in an interview.



The metaanalysis by Dr. Askie and her associates was an individual patient-data review, which means that all the data for each patient from every trial were collected and reanalyzed. The researchers

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DR. SIBAI

data were trimmed down to about 31,000 women in 26 trials of preeclampsia prophylaxis. Although various antiplatelet agents were used, about 98% of the

women were treated with aspirin.

The reductions in the rates of preeclampsia and other serious adverse outcomes that were associated with aspirin use were statistically significant, compared with those in controls who received placebo. The analysis was unable to find any subset of women for whom aspirin was ineffective for preventing preeclampsia, including women with preexisting diabetes, renal disease, or chronic hypertension, and women who previously delivered a small-for-gestational-age infant.

In addition, the dosage of aspirin used did not have any significant effect on the outcomes.

The analysis did not reveal any adverse effects of treatment and therefore provided “reasonable reassurance of safety,” Dr. Askie said.