

Women who drink and smoke less likely to stick to chemoprevention

August 24 2011

(Medical Xpress) -- Women at high risk of developing breast cancer who smoked cigarettes and drank alcohol were less likely to continue with their chemopreventive regimen and may require more adherence support, according to results of a study published in *Cancer Prevention Research*, a journal of the American Association for Cancer Research.

“Our results might suggest there are common factors, perhaps social factors relating to the behaviors of smoking and drinking, that are more strongly related to maintaining the chemopreventive regimen,” said lead researcher Stephanie R. Land, Ph.D.

At the time of the study, Land was an associate professor in the Graduate School of Public Health at the University of Pittsburgh and a statistician at the National Surgical Adjuvant Breast and Bowel Project (NSABP). She is currently a program director and statistician in the Behavioral Research Program, Division of Cancer Control and Population Sciences at the National Cancer Institute.

“It doesn’t seem to be about unhealthy behaviors in general, but perhaps the commonality between smoking, [alcohol](#) and the use of preventive medications is associated with other sociologic, biologic or preventive mechanisms,” she suggested.

Utilizing data from the NSABP [Breast Cancer](#) Prevention Trial, the researchers evaluated predictors of chemoprevention adherence among 11,064 women at a high risk for breast cancer. The initial trial was

conducted from 1992 to 1997, and women were randomized to receive 20 mg tamoxifen per day or placebo.

In Land's study, the primary endpoint was full (100 percent) drug adherence at one and 36 months; secondary endpoint was adequate adherence (between 76 percent and 100 percent). They evaluated cigarette smoking, obesity, physical activity levels, and alcohol use as predictors of drug adherence.

Women were classified as overweight or obese if they had a BMI of 25 or greater and were classified according to physical activity levels.

For alcohol consumers, the researchers divided participants into groups based on the frequency and quantity of liquor, wine and beer the women reported consuming. One drink per day was classified as moderate drinking and more than one drink per day was considered heavy drinking. Participants were separated as current smokers and nonsmokers.

Land and colleagues found that women classified as heavy alcohol drinkers had lower chemoprevention adherence in the short term and were less likely to continue use of their medications one month after they started. In addition, women who smoked [cigarettes](#) were less likely to adhere to their medications in the long term.

Additional significant sociodemographic variables included age, education and per capita household income.

Physical activity and obesity held no significant bearings, according to the researchers, possibly suggesting that “poor adherence is not simply based on a pattern of unhealthy behavior in general, but could be related to common sociological, psychological, biological or genetic mechanisms that impact both substance use and medication adherence.”

Land said it is important to note that even women who had more favorable factors, such as having a support system and maintaining a healthy lifestyle, had some trouble adhering to the chemopreventive regimen.

“Patients shouldn’t be afraid to ask for support from their social network and health care community,” she said. “Health care providers need to know that smokers and drinkers may need additional support. This medication has been shown to prevent breast cancer, but that benefit will only translate if [women](#) follow the regimen and maintain it.”

Provided by American Association for Cancer Research

Citation: Women who drink and smoke less likely to stick to chemoprevention (2011, August 24) retrieved 11 June 2026 from <https://medicalxpress.com/news/2011-08-women-chemoprevention.html>

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