Educational Materials Can Alter Young Women's Attitudes About Tanning, May Reduce Skin Cancer

Atlanta 2008/10/20 -A new study indicates that educational literature can influence young women's use of indoor tanning, not by raising their fear of skin cancer but by changing their attitudes about indoor tanning and promoting healthier alternatives for changing appearance. The study is published in the December 1, 2008 issue of CANCER, a peer-reviewed journal of the American Cancer Society.

Each year there are more than 1.3 million skin cancer diagnoses in the U.S., resulting in more than 10,000 deaths. A variety of efforts have attempted to get young people to alter their sun exposure behaviors, with limited success. For the new study, researchers led by Dr. Joel Hillhouse of the School of Public Health at East Tennessee State University designed a large, randomized, controlled study on an educational-based intervention meant to reduce indoor tanning, which is related to an increased risk of melanoma in young women.

The researchers included approximately 430 female university students aged 17 to 21 years, 200 of whom received a booklet on the effects of indoor tanning. The booklet, which focused on the appearance damaging effects of tanning, provided information on the history of tanning and tanning norms in society. It also presented the effects of ultraviolet radiation, specifically related to indoor tanning on the skin's appearance. The booklet also offered guidelines emphasizing tanning abstinence and recommended healthier alternatives to improve appearance including exercise, choosing fashion that does not require a complimentary tan and sunless tanning products.

All participants were assessed at the start of the study to determine their tanning practices over the previous year. Six months after the booklets were distributed, the subjects were asked questions related to recent indoor tanning frequency and their intentions to tan indoors in the future. The survey also explored attitudes toward indoor tanning, alternatives to indoor tanning, and beliefs about indoor tanning (e.g. whether it was relaxing or reduced stress). The test also assessed participants' thoughts on tanning's negative effects on physical appearance and risk of developing skin cancer.

The investigators found that indoor tanning was reduced by approximately 35 percent in women who received the booklets compared with women who received no intervention. Similar changes were noted for future intentions to tan. The intervention also reduced positive attitudes toward indoor tanning and improved attitudes toward using sunless tanning and fashion to enhance appearance. However, the investigators found no impact on participants' perceptions on susceptibility to skin damage or skin cancer from indoor tanning.

The study revealed that "a simple message delivery method, a booklet, was able to achieve clinically significant reductions in ultraviolet exposure behavior," the authors wrote. They concluded that their clinical trial "supports the use of… intervention messages to change young people's ultraviolet risky behaviors and ultimately reduce skin cancer morbidity and mortality."

Article: "A randomized controlled trial of an appearance-focused intervention to prevent skin cancer." Joel Hillhouse, Rob Turrisi, Jerod Stapleton, and June Robinson. CANCER; Published Online: October 20, 2008 (DOI: 10.1002/cncr.23922); Print Issue Date: December 1, 2008.

David Sampson
Director, Medical & Scientific Communications
American Cancer Society
213 368-8523
david.sampson@cancer.org