

Survey Finds Many Americans Believe Unsubstantiated Claims about Cancer

Atlanta 2007/07/26 -A new study from American Cancer Society researchers finds a surprising number of Americans believe scientifically unsubstantiated claims concerning cancer, and that population segments suffering the greatest burden of cancer are the most likely to be misinformed.

Evidence indicates that healthy behavior depends in part on an accurate assessment of proven risk factors. Previous research has shown that undue concern over unproven risk factors may distract some attention from proven risk factors and might actually result in decisions that are bad for the health. For the current report, published in the September 1 issue of *CANCER*, a peer reviewed journal of the American Cancer Society, researchers led by Kevin Stein, PhD in the American Cancer Society's Behavioral Research Center used a nationwide telephone survey to assess the prevalence of unproven beliefs about cancer in the U.S.

The survey included 12 inaccurate or unlikely statements about cancer risk, risk factors, and prevention, some of which frequently show up in email inboxes, and asked participants to identify the statements as true or false. While more than two-thirds of the participants were able to identify seven of the 12 statements as false, five of the 12 statements were endorsed as true by at least a quarter of the respondents, and for seven of the statements, uncertainty was higher than 15 percent. Among the survey's findings:

- Nearly seven in ten Americans (67.7%) said the risk of dying of cancer in the U.S. is increasing.
- Nearly four in ten (38.7%) agreed that living in a polluted city is a greater risk for lung cancer than smoking a pack of cigarettes a day.
- Three in ten (29.7%) thought electronic devices, like cell phones, can cause cancer.
- About one in seven (14.7%) thought personal hygiene products, like shampoo, deodorant, and antiperspirants, can cause cancer.
- Six percent (6.2%) thought underwire bras can cause breast cancer.

The study also found that the two statements most often rated as "true" by the general public were among the statements unanimously identified as false by a group of ten epidemiologists who were also given the survey. Most strikingly, the statement about the risk of dying from cancer in the United States being on the increase is clearly false, as the age-standardized cancer death rate has been decreasing since the early 1990s, and the 5-year relative survival rate for all cancers combined has improved steadily over the last 30 years. Yet fully 68 percent of the respondents believed the statement. As for why so many believed living in a polluted city is a greater risk for lung cancer than smoking a pack of cigarettes a day, the authors point to studies that have shown people who engage in behaviors like smoking or unprotected sun exposure tend to underestimate the personal risks associated with these choices despite knowledge of the risk in general.

The researchers also found associations between certain sociodemographic variables and the likelihood of believing the false statements. One consistent finding was that males were more likely to believe the statements to be true than were females (eight of the 12 statements). Indeed, some research indicates that males may be less attentive to and less likely to seek medical information than are females, and thus may be less well informed. Those with lower educational levels were more likely to endorse ten of the 12 statements, consistent with most prior studies of health literacy.

The authors concede that individual beliefs are frequently not the most influential determinants of health behavior, and that other factors, like access to regular care and insurance, physician advice, and socioeconomic factors, have a major influence. Still, they conclude: "Public education programs and interventions to address and convincingly refute commonly held misconceptions regarding cancer risks might increase the adoption of healthy attitudes, beliefs, and, most importantly, behaviors," adding that "educational and intervention programs should be culturally-informed and accessible to all individuals, with special attention placed on reaching the highest risk populations."

The American Cancer Society is dedicated to eliminating cancer as a major health problem by saving lives,

diminishing suffering and preventing cancer through research, education, advocacy and service. Founded in 1913 and with national headquarters in Atlanta, the Society has 13 regional Divisions and local offices in 3,400 communities, involving millions of volunteers across the United States. For more information anytime, call toll free 1-800-ACS-2345 or visit www.cancer.org.

Article: Stein K, Zhao L, Crammer C, Gansler T. Prevalence and sociodemographic correlates of beliefs regarding cancer risks. *Cancer* 2007. Epub ahead of print (DOI: 10.1002/cncr.22880); published online 26 July 2007.

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