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Study Links Smoking to Increased All-Cause Mortality in Older Patients

An analysis of available medical literature suggests smoking was linked to increased mortality in older patients and that smoking cessation was associated with reduced mortality at an older age, according to a report published in the June 11 issue of Archives of Internal Medicine, a JAMA Network publication.

Smoking is a known risk factor for many chronic diseases, including cardiovascular disease and cancer, however, the epidemiological evidence mostly relies on studies conducted among middle-aged adults, according to the study background.

"We provide a thorough review and meta-analysis of studies assessing the impact of smoking on all-cause mortality in people 60 years and older, paying particular attention to the strength of the association by age, the impact of smoking cessation at older age, and factors that might specifically affect results of epidemiological studies on the impact of smoking in an older population," Carolin Gellert and her colleagues from the German Cancer Research Center (DKFZ), Heidelberg, Germany, note in the study.

The authors identified 17 studies from seven countries (the U.S., China, Australia, Japan, England, Spain and France) that were published between 1987 and 2011. The follow-up time of the studies ranged from 3 to 50 years and the size of the study populations ranged from 863 to 877,243 participants.

In summarizing the results from the 17 studies, the authors note an 83 percent increased relative mortality for current smokers and a 34 percent increased relative mortality for former smokers compared with never smokers.

"In this review and meta-analysis on the association of smoking and all-cause mortality at older age, current and former smokers showed an approximately 2-fold and 1.3-fold risk for mortality, respectively," the authors note. "This review and meta-analysis demonstrates that the relative risk for death notably decreases with time since smoking cessation even at older age."

Carolin Gellert, Ben Schöttker, Hermann Brenner. Smoking and all-cause mortality in older people - Systematic review and meta-analysis Archives of Internal Medicine 2012; 172: 837-844. Doi:10.1001/archinternmed.2012.1397

The German Cancer Research Center (Deutsches Krebsforschungszentrum, DKFZ) with its more than 2,500 employees is the largest biomedical research institute in Germany. At DKFZ, more than 1,000 scientists investigate how cancer develops, identify cancer risk factors and endeavor to find new strategies to prevent people from getting cancer. They develop novel approaches to make tumor diagnosis more precise and treatment of cancer patients more successful. Jointly with Heidelberg University Hospital, DKFZ has established the National Center for Tumor Diseases (NCT) Heidelberg where promising approaches from cancer research are translated into the clinic. The staff of the Cancer Information Service (KID) offers information about the widespread disease of cancer for patients, their families, and the general public. The center is a member of the Helmholtz Association of National Research Centers. Ninety percent of its funding comes from the German Federal Ministry of Education and Research and the remaining ten percent from the State of Baden-Württemberg.

Dr. Stefanie Seltmann Head of Press and Public Relations German Cancer Research Center Im Neuenheimer Feld 280 D-69120 Heidelberg T: +49 6221 42 2854 F: +49 6221 42 2968 presse@dkfz.de