Many cancers with largest impact on years of life lost linked to tobacco and alcohol

18 October 2016

A new study finds eleven of the 15 cancers with the most impact on healthy years of life lost in the United States are closely-associated with two preventable risk factors: smoking and alcohol. The study, appearing early online in the *American Journal of Preventive Medicine*, also finds the cancer burden is 20% to 30% higher in African Americans than in all races/ethnicities combined.

To measure cancer burden, researchers led by Joannie Lortet-Tieulent calculated the disability-adjusted life years (DALYs) lost to cancer, i.e. the loss of life in full health because of cancer. This measure combines mortality, incidence, survival, and quality of life into a single summary indicator.

They estimated the U.S. burden of cancer in 2011 at over 9.8 million DALYs, which was equally shared among men and women (4.9 million DALYs for each sex). DALYs lost to cancer were mostly related to premature death due to cancer (91%), and only 9% related to impaired quality of life because of the disease or its treatment, or other disease-related issues.

Lung cancer was by far the largest contributor of the loss of healthy years to all-cancer, accounting for 24% of the burden (2.4 million DALYs). Next was breast (10%) followed by colorectal (9%), pancreatic (6%), prostate (5%), leukemia (4%), liver (4%), brain (3%), non-Hodgkin lymphoma (3%), and ovarian (3%). The four most-burdensome cancers (lung, breast, colorectal, and pancreas) caused about half of all DALYs.

The authors conclude their study "stresses the need to direct efforts to prevent premature death, particularly at middle age, through broad implementation of known effective interventions from primary prevention to early detection and treatment."

More information: Joannie Lortet-Tieulent et al, U.S. Burden of Cancer by Race and Ethnicity