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Bladder cancer is more advanced in South Texas, study shows

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Bladder cancer is more aggressive and more advanced in South Texas residents than in many parts of the country, a study by the Mays Cancer Center, home to UT Health San Antonio MD Anderson, indicates.

The disease is also deadlier in Latinos and women, regardless of where they live nationwide, according to the research.

The team from The University of Texas Health Science Center at San Antonio (UT Health San Antonio), which includes the Mays Cancer Center, compared bladder cancer cases in the Texas Cancer Registry with cases in the Surveillance, Epidemiology and End Results (SEER) Program. SEER, which collects data on cancer cases from various locations and sources across the U.S., does not include Texas statistics.

Cases covered the years 1995 to 2015. The South Texas cohort consisted of 11,027 bladder cancer cases from a 38-county region extending from San Antonio to Laredo to the Lower Rio Grande Valley to Corpus Christi. The statewide cohort totaled 68,415 cases from all 254 Texas counties. The SEER cohort consisted of 155,701 cases from Alaska; Connecticut; Detroit; Atlanta; rural Georgia; San Francisco-Oakland, Calif.; San Jose-Monterey, Calif.; Hawaii; Iowa; Los Angeles; New Mexico; Seattle-Puget Sound; and Utah.

Worse survival rates

"Although South Texas and Texas had lower bladder cancer incidence rates than SEER, the region and state had significantly worse five-year survival rates for bladder cancer compared to SEER. This was regardless of gender," said study first and corresponding author Shenghui Wu, MD, Ph.D., MPH, assistant professor of population health sciences at UT Health San Antonio.

"We also found that Latinos, both men and women, had lower incidence but worse survival than non-Latino whites in each geographical area," Dr. Wu said. "And women had significantly lower bladder cancer incidence but worse survival rates than men, regardless of race or ethnicity, in each area."

She said the researchers have a long way to go to know which factors affect bladder cancer survival. In the journal article, the authors wrote: "The residents in South Texas have lower per capita personal incomes; higher rates of unemployment, poverty and lack of insurance; lower educational attainment; less access to health care services; and higher obesity prevalence than the state as a whole, which may uniquely impact both incidence and survival rates for cancer patients."

Unique differences that need to be studied

UT Health San Antonio urologist Robert Svatek, MD, a study co-author, said the findings reveal the complex variations among diverse groups in their responses to cancer. The Texas population, which is 40% Latino, "is uniquely different than the rest of the United States in the biology of bladder cancer," Dr. Svatek said. "It means we really need to understand what is going on locally and study our patients to understand why there is a difference."

More than 4,780 people in Texas will develop bladder cancer in 2021, the American Cancer Society estimates. Because it bleeds, this form of cancer rarely goes undetected. Symptoms include blood in the urine and urinary pain. People with bladder cancer typically need follow-up tests for years after treatment to look for recurrence.

One form of the disease responds well to treatment and patients don't lose the bladder. Another form requires chemotherapy, surgery and sometimes radiation, and only 50% of patients survive it. "There are different forms, there is a spectrum," Dr. Svatek said.

Smoking contributes to bladder cancer development, but other factors aren't known. For this reason, it is necessary and important to do a bladder cancer survival study, which Dr. Wu is designing to find factors affecting survival in South Texas.

"This first study and the ones to come will make an important contribution to the literature because there is not a lot known about Latinos and bladder cancer," Dr. Svatek said.

Knowledge a step toward improving survival

Study findings will have relevance to health care services planning, Dr. Wu noted.

"Hopefully our research will help communities by first determining the high-risk populations and then understanding the ways to improve bladder cancer survival and quality of life and decrease mortality rates," she said.

The research was published in December in the journal *Bladder Cancer.*

Dr. Svatek, professor and chairman of urology in the Joe R. and Teresa Lozano Long School of Medicine, treats bladder cancer in Mays Cancer Center patients and leads clinical trials of new bladder cancer therapies. The Mays Cancer Center employs a co-management team of multiple experts focusing on each bladder cancer patient. The center is one of the country's leading sites enrolling Latinos into clinical trials.

"These findings are crucial and aligned with the fundamental focus of the Mays Cancer Center to advance the science of cancer in Latinos," said Ruben A. Mesa, MD, FACP, executive director of the Mays Cancer Center and a study coauthor.

More information: Shenghui Wu et al, Bladder Cancer Incidence and Survival in the United States and Texas Non-Latino Whites and Latinos, *Bladder Cancer* (2020). DOI: 10.3233/BLC-200352