Study Finds Adverse Effects of COVID-19 Pandemic on Cancer Detection and Surgical Treatments

A new study finds evidence for adverse effects of the COVID-19 pandemic on declines in cancer detection and surgical treatments. The study, appearing in *JNCI: The Journal of the National Cancer Institute,* finds a 10.2% decline in real-time electronic pathology reports from population-based cancer registries in 2020 compared with those in 2019.

This study observation period, through December 2020, is one of the longest to date for evaluating the effects of the COVID-19 pandemic on cancer-related trends. To learn more about the indirect effects of the pandemic on cancer care, investigators led by Robin Yabroff, PhD, MBA of the American Cancer Society used electronic pathology data from population-based SEER cancer registries from Georgia and Louisiana that included information about cancers from all age groups. Trends for breast, colorectal, lung, and prostate cancers, the most common cancers, were assessed separately, as were trends by age group.

The study found initial patterns of declines were generally like those reported elsewhere, with greatest differences in April 2020 relative to April 2019, the first peak in COVID-19 mortality rates in Georgia and Louisiana. Declines in pathology reports in August, November, and December coincided with later peaks in COVID-19 mortality rates.

“We observed substantial declines in 2020 among cancers with effective screening tests, including breast and colorectal cancers, as well as across cancer sites and age groups without effective screening tests, including cancers among children and young adults,” said Dr. Yabroff. “Declines across cancer sites and age groups suggest that in addition to delays in cancer screening, there were also delays in routine well-child and primary care, evaluation of signs and symptoms, and treatment initiation for most cancers.”

Notably, the number of pathology reports in 2020 never consistently exceed those in 2019 after initial declines, which might be expected if a backlog of diagnoses were being resolved. By cancer type, percentage declines were greatest for lung (17.4%) and colorectal (12.0%) cancers, followed by breast (9.0%) and prostate (5.8%) cancers. Declines were observed in all age groups, including children and adolescents younger than 18 years. Patterns of declines were similar by cancer site and age group, with some variation in timing, magnitude, and duration of declines.

“The findings suggest substantial delays in diagnosis and treatment services for cancers during the pandemic, and that ongoing evaluation can inform public health efforts to minimize any lasting adverse effects of the pandemic on cancer diagnosis, stage, treatment, and survival,” write the authors. “As data become available, evaluation of the effects of the pandemic on cancer stage at diagnosis and survival will be important, as will evaluation of racial/ethnic, socioeconomic, and geographic disparities in access to care and outcomes.”

Article: Yabroff KR, Wu XC, Negoita S, Stevens J, Coyle L, Zhao J, Mumphrey B, Jemal A, Ward K. Association of the COVID-19 Pandemic with Patterns of Statewide Cancer Services. *JNCI: Journal of the National Cancer Institute*, 2021. doi: 10.1093/jnci/djab122.

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