How Has COVID-19 Affected Cancer Care?

People with cancer not only are at increased risk for severe COVID-19, they also face treatment interruptions due to the pandemic, according to a new AACR report.

March 3, 2022 By Liz Highleyman

COVID-19 has had a major impact on people living with cancer, according to a new report from the American Association for Cancer Research (AACR). Cancer patients are more prone to severe coronavirus disease, some do not respond as well to COVID-19 vaccines and they face delays in diagnosis and treatment due to the pandemic.

The report provides a comprehensive overview of the burden of COVID-19 on people with cancer and challenges related to patient care and cancer research, but it also notes some unexpected improvements in research practices and access to care. On February 9, AACR held a virtual congressional briefing to release the report and call for more funding.

“In the United States and globally, there has been remarkable progress against cancer over the past few decades. However, our ability to continue the current pace of progress is in jeopardy because of the enormous global public health challenge posed by coronavirus disease 2019 (COVID-19),” AACR president Antoni Ribas, MD, PhD, and AACR CEO Margeret Foti, MD, PhD, wrote in a statement. “The AACR Report on the Impact of COVID-19 on Cancer Research and Patient Care presents current evidence on the burden of COVID-19 among patients with cancer and highlights the challenges as well as future opportunities created by the pandemic in cancer research and patient care.”

Impact on People With Cancer

Since the early days of the pandemic, efforts to protect patients and the diversion of medical staff and resources have resulted in the deferral of cancer care.

The pandemic led to nearly 10 million missed screenings from January to July 2020, which is expected to result in cancer being diagnosed at more advanced stages, leading to more deaths in the coming years. Such delays led to an 11% increase in patients diagnosed with inoperable or metastatic cancer during March to December 2020, according to the report. Screenings for breast cancer, cervical cancer and colorectal cancer declined by 80% or more during the first months of the pandemic and have not yet returned to previous levels.

Early in the pandemic, reports began to surface that people living with cancer were among those who had a higher risk of severe or fatal COVID-19. As time went on, it became clear that people with lung cancer and blood cancers, such as leukemia and lymphoma, were especially susceptible.

From AACR Report on the Impact of COVID-19 on Cancer Research and Patient Care, 2022Courtesy of AACR

In particular, blood cancer patients receiving therapies that impair the function of antibody-producing B cells are not only at higher risk for severe COVID-19, but they also do not respond as well to vaccines and need to keep taking precautions. The good news is that most people with solid tumors have an adequate response to vaccination and boosters.

People living with cancer have faced—and in some cases continue to experience—delays or interruptions in chemotherapy, immunotherapy, radiation therapy and surgery.

What's more, the pandemic has had a negative impact on the mental health of cancer patients, survivors and caregivers, arising from issues such as social isolation, financial stress, food insecurity and concerns about timely access to care and disease recurrence. Underserved groups, including racial and ethnic minorities and low-income people, have been disproportionately affected by disruptions in cancer care.

"There are particularly serious concerns for racial and ethnic minorities and other medically underserved populations because these groups already experience cancer health disparities and have shouldered a disproportionate burden of COVID-19," Ribas and Foti wrote. "The stark disparities in the burden of COVID-19 have refocused the nation's attention on the inequities in health care, and it is critical that everyone play a role in eradicating the social injustices that are barriers to health equity."

Impact on Cancer Research

Cancer research has also been negatively affected as labs shut down, personnel were diverted to the COVID-19 response and clinical trials were delayed or put on hold.

But the pandemic led to some new innovations that could improve research going forward, such as the increased use of telehealth for clinical trials. This shift has made such studies more patient-centric and "has the potential to increase and diversify clinical trial participation, shorten the timelines for some trials and minimize the financial and logistical burdens on clinical trial participants," according to an AACR press release.

Larry Saltzman, MD, a physician living with chronic lymphocytic leukemia who heads the Leukemia and Lymphoma Society National Patient Registry, is one of several patients who tell their stories in the report. When COVID-19 hit, Saltzman, who was participating in a CAR-T therapy clinical trial at the Fred Hutchinson Cancer Research Center, was no longer able to travel regularly from his home in Sacramento to Seattle for follow-up. But he and the researchers realized that an MRI, CT or PET scan is as good in California as in Seattle. "Clinical trials should be formatted so they can be followed wherever patients are located. Location shouldn't be a barrier," he said at the briefing.

The report points out that cancer research contributed to knowledge about the coronavirus and immune response and aided the development of COVID-19 treatments and vaccines. In fact, the messenger mRNA (mRNA) technology used in the highly effective Pfizer-BioNTech and Moderna vaccines was initially developed for cancer immunotherapy, and this success could in turn help advance cancer treatment in the future.

"The cancer research community has generated so many tools to study cancer—sequencing, developing antibodies, pioneering targeted therapies—that have also helped researchers address COVID-19. And the best example of all is the COVID-19 mRNA vaccines," Ribas said.

More Funding Needed

To overcome these challenges, more resources are needed to enhance medical research and modernize how patients receive care and rebuild the U.S. public health infrastructure.

AACR is asking for increased investments in cancer research and prevention, raising the National Institutes of Health (NIH) budget to $46.4 billion and the National Cancer Institute (NCI) budget to $7.6 billion. The organization also called on Congress to expand Medicaid funding and permanently increase access to telehealth, including grants to address the digital divide.

"The COVID-19 pandemic has highlighted the importance of basic science, cancer prevention, cancer screenings and addressing cancer disparities," Foti said. "Robust, sustained, and predictable annual funding increases for NIH and NCI will propel future scientific advances, maximize returns from prior investments in cancer research, drive economic prosperity, and support new lifesaving cures for patients with cancer."

Click here to read the full AACR report.
Click here to learn about how COVID-19 is changing the face of cancer care.
Click here for more news about COVID-19.