COVID-19: Changing the Face of Cancer Care

The pandemic raises new concerns, but it may also lead to long-lasting improvements.

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The COVID-19 pandemic presents new challenges for people living with cancer. Many are worried about whether they are at greater risk of getting the new coronavirus, developing severe COVID-19 or dying from it.

Efforts to protect patients and the diversion of medical staff and resources have resulted in the deferral of cancer care. Many healthy individuals have skipped recommended screenings, people with newly diagnosed cancer have postponed lifesaving treatment and those already undergoing treatment have delayed their scans and blood tests. The pandemic has also led to a slowdown in clinical trials of new therapies.

“Patients undergoing cancer treatment have had to make difficult choices to interrupt or modify their cancer treatment to decrease their risk of COVID-19 but thereby increase their risk of cancer progression or to continue their cancer treatment, risking a greater likelihood of COVID-19 disease or complications,” says Richard Schilsky, MD, executive vice president and chief medical officer of the American Society of Clinical Oncology (ASCO).

But at the same time, the pandemic has brought about greater flexibility and innovations in care and research that could offer long-lasting benefits for cancer patients and survivors.

Cancer and COVID-19 Outcomes

Early in the pandemic, things seemed simple. Reports from China, where the new disease emerged in late 2019, showed that people with immune suppression had higher rates of COVID-19 and worse outcomes, and this included people with cancer. What’s more, many people with cancer are older and have coexisting health conditions, both of which increase vulnerability to severe COVID-19.

The picture became less clear as researchers worldwide reported widely varying rates of complications and death among cancer patients with COVID-19. But now, efforts to pool data are providing more clarity. These include the COVID-19 and Cancer Consortium (CCC19), the TERAVOLT registry of people with lung cancer and the ASCO Survey on COVID-19 in Oncology

Registry. The National Cancer Institute (NCI) recently started the NCI COVID-19 in Cancer Patients Study, or NCCAPS, which aims to collect medical information from 2,000 people with cancer and COVID-19 who will be followed for up to two years.

Some studies have shown that people with cancer are more likely to contract the coronavirus. Such research is complicated by the fact that cancer patients spend more time in medical settings where they could be exposed to the new virus, although they are also more likely to take precautions in their daily lives.

The impact of cancer on COVID-19 outcomes is more definitive. Studies throughout the world have found that people living with cancer are at greater risk for severe COVID-19 and death. Still, the effect of cancer "pales in comparison" with the added risk associated with other conditions such as cardiovascular disease or diabetes, according to Leora Horwitz, MD, of New York University Langone Health. But risk factors add up: People with cancer who are older, are Black or Latino or have other health conditions are likely to fare worse.

Reports from some early COVID-19 epicenters, where medical capacity was stretched to the breaking point, showed that people with cancer had very high mortality rates. For example, at Montefiore Health System in the Bronx, 28% of COVID-19 patients with cancer died—two to three times the rate of people without cancer.

More recent multicenter studies, however, have seen lower rates of COVID-19 complications and deaths as clinicians have gained a better understanding of the new disease and how to treat it.

A CCC19 analysis of more than 2,700 cancer patients with COVID-19, presented at the American Association for Cancer Research COVID-19 and Cancer Virtual Meeting in July, showed that 60% were hospitalized, 16% were admitted to an intensive care unit, 45% needed oxygen, 12% were put on ventilators and 16% died.

But people with cancer are not all alike. Studies have consistently shown that people with lung cancer or blood cancers, such as leukemia or lymphoma, have worse outcomes. While the overall mortality rate for people with cancer in the CCC19 analysis was 16%, this rose to 19% for those with colorectal cancer, 22% for those with lymphoma and 26% for those with lung cancer. On the other hand, people with breast cancer, gynecological cancers or prostate cancer do not appear to be at greater risk.

People with active cancer, especially those with metastatic disease, are more prone to severe COVID-19 and death. An earlier CCC19 analysis found that mortality rates were 25% for people with progressive disease, 14% for those whose cancer was stable or responding to treatment and 9% for those who were in remission or had no remaining evidence of disease. But to date, there has been little research on coronavirus outcomes among survivors with a past history of cancer, people who have finished treatment and those who are in remission.

The type of cancer treatment also plays a role. Many chemotherapy drugs kill immune system white blood cells, leaving people less able to fight off infections. While several studies have shown

that people currently undergoing chemo are at greater risk for COVID-19 complications, others haven't seen such a link.

The impact of immunotherapy is less clear. Part of the damage to the lungs and other organs in people with advanced COVID-19 is caused by the coronavirus itself, but some severe complications are due to an overactive immune response known as a cytokine storm. Immune checkpoint inhibitors that boost T-cell activity could potentially help the body fight the coronavirus—or they could make matters worse. Studies to date have yielded conflicting results.

As research continues to sort things out, experts say concerns about COVID-19 should not be a reason to stop cancer treatment, as the risk of disease progression is likely a bigger threat.

The latest CCC19 analysis—the largest to date—found that cancer treatment, including cytotoxic chemotherapy, targeted therapy, immunotherapy, hormone therapy, radiation and surgery, did not significantly increase the risk of death for cancer patients with the coronavirus.

"This indicates that cancer care can continue for these patients," says Brian Rini, MD, of Vanderbilt-Ingram Cancer Center in Nashville.

Impact on Cancer Care

The COVID-19 crisis has affected all areas of cancer care, including screening, diagnosis, treatment, follow-up monitoring and clinical trials. While preventive screenings, nonurgent surgery, certain types of medication and routine checkups can often be safely modified or delayed, they can't be put off forever.

"A screening delay of three months is not likely to affect overall mortality," says Otis Brawley, MD, of Johns Hopkins University in Baltimore. "Failure to receive treatment is going to account for far more deaths—and this could have an impact in three months."

During the worst outbreaks of COVID-19—as occurred in the Northeast in the spring and are still cropping up across the country—personal protective equipment and other resources are in short supply, and doctors and nurses are diverted from their regular work to focus on patients with COVID-19. Experts have advised people in hard-hit areas to stay home and in particular to steer clear of health care facilities to avoid exposure to the coronavirus.

This has had a dramatic impact on cancer care. During the spring, the number of people getting screening tests such as mammograms declined by around 90%. An analysis by the national laboratory testing company Quest Diagnostics saw a steep 46% drop in the diagnosis of six common cancer types during March and April.

A survey by the American Cancer Society in May found that 62% of respondents said COVID-19 had affected their cancer care in some way, 37% reported delays and nearly a quarter feared losing their health insurance due to the economic fallout of the pandemic. For patients who do receive care at a hospital or infusion center, restrictions on visitors can mean facing the ordeal

alone.

In a recent editorial in Science magazine, NCI director Norman Sharpless, MD, estimated that reduced screening due to COVID-19 and the resulting delays in diagnosis and treatment could lead to nearly 10,000 additional deaths from breast cancer and colorectal cancer over the next decade.

“Cancers being missed now will still come to light eventually but at a later stage…and with worse prognoses,” he wrote. “Ignoring life-threatening non–COVID-19 conditions such as cancer for too long may turn one public health crisis into many others.”

Innovations in Care

Clinicians and patients are finding new and more flexible ways to deliver cancer care in the wake of the pandemic.

Sometimes treatments can be administered in a different order or on a modified schedule, such as starting medications while awaiting delayed surgery or receiving radiation or infusions less often. Oral medications can sometimes be substituted for IV chemotherapy. Some doctors advise using therapies that cause less immune suppression or are less likely to lead to side effects that could require hospitalization. People with low-risk cancer may opt for active surveillance rather than immediate treatment. And monitoring scans may be done less frequently.

Most cancer centers have shifted some of their on-site care to telemedicine and home care. Consultations about a diagnosis or side effects, for example, may be done via video chat; this can enable loved ones and caregivers to participate. Virtual meetings can also be a good option for support groups and mental health counseling. Some providers have given patients devices to monitor their vital signs and conduct other tests at home. In certain cases, IV chemotherapy may be administered by a nurse at home, but ASCO cautions that home infusions generally are not a safe alternative to outpatient treatment.

Recognizing its importance during the crisis, Medicare has expanded its coverage of telehealth and is considering making the change permanent. But the digital divide in familiarity with and access to technology could limit some people’s ability to benefit from these innovations, including older people and those with lower incomes.

Finding ways to continue clinical trials is another urgent priority. “Trial interruptions are devastating news for thousands of patients,” says ASCO president Howard Burris, MD, of Sarah Cannon Cancer Center in Nashville. “In many cases, clinical trials are the best, or the only, appropriate option for care.”

To this end, the Food and Drug Administration, the NCI, ASCO and others are working with trial investigators and drug company sponsors to increase flexibility in how studies are designed and carried out.

For example, informed consent may now be provided remotely rather than in person. Participants

are being asked to make fewer study visits, and scans and blood work can be done closer to home. “[Patients] don’t have to drive an hour for a CAT scan when there’s a machine 10 minutes away,” says Patricia LoRusso, DO, of Yale University School of Medicine.

Carrying these changes forward after the crisis could enable more people—including those in minority and underserved populations—to participate in lifesaving studies. “Democratization of clinical trials will allow all people to have access to novel treatment for their disease,” LoRusso says.

Communication is key to helping people balance concerns about COVID-19 and cancer progression, taking into account their risk factors, type of cancer and its stage.

“The best course of action requires a detailed discussion between each patient and their oncologist,” Schilsky says.

Medical facilities in some areas are starting to bring patients back for screenings and treatment that can no longer be safely postponed—often with new precautions in place—even as others face further shutdowns. This may not be easy: A survey of more than 500 participants conducted by the Kidney Cancer Research Alliance found that they were equally worried about COVID-19 and cancer progression.

But experts offer reassurance: “It’s safer to come to the hospital than it is to go to the grocery store, and that’s true because we continue to have a high concern for caution and safety,” says Lawrence Shulman, MD, of the University of Pennsylvania Abramson Cancer Center. “We haven’t let down our guard at all.”

Megan-Claire ChaseCourtesy of Megan-Claire Chase

“My anxiety has gone sky-high during COVID-19, but it’s OK to not be OK. The shutdown means a loss of time, and we’re never going to get it back. As cancer patients, we’ve already lost so much time.”

—Megan-Claire Chase (Warrior Megsie), young adult breast cancer survivor

Robin McGeeCourtesy of Robin McGee

“Part of the grief of COVID-19 for people with cancer is that we can’t do the things on our bucket list. We worry we won’t be able to see our loved ones, maybe for the last time. The pleasures we use to cope are no longer available.*”

—Robin McGee, patient advocate and clinical psychologist living with colorectal cancer

Jeff NeurmanCourtesy of Jeff Neurman

“I have mixed feelings about telehealth. In some ways, it’s much easier and there’s a sense of security at home, but there’s an element of distance when we aren’t together in the same room.*

—Jeff Neurman, Guys With Cancer podcast cohost living with leukemia

*Excerpts from Cancer Health at Home: Coping With COVID-19, July 23, 2020. To watch the video, go to cancerhealth.com/athome.
