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COVID-19 and Cancer Care: What Have We Learned?

Despite the enormous challenges, researchers are sharing valuable lessons regarding evaluating risks, setting priorities, and communicating with patients during the pandemic

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elayed surgeries, uncertain risks, and frayed supports: the coronavirus disease 2019 (COVID-19) pandemic has created daunting challenges in caring for and protecting vulnerable patients with cancer. Amid the crisis, however, researchers and clinicians are learning valuable lessons about sharing data, setting priorities, and communicating virtually that could help permanently reshape the field.

For one massive data-sharing effort, the COVID-19 and Cancer Consortium, some 120 institutions from 12 countries have banded together to collect data from people with cancer who were diagnosed with COVID-19. To date, the group has surveyed greater than 5000 deidentified patients, says Gary Lyman, MD,

MPH, senior lead for healthcare quality and policy at the Hutchinson Institute for Cancer Outcomes Research at the Fred Hutchinson Cancer Research Center in Seattle, Washington. "What we've done is provided a strong foundation for understanding the specific and unique aspects of COVID-19 in patients with cancer and particularly those getting cancer treatments," he says.

Based on the first 1035 patient records, the consortium published a snapshot that suggested an association between increased 30-day mortality and factors such as increased age, male sex, smoking, multiple comorbidities, and active cancer.¹ At the 62nd American Society of Hematology Annual Meeting, which will be held virtually in December 2020, the consortium will

present more recent data from 4000 patients suggesting that those who are undergoing active cancer treatment are at high risk of life-threatening thrombosis after a diagnosis of COVID-19.

With thrombosis, physicians have long acknowledged a "kind of double whammy of cancer and cancer treatment both adding to the risk," Dr. Lyman says. A COVID-19 diagnosis, the data suggest, has added a third risk factor. The growing evidence that such patients may be at "exceedingly high risk" for thrombosis, he says, has added more support to preliminary guidelines from the American Society of Hematology that patients undergoing cancer treatment should receive a daily prophylactic dose of low-molecular-weight heparin as an anticoagulant.

The consortium is also conducting a deeper dive on the outcomes of patients with hematologic malignancies such as leukemia, lymphoma, or multiple myeloma after initial data demonstrated a trend toward a greater risk of 30-day mortality. Waiting for the pandemic to end before initiating active cancer treatments may not be a realistic option for many patients, Dr. Lyman says. Therefore, the findings may inform guidelines around which patients undergoing treatment might need more aggressive supportive care such as growth factors or even transfusions to boost their blood cell counts and lower their risk of a bacterial coinfection if they contract COVID-19.

Setting Priorities and Strengthening Communication

Beyond the need for rapid but well-vetted data sharing, the pandemic has spurred conversations about how providers can make equitable decisions when they are prioritizing care. Rebecca DeBoer, MD, MA, an assistant clinical professor of medicine at the University of California at San Francisco, says oncologists and administrators facing resource constraints can draw on the experience of lower resource settings that have long grappled with such priority setting.

For example, in many countries around the world, radiation machines are routinely overburdened by the sheer number of patients while clinics face chronic drug shortages and

other resource constraints. In Rwanda, where Dr. DeBoer worked with the non-profit health care organization Partners in Health, "we had to decide who to prioritize for the radiotherapy," she says. Although many patients could have received significant palliative benefits, physicians prioritized those whose cancer was curable.

"Even though it perhaps sounds obvious that you would want to prioritize patients—for example young cervical cancer patients—who are curable, there are so many other competing factors," says Dr. DeBoer, a bioethicist and medical oncologist at Zuckerberg San Francisco General Hospital and Trauma Center. "If you don't have a deliberate approach and come up with explicit systems, then the seemingly obvious principle of curing as many patients as we can won't actually be materialized."

In a JAMA Oncology article about prioritizing cancer cures during the pandemic, Dr. DeBoer cautions that "conflicting principles will often arise among stakeholders and decision makers" and that "fair decision-making procedures should be established to ensure moral legitimacy and accountability."2 Although resource constraints may vary considerably over time and by location as the COVID-19 pandemic evolves, Dr. DeBoer nevertheless says, "I think that it's important to have a plan for how you're going to talk to patients about those things, and have consistent messaging."

The pandemic has added yet another wrinkle by complicating provider-patient communication. Trevor Royce, MD, MS, MPH, an assistant professor of radiation oncology at the University of North Carolina at Chapel Hill, says that, by necessity, COVID-19 has broken down both regulatory and cultural barriers to alternative interactions through telemedicine. "Over the course of 1 month, we went from basically zero encounters for telemedicine to 50%, 60%, 70% of patient encounters being done in a virtual space," he says.

In *JAMA Oncology*, Dr. Royce and 2 colleagues reviewed some of the recent changes to telemedicine and their potential impacts on the quality of oncology care.³ "I think telemedicine has long been thought of as this almost idealistic way of delivering health care that was

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just oozing with potential but unattainable," Dr. Royce says. "Despite all the challenges that COVID has brought to society broadly, clearly there are opportunities for us to really rethink how we do some things, and I think telemedicine is really one way that that's true."

Removing Barriers and Addressing Disparities

One key advantage of telemedicine is its ability to remove physical location as a barrier to care. Dr. Royce says he has had multiple telemedicine visits with patients in other cities who were joined by family members in a third city. Reviewing prostate-specific antigen values with patients with prostate cancer has been a particularly good application of telemedicine, he notes, whereas Dr. Lyman cites its utility in evaluating a patient with cancer who is undergoing treatment and experiencing a side effect such as a fever or sore throat. A clinician who can evaluate the symptoms via telemedicine may be able to keep a patient who is not seriously ill from having to go to a health care center and facing other risks. "I think that is a lesson we've all learned from this: let's be more discriminating on our requirement for patients to always have a face-to-face visit," he says.

Dr. Royce cautions that delivering bad news such as cancer progression can be particularly challenging via telemedicine given the delicate and emotional nature of the conversation. Likewise, the format can complicate preoperative appointments that help a physician determine whether a patient is an appropriate candidate for a procedure or treatment. Still, a virtual visit may provide the physician with other cues, such as what a patient's home environment is like and how they are interacting with it. Even a relatively simple visual examination can be revealing, says Ana María López, MD, MPH, MACP, professor and vice chair of medical oncology at Thomas Jefferson University in Philadelphia, Pennsylvania. Physicians can observe patients as they breathe, get up from a chair, or walk up

a flight of stairs to gauge their pulmonary and cardiovascular health, she says.

Despite its enormous potential, Dr. López says telemedicine in the time of COVID-19 has further laid bare existing disparities in cancer care, and she cautions that awareness and proactive interventions are necessary to ensure that the technology does not widen the gap further. For example, Thomas Jefferson University already had built up its telemedicine infrastructure before the COVID-19 pandemic. As part of that infrastructure. a telehealth task force reached out to patients to ensure that they had internet connectivity, an appropriate device, and the necessary app to access the telemedicine platform. The team then guided each patient as to where they could find the telemedicine appointment and used a test appointment to troubleshoot any issues. "That patient is going to be much more ready to enter into the telemedicine visits than somebody who just gets an email [that says] 'Your appointment is Monday," Dr. López says.

Telemedicine platforms still can allow providers to convey empathy and "create an environment of compassion," she emphasizes. However, physicians need to adapt by looking directly into the camera to create a connection and slowing down their conversation to engage the person, she says. Some patients, in fact, have said they prefer telemedicine sessions because of the increased focus on them. Such lessons, it appears, may far outlast the pandemic.

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