Introduction

On January 30, 2020, the World Health Organization (WHO) declared COVID-19 as a worldwide public health emergency of international concern. Since then, globally, nearly 500 million people have been afflicted while more than 6 million have died.\(^1\) Nationally, approximately 80 million patients have contracted the virus while nearly 1 million have lost their lives.\(^1\) Locally, almost a quarter of a million cases and more than 1000 deaths have been reported.\(^1\) While these statistics are profound, they do not entirely depict the repercussions of the pandemic on cancer care. Over the last 2 years, multitudes of individuals and institutions have been gravely affected: patients, caregivers, providers, health systems, and non-profit organizations. As a surgical oncologist, it has been challenging to manage cancer patients with colleagues but rewarding to witness the collective partnerships amongst stakeholders under these circumstances.

Like other states, efforts to mitigate the spread of infection in Hawai‘i included social distancing, wearing facial coverings, closing parks, and instituting quarantine protocols for travelers.\(^2\) Initiatives in cancer prevention and early detection were temporarily halted due to the need to reprioritize resources. The Centers for Disease Control and Prevention (CDC) issued guidelines to limit viral transmission and increase healthcare workforce allocation.\(^3\) Unfortunately, in some instances actions such as postponing procedures contributed to disease progression and poorer outcome. Holcombe and colleagues found that in 2020 screening for breast cancer and colorectal cancer in Hawai‘i was reduced in rural areas and among Native Hawaiians.\(^4\) A recent meta-analysis by Johnson and co-investigators revealed that delaying surgical intervention for 12 weeks led to decreased survival in breast, lung, and colon cancer patients.\(^5\) In my opinion, although, much of the concern of cancer patients has been focused on the physical detriment, the emotional toll and financial hardship should not be minimized. The social and economic impacts have been worse for minority populations.\(^6\)

For cancer patients, the constant risk of acquiring an infection in an immunocompromised state or developing metastatic disease due to an inability to obtain treatment has led to a high frequency of depression and anxiety during the pandemic; one review elucidated a prevalence rate of more than 50%.\(^7\) Other associated problems such as insomnia, cognitive dysfunction, and fatigue impair quality of life. Studies have also shown that delays in the therapeutic regimen cause higher distress.\(^8\) However, as the pandemic wanes, it is hopeful that these uncertainties and issues will diminish.

Cancer patients with economic limitations have demonstrated a decreased survival. There are multiple reasons for this disparity but lack of access to specialized care and other barriers may be essential variables. Because of the pandemic, facilities such as the Hope Lodge necessitated closure. This structure managed by the American Cancer Society, is truly a “home away from home.” It was established in 2016 and provides a complementary place for neighbor island patients and caregivers to stay while undergoing treatment on Oahu. The reduction of the financial burden allows them to focus their energy on fighting the cancer in lieu of unnecessary worry.

While much has been said about patients, in my encounters, caregivers also suffered from the uncertainty of their loved ones. The lack of control in determining timing of treatment was a source of constant turmoil. The loss of job security was a cause of emotional crisis in a recent study of cancer patients.\(^9\) Other challenges including restrictions on visitation were also major stressors but were partially alleviated by innovative efforts. Telemedicine served as a conduit for an interactive approach to maintaining visits while reducing viral exposure and enabled participation by all relevant parties when feasible.

Providers needed to pivot during the pandemic. Many were tasked with explaining to patients why their services had to be rescheduled. Numerous physician, nursing, and administrative
leaders partnered to devise algorithms and implement guidelines in determining the optimal timing of surgeries. Other modifications of modalities were enacted; chemotherapeutic regimens were truncated and in person encounters were limited. However, reduction of in-person visits did not uniformly create a desirable environment when making end of life decisions. Cases of death occurring without family being available at the bedside was not optimal since there was lack of intimate closure. An undesired result of the pandemic was physician burnout, including those in the oncology field. In fact, a national survey of oncologists reported by the American Society of Clinical Oncology found that loss of personal interaction with cancer patients led to feelings of burnout.

Health systems were hampered with overcrowding and staffing issues but still managed to find a way to navigate the landscape of cancer patients, given their immunocompromised status. The launching of extensive vaccine clinics off-site helped mitigate critical hospitalizations, especially for those who required chemotherapy and immunotherapy. However, clinical trial participation at cancer institutes and medical centers was attenuated. Fortunately, enrollment is increasing as the pandemic abates.

Non-profit organizations were not spared from the pitfalls of the pandemic. In fact, during the summer of 2020 the American Cancer Society announced the elimination of more than 1000 jobs and reduction in executive salaries. During 2020, charitable commitment and fundraising efficiency had declined. It is imperative that philanthropists continue to support the mission of saving lives and celebrating lives so that programs and resources can be sustained to assist cancer patients.

**Conclusion**

In essence, although the pandemic illustrated the plight of cancer care in Hawai‘i it also highlighted how collaboration was the key to overcoming obstacles. Alliances were forged throughout the community to benefit cancer patients and their caregivers. As normalcy ensues, the coronavirus crisis has shed light on the vulnerability of cancer patients and their need for specialty care. It is hopeful that those diagnosed during the pandemic persevere without any major physical, mental, social, or financial turmoil.