

COVID19 Infection in Pediatric Hematology Oncology Patients

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Perspective

Due to factors such as older age, greater smoking rates, comorbidities, frequent health-care exposures, and the impact of cancer medications, cancer patients have a higher risk of coronavirus disease 2019 (COVID-19) problems than the general population. When compared to non-cancer controls who were matched for age, sex, and comorbidities, hospitalised cancer patients had greater incidence of severe COVID-19. Recent anticancer therapy administration has been linked to an increased risk of SARS-CoV-2-related mortality or sequelae. Because the majority of researches have focused on cancer patients hospitalised with severe COVID-19 infection, it's uncertain whether cancer status has an independent negative impact on clinical outcomes in a population-based sample of SARS-CoV-2 infection patients. We used the Penn Medicine Bio Bank (PMBB), a population-based cohort with access to Electronic Health Record (EHR) data that was approved by the institutional review board, to look into the link between cancer status and COVID-19 outcomes.

Because oncology patients are at such a high risk of developing COVID-19 and suffering its sequelae, avoiding acute healthcare utilisation, such as ER visits and hospitalizations, is becoming increasingly crucial during the COVID-19 pandemic. The pandemic has driven quick changes in healthcare delivery, including a growth in telemedicine use, which may bring new hurdles to care and difficulty in systematically addressing patient concerns, raising the likelihood of acute healthcare utilisation.

ER visits and hospitalizations can be reduced with oncology

navigation programmes and proactive symptom management. Risk classification is required, however, due to resource limits, in order to prioritise patients for therapies. It's uncertain whether generic medical risk stratification methods can be used to help oncology patients, and there are few cancer-specific models available. To identify those at high risk for acute healthcare utilisation, we used a general medicine Health Composite Score (HCS) and a Cancer-Specific Risk (CSR) stratification to risk-stratify oncology patients, measure the correlation between risk stratification methods, and pilot a telephone-based outreach for high-risk patients.

New York City (NYC) and the surrounding area became the epicentre of the new coronavirus 2019 (COVID-19) epidemic when it invaded North America. NYC reached its pinnacle in early April 2020, with more than 500 deaths each day and a total of more than 9,000 deaths in the tristate area (New York, New Jersey, and Connecticut). The influence on the well-being and mental health of healthcare personnel has been reported in reports from China, where the COVID-19 epidemic began, as well as previous pandemics. There have been observed differences in mental health outcomes based on provider role, region, and specialty. During the current pandemic, hospital personnel have experienced multiple changes, resulting in emotions of loss of control or order as a result of balancing changes to their living arrangements, childcare, working from home, and commute. In addition to the stresses on healthcare personnel as providers, they may also be dealing with financial losses, a lack of childcare and virtual schooling, solitary elderly, and personal or family disease as a result of the COVID-19 epidemic. As a result, they may be less resilient to work-related stress.

COVID-19's potential impact on well-being comes at a time when burnout is already a well-known occupational hazard affecting healthcare personnel with serious consequences. Burnout is not uncommon among Paediatric Haematology Oncology (PHO) doctors, and there are concerns about the impact on these doctors as they watched their already vulnerable patients try to navigate health care during the pandemic. PHO clinicians and staff frequently address various stresses that affect their patients, such as psychosocial and sociodemographic stressors, in addition to their patients' medical vulnerability. The special relationships that PHO physicians create with their patients during therapy as they navigate challenging talks are a crucial element of their job satisfaction for many PHO doctors. Changes in healthcare delivery modality and frequency, such as practise volume reductions, telemedicine, and wearing personal protection equipment, may have disturbed these dialogues and interactions (PPE). In addition, some PHO providers were assigned to different areas of the hospital or cared for older patient populations, just like other paediatric providers.