



Cancer in the context of COVID-19: Summary of emerging evidence (17)

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Date: 14 July 2020

The CRI presents a selection of emerging research articles and clinical practice guidelines related to cancer and COVID-19, with a summary of their key findings/recommendations (links to the articles are embedded as hyperlinks in the titles). This is the 17th of our weekly compilation, which we plan to update and disseminate as the pandemic evolves globally and nationally.

This week, we highlight the latest research and evidence related to oncology services in COVID-19 outbreak contexts globally, with a focus on African and other low- and middle-income country (LMIC) contexts. We hope that insights from these pieces of evidence will help guide how we rethink cancer prevention, treatment and care in the context of the ongoing pandemic, in view of its unprecedented implications for patients, healthcare providers and the community in general. We are keen to include research and guidelines from African and other low- and middle-income settings and will profile these as they become available. Previous weeks' editions can be found on the [CRI website](#), as well as on [our Twitter page \(@UctCri\)](#).

[Heisper et al. Cancer has not gone away: A primary care perspective to support a balanced approach for timely cancer diagnosis during COVID-19. European Journal of Cancer Care. DOI: 10.1111/ecc.13290.](#)

Country Context: High-income settings

In this commentary members of the Cancer and Primary Care Research International Network (Ca-PRI), propose a set of guidelines that should be part of an ongoing approach to iteratively and continuously find the optimal balance between minimising the negative impact of the COVID-19 pandemic while safeguarding timely cancer diagnosis. The guidelines are summarised in the Figure below:

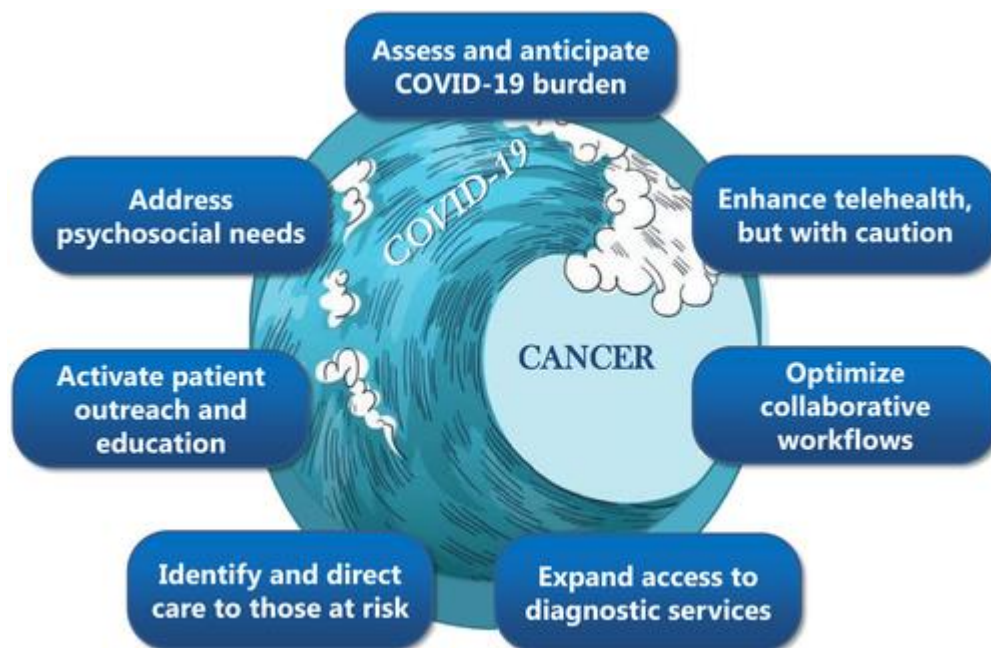


Figure: Essential components of an iterative, continuous approach to find optimal balance between impact of COVID-19 pandemic while safeguarding timely cancer diagnosis

Lombe et al. Negative impact of the COVID-19 pandemic on the management of cervical cancer patients in Zambia. *Ecancer*. DOI: [10.3332/ecancer.2020.ed103](https://doi.org/10.3332/ecancer.2020.ed103)

Country context: Zambia

In this short article, the authors describe the adverse impacts of the COVID-19 pandemic on the management of cervical cancer, including the situation in which the country has not been able to import radioactive isotopes for High Dose Rate (HDR) brachytherapy. They illustrate how this has led to the suspension and delay of treatment for patients, as well as how the implementation of mitigation strategies like external beam radiotherapy boost or hysterectomy has been difficult due to overburdened radiotherapy and gynaecological surgical units.

Okeke et al. Oncology and COVID-19: Perspectives on cancer patients and oncologists in Africa. *Ethics, Medicine and Public Health*. DOI: [10.1002/pcb.28318](https://doi.org/10.1002/pcb.28318)

Country context: Nigeria

This article outlines the challenges that frontline oncologists and other cancer care providers face in the management of cancer patients, as the entire health sector grapples with the burden of the COVID-19 pandemic. It highlights the importance of infection prevention and control; screening and triaging of cancer patients; alternative cancer care management strategies; telemedicine as an emancipator for sustained health care provision and the impact of the pandemic on cancer research.

Nicolas Andre. Covid-19: Breaking bad news with social distancing in pediatric oncology. *Pediatric Blood & Cancer*. DOI: [10.1002/pcb.28524](https://doi.org/10.1002/pcb.28524)

Country Context: France

In this letter to the editor, the author highlights how breaking bad news, while trying to maintain social distancing, is an unexpected new challenge associated with the COVID-19 pandemic. The use of face masks, for instance, poses a barrier to the adequate demonstration of empathy when communicating bad news to the caregivers of children with cancer. The author recommends that oncology care providers should learn and adapted strategies to better cope with such challenges; to better communicate, read, and show empathy even with masks and physical distancing.

Rojas et al. COVID-19 infection in children and adolescents with cancer in Madrid. *Pediatric Blood & Cancer*. DOI: 10.1002/psc.28397

Country context: Spain

This case series study of paediatric oncology patients infected with COVID-19 in Madrid provides updated epidemiological data and describes the most relevant clinical features and outcomes. The authors found the overall prevalence of COVID-19 infection among children with cancer in Madrid to be 1.3% and conclude that although this patient population is managed as high risk, the clinical features are milder and the prognosis than in the adult population. The main findings are summarised in the table below:

Main characteristics of the patients

Age (years)	Gender	Baseline disease	Disease status	CT interruption	COVID-19 symptoms	Chest X-ray	COVID-19 treatment
16.5	M	NHL	Active	No	Fever hypoxemia	Pneumonia	HCQ, Tocilizumab, Lopinavir, Ritonavir, Azithromycin, Oxygen support
8	M	B-ALL	CR	No	Fever coughing	Pneumonia	HCQ
10.6	M	B-ALL	CR	No	Fever	Normal	HCQ
0.6	M	HR-NBL	R/R	Yes	Asymptomatic	-	-
12.9	M	Myelo-dysplastic syndrome	CR	Yes	Throat pain	Peribronchial cuffing	-
12.7	M	B-ALL	CR	No	Fever	Peribronchial cuffing	HCQ
9	M	T-ALL	CR	Yes	Fever	Peribronchial cuffing	HCQ, remdesivir
6.8	M	Melanoma	R/R	Yes	Coughing	Peribronchial cuffing	-
11.2	M	AML	CR	No	Fever	Normal	HCQ
6.8	F	B-ALL	CR	No	Coughing, chest pain	Pneumonia	HCQ
5.2	M	B-ALL	CR	No	Fever	Normal	HCQ
14.6	M	T-ALL	Active	No	Asymptomatic	Normal	HCQ
18.6	M	Ewing sarcoma	R/R	Yes	Fever, cough, hypoxemia	Pneumonia	HCQ, azithromycin, corticoids, oxygen support
11	M	Wilms tumor	R/R	No	Fever, cough	Normal	HCQ
3	M	B-ALL	CR	Yes	Fever, cough	Normal	-

Abbreviations: ALL, acute lymphoblastic leukaemia; AML, acute myeloblastic leukemia; CR, complete remission; CT, chemotherapy; HCQ, hydroxyl-chloroquine; HR-NBL, high-risk neuroblastoma; NHL, non-Hodgkin lymphoma; R/R, refractory/relapse

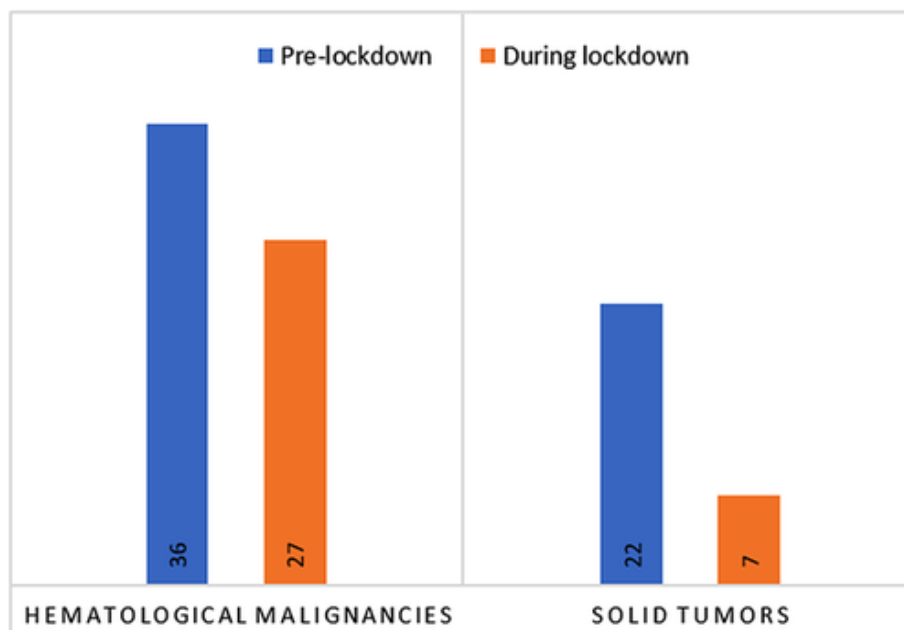
Trehan et al. Oncology care in a lower middle-income country during the COVID-19 pandemic. *Pediatric Blood & Cancer*. DOI: 10.1002/pbc.28438

Country context: India

In this letter to the editor, the authors share how their oncology unit managed the formidable challenge of ensuring the continued care of children under their care following the implementation of nation-wide movement restrictions in India, in response to the increasing spread of the novel coronavirus. The specific measures taken to manage and mitigate the impact of this situation are described below:

- The clinics continued with approximately one-third of patients reporting for their appointments. Only patients who reside in the city and those staying temporarily in the city during the intensive phase of therapy could attend. Out-of-city patients could attend hospital, as per lockdown rules, provided they had private transport.
- Contacting paediatrician colleagues in the neighbouring cities and states. They were requested to be part of a group to help patients in the trying times. A “WhatsApp” group of the doctors in the unit and 35 paediatricians in the surrounding areas (up to 500 km) was created. The platform was utilized for disseminating information as well as assisting in everyday patient management issues, such as the management of febrile neutropenia and administration of parenteral chemotherapy.
- A telecommunication network was established with the patients. A weekly rotation schedule of registrars was made for telephone duty, 24/7. The outpatient nursing staff shared the mobile number with patients when they called in. Patients would call for any problem, emergency, or when the clinic appointment was due. The patients communicated their blood counts to the registrar by scan or telephone. Patients in the maintenance phase of acute lymphoblastic leukaemia (ALL) or lymphoma therapy were advised drug doses by telephone. Patients with solid tumours due for the next cycle of chemotherapy were instructed to visit the nearest paediatrician who was a member of the WhatsApp group. Chemotherapy was administered locally by the paediatrician with the assistance of telephone instructions by a paediatric oncology registrar. Febrile neutropenia was handled similarly.
- The leukaemia research nurse made another WhatsApp group of parents of patients with leukaemia on ongoing chemotherapy (approximately 200) to enable regular instructions to the families.
- A social worker provided by a nongovernment organization for the care of children with retinoblastoma coordinated by telephone with doctors at local hospitals for administration of the scheduled 3-weekly chemotherapy.
- The availability of drugs (6-mercaptopurine and methotrexate) became a concern as the small-town pharmacies did not store these medications. Local pharmacies were requested to procure the medications for the patients. Patients living in the same town assisted each other by sharing the drugs. A few families were successful in ordering the medications online after an updated prescription was sent through WhatsApp.

The authors registered only 34 new patients in the 6 weeks of the lockdown as compared to 58 in the 6 weeks preceding the lockdown, though oncology was included as an essential service. The median symptom-diagnosis interval for children with ALL was 30 days in the pre-lockdown period as compared to 22.5 days in the lockdown period. The figure below demonstrates the decline in the number of paediatric oncology patients in the lockdown period.



Paediatric oncology patients registered in the 6 weeks prior to and during the lockdown period

[Casanova et al. How young patients with cancer perceive the COVID-19 \(coronavirus\) epidemic in Milan, Italy: Is there room for other fears? *Pediatric Blood & Cancer*. DOI: \[10.1002/pbc.28318\]\(#\)](#)

Country context: Italy

In this article, the authors present the findings from their study, which aimed to assess young cancer patients' perception of their risk of COVID-19 and level of stress. A semi-structured questionnaire was developed and administered in March 2020 (10-14 days after the coronavirus outbreak in Italy began) to three groups of adolescents and young adults (15-21 years old) living in Milan or Lombardia: 25 patients were receiving treatment; 25 patients were in follow-up who had completed their treatments; and 25 were healthy peers. A major finding was that: while by far the majority of healthy peers did not expect to be affected by the virus, a substantial proportion of the patients (particularly those receiving treatment, compared with those on follow-up) were worried, and felt personally at risk of severe consequences of the pandemic.

Orf et al. Remdesivir during induction chemotherapy for newly diagnosed paediatric acute lymphoblastic leukaemia with concomitant SARS-CoV-2 infection. *British Journal of Haematology*. DOI: [10.1111/bjh.17014](https://doi.org/10.1111/bjh.17014)

Country context: UK

This letter to the editor reports the use of remdesivir in a previously well five-year old child diagnosed with precursor B-cell acute lymphoblastic leukaemia and concomitant SARS-CoV-2 infection. This was the first case described in the UK of the treatment of a child with a new presentation of acute leukaemia and SARS-CoV-2 infection treated with antiviral therapy. The child remained asymptomatic from SARS-CoV-2 and did not deteriorate with immunosuppressive chemotherapy. Remdesivir was well tolerated with no side effects except anticipated elevation in alanine transaminase (ALT) which was more likely secondary to induction chemotherapy. This finding demonstrates the need for regular monitoring of liver function tests during therapy, as well as assessing the safety profiles of medications when started in the acute phase of an illness when chemotherapy agents are started concurrently.