Comment on: The COVID-19 Pandemic: A rapid global response for children with cancer from SIOP, COG, SIOP-E, SIOP-PODC, IPSO, PROS, CCI and St. Jude Global.

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Abbreviations

LMIC	Low- and middle-income countries
COVID-19	Coronavirus disease
SARS-CoV-2	Severe acute respiratory syndrome coronavirus 2

Dear Editor.

We read with great interest the article on adapting childhood cancer services during the COVID-19 pandemic

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from global pediatric oncology experts (1, 2). The document highlights the 6 most curable cancers with practical advice for their management during the Covid-19 pandemic, and includes adaptations for Low-Middle-Income Countries (LMICs). While we share the broad consensus outlined here we faced several unique challenges at our center- a large tertiary cancer care center in Mumbai- now at the epicenter of the outbreak in India, compelling us to take several steps to mitigate the impact of the pandemic, which may be of benefit to others affected similarly in healthcare settings closer to ours.

The Government of India declared one of the largest and most complete lockdowns in the world on 26th March 2020, which may have had an impact on slowing the first surge of Covid-19. However, well before this our center anticipated a potential cancer-care disaster located as we are in a population-dense urban setting with overstretched infrastructure and an unparalleled workload of more than 60000 new cases of cancer annually, including nearly 3000 children, more than 95% being from outside Mumbai. Measures were initiated 2 weeks prior to the lockdown aimed at reducing out-patient footfall, and conservation of supportive care resources and staff, as already detailed elsewhere (3, 4).

Within this larger response, we tailored management of pediatric cancers to meet the twin objectives of retaining hard-fought recent improvements in disease outcomes of largely curable malignancies (5, 6) while balancing resource constraints from disruption of services, and evolving strategies for the inevitable Cancerwith-Covid-19 patient surge. Our priority was to immediately reduce the average of 300 daily outpatient visits to pediatric cancer units by more than 50%. Screening at entrance gates was done by medical teams that dispensed advise and medication for low-risk patients such as those on follow-up or maintenance therapies without the patient needing to enter the premises, and they were later followed-up telephonically. A comprehensive tele-consult facility was set up to prevent unwarranted visits by those due to follow-up in the coming weeks from around the country. We achieved the targeted 50% reduction before the lockdown, which led to travel disruptions preventing new cases reaching us. Despite these measures, 890 active cases were seen in the Pediatric outpatient clinics with above 2900 clinic visits from 21st March to 1st May 2020, including 15 new cases.

To reduce the strain on supportive care resources including disruptions in blood-products supply, we were able to fall back on several measures that had been successfully used earlier. These included low-cost adaption of protocols that substituted high-dose methotrexate, and oral metronomic chemotherapy (OMCT) in curative settings as maintenance, or as a bridge to definitive therapy by giving time to ameliorate severe comorbidities or socio-economic constraints by necessary interventions prior to the standard treatment. These strategies have consistently yielded us acceptable, and often excellent outcomes (5-8). We rolled out a comprehensive set of measures including these and similar adaptations, and summarized them for easy reference (9). These guidelines helped us successfully brace for the initial Covid-19 surge and a brief summary of the first 7 cases of childhood cancer from 59 Covid-19 patients in 5 weeks from the first recorded case seen at our center is included (Table-1). With recent publicly available data showing no signs of the first wave abating in Mumbai and India, we have updated these to adapt to the rapidly changing external and internal logistics and pandemic realities.

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