

# Paediatric Cancer Surgery in COVID-19 - Challenges and Way Forward

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The world is now facing the second wave of COVID-19 and new cases are being reported at an alarming speed. Presently entire world population is at risk of contracting the disease including children and pregnant women. The progressively increasing number of COVID-19 cases has further increased the burden on already resource deficient health care systems of Low Middle-Income countries (LMICs) like Pakistan. According to the LANCET commission on Global surgery, five billion people lack access to surgery and most of these people reside in LMICs. It is also known that 1/3<sup>rd</sup> of child mortality is attributable to surgical conditions and the majority of these deaths occur in poor countries [1]. Facilities to deal with surgical conditions especially cancer surgeries are already deficient in developing countries. We do not see constructive efforts to improve this hence children's surgery is known as a stepchild of surgery. COVID-19 has further widened the gap of accessibility to surgery for children, especially in LMICs.

Children presenting with cancer are at higher risk of compromise in their care in the present global pandemic. Their disease and treatment with chemotherapy, immunotherapy and radiation put them at additional risk to acquire COVID-19.

Due to their disease and the treatment they receive, their ability to fight against COVID-19 is poor. Hence they have higher chances of morbidity and mortality. It is therefore important to consider using a minimum possible dose of chemotherapeutic drugs and adding long-acting granulocyte stimulating factor and recombinant human thrombopoietin to prevent severe myelosuppression. It is also worthwhile to consider reducing the dose of radiotherapy to decrease bone marrow suppression [2]. Moreover, visiting hospitals especially using public transport and hence increasing chances of exposure to infections should be avoided.

This catastrophic situation has lead to many ethical and social dilemmas. If the treatment is delayed there is a risk of disease progression. Admitting them for chemo-radiation and surgery makes them even more vulnerable. Hence, the ethical principle of beneficence

and non-maleficence; "Do No Harm" needs to be carefully balanced. The utilization of healthcare services for diseases other than COVID has steeply fallen during the pandemic, offering a rare opportunity to analyze a natural experiment in minimum medical care. This has also highlighted the need to divert medical resources to conditions that need urgent care.

In this special situation of the COVID-19 global pandemic, we need to learn to finely balance individual versus public interest. This has been studied in adults and then modified for children procedure. To maintain the balance, disease and patient-related specific factors need to be considered which is better known as Pediatric Medically Necessary Time Sensitive (pMeNTS) Prioritization. It also takes into account local COVID-19 incidence, risks to health care workers and patients [3]. Moreover, judicious use of already meager resources like intensive care beds and operating room space is challenging especially in LMICs like Pakistan.

COVID-19 has further increased the cost of managing children with cancer. The government has provided facilities for testing free of cost at limited hospitals therefore, most of the patients have to bear the cost of tests and treatment out of their own pockets, further increasing the dilemma. Our fear is that when this pandemic will slow down we will have a surge of children with all forms of cancer presenting late and many of them will not be salvageable with treatment.

This will be a very demoralizing scenario but the hope is to improve this situation as now vaccination for COVID-19 is started in Pakistan. As more and more people will get vaccinated we're likely to see a sharper decrease in cases and deaths due to COVID-19 in the coming months. Moreover fear of parents bringing children with cancer for treatment will be alleviated.

## REFERENCES

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