Clinical and Radiological Characteristics of Critically Ill Children with COVID-19 Disease Presenting to a Resources Limited Setting Paediatric Intensive Care Unit
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Background
In March 2020, WHO declared COVID-19 disease caused by SARS-nCOV-2 as a pandemic. COVID-19 is characterized by a spectrum of disease syndrome commonly affecting respiratory system. Progression to severe and critical disease is seen in 20% of confirmed cases. Childhood clinical presentation and radiological features children in resource limited settings including Africa has been less described in literature. Study aimed to describe common clinical characteristics and radiological features of childhood covid-19 disease with critical illness.

Methods
Electronic records of paediatric patients aged 2 months to 14 years admitted to PICU of KATH between the period of 1st February - 31st August 2021 were respective reviewed. Clinical features were collected using a case record form and radiological features reviewed by radiologist.

Results
PICU admitted 78 patients during the study, 8 covid-19 cases (10%); 7 confirmed and 1 probable. The median age 4 years (0-14 years), 6 males. The most common presenting features include; altered level of consciousness, breathlessness, and fever. The respiratory system was the most common site of presentation followed by circulatory system. Associated co morbid condition on admission includes sickle cell disease and road traffic accident. Six out of 7 had CXR showing abnormal features; 4 had ground glass appearance, 3 with consolidations, reticulo-nodular and pleural effusion respectively, and peri-bronchial thickening 2. Three (37.5%) presented as ARDS with severe hypoxaemia1. Echocardiography in 2 patients showed abnormalities: myocardial dysfunction, pericardial effusion and right ventricular failure. Seven (87%) received mechanical ventilation and 2 (25%) received inotrope support. PICU survival was 75% about half of the overall outcome reported on the continent2.

Conclusion
This study shows that COVID-19 and radiological features suggest severity of illness requiring critical care services including mechanical ventilation and inotrope therapy(Please rephrase sentence). Early identification and referral to centres with PICU capacity are needed for management.

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