Paediatric Attendances and Acuity in the Emergency Department during the COVID-19 Pandemic: A Comparative Analysis of Service Use

Katy Rose¹, Kerry Van Zyl¹, Rachel Cotton¹, Susan Wallace², and Francesca Cleugh¹

¹Imperial College Healthcare NHS Trust ²Chelsea and Westminster Healthcare NHS Trust

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Abstract

Aim: To investigate the difference in both numbers and acuity of presentations to the Paediatric Emergency Department (PED) during the peak time period of the current global SARS-CoV-2 pandemic. Design: This single centre retrospective observational study used routinely collected electronic health data to compare patient presentation characteristics between 21st March and 26th April 2020 compared to the equivalent time period in 2019. Results: There was a 90% decrease in attendances to PED, with a 10.23% reduction re-attendance rate. Children presenting were younger during the pandemic, with a median age difference of 2 years. They were more likely to present in an ambulance (9.63%), be admitted to hospital (5.75%) and be assigned the highest two Manchester triage categories (6.26%). There was a non-significant trend towards longer lengths of stay. The top 10 presenting complaints remained constant (although the order changed) between time periods. There was no difference in mortality or admission to PICU. Implications: Our data demonstrates that there has been a significant decrease in numbers of children seeking emergency department care. It suggests that presenting patients were proportionally sicker during the pandemic; however, we would argue that this is more in keeping with appropriate acuity for PED presentations, as there were no differences in PICU admission rate or mortality. We explore some of the possible reasons behind the decrease in presentations and the implications for service planning ahead of the winter months.

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