

PEER REVIEW HISTORY

BMJ Paediatrics Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Impact of COVID-19 on Paediatric Emergency department attendances at 4 English hospitals.
AUTHORS	Aldridge, Patrick Wilson, Sarah Roland, Damian McCann, Gerard Burridge, Richard

VERSION 1 – REVIEW

REVIEWER	Reviewer name: Dr. Arif Tyebally Institution and Country: KK Women's and Children's Hospital Emergency Medicine, Singapore Competing interests: None
REVIEW RETURNED	11-Dec-2021

GENERAL COMMENTS	<p>Thanks for sharing your interesting observations about paediatric and neonatal attendances at the ED during the COVID pandemic.</p> <p>It would be useful to see what the attendances were for and whether they can be linked to an ICD diagnosis code? This will help with our understanding of why the differences may have occurred and thus help with planning service provision for future pandemics. The differences may be due to differences in disease epidemiology independent of age. For example, the lockdown period may have resulted in a drop in respiratory and infectious diseases which may affect the older children disproportionately higher than the neonatal patients. It would be useful to understand what conditions the patients under 30 days of age came to the ED for.</p> <p>I also notice that between 2017 and 2019 there is usually a rise in attendance during the October to December period but this seasonal variation is not seen in 2020 where there is a drop during the same period. Any possible explanation?</p> <p>Information on the triage category of patients would also be useful. Was the drop in attendance mainly for lower acuity cases or for all cases?</p> <p>Were there changes in healthcare delivery in the region during the pandemic e.g. telehealth which may have impacted the drop in numbers?</p> <p>In addition to a description of the patterns, it is useful to make an attempt to answer why there is a difference as this will impact resource planning.</p>
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REVIEWER	Reviewer name: Dr. Kirsty Challen Institution and Country: Lancashire Teaching Hospitals NHS Foundation Trust, Emergency Department, United Kingdom of Great Britain and Northern Ireland Competing interests: None
REVIEW RETURNED	13-Dec-2021

GENERAL COMMENTS	<p>Thank you for this manuscript. The design is straightforward and not over-analysed.</p> <p>A couple of queries - why these institutions? How representative are you?</p> <p>What was different about hospital B in April 2020?</p>
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VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

Thanks for sharing your interesting observations about paediatric and neonatal attendances at the ED during the COVID pandemic.

It would be useful to see what the attendances were for and whether they can be linked to an ICD diagnosis code? This will help with our understanding of why the differences may have occurred and thus help with planning service provision for future pandemics. The differences may be due to differences in disease epidemiology independent of age. For example, the lockdown period may have resulted in a drop in respiratory and infectious diseases which may affect the older children disproportionately higher than the neonatal patients. It would be useful to understand what conditions the patients under 30 days of age came to the ED for.

I also notice that between 2017 and 2019 there is usually a rise in attendance during the October to December period but this seasonal variation is not seen in 2020 where there is a drop during the same period. Any possible explanation?

Information on the triage category of patients would also be useful. Was the drop in attendance mainly for lower acuity cases or for all cases?

Were there changes in healthcare delivery in the region during the pandemic e.g. telehealth which may have impacted the drop in numbers?

In addition to a description of the patterns, it is useful to make an attempt to answer why there is a difference as this will impact resource planning.

Reviewer 1 makes valid comments/queries. However, we are unable to meaningfully answer within the confines of our research letter. Reviewer 1 will be pleased to know this is being addressed in a UK wide data analysis (central NHS data) currently under final write up.

Reviewer: 2

Thank you for this manuscript. The design is straightforward and not over-analysed.

A couple of queries - why these institutions? How representative are you? ***Please note a recent paper from Bristol Royal Hospital for Children (now referenced). We***

feel this supports the notion of being representative.

What was different about hospital B in April 2020? **Unable to definitively answer as query a little unclear. However, all hospitals saw a drop in gross attendances in April 2020. Hospital B graphically shows a larger drop in numbers but the % change (2019 vs 2020) are broadly similar (between 32% to 41%) across all sites. We did not feel the need to comment on this in our original manuscript but have now noted this.**

VERSION 2 – REVIEW

REVIEWER	Reviewer name: Dr. Kirsty Challen Institution and Country: Lancashire Teaching Hospitals NHS Foundation Trust, Emergency Department, United Kingdom of Great Britain and Northern Ireland Competing interests: None
REVIEW RETURNED	
GENERAL COMMENTS	

VERSION 2 – AUTHOR RESPONSE