

Issue: Ir Med J; Vol 114; No. 3; P314

Covid-19: The Disappearance of Children from the Paediatric Emergency Department

R. Sabnani, E. Curran (joint 1st co-authors), J. Hayden, J. Twomey

Paediatric Emergency Department, University Hospital Limerick (UHL).

Dear Editor,

Ireland had its first case of COVID-19, the disease caused by SARS-CoV-2, a novel coronavirus first reported in Wuhan, China, on the 29th of February 2020¹. On the 11th of March 2020, the World Health Organisation (WHO) declared a global pandemic¹ and by March 12th schools and childcare centres in Ireland were closed. March 27th, 2020 marked the day when Ireland went into full lock down. With increasing restrictions came a decrease in paediatric emergency presentations, leading many to wonder: Where have all the children gone?²

The aim of this study was to determine if the pandemic influenced paediatric presentations to the University Hospital Limerick (UHL) Paediatric Emergency Department (ED). Our data included presenting complaint, triage category, referral source and address. A single centre, retrospective review of the Paediatric ED from April 6th to 13th 2020 (during the first lock down) compared to April 7th to 14th 2019.

A total of 371 patients from 2019 and 120 patients from 2020 were identified. There was a 67.7% reduction in presentations during the pandemic. The age ranged in both cohorts from 6 days to 16 years, with a median of four years. There was an increase in triage category "Overdose and Poisoning" from 0.5% to 3.3%, which was statistically significant (p<0.05). The number of patients with "Facial/Eye Problems" including injuries, infection, etc. also increased with a significant p value (p<0.05). Patients triaged as "Unwell Child/Baby" decreased significantly from 24.5% to 15.8% (p<0.05). There was no statistical difference in "Short of Breath" or "Abdominal Pain" presentations. Changes in triage categories one to four were not statistically significant, however, there was a reduction in category four presentations from 4% to 1.7%. There were no referrals from out of hours GPs, injury units or other services during lockdown (p<0.05). Self-referrals increased from 42.3% to 64.2%. Patient address from Limerick remained unchanged, with ~59% in 2019 and ~58% in 2020, with others mostly from North Cork, Tipperary or Clare.

The decrease during the pandemic in comparison to a week in the previous year is almost 70%. This suggests that patients presenting to ED may not always need emergency care or were hesitant to attend due to the pandemic. Similar studies in Paediatric EDs worldwide have noticed similar decreases³. Self-referrals to the ED increased due to the lack of availability of minor injury units or out of hours GPs. The increase in "Overdose and Poisoning" presentations may suggest a deterioration of mental health or accidental exposure as more time was spent at home due to closure of school and crèche facilities. Our ED has noticed a significant increase in children presenting with mental health issues which is of extreme concern.⁴ The decrease in triage category "Unwell Child/Baby" may be due to a reduction in the normal mixing of children, with resultant cross-infection, within the school and crèche setting. Reassuringly, there was no increase in cases triaged as "Short of Breath". The acuity of presentations remained similar in proportion to the attendances, with no statistical difference in triage categories. Further studies of paediatric EDs during the pandemic will be needed to provide additional insight into this observed phenomenon.

Corresponding Author:

Jennifer Hayden,
Paediatric Emergency Department,
University Hospital Limerick (UHL).
E-mail: jennyhayden40@gmail.com

References:

- 1. "WHO Director-General's Opening Remarks at the Media Briefing on COVID-19 11 March 2020." World Health Organization, World Health Organization, www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020. Accessed in November 2020.
- 2. Isba R, Edge R, Jenner R, Broughton E, Francis N, Butler J. Where have all the children gone? Decreases in paediatric emergency department attendances at the start of the COVID-19 pandemic of 2020. Arch Dis Child. 2020 Jul;105(7):704.
- 3. Scaramuzza A, Tagliaferri F, Bonetti L, Soliani M, Morotti F, Bellone S, et al. Changing admission patterns in paediatric emergency departments during the COVID-19 pandemic. Arch Dis Child. 2020 Jul;105(7):704-706.
- 4. Golberstein E, Wen H, Miller BF. Coronavirus disease 2019 (COVID-19) and mental health for children and adolescents. JAMA Pediatr 2020;174(9):819–820.