

The power of social isolation on paediatric emergency visits during COVID-19 lockdown

Dear Editor

In a brief report, Iozzi et al published their observations of reduced visits in the paediatric emergency department at the University of Pavia in Southern Lombardy during the lockdown period in Italy. [1] We experienced similar findings of a drastic reduction in paediatric emergency department visits at our institution (Figure 1). Located in central Queens, our hospital experienced the highest COVID-19 transmission rate within New York City during the pandemic's peak.

It is indeed interesting to see a spike in the number of trauma visits, despite the government shelter in place orders. Yet we do feel that many factors play a role in the decrease of paediatric emergency visits. We agree with the authors that parental fear of seeking care during the pandemic is a significant factor. While the delay in seeking care for emergencies is possible, we believe that most paediatric emergency visits fall into three different categories that are controlled well with this lockdown.

The first category is infectious diseases (viral or bacterial), representing the majority of paediatric emergency department visits. [2] This lockdown probably affected the rate of transmission of other pathogens, not just COVID-19. The second category is allergic reactions, children staying in a controlled environment limit their exposure to an allergen (food or environmental); this can explain lower rates of asthma, allergic rashes or angioedema. Finally, traumatic injuries, while authors describe an increase during the study period, it would be valuable to explore the type of those injuries. There are two types of traumas, accidental or non-accidental. While we believe that social isolation would decrease outdoor activities, both trauma categories can increase due to psychosocial stressors or decreased child observation during the lockdown.

Telehealth visits are another aspect that we should factor in these findings. We observed a drastic increase in these visits during the pandemic. We believe these factors collectively did decrease our average visits to 13% of the year prior, which prompted our response

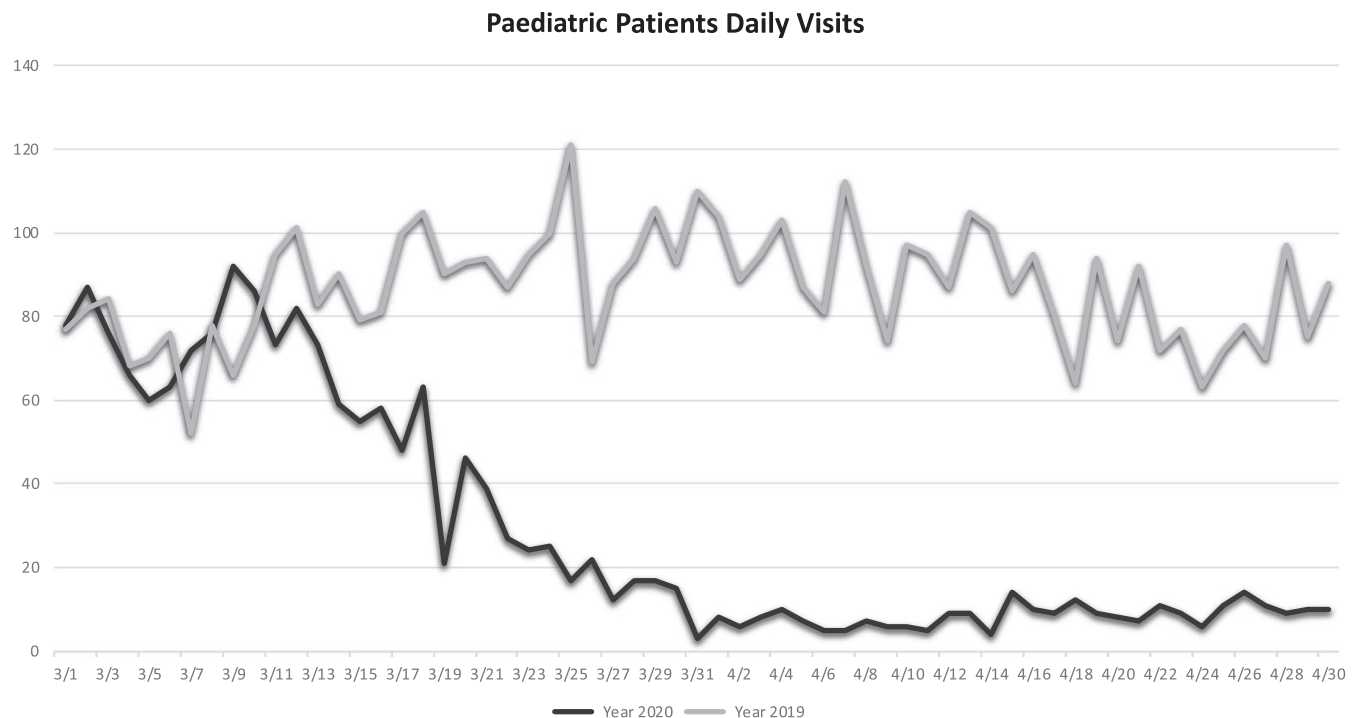



FIGURE 1 Paediatric March and April Daily Visits for 2019 and 2020

of redeployment of paediatric emergency physicians to care for adult patients during the pandemic.

We agree with the authors that some paediatric entities (otitis media, acute abdomen) can evolve into life-threatening conditions. The decrease in viral, bacterial or environmental allergen exposures can explain the lower rates of otitis media, especially in older children. It is unclear from the data described if the frequency of the acute abdomen has changed. On the other hand, we did notice a reduction in the number of acute appendicitis cases presenting to our hospital during the lockdown when compared to a year prior, which could reflect an environmental aspect to this entity. We will not be able to conclude a decrease in incidence, unless we have a more extensive epidemiological study to quantify the number of cases within different regions at a multicenter level, despite our current knowledge of decreased paediatric emergency department visits.

CONFLICT OF INTEREST

None.

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REFERENCES

1. Iozzi L, Brambilla I, Foiadelli T, Marseglia GL, Ciprandi G. Paediatric emergency department visits fell by more than 70% during the COVID-19 lockdown in Northern Italy. *Acta Paediatr.* 2020;109:2137-2138.
2. McDermott KW, Stocks C, Freeman WJ. Overview of Pediatric Emergency Department Visits, 2015: Statistical Brief #242. In: *Healthcare Cost and Utilization Project (HCUP) Statistical Briefs.* Rockville (MD): Agency for Healthcare Research and Quality (US); 2006.