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BRIEF19

A daily review of covid-19 research and policy

RESEARCH BRIEFING

Pediatric hospitalizations decreased during the spring and summer of 2020.

Research over the last year suggests that pediatric hospital admissions have decreased during the covid-19 pandemic. In a new paper published yesterday in *JAMA*, researchers provide a detailed look at data regarding specific trends in decreased hospitalization for a variety of conditions.

The researchers conducted a retrospective review of the Pediatric Health Information System databases for all admissions for children aged 0 to 18 years of age across 43 freestanding children's hospitals in the United States. Data on admission trends and diagnoses from 2020 were compared to similar time-of-year data from 2017 to 2019.

Compared to 2017-2019, pediatric hospitalizations decreased 48 percent during the spring and 23.5 percent during the summer of 2020. Decreases in hospitalizations occurred across all demographic groups.

When looking at specific reasons for hospitalizations for spring of 2020, hospital admissions for respiratory failure decreased by 168 percent, bronchiolitis (inflammation of the small airway branches in the lungs) decreased by 122 percent, and asthma exacerbations decreased by over 79 percent.

Rates of admission decreased for major depressive disorder by 52.5 percent, epilepsy by 48 percent, and sickle cell crisis by 50 percent, sepsis by 64.5 percent, gastroenteritis by 82 percent, and cellulitis by over 34 percent. Headaches decreased by 60 percent. Broken bones requiring admission decreased by 26 percent.

Notably, admission rates started to slowly increase for these conditions during the summer of 2020, but nevertheless remained significantly decreased when compared to admission rates in 2017-2019.

How can we explain the lower rates of pediatric hospitalizations due to such a wide variety of causes during the first 6 months of the covid-19 pandemic? Much of this explained by physical distancing. Many contagious diseases other than covid-19 were prevented by the lack of close contact among children for the better part of a year. In addition, perhaps some parents who might have normally had a relatively low threshold to bring their children in to emergency rooms for evaluation instead opted for at-home "watchful waiting." Another interesting finding here was that hospitalizations for psychiatric complaints during 2020 was also lower than in previous years. This may come as a surprise given reports of higher rates of mental health struggles among kids during the pandemic. However, this study did not cover the school year that began in the fall of 2020, nor the winter or spring of 2021. It's possible that pediatric mental health hospitalizations went up in the months after the period covered by the study. Data on that should be available in the coming months.

The major limitation of this study is that the authors did not assess whether changes in hospitalization rates were correlated with local and contemporaneous changes in mortality. Doing so would have helped us confirm that the decreases in acute emergency care reflected fewer emergencies, rather than inadequate treatment of the usual number of life-threatening conditions. Further research is warranted to understand what role decreased hospital utilization had on non-covid-19 pediatric morbidity and mortality during the pandemic

—Joshua Niforatos, MD, MTS

POLICY BRIEFING

New CDC guidance on public masking.

In light of the two hundred and thirty million vaccine doses administered in the United States and the increasing understanding of how SARS-CoV-2 is transmitted, the US Centers for Disease Control and Prevention (CDC) has updated its guidelines on public masking for fully-vaccinated individuals. By the CDC definition, the new guidelines apply to all individuals who are at least two weeks out from their final dose. The recommendations can be split into outdoor and indoor settings.

Changes to behavior for fully vaccinated people:

- Visit other fully-vaccinated individuals without wearing masks.
- Visit the homes of low-risk unvaccinated individuals without wearing masks.
- Aside from crowded venues, participate in outdoor and recreational activities without wearing a mask.
- Refrain from needing to self-quarantine after travel or if asymptomatic after a potential exposure.

Continued behavior for fully vaccinated people:

- Wear a mask at public indoor events.
- Wear a mask when visiting multiple groups of unvaccinated people.
- Avoid large, indoor group events.
- Get tested if symptomatic.

It is important to note that these are merely federal recommendations, and do not supersede local, state, or federal requirements, or employer mandates. *Various*.

—Brief19 Policy Team

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