

Impact of the COVID-19 pandemic on the circulation of common respiratory viruses

A search in Pubmed of the terms “SARS-CoV-2” or “COVID-19” and “respiratory syncytial virus” found 6 articles published in 2019; 95, in 2020; 276, in 2021; and 75, in the first bimester of 2022. Such simple observation shows the growing interest in the impact of the pandemic on one of the leading causes of pediatric diseases.

The first reports on the consequences of the pandemic in pediatrics referred to the decrease in health system visits of children and adolescents during the first year of the pandemic, and the impact that this would have on their health.¹

Later, there were reports that described the changes in the seasonal circulation of respiratory viruses other than SARS-CoV-2, particularly influenza and respiratory syncytial virus (RSV), referring to their near disappearance. Given that the first wave of the pandemic began in the Northern Hemisphere late in the winter and in the Southern Hemisphere in the early fall, it is not unusual that the first reports of this phenomenon originated in the South.²

There was much discussion initially as to whether this alteration in the circulation of common respiratory viruses was due to the occupation of the “ecological niche” by SARS-CoV-2 or to the impact of non-drug mitigation measures.³

To make matters worse, anti-SARS-CoV-2 vaccination soon broke out among adolescents and, in some countries, in children, with an epidemiological impact that is still difficult to assess.⁴

Gradually, intrigue grew about the future of pediatric respiratory infections caused by common viruses, particularly those related to RSV, once the pandemic had been overcome.⁵

During the winter of 2020/2021, RSV circulation in the Northern Hemisphere was delayed by 12-16 weeks.^{6,7}

In Argentina, during the winter of 2021, there was practically no influenza virus activity and RSV circulation was delayed by approximately 10 weeks and showed a lower relevance than usual.⁸

From what has been reported so far, it would seem that, once the restrictions on in-person classes are lifted, common respiratory viruses will return to their usual circulation.

This issue of *Archivos Argentinos de Pediatría* includes two brief reports on RSV screening in patients assisted for suspected COVID-19 in pre-hospital facilities in the City of Buenos Aires during 2021.^{9,10}

Consistent with what has already been observed in Argentina in relation to hospitalizations for RSV,¹¹ these reports show that something similar occurred in patients seen in outpatient clinics. RSV circulation was delayed by up to 10 weeks in relation to its usual pattern, coinciding with the return to in-person school activities.

After several pandemic waves, with a substantial part of the population vaccinated against SARS-CoV-2 and with the lifting of the mitigation measures imposed due to COVID-19, winter of 2022 will show us to what extent the panorama of acute respiratory infections –the leading cause of pediatric diseases– will resume its already known pattern or take on a new one, with the definitive incorporation of a novel actor, even if it plays a minor role in pediatrics.¹²

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