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50 Years Ago in *THE JOURNAL OF PEDIATRICS*

Pediatric Lower Respiratory Pathogens: What Has Changed Throughout the Years

Glezen WP, Loda FA, Clyde WA Jr, Senior RJ, Sheaffer CI, Conley WG, et al. Epidemiologic patterns of acute lower respiratory disease of children in a pediatric group practice. *J Pediatr* 1971;78:397-406.

Cold weather viruses have been a common cause of consultation in the pediatric practice for many years. The respiratory syncytial virus (RSV) is responsible for an estimated 3.4 million worldwide hospitalizations annually in children younger than 5 years of age.¹ Fifty years ago, Glezen et al published a study with more than 3000 cases in which they demonstrated (by culture medium) that almost 75% of the pathogens were associated with RSV, parainfluenza virus, or *Mycoplasma pneumoniae*. Needless to say, times (and pathogens) have changed.

We can compare pathogens associated with infectious respiratory illnesses in children between eras; it is well known that other viruses such as influenza, rhinovirus, adenovirus, or the recently discovered human metapneumovirus have emerged. RSV and influenza account for most of the cold-weather infections today,¹ but not all lower respiratory pathogens are associated with cold weather. Recent studies have demonstrated that parainfluenza virus, human metapneumovirus, rhinovirus, and adenovirus can present almost all year long. Thanks to polymerase chain reaction viral tests, rapid antigen tests, and serologies, among others, the causative agents of respiratory infections are much easier and faster to diagnose. However, the daily practice of pediatricians is dependent on the epidemiologic knowledge learned through the years.

A few months have passed since the start of the coronavirus disease 2019 (COVID-19) pandemic, and the world is learning about the epidemiology of this virus. We do not know if this disease will have a seasonal prevalence, if it will recur annually, or how it will affect the clinical differential diagnosis. What will we be writing 50 years from now about this and the other many respiratory pathogens that have challenged us over the last 5 decades?

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