



Figure. Willingness of parents to vaccinate their children against influenza and COVID-19 in the total study sample and stratified according to whether the child did/did not receive influenza vaccine in the last influenza season. **A**, Parents’ willingness to vaccinate their children against influenza in the coming influenza season. **B**, Parents’ willingness to vaccinate their children against COVID-19 once a vaccine is approved and available.

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Reply

To the Editor:

AlHajri et al surveyed 1038 parents to determine their willingness to vaccinate against influenza as well as a coronavirus disease-2019 (COVID-19) future vaccine.

Although AlHajri et al found a low rate of overall vaccine acceptance, compared with the global sample we recently reported, intent to vaccinate against influenza increased significantly for this coming season in both the online sample from Kuwait and our recent global sample. Further identifying those responding to their survey may help to elucidate the reasons for those differences.

We reported that 65% of our international sample of parents in pediatric emergency departments plan to vaccinate against COVID-19,¹ compared with 44.2% in the online sample from Kuwait. A recent history of vaccination against influenza was similarly associated with increased intended uptake, as well as children who were older, children with no chronic illness, when fathers completed the survey, children up-to-date on their



vaccination schedule, and caregivers concerned their child had COVID-19 at the time of survey completion.

In both influenza and future COVID-19 vaccines, and in both the international COVID-19 Parental Attitude Study sample and the one from Kuwait, prior immunization of children against influenza predicted willingness to vaccinate in the future. Although many parents are not planning to vaccinate their children (or themselves), others told us that they are eager to see approved COVID-19 vaccines, and were even willing to accept less rigorous testing and postresearch approval of a new inoculation.²

Vaccine hesitancy, the delay in acceptance and/or refusal of vaccination despite availability, is complex and crosses geographic locations and cultures. Convenience and confidence may contribute to a compromised ability to mitigate the rapid spread of COVID-19 and may amplify the deleterious effects on the “global village.”

We agree with AlHajri et al that developing public health strategies to educate all parents with regard to the importance of vaccinating children (against influenza, COVID-19, and all other available vaccines), as well as increased parental knowledge on the safety of vaccines, are 2 critical steps in ensuring herd immunity during this pandemic. A global effort, by governments, healthcare providers, and country-specific public health offices, must take action to identify barriers to vaccinating, in order to establish a foundation on which we improve vaccination rates. This will allow our global community to move forward and enter the post-COVID era.

Data Statement

Data sharing statement available at www.jpeds.com.

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Pediatric acute respiratory distress syndrome associated with respiratory viruses



To the Editor:

A report of pediatric patients with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection in New York City included 21 patients with pediatric acute respiratory distress syndrome (PARDS).¹ A diagnosis of PARDS mandates the presence of respiratory failure, defined as the use of positive pressure mechanical ventilation, either invasive or noninvasive. Therefore, it might be helpful to determine the incidence of PARDS in patients with respiratory failure and various respiratory viruses, as it is possible that specific viruses are more frequently associated with the development of PARDS.

Historical data for the incidence of PARDS in patients with respiratory failure and human metapneumovirus,² human rhinovirus/enterovirus,³ pandemic 2009 H1N1 influenza A,⁴ and respiratory syncytial virus² in New York City were compared with data for the SARS-CoV-2 in New York City¹ (Table). The proportion of patients with PARDS was not similar between viruses ($P < .0001$), and post-testing with the Bonferroni correction revealed that PARDS was more likely with SARS-CoV-2 vs either respiratory syncytial virus ($P < .0001$) or human rhinovirus/enterovirus ($P < .0001$). Assuming that no patient with SARS-CoV-2 treated with noninvasive ventilation alone was included in the PARDS severity stratification, the incidence of severe PARDS was similar between viruses ($P = .38$; human rhinovirus/enterovirus excluded as data not available).

Table. PARDS and respiratory viruses in New York City

	SARS-CoV-2	Human metapneumovirus ²	Human rhinovirus/enterovirus ³	Pandemic 2009 H1N1 influenza A ^{4*}	Respiratory syncytial virus ²
Patients with respiratory failure, n	27	32	97	28	107
Patients with PARDS, n (%)	21 (78)	13 (41)	22 (23)	12 (43)	33 (31)
Patients with severe PARDS, n (%)	5 (19)	5 (16)	Not available	6 (21)	11 (10)

*Historical data reviewed and PARDS classification determined by author.