To the Editor:

I read with interest the article by Green et al that presents the conclusion of lower coronavirus disease 2019 (COVID-19) susceptibility in patients with preexisting asthma in a cross-sectional study of a nationwide health maintenance organization member population in Israel. The author’s conclusion is based on a statistically significant odds ratio for asthma of about 0.7 (varying based on adjustment for confounders). I find the causal interpretation of population-based susceptibility from these findings to be inappropriate based on the measure of effect used and the study design. Using the crude numbers from their report (Table I), I calculate a prevalence difference for asthmatics (4.3%) versus nonasthmatics (6.2%) indicating that the COVID-19 burden in asthmatics is lower by 1.9 cases per 100 members tested (95% confidence interval [95% CI], 1.1-2.6).

On the scale of population health impact, this slight difference measured by the prevalence difference in a cross-sectional study does not translate to a broad conclusion or prediction of “lower COVID-19 susceptibility” for asthmatics. Adjustment for cross-sectional confounders in the report furthered weakened measures. Lastly, reporting of “lower COVID-19 susceptibility” for patients with preexisting asthma needs further caution when considering existing controversy in which diagnosed and undiagnosed asthmatics are requesting medical exemption from wearing a mask during the pandemic.²

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No funding has been received for this study.
Conflicts of interest: The author declares that he has no relevant conflicts of interest.
Received for publication December 3, 2020; accepted for publication April 5, 2021.
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https://doi.org/10.1016/j.jaip.2021.04.012

TABLE I. Asthma and COVID 19 RT-PCR findings among 37,469 HMO members in Israel

<table>
<thead>
<tr>
<th>Asthma status</th>
<th>COVID-19 RT-PCR +</th>
<th>COVID-19 RT-PCR –</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma +</td>
<td>153</td>
<td>3,388</td>
</tr>
<tr>
<td>Asthma –</td>
<td>2,096</td>
<td>31,832</td>
</tr>
</tbody>
</table>

HMO, Health Maintenance Organization; RT-PCR, reverse transcription polymerase chain reaction.
Covid-19 “infodemics” and asthmatic children: The return to school challenge

To the Editor:

We read with great interest the Rostrum article by Abrams et al., highlighting the relevance of clear and consistent recommendations about the relationships between asthma, allergies, school attendance, and coronavirus disease 2019 (COVID-19) infection in childhood. An adequate communication of the known evidence to children with asthma and their families will help on the decision-making process of a central question: should I allow my child with asthma to go back to in-person learning in the school or not?

Although the personal and community impact of returning to school is still a controversial issue, there is growing evidence that asthma and its treatment are not risk factors for increased morbidity and mortality of COVID-19 in children and, as the authors highlight, may even have a protective role. In spite of the recent progress, there are still open questions regarding severe acute respiratory syndrome coronavirus 2 infection in schoolchildren: Bayham and Fenichel found that school closures, in the absence of other child-care options, may reduce health care labor force, impacting COVID-19 mortality, while Brauner et al. found that closing schools and universities had a large effect on mitigating and suppressing outbreaks of COVID-19. Supporting this effect of school reopening is the recent resurgence of cases in the United Kingdom being concentrated among schoolchildren (2-16 years old) as well as adults in the 35 to 49 age group, possibly comprising their caregivers.

In a recently published review, we addressed the clinical and management challenges of pediatric asthma in the current pandemic, and the available evidence of a low actual risk of COVID-19 morbidity or mortality in these patients. The publication was complemented and immediately followed by a lay summary, in a press release to local and national media. What caught our attention with the publication of this narrative review was the media interest in this specific medical topic, notably at both regional and national levels, including general and children’s health education websites. The summary of the article was rapidly disseminated in more than 50 media outlets, and it was widely quoted in the press, leading to a healthy discussion of a wrongly perceived risk.

At this moment in the pandemic, where anxiety generated by misinformation becomes more and more noticeable in families, appropriate information on sensitive topics, such as the return to school of children with asthma, the most common chronic respiratory illness in childhood, makes this issue a subject of interest to the lay public. An additional focus on individual risk stratification (eg, coexposure to relevant allergens and comorbidities) and controller medication adherence will be essential to allow children and their families to retain asthma control and to safely return to in-person school.

As doctors and researchers, we cannot ignore the growing relevance of the lay and social media in the dissemination of accurate information in a clear language. On the contrary, the current pandemic has taught us, with all its information and political biases, the importance of engagement with these powerful media tools, which can decisively contribute to educate and communicate scientific evidence in this digital and “infodemics” era.

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