

Contextualizing COVID-19 Vaccine Hesitancy in the Broader Vaccination Debate

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To the Editor:

The article by Indelicato et al¹ presents an important question of vaccine hesitancy among health care workers. However, significant limitations and debatable premises need to be challenged. The survey that was conducted between December 13, 2021, and January 14, 2022, reflects a phase of the pandemic that differs vastly from the current postpandemic context, characterized by changes in virology, herd immunity, and public sentiments surrounding COVID-19 booster vaccination, especially for children.

As the authors stated, the Emergency Use Authorization by the Food and Drug Administration was issued between late 2021 and early 2022 for younger age groups. Health professionals should appreciate the desire of parents to evaluate and understand vaccine safety and effectiveness information being presented regarding new vaccines within the context of perceived and actual risk of disease. Throughout the pandemic, the impact of COVID-19 on healthy children was markedly less than on older adults and those with comorbidities.² Because perception of risk underlies people's motivation to accept medical interventions, vaccinating children was seen by many parents as a lower priority than it would be for diseases such as measles, which pose a greater threat of morbidity and mortality compared to COVID-19.³

Another challenge compounding the public's perception of COVID-19 vaccines, especially as it pertains to children and adolescents, were the reports of myocarditis as a rare but clear risk of the mRNA vaccines as acknowledged by the Centers for Disease Control and Prevention (CDC) in June 2021, particularly for male adolescents.⁴ Concurrently, the Janssen vaccine was linked with the risk of venous sinus thrombosis among younger women in April 2021. Such reports, amplified and often exaggerated by traditional and social media, influenced parents' decisions.

To report COVID-19 vaccine hesitancy as indicative of broader vaccine hesitancy oversimplifies the issue and ignores unique aspects of COVID-19 vaccines as well as the sociopolitical environment clouding these decisions by parents. While vaccine hesitancy is a major public health concern, equating COVID-19 vaccine-specific concerns with general vaccine mistrust may undermine our understanding of nuanced public perspectives as well as the scientific controversies surrounding COVID-19 vaccine policy. Such assumptions may also be detrimental to public health efforts in responding to future pandemics with mass vaccination campaigns, which require differentiated messaging compared to well-established immunization programs that for years have become normalized in many countries.

Policy decisions also played a role. Despite evidence of robust immunity from natural infection, CDC guidance did not adjust vaccine schedules to account for survivor-based immunity, further fueling skepticism. Booster

doses for young and healthy individuals were approved in 2021 with limited effectiveness data, raising questions about cost-effectiveness and necessity for annual boosters that were promoted to all age groups older than 6 months. By 2023, many organizations and countries, including the World Health Organization, the United Kingdom, Sweden, and Germany, no longer advised routine COVID-19 boosters for children due to insufficient data.

While COVID-19 vaccine hesitancy has public health implications, applying this study's findings to more traditional vaccines, like measles, would have been more insightful. These diseases present higher risks of outbreaks and severe outcomes, underscoring the importance of contextualizing hesitancy within specific vaccination frameworks. Greater emphasis on the complex decision-making environment parents faced could have strengthened the study's conclusions.

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References

- 1. Indelicato AM, Shaw J, Blatt SD, Stewart TM, Morley CP. Health care personnel attitudes toward pediatric COVID-19 vaccines. *PRIMER*. 2024;8:53. <u>doi:10.22454/PRIMER.2024.405060</u>
- Shekerdemian LS, Mahmood NR, Wolfe KK, et al; International COVID-19 PICU Collaborative. Characteristics and outcomes of children with coronavirus disease 2019 (COVID-19) infection admitted to US and Canadian pediatric intensive care units. *JAMA Pediatr*. 2020;174(9):868-873. doi:10.1001/ jamapediatrics.2020.1948
- 3. Liu Y, Bruine de Buin W, Kapteyn A, Szilagyi PG. Role of parents' perceived risk and responsibility in deciding on children's COVID-19 vaccination. *Pediatrics*. 2023;151(5):e2022058971. doi:10.1542/peds.2022-058971
- 4. Weintraub ES, Oster ME, Klein NP. Myocarditis or pericarditis following mRNA COVID-19 vaccination. *JAMA Netw Open*. 2022;5(6):e2218512. doi:10.1001/jamanetworkopen.2022.18512

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