

COVID-19 in Children and Safety of SARS-CoV-2 Immunization in Children: Statement of the International Pediatric Association

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The global burden of coronavirus disease 2019 (COVID-19) exceeded 271 million cases worldwide, with over 5 million officially confirmed deaths due to COVID-19, with no country of the world spared [1]. According to the American Academy of Pediatrics, about 17.3% of all US cases through 12 December, 2021 were in children, while 0.1-1.8% of all child COVID-19 cases resulted in hospitalization [2]. The global data compiled by the World Health Organization (WHO) in November, 2021, show that children and adolescents represent a small proportion of severe diseases, and of deaths from COVID-19 when compared to older age groups. However, the emerging evidence suggests that COVID-19 disease may not be uniform globally.

In addition to the direct effects of COVID-19, the COVID-19 mitigation measures have had a profound impact on the lives of children and adolescents, affecting their education, mental, emotional, and social health for the last two years, hindering normal child development. Experts suggest that the indirect effects of COVID-19 on children's education, mental and emotional health may be much more important in the long term than the direct effects.

The surge in COVID-19 cases driven by the greater circulation of transmissible variants (e.g., Delta) resulted in an increase in the COVID-19 associated hospitalization in children in many countries [3-5]. The Omicron variant, which has recently emerged, is highly transmissible. With its increased transmissibility, the number of cases, including severe cases, is likely to increase worldwide. Therefore, vaccination of children and adolescents assumes even greater importance given the substantial

and increasing impact of COVID-19 and pandemic response on children and adolescents.

A number of vaccines have been developed and are approved for use in adults in various countries around the world for COVID-19 prevention. Available data suggest that vaccines are highly effective in prevention of serious illness and death. Several vaccines, including Covaxin, Moderna, Pfizer, Sinopharm, Sinovac, and ZyCoV-D have recently been authorized for emergency use in children in some countries. Limited published data exist for some of these vaccines, but available data suggest robust immunogenicity, efficacy, and safety in clinical trials [6,7]. Other data have been presented supporting pediatric immunizations to regulatory authorities and National Immunization Technical Advisory Groups (NITAGs). The International Pediatric Association encourages improved access of these data to the public, and peer review publication of these data. Thus far, in those 5 years of age or older, the benefits of COVID-19 vaccines in reducing hospitalizations and deaths due to COVID-19 appear to far outweigh any safety issues.

With several countries extending COVID-19 vaccinations to children, the International Pediatric Association, also supports and recommends vaccination of children, provided the vaccines are approved by regulatory authorities for children and recommended by NITAGs. Children should get the full benefit that COVID-19 vaccines can provide to improve their health and well-being.

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