

COVID-19 vaccination in paediatric age group- parental hesitancy justified?

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The pandemic of COVID 19 has given rise to a large number of deaths and disease complications.^{1,2} Of the over 615 million cases worldwide to date as of September 2022,³ 1.57 million have been in Pakistan.⁴ Moderately a lot of significant public health measures have been found effective in alleviating the spread of the COVID-19 pandemic. This includes wearing masks, maintaining social distance and vaccination. Approximately 67% of the population needs to be vaccinated in order to achieve herd immunity and vaccine effectiveness.⁵

When the vaccine initially received emergency authorization, vaccines were being administered to priority groups such as health care professionals, essential workers, and individuals over the age of 65, with guidelines subsequently expanding.⁵ Vaccine data from clinical trials has shown promise in preventing recipients from morbidity and mortality due to COVID19 and there is hope for decreasing viral transmission and therefore disease volume and burden.⁵ In order for a vaccine to be effective in controlling the spread of COVID-19 it is estimated that 67% of the population will need to receive the vaccine to reach herd immunity.⁶ Pakistani population comprises of more than half of children less than 19 years of age,⁷ hence vaccination of children is of prime importance for protection against COVID-19. Also, as of this reason and also adult's reluctance towards vaccination; it seems very unlikely the Pakistan can ever attain herd immunity.

Regrettably, routine immunizations and the annual influenza vaccine for both children and adults have emerged as a major public health problem due to vaccine hesitancy, skepticism, and refusal.⁸ Certain sociodemographic groups including racial/ethnic minorities⁹ and those with lower socioeconomic status shows a lower vaccine confidence.¹⁰

Children spread COVID-19 less easily than the influenza virus.¹¹ It is difficult to validate COVID-19 vaccine in children for a disease that appears to be mild in most children, particularly if they play a nominal role in spreading the infection to others.¹²

The CDC recommends that children ranging from 6 months

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to 4 years should get their primary series doses of Covid-19. Children aged 5 years older should get their primary series plus the booster. Children from age group 5 to 11 years are currently recommended to get the original monovalent booster. Those who are 12 years and above should receive Pfizer or Moderna (bivalent) booster.¹³ The U.S. government, through USAID, is supporting the Government of Pakistan's COVID-19 paediatric vaccination campaign for 5- to 11-year-old children. The campaign took place in Islamabad and selected districts of Sindh and Punjab provinces on 19th September 2022.¹⁴

Successful propagation and implementation of public health policies to eradicate the global pandemic have been affected by vaccine hesitancy. Since children contribute to half of Pakistan's population, it is vital to include children and their parents in efforts to achieve herd immunity and eventually disease eradication, which are the goals of every vaccination programme. The demographic groups that have been the most adversely affected by the pandemic exhibit the highest rates of hesitancy and this could potentially push us further from health equity. Also, this hesitancy is fragile and should not be taken for granted; communities and families must be incorporated into decision making to ensure that whole populations move together in solidarity. Efforts to disseminate information regarding the COVID-19 vaccine should be culturally tailored and delivered through effective sources to decrease the COVID-19 illness burden in disproportionately affected groups.¹⁵

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