

# Editorial The urgency of vaccination COVID-19 in children Supriyadi<sup>⊠</sup>

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## ABSTRACT

The incidence of COVID-19 disease is much lower in children. Because the incidence and burden of COVID-19 disease are low in children, vaccination should not be done primarily for their self-protection but for communities, especially parents or high-risk individuals. Therefore, any vaccine should be thoroughly tested and proven safe before giving it to children to respect the risk-benefit balance.

#### **COVID-19 IN CHILDREN**

The incidence of COVID-19 disease is lower in children. In addition, children generally have a shallow risk of death. Compared to adults, the incidence and severity of COVID-19 illness in children is low, and regardless of its infectivity, their role in the spread of the disease is limited.<sup>1,2</sup> Children have consistently been shown to have a lower burden of COVID-19 disease than adults; therefore, it did not appear to be a top priority for vaccination. Young children are an essential driver of other common respiratory viruses.<sup>3</sup>

Children account for 1%–3% of COVID-19 cases diagnosed and have less severe illness and a better prognosis than adults, with infrequent deaths, primarily affecting adolescents and those with significant underlying comorbidities. Early epidemiological studies suggest that children do not contribute much to the spread of SARS-CoV-2. Younger children may be less likely to be infected or transmit the virus than older children or adults.<sup>4</sup> Incidence and severity of COVID-19 disease in children is low.

#### VACCINATING CHILDREN

The COVID-19 vaccine must fully demonstrate safety and efficacy in vaccinating children and prevent complications and disease transmission. The already damaging effects of pandemics on children's routine vaccine coverage require action to limit the increased risk of vaccine-preventable diseases.<sup>5</sup>

In Indonesia, COVID-19 vaccination for children aged 6 to 11 has begun. The vaccination targets reached 26.5 million children. The implementation of this vaccination will be carried out gradually. The first vaccination phase will be carried out in provinces and districts/cities with vaccination coverage criteria of doses of 1 above 70% and elderly vaccination coverage above 60%. To date, 8.8 million people from 106 districts/cities from 11 provinces have met these criteria.<sup>6</sup>

The low rates of severe illness and death associated with SARS-CoV-2 infection in children and adolescents suggest that they should not be prioritized for vaccination during the initial spread of the vaccine. Sars-CoV-2 vaccine trials have appropriately focused on adults, and safety data is currently limited to adults in vaccine trials, with limited data on children. In addition, large-scale post-implementation surveillance after mass immunization will be needed to assess the risk of rare events, including immune-mediated conditions such as antibody-dependent enhancements in vaccinated individuals.<sup>7</sup>

The obstacle faced in vaccination in children is necessary to include a safe and effective vaccine for minors. However, many vaccine trials currently have no plans for enrolling minors.<sup>8</sup> Urgent to discuss ethical considerations related to COVID-19 vaccination in children. Because the incidence and burden of COVID-19 disease are low in children, vaccination should not be done primarily for their self-protection but for communities, especially parents or high-risk individuals. Therefore, any vaccine should be thoroughly tested and proven safe before giving it to children to respect the risk-benefit balance.<sup>5</sup>

The criteria that should be prioritized over others are the first: there should be evidence that the COVID-19 vaccine is safe for children with an acceptable level of risk. The data needed to meet these criteria often requires years of research.<sup>9</sup> Without this data, it would be a mistake to consider making the COVID-19 vaccine mandatory. Vaccine

https://doi.org/10.30595/medisains.v19i3.12653

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safety is critical to maintaining public confidence in vaccines, and ignoring these safety criteria can have farreaching consequences.

Four other criteria must be prioritized considering the mandatory or absence of the COVID-19 vaccine for children. First, the burden of COVID-19 disease must be pretty enormous, at least in some populations. Second, vaccinating children should reduce the risk of disease transmission. Third, the COVID-19 vaccine must also protect children from disease. It does not need to be 100% effective, but the COVID-19 vaccine should be comparable to other vaccines we currently need for children. Fourth, vaccines should be widely available, accessible, and affordable to all.<sup>10</sup>

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