

Healthcare provider perspectives on COVID-19 vaccination for children in India

Introduction:

COVID-19 vaccines are the most important intervention to contain the effects of the SARS-CoV-2 virus and attain herd immunity across populations. Following rollout amongst adult populations in 2021, India has rolled out COVID vaccination amongst 15–18-year-olds in January this year and began vaccinating children between 12–14 years from March 2022, and the program may extend to 6–12-year age group by the end of the year. We are conducting this survey to gather thoughts and perceptions on key factors related to introduction and roll-out of pediatric COVID-19 vaccines (for populations 6 months- 15 years of age).

Participant Instructions: This is a quick survey and should only take you approximately 10 minutes. We will not collect your name or other personal information, and your data will not attach to your institution or organization.

Responding to this survey request is voluntary; it is your choice. Completing this survey and submitting it would mean that you consent to participate in the study. You may choose not to answer any question that we ask.

We are grateful to you for responding to our survey.

| Participant Demographics: To help us interpret your responses, please tell us about yourself | | |
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| 1. | What is your primary occupation? | <ul style="list-style-type: none"> a. Pediatrician b. Other Physician/ medical officer c. Immunization officer d. Program officer e. Other, specify: |
| 2. | Please describe your institution/ organization type: | <ul style="list-style-type: none"> a. Public clinic b. Public hospital c. Private clinic d. Private hospital |
| 3. | Please describe your location type: | <ul style="list-style-type: none"> a. Urban b. Rural |
| 4. | What is your age? | _____ years |
| 5. | What is your gender? | <ul style="list-style-type: none"> a. Male b. Female |
| 6. | What state or Union Territory are you based in? | <ul style="list-style-type: none"> a. Andhra Pradesh b. Arunachal Pradesh c. Assam d. Bihar e. Chhattisgarh |

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| | | <ul style="list-style-type: none"> f. Goa g. Gujarat h. Haryana i. Himachal Pradesh j. Jammu and Kashmir k. Jharkhand l. Karnataka m. Kerala n. Madhya Pradesh o. Maharashtra p. Manipur q. Meghalaya r. Mizoram s. Nagaland t. Odisha (former Orissa) u. Punjab v. Rajasthan w. Sikkim x. Tamil Nadu y. Tripura z. Uttar Pradesh aa. Uttarakhand bb. West Bengal cc. Telangana dd. Andaman and Nicobar Islands ee. Chandigarh ff. Dadra and Nagar Haveli and Daman and Diu gg. Jammu and Kashmir hh. Ladakh ii. Lakshadweep jj. Delhi (national capital territory) kk. Puducherry (former Pondicherry) |
| 7. | Do you provide routine childhood immunizations in your clinic/ institution/ healthcare center? | <ul style="list-style-type: none"> a. Yes b. No |
| Potential benefits of pediatric COVID-19 vaccination | | |
| 8. | Direct benefits: I believe that vaccinating children against COVID-19 will significantly reduce | |
| a. | Severe illness, hospitalization, and death in children | <ul style="list-style-type: none"> <input type="checkbox"/> Strongly agree <input type="checkbox"/> Agree <input type="checkbox"/> Neither agree nor disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree |
| b. | Cases and effects of long-COVID-19 in children, | <input type="checkbox"/> Strongly agree |

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| | including Multi-Inflammatory syndrome in children (MIS-C) | <input type="checkbox"/> Agree <input type="checkbox"/> Neither agree nor disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree |
| 9. | Indirect benefits: I believe that vaccinating children against COVID-19 will significantly help with | |
| a. | Reopening of schools | <input type="checkbox"/> Strongly agree <input type="checkbox"/> Agree <input type="checkbox"/> Neither agree nor disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree |
| b. | Reducing community transmission of COVID-19 | <input type="checkbox"/> Strongly agree <input type="checkbox"/> Agree <input type="checkbox"/> Neither agree nor disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree |
| c. | Enabling catch up of missed vaccines for other diseases | <input type="checkbox"/> Strongly agree <input type="checkbox"/> Agree <input type="checkbox"/> Neither agree nor disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree |
| Vaccine Data | | |
| 10. | Which of the following COVID-19 vaccine candidates for children (<18 years) have you heard of? Select all that apply | a. Covaxin b. ZyCov-D c. Covovax d. Corbevax |
| 11. | Do you believe that you have been provided sufficient information these pediatric COVID-19 vaccine candidates in terms of: | |
| a. | Their safety? | a. Yes b. No |
| b. | Their efficacy? | a. Yes b. No |
| c. | The adequacy of sample size and power end points in the pediatric vaccine trials? | a. Yes b. No |
| d. | Vaccination schedule for children? | a. Yes b. No |
| e. | Requirement of boosters for children? | a. Yes b. No |

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| 12. | Have you received any guidelines on COVID-19 vaccines for children? | a. Yes, National Guidelines b. Yes, State Guidelines c. Yes, Guidelines from the Indian Academy of Pediatrics (IAP) d. We put together our own institutional guidelines based on international guidelines e. No f. Other, Specify: |
| Please reflect on the following statements: | | |
| 13. | I feel confident about recommending pediatric COVID-19 vaccines for my patients once they are rolled out | <input type="checkbox"/> Strongly agree <input type="checkbox"/> Agree <input type="checkbox"/> Neither agree nor disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree |
| 14. | I feel confident about addressing parent concerns regarding pediatric COVID-19 vaccines | <input type="checkbox"/> Strongly agree <input type="checkbox"/> Agree <input type="checkbox"/> Neither agree nor disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree |
| 15. | I believe that all children should be vaccinated in pediatrician's offices/clinics/hospitals | <input type="checkbox"/> Strongly agree <input type="checkbox"/> Agree <input type="checkbox"/> Neither agree nor disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree |
| 16. | School based vaccination strategies will be highly effective in increasing pediatric vaccine uptake | <input type="checkbox"/> Strongly agree <input type="checkbox"/> Agree <input type="checkbox"/> Neither agree nor disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Strongly disagree |
| 17. | How concerned are you about the following potential side effects of COVID-19 vaccines in children? | |
| a. | Myocarditis | a. Very concerned b. Moderately concerned c. Mildly concerned d. Not concerned |
| b. | Vaccine-induced thrombotic thrombocytopenic purpura (VITT) | a. Very concerned b. Moderately concerned c. Mildly concerned d. Not concerned |
| c. | Vaccine induced multi-Inflammatory syndrome in children (MIS-C) | a. Very concerned b. Moderately concerned c. Mildly concerned d. Not concerned |

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| d. | Long-term sequelae (Long COVID) | <ul style="list-style-type: none"> a. Very concerned b. Moderately concerned c. Mildly concerned d. Not concerned |
| e. | Other adverse events following immunization (AEFI) | <ul style="list-style-type: none"> a. Very concerned b. Moderately concerned c. Mildly concerned d. Not concerned |
| Vaccine Roll-Out | | |
| 18. | In your opinion, which of the following categories of children should be first prioritized during vaccine roll-out? | <ul style="list-style-type: none"> a. Children with comorbidities b. Children living with high-risk individuals c. 12–17-year-olds d. 5–11-year-olds e. 2–5-year-olds |
| 19. | Which of the following strategies would you recommend for COVID-19 vaccine roll out in children? Select all that apply | <ul style="list-style-type: none"> a. Registration for vaccine appointment at health facility through CoWIN portal b. Provision of COVID-19 vaccine alongside other routine vaccines c. School based vaccination programs d. SMS/ phone call reminders e. Door-door campaigns f. Special campaigns g. Other, specify: |
| 20. | Please select any supply side barriers you anticipate in provision of COVID-19 vaccines for children (Select all that apply) | <ul style="list-style-type: none"> a. None b. Lack of enforcement of guidelines/ policies c. Supply-chain issues d. Cold chain issues e. Low availability of healthcare workers f. Financial constraints in provision of COVID-19 vaccines g. Lack of efficient monitoring systems h. Lack of a strong AEFI reporting system i. Other, specify: |
| 21. | Please select any demand side barriers you anticipate in delivery of COVID-19 vaccines for children (Select all that apply) | <ul style="list-style-type: none"> a. None b. Caregivers are not able to safely use |

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| | | <p>transportation to reach vaccine site</p> <p>c. Loss of wages when bringing child to vaccine site</p> <p>e. Concerns on vaccination safety and side effects</p> <p>f. Vaccine hesitancy amongst parents regarding vaccinating their children</p> <p>g. Other, specify:</p> |
| 22. | In your opinion, which of the following factors could lead to hesitancy for COVID-19 for children among caregivers? (Select all that apply) | <p>a. Lack of sufficient information on vaccine safety/ efficacy</p> <p>b. Already crowded pediatric immunization schedule</p> <p>c. Fear of side effects</p> <p>d. General distrust in vaccines</p> <p>e. Concerns about long term effects of vaccination</p> <p>f. Rumors/ Misinformation</p> <p>g. Financial concerns</p> <p>h. Other, specify:</p> |
| 23. | Do you have any other remarks or suggestions on the pediatric COVID vaccines you would like to share? (optional) | |
| 24. | <p>Thank you very much for taking the time to complete this survey. Please leave your name and email address below so that we can contact you with further reports and updates (optional)</p> <p>Email:</p> <p>We appreciate you taking the time to complete this survey. Please review your answers and click the following arrow to submit.</p> | |