

# Examining Reasons for Under-vaccination Among Kenyan Children Born Before & During the COVID-19 Pandemic



Routine vaccination is an essential strategy to increase child survival. In 2020, the World Health Assembly endorsed the Immunization Agenda 2030 to accelerate vaccination gains globally by strengthening vaccination service delivery, investing in further research and development, and ensuring continued demand for vaccines. However, vaccination coverage has been stagnating or declining in many countries, and may have been worsened by COVID-19 pandemic-related disruptions, which led to supply shortages and limited people's access to health services.<sup>1</sup>

Previous IPA research in Kenya found that caregivers had challenges in accessing and affording health care for their children early in the COVID-19 pandemic, including immunization services.<sup>2</sup> Although vaccination coverage in Kenya is generally high, vaccine confidence may be on the decline.<sup>3</sup> What is the magnitude of complete and on-time vaccination for children born before and during the COVID-19 pandemic? How do maternal factors impact their children's vaccination status?

## The Research

In collaboration with the Kenyan Ministry of Health and IPA Kenya, researchers assessed the reasons of under-vaccination among children. To do this, they conducted a follow-up survey in May-June 2022 with women in Kiambu and Nairobi counties who had participated in a previous IPA study about their antenatal and childbirth experiences.

Researchers measured indicators including vaccine take-up, access to vaccination services, attitudes toward vaccines, and interactions with health workers.

## Results

Under-vaccination of children in Kenya increased during the COVID-19 pandemic, and was associated with person-centeredness of vaccination services, and concerns about vaccine safety.

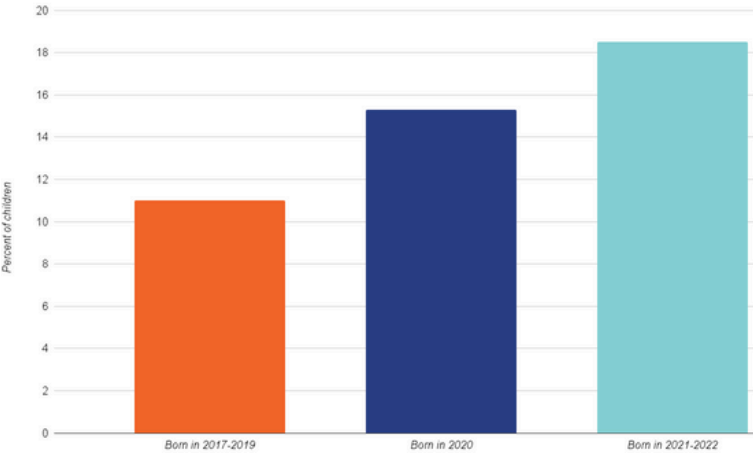


CREDITS | A health worker administering a vaccine to an infant.  
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## Key Findings

- Under-vaccination in study areas of Kenya increased during the COVID-19 pandemic, from 11 percent of children born in 2017-2019 to 18.5 percent of children born in 2021 and 2022.
- Mothers perceive pro-vaccination norms & trust health workers.
- Half of mothers had concerns about vaccines' safety.
- Most mothers faced no access problems.
- Low patient-centered care was strongly associated with mothers under-vaccinating or missing vaccine doses for their children.

# Childhood Under-vaccination Rate in Kenya

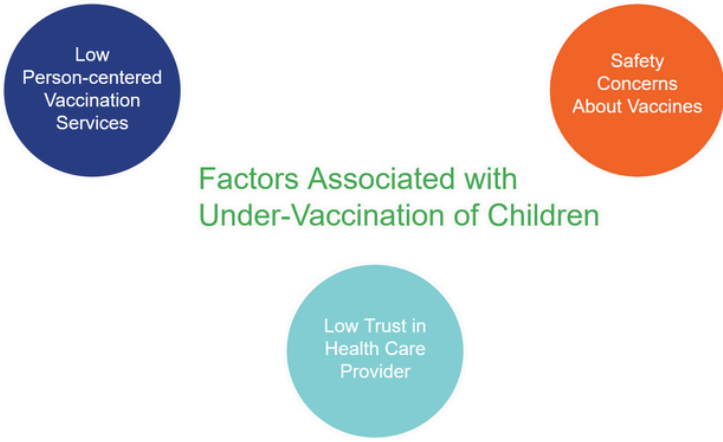


## Missed and late vaccine doses

Among those born before the COVID-19 pandemic (from 2017-2019), 11 percent of newborn children were under-vaccinated (i.e., missed or received a late vaccine dose). This increased to 15.3 percent for children born in 2020 and to 18.5 percent for children born between 2021 and 2022.

## Trust in health workers

Overall, trust in health workers was high. Mothers who had greater trust in their health provider were 15 percent less likely to have a child with a missing vaccine dose than mothers who did not trust their providers.



## Factors Associated with Under-Vaccination of Children

## Positive views of vaccines

Mothers had largely positive views on the efficacy and importance of childhood vaccines.

However, about half of mothers reported worse attitudes about childhood vaccines now compared to before the COVID-19 pandemic. Mothers also perceived that children receive too many vaccines.

## Importance of person-centered care

The level of person-centered care was the strongest factor associated with vaccine uptake. Mothers who received less person-centered care were more likely to under-vaccinate or miss vaccine doses for their children.

Read the published paper [here](#).

# Implications for Future Interventions

To improve childhood vaccination rates in Kenya, future interventions should focus on:

- Exploring the use of community scorecards for vaccination service quality
- Sensitizing and educating communities about vaccine safety
- Strengthening health system resilience to handle shocks (e.g., supply & staff shortages)
- Identifying and engaging diverse trusted messengers about vaccination, such as community health promoters.

1. World Health Organization and UNICEF Press Release, "Global childhood immunization levels stalled in 2023, leaving many without life-saving protection," World Health Organization, July 15, 2024.

2. Moucheraud, Corrina, John Mboya, Doris Njomo, Ginger Golub, Martina Gant, and May Sudhinaraset. "Trust, Care Avoidance, and Care Experiences among Kenyan Women Who Delivered during the COVID-19 Pandemic." Health Systems & Reform 8, no. 1 (2022): 2156043.

3. Porth, Julia M., Abram L. Wagner, Cheryl A. Moyer, Martin K. Mutua, and Matthew L. Boulton. "Women's empowerment and child vaccination in Kenya: the modifying role of wealth." American Journal of Preventive Medicine 60, no. 1 (2021): S87-S97.

**Writer:** Eric Ochieng | **Editing and Design:** Michael Podesta

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**Researchers:** Corrina Moucheraud (NYU/UCLA), Peter Szilagyi (UCLA) May Sudhinaraset (UCLA) Risa M. Hoffman (UCLA), Beth Glenn (UCLA), Doris Njomo (KEMRI)

**Partners:** Sabin Vaccine Institute, Kenya Medical Research Institute (KEMRI), University of California Los Angeles (UCLA)

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