

# Changes in parental behavior toward routine childhood immunizations after the pandemic: a multi-country, self-controlled study

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## Study Rationale

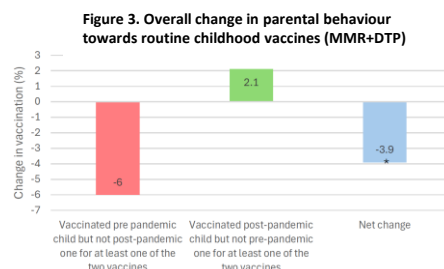
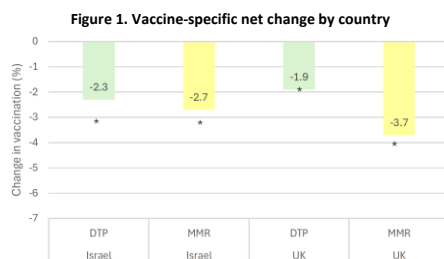
- ❑ COVID-19 pandemic impacted routine childhood vaccination
- ❑ It is unknown whether it affected parental attitudes and behaviour towards vaccines long-term

## Objective

- ❑ Determine changes in vaccination attitudes and behavior among parents with children born before and after the pandemic in two countries: Israel and the UK

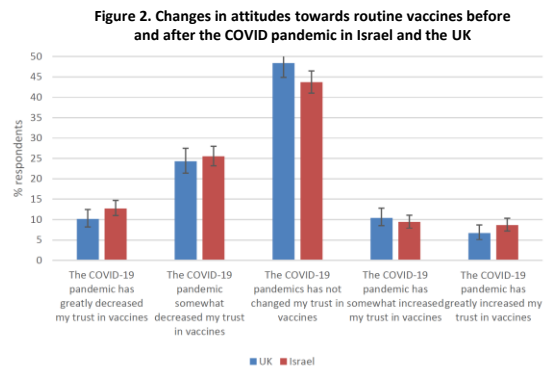
## Methods

- ❑ Self-controlled, matched design
- ❑ Recruited Israeli and UK parents with at least one child born before and one after the pandemic peak
- ❑ Built data collection tool using validated surveys adapted to local context
- ❑ Collected socio-demographic data and attitude and practice towards DTP and MMR vaccination before and after the pandemic.
- ❑ Compared vaccination attitudes and practices before and after pandemic using Paired t-tests and McNemar's tests
- ❑ Identified factors associated with changes in attitudes and/or practice using logistic regression



## Results (continued)

- ❑ 777 UK and 1270 Israel Participants
  - ❑ (61% female)
- ❑ 6% stopped vaccinating for either DTP or MMR post-COVID
- ❑ 2.1% started vaccinating for either DTP or MMR post-COVID post-COVID
- ❑ Overall Net decrease in vaccination rates: 3.9% ( $p < 0.01$ , figure 3)
  - ❑ MMR decrease: 3% (Figure 1)
  - ❑ Pentavalent decrease: 2.2% (figure 1)
- ❑ No difference according to country or parental age
- ❑ Minority ethnicity (Asian in UK, non-Jewish in Israel) was associated with larger decreases ( $p < 0.01$ )
- ❑ Higher income was associated with smaller decreases ( $p < 0.01$ )
- ❑ 37% reported the COVID19 pandemic decreased their confidence in vaccines, similar in both countries (Figure 2)



## Study conclusions

- ❑ Using an innovative, bias-reducing, self-controlled approach, we show the pandemic has significantly decreased vaccine uptake and confidence
- ❑ Very similar picture in two countries with different context
- ❑ Ethnic and socio-economic disparities in vaccination behavior changes
- ❑ Improving attitudes may not be sufficient to increase coverage
- ❑ The pandemic also pushed a small proportion of parents towards better vaccination enablers: a mechanism worth exploring
- ❑ Targeted interventions needed to restore optimal collective immunity

