Motivations for paediatric vaccine trial participation

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During the COVID-19 pandemic, clinical trials of vaccines received unprecedented publicity; whether this interest might be transferred to vaccine trials generally is unknown. Enrolment in paediatric COVID19 vaccine trials was slower than uptake of adult vaccine trials, and lessons learned are, therefore, of importance for future recruitment and participant experience. Previous studies have investigated motivations for participation in adult vaccine trials [1, 2], paediatric trials for chronic conditions [3], and select paediatric vaccine trials [4]. By contrast, for a non-COVID-19 paediatric vaccine trial, with recruitment from March–May 2021, we noted a higher rate of response (5.71%) than we have seen previously in the same population. The study was a randomised controlled trial of acellular vs whole cell pertussis vaccines (AWARE, part of the Periscope consortium). 295 responses were received; 184 respondents volunteered to participate, and 112 infants met the inclusion/exclusion criteria. For our study on trial motivations, 110 surveys were sent out and 81 responded (73.6% response rate). Baseline characteristics of the trial participants’ parents are outlined in Supplementary Table 1.

Previously, we have observed response rates of 2%-4% for similar trials. We therefore hypothesised that prior vaccine trial experience and exposure might modulate the threshold for trial participation, and descriptively studied motivations and barriers to paediatric vaccine trial participation in this context. Ethical approval and feedback from the Oxford Vaccine Centre Public and Patient Involvement (PPI) group was received. Motivations for trial participation were dichotomised by prior trial participation (Table 1); self-described altruistic motivations were common, while motivations related to concrete personal benefits, regardless of prior trial participation, were less frequently reported. The two most cited motivations were improving the health of children and contributing to scientific progress, while access to in-home study visits was reported as a motivator by 83% of respondents. The pandemic context may have contributed to both the emphasis on scientific progress and the sense of public service and interest in trials, while also heightening the perceived benefit of in-home visits.

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This survey has limitations, being an unvalidated survey instrument, the reliance on self-report, and the inability to ascertain motivations among those who declined to participate. Further research including representative sample of the general UK population and better controlling for social desirability bias may shed further light on the nature and magnitude of differences in motivation, providing a basis for targeting adjustments to enrolment—and improve generalisability especially post-pandemic. Parental motivations for enrolling children in clinical trials are understudied and merit detailed exploration to maximise successful recruitment in future trials.

**Supplementary Information**

The online version contains supplementary material available at https://doi.org/10.1186/s13063-023-07597-2.

**Additional file 1: Supplementary Table 1.** Baseline characteristics of 81 respondents. P-values are for chi-squared tests.

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**Authors’ contributions**

KH Conceptualised and designed the survey, led and coordinated recruitment of all participants, data collection and validation, literature search and manuscript writing. JK performed formal data analysis, literature search and equal contribution to the manuscript writing as KH. MMVP was involved in the initial study design and reviewed and edited the manuscript. AP had an overview of the project and reviewed and edited the manuscript. DK is the principal investigator of the trial, provided conceptual and technical guidance on survey design, supervision and reviewed and edited the manuscript. SV conceptualised and designed the survey, data collection and validation, literature search, data analysis and provided the overall supervision of the manuscript writing. All authors critically reviewed and approved the final text and were responsible for the decision to submit the manuscript.

**Declarations**

**Competing interests**

All other authors declare no competing interests.

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