

## Letter to the editor: Backdrop context of the study “Intention to vaccinate young children against COVID-19: a large-scale survey of Hong Kong parents”

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### ABSTRACT

The current letter provides the backdrop context of the study “Intention to vaccinate young children against COVID-19: a large-scale survey of Hong Kong parents” conducted when the COVID-19 vaccination was first made available to young children in Hong Kong during the fifth wave of the outbreak. The study was conducted to examine parents’ intention for informing the development of an effective child COVID-19 vaccine program because parents were speculated to have low intention to vaccinate their children against COVID-19.

### ARTICLE HISTORY

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### Letter to the editor

Dear Editor,

We write in response to the comments from Mungmunountipantip and Wiwanitkit on our paper titled “Intention to vaccinate young children against COVID-19: a large-scale survey of Hong Kong parents” (Lau et al., 2022) to provide more information about the backdrop context of our study. We conducted our study in January 2022 when the vaccination was first made available to young children in Hong Kong during the fifth wave of the outbreak to examine parents’ intention for informing the development of an effective child COVID-19 vaccine program. The study was initiated because parents were speculated to have low intention to vaccinate their children against COVID-19 for the following reasons.

First, before the biggest wave of the pandemic (i.e., the 5<sup>th</sup> wave) starting in late December 2021, Hong Kong adopted the “zero-COVID” strategy and COVID-19 local transmission had been maintained at a low level, with only a total of around 12,000 cases and 200 related deaths. The infection rate among children aged 11 or below was very low (i.e. below 750 cases) and there were no reported COVID-19 related deaths among children in Hong Kong until the 5<sup>th</sup> wave of pandemic.<sup>1</sup> These have likely contributed to parents’ low perceived risk and correspondingly low intention to vaccinate their children against COVID-19.

Second, considerable evidences showed that trust in government authorities plays a critical role in people’s intention to receive vaccination.<sup>2,3</sup> In Hong Kong, the social unrest in 2019 has led to a low level of trust in the government among the general population.<sup>4</sup> As the pandemic persists and negatively influences the economic, the trust in the government has also gradually declined. The lack of trust in government may have led to greater vaccine hesitancy among Hong Kong parents and make it challenging for the government to encourage children’s uptake of COVID-19 vaccines in Hong Kong.

Third, compared to other countries worldwide,<sup>5–7</sup> the prevalence of adults’ vaccine hesitancy was high in Hong Kong. Consistently, when the COVID-19 child vaccination program in Hong Kong was first launched, parents raised questions and

concerns about the potential adverse effects of the fast-tracked vaccines. There was also only one option of vaccine (CoronaVac) available during the first month. As such, the lack of information on the safety and effectiveness of the vaccines and the lack of vaccine options were speculated to contribute to a high level of parental hesitancy among parents.

Fourth, there was a lack of incentive for parents to vaccinate their children against COVID-19. Before the 5<sup>th</sup> wave of pandemic, Hong Kong secondary students were allowed to resume whole-day face-to-face class for individual class that reached 70% student vaccination rate. In previous class suspension during the pandemic, Hong Kong parents of young children were found to be unsatisfied with online learning.<sup>8</sup> It was also found that children displayed psychological and academic problems.<sup>9</sup> Clearly, parents desired more face-to-face learning for their children. However, for children aged 11 or below, their vaccination was not associated with any class resumption or anti-epidemic arrangements. As a result, parents’ intention to vaccinate their children may be low when there is a lack of articulated pathway between child vaccination and school resumption.

Consistent with our speculation, our study found that parents had high hesitancy toward vaccinating their children against COVID-19.<sup>10</sup> Nevertheless, the vaccine hesitancy of some parents has abated and there has been a rapid increase in child COVID-19 vaccination rate lately. As of mid-May 2022, around 73% and 50% of Hong Kong young children have received one dose and two doses of vaccines respectively. In another recent study,<sup>11</sup> we found that parents’ intention to vaccinate their children was higher if parents had higher levels of perceived susceptibility, perceived benefits, positive attitudes, and subjective norms and if they had lower levels of perceived barriers in arranging COVID-19 vaccination for their children. The pattern of the initially low parental intention and the subsequently rapid increase in child COVID-19 vaccination rate was consistent with our speculation and also the literature that explains how vaccination policies and contextual factors could have contributed to the change in Hong Kong parents’ hesitancy over the last few months.<sup>12</sup> We are currently

conducting a follow-up study with the participants of our study (Lau et al., 2022) to understand the factors contributing to the changes in parents' decision and intention over time. Such investigation will provide important insights to facilitate parents' decision to vaccinate their children against COVID-19 to improve child vaccination rate.

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