Caregivers’ intentions regarding pandemic (H1N1) 2009 influenza vaccination for their children

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TO THE EDITOR: Children have been seen as a key priority group for pandemic (H1N1) 2009 influenza (“swine flu”) vaccination. In Australia and New Zealand, children aged 0–4 years had the highest population rate of intensive care unit admissions for swine flu. From 3 December 2009, the Australian Government provided free H1N1-specific influenza vaccine for all Australians aged 6 months and older. However, it was not known how parents and other caregivers would respond to the offer of vaccination. We sought to determine caregivers’ intentions regarding whether their child would receive the pandemic vaccine. The study was approved by the human research ethics committee of the Children’s Hospital at Westmead and was conducted in November and December 2009, immediately before, and alongside, the commencement of the pandemic vaccination program for children.

A paper-based questionnaire (with an alternative web-based option) was sent to caregivers of children aged 6 months to 5 years who were attending 16 long-day-care centres across metropolitan Sydney. It included questions about attitudes, behaviour, intentions and beliefs regarding swine flu, seasonal influenza and vaccines. We analysed responses using SPSS, version 17 (SPSS Inc, Chicago, Ill, USA) and conducted univariate analysis (as factors had high collinearity) to search for factors associated with caregivers’ intention for their child to receive the pandemic vaccine.

The response rate was 44% (431/972). Most respondents had families of two children (47%) or one child (41%); 90% were mothers; and 48% had a postgraduate education. Caregivers were asked to report in relation to their eldest child attending the day-care centre (mean age, 38 months). Three children (out of 427 responses; 0.7%) had already received the pandemic vaccine: 23% of caregivers (92/400) said they would have their child vaccinated; 54% (217/400) were unsure; and 22% (87/400) would not. Intentions regarding seasonal influenza vaccination were similar. Factors associated with caregivers’ intention to have their child vaccinated with the pandemic vaccine were the respondents’ age group, sex, education level, language spoken at home, and number of children in the household.

The study indicated that at the commencement of the Australian pandemic influenza vaccination program for children, there was significant uncertainty among this sample of relatively highly educated respondents. The proportion of respondents intending to have their children vaccinated was far lower than recent Australian estimates (6% of children aged 4 years and under). Our findings suggest that, despite the acknowledged severity of pandemic influenza, respondents’ concerns about vaccine safety were influencing their intentions. Indeed, the program commenced in a context of public debate about the response to the influenza pandemic and the vaccination program, including concerns about the safety of using multi-dose vials for vaccine delivery. Among respondents intending for their child to have the pandemic vaccine, the association with the child having had a previous influenza vaccination suggests that, having once taken up vaccination, respondents were more likely to intend to do so again.

More recent events in Australia leading to suspension of use of all three 2010 seasonal influenza vaccines for children under 5 years of age are likely to further increase safety concerns. While two vaccines have since been reinstated, these events present a significant challenge for future influenza vaccination programs. Providers are likely to have an important role in communicating recommendations and addressing caregivers’ concerns.

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