__Editorial note.__ Dear colleagues! Despite a large number of publications on vaccination, the journal continues to receive numerous questions of practicing pediatricians on the experience of application of various vaccines in other countries. We have decided to interview the leading specialists from all around the world. Professor of the department of pediatric infectious diseases of the children's hospital of Montreal (Canada) Caroline Quach has answered questions on vaccination of children against pneumococcal infection in this issue.

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Vaccination Against Pneumococcal Infection in Canada

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1. When Pneumococcal conjugated vaccine (PCV) was introduced in your country into National immunization program (NIP)?

PCV7 was introduced in 2002 at first only for children aged 2 to 59 months with a chronic condition putting them at higher risk of invasive pneumococcal disease (IPD) — including children who were getting a cochlear implant and children from circumpolar and Aboriginal communities. In 2004, PCV7 was introduced in the NIP for all infants and children aged 2 to 59 months.

In 2009, we switched to PCV10 and in 2011 we switched to PCV13.

2. What is the schedule of PCV vaccination? How many different vaccines are administered to the child during one visit?

Our program — from the beginning — has been a 2+1 program with PCV administered at 2 and 4 months of age with a booster at 12 months of age.

For individuals in high-risk groups and immunocompromised, a 3 + 1 schedule is used: 2, 4, 6 months + 12 months.

The rationale behind the 2 + 1 program choice in 2004 was based on effectiveness data from the PCV shortage in the US and health economics, showing that the incremental cost of the 4th dose compared to the 3rd dose was incredibly high. Moreover, the vaccine effectiveness of a 2 + 1 program was already in the 95% + range. We implemented the 2 + 1 schedule for routine vaccination with an evaluation plan that has since been published and validates that 2 + 1 has enabled us to fill our public health objective of decreasing the incidence of IPD.

High-risk conditions receiving a 3 + 1 schedule

- Asplenia
- Immunosuppression
- Cochlear implant
- Renal insufficiency or nephrotic syndrome
- Premature < 32 weeks or VLBW
- Chronic condition: pulmonary, cardiac, hepatic, diabetes, chronic CSF leak, conditions impairing the clearing of oral secretions or increasing the risk of aspiration

Co-administration with other vaccines:

- At 2 and 4 months: PCV + hexavalent
- At 12 months: PCV + MMR + influenza (if needed) + menC

3. What were the main reasons for PCV introduction?

We initially introduced a PCV vaccination program in 2004 because of the high incidence of IPD, complications, mortality and increasing prevalence of penicillin resistance in isolates causing IPDs.

4. What PCV vaccine is used in NIP (no brand names)? What is the rationale for choose of this particular vaccine?

I have answered this question in question 1.

We initially chose PCV7 because it was the only vaccine available.

We switched to PCV10 because of a health economic analysis: both were considered equivalent in terms of serotypes coverage — we had mainly only non-PCV serotypes causing disease at that point in time and going for tender, PCV10 came in at a much lower cost than PCV7.

In 2011, after the approval of PCV13, given that serotype 19A was the most prevalent and was vaccine-preventable, we went for PCV13.

5. How the new vaccination was accepted by parents and general public?

This new vaccine was very well accepted by parents and the general public. In Quebec, the main driver for vaccine acceptance is that it is paid for by the government and part of the regular vaccination program. Some professionals questioned our implementation of a 2 + 1 rather than a 3 + 1 schedule… as we were, at the time, the only ones to do so. Since then, many have followed and it is not an issue.

6. How is mass media demonstrate value of vaccines? Have your country a problem with anti vaccination organizations?

We have small groups of antivaccinalists, but nowhere near the US and Europe. We try to keep the community engaged in vaccination issues and have communication campaigns as needed.

British Columbia (the western part of Canada) seems to have more problems than we do. Our clinicians and experts will answer questions and do interviews to explain vaccination issues as needed.

We are having issues with certain healthcare organizations, such as chiropractors and midwifery who do not believe in vaccines. Various initiatives are being launched to try and liaise with these groups.

We have a vaccination promotion working group that tries to tackle the issues about knowledge, attitutes, perceptions of parents and healthcare workers on vaccines. The leader on this is an anthropologist. A research project is underway to evaluate new communication and education strategies.

7. Have you implement any special education program for physicians and/or public about pneumococcal diseases and vaccination

As usual, whenever a new vaccination program is launched, information leaflets, conferences and meetings within public health units are organized. Because this program was launched in 2005, we have only needed to update our community on what has changed.