Features



Cbroniques

Physicians may have to "sell" benefits of immunization to sceptical parents

Susan Pinker

igi Russ of Montreal kept her 2 sons home from school from September to January because she did not want to risk exposing them to an outbreak of whooping cough. She wasn't terribly worried about her sons, aged 5 and 8, even though they hadn't been immunized against pertussis. Her main concern was Zoe, her 3-month-old daughter.

"I was petrified when I first heard there was a whooping cough outbreak at the school," says Russ. "I cried all night. Infants who catch it can stop breathing and not start again, or be on respirators. I kept the boys home to protect the baby, who hadn't been immunized. The school understood and supported my decision."

The 35-year-old birth assistant feels suspicious and confused when it comes to vaccinations. "Why so many vaccinations at once, and at such a young age?" asks Russ. "Why not allow the body to repair itself?"

She would like to have more information about success rates and possible dangers associated with immunization, and until then will refuse specific vaccines and boosters that worry her.

She is not alone. Many parents have unanswered questions, and their ambivalence may be one reason why approximately one-third of 2-year-olds in the Montreal area have incomplete immunization. This statistic surfaced during a recent study of immunization rates by Dr. Louise Valiquette and her colleagues at the Department of Public Health in Montreal. Although less than 1% of 2-year-old children have never been vaccinated, it was common to see immunizations lacking after a child's first birthday. This trend is mirrored in national data, which indicate that coverage drops for vaccines that have to be administered after a child is 12 months old. "More and more people are not up-to-date, and we don't know why," says Valiquette.

She and her colleagues suspect that fees for immunizations done in private offices, combined with the need for parents to take time off work if their children experience side effects following an immunization, act as disincentives. Although standard immunizations are provided for free by Valiquette's department, 20% of parents surveyed by the department were asked to pay for the service by their physicians, and 25% of parents missed work for brief periods because of the impact of side effects on a child.

Valiquette's department also found that sociodemo-



Gigi Russ with her 3 children and father: suspicious and confused

graphic factors influence immunization rates: a first child born to a high-income family is most likely to have an upto-date record.

But even when respondents to Valiquette's survey indicated that a child's immunizations were complete, the questionnaire was often accompanied by handwritten questions from parents. These anonymous queries left researchers with the impression that public scepticism about immunization is growing. Although there are no data showing that the proportion of dissenters is increasing, there is a consensus that parents are asking more questions.

Janet Marcuse is one of these parents. The Montreal mother of 2 children — 14-year-old Eric and 11-year-old Sagan — had her children immunized but she has lingering doubts. "I'm not sure I would make the decision to have them immunized today. What we don't understand very well, and we won't for a while, are the long-term effects of these immunizations. Do these effects outweigh the benefits?"

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Marcuse, like many of the parents interviewed for this article, thinks that it is best to develop "natural" immunity to a disease by contracting it. "When I was little, one kid would get something and all the mothers would trot their kids over to consciously expose their kids. It was the accepted thing to do. You were triggering the immune system the way it was supposed to work." She is concerned about how vaccinations affect the immune system in the long term. "Do they keep your own body's immunity from being fully engaged? What are the ultimate effects?"

Less invasive alternatives?

Other ideas circulating in natural medicine and homeopathic circles include the notion that childhood diseases such as measles, mumps and chickenpox are either harmless or no longer pose a real threat. In some cases, parents are told that children can get the full-blown disease because of immunization, and experience permanent disability or death. In this context, it is probably not surprising that some parents are seeking what they consider to be less invasive alternatives.

Dr. John Carsley, the director of infectious diseases at Montreal's Department of Public Health, says the myths circulating about immunization could be dispelled if parents had access to up-to-date information. "Vaccination programs are victims of their own success. Parents now have had very little personal experience with diseases like measles, mumps and polio, whereas everybody who grew up in the '50s knew someone who limped because of polio. These are serious illnesses with the risk of real complications or death. Everybody used to get measles, but 1 out of every 1000 would get encephalitis. Parents need full information about vaccines, and the physician should have the resources to speak to parents."

This is easier said than done. One obstacle is the lack of a computerized registry that tracks children's vaccination records, making it difficult to know which children are not up-to-date. Most vaccinations are given in private medical offices, making it difficult to compile a comprehensive database. Current estimates of immunization levels are achieved through sampling and telephone interviews, techniques that are less than perfect in terms of validity and follow-up.

Another hurdle is the dynamic nature of vaccine research and development. Improved vaccines, with lower risks of side effects and greater efficacy, are being tested and released at a steady rate. But it is hard to deliver this information to parents and to change their minds once they have taken a stand.

Dr. Emmett Francœur, past president of the Canadian Paediatric Society (CPS), says that the organization strongly supports and encourages parents to immunize their children (see *On-the-Net* column, page 736). "Fully informing parents is the first step. Then we sit back and wait, and continue to treat them as they come in." He recommends that parents read a CPS publication, *Your Child's Best Shot*, if they have questions about vaccination.

"They will not immunize"

Despite his proactive stance and his strong position on immunization, Francœur admits to some frustration with a certain faction of parents. "No matter what you say or do, they will not immunize. This is only one of many decisions they have taken about how they relate to society as a whole. A lot of these are quite angry people and they're not going to change their minds. But there is an intermediate group of parents who are ready to talk, and do catch-up immunizations at a certain point."

One example of information not reaching the public has resulted in a lively controversy about polio vaccine. Many proponents of alternative medicine are convinced that the vaccine is contaminating the water supply and infecting adults. Although such fears are not widespread approximately 83% of Montreal children and 90% of all Canadian children had received polio vaccinations by 1994 — many parents seem unaware that attenuated poliovirus vaccine (OPV) has not been administered in Quebec for more than 2 years. Instead, the inactivated polio vaccine is used. Even when OPV was the norm, the risk of vaccineassociated paralytic polio for those in contact with a vaccinated infant was minuscule — 1 case after 20 million doses of vaccine.

A similar vacuum of information exists for parents who fear pertussis vaccine. The whole-cell pertussis vaccine was not perfect — it had a 70% success rate for 3 to 5 years, and was associated with more adverse reactions than any other routine vaccination. However, the Canadian Paediatric Society said there is no empirical evidence to support contentions that the vaccine caused encephalopathy, autism and other problems. And given the relatively high rates of infant mortality and neurological sequelae from the disease, the CPS and American Academy of Pediatrics continued to recommend the vaccine's use.

Since January 1998, an acellular pertussis vaccine that has a much lower rate of side effects has been used in Quebec. This has reassured Gigi Russ. Since her ordeal in the fall, she has said yes to 2 doses of diphtheria-pertussistetanus vaccine for Zoe. "I waited until she was 6 months old. If there hadn't been an outbreak, we probably wouldn't have given her the pertussis vaccine. But it was a lifethreatening issue."

Her change of heart reflects public health officials' contention that parents need more complete information about vaccines. "There should be no controversy about it," says Carsley. "It's a question of information being given to parents. The physician should have the resources to speak to parents. Every parent should feel comfortable about making an informed choice about vaccination."

Susan Pinker is a Montreal journalist.