Straight Talk From a Pediatrician about Vaccines

Recently an Associated Press survey determined that Colorado ranks second in the country, behind Alaska, in the percentage of parents who opt out of giving the recommended vaccines to their child.

By Carol Roberts

D r. Sean O’Leary, a pediatrician and infectious disease specialist from Children’s Hospital Colorado, welcomed the opportunity to share his knowledge on the subject, saying, “From the perspective of the people who promote vaccination, we have not done a good enough job communicating vaccination safety to the public.”

“I do a lot of things as a pediatrician,” says O’Leary. “I treat kids for ear infections; I treat kids for much more severe infections sometimes. But the most important thing I do from an overall child health standpoint is give children vaccinations.”

In the past, says O’Leary, there were lower immunization rates in lower-income populations, and there were outbreaks of vaccine-preventable diseases. But as vaccines became available to all children, immunization rates went up through the ’90s. Then in 1998, the Wakefield study, “which has been disproven in many studies,” raised the fear of autism associated with the measles, mumps and rubella vaccines.

O’Leary believes the Internet has contributed to misinformation and misinterpretation of scientific data. “You hear from your friend down the street who is entirely convinced that their child got something from a vaccine and no amount of scientific studies is going to convince them that it’s not true. That presents a real problem.” Today, he says, the children who are not vaccinated are often those with well-educated parents who are trying to do what’s best for their child. “So that’s where it gets hard, sometimes, to talk to parents, because it can be frustrating as someone who cares for children, to convince parents otherwise when they’ve been led down this wrong path. There really is a problem now with under-immunization in the U.S.”

Colorado is one of 21 states that allow a parent to opt out of vaccinations for philosophical reasons. O’Leary explains the three main reasons he believes parents opt out. First, parents have the idea their children aren’t at risk of the diseases because immunizations have reduced the risk. But the diseases still exist in the world and they are “only a plane ride away, and for measles, with the rates where they are in Colorado, it’s really not a matter of if we’re going to get an outbreak, it’s when we’re going to get an outbreak.”

Second, parents seem to believe diseases like measles and chicken pox aren’t that severe of a disease. “For measles, in developed countries, prior to the introduction of the vaccine, the death rate was about one in 1,000. And before the introduction of the chicken pox vaccine, there were about 50 to 100 deaths a year in the U.S. So it’s hard to tell the parents of those children who died from chickenpox that it’s not a serious disease.” O’Leary also points out that with better treatments for cancer and other diseases, there are more people whose immune systems are compromised. In those people, chicken pox is potentially a fatal disease—so they need community-wide protection.

Third, parents question the safety of vaccines. O’Leary explains, “Because vaccines are given to healthy people, they’re held to a much higher safety standard than other medicines that are tested. There’s an incredibly elaborate and complicated vaccine safety surveillance system in the U.S. where all of the vaccines being used are constantly being monitored for potential side effects. So we actually have a pretty good idea of what vaccines do and don’t cause. We know they cause lots of local reactions—soreness at the site you get the vaccine; a certain percentage, depending on the vaccine, might get a fever. But in terms of severe reactions, they’re actually incredibly rare—the biggest really severe reaction probably being a severe allergic reaction, and those are on the order of one in millions. In terms of severe events, they’re really safe.”

O’Leary points out that in the scientific community there is no controversy about vaccines. “In almost every article I read in the newspapers or see on the news about vaccines, people will say it’s a controversial topic. It’s not controversy in the scientific community. It’s really a controversy of science vs. emotion.

“Parents are very often persuaded by the emotional argument as opposed to the scientific argument. For example, on Oprah Winfrey or on TV shows they’ll pull a scientist out there and they’ll pull a parent of a child with autism or a parent who feels like their child has been harmed by a vaccine. The audience is going to relate much more to the parent than they are to the scientist. In those settings, the emotional appeal wins out every time. That’s a really hard problem to combat.”

“Anybody who really has a background in science and studies this, it’s not a controversy in that community. It’s very hard to convince people once they have an emotional tie to an idea that it’s not correct. But the data just don’t support that. Vaccines are effective and they are safe.”

“Parents are just trying to do the best they can for their children, and understandably, they have questions. As a parent myself, I vaccinate my children on the recommended schedule, as I have no doubt that the benefits of vaccines far outweigh the risks.”

Dr. O’Leary reports that he has no financial conflicts of interest.