

Virtual Mentor

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FROM THE EDITOR

Vaccination: A Victim of Its Own Success

“Vaccination is the medical sacrament corresponding to baptism.”
Samuel Butler

My grandfather Robert is a stalwart American man of letters, a role model with a taciturn temperament known for his inventive wit and experiential wisdom. As a child I hung on his every word and imagined him walking and talking in the black and white world of his photographs. One afternoon his rough voice softened as he recounted the day he lined up with hundreds of his neighbors outside a local hospital to receive Salk’s inactivated polio vaccine. He paused and looked up, recalling that as he received the injection, children inside the hospital lay immobilized in iron lungs. I watched his blue eyes shimmer, revealing a memory powerful enough to evoke this reaction from a stoic.

The eradication of the crippling lower motor neuron degeneration and subsequent flaccid paralysis of poliomyelitis is perhaps the best recent example of a supremely successful vaccination campaign. The World Health Organization estimates that 8 million people who would otherwise have been paralyzed by polio are walking because they were immunized. Today entire generations are free from the fear of polio, yet we struggle with, on the one hand, the fear of new diseases and, on the other, with fear of vaccines themselves.

This month’s issue of *Virtual Mentor* examines the past, present, and future of vaccination medicine and ethics. Today the tribulations of diseases such as smallpox and polio are but fading shadows of history, yet new challenges in vaccination arise every day. Lack of clarity about the safety and efficacy of vaccination have sparked intense debate within the international medical community and extensive public suspicion in recent years.

In this month’s issue, we address several questions that are germane to all of us who counsel patients about vaccines: How—and why—is misinformation propagated, and why does it find such wide acceptance? How can we educate individual patients and the public so that they can differentiate the science from the rhetoric about vaccines? How will we manage future vaccine shortages? How should we approach first-in-human vaccine clinical trials? Who bears the burden of responsibility when vaccines inevitably cause an adverse event? Should we embrace future “vaccinations” that target the brain, specifically normal stress responses? Why should we risk the side effects of a vaccine when regular checkups can screen for disease instead of trying to prevent it?

There is one individual story that, for me, answers this last question particularly well. By the time of her diagnosis in 2003, District Attorney Cheryl Lieck had never missed a well checkup in her life. She trusted her long-time gynecologist's reports of her regular pap smears, though she had symptoms that were troubling. After she sought out another doctor, the root of her symptoms was revealed—cervical cancer.

Over the next few years, Cheryl waged a successful battle, but at a high cost. She underwent cervical cauterization, cold knife cone surgery, a hysterectomy, oophorectomy, and lymph node removal. She made a 120-mile trip every weekday for 6 weeks of radiation.

Today Cheryl is symptom-free in remission and credits the support of her family, friends, and doctors with saving her life. Cheryl recently asked her doctor about the HPV vaccine for her children and concluded, "It's a no-brainer. We teach our kids to wear their seatbelts [even though] nobody plans on having their children in a car crash."

One of the many difficulties for medical professionals involves talking to parents about their teenagers' sexual activity. As Cheryl puts it, "Parents can't do everything, but when you have the power to prevent something from happening, you do it!"

We question the value of vaccines because they have become a victim of their own success, so it is an imperative that we educate ourselves with objective, fact-based information to weigh the benefits and risks of vaccination. Will cervical cancer, measles, and HIV eventually go the way of polio? Perhaps one day I will sit down with my grandson and tell him of our generation's success.

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