

Unprotected People #22

The Importance of Vaccination

Infection-control nurse urges parents to support U.S. vaccine program

I am an infection-control nurse practicing at Vanderbilt University Medical Center. In the United States we enjoy freedom from many vaccine-preventable diseases that killed or caused severe morbidity at the beginning of this century. Most people view these vaccine-preventable diseases as curiosities, as exceptions to the rule. Yet these diseases have not been defeated, and in my job I see firsthand what happens when parents do not vaccinate their children.

At Vanderbilt, we continue to see these diseases; particularly in immigrant groups who are sometimes not immunized by U.S. standards, and within certain religious groups that refuse vaccination. Lately, parent-inspired groups are encouraging other parents to opt out of the traditional vaccine regimen. These groups use the Internet to promote scare tactics and misinformation. As a result, I have recently seen more cases of childhood preventable diseases in my daily practice.

I have watched helplessly as infants with pertussis turn blue after an agonizing coughing spell. These children get a wild, frightened look in their eyes as they gasp for breath. They usually vomit after their coughing spell, then collapse into a tired heap to rest up before the next session. Adults with pertussis can cough so hard that they break ribs. Can you imagine what a small child is going through? I have also seen cases progress into respiratory arrest and death, or brain damage due to hypoxia. Why would any parent put their child at such a risk?

In middle Tennessee, we have experienced an increase in immigrants from Mexico, and many of the adults have never been immunized against rubella. At Vanderbilt, we have had cases of congenital rubella, something I would never have guessed I would see in my lifetime. The two infected infants with whom I worked were deaf, blind, had brain damage, and severe heart defects. Neither infant

survived. I saw their parents huddled over their cribs, powerless to do anything for their children.

Other diseases like diphtheria could possibly make a comeback in this country. Diphtheria is a disease that causes a membrane to form across the trachea, slowly suffocating the patient if untreated. At the turn of the century, an outbreak of diphtheria claimed the lives of children and adults in Nome, Alaska, but we have had very few cases in the United States recently. However, after the breakup of the Soviet Union, Russia experienced a serious epidemic of diphtheria that lasted for years.

From an infection-control standpoint, I cannot help but wonder at the havoc that would be generated if most parents decided not to vaccinate their children against these “outdated” diseases. Hospitals would start to fill up with children stricken with measles and chickenpox, and because of the extremely contagious nature of these diseases, the victims would have to be placed in rooms with special air filters and negative air flow to keep the disease from spreading to the leukemia patient down the hall. How many isolation rooms would we need to handle America’s children?

I have seen the news media run specials on the “evils” of vaccines, interviewing vaccine “victims.” These reporters never interview the millions of immunized, healthy, and disease-free children—that would be boring! When I began my infection-control experience at Vanderbilt, we saw a lot of meningitis cases caused by *Haemophilus influenzae* type b. The disease was spread person-to-person by direct contact or from respiratory droplets, so infants in daycare were particularly susceptible. These children would often die or suffer brain damage if they survived. In the late 1980s, immunization with Hib vaccine was begun and the number of Hib meningitis cases dropped to near zero. Yet I

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never saw a *Dateline* or *20/20* episode on that success story.

There is nothing worse to a parent than losing a child, nothing. Nothing can ease the pain. I know because I have experienced that pain. I lost my own son to congenital heart disease. I too, had to pick out a coffin instead of a birthday gift. I go to a grave site instead of a birthday party. My son's congenital heart disease was random and not preventable. Pertussis, measles, mumps, and rubella are preventable.

Dr. David Satcher, the U.S. Surgeon General, has pointed out that Australia, Germany, Great Britain, Ireland, Italy, Japan, and Russia all learned the hard way that if you cut vaccine programs, infectious diseases return with a vengeance. With this experience, these countries reinstated their immunization programs. I urge everyone to support our nation's vaccine program, and to encourage its growth to better protect all citizens from preventable disease.

*Vicki Brinsko, RN, CIC
Infection Control Coordinator
Vanderbilt University Medical Center
Nashville, Tennessee*