

Sound Advice

This is an edited transcript of a telephone interview recorded in April 2009.

Dr. Judith Palfrey is the T. Berry Brazelton Professor of Pediatrics at Harvard Medical School and President-elect of the American Academy of Pediatrics. She is the author of five books and more than 100 articles on child health. Welcome, Dr. Palfrey.

Dr. Palfrey: It's nice to be here.

Q: Dr. Palfrey, why are vaccine preventable diseases making a comeback?

Dr. Palfrey: Well, it's a very unfortunate thing for us to be seeing vaccine preventable diseases on the radar again, and we are seeing measles, we're seeing H flu, which causes horrible meningitis, can cause death. And the reason we're seeing this is that some families are actually foregoing vaccines. The other reason is that occasionally, the vaccine producers are running out of their stocks of vaccines.

Q: What diseases in particular are we seeing reappear?

Dr. Palfrey: Well, the main ones that we've seen in the last couple of years have been measles, and then recently, we've been seeing the reappearance of Haemophilus influenza and that's a disease that causes deep infections. It can cause swelling and redness and abscesses around the eyes. It can cause epiglottitis, where the children can't breathe and die from not being able to get air in. It can cause meningitis.

These are really serious illnesses and, you know, it's interesting; the medical students and residents that I see now have never seen these diseases, when, 20 years ago, that's what we were dealing with day in and day out and really worrying about what the kids would come in with. So, it's a shame to be seeing these things coming back and of course, I think most people have a view of what measles looks like, but I think you don't realize that it also causes things like terrible pneumonias, and people die from measles. So, these are very, very serious problems that we're seeing.

Q: Why do we care so much about preventing chicken pox?

Dr. Palfrey: Chicken pox is a horrible disease. First of all, it causes great pain for children and a lot of missed opportunities for work and for school. But, it also is a disease that causes very serious problems like encephalitis and pneumonia, and if it's in the community, it can be caught not only children, but also adults.

But the reason I think we got so exercised about chicken pox was two things. One, immunocompromised children can actually die if they get chicken pox, and then it turns out that if chicken pox is going on at the same time as someone has a Streptococcal infection, they get

that flesh-eating disease at the level of the chicken pox. Literally, people were losing limbs to the combination of chicken pox and Strep. And if you've seen that one time, you'll give the chicken pox vaccine to every child you see.

Q: If a family can't afford health insurance, how can they get vaccines?

Dr. Palfrey: Well first of all, the family should try very hard to get onto health insurance. In most states, they can get Medicaid or now with the new expansion of CHIP. But if they can't, the public health clinics do offer vaccines and they can feel free to go to the public health clinics.

Q: What is the Academy doing on a federal level to promote immunization?

Dr. Palfrey: Well, the Academy works very closely with many of the agencies of the federal government, where basic research is going on to develop new vaccines and to assure efficacy and safety, with the CDC to make sure that we're promoting the best information on vaccines, and also to make sure that we have immunization registries, and with the FDA to, again, make sure that there's high quality of the vaccines.

We also work at the level of trying to be sure that the vaccines are affordable and also working with Medicaid and other groups to be sure that the payment for the vaccines is appropriate for the physicians and the clinics that are giving the vaccines.

Q: How important is it that vaccines be part of healthcare reform?

Dr. Palfrey: It's essential. Vaccines are the most effective public health maneuver that we've had, ever, and we must be sure that we protect our vaccine program. You know, we've become a little bit complacent because we don't see the chicken pox and the measles and the Haemophilus influenza and so forth, so people may -- out of sight out of mind. And we also are watching some of our physicians have difficulty being able to provide vaccines because of increased costs for administration and so forth. So, it's essential that vaccines be a central part of health care reform.

Q: How can the country's leaders and vaccine manufacturers work together to solve the challenges of safety, funding, and distribution of vaccines?

Dr. Palfrey: I think the central word here is "communication." We really need to be working together, partnerships between the volunteers of the American Academy of Pediatrics, our government agencies and the companies with high priority placed on creating safe and effective vaccines.

One of the big things that we have seen in these last couple of years, you know, has been the fact that some of the vaccines have actually not been available. In the program where I work, you go to grab the vaccine to give to a child and it's just not there. We just must not have situations like that. You know, the child comes, they have their insurance, the doctor's ready and the vaccine is not there. So, working to be sure that there's stockpiles so that the costs of the vaccines are kept reasonable and that the insurance is available for children to receive the vaccines.

Q: Dr. Palfrey, can you explain what “herd immunity” means and why it’s important?

Dr. Palfrey: Sure. So when a virus or a bacteria is in a community, the flu spreads around or a cold spreads around, it goes from one person to another. If the group of people has been immunized, has the protection, the disease won’t come from you to me to my child to grandmother. But if we have not been immunized, you cough on me, I cough on my child, my child coughs on grandma and all of a sudden you’ve got a very serious pneumonia or something of that sort. So, what we try to do is be sure that the vast majority of people are immunized so that we don’t have this trail of infection going from person to person.

There are occasional people who are immunocompromised – [they] might have a cancer or they may be on some sort of heavy drugs who actually cannot take immunizations, and we want to protect them by the rest of the community not being carriers of the diseases.

Q: What does the recent decision in vaccine court about the MMR vaccine mean for parents?

Dr. Palfrey: Well, this should be very reassuring to parents. Basically, what this decision says is that there is no evidence at all for a relationship between MMR and autism, and this is based on many, many, very carefully done studies.

There was a thought that MMR and autism might be related; a perfectly reasonable question. But the studies that have been done have unequivocally proved that there is no relationship between MMR vaccine and autism. So, this should reassure parents that giving MMR is a very wonderful gift to give to their children so that they don’t get measles, mumps or rubella.

I just would say one other thing, which is that we don’t know what causes autism. A lot of energies have gone into these studies of MMR and so forth and we need to take that energy now and put it into looking for what may be the cause of autism. Maybe it’s something in our environment, maybe it’s some genetic issues, maybe it’s immunologic issues. We need to now put our energy into really looking for the cause of autism.

But, parents should feel completely reassured by this finding that MMR is not related to autism.

Q: What new vaccines are being developed?

Dr. Palfrey: There are a number of things that are being studied. The big one is the RSV. Hope that we can get a vaccine for respiratory syncytial virus. This is a disease that causes 10,000 deaths annually. It’s a disease that causes a cold in you and me, but in little babies, it causes a terrible respiratory disease - bronchiolitis. It’s responsible for much of the hospitalization of children and emergency room visits that we see every winter. So, if we can get a vaccine for RSV, that would be wonderful.

Also, obviously, there's very serious work on HIV. As you may know, there are 50,000 new cases a year still in the United States of HIV infection, and we don't have a vaccine yet for it. This particular virus, you know, changes its behavior.

The other thing that's going on, and this should be reassuring to parents too, is really looking to see if we can find new ways of administering vaccines. In other words, we do give some vaccines orally. As you know, we give rotavirus vaccine orally, but there are some vaccines that we might be able to give through the respiratory route -- as we do with some flu vaccines. One of my colleagues here is actually working on a pneumococcal vaccine that would be given through the respiratory route and of course, that would be great if you didn't have to give so many things with injection.

Q: So the vaccine could be given in a nose spray?

Dr. Palfrey: Yeah, like a flu spray, right. So, you know, wouldn't it be neat if we could get our pneumococcal vaccine that way, or we could get a lot of the other vaccines that way?

Q: Is the HPV vaccine safe?

Dr. Palfrey: The studies of HPV vaccine have shown it to be very safe. and, you know, as- as you know, HPV is kind of an interesting thing. It really is to protect young girls against cancer. In the past, we were really looking at protecting against infectious diseases that might affect young people in their youth. HPV vaccine actually is a life-long protection. It's protecting young women against getting cervical cancer. It's a very exciting development. All of the safety testing has been very reassuring.

Q: What about boys? Should boys get the HPV vaccine?

Dr. Palfrey: Well, at this point, there hasn't been as much testing. We're really talking about cancer prevention for young women. At least at this point, we don't have quite as strong a rationale for boys to receive the HPV vaccine and quite frankly, this is a fairly expensive vaccine.

Q: Where can parents go for reliable information about vaccines?

Dr. Palfrey: The first place is to their doctor, and they should feel very, very comfortable going in and speaking with their primary care physician, asking any questions that they have. They also obviously can come to the AAP Web site. The CDC has wonderful information on their Web site. But the really best thing is for them to talk directly with their doctor.

Q: Dr. Palfrey, are there any final thoughts that you want to add?

Dr. Palfrey: I just would reiterate that we're blessed to have vaccines as part of what we can offer to families. There are parts of the world where vaccines are not available and people are still seeing measles and polio. It's a horrible thing when you know that something that is

absolutely preventable continues to show itself, and we need to get that message across loud and clear. This is a wonderful resource that we have and we need to protect it.