Measures Could Improve Teen Immunization

BY NASEEM S. MILLER

EXPERT ANALYSIS FROM A MEETING ON CLINICAL VACCINOLOGY

BETHESDA, MD. – Physicians face several barriers when it comes to immunizing adolescents, including infrequent access to the age group, low reimbursements, difficulty tracking immunization history, and lack of education about vaccine safety, Dr. Amy B. Middleman said.

The 2009 National Immunization Survey shows that the vaccination rates "remain unacceptably low for those vaccines that are targeted specifically to prevent disease in adolescents," according to a Society for Adolescent Health and Medicine (SAHM) statement. The survey shows that among 13- to 17-year-old teens, roughly 54% received meningococcal meningitis vaccines; 44% got human papillomavirus (HPV) vaccine (with only 27% receiving all three recommended doses), and nearly 56% got tetanus-diphtheria-pertussis (Tdap) vaccines.

"Low rates among adolescents may be responsible for the epidemic of pertussis that is presently occurring in California," according to the SAHM statement.

But there are opportunities to improve adolescent immunization rates, Dr. Middleman said at the meeting, which was sponsored by the National Foundation for Infectious Diseases.

Some polls show that 80% or more of adolescents have visited a health care provider within the last 12 months, but those visits may not necessarily be preventive in nature, and physicians can turn them into comprehensive visits and update the patients' vaccinations, said Dr. Middleman, who is an SAHM liaison to the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices.

Reimbursement rates are another barrier, Dr. Middleman pointed out, saying that there is a "significant correlation between reimbursement rates and childhood immunizations," with a correlation of 0.42 (Pediatrics 2006;115:833). A 2009 Pediatrics article (124:S466-71) shows that 49% of primary care physicians delayed vaccine purchase because of finances, and 53% had decreased profit margins due to immunizations.

There is a need for a standardized vaccination visit during adolescence, said Dr. Middleman, and so far state policies and school mandates have shown a great impact on increasing the rates.

For instance, a 2004 study showed that adolescents were significantly more likely to have completed their hepatitis B series in states with school mandates (75%) versus those without a mandate (39%), she said (J. Adolesc. Health 2004;34:420-23). Such mandates also help eliminate preventive care disparities, given available funding, she added.

Dr. Middleman said that in one of her recent surveys in Houston, 41% of the parents indicated they would be willing to immunize their children in schools (Vaccine 2010;28:2674-6).

The rate, however, varies depending on the type of vaccines, with the influenza vaccine getting the highest support (57% of parents) and human papillomavirus the least (27%), according to one study (J. Adolesc. Health 2010;47:249-53). She added that other studies have shown that as many as 88% of practicing pediatricians are receptive to programs such as school vaccinations, and 61% said they would participate in such programs (BMC Pediatrics 2009;9:8).

In addition, alternative immunization sites, such as pharmacies, city and county clinics, emergency departments, and even ob.gyn. offices and clinics, provide additional opportunities to immunize the adolescent age group. Dr. Middleman said there are drawbacks for alternative sites, including poor follow-up and lack of access to immunization information systems. But there are potential benefits for adolescents who lack a medical home or need to complete multiple-dose regimens.

Immunization Information Systems are another tool recommended by the National Vaccine Advisory Committee and the National Immunization Program as a way to consolidate fragmented records and automate reminders and recalls. Such programs have been very successful, even in extreme situations such as Hurricane Katrina, she said.

Dr. Middleman stressed the importance of education about vaccine recommendations and safety for physicians, their staff, and parents. She recommended physicians "capitalize on noncomprehensive visits" such as camp or sports physicals or precollege visits to immunize the otherwise-hard-to-reach adolescents.

Dr. Middleman said that she receives research funding from Sanofi Pasteur and MedImmune. ■

Resources for Immunization Info.

- Centers for Disease Control and Prevention: www.cdc.gov/vaccines.
- Immunization Action Coalition: www.immunize.org.
- National Foundation for Infectious Diseases: www.nfid.org.
- National Network for Immunization Information: www.immunizationinfo.org.
- Texas Children's Hospital Center for Vaccine Awareness and Research: www.texaschildrens.org/vaccines.

Adult Immunization Rates Increased Slightly in 2008-2009

BY MIRIAM E. TUCKER

Adult immunization rates in the United States are improving but very slowly, according to new data from the Centers for Disease Control and Prevention.

Overall, the 2009 National Health Interview Survey of 88,446 adults showed that adult immunization rates for influenza, hepatitis B, pertussis, and shingles increased by small proportions, compared with the previous year, while pneumococcal disease coverage dropped slightly. Moreover, large racial disparities persisted for influenza immunization, with lower proportions of African Americans and Hispanics receiving the vaccine than whites.

"We have wonderful vaccination rates in young children … but there are lower vaccination rates in adults, and they show us that maybe we're starting to take vaccines and immunity for granted. This is one area where we cannot rest on our laurels. Our accomplishments will be undone if we don't maintain our immunity as adults," Dr. Susan J. Rehm, medical director of the National Foundation for Infectious Diseases (NFID), said in a press briefing.

The NFID, which cosponsored the briefing with the CDC, also released the findings from its survey of 300 primary care physicians and 1,013 American consumers aged 18 years and older, which showed a distinct communication disconnect: Whereas 90% of the physicians said they discuss vaccines with their patients, 47% of the patients couldn't recall ever discussing vaccines other than influenza with their doctors, and one-fifth couldn't recall discussing any vaccines.

However, nearly 9 in 10 patients said that a strong recommendation from a physician would be a very likely motivator for them to get vaccinated. "Overall I think these findings are in a way encouraging. Although we have this disconnect, we have a solvable problem, and that is communication. Patients need to hear the recommendation from their provider, and it needs to be clear," said Dr. Rehm of the Cleveland Clinic.

Since adults typically visit the doctor for an acute problem and not for routine medical care, "every adult visit needs to be an immunization visit," she said.

Dr. Melinda Wharton, deputy director of the CDC's National Center for Immunization and Respiratory Diseases, reviewed the data from the 2009 NHIS. For influenza vaccine, there was an overall 2.3–percentage point increase among adults aged 19-49 years during the 2008-2009 season, compared with 2007-2008. While the increase was even greater for African Americans, 3.6 percentage points, their overall influenza immunization rate was just 16.5%, compared with 21.6% among whites. The percentage among Hispanics in that age group was 14.5%, up by just 1.5 percentage points.

For ever-receipt of pneumococcal vaccine among those for whom it is recommended, coverage among adults aged 19-64 years in 2009 was 17.5%, a drop of 7.4 percentage points since 2008. This is likely due in part to the recent addition of smokers and asthma patients to the high-risk list, Dr. Wharton said, noting that coverage among adults aged 65 years and older remained stable, at about 61%.

Immunization against hepatitis B among those at risk increased to the greatest degree among African Americans, rose by 13.6 percentage points to 43.6%, similar to the 43.2% among whites. Herpes zoster vaccine, on the other hand, increased by just 3.3 percentage points, from 6.7% of adults aged 60 years and older in 2008 to 10.0% in 2009. In 2009, the proportion of women aged 19-26 years who received human papillomavirus vaccination was just 17.1%, up by 6.6 percentage points from 10.5% in 2008.

Data for pertussis is reported via tetanus coverage. In 2005, the CDC recommended that the then-newly licensed adult/adolescent formula tetanus-diphtheria-pertussis vaccine (Tdap) replace a single dose of Td vaccine for individuals aged 10-64 years. Of adults aged 19-64 years who received a tetanus vaccine since 2005 and knew which kind of vaccine they had received, only 50.8% reported receiving Tdap.

The NHIS data also included health care provider immunization rates, which showed an overall 7.1–percentage point increase in influenza immunization from 2007 to 2008 to 52.9% in 2008-2009, a 1.6–percentage point increase in the proportion of tetanus vaccination during 2005-2009 given as Tdap, to 58.3% in 2009, and a slight 0.5 percentage point rise in ever-receipt of three doses of hepatitis B vaccine, reaching 64.7% in 2009.

Dr. Rehm noted that 57% of physicians reported in the NFID survey that they didn't have adequate time to discuss vaccination during hurried office visits. But, she said, "The immunization discussion doesn't need to be long. It needs to be concise and clear. When I talk with my patients, I don't say 'I think you should consider the vaccine,' and so on. I simply say I recommend that you receive this vaccine.' Data show that patients are quite receptive to that."

The NFID now has a Web site for patients that is dedicated to adult vaccination (www.adultvaccination.com).

Dr. Rehm has served as a speaker for Sanofi-Pasteur and Genentech, as a speaker and principal adviser for a research study for Cubist Pharmaceuticals Inc., and as an advisory committee member for Pfizer Inc. and Merck & Co. Dr. Wharton is an employee of CDC with no financial disclosures. ■