



The Benefits of Immunizations for Older Adults

DEBORAH HALE, MSN, RN, ACNS-BC, AND KATHERINE MARSHALL, DNP, PMHCNS-BC, CNE, NP

Immunizations are one of the most effective ways to combat morbidity and mortality associated with infectious disease (Pilkinton & Talbot, 2015). However, even though it is possible for diseases to be prevented via immunization, vaccination rates in the United States rarely meet their targets (Greenberg, 2012). Education on the benefits of timely immunization in preventing disease in older adult home care patients should be a priority intervention for the home healthcare clinician. Home healthcare clinicians can promote and administer routine immunizations that can assist in keeping their patients healthy and promote a good quality of life. Unfortunately, because older adults are often being treated for serious comorbidities, routine immunizations are sometimes overlooked.

For those over 65 years of age, recommended vaccines include influenza (flu), herpes zoster (shingles), diphtheria, tetanus, pertussis (whooping cough), and pneumococcal disease (Centers for Disease Control and Prevention [CDC], 2016). These vaccines are relatively safe, with few contraindications and have a low rate of adverse reactions (Greenberg, 2012). Vaccines for influenza, pneumococcal pneumonia, and tetanus have preventative efficacy rates of about 90% (Greenberg, 2012).

Influenza causes 23,000 deaths each year, with older adults accounting for 90% of these deaths (Pilkinton & Talbot, 2015). The influenza vaccine is

given yearly, starting in October and ending in February of the following year (Greenberg, 2012). For older adults, the flu vaccine is given as an inactivated virus or the standard high-dose vaccine. The intranasal (live vaccine) is contraindicated in those over 49 years old (Greenberg, 2012). Home care clinicians will need to consult with the patient's primary care provider or allergist if an egg allergy is present (CDC, 2016).

Streptococcus pneumoniae is the most common bacterial cause of community-acquired pneumonia, and causes significant morbidity and mortality (Pilkinton & Talbot, 2015). The pneumococcal vaccination is typically given only once after the age of 65, but revaccination can occur after 5 years if diseases such as chronic renal failure, chronic immunosuppression, malignancies, and asplenia are present (Greenberg, 2012). There are two pneumococcal vaccines currently recommended: PCV-13 and PPSV-23. PCV-13 is recommended for all vaccine-naïve adults when they turn 65, followed by the PPSV-23 6 to 12 months later (Pilkinton & Talbot, 2015). If a patient has received PPSV-23 before turning 65, there should be a 1-year interval before PCV-13 is given, and the follow-up PPSV-23 should not be administered less than 5 years after the previous PPSV-23 dose (Pilkinton & Talbot, 2015). No further PPSV-23 doses after age 65 are recommended (Pilkinton & Talbot, 2015). The influenza and pneumococcal vaccines may be administered at the

same time (by separate injection in opposite arms) without an increase in side effects or decrease in antibody response to either vaccine (Greenberg, 2012).

Tetanus-diphtheria booster is needed every 10 years for those who received the series in childhood or teen years and have not received a booster in the last 10 years (Greenberg, 2012). A one-time dose of the tetanus, diphtheria, pertussis (Tdap) is recommended at the soonest opportunity for those over 65 who have not yet been vaccinated, regardless of when their last Td vaccine was (Pilkinton & Talbot, 2015). It should be noted that this vaccine is different than the childhood tetanus, diphtheria, and pertussis vaccine, as the one given to adults has less diphtheria and pertussis immunogen (as denoted by the lowercase letters) (Pilkinton & Talbot, 2015). If the patient has never been vaccinated for tetanus-diphtheria, the vaccine should be given twice within a 1- to 2-month interval and an additional dose 6 to 12 months later (Greenberg, 2012). After this time, it is recommended that Td vaccine be administered every 10 years (Pilkinton & Talbot, 2015). The tetanus-diphtheria toxoid (Td) or Tetanus, diphtheria, pertussis (Tdap) booster may also be given with other vaccines (Greenberg, 2012).

Varicella zoster virus resides in the nerve roots of people who have had varicella (chicken pox) and manifests as shingles with increasing incidence with age (Pilkinton & Talbot, 2015). In some patients over 60 years

of age, vaccination against herpes zoster has decreased the incidence of shingles by 51% and postherpetic neuralgia by 67% (Greenberg, 2012). Routine immunization to those older than 60 is recommended; those who have already had shingles should still be vaccinated to protect against future episodes (Pilkinton & Talbot, 2015). The shingles immunization is a live vaccine, so immunosuppression status needs to be considered before vaccine administration as it would be a contraindication (Pilkinton & Talbot, 2015).

Certain subsets of the older adults may require vaccinations such as Hepatitis A and B; measles, mumps and rubella (MMR); meningitis; and *Haemophilus influenzae* type b. Some of the medical conditions or lifestyles and living conditions that need to be considered for administration of these vaccines include: lack of administration during childhood, heart disease, pulmonary disease, diabetes mellitus, liver disease, renal failure, alcoholism, immune suppression, malignancies, immunosuppression, and resident of an assisted or communal living situation (Greenberg, 2012).

Home care clinicians have the opportunity to provide health education and administer immunizations during routine screening and assessments in home care clinical visits. Prior to administering vaccines, the clinician will need to review all agency policies and procedures related to immunizations. Review and understand the protocol and procedures related to the treatment of anaphylaxis. Check the anaphylaxis kit and immunizations



Education on the benefits of timely immunization in preventing disease in older adult home care patients should be a priority intervention for the home healthcare clinician.

for expiration dates, dosages, and necessary supplies such as extra needles, syringes, alcohol wipes, adhesive bandages, and patient education teaching forms. Clinicians need to obtain evidence of previous immunization status, and any adverse reactions. Clinicians should obtain physician orders for immunizations and a signed consent from the patient or the patient's legal guardian prior to administration. Assisted living facilities and group homes maintain records of their resident's immunization status; therefore, clinicians should collaborate with facility management to assure that all residents, current and incoming are educated on and offered the appropriate immunizations.

Immunizations limit exposure to infectious disease and are key vehicles for avoiding infectious disease particularly in the older population. It is highly recommended, and in many healthcare institutions, mandated that all clinical staff maintain an updated immunization status. The recommendations

for healthcare providers differ from those for older adults, so clinician should work with their primary care provider to ensure adequate vaccination coverage.

Clearly, immunizations are essential to the health and wellness of older adult home care patients. Clinicians play an important role in the assessment of the vaccines needed by the patients they care for. In some cases, it is possible for home care clinicians to administer the vaccines or, it may be necessary to refer the patient to their primary care provider or their local health department. Home care clinicians should be knowledgeable on which immunizations are important for older adults, the administration schedule, and agency protocols and procedures. ■

Deborah Hale, MSN, RN, ACNS-BC, is an Advanced Practice Registered Nurse, Optimal Care Inc., Bingham Farms, Michigan.

Katherine Marshall, DNP, PMHCNS-BC, CNE, NP, is an Advanced Practice Registered Nurse, Optimal Care Inc., Bingham Farms, Michigan.

The authors declare no conflicts of interest.

Address for correspondence: Deborah Hale, MSN, RN, ACNS-BC, Advanced Practice Registered Nurse, Optimal Care Inc., 30600 Telegraph Road, Suite 3275, Bingham Farms, MI 48025 (haled1@udmercy.edu).

Copyright © 2016 Wolters Kluwer Health, Inc. All rights reserved.

DOI:10.1097/NHH.0000000000000436

REFERENCES

- Centers for Disease Control and Prevention. (2016, March 30). *Immunization Schedules*. 2016 recommended immunizations for adults. Retrieved from <http://www.cdc.gov/vaccines/schedules/easy-to-read/adult.html>
- Greenberg, S. A. (2012). Immunizations for older adults. *Try this: Best Practices in Nursing Care for Older Adults*. Retrieved from www.hartfordign.org and/or www.ConsultGerRN.org
- Pilkinton, M. A., & Talbot, H. K. (2015). Update on vaccination guidelines for older adults. *Journal of the American Geriatrics Society*, 63(3), 584-588.