Week 1 Discussion Post

Post a comparison of the differences in immunizations that are recommended for patients ages 11–24, 25–64, and 65 years of age and older. Then, explain how these immunizations might impact patients who are immunocompromised or on immunosuppressive therapy. Be specific and provide examples by age group and gender.

Vaccination Recommendations

When looking at vaccination schedules, heavy focus is based on childhood vaccines. However, it is important to note that vaccinations are vital in prevention of disease at all ages. Therefore, vaccinations within the preteen to gerontological populations are pertinent to review. It is recommended by the Centers for Disease Control and Prevention (CDC) that all ages receive the **influenza** (flu) vaccination yearly. The **tetanus, diphtheria, and pertussis** vaccination should be administered once between the ages of 11 and 12 years and the booster should be administered every ten years after (CDC, 2020). The **meningococcal** 2-dose series should be administered between 11-12 years of age and again at 16 years of age. The catch-vaccination should be administered between 13-15 years of age and a booster to follow at 16-18 years of age. The meningococcal vaccine must be considered for those with HIV infections, persistent complement component deficiency, and anatomical or function asplenia. Individuals who plan to travel to countries with hyperendemic or endemic meningococcal disease and first-year college students living in residential housing or military recruits should also receive the meningococcal vaccination (CDC, 2020**). Human papilloma virus (HPV)** vaccination is recommended between 11 and 12 years of age. The HPV catch-up vaccination is recommended to all teens through the age of 18 years if not adequately vaccinated. Over the age of 13 years, two doses of the varicella vaccination 4-8 weeks apart are recommended if there is no evidence of immunity to varicella and the patient has not received a varicella containing vaccination (CDC, 2020).

Adults with no evidence of immunity **to measles, mumps, and rubella (MMR)** should be administered one dose of the MMR vaccination. The **shingles** vaccination should be administered to those 50 years of age or older. The **pneumococcal vaccination** (PPSV23) should be administered to all adults 65 years of age and older. PCV13 and PPSV23 should be considered for those individuals with chronic medical conditions or immunocompromising conditions (CDC, 2020). Two doses of **hepatitis A** vaccination are recommended for individuals 19 years of age or older for the following reasons: chronic liver disease, HIV infection, men who have sex with men, drug use, homelessness, working with hepatitis A in a research lab, those who work in healthcare settings, or those who travel in countries with high or intermediate endemic hepatitis A (CDC, 2020). Three doses of the **hepatitis B** vaccination are recommended for individuals 19 years of age or older for the following reasons: chronic liver disease, HIV infection, sexual exposure risk , current or recent injection drug use, percutaneous or mucosal risk for exposure to blood, incarcerated persons, or travel in countries with high or intermediate endemic hepatitis B (CDC, 2020).

Impact on the Immunocompromised/Immunosuppressed Patient

As discussed above, immunocompromised individuals such as those with HIV are