Introduction to HIV/AIDS

Human immunodeficiency virus (HIV) is one of the many viruses that infects humans and attacks the immune system. HIV may be transferred through blood products, sharing needles, sexual contact and mother to child transmission. Acquired immunodeficiency syndrome (AIDS) occurs when a patient has a very weak immune system or is diagnosed with an opportunistic infection (an infection that can only be contracted by those with a depressed immune system). Therefore, a patient can have HIV, which is simply a virus, without having AIDS. In the United States, more than one million people are living with HIV. While there is not yet a cure for HIV/AIDS, with adherence to their medications, patients with HIV can suppress the virus, prevent disease progression and prevent the development of resistance.

What a Pharmacist Provides

Pharmacists can help patients improve adherence to suppress the virus by providing education about HIV/AIDS, medical terminology and how the HIV medications work to suppress the virus as well as answering patient questions about their medication. Pharmacists are well positioned to deliver this knowledge as well as to provide patients with practical tips such as the use of pillboxes, timers, planners or alarm watches, to enhance medication adherence. HIV pharmacists keep in close contact with each patient to evaluate and help with the management of any unwanted side effects they may experience from the HIV medications. By helping patients work through these side effects and remain adherent to their medications, pharmacists contribute to the success of medication therapy and health of the patient. In the hospital setting, pharmacists help initiate HIV medication therapy to ensure that patients receive the correct doses of the medications. These pharmacists also assess for any drug-drug interactions and other potential medication-related problems during hospital admission. There are few other disease states where complex medication regimens play such a critical role in the outcomes of patients; pharmacists provide an essential role to allow patients to live much longer and with a greater quality of life than ever before.

A study examined medication adherence for patients using HIV-specialized pharmacies, found that HIV patients were more adherent to their anti-retroviral and comorbid therapies. For patients taking angiotensin converting enzyme or angiotensin receptor blocker (drugs used to treat hypertension), HIV-specialized pharmacy users had significantly higher mean proportion of medication adherence (82.6 percent days covered compared with 79.6 percent of days covered) than in patients not taking advantage of these services. HIV-specialized pharmacy users also had better medication adherence measured as achieving a higher mean proportion of days covered at 83.7 percent than those not utilizing these services (81.3 percent).