

dren with RSV infections have mild, self-limited disease that does not involve the lower respiratory tract and therefore does not require hospitalization or ribavirin therapy.

Nursing Process

Assessment

- Assessment varies with the type of viral infection and may include signs and symptoms of influenza or other viral infections of the respiratory tract, genital herpes, viral infections of the eye, or other conditions.
- Assess renal function and adequacy of fluid intake.
- With HIV infection, assess baseline data to assist in monitoring response to drug therapy. Baseline data may include vital signs, weight and nutritional status, signs and symptoms of the disease, signs and symptoms of opportunistic infections associated with the disease and immunosuppression, and available reports of laboratory tests (eg, complete blood count, CD4+ lymphocyte counts, plasma levels of viral RNA, blood urea nitrogen and serum creatinine, liver function tests).

Nursing Diagnoses

- Anxiety related to a medical diagnosis of HIV infection, genital herpes, or CMV retinitis
- Altered Sexuality Patterns related to sexually transmitted viral infections (HIV infection, genital herpes)
- Disturbed Body Image related to sexually transmitted infection
- Social Isolation related to a medical diagnosis of HIV infection or genital herpes
- Deficient Knowledge: Disease process and methods of spread; availability of vaccines and other prophylactic interventions
- Risk for Injury: Recurrent infection; adverse drug effects or interactions; infections and other problems associated with compromised immune systems in HIV infection

Planning/Goals

The client will:

- Receive or take antiviral drugs as prescribed
- Be safeguarded against new or recurrent infection
- Act to prevent spread of viral infection to others and recurrence in self
- Avoid preventable adverse drug effects
- Receive emotional support and counseling to assist in coping with HIV infection or genital herpes

Interventions

- Follow recommended policies and procedures for preventing spread of viral infections.
- Assist clients in learning ways to control spread and recurrence of viral infection.
- Assist clients to maintain immunizations against viral infections.

- For clients receiving systemic antiviral drugs, monitor serum creatinine and other tests of renal function, complete blood count, and fluid balance.
- Spend time with the client when indicated to reduce anxiety and support usual coping mechanisms.
- For clients with HIV infection, monitor for changes in baseline data during each contact; prevent opportunistic infections (eg, CMV retinitis, herpes infections) when possible; and manage signs and symptoms, disease complications, and adverse effects of drug therapy to promote quality of life.

Evaluation

- Observe for improvement in signs and symptoms of the viral infection for which a drug is given.
- Interview outpatients regarding their compliance with instructions for taking antiviral drugs.
- Interview and observe for use of infection control measures.
- Interview and observe for adverse drug effects.
- Observe the extent and severity of any symptoms in clients with HIV infection.

PRINCIPLES OF THERAPY

Prevention of Viral Infections

General preventive measures include vaccination, hand washing, teaching infected clients to cover their mouth and nose when coughing or sneezing, treatment of symptoms, and recognition and treatment of complications. Of the sexually transmitted viral infections, genital herpes can be prevented by avoiding sex when skin lesions are present and using condoms; HIV infection can be prevented by the consistent use of condoms and use of clean needles by IV drug abusers.

Viral Vaccines

Viral vaccines are used to produce active immunity in patients before exposure or to control epidemics of viral disease in a community. Vaccines for prevention of poliomyelitis, measles, rubella, mumps, smallpox, chickenpox, and yellow fever and for protection against influenza and rabies are available (see Chap. 43). Live attenuated viral vaccines are generally safe and nontoxic. However, they should not be used in patients who are pregnant, immunodeficient, receiving corticosteroids, antineoplastic or immunosuppressive drugs, or irradiation. Influenza vaccines prevent infection in most patients. If infection does occur, less virus is shed in respiratory secretions. Thus, vaccination reduces transmission of influenza by decreasing the number of susceptible people and by decreasing transmission by immunized people who still become infected. The multiplicity of rhinoviruses (common cold), enteroviruses, and respiratory viruses hinders development of practical, specific vaccines for these common diseases.